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# Analysis of the FY 2006 Defense Budget Request

Steven M. Kosiak



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**CSBA** CENTER FOR STRATEGIC  
AND BUDGETARY ASSESSMENTS

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by

Steven M. Kosiak

Center for Strategic and Budgetary Assessments

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## EXECUTIVE SUMMARY

The Bush Administration has requested \$441.8 billion in budget authority for national defense in fiscal year (FY) 2006, including \$421.1 billion for the Department of Defense (DoD) and \$20.7 billion for Department of Energy and other defense-related programs. The request represents about a 1.9 percent increase in real (inflation-adjusted) terms from the level provided for national defense through regular, annual appropriations in FY 2005 (i.e., excluding the \$25 billion set aside in that bill for military operations, as well as the \$75 billion for military operations included in the administration's FY 2005 supplemental appropriations request).

The administration's budget request does not include funding to cover the incremental costs—i.e., costs above and beyond those DoD would normally incur in peacetime—DoD is almost certain to incur as a result of its continued involvement in military operations in Iraq and Afghanistan in FY 2006. At some point this year, or in early 2006, the administration will need to request a supplemental appropriation to cover these costs. Assuming the size of the US military's presence in Iraq and Afghanistan will remain at roughly today's levels through the end of next year, the Congressional Budget Office (CBO) recently estimated that war costs would total about \$85 billion in FY 2006. If the administration were to request such a sum, it would bring DoD's total FY 2006 budget to some \$527 billion—which would make it, in real terms, the highest defense budget since the Korean War.

### HOW MUCH IS ENOUGH?

Whether the requested increase in defense spending is necessary to meet US security requirements adequately is unclear. Based on analyses by CBO, CSBA and others, it is likely that fully implementing the administration's defense plan would require spending substantially more on defense over the long term than proposed by the administration. Despite its high costs, this plan may also fall short of meeting US security requirements if the kinds of challenges faced by the US military change significantly over the coming years. On the other hand, it might be possible to meet US security requirements adequately at lower budget levels by adopting a scaled-back and more transformation-oriented defense plan. In other words, the ability of the US military to effectively meet future challenges is likely to have more to do with how wisely we spend our defense dollars, than on how much more we spend.

### HIGHLIGHTS OF THE ADMINISTRATION'S BUDGET PROPOSAL

- During the 2000 presidential campaign, then-candidate George W. Bush argued that the US military must be transformed to counter effectively the very different kinds of challenges projected to emerge over the next several decades. He also suggested that transforming the US military would require reducing investments in some traditional types of forces and programs. The Bush Administration has made some noteworthy transformation-related changes to DoD's plans, and has cancelled or truncated a number of major weapons programs—including several in the FY 2006 request. It has also initiated some changes intended to improve the US Army's ability to carry out stability operations. However, its efforts appear to fall short in a number of important respects. Perhaps most significantly, DoD's plans still do not seem to adequately address the "anti-access" challenge that

increasingly confronts US power projection capabilities, and continues to fund a number of very costly acquisition programs that appear ill-suited to the emerging threat environment. A critical question for the coming year is whether the Bush Administration will make some more significant changes to its long-term plans in the ongoing Quadrennial Defense Review (QDR). The 2005 QDR may represent the administration's last, best chance to begin a more dramatic transformation of the US military.

- The administration's FY 2006 budget request includes \$49.9 billion for homeland security. About \$27.3 billion of this request is allocated to the Department of Homeland Security (the Department would also receive \$13.7 billion for non-homeland security missions, such as maritime safety). The remaining funding would be divided among the Departments of Defense (\$9.5 billion), Health and Human Services (\$4.4 billion), Justice (\$3.1 billion), Energy (\$1.7 billion), and more than two dozen other departments and agencies. The FY 2006 request for homeland security represents a 1 percent real increase from the level provided for FY 2005. With this increase, funding for homeland security will have grown by some 165 percent between FY 2001 and FY 2006. Whether this level of funding is adequate is unclear. Given the enormous challenges related to homeland security that the United States faces, further substantial increases may be needed. On the other hand, even if more funding is needed, it might be appropriate to allow the agencies involved in the homeland security mission some time to absorb the large increases enacted over the past several years.
- The 2005 budget request would provide some \$148.4 billion for O&M. This level is quite high by historical standards, and should be adequate to cover normal peacetime O&M funding requirements. It is less clear whether the O&M funding levels projected for later years of the administration's plan would be adequate. Additional O&M funding will clearly have to be provided in FY 2006 assuming US forces remain deployed in Iraq, Afghanistan and elsewhere.
- Notwithstanding the fact that many military personnel have been deployed away from home for extended periods of time in recent years, the Services have, for the most part, continued to meet most of their recruitment and retention goals for active duty forces. As a result, overall, the quality of personnel in the US military remains very high. The FY 2006 request includes \$111 billion for military personnel. This would be sufficient to fund average pay raises of 3.1 percent. The size of the pay raises needed in future years will depend, among other things, on the strength of the US economy and whether US forces remain heavily deployed in military operations in Iraq and elsewhere. Presently, the most critical personnel problems confronting DoD are in the Army, and especially the Army National Guard and Reserve, which are currently experiencing significant recruitment problems—due in large part to the stress on these forces caused by lengthy deployments in Iraq. Making greater use of cash compensation and relatively less use of non-cash, and particularly non-cash deferred, compensation, would likely improve the cost-effectiveness of the Services' recruitment and retention efforts in the future.
- The FY 2006 defense budget request includes \$69.4 billion for R&D. This marks a very slight (1.2 percent) real decline from this year's record level. The requested level of funding is \$27.8 billion, or 51 percent, more than was provided in FY 2001 and 28 percent above the level provided in FY 1987, the Cold War peak for defense R&D. Under the administration's

plan, funding for defense R&D would decline gradually to about \$53.8 billion (FY 2006 dollars) by FY 2011, with the savings essentially shifted to weapons procurement. Robust funding for R&D is probably appropriate, given the need to transform the US military, and the likelihood that in the future the US military will face challenges that are significantly greater than and different from those it faces today. But whether funding for defense R&D needs to be as high as it is today, or whether the new R&D budget request emphasizes the most important priorities, is debatable. There is also some reason to question whether it is realistic to depend on reductions in R&D to help finance a substantial portion of the future increases projected for procurement. First, new weapon systems tend to cost more to develop than assumed in DoD's plans, suggesting that the projected decline in R&D funding requirements may not materialize. Second, historically, DoD funding for R&D and procurement tend to move in the same direction—there has been no sustained period over the past 50 years during which R&D funding has been cut, while funding for procurement has been increased.

- The latest defense plan includes reductions in a number of major acquisition programs, including the F/A-22 fighter. The \$78.0 billion requested for procurement in FY 2006 is slightly (about 2 percent in real terms) below the level included in the FY 2005 annual appropriations act for weapons procurement. Over the longer term, however, the new plan includes substantial increases in procurement funding—with procurement funding projected to increase to about \$107 billion (FY 2006 dollars) by FY 2011. It is widely agreed that funding for procurement needs to be increased. But, as in the case of R&D, there is less agreement concerning just how much funding needs to be provided for procurement. Estimates provided by CBO suggest that implementing the administration's current modernization plan would require increasing procurement funding to an average of roughly \$120-140 billion (FY 2006 dollars) annually over the FY 2010-22 period. Moreover, if history is any guide, cost growth in O&M, military personnel and R&D might well crowd out even the level of increases in procurement funding projected in the administration's plan. On the other hand, an approach that included the purchase of some next-generation weapon systems, but focused relatively more on the production of new current-generation systems, and upgrades of existing systems—perhaps similar to the “skip a generation” approach that was considered, but ultimately rejected, by the Bush Administration—might be affordable at lower budget levels.
- The large increases projected in the current plan may not be sustainable over the long term. The long-term federal budget picture has dramatically worsened over the past three years. In early 2001, CBO projected a 10-year surplus of about \$5.6 trillion over the FY 2002-11 period. By contrast, CBO's baseline estimate now projects *deficits* totaling \$980 billion over the next decade (FY 2006-15). The dramatic change in the government's fiscal outlook has resulted from the enactment of large tax cuts, increases in defense and homeland security spending, the addition of the Medicare prescription drug benefit, and other factors. Unfortunately, it is likely that the outlook will deteriorate still further in coming years. According to CBO, enactment of the President's proposed budget would push total federal deficits to some \$2.6 trillion over the FY 2005-14 period, and keep the government in the red throughout the entire decade. Others project that deficit totals could reach some \$4-5 trillion over the coming decade.

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# I. INTRODUCTION

The Bush Administration has requested \$441.8 billion in budget authority for national defense in fiscal year (FY) 2006, including \$421.1 billion for the Department of Defense (DoD) and \$20.7 billion for Department of Energy and other defense-related programs. The request represents about a 1.9 percent increase in real (inflation-adjusted) terms from the level provided for national defense through regular, annual appropriations in FY 2005 (i.e., excluding the \$25 billion set aside in that bill for military operations,<sup>1</sup> as well as the \$75 billion for military operations included in the administration's FY 2005 supplemental appropriations request<sup>2</sup>).

The administration's budget request does not include funding to cover the incremental costs—i.e., costs above and beyond those DoD would normally incur in peacetime—DoD is almost certain to incur as a result of its continued involvement in military operations in Iraq and Afghanistan in FY 2006. At some point this year, or in early FY 2006, the administration will need to request a supplemental appropriation to cover these costs. Assuming the size of the US military's presence in Iraq and Afghanistan will remain at roughly today's levels through the end of next year, the Congressional Budget Office (CBO) recently estimated that war costs would total about \$85 billion in FY 2006.<sup>3</sup> If the administration were to request such a sum, it would bring DoD's total FY 2006 budget to some \$527 billion—which would make it, in real terms, the highest defense budget since the Korean War.

## NEW PLAN WOULD SLOW GROWTH IN REGULAR DOD BUDGET

Under the administration's latest plan, funding for DoD provided through regular, annual appropriations bills (exclusive of war costs) would grow by some 9 percent in real terms over the FY 2006-09 period. After that, it would decline slightly, by about 1 percent, through FY 2011.<sup>4</sup> Although DoD's budget would continue to grow in real terms through FY 2009, under the latest plan the total amount of funding provided to DoD over the FY 2006-09 period would be slightly less than was projected for those same years in the February 2004 Future Years Defense Program (FYDP). The FY 2006 request is \$2.6 billion less than was projected for FY 2006 in last year's plan. Altogether, some \$13 billion less would be provided over the FY 2006-09 period than was included for those same years in last year's plan. This represents a reduction of about 1 percent compared to last year's plan for those same years.

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<sup>1</sup> Although this \$25 billion was enacted as part of the FY 2005 defense appropriations act, the bill's language allowed DoD to begin obligating this funding as soon as the bill became law, in August 2004, rather than waiting until the start of FY 2005 (October 1, 2004). As a result, the Office of Management and Budget (OMB) scored the funding as FY 2004 budget authority.

<sup>2</sup> In addition to \$75 billion in DoD funding, primarily for military operations, the administration's \$82 billion FY 2005 supplemental request includes about \$7 billion in non-DoD funding, primarily for foreign assistance and other foreign affairs programs. At press time, Congress had not yet approved this measure.

<sup>3</sup> CBO, "An Alternative Path Assuming Continued Spending for Military Operations in Iraq and Afghanistan and in Support of the Global War on Terrorism," February 2005, p. 3.

<sup>4</sup> These estimates were derived based on DoD's inflation estimates through FY 2010. For FY 2011 it was assumed the inflation rate would be the same as projected by DoD for FY 2010.

## SOME FUNDING IN SUPPLEMENTAL IS NOT BE DIRECTLY RELATED TO MILITARY OPERATIONS

In mid-February the administration submitted an \$82 billion request for FY 2005 supplemental appropriations, which included \$75 billion in DoD funding. Although most of this funding will be needed to cover FY 2005 costs directly related to military operations in Iraq and Afghanistan (e.g., costs associated with activating reserve personnel, sustaining combat operations, overhauling equipment, and replacing destroyed or worn-out equipment), some of the programs and activities funded through this supplemental are not directly related to costs incurred as a result of military operations. The clearest example of this is the \$5 billion included in the supplemental request for the Army's modularity initiative.

The goal of this effort is to increase the number of deployable brigades in the Army from 33 to 43-48, without permanently increasing the Army's active duty end strength. The Army's decision to restructure its forces appears to rest in part on lessons learned as a result of recent experience in Iraq and Afghanistan. However, this initiative would apparently be carried out by the Army even if US forces were no longer engaged in operations in those countries—since the Army leadership believes these changes are needed, in any case, to improve the capability of the US Army to fight effectively in future military operations. As such, it should probably be funded through DoD's regular, annual appropriations act, rather than a supplemental. DoD budget documents indicate that the administration plans to fund the Army's modularity initiative through supplemental appropriations in FY 2006 as well.<sup>5</sup>

The fact that the administration is proposing to fund some programs not directly related to the war in Iraq and other military operations through supplemental appropriations in FY 2005 and FY 2006 (and possibly future years) makes it difficult to know how seriously to take the topline reductions in DoD's regular, annual budget projected for the next several years, or the slight real decline in funding projected for the last two years of the FYDP.

## GROWTH IN WEAPONS PROGRAMS SCALED BACK

The new FYDP calls for buying fewer F/A-22 fighters, DD(X) destroyers, LPD-17 amphibious ships, Virginia-class attack submarines, and V-22 tilt-rotor aircraft than previously projected. However, most of these cuts would not occur for several years. Under the new plan, FY 2006 funding for weapons procurement would stay essentially flat (compared to FY 2005) in nominal terms at \$78 billion, equating to a real decline of about 2 percent. A total of about \$14 billion less would be provided for weapons procurement over the FY 2006-09 period than was projected in last year's plan. Many of these cuts may be appropriate given DoD's need both to transform the US military, and to make its plans more affordable.

Notwithstanding these proposed cuts, the new plan still calls for increasing procurement funding over the long term. Although it would decline in FY 2006, under the new plan procurement funding is projected to grow in FY 2007 and later years, reaching \$119 billion in FY 2011 (about \$107 billion in FY 2006 dollars).

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<sup>5</sup> DoD, Program Budget Decision 753, December 23, 2004, p. 1.

## CURRENT PLANS MAY NOT BE AFFORDABLE

As discussed below, pressures caused by the ballooning federal deficit, the approaching retirement of the baby boomer generation, and competition from non-defense priorities (e.g., tax cuts and non-defense spending), will make it difficult to sustain the funding increases for defense projected in the administration's latest plan. However, even if DoD were able to achieve and sustain these funding levels, DoD would probably not be able to execute its current modernization and force structure plans.

If history is any guide, DoD's major weapons acquisition programs are unlikely to meet projected cost goals. Similarly, operations and support activities (e.g., military pay, health care, and a wide variety of operations and maintenance functions) are likely to cost more than anticipated. Under the administration's new plan, funding for DoD is projected to reach \$505 billion by FY 2011 (\$445 billion in FY 2006 dollars). However, estimates by CBO, CSBA and others suggest that executing existing plans could require substantially higher DoD funding levels, perhaps an additional \$50 billion or more a year over the long term.

## MILITARY OPERATIONS IN IRAQ AND ELSEWHERE

As part of the regular, annual FY 2005 defense appropriations act, enacted in August 2004, Congress provided \$25 billion as a down payment on future war-related costs.<sup>6</sup> Assuming Congress approves the administration's \$82 billion FY 2005 supplemental request,<sup>7</sup> the United States would have a total of about \$107 billion in special funding (including \$100 billion for DoD) available this year to pay for military operations and other defense and international affairs priorities.<sup>8</sup>

As noted above, the administration's FY 2006 budget request does not include any funding to cover the incremental costs likely to result from the US military's involvement in operations in Iraq and Afghanistan States in FY 2006. Funding requirements for military operations beyond FY 2005 can be only very roughly and tentatively estimated. Considerable uncertainty surrounds the number of troops the United States will have deployed in Iraq and Afghanistan in future years, as well as how intensively those forces will be operated. Uncertainty concerning those factors, by definition, creates uncertainty concerning future funding requirements.

Despite this uncertainty, the administration should almost certainly have included funding for military operations in its FY 2006 request. Supplemental appropriations are intended to be used to cover *unanticipated* costs incurred during the current fiscal year—costs that, because they were unanticipated, could not be budgeted for in advance through regular, annual appropriations

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<sup>6</sup> After considerable pressure from Congress, the administration amended its original FY 2005 defense budget request to include \$25 billion to cover war-related costs.

<sup>7</sup> At press time, the House had passed a version of the FY 2005 supplemental that would provide \$81.4 billion, including \$76.8 billion for DoD, while the Senate Appropriations Committee (SAC) had passed a version that would provide \$80.6 billion, including \$74.4 billion for DoD.

<sup>8</sup> For a discussion of the FY 2005 supplemental request and US spending on recent military operations more generally, see Steven Kosiak, "Fiscal Year 2005 Funding for Military Operations," Center for Strategic & Budgetary Assessments, April 11, 2005.

measures. At this point it cannot reasonably be argued that that the deployment of US forces in Iraq and Afghanistan is unanticipated.<sup>9</sup>

To be sure, given the uncertainty inherent in these military operations, any projection of costs in FY 2006 is likely to prove off by some amount. If those projections prove to be too low the administration might have to request some additional funding through another supplemental in FY 2006. But in terms of budget realism (including future deficit projections) this would be far preferable to the current approach in which, implicitly, the administration's budget plan assumes that no funding will be required for military operations next year.<sup>10</sup>

Under one plausible scenario, provided for illustrative purposes, CBO projected that DoD would need about \$85 billion in FY 2006 to cover the cost of military operations in Iraq and Afghanistan, as well as certain homeland security activities in the United States (i.e., Operation Noble Eagle).<sup>11</sup> This cost estimate was derived based, among other things, on the assumption that the number of US troops deployed in and around Iraq and Afghanistan would remain at roughly 200,000 through FY 2006. Even if the United States is able to reduce the number of troops deployed in these operations dramatically, costs are likely to remain relatively high. CBO's analysis suggests that supporting a force of 120,000 troops, for example, would still require FY 2006 funding of some \$50 billion.<sup>12</sup> At some point this year, or in early FY 2006, the administration will need to request a supplemental appropriation to cover these costs.

## HOW MUCH IS ENOUGH?

Whether the requested increase in defense spending is necessary to meet US security requirements adequately is unclear. As noted above, fully implementing the administration's defense plan would likely require spending substantially more on defense than proposed by the administration. Despite its high costs, this plan may also fall short of meeting US security requirements if the kinds of challenges faced by the US military change significantly over the coming years. On the other hand, it might be possible to meet US security requirements adequately at lower budget levels by adopting a scaled-back and more transformation-oriented defense plan. In other words, the ability of the US military to meet future challenges effectively is likely to have more to do with how wisely we spend our defense dollars, than on how much more we spend.

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<sup>9</sup> The most recent past war to approach the ongoing military operations in Iraq and Afghanistan, in terms of number of troops deployed and duration, was the Vietnam War. That war was initially, in FY 1965, funded through supplemental appropriations, and later, beginning in FY 1966, funded through a combination of annual appropriations and supplementals. Steven Daggett and Amy Belasco, "Authorization and Appropriations for FY 2005: Defense," CRS, November 9, 2004, pp. 51-52.

<sup>10</sup> Although the administration has failed to request any funding for Iraq or Afghanistan in FY 2006, both the House and Senate versions of the FY 2006 congressional budget resolution include a \$50 billion contingency fund to cover the cost of military operations next year.

<sup>11</sup> CBO, "An Alternative Path Assuming Continued Spending for Military Operations in Iraq and Afghanistan and in Support of the Global War on Terrorism," February 2005, p. 3.

<sup>12</sup> Ibid.

## ORGANIZATION OF REPORT

This analysis of the FY 2006 defense budget request is broken down into three main sections. The introduction provides an overview of three important issues: the extent to which the administration's request appears to be consistent with a sound transformation strategy, the funding levels proposed for homeland security, and the sustainability of the administration's proposed increase in funding for defense in the face of other budget priorities. The second part of this report (Chapter II) discusses how the administration's FY 2006 request would affect each of the major areas of the defense budget, including operations and maintenance (O&M), military personnel, research and development (R&D), and procurement funding. Lastly, the appendix to this report contains tables and graphs which chart past and projected future funding levels for the overall defense budget, various categories of defense spending and selected weapons programs.

## TRANSFORMATION

During the 2000 presidential campaign, then-candidate George W. Bush argued that the US military must be transformed to counter effectively the very different kinds of challenges projected to emerge over the next several decades as a result of the ongoing "Revolution in Military Affairs" (RMA). He also suggested that transforming the US military would require not only investing in new kinds of capabilities, but also reducing investments in some traditional types of forces and weapons programs. Likewise, in the 2001 Quadrennial Defense Review (QDR), the administration stated that continuing a "business as usual approach" in DoD was not a viable option, and cautioned that "without change the current defense program will only become more expensive to maintain over time and will forfeit many of the opportunities available to the United States today."<sup>13</sup>

Over the past four years, the Bush Administration has continued to highlight the importance of effectively transforming the US military, and has made some noteworthy transformation-related changes to DoD's plans. It has scaled back or cancelled several major weapons programs. In 2001 the administration cancelled the Navy's Area Missile Defense program. In 2002 it cancelled the Army's Crusader artillery system. And in 2004 it cancelled the Comanche helicopter program. As noted earlier, this year's budget request also includes significant reductions in the F/A-22 fighter program and a range of other systems. Money saved through these cuts has been used, in part, to fund a variety of transformation-related initiatives.

Among other things, the administration has moved ahead with plans to convert four Trident ballistic missile submarines to carry conventional Tomahawk cruise missiles, and has accelerated and expanded the acquisition of some unmanned systems. It has also pushed ahead with a wide variety of programs and initiatives related to improving "C4ISR" (command, control, communications, computers, intelligence, surveillance and reconnaissance) and precision-strike capabilities. In addition, as demonstrated in Afghanistan and Iraq, administration guidance appears to have encouraged greater joint integration in military operations. Finally, the administration has initiated several changes, in the Army in particular, intended to improve its ability to carry out stability operations.

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<sup>13</sup> *Quadrennial Defense Review Report* (Washington, DC: DoD, September 30, 2001), p. 16.

However, the administration's transformation efforts appear to fall short in a number of important respects. Notwithstanding the cuts noted above, over the past four years, the administration has decided to move ahead with the vast majority of the acquisition programs included in the Clinton Administration's last defense plan. Likewise, the Bush Administration's defense plan calls for maintaining Army, Navy, Air Force, and Marine Corps forces of roughly the same size and (with the exception of the Army) shape as those included in the last Clinton Administration plan.

Perhaps most significantly, DoD's plans still do not seem to address adequately the "anti-access" challenge that increasingly confronts US power projection capabilities.<sup>14</sup> In particular, current plans may not focus enough attention or funding on the development of long-range precision-strike, deep insertion capabilities for special operations forces, and distributed C4ISR capabilities related to locating and tracking small targets. Conversely, DoD may be over-investing in programs which appear ill-suited to the emerging threat environment. Among the most questionable of these are the Services' three new tactical fighter programs, whose total costs could exceed \$250 billion over the next several decades (even taking into account the proposed reductions in the F/A-22 program). This focus on relatively short-range tactical fighters seems at odds with recent experience in Afghanistan, Iraq and elsewhere which suggests that, in the future, the US military may often have difficulty securing access to forward air bases.<sup>15</sup>

The 2005 QDR, in which the DoD is currently engaged, may represent the last, best opportunity for the Bush Administration to propose significant changes in the Services' acquisition, force structure and other plans. The results of this major review are expected to be released, in full, when the FY 2007 defense budget request is submitted to Congress in February 2006. However, some results of the review could be released earlier.

## HOMELAND SECURITY

The Bush Administration's FY 2006 budget request includes \$49.9 billion for homeland security. About \$27.3 billion of this request is allocated to the Department of Homeland Security (the Department would also receive \$13.7 billion for non-homeland security missions, such as maritime safety). Another \$9.5 billion would be provided to DoD for its homeland security-related programs and activities. The remaining funding would be divided between the Departments of Health and Human Services (\$4.4 billion), Justice (\$3.1 billion), Energy (\$1.7 billion), and more than two dozen other departments and agencies.

The FY 2006 request for homeland security represents a 1 percent real increase from the level of funding provided for FY 2005.<sup>16</sup> With this increase, funding for homeland security will have

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<sup>14</sup> For a discussion of the anti-access challenge, see, for example, Andrew Krepinevich, Barry Watts and Robert Work, *Meeting the Anti-Access and Area-Denial Challenge* (Washington, DC: Center for Strategic and Budgetary Assessments, 2003).

<sup>15</sup> The growing proliferation of submarines, mines and anti-ship missiles among potential adversaries also raising questions about the ability of carrier-based short-range fighters to operate effectively in forward areas.

<sup>16</sup> Excluding funding for Project BioShield, the request amounts to a 6.5 percent real increase. See, Steven M. Kosiak, "Overview of the Administration's FY 2006 Request for Homeland Security," Center for Strategic & Budgetary Assessments, May 2005.

grown by some 165 percent between FY 2001 and FY 2006 (excluding funding provided through emergency supplemental appropriations).

The request would allocate funding to a broad range of programs and activities related to homeland security, including intelligence and warning (\$432 million), border and transportation security (\$19.3 billion), domestic counterterrorism (\$4.5 billion), protecting critical infrastructure and key assets (\$15.6 billion), defending against catastrophic threats (\$3.9 billion), emergency preparedness and response (\$6.1 billion), and other programs (\$105 million).

Whether or not the FY 2006 budget request for homeland security is adequate is unclear, given the absence of a comprehensive strategy in this mission area. Further substantial increases may be needed. A 2003 report by a task force of the Council on Foreign Relations concluded that US funding for emergency responders (e.g., police, fire and rescue personnel) was some \$20 billion a year below the level needed to meet requirements.<sup>17</sup> Similar shortfalls may exist in other areas of homeland security as well. Conversely, even if more funding is needed, it might be appropriate to allow the departments and agencies involved in the homeland security mission some time to absorb the large increases in funding enacted over the past several years.

## SETTING THE TOPLINE FOR DEFENSE

The large increases in funding for defense projected in the administration's defense plan may not be sustainable over the long term. In the aftermath of the terrorist attacks of September 11, 2001, defense spending has become a higher priority for most Americans, especially as it relates to homeland security and the war on terrorism, but it is still far from the only priority. Over the long term, the defense mission will have to compete with other priorities of the American public and political leadership. These goals include cutting taxes, reducing the federal debt, ensuring the health and durability of Social Security and Medicare, and providing greater resources for education, health research and other domestic programs.

The long-term federal budget picture has dramatically worsened over the past four years. In early 2001, CBO projected a 10-year surplus of about \$5.6 trillion over the FY 2002-11 period.<sup>18</sup> By contrast, CBO's baseline estimate now projects *deficits* totaling \$980 billion over the next decade (FY 2006-15).<sup>19</sup> The dramatic change in the government's fiscal outlook has resulted from the enactment of large tax cuts, the expansion of Medicare (to include a prescription drug benefit), increased defense and homeland security spending, and other factors. Unfortunately, it is likely that the outlook will deteriorate still further in coming years. In its most recent budget request, the administration has proposed to make the 2001 and 2003 tax cuts permanent (rather than having them expire in 2010, as they would under current law). At the same time it is proposing further increases in funding for defense and homeland security. According to CBO, enactment of

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<sup>17</sup> Report of an Independent Task Force Sponsored by the Council on Foreign Relations (CFR), Warren B. Rudman, Chair, *Emergency Responders: Drastically Underfunded, Dangerously Unprepared* (New York, NY: CFR, 2003), 13.

<sup>18</sup> CBO, *The Budget and Fiscal Outlook: Fiscal Years 2002-2011* (Washington, DC: CBO, January 2001), p. 2.

<sup>19</sup> CBO, *An Analysis of the President's Budget Proposals for Fiscal Year 2006* (Washington, DC: CBO, March 2005), p. 4.

the President's proposed budget would push total federal deficits to some \$2.6 trillion over the FY 2005-16 period, and keep the government in the red throughout the entire decade.<sup>20</sup>

Worse yet, this estimate almost certainly understates the actual cost of the administration's proposals. Among other things, the CBO estimate of the President's proposed budget does not include the cost of the war in Iraq and other military operations, the cost of extending relief from the Alternative Minimum Tax (AMT),<sup>21</sup> or costs associated with his proposal to establish a new system of private accounts as part of Social Security. The administration's plan also assumes that spending on domestic discretionary programs (e.g., education, transportation and health research) will be cut by a total of 16 percent by FY 2010. Projections based on more realistic assumptions about revenue and spending suggest that total deficits could total some \$4-5 trillion over the next 10 years.<sup>22</sup>

As bad as the deficit picture appears to be for the coming decade, the outlook for the years beyond 2015 is far worse. Deficits are projected to become much larger after members of the baby boomer generation begin retiring around the end of this decade. This change in demographics has enormous implications both for federal spending and revenue. Because of the retirement of the baby boomers, spending on Social Security and Medicare is projected to increase from about 6.6 percent of GDP in 2005 to 10 percent by 2025 and 13 percent by 2045.<sup>23</sup> Covering these costs will become ever more difficult as the ratio of working-to-retired Americans declines. Today, there are nearly five adult Americans 20-64 years of age for every American over 65. By 2020 the ratio will drop to less than four-to-one, and by 2030 it will fall to

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<sup>20</sup> Ibid.

<sup>21</sup> Since, unlike the regular income tax code, the AMT is not indexed to inflation, unless relief is provided the number of taxpayers that would be subject to the AMT would grow from about two million today to some 39 million by 2012. The administration's proposal does not include any AMT relief. In reality, it seems highly unlikely that either the president or the leadership of either party in Congress would allow the AMT to expand in this way.

<sup>22</sup> For example, according to CBO, making the tax cuts permanent, continuing military operations in Iraq and elsewhere (even at a reduced level) and reforming the Alternative Minimum Tax, would increase deficit totals for the decade to \$3.8 trillion. If, in addition, discretionary appropriations were increased at the same rate as the gross domestic product over this period, total deficits would grow to \$5.5 trillion. Ibid.

<sup>23</sup> Office of Management and Budget (OMB), *Fiscal Year 2006 Budget of the US Government, Analytical Perspectives* (Washington, DC: US Government Printing Office, 2005), p. 209.

less than three-to-one.<sup>24</sup> As a result of these pressures, the Bush Administration's own budget documents project that the federal government will run deficits continuously over the next 50 years, and that the size of the deficit will grow from about 1 percent of gross domestic product (GDP) in 2015 to 2.7 percent in 2025, and 7.4 percent by 2045.<sup>25</sup> Others have projected that deficits could increase to as much as 9 percent of GDP by 2025 and 28 percent by 2045.<sup>26</sup>

The generally bleak fiscal outlook outlined above does not, of course, *prove* that the administration's proposed funding increases for defense are not sustainable over the long run. These projections do, however, suggest that sustaining these increases could be difficult, and will likely require making hard choices between defense and other important priorities over the coming decade and beyond.

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<sup>24</sup> CBO, "The Looming Budgetary Impact of Society's Aging," July 3, 2002, p. 6.

<sup>25</sup> OMB, *Fiscal Year 2006 Budget of the US Government, Analytical Perspectives*, p. 209.

<sup>26</sup> Center on Budget and Policy Priorities, Committee for Economic Development and Concord Coalition, "Mid-Term and Long-Term Deficit Projections," September 29, 2003, p. 15.



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## II. THE ADMINISTRATION'S BUDGET REQUEST

The following section provides a brief analysis of how major funding categories and programs would fare under the administration's FY 2006 budget request.

### OPERATIONS AND MAINTENANCE

The O&M budget covers the costs of purchasing fuel, spare parts and many other items associated with carrying out training activities, as well as real world operations in Iraq, Afghanistan and elsewhere. As such, the readiness of the US military to fight effectively on short notice is largely dependent on the provision of adequate funding in this account. In addition, the O&M budget covers the cost of many programs less immediately related to near-term readiness, such as military health care, base operations and other support, or "infrastructure," activities. These costs include the salaries of most civilian DoD personnel, who perform many of DoD's infrastructure functions.

The FY 2006 budget request would provide some \$148.4 billion for O&M. This level is quite high by historical standards, and should be adequate to cover normal peacetime O&M funding requirements. The administration's request works out to about \$109,000 per active duty troop. This is roughly 65 percent more in real terms than DoD provided per troop in FY 1990, the year the United States began sending forces to the Persian Gulf in preparation for Operation Desert Storm in 1991, and 15 percent more than in FY 2000, just prior to the successful US invasion of Afghanistan in 2001-02.

However, as noted earlier, the administration's FY 2006 request does not include any funding to cover the extra costs that will be incurred by DoD next year, assuming (as seems nearly certain) US forces remain engaged in military operations in Iraq and Afghanistan. CBO has estimated that if the number of US troops deployed in and around Iraq and Afghanistan were to remain at today's level of roughly 200,000 in FY 2006, and the tempo of the military's operations in those countries were likewise to remain essentially unchanged, DoD would require additional funding of about \$85 billion to cover the cost of military operations next year. Probably half of that total, some \$40 billion or more, would be needed to fund various O&M activities. Among other things, O&M funds are used to cover the cost of extra fuel and spare parts consumed in these operations, as well as many other costs associated with supplying, sustaining and otherwise supporting deployed US forces. Perhaps two-thirds of this O&M funding, some \$25-30 billion, would be provided to the Army and the Marine Corps, with the Army receiving the lion's share of the funds.

Although some elements of the Air Force and Navy have been stressed substantially over the past few years—such as the Air Force's tanker and transport fleets—overall, these two Services appear today to be operating relatively close to their traditional peacetime operational tempo (OPTEMEPO) levels (measured, for example, in terms of aircraft flying hours and ship steaming days). By comparison, Army and Marine Corps units, which account for the vast majority of the forces deployed in and around Iraq and Afghanistan, and represent the bulk of the US military's counter-insurgency capabilities, are currently operating under far greater stress. For example,

Army combat vehicles in Iraq and Afghanistan are reportedly being operated in Iraq and Afghanistan at five times their normal, peacetime rate.<sup>27</sup>

Notwithstanding the high tempo at which US forces are operated in Iraq and Afghanistan, and the resulting wear and tear on weapons and other equipment, US Army and the Marine Corps units deployed in those countries appear to remain highly effective. It also appears that—assuming Congress approves the administration’s supplemental request—DoD should have sufficient funding to cover the cost of sustaining these operations in FY 2005, including required equipment maintenance and repair activities.<sup>28</sup> That said, the full impact of recent and ongoing military operations on the readiness of the US Army and Marine Corps, in terms of equipment mission-capable rates and other traditional indicators, is difficult to assess based on publicly available data. Among other things, it is unclear whether—even if adequate funding is provided—the Services have sufficient maintenance and repair capacity to keep up with the demands created by the operations in Iraq and Afghanistan, or, if they do not, at what point this deficiency will be felt among deployed units.

In addition to the potential impact of military operations on equipment mission-capable rates and other readiness indicators, as well as DoD’s funding requirements, a major challenge confronting DoD is the steady, and seemingly unstoppable, cost growth that has affected its *peacetime* O&M funding requirements.

The amount of funding provided to DoD to cover the cost of peacetime O&M activities has grown significantly on a per-troop basis for at least the past 50 years. As noted above, the administration’s FY 2006 request would bring peacetime O&M funding per active duty troop to some 65 percent above the level provided in FY 1990. Due to data limitations, it is impossible to fully ascertain the causes of this cost growth.

Improvements in peacetime readiness levels—at least as measured by traditional indicators such as equipment mission-capable rates, flying hours and steaming days—do not appear to explain much, if any, of this cost growth. For the most part there has been little change in these measures over the past decade-and-a-half.<sup>29</sup> Some observers have pointed to cost growth in a variety of non-traditional activities (sometimes referred to as “non-defense” defense programs) funded through the O&M budget, such as environmental cleanup and weapons dismantlement aid to the states of the former Soviet Union, to explain the increase in infrastructure-related funding. However most of that growth ended by the mid-1990s.

One relatively easily identifiable area that has contributed substantially to cost growth in DoD’s O&M budget over the past decade-and-a-half is military health care. Despite the fact that the US military’s active duty end strength was cut by about one-third after the end of the Cold War,

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<sup>27</sup> Daniel Frisk and Frances Lussier, “The Potential Costs Resulting from Increased Usage of Military Equipment in Ongoing Operations,” CBO, March 18, 2005, p. 10.

<sup>28</sup> See, Kosiak, “Fiscal Year 2005 Funding for Military Operations,” pp. 5-6.

<sup>29</sup> It is possible that traditional measures do not capture some important improvements associated with today’s higher levels of O&M funding (e.g., advances in communications and sensor capabilities generated by O&M spending on computer software). However, it is difficult to quantify such improvements.

DoD funding for health care increased from about \$15 billion in FY 1988 (FY 2005 dollars) to \$28 billion in FY 2003, and has continued to grow since then.<sup>30</sup> Put another way, on a per troop basis, military health care costs have roughly tripled since FY 1988. This growth was due partly to increases in the cost of providing medical services, partly to the fact that the overall beneficiary population (which includes military retirees and dependents, as well as active duty troops) declined much more modestly than did the size of the force structure, and partly due to the expansion of health care benefits.

Other areas that seem to have contributed to the growth in DoD's O&M budget, to varying degrees, include pay increases for DoD civilian personnel, and cost growth in other infrastructure-related functions, such as installation support, headquarters and administration, central (i.e., non-unit) training, personnel support, and recruiting.<sup>31</sup>

Given the difficulty of precisely determining the cause of past cost growth in DoD's O&M budget, not surprisingly, it is difficult to project future funding requirements with much confidence. Overall, however, it is probably safe to assume that costs will continue to increase. Among the areas most likely to experience significant cost growth are the following:

- **Military Health Care.** Health care costs for the civilian population are projected to grow well above the rate of inflation over the next decade, and there is little reason to believe that the military's health care costs will grow any more slowly. If anything, historical precedent would seem to suggest that these costs will increase more rapidly. CBO estimates that funding for military health care will grow from about \$34 billion in FY 2005 to over \$60 billion (FY 2005 dollars) in FY 2022.<sup>32</sup> Based on CBO data, it appears that, under the current plan, military health care activities funded through the O&M budget (i.e., the Defense Health Program) would grow from about \$17.5 billion in FY 2005 to \$32 billion in FY 2022.<sup>33</sup>
- **Equipment Maintenance and Repair.** Through most of the 1990s, the age of the Services' weapons inventory increased only modestly, despite the fact that relatively few weapons were purchased during the decade. This is because the Services bought large quantities of new weapon systems in the 1980s, and then in the 1990s cut the size of the force structure by about one-third, with the oldest equipment generally being retired first. However, the buildup of the 1980s is now receding further into the past, and most of the planned force structure cuts were completed by the middle of the decade. As a result, the average age of most major weapon systems is projected to increase substantially over the next decade. To date, the aging of the Services' weapons inventory does not seem to have resulted in a substantial increase in

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<sup>30</sup> Alison Percy, *Growth in Medical Spending by the Department of Defense* (Washington, DC: CBO, September 2003), p. vii. CSBA has converted these estimates into FY 2005 dollars. O&M funding currently covers about three-quarters of military health care costs.

<sup>31</sup> For a discussion of funding trends for many of these functions, see Lane Perrot and Greg Kiley, *The Long-Term Implications of Current Defense Plans* (Washington, DC: CBO, January 2003), pp. 15-35.

<sup>32</sup> CBO, "The Long-Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2005," Supplementary Slides, September 2004, p. 8.

<sup>33</sup> This estimate was derived by the author based on CBO projections of cost growth in three different categories of military health care funding: pharmaceuticals, purchased care and contracts, and direct care and other. See, *ibid.* Funding for other military health care activities is provided through the Services' military personnel accounts.

operations and maintenance costs.<sup>34</sup> However, as the aging of the force accelerates over the coming decade, age-related O&M costs could grow significantly, perhaps by as much as \$5 billion annually by 2010.<sup>35</sup> According to CBO, by 2022, cost growth associated with operating older equipment could cause O&M funding requirements to increase by as much as \$14 billion annually.<sup>36</sup> Moreover, replacing aging weapons with newer systems may, at best, only partially offset this cost growth, since the greater complexity of some new weapon systems can also lead to higher O&M costs.<sup>37</sup>

- **Facilities Maintenance and Repair.** It is widely believed that DoD operates an excessive number of military bases. In an attempt to address this problem, for the first time in a decade the United States is beginning a new round of military base closures. Under the Base Realignment and Closure (BRAC) process, the President has appointed an independent commission that, by September of this year, will recommend—based on advice from the Services, as well as its own analysis—the closure of some number of US bases.<sup>38</sup> Currently the US military operates about 425 major US bases. Defense Secretary Donald Rumsfeld recently suggested that some 20 percent of those bases might be selected for closure.<sup>39</sup> Over the long term, these closures could yield savings of perhaps \$2 billion a year. However, in the near term (e.g., over the next five years), these closures are likely to cost more money than they will save. Moreover, over the long term it seems likely that, even with these base closures, DoD will need to increase substantially its funding for facilities upkeep and construction.<sup>40</sup> This is because DoD appears to have spent too little over the past decade or more on maintaining, repairing and constructing military bases, housing and other facilities.

If DoD were able to manage its infrastructure-related functions more efficiently, it might be possible to reduce the rate of O&M cost growth in the future. In addition to closing unneeded bases, proposals aimed at reducing infrastructure-related O&M costs include making greater use of “competitive sourcing” (allowing private sector contractors to compete for maintenance, repair and other work currently performed at public sector facilities) and adopting a range of “best practices” used in the private sector. According to a 1996 study by a panel of DoD’s Defense Science Board (DSB), through competitive sourcing and other initiatives, DoD might eventually be able to achieve annual recurring savings of as much as \$30 billion. If history is any

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<sup>34</sup> Greg Kiley, *The Effects of Equipment Aging on the Costs of Operating and Maintaining Military Equipment* (Washington, DC: CBO, August 2001), p. 8.

<sup>35</sup> Steven M. Kosiak, “Three Myths About DoD’s Weapons Modernization Requirements,” Center for Strategic and Budgetary Assessments, June 18, 2001, p. 5.

<sup>36</sup> CBO, “The Long-Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2005,” February 2004, p. 6.

<sup>37</sup> Perrot and Kiley, *The Long-Term Implications of Current Defense Plans*, pp. 21.

<sup>38</sup> Under the BRAC process, if the President approves the commissions recommendations they become law, unless—within 45 legislative days—Congress enacts a joint resolution of disapproval.

<sup>39</sup> Jonathan Finer, “Threat of Closure Gives States Big Case of Base Fever,” *The Washington Post*, April 10, 2005, p. A3.

<sup>40</sup> Funding for maintaining and repairing military facilities is found in the O&M budget, as well as the Military Construction and Family Housing budgets, while construction funding is provided through the latter two accounts.

guide, however, the actual level of savings is likely to be much more modest.<sup>41</sup> As such, while these initiatives should be vigorously pursued, the best that is likely to be achieved is some slowing of the rate of cost growth in O&M, rather than actual reductions in funding requirements.

As a result of legislation enacted in 2003, DoD has also received authority to reform and reorganize the way it manages its civilian workforce substantially. The changes include: reducing the time required to hire new personnel; replacing the General Schedule (GS) system for determining pay levels with one that gives managers greater discretion to tie pay to performance; and making it easier to fire civilian workers.<sup>42</sup> Although some observers expect the new National Security Personnel System (NSPS) to help DoD save money, as in the case of other proposed efficiency initiatives, it is unclear whether these changes will yield significant savings over the long term.

If O&M costs do continue to grow, and the overall DoD budget is not increased in a substantial and sustained way, it will probably prove impossible to boost procurement funding significantly. During the Clinton Administration, O&M cost growth was a key factor delaying projected increases in the procurement accounts. For much of that period, the Clinton Administration submitted budgets which projected significant increases in procurement funding two or more years down the road. But each year, O&M costs proved to be higher than anticipated, forcing the administration to add funding to the O&M accounts and push back the projected upturn in procurement funding. In more recent years, projected increases in procurement funding have been slowed by a combination of continued O&M cost growth, and high rates of growth in military personnel costs and R&D funding requirements.

Under the administration's latest plan, funding for O&M is projected to grow at an average annual rate of about 1.7 percent in real terms over the FY 2005-11 period. However, given the fact that, historically, O&M costs per troop have consistently and persistently increased at an average annual rate of 2-3 percent, the administration's projected funding levels may well prove inadequate. If more funding is needed to cover higher O&M costs, as in the past, DoD's procurement accounts may end up being used as the bill payers to cover those costs. The only way to avoid such migration out of procurement and into O&M might be to increase the overall DoD budget by even more than currently projected, make offsetting cuts in other parts of the defense budget, such as research and development (R&D) funding, or reduce the size of the military.

## MILITARY PERSONNEL

The effectiveness of the US military depends critically on its ability to attract and retain quality military personnel. As demonstrated by its performance in recent conflicts, the quality of the US

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<sup>41</sup> For a discussion of problems and prospects for efficiency savings within DoD, see Robert F. Hale, *Promoting Efficiency in the Department of Defense: Keep Trying, But Be Realistic* (Washington, DC: Center for Strategic & Budgetary Assessments, January 2002).

<sup>42</sup> Critics have raised concerns that the new system, among other things, does not adequately protect civilian employees from the possibility of being subjected to unwarranted or arbitrary discipline.

military today is very high. Maintaining such a force in the future must be a central goal of US defense planning.<sup>43</sup>

The FY 2006 request includes \$111.3 billion in the Services' military personnel accounts. This would be sufficient to fund average pay raises of 3.1 percent for military personnel (by comparison, the FY 2006 request includes only a 2.3 percent pay raise for civilian federal workers). This raise continues the trend begun in FY 2000 of providing military pay raises that are at least 0.5 percentage points above the employment cost index (ECI), a measure of wage growth in the overall economy. Given the importance of recruiting and retaining quality military personnel, and the stress caused by the deployment of large numbers of troops in Iraq and elsewhere, this pay raise is probably appropriate.

Total compensation for the average active duty service member currently (FY 2005) amounts to about \$106,000 a year. Military compensation includes a wide variety of different elements, funded through a number of different DoD and Department of Veterans Affairs' (VA) accounts. About 85 percent of these costs are covered by DoD, and 15 percent by the VA.

Cash compensation—which includes basic pay, the basic allowance for housing and the basic allowance for subsistence, plus bonuses and other special pays and incentives—accounts for about 44 percent of military compensation for the average active duty service member. Non-cash benefits include health care for military personnel and their families, and military retirees and their dependents, military retirement pay, military housing (for personnel and dependents living on-base), veterans' and other benefits. Combined, non-cash benefits account for about 56 percent of military compensation.

Compensation for military personnel has increased substantially over the past decade-and-a-half, and especially since the late 1990s. These increases are due to a variety of changes instituted in the last two years of the Clinton Administration, or initiated, reinforced, or expanded under the Bush Administration. Overall compensation per active duty service member (exclusive of veterans' benefits) grew by about \$22,000 (fiscal year 2005 dollars), or 33 percent, between 1999 and 2005. More than half of this \$22,000 increase (58 percent) was allocated to improvements in non-cash benefits, especially deferred benefits. Improvements in retiree benefits (e.g., the introduction of the Tricare For Life program and increases in pension payments) accounted for about three-quarters of the increase in non-cash benefits (and 43 percent of the overall increase in compensation) provided over the past six years.

Cash compensation for active duty service members increased by some 25 percent between 1999 and 2005. Raises in basic pay and the basic allowance for housing accounted for almost all of this growth. Across-the-board increases accounted for about 90 percent of the growth in cash and non-cash benefits that occurred between 1999 and 2005. Targeted increases directed at particular classes of personnel (e.g., those with special skills or in particular occupations) accounted for only some 10 percent of the growth in compensation.

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<sup>43</sup> For a discussion of military compensation issues, see Steven M. Kosiak, *Military Compensation: Requirements, Options and Trends* (Washington, DC: Center for Strategic & Budgetary Assessments, February 2005).

It is difficult to compare the salaries of military personnel and civilian workers. Unlike most civilian workers, military personnel frequently are deployed overseas away from their families, for extended periods of time, and are sometimes asked to risk their lives in the service of their country. Comparing compensation levels is also made difficult by the fact that military personnel receive greater non-cash benefits than civilian workers generally receive.

Notwithstanding the complexities inherent in comparing military and civilian pay, however, the best available evidence suggests that active duty military personnel are, overall, adequately compensated. According to an analysis by the CBO, in 1997, the average active duty service member received higher pay than 75 percent of all civilian workers of the same age and education level.<sup>44</sup> Moreover, based on an analysis of changes in military and civilian pay over the 1997-2005 period, it seems likely that the pay of military personnel, relative to comparable civilian workers, has improved in the years since then.

A better indication that overall compensation levels for active duty personnel are probably adequate is the fact that the Services have, in recent years, generally been able to meet their recruitment and retention goals. The Army, Navy and Air Force each failed to meet their recruitment goals once or twice over the 1999-2000 period, and several of the Services failed to meet their overall retention goals in one or more years during the 1999-2001 period. The high operational tempo experienced over the past few years as a result of US military operations in Afghanistan, Iraq and elsewhere, has also raised concerns that the Services, particularly the Army, might now suffer substantial shortfalls in recruitment and, especially, retention. However, the most recent data indicates that, with the exception of the Army Reserve and National Guard, the Services' efforts to attract and retain quality personnel have continued to be largely successful.

All four Services have been able to meet or exceed their active duty recruitment goals since 2000. Moreover, they have also been able to keep their quality standards relatively high. Continuing a trend that began in the 1980s, in recent years over 90 percent of the Services' recruits have been high school graduates and over 65 percent have scored above average on the Armed Forces Qualification Test (AFQT). Recent trends in active duty retention also appear to be generally positive. In 2004, each of the Services met or exceeded most of their retention goals for active duty forces.<sup>45</sup>

The greatest area of concern is currently the ability of the Army, and especially the Army Reserve and National Guard, to meet their personnel goals. The Army National Guard missed its recruitment goal by some 7,000 troops, or 13 percent, in 2004. It also fell short of meeting its quality goals. Moreover, through February, it was 24 percent below its year-to-date recruiting goal for 2005. The Army Reserve has generally done better. But through February it had fallen 10 percent below its 2005 year-to-date goal.<sup>46</sup> Through March 2005, the active Army was falling

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<sup>44</sup> Richard Fernandez, *What Does the Military "Pay Gap" Mean?* (Washington, DC: CBO, June 1999), p. xi.

<sup>45</sup> Lawrence Kapp, "Recruiting and Retention Data for Active Duty Enlisted Personnel (FY 2004)," Congressional Research Service Memorandum, November 28, 2004, pp. 1-3.

<sup>46</sup> Tom Squitieri, "Guard, Reserve Raise Recruiting Age," *USA Today*, March 21, 2005.

short of its recruitment goals.<sup>47</sup> Whether in coming years DoD will remain successful in its active duty recruitment and retention efforts, and will be able to improve its Army National Guard and Reserve recruitment numbers, is likely to depend in part on how heavily US forces remain engaged in Iraq and Afghanistan.

Although it may be necessary to provide sizeable additional pay raises in the future—depending, in part, on how events unfold in Iraq and Afghanistan—in general, the problem for the Services does not appear to be that too little money is available, or that overall compensation levels are too low. Instead, the main problem seems to be that its current personnel system and pay structure does not allow the Services to differentiate sufficiently pay levels among military personnel who differ in terms of skills, occupation and other characteristics. As a result, they have consistently experienced retention shortfalls among certain classes of military personnel and particular occupational specialties.

In general, research indicates that improvements in compensation that provide relatively immediate and easily recognized benefits (such as increases in basic pay), and especially those that are targeted to the classes of individuals the Services most need to keep, and reward performance, rather than time in service, are the most cost effective. Despite these findings, most of the increase in military compensation provided in recent years has been provided in an across-the-board fashion, and directed to improvements in non-cash, and especially non-cash deferred, benefits.

Making greater use of cash compensation and relatively less use of non-cash, and particularly non-cash deferred, compensation, would likely improve the cost-effectiveness of the Services' recruitment and retention efforts. Conversely, failure to direct future increases in pay and benefits in this way could lead to the worst of both worlds: Much higher levels of spending on military compensation, and an inability to meet the Services' personnel requirements.

The large increases in military compensation implemented over the past six years have clearly helped the Services with their efforts to maintain sufficient numbers of quality personnel during a period of intense military operations. However, these increases have also come at a very high price in budgetary terms. Between FY 1999 and FY 2005, total DoD funding for military pay and benefits (exclusive of war-related personnel costs) grew from about \$108 billion (FY 2005 dollars) to \$139 billion, an increase of over \$20 billion—with most of this growth occurring in the military personnel accounts and DoD's health care program.

During the Clinton years, higher than anticipated growth in O&M costs frequently prevented DoD from increasing procurement funding as rapidly as its plans projected. In more recent years, an equal or greater problem has been the growth in military personnel costs. If steps are not taken to better control cost-growth in this area, in the future military personnel costs are likely to increasingly “crowd out” projected increases in procurement funding. Future funding requirements for military personnel can be only very roughly and tentatively estimated. However, even making relatively conservative assumptions about cost growth in the various

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<sup>47</sup> Associated Press, “Army Recruiting Short Again in March,” April 5, 2005, at [www.cnn.com/2005/US/04/05/army.recruiting.ap/](http://www.cnn.com/2005/US/04/05/army.recruiting.ap/)

components of military compensation, it appears likely that those funding requirements will grow substantially.

CBO estimates that military personnel appropriations are likely to increase at an average annual rate of about 1.7 percent a year between FY 2005 and FY 2022. This would bring funding requirements for this account alone to some \$138 billion by 2022 (FY 2005 dollars).<sup>48</sup> Based on CBO data, it appears that overall DoD funding requirements for military compensation (e.g., including health care, family housing and other costs) would increase from about \$139 billion this year to some \$189 billion in FY 2022, an increase of some \$50 billion, or about \$3 billion a year.<sup>49</sup>

## FORCE STRUCTURE

In the 2001 QDR, the Bush Administration decided to maintain essentially the same force structure (e.g., numbers of Army divisions, Navy carrier battle groups and Air Force fighter wings) proposed and adopted by the Clinton Administration. The administration's latest defense plan proposes to reduce the number of aircraft carriers from 12 to 11. The new plan would also continue to restructure the Army through the Service's modularity initiative.

In recent years, members of Congress and others have proposed that as many as 50,000 or more troops should be added to the US military, and the Army in particular, to alleviate the stress caused by the large deployments in Iraq and Afghanistan. However, to date the administration has resisted these proposals. In fact, under the latest administration plan, the military's permanent active duty end strength is projected to fall from 1.383 million this year to 1.368 million in FY 2006. The Navy accounts for almost all of this reduction. Among other things, these cuts reflect the proposed elimination of one aircraft carrier and the smaller crews typically required for new ships.

While the administration has rejected proposals to increase the military's active duty end strength permanently, over the past few years (using its emergency authority), it has kept the Army's active duty end strength temporarily about 30,000 troops above its congressionally authorized level—with the cost of this additional end strength covered through the supplemental appropriations for Iraq and Afghanistan.

The Army is using these additional troops both to relieve some of the pressure created by the large and enduring deployments in Southwest Asia and to facilitate its plans to reorganize the Army's force structure. Prior to the Army's modularity initiative, the its active duty forces were organized around 10 active divisions, each of which consisted of three combat brigades, plus three separate brigades and regiments—for a total of 33 combat brigades. Under the Army's new plan, a fourth is to be created out of each division—increasing the total number of combat brigades to 43-48. Presently, the Army has a total of 36 combat brigades. The extra troops needed for these brigades are being provided by shifting personnel from missions and functions

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<sup>48</sup> This estimate was derived by the author based on CBO data. CBO, "The Long-Term Implications of Current Defense Plans: Detailed Update for Fiscal Year 2005," p. 8.

<sup>49</sup> Ibid.

for which the Army currently has excess capability (e.g., field artillery and air defense) and by making other changes, rather than by permanently increasing total end strength.

According to DoD, this restructuring of the Army will cost some \$48 billion over the FY 2005-11 period, with much of this cost stemming from the need to buy equipment for the additional brigades. However, this estimate may substantially understate the cost of the effort. The need to find funding to cover the Army's modularity initiative was one of the main factors that led the administration to propose cuts in the F/A-22 fighter and several other major acquisition programs in its latest budget request. The administration plans to fund the Army's modularity initiative through supplemental appropriations in FY 2005 and FY 2006, and through DoD's regular, annual budget thereafter.

**Table 1: Force Structure**

	1990	2000	2006
<b>Army</b>			
Active Divisions	18	10	<b>10</b>
Reserve Personnel	736,100	555,826	<b>555,000</b>
<b>Navy</b>			
Active/Reserve Carriers	15 / 1	11 / 1	<b>11</b>
Attack Submarines	97	55	<b>54</b>
Ships	546	316	<b>289</b>
Active/Reserve Wings	13 / 2	10 / 1	<b>10 / 1</b>
<b>Air Force</b>			
Active Wings	24	13	<b>12+</b>
Reserve Wings	12	7.6	<b>7+</b>
<b>Marine Corps</b>			
Active/Reserve Divisions	3 / 1	3 / 1	<b>3 / 1</b>

In the 2001 QDR, the Bush administration considered, but ultimately rejected, making major reductions in force structure. In coming years, as new and more capable (as well as more costly) weapon systems are introduced into the Services, it may make sense to reconsider this decision. Viewed from a long-term perspective, DoD's past modernization plans have often been financed in part by cuts in the size of the military. The result has been that although the US military has become smaller over time, it has nevertheless become progressively more capable. So long as the Army and Marine Corps must maintain large deployments in Iraq and Afghanistan, any discussion of cuts in the size of these Services will presumably be "off the table." However, in the case of the Navy and Air Force, significant tradeoffs of this kind may be possible in the near term. Indeed, as noted above, the Navy, at least, already appears to be moving in this direction. Whether to make additional changes—including cuts—in force structure is presumably one of the critical questions being considered in this year's QDR.

## RESEARCH AND DEVELOPMENT (R&D)

The FY 2006 defense budget request includes \$69.4 billion for R&D. This marks a very slight (1.2 percent) real decline from this years' record level. The requested level of funding is \$27.8 billion, or 51 percent, more than was provided in FY 2001 and 28 percent above the level provided in FY 1987, the Cold War peak for defense R&D. Under the administration's plan funding for defense R&D would decline gradually to about \$63.3 billion (FY 2006 dollars) by FY 2010, and then drop sharply, to \$53.8 billion, in FY 2011. Robust funding for R&D is probably appropriate, given the need to transform the US military, and the likelihood that in the future the US military will face challenges that are significantly greater than and different from those it faces today. But whether funding for defense R&D needs to be as high as it is today, or whether the new R&D budget request emphasizes the most important priorities, is debatable. There is also some reason to question the realism of the future reductions in R&D funding projected in the current defense plan.

The FY 2006 budget request includes a \$1 billion reduction in funding for ballistic missile defense (BMD) R&D. Despite this cut, the Bush Administration continues to give high priority to the development of BMD capabilities. Under its plan, \$7.8 billion in R&D funding would be provided for the Missile Defense Agency (MDA) in FY 2006. Although this is a reduction from this years' budget, it is still some \$3.6 billion above the level provided in the last Clinton Administration budget in FY 2001.

During the 2000 presidential campaign, then-candidate Bush argued that the US military must be transformed to counter effectively the very different kinds of challenges projected to emerge over the next several decades. And the need to transform the US military has remained a constant theme of DoD officials over the past four years. However, while the FY 2006 budget request does contain R&D funding for several programs widely believed to be important for transformation, overall, defense R&D funding still appears to be very much focused on traditional kinds of weapons programs. This is reflected in the allocation of funding both among DoD's various R&D budget activities, and among specific programs.

The DoD R&D budget is broken down into six different budget categories primarily reflecting different phases of the R&D process. The S&T budget includes programs in the three earliest phases of R&D.<sup>50</sup> The discovery and development of new technologies promising major leaps in military capability are most likely to be made in these early phases of R&D. As a result, many advocates of military transformation believe that S&T programs should be given a high priority. The administration's plan includes \$10.5 billion for S&T programs in FY 2006. This is \$2.5 billion less than was provided in FY 2005 and only about 7 percent more in real terms than was provided in FY 2001. This level of growth is extremely modest compared to the increases the administration has requested for R&D overall, or for specific programs, such as BMD and fighter development over this same period.

Programs in the system development and demonstration (SDD) phase have been given the largest increases in funding since FY 2001. SDD is the last phase of R&D prior to production, as

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<sup>50</sup> S&T programs consist of those funded through the Basic Research, Applied Research and Advanced Technology Development budget activities.

well as the most costly phase for most programs. Under the administration's plan, \$19.8 billion would be provided for SDD programs in FY 2006, a \$2.5 billion jump from FY 2005. Altogether, funding in this category would grow by \$11.3 billion, or 112 percent in real terms, between FY 2001 and FY 2006.

During the 2000 presidential election, then-candidate Bush argued that the US military should modernize its military "selectively," but that the real goal should be to "move beyond marginal improvements—to replace existing programs with new technologies and strategies: to skip a generation of technology."<sup>51</sup> These goals were essentially reaffirmed in the 2001 Quadrennial Defense Review (QDR). Nevertheless, to date, the administration does not appear to have actually embraced this approach.

Over the past few years, DoD has cancelled several major acquisition programs, including the \$11 billion Crusader artillery system, the \$9 billion Navy Area Missile Defense program and, most recently, the \$38 billion Comanche helicopter program.<sup>52</sup> However, the administration is continuing to move ahead with the vast majority of the major weapons platforms included in the plans it inherited from the Clinton Administration. As noted earlier, the administration's latest defense budget request proposes to scale back a number of additional acquisition programs. However, most or all of these reductions involve stretching out or truncating the procurement of new weapon systems, rather than canceling new programs.

The continued growth in SDD funding projected in DoD's latest plan essentially reflects this decision to move ahead with the vast majority of weapon systems in DoD's acquisition pipeline. The many long-planned, next-generation programs currently undergoing SDD, include the F-35 Joint Strike Fighter (JSF), the DD(X) destroyer and the Future Combat System (FCS).

The administration and the Services claim that most SDD funding is focused on transformational systems, or are at least programs consistent with a sound transformation strategy. If so, this boost in SDD funding may be appropriate. But at least some of the weapons programs being pushed into SDD appear ill-suited for the emerging security environment. Perhaps most questionable is the administration's decision to continue to move ahead with all three planned tactical fighter programs. This focus on relatively short-range tactical fighters seems at odds with recent experience in Iraq, Afghanistan and elsewhere which suggests that, in the future, the US military may often have difficulty obtaining access to forward bases.<sup>53</sup> Arguably, a better approach would be to shift some of the funding allocated to SDD programs to earlier phases of the R&D process, and to focus more on the development of long-range weapon systems.

Some might argue that the current defense plan also short-changes funding for the development of unmanned aerial vehicles (UAVs). The FY 2006 request includes \$912 million for the development of six different UAVs. This is less than one-fifth the amount DoD is proposing to

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<sup>51</sup> George W. Bush, Speech on Defense Policy, The Citadel, Charleston, SC, September 23, 1999.

<sup>52</sup> Prior to the program's cancellation, DoD plans called for buying a total of 650 Comanche helicopters. A total of about \$8 billion has been spent on this program to date.

<sup>53</sup> See, Barry D. Watts, *Long-Range Strike: Imperatives, Urgency and Options* (Washington, DC: Center for Strategic & Budgetary Assessments, April 2005).

for the continued development of its most costly manned aircraft program, the F-35 Joint Strike Fighter.<sup>54</sup>

Perhaps the greatest problem with the administration's decision to move ahead with so many costly traditional programs today is that it might make it impossible to increase funding for more transformational kinds of systems several years down the road, when their feasibility and potential is better proven and they are ready to be moved beyond the early stages of R&D. This is because the level of funding absorbed by traditional weapon systems entering SDD today will grow significantly over the next five years or more, as they move further through the SDD process and into production—potentially crowding out promising, emerging transformational programs.

The above discussion focuses primarily on the question of how appropriately R&D funding is allocated among various budget categories in the administration's FY 2006 request. An equally important question is whether the total funding level requested for R&D is appropriate. Robustly funding R&D probably makes sense, given the need to transform the US military, and the likelihood that the future challenges facing the US military will be significantly greater than—and different from—those it faces today. On the other hand, the level of funding requested by the administration may be higher than necessary to modernize or transform the US military adequately. As noted earlier, the requested level of funding for R&D is some 28 percent above the previous peak of FY 1987. But unlike FY 1987, when the United States faced—in the Soviet Union—a peer competitor that spent as much as \$50 billion a year on defense R&D, today no potential US adversary spends even close to that amount.

This does not necessarily mean that defense R&D funding should be reduced. To the extent that modernizing and transforming the US military represents a cost-effective means of improving US capabilities, especially capabilities to counter new kinds of threats, relatively high levels of spending on R&D may make sense, even if potential adversaries are not modernizing their own forces as rapidly as in the past. But the slower pace at which most potential adversaries appear to be modernizing their forces does at least raise questions about the need for such high levels of funding for defense R&D.

Perhaps more importantly, the high level of funding currently allocated to the *development* of new weapon systems appears to be undermining DoD's ability to increase substantially funding for the *procurement* of new weapon systems. During the Reagan buildup of FY 1980-85, nearly four-fifths of the funding added to weapons acquisition was allocated to procurement, with about one-fifth going to R&D. By contrast, over the FY 2000-05 period, more than half of the funding added to weapons acquisition has been absorbed by R&D. As noted above, under the administration's latest plan, funding for defense R&D is projected to decline substantially over the next six years, with those savings essentially shifted into weapons procurement. According to the administration, this transfer of funding from R&D to procurement will be possible because

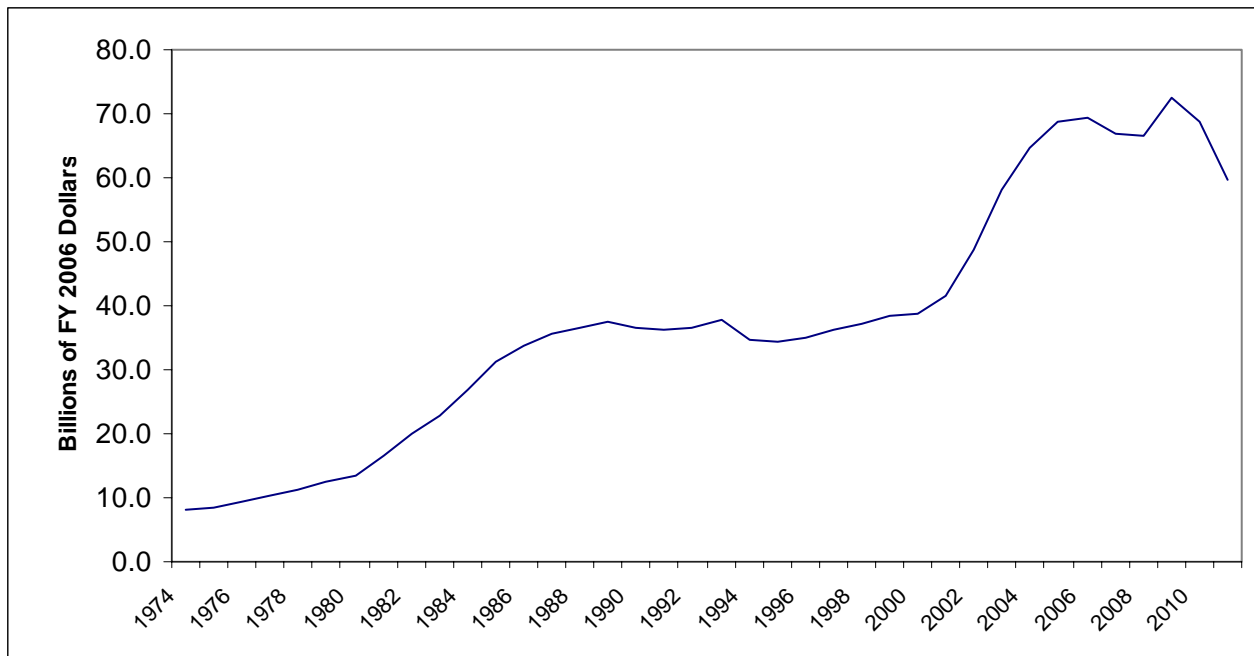
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<sup>54</sup> Another concern of some transformation advocates is that even the funding provided for UAVs is focused on the development of systems that are non-stealthy and, with the exception of Global Hawk, relatively short-range. Like manned fighters, short-range UAVs might prove ineffective in an anti-access environment.

the development of a number of major acquisition programs will be largely completed over the next few years.

Such a shift in funding may, indeed, be possible. However, depending on reductions in R&D to help finance a substantial portion of the future increases projected for weapons procurement may be risky for at least two reasons. First, new weapon systems tend to cost more to develop than assumed in DoD's plans, suggesting that the projected decline in R&D funding requirements may not materialize. Second, historically, DoD funding for R&D and procurement tend to move in the same direction—there has been no sustained period over the past 50 years during which R&D funding has been cut, while funding for procurement has been increased. Combined with likely increases in military personnel and O&M costs, the failure of DoD to hold down R&D funding requirements and costs could prove a major barrier to its plans to increase weapons procurement funding in coming years.

**Figure 1: R&D Funding, FY 1974-2011**



## PROCUREMENT

The FY 2006 budget request provides \$78 billion for weapons procurement. This is slightly (about 2 percent) less in real terms than was approved in the FY 2005 annual defense appropriations act. Under the administration's latest plan, funding for procurement is projected to increase to about \$107 billion (FY 2006 dollars) by FY 2011. It is widely agreed that funding for procurement needs to be increased. But, as in the case of R&D, there is less agreement concerning just how much funding needs to be provided for procurement and how those funds should be invested.

As noted earlier, during the 2000 presidential campaign, then-candidate Bush suggested that it might make sense for the US military to "skip a generation" of planned new weapon systems, and focus resources on developing and later producing new kinds of weapon systems that would

be better suited to fighting the new and different kinds of threats likely to emerge in the future. Although the specifics of this strategy were never spelled out, it also appeared to involve placing greater reliance on less costly current-generation systems (both modifications and upgrades of existing systems, and new production of current-generation systems). In addition, during the 2001 QDR process, the administration apparently considered the possibility of making some cuts in the size of the US military's force structure (e.g., number Army divisions and Navy carrier battle groups), as a way of paying for some of the needed increase in procurement funding.

The administration has decided to scale back a number of major acquisition programs over the past few years, and its latest request includes reductions in a number of additional programs. It has also proposed cutting one aircraft carrier from the Navy's force structure. Overall, however, the administration has opted to move ahead with the vast majority of major weapons programs it inherited from the previous administration, and to keep the US military essentially the same size as projected under the last Clinton Administration plan.

Estimates provided by CBO suggest that implementing the administration's current modernization plan would require increasing procurement funding to an average of roughly \$120-140 billion (FY 2006 dollars) annually over the FY 2010-22 period.<sup>55</sup> The lower figure assumes that the Services would be relatively successful at meeting their current cost goals for new weapons programs, while the higher figure assumes that, consistent with historical experience, most next-generation weapon systems would end up costing substantially more to procure than projected by the Services.

Even if the lower estimate is correct, the level of procurement funding projected in the administration's plan (\$107 billion by FY 2011) would appear to be substantially below the amount required to actually implement the current plan. If, as history suggests is more likely, the higher estimate is correct, the current plan would appear to fall short by over \$30 billion a year over the long term. Worse yet, as noted earlier, the plan's assumptions about O&M, military personnel and R&D funding requirements may be optimistic. If O&M and military personnel costs continue to grow, and DoD is unable to cut R&D as assumed in the current plan, DoD may find itself with little choice but to forgo the projected rise in procurement funding and use the money instead to cover these other costs.

In any case, the fact that implementing the administration's modernization plan would require increasing funding to \$120-140 billion a year does not necessarily mean that adequately modernizing US forces would require increases of this magnitude. The administration's current approach is one of several different possible approaches to modernization. At the most basic level, there are essentially three different means by which forces can be modernized:

- Existing current-generation systems (e.g., F-15 and F-16 fighters) can be replaced with next-generation weapon systems (e.g., the F/A-22 and JSF, respectively). Next-generation weapon

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<sup>55</sup> These estimates were derived by CSBA based on data provided by CBO in *The Long-Term Implications of Current Defense Plans: Summary Update of Fiscal Year 2005*, September 2004, p. 9. This estimate does not take into account the reductions in the F/A-22 and other programs included in the latest budget plan. Accounting for these changes might modestly lower this estimate. On the other hand, increases in cost estimates related to the Army's modularity initiative might offset much or all of this reduction.

systems are likely to display the most dramatic improvements in capabilities. However, they are also by far the most expensive systems to produce—typically costing at least twice as much as the systems they are intended to replace.

- Existing current-generation systems can be replaced with the latest versions of the same system (e.g., old F-16s replaced with the latest versions of the F-16 now being produced). Often the latest versions of these systems are far more capable than the earlier versions they would replace. According to the Air Force, the latest F-16s, for example, are as much as five times more effective than the earliest version of the F-16.<sup>56</sup> These systems also tend to cost much less to produce than next-generation systems. For example, the Air Force version of the JSF appears likely to cost about twice as much as the latest F-16s.
- Existing current-generation systems can be upgraded with new electronics and other equipment, and have their service lives extended (e.g., older AV-8B Harrier short take-off vertical landing aircraft can be upgraded to the most modern AV-8B standards). For example, according to one estimate, incorporating a new data link in existing F-15s, which would allow aircraft to share target information, could yield a five-fold improvement in air-to-air kill ratios.<sup>57</sup> The cost of upgrade and modification efforts varies greatly, depending on how extensive the efforts are, but overall costs tend to be even less than the cost of buying new current-generation systems.

The administration's plan includes a mix of these different approaches. But it is heavily weighted toward the first approach: the acquisition of next-generation systems. Thus, not surprisingly, its funding requirements are very high. An approach that included the purchase of some next-generation weapon systems, but focused relatively more on the production of new current-generation systems, and upgrades of existing systems—perhaps similar to the skip-a-generation approach that was considered, but largely rejected, by the Bush Administration—might cost substantially less.

Another option would be to move ahead with procurement of the next-generation weapon systems called for under current plans, but to offset the high cost of these plans by making cuts in the size of the force structure. This would be consistent with earlier decisions to tradeoff quantity for quality. Given the large number of troops currently deployed in Iraq and the likelihood that substantial US forces will need to remain there for some number of years, making cuts in the Army may not be feasible in the near term. However, over the longer term some such cuts may be possible. And in the shorter term, it may be feasible to make at least modest cuts in some of the other Services (e.g., in the number of Air Force tactical fighter wings). Viewed from a long-term perspective, DoD's past modernization efforts have often been financed in part by cuts in the size of the military. Still another option would be to combine cuts in next-generation weapons programs with force structure cuts. In this case, annual procurement funding requirements could fall well below the levels required to pay for the current plan. Finally, rather than modernizing the Services through buying more of the same types of weapon systems

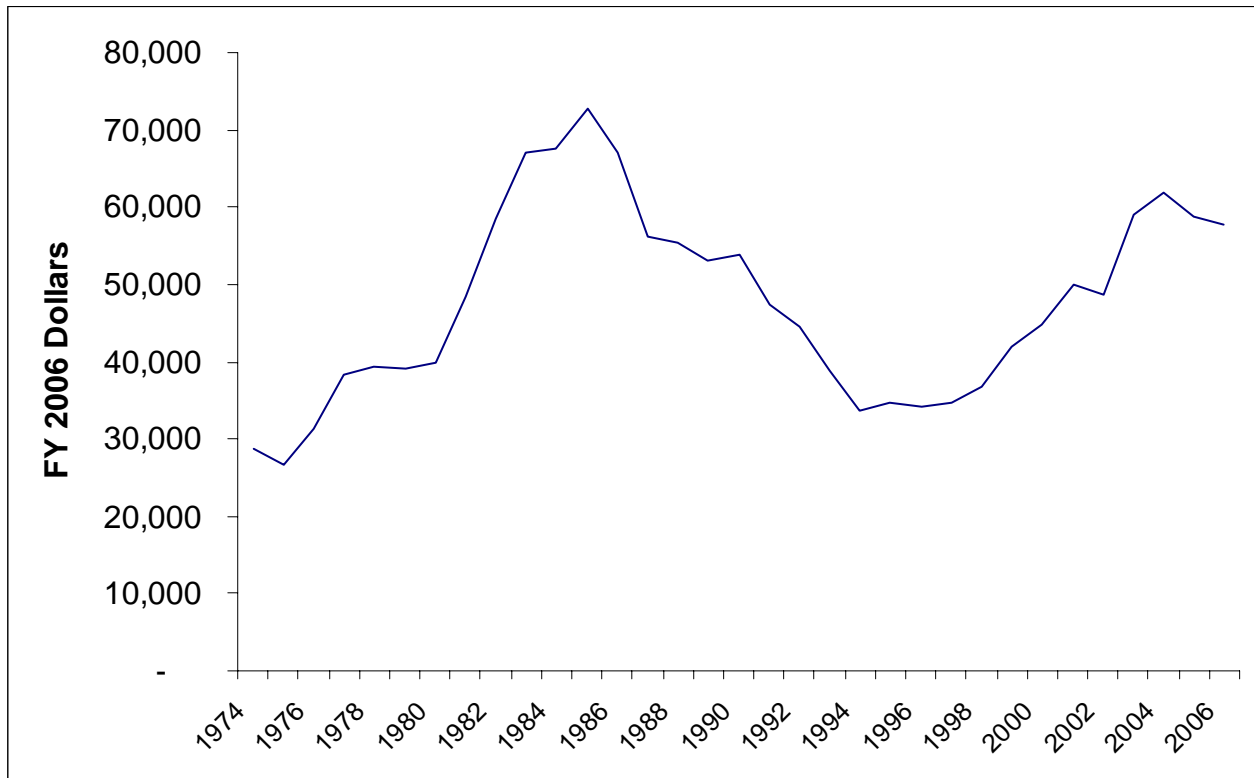
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<sup>56</sup> "F-16 Celebrates 25 Years of Flying High," Air Force Press Release, February 22, 1999, p. 2.

<sup>57</sup> Report of the House Committee on Appropriations, Department of Defense Appropriations Bill, 2000 (Government Printing Office, July 29, 1999), p. 19.

(whether they be current- or next-generation systems), DoD could focus more on buying new kinds of systems that could prove more cost effective. For example, DoD might consider investing more in UAVs or bombers, rather than relatively short-range manned fighters, to strike ground targets.

**Figure 2: Procurement Funding Per Troop, FY 1974-2006**



In short, there is no single right answer to the question of how much the United States must spend to modernize its military—the answer depends on the kind and rate of modernization that is believed to be necessary. In turn, one’s answers to these questions are likely to be influenced by views concerning a broad range of other, largely non-budgetary, issues, including: the strategy and missions of the US military; the pace of modernization among potential adversaries; changes in expected standards of performance for US forces; the nature and pace of advances in weapons platform design and propulsion, precision-guided munitions (PGMs), computers, sensors and communications technologies; and the impact and implications of the RMA. Reasonable minds can, and do, differ greatly on these questions. For example, some observers believe that the projected aging of the Services’ inventories of aircraft, ships and other weapons platforms could greatly reduce the effectiveness of the US military, while others believe that

even relatively old platforms can be kept highly effective through the incorporation of new electronics and PGMs.<sup>58</sup>

A major question for the coming year is whether the Bush Administration and the Services will make any substantial changes to their modernization and force structure plans as a result of the 2005 QDR. While a number of significant changes were contemplated during the 2001 QDR, ultimately the changes adopted were relatively modest. This year's QDR represents perhaps the last, best opportunity for the administration to propose significant changes to the current plan. Whether or not some such changes are proposed, it seems likely that the Services will be forced to scale back their modernization plans substantially in coming years. The real question appears to be whether these cuts will be proposed sooner rather than later, and whether they will result from a relatively comprehensive review (i.e., the 2005 QDR) or ad hoc decisions made in future years. While politically and bureaucratically easier, the latter approach is likely to be far less efficient in both strategic and budgetary terms.

## MISSILE DEFENSE

The Bush Administration's FY 2006 defense budget request provides about \$8.8 billion for BMD programs. This includes \$7.8 billion provided through the Missile Defense Agency and \$1.1 billion funded through the Services' budgets. This is almost \$1.1 billion less than was provided for BMD programs in FY 2005. It is also about \$1 billion less than was projected for FY 2006 in last year's defense plan. However, even with these reductions, the requested BMD budget is high by historical standards. The request is still some \$3.6 billion above the level appropriated in the last Clinton Administration (FY 2001) budget.

The \$8.8 billion figure includes funding both for the development of national missile defense (NMD) systems, designed to protect the United States from strategic ballistic missile attack, and the development and deployment of theater missile defense (TMD) systems, intended to protect forward-deployed US forces against shorter-range ballistic missiles. The Bush Administration has not only significantly increased funding for BMD programs, over the past several years, it has also taken a different approach in allocating that funding.

Under the Clinton Administration, BMD efforts were focused on the development and near-term deployment of a variety of TMD systems, and the development and deployment (at some future date) of a limited NMD system. The Clinton Administration believed that the Anti-Ballistic Missile (ABM) Treaty—by which the United States and the Soviet Union (now Russia) agreed to limit the development and, especially, deployment of NMD systems—still had an important role to play in maintaining a stable nuclear balance between the United States and Russia, as well limiting the incentive for China to buildup its strategic nuclear forces. As a result, while its proposed NMD system conflicted with the ABM treaty in a number of ways, the Clinton Administration hoped to get around this problem by gaining Russian agreement to modify the treaty, rather than by withdrawing from it.

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<sup>58</sup> For a discussion of various views concerning modernization requirements, see Steven M. Kosiak, *Buying Tomorrow's Military: Options for Modernizing the Defense Capital Stock* (Washington, DC: Center for Strategic & Budgetary Assessments, 2001), pp. 24-30.

By comparison, President Bush has made the near-term deployment of an NMD system a more urgent priority. The administration withdrew the United States from the ABM Treaty at the end of 2001, on grounds that it would preclude the development and deployment of effective defensive systems. By the end of FY 2005, the administration expects to have a modest NMD capability, consisting of 16 ground-based interceptors (GBI) based in Alaska, to protect against a possible North Korean threat, and 11 sea-based interceptors based aboard three Navy Aegis (air defense) ships. The FY 2006 plan would add five more GBIs and 11 more sea-based interceptors to the existing BMD force. Over the longer term, the administration projects the development and deployment of a larger, layered NMD system that might include space-based interceptors as well.

The administration's FY 2006 request for MDA programs includes \$3.234 billion for midcourse defenses, \$1.144 billion for terminal defenses, \$484 million for boost-phase defenses and \$538 million for BMD sensor programs.

Whatever the merits or shortcomings of the Bush Administration's approach to BMD on technical or strategic grounds, pursuing this course will likely require a substantial and sustained increase in funding. The cost of developing and deploying a multi-layered NMD system could be especially high. In January 2002, CBO estimated that developing, deploying and operating a single-site NMD system similar to the one proposed by the Clinton Administration would require spending \$23-25 billion through 2015, while a three-site system could cost \$56-64 billion.<sup>59</sup> Likewise, CBO estimated that a stand-alone sea-based system would cost \$43-55 billion and a space-based system might cost \$56-68 billion.<sup>60</sup> In 2004, CBO estimated that a boost-phase intercept (BPI) system designed to protect the United States against potential North Korean and Iranian threats would cost \$16-37 billion to acquire and operate for 20 years, while a space-based BPI system would cost \$27-78 billion.<sup>61</sup>

The potentially high cost of pursuing a multi-layered NMD system does not necessarily mean that the administration's missile defense plans are unaffordable. In the context of an overall defense budget exceeding \$400 billion a year, exclusive of war costs, spending \$8.8 billion or even significantly more on BMD programs should be manageable. However, doing so may make it difficult for the administration to fund other new initiatives, including efforts aimed at transforming various elements of the US military.

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<sup>59</sup> CBO, "Estimated Costs and Technical Characteristics of Selected National Missile Defense Systems," Letter to the Honorable Thomas A. Daschle, Majority Leader, United States Senate, January 31, 2002, p. 23.

<sup>60</sup> Ibid. CBO noted that the stand-alone sea-based system includes some elements common to the ground-based system. Thus simply adding together the estimates for the ground- and sea-based systems would overstate the total cost of buying and operating both systems.

<sup>61</sup> David Arthur and Robie Samanta Roy, *Alternatives for Boost-Phase Missile Defense* (Washington, DC: CBO, July 2004), p. ix.

## MAJOR ACQUISITION PROGRAMS

(See Appendix, Table 5)

### Air Force

The Air Force's FY 2006 budget request includes \$22.6 billion for R&D and \$32.5 billion for procurement.

**F/A-22:** The budget request includes \$3.818 billion to procure 24 Lockheed-Martin F/A-22 fighters, plus \$480 million for continued development of the aircraft. Originally designed to replace the Air Force's existing fleet of F-15 air superiority fighters, the F/A-22 is now intended to carry out ground attack missions as well. The F/A-22 program is cut substantially in the administration's latest defense plan. Under that plan, the number of F/A-22s to be procured will decline from some 275 in last years' plan to a total of 178 aircraft, with the last of these to be purchased in FY 2008. The F/A-22 acquisition program—which has experienced significant cost growth—is now projected to cost a total of about \$64 billion.

**F-35 Joint Strike Fighter:** The proposed FY 2006 budget would provide \$5.02 billion for the JSF. In 2001, Lockheed Martin Corporation defeated the Boeing Company in a competition to develop and produce the JSF. This year's request includes \$2.475 billion in Air Force and \$2.393 billion in Navy R&D funding for the program, as well as \$152 million in advance procurement funding. The program is intended to lead eventually to the fielding of a family of fighter aircraft to be used by the Air Force, Navy and Marine Corps. Altogether, current plans call for buying a total of some 2,443 JSF for a cost likely to exceed \$245 billion.

**B-2:** The administration is requesting \$344 million for the B-2 strategic bomber program in FY 2006, primarily for the development of modifications and upgrades for the existing fleet of 21 aircraft. In the 2001 QDR, the administration indicated that it believed that greater emphasis should be placed on long-range precision-strike capabilities. This conclusion, combined with the important role played by bombers in the conflict in Afghanistan, suggested to some that the administration might propose to reopen the B-2 bomber production line. However, in the end, the administration decided to forego the production of any additional B-2 bombers. Under current plans, no new bombers would be developed or produced for several decades.

**Unmanned Aerial Vehicles:** The FY 2006 request includes \$1.512 billion in acquisition-related funding for six different UAV programs. This represents a \$359 million decline from FY 2005. Nearly half of this funding (\$706 million) is for the Global Hawk program. The Global Hawk is a long-range reconnaissance UAV. Although still not entirely through the R&D process, the Global Hawk has already been used successfully in Afghanistan and Iraq. The next largest UAV program is the Joint Unmanned Air Combat System (J-UCAS). The request includes \$350 million for this program—the goal of which is to develop the first UAV designed specifically to carry out strike missions. Other UAV programs funded in the request include the Predator (Air Force), Shadow (Army), and Fire Scout (Navy).

**C-17:** The administration's request includes \$3.663 billion for the C-17 program in FY 2006, including \$3.497 billion for the procurement of 15 of the intercontinental-range cargo aircraft

and \$166 million for further R&D. To date, the Air Force has procured 153 C-17s. Originally, the Air Force had hoped to buy a total of 210 C-17s. The number was later reduced to 120 aircraft. Under the latest plan, however, a total of 180 C-17s are projected to be procured. The total acquisition cost for the program is estimated to be about \$59 billion. Eventually, if possible, the Air Force would like to buy as many as 222 C-17s.

**Space-Based Infrared System (SBIRS)-High:** The FY 2006 budget request includes \$757 million for the SBIRS-High program. The goal of this program is to field a constellation of satellites to provide improved warning of ballistic missile strikes (replacing existing Defense Support Program satellites), as well as support national missile defense and intelligence collection efforts.

## Navy

The Navy's FY 2006 budget request includes \$18 billion for R&D and \$29.7 billion for procurement.

**F/A-18E/F:** The administration is requesting \$2.911 billion for the F/A-18E/F aircraft program in FY 2005, including \$89 million for continued development and \$2.822 billion to procure 42 aircraft. In production since FY 1997, the F/A-18E/F is a substantially changed derivative of the older A-D versions of the F/A-18, featuring, among other things, a longer fuselage and larger wings. Current plans call for the Navy to buy 552 of these carrier-based aircraft at a total cost of about \$52 billion. However, the total number of F/A-18E/Fs ultimately procured could be higher if the JSF were to develop technical problems, could not meet its cost goals, or suffer significant slippage in its schedule.

**V-22:** The proposed budget would provide \$276 million in R&D funding for the V-22 tilt-rotor, vertical take-off and landing aircraft plus \$1.142 billion in procurement funding to buy nine Marine Corps versions of the aircraft (MV-22) and \$362 million for two Air Force versions of the aircraft (CV-22). The V-22 program has suffered from some significant technical problems and cost growth in recent years. Nevertheless, the administration has decided to move ahead with the program. Under the current plan, V-22 production would be limited to the "minimum sustaining rate" as the program continues to make its way through the R&D and flight testing process. Ultimately, the Marine Corps plans to buy a total of 360 MV-22s, while the Air Force expects to buy 50 CV-22s, and the Navy plans to purchase 48 HV-22s. The MV-22 is intended to replace the Marine Corps' CH-46 and CH-53 helicopters. The CV-22 would be used for special operations forces (SOF) and the HV-22 would be used for search and rescue.

**DD(X):** The Navy plans to provide full funding for the first of this new class of surface combatant in FY 2007. Unlike the DDG-51, which is focused primarily on the air defense mission, the DD(X) is intended to be a multi-mission combatant with a substantial land-attack capability. Current Navy plans call for buying follow-on ships of this class at the rate of one per year over the FY 2008-11 period. This is a reduction from last years' plan, under which the first ship would have been procured in FY 2005, and the production rate would have reached two per year in FY 2007 and three per year in FY 2009. The FY 2006 request includes \$1.8 billion for the DD(X) program—\$1.05 billion for R&D and \$716 million in advance procurement funding.

The Navy has testified that it requires a total of eight to 12 DD(X)s.<sup>62</sup> The average cost per ship is projected to be some \$2.5 billion.

**CG(X):** Under last year's plan, the Navy planned to begin construction of a new class of guided missile cruiser, the CG(X), in FY 2018, as the DD(X) program was coming to an end. Consistent with the Navy's decision to truncate the purchases of DD(X) destroyers, the new Navy plan has accelerated the construction of the lead ship of this new class to FY 2011.

**Littoral Combat Ship (LCS):** The LCS is a new surface combatant intended to focus on the kinds threats likely to be confronted in coastal waters, such as mines, diesel submarines and "swarming attacks" by small boats. Navy plans call for two industry teams to build competing designs of this new type of ship. The FY 2005 budget included funding for the first of these new design ships, while the FY 2006 request includes \$613 million for continued R&D and the purchase of the second new design ship. The LCS is to be roughly the size of a frigate (i.e., around 3,000 tons) and much more affordable than the much larger (14,000-ton) DD(X). Although the Navy has not yet decided how many LCSs to procure, the number could reach as many as 82 .

**SSN-774:** The administration's FY 2006 request includes \$2.402 billion in procurement funding for one Virginia-class attack submarine, plus \$156 million for R&D. This class of submarines is being built jointly by Electric Boat of General Dynamics, Groton, CT, and Newport News Shipbuilding (NNS) of Newport News, VA. Under the administration's new defense plan, the Navy would buy one Virginia-class submarine a year through FY 2011. This represents a cut from last year's plan, under which the number of boats procured was to increase to two per year beginning in FY 2009. Ultimately, the Navy hopes to buy 30 SSN-774s at a total cost of about \$88 billion.

**LPD-17:** This year's request includes \$1.345 billion to procure the eighth LPD-17 class amphibious transport ships. The latest Navy plans call for procuring one additional LPD-17 in FY 2007, for a total of nine ship. This marks a significant reduction from last year's plan, which projected procurement of a total of 12 ships of this class for some \$16 billion.

**LHA(R):** The Navy's new shipbuilding plan provides for the construction of the first of a new class of amphibious assault ship in FY 2007. This schedule accelerates the construction of this ship by one year, compared to last year's plan. The FY 2006 budget request includes \$150 million in advance procurement funding for the program.

**CVN-21:** Under the administration's defense plan, \$308 million in R&D and \$565 million in advance procurement funding would be provided for the CVN-21, the lead ship of a new class of aircraft carrier. Full funding for the ship is projected for FY 2008. In 1998, the Navy decided to adopt an evolutionary approach to designing this new class of aircraft carrier. Under this plan, the first ship of this class will closely resemble existing Nimitz-class carriers, although succeeding ships might differ substantially from that class.

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<sup>62</sup> Ron O'Rourke, "Navy Force Architecture and Ship Acquisition: Selected FY 2005 Issues for Congress," CRS, March 15, 2005, p. 24.

**T-AKE:** This new class of dry cargo ship is intended to replace the existing refrigerated cargo and food stores ships (designated AFS class) and ammunition ships (designated AE class) in the Navy's mobile logistics fleet. The FY 2006 request includes \$380 million for the procurement of one T-AKE in FY 2006.

## Army

The Army's FY 2006 budget request includes \$9.7 billion for R&D and \$11.8 billion for procurement.

**AH-64:** The FY 2006 budget request would provide \$794 million for various upgrades to the Army's fleet of AH-64 Apache attack helicopters. These upgrades include the addition of Target Acquisition Designation Sight (TADS)/Pilot Night Vision Sensors (PNVS), as well as a variety of safety and reliability improvements. The Longbow Apache upgrade program—under which a portion of the Apache fleet is being be equipped with a mast-mounted fire control radar, and all of the existing Apaches are being modified to carry the radar-frequency fire-and-forget version of the Hellfire missile—was completed with funding in the FY 2005 budget.

**UH-60:** The FY 2006 request includes \$618 million for the procurement of 41 Blackhawk UH-60 utility helicopters, plus \$115 million for R&D. The Army's cancellation of the \$38 billion Comanche reconnaissance/attack helicopter program last year freed up additional funding for a number of other Army helicopter programs, including the UH-60. By comparison, only 17 of these helicopters were procured in FY 2004, before the Comanche cancellation.

**CH-47:** The Army is requesting \$696 million in FY 2006 to purchase two new and 21 remanufactured CH-47F helicopters. The CH-47F is used to transport troops, supplies, ammunition and other supplies in support of combat operations. Altogether, current plans call for procuring 501 aircraft, including 397 remanufactured CH-47Fs, 55 new-build CH-47Fs and 58 Special Operations MH-47Gs.

**Interim Armored Vehicle (IAV):** The "Stryker" IAV program represents a key element in the Army's transformation plans. The Stryker is intended to provide a relatively light and easily deployable combat vehicle to bridge the gap between today's lethal, but relatively heavy forces, and the more capable and deployable systems being developed under the Future Combat System (FCS) program—which is expected to lead to the fielding of new capabilities starting around 2010. The FY 2006 request includes \$27 million for R&D and \$878 million in procurement funding to buy 240 Stryker vehicles.

**Future Combat System:** Through the FCS program, the Army plans to develop a family of 18 combat vehicles and other systems, including UAVs and sensors, with which to equip the Army's "Future Force"—the Army projected for 2010 and beyond. This force is expected to be both more deployable than today's forces and more lethal and survivable than the interim forces presently being procured. The FY 2006 budget request includes \$3.4 billion in R&D funding for the FCS program. With costs projected to reach some \$145 billion or more,<sup>63</sup> and substantial

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<sup>63</sup> This level of funding would be sufficient to equip about one-third of the Army with the FCS.

technical obstacles yet to be overcome, this program is coming under increasing scrutiny from members of Congress and others.<sup>64</sup>

**M-1 Tank:** The budget request provides \$455 million to upgrade older M-1 Abrams tanks. Among other things, this funding will be used to procure 399 new AGT 1500 Tiger engines to improve the M-1's reliability, maintainability and availability.

## MILITARY CONSTRUCTION AND FAMILY HOUSING

The administration is requesting \$7.8 billion for military construction and \$4.2 billion for family housing in FY 2006. The FY 2006 request for military construction marks a \$1.7 billion increase from the level provided in FY 2005. It also represents the highest level of funding for military construction since FY 1996. Under the administration's defense plan, military construction funding is projected to receive large boosts over the next few years and stay at historically high levels through FY 2011—specifically, DoD's military construction budget would rise to \$12 billion (FY 2006 dollars) in FY 2007 and \$13 billion in FY 2008, before declining to \$9.8 billion in FY 2011.

These increases are driven primarily by the 2005 BRAC process. Over the long term, base closures save money. The previous BRAC rounds begun in 1988, 1991, 1993, and 1995 eliminated a total of about 21 percent of DoD's domestic basing structure. But there are substantial upfront costs associated with the BRAC process related, among other things, to environmental cleanup and the need to reconstitute, at remaining bases, some capabilities existing at bases selected for closure. The FY 2006 request includes \$1.9 billion to cover BRAC costs. This funding is projected to increase to \$5.7 billion in FY 2007.

By contrast, the latest budget projects a significant decline in funding for military family housing towards the end of the decade. Under the new plan, DoD's family housing budget would fall to \$2.4 billion (FY 2006 dollars) by FY 2011.

## DEPARTMENT OF ENERGY DEFENSE (DoE) ACTIVITIES

The administration's FY 2006 request would provide \$17.5 billion for atomic energy defense activities. This represents about a \$473 million decrease from FY 2005. The request includes \$6.6 billion for weapons activities and \$7.0 billion for defense environmental restoration, waste management and other activities. The request would also provide \$1.6 billion for non-proliferation programs and \$786 million to support naval nuclear reactor programs. About \$9.4 billion of DoE funding would come under the purview of the National Nuclear Security Administration, which was established in the FY 2000 defense authorization act, among other things, to improve management and security at DoE weapons labs.

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<sup>64</sup> In particular, Senator John McCain, chairman of the Senate Armed Services Committee's Air Land subcommittee has begun reviewing the FCS program.

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### III. CONCLUSION

The administration's FY 2006 defense budget request continues the build up in funding for defense begun in the late 1990s and accelerated after the terrorist attacks of September 11, 2001. The request should be adequate to cover the FY 2006 costs of DoD's modernization plans, and peacetime manning and operations and support activities. However, as much as an additional \$85 billion will eventually have to be provided to cover the FY 2006 cost of US military operations being carried out in Iraq and Afghanistan. Under the administration's plan, funding for defense is projected to continue to grow through FY 2009, and then decline slightly. However, by FY 2011 funding for defense (exclusive of war costs) would still be very high by historical standards—some 20 percent above average Cold War budget levels in real terms, and above the levels sustained even during the 1980s, the decade of the Reagan buildup.

However, even defense budgets of this magnitude are unlikely to prove sufficient to pay for DoD's long-term force structure, modernization and readiness plans. If history is any guide, operations and support costs and DoD's modernization plans are likely to prove substantially more costly to execute than assumed by the administration. Studies conducted by CBO, CSBA and others suggest that fully implementing DoD's plans, over the long-term, could require increasing funding for defense by an additional \$50 billion or more per year beyond the levels called for in the administration's current plan.

On the other hand, sustaining even the level of funding increases projected for defense in the administration's latest budget will be difficult. The long-term federal budget picture has dramatically worsened over the past two years. In early 2001, CBO projected a 10-year surplus of about \$5.6 trillion over the FY 2002-11 period. By contrast, CBO's baseline estimate now projects *deficits* totaling \$980 billion over the next decade (FY 2006-15). The change in the government's fiscal outlook has resulted from the enactment of large tax cuts, increases in defense and homeland security spending, the addition of the Medicare prescription drug benefit, and other factors.

Unfortunately, it is likely that the outlook will deteriorate still further in coming years. In its latest request, the administration has proposed additional tax cuts and spending increases. If enacted these changes could increase total deficits to at least \$2.6 trillion over the FY 2006-15 period, and quite possibly to \$4-5 trillion. Moreover, the fiscal outlook is likely to deteriorate even more dramatically after the "baby boomer" generation begins retiring towards the end of the decade. In this environment, strong pressure may emerge to slow, or perhaps even reverse, the continued growth in funding for defense projected in the administration's plan.

This means that in coming years pressure will grow for DoD to scale back its plans. More actions like the recent reduction in the F/A-22 program will likely have to be taken. There is good reason to believe that by adopting a scaled-back and more transformation-oriented defense plan the United States could avoid (or offset) much of the cost growth that is otherwise projected in DoD's plans, by CBO and others, and still adequately meet its security requirements. However, so long as a large US military presence is required in Iraq and elsewhere, it will be difficult or impossible to make reductions in some programs and activities—especially Army force structure.

Alternatively, a decision could be made to address the ballooning budget deficit solely through reductions in domestic and entitlement (e.g., Social Security and Medicare) spending, or tax increases, leaving current defense plans unaffected. But such a choice would be politically difficult and, based on history, seems unlikely. In any case, whatever path is selected, effectively addressing the growing cost of DoD's plans and the growing size of the federal deficit, will require making some very hard decisions. And the sooner those decisions are made the less painful they will be to carry out. A critical question for the coming year is whether the Bush Administration will make some of these tough decisions in the ongoing QDR, the results of which are expected to be fully reflected in the FY 2007 defense budget request.

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# APPENDIX

Table 1	National Defense Budget Authority and Outlays
Graph 1	National Defense Budget Authority, FY 1946–2010
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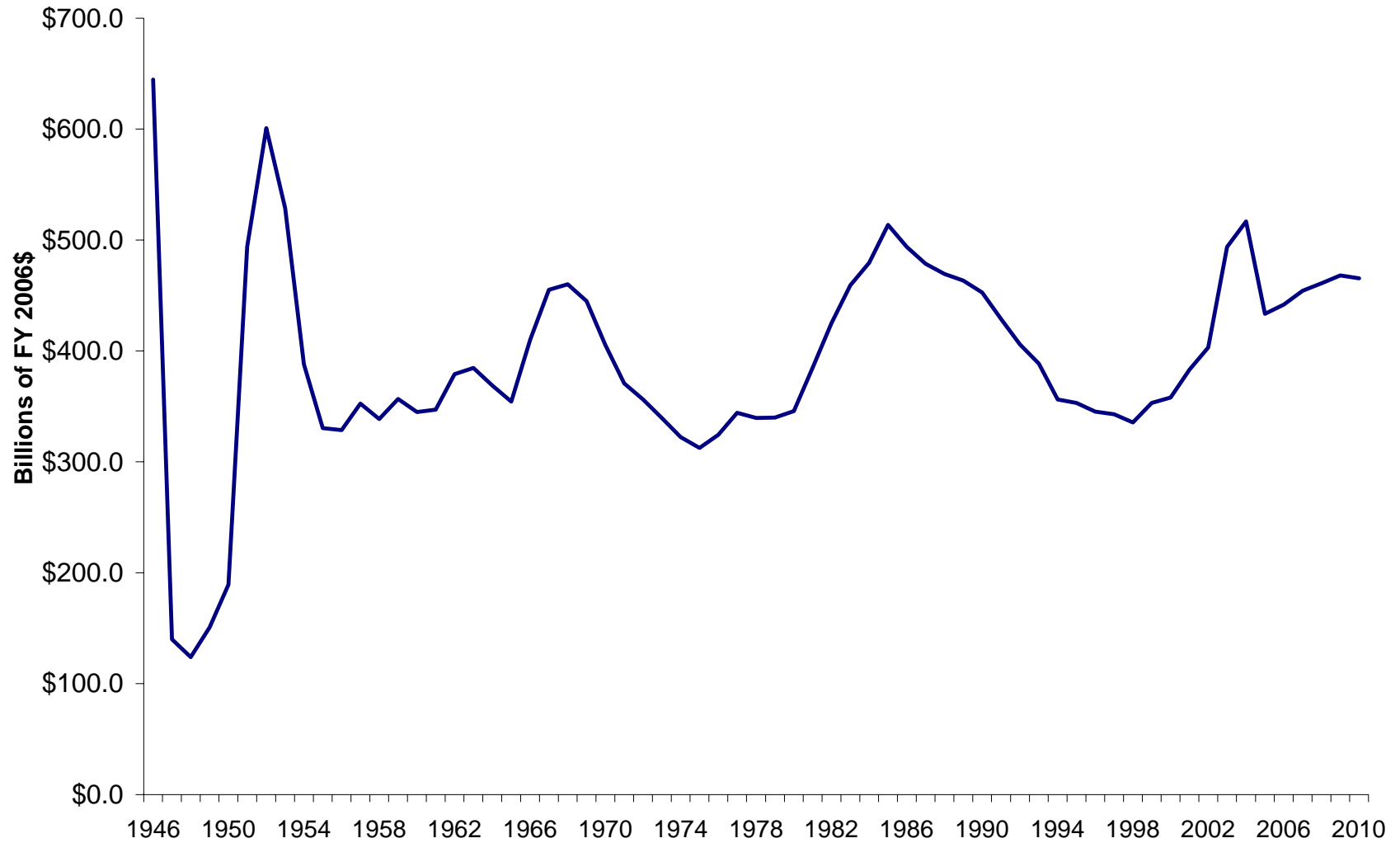
**Table 1**  
**National Defense Budget Authority and Outlays\***  
(in billions of current dollars)

	<u>FY 80 ~</u>	<u>FY 85 ~</u>	<u>FY 90 ~</u>	<u>FY 95 ~</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY08</u>	<u>FY 09</u>	<u>FY 10</u>
<b>Budget Authority</b>																	
DoD (051)	140.7	286.8	291.0	255.7	258.5	278.5	290.4	318.8	345.0	437.9	471.0	402.0	421.1	445.0	464.4	484.0	494.2
DoE & Other	3.2	7.9	10.3	10.7	12.8	13.8	13.7	16.1	17.1	18.3	19.6	21.6	20.7	20.4	19.5	19.8	19.7
National Defense (050)	143.9	294.7	301.2	266.4	271.3	292.3	304.1	334.9	362.1	456.2	490.6	423.6	441.8	465.4	483.9	503.8	513.9
<i>annual real change</i>	NA	NA	NA	NA	NA	5.2%	1.4%	7.0%	5.2%	22.5%	4.6%	-16.1%	1.9%	2.8%	1.5%	1.5%	-0.6%
	<u>FY 80 ~</u>	<u>FY 85 ~</u>	<u>FY 90 ~</u>	<u>FY 95</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>	<u>FY 06</u>	<u>FY 07</u>	<u>FY08</u>	<u>FY 09</u>	<u>FY10</u>
<b>Outlays</b>																	
DoD (051)	130.9	245.2	288.3	258.4	256.1	261.3	281.2	290.3	332.0	387.3	436.5	443.9	426.3	428.0	446.5	468.1	485.1
DoE & Other	3.1	7.6	9.6	12.6	9.1	13.6	13.3	14.6	16.6	17.6	19.4	22.0	21.1	20.9	19.6	19.6	19.7
National Defense (050)	134.0	252.7	297.9	271.0	265.2	274.9	294.5	304.9	348.6	404.9	455.9	465.9	447.4	448.9	466.1	487.7	504.8
<i>annual real change</i>	NA	NA	NA	NA	NA	1.8%	4.2%	0.5%	11.4%	13.6%	9.4%	-0.7%	-6.1%	-2.1%	1.3%	2.0%	0.9%

Source: CSBA, April 2005. Based on OMB, CBO and DoD data.

\*Totals *exclude* funding for the 1991 Gulf War and related allied cash contributions.

**Graph 1**  
**National Defense Budget Authority FY 1946-2010\***



Source: CSBA, February 2004. Based on OMB, DoD and CBO data.  
\*Excludes funding for the 1991 Gulf War and related allied cash contributions.

**Fiscal Year**

**Table 2**  
**National Defense (050) Budget Authority, FY 1946-FY 2010\***  
 (by fiscal year in billions of dollars)

	<i>Current Dollars</i>	<i>FY 2006 Dollars</i>	<i>% real change</i>		<i>Current Dollars</i>	<i>FY 2006 Dollars</i>	<i>% real change</i>
1946	44.0	644.6		1978	117.2	339.5	(1.4%)
1947	9.0	139.9	(78.3%)	1979	126.5	340.0	0.2%
1948	9.5	123.8	(11.5%)	1980	143.9	345.7	1.7%
1949	10.9	150.6	21.6%	1981	180.0	385.0	11.4%
1950	16.5	189.2	25.6%	1982	216.5	424.9	10.4%
1951	57.8	494.1	161.1%	1983	245.0	459.1	8.0%
1952	67.5	600.8	21.6%	1984	265.2	479.5	4.4%
1953	56.9	528.5	(12.0%)	1985	294.7	513.5	7.1%
1954	38.7	388.0	(26.6%)	1986	289.2	493.8	(3.8%)
1955	32.9	330.3	(14.9%)	1987	287.4	478.5	(3.1%)
1956	35.0	328.6	(0.5%)	1988	292.0	469.4	(1.9%)
1957	39.4	352.6	7.3%	1989	299.6	463.4	(1.3%)
1958	40.0	338.7	(3.9%)	1990	301.2	452.7	(2.3%)
1959	45.1	356.6	5.3%	1991	296.2	428.6	(5.3%)
1960	44.3	344.8	(3.3%)	1992	287.7	405.9	(5.3%)
1961	45.1	347.1	0.7%	1993	281.1	388.6	(4.3%)
1962	50.2	379.1	9.2%	1994	263.3	356.4	(8.3%)
1963	52.1	384.5	1.4%	1995	266.4	353.1	(0.9%)
1964	51.6	369.0	(4.0%)	1996	266.2	345.2	(2.2%)
1965	50.6	354.3	(4.0%)	1997	270.4	342.9	(0.7%)
1966	64.4	410.0	15.7%	1998	271.3	335.5	(2.1%)
1967	73.1	455.0	11.0%	1999	292.3	353.0	5.2%
1968	77.8	460.0	1.1%	2000	304.1	358.0	1.4%
1969	78.5	444.8	(3.3%)	2001	334.9	383.0	7.0%
1970	75.3	405.3	(8.9%)	2002	362.1	403.1	5.2%
1971	72.7	370.7	(8.5%)	2003	456.2	493.9	22.5%
1972	76.4	356.2	(3.9%)	2004	490.6	516.8	4.6%
1973	79.1	339.6	(4.7%)	2005	423.6	433.5	(16.1%)
1974	81.5	322.2	(5.1%)	<b>2006</b>	<b>441.8</b>	<b>441.8</b>	<b>1.9%</b>
1975	86.2	312.5	(3.0%)	2007	465.4	454.3	2.8%
1976	97.3	324.3	3.8%	2008	483.9	461.0	1.5%
1977	110.2	344.3	6.2%	2009	503.8	468.1	1.5%
				2010	513.9	465.5	(0.6%)

Source: CSBA, April 2005. Based on OMB, CBO and DoD data.

\*Excludes funding for the 1991 Gulf War and related allied cash contributions.

**Table 3**  
**National Defense (050) Outlays, FY 1946-FY 2010\***  
 (by fiscal year in billions of dollars)

	<i>Current Dollars</i>	<i>FY 2006 Dollars</i>	<i>% real change</i>		<i>Current Dollars</i>	<i>FY 2006 Dollars</i>	<i>% real change</i>
1946	42.7	647.7		1978	104.5	316.2	(0.1%)
1947	12.8	182.7	(71.8%)	1979	116.3	327.8	3.7%
1948	9.1	125.2	(31.5%)	1980	134.0	335.5	2.3%
1949	13.2	173.5	38.5%	1981	157.5	351.4	4.8%
1950	13.7	170.3	(1.9%)	1982	185.3	373.6	6.3%
1951	23.6	261.0	53.3%	1983	209.9	403.0	7.9%
1952	46.1	451.0	72.8%	1984	227.4	419.1	4.0%
1953	52.8	497.7	10.4%	1985	252.7	447.2	6.7%
1954	49.3	473.3	(4.9%)	1986	273.4	469.6	5.0%
1955	42.7	408.1	(13.8%)	1987	282.0	471.3	0.4%
1956	42.5	385.5	(5.5%)	1988	290.4	469.7	(0.3%)
1957	45.4	390.6	1.3%	1989	303.6	471.1	0.3%
1958	46.8	380.9	(2.5%)	1990	297.9	449.9	(4.5%)
1959	49.0	380.0	(0.3%)	1991	296.7	430.4	(4.3%)
1960	48.1	374.3	(1.5%)	1992	286.1	401.5	(6.7%)
1961	49.6	371.5	(0.7%)	1993	283.9	388.3	(3.3%)
1962	52.3	392.7	5.7%	1994	278.9	372.5	(4.1%)
1963	53.4	392.6	(0.0%)	1995	271.0	356.1	(4.4%)
1964	54.8	391.4	(0.3%)	1996	265.2	341.6	(4.1%)
1965	50.6	360.3	(7.9%)	1997	270.4	339.5	(0.6%)
1966	58.1	383.6	6.5%	1998	265.2	325.4	(4.1%)
1967	71.4	441.7	15.1%	1999	274.9	331.2	1.8%
1968	81.9	481.1	8.9%	2000	294.5	345.2	4.2%
1969	82.5	468.5	(2.6%)	2001	304.9	346.8	0.5%
1970	81.7	435.7	(7.0%)	2002	348.6	386.2	11.4%
1971	78.9	398.7	(8.5%)	2003	404.9	438.8	13.6%
1972	79.2	369.8	(7.3%)	2004	455.9	480.0	9.4%
1973	76.7	336.8	(8.9%)	2005	465.9	476.6	(0.7%)
1974	79.3	322.8	(4.1%)	<b>2006</b>	<b>447.4</b>	<b>447.4</b>	<b>(6.1%)</b>
1975	86.5	317.0	(1.8%)	2007	448.9	438.1	(2.1%)
1976	89.6	306.9	(3.2%)	2008	466.1	443.9	1.3%
1977	97.2	316.4	3.1%	2009	487.7	453.0	2.0%
				2010	504.8	457.2	0.9%

Source: CSBA, April 2005. Based on OMB, CBO and DoD data.

\*Excludes funding for the 1991 Gulf War and related allied cash contributions.

**Table 4**  
**Department of Defense (051) Budget Authority by Title\***  
(in billions of dollars)

	<u>FY 80</u>	<u>~</u>	<u>FY85</u>	<u>~</u>	<u>FY 90</u>	<u>~</u>	<u>FY 93</u>	<u>FY 94</u>	<u>FY 95</u>	<u>FY 96</u>	<u>FY 97</u>	<u>FY 98</u>	<u>FY 99</u>	<u>FY 00</u>	<u>FY 01</u>	<u>FY 02</u>	<u>FY 03</u>	<u>FY 04</u>	<u>FY 05</u>	<u>FY06</u>	<u>FY07</u>	<u>FY08</u>	<u>FY09</u>	<u>FY10</u>	<u>FY11</u>
<b>Current Dollars</b>																									
Personnel	41.1		67.8		78.9		76.0	71.4	71.6	69.8	70.3	69.8	70.6	73.8	76.9	87.0	109.1	116.1	105.6	111.3	114.4	117.9	122.0	125.9	129.8
O&M	46.4		77.8		88.4		89.1	88.6	93.7	93.6	92.3	97.2	104.9	108.7	115.7	133.2	178.3	189.8	138.4	148.4	154.7	161.4	167.9	172.7	178.0
Procurement	35.3		96.8		81.4		52.8	44.1	43.6	42.6	43.0	44.8	51.1	55.0	62.6	62.7	78.5	83.1	78.3	78.0	91.6	101.4	105.3	111.3	118.6
RDT&E	13.6		31.3		36.5		37.8	34.6	34.5	35.0	36.4	37.1	38.3	38.7	41.6	48.7	58.1	64.6	68.8	69.4	66.8	66.5	72.4	68.8	59.7
Military Construction	2.3		5.5		5.1		4.6	6.0	5.4	6.9	5.7	5.5	5.4	5.1	5.4	6.6	6.7	6.1	6.1	7.8	12.3	13.6	11.1	10.5	10.9
Family Housing	1.5		2.9		3.1		3.9	3.5	3.4	4.3	4.1	3.8	3.6	3.5	3.7	4.0	4.2	3.8	4.1	4.2	3.9	3.0	2.7	2.7	2.7
Other	0.5		4.7		-0.4		3.0	3.1	3.4	2.4	6.1	0.3	4.6	5.6	12.9	2.7	3.0	7.5	0.8	1.9	1.3	0.6	2.7	2.284	4.8
DoD	140.7		286.8		292.9		267.1	251.3	255.7	254.5	257.9	258.5	278.5	290.4	318.8	345.0	437.9	471.0	402.0	421.1	445.0	464.4	484.0	494.2	504.5
<b>FY 2006 Dollars</b>																									
Personnel	123.6		137.6		137.8		117.7	107.8	105.5	100.6	98.4	93.8	92.1	91.9	92.6	99.1	119.7	123.4	108.8	111.3	111.0	110.9	111.3	111.5	111.4
O&M	103.7		138.9		135.2		125.6	121.5	125.7	122.8	118.7	121.2	127.7	129.8	133.0	149.8	194.1	200.6	141.3	148.4	151.1	154.0	156.0	156.2	156.7
Procurement	73.9		152.0		107.5		64.7	53.1	51.6	49.6	49.4	51.1	57.5	60.9	68.5	67.8	83.4	86.5	79.9	78.0	89.7	97.3	98.9	102.4	106.9
RDT&E	28.0		50.4		49.2		47.3	42.4	41.5	41.3	42.3	42.6	43.7	43.4	45.9	52.8	62.0	67.5	70.2	69.4	65.4	63.8	68.0	63.3	53.8
Military Construction	4.6		8.9		6.9		5.7	7.4	6.5	8.1	6.7	6.3	6.2	5.7	6.0	7.2	7.1	6.4	6.2	7.8	12.0	13.0	10.4	9.7	9.8
Family Housing	3.1		4.6		4.2		4.9	4.2	4.0	5.0	4.8	4.4	4.0	3.9	4.0	4.4	4.5	4.0	4.2	4.2	3.8	2.9	2.5	2.5	2.4
Other	1.1		7.4		-0.5		3.5	3.6	3.9	2.7	6.8	0.3	5.1	6.2	14.5	2.9	3.2	7.8	0.9	1.9	1.3	0.6	2.5	2.1	4.3
DoD	338		499.8		440.3		369.3	340.1	338.8	330.1	327.1	319.7	336.3	341.9	364.6	384.0	474.0	496.1	411.5	421.1	434.4	442.5	449.7	447.6	445.5

Source: CSBA, April 2005. Based on OMB, DoD and Other data.

\*Includes funding for the 1991 Gulf War and related allied cash contributions.

**Table 5**  
**FY 2006 Request for Selected Weapon Systems**  
(funding in millions of dollars)

	<u>Qty</u>	<u>Proc</u>	<u>R&amp;D</u>	<u>Total</u>
<b><u>Tactical Aircraft</u></b>				
F/A-22 Fighter	24	3,817.5	479.7	4,297.2
F/A-18 E/F Super Hornet	42	2,822.0	89.0	2,911.0
Joint Strike Fighter (JSF)		152.4	4,867.8	5,020.2
<b><u>Other Aircraft</u></b>				
C-17 Cargo Aircraft	15	3,497.1	165.8	3,662.9
C-130	12	1,383.4	239.7	1,623.1
JPATS	54	335.7	0.0	335.7
E-2C Hawkeye	2	249.0	629.7	878.7
V-22 Osprey	11	1,503.8	275.7	1,779.5
UAVs	114	599.6	912.2	1,511.8
<b><u>Submarine Programs</u></b>				
NSSN/Virginia Class Submarine	1	2,401.5	155.8	2,557.3
<b><u>Other Ships</u></b>				
CVN-21 (carrier replacement prog.)		564.9	308.0	872.9
DDG-51 Destroyer		225.4		225.4
DD(X) Destroyer		716.0	1,084.7	1,800.7
Littoral Combat Ship (LCS)	1	36.8	576.4	613.2
LPD-17	1	1,344.7	11.4	1,356.1
T-AKE Dry Cargo Ship	1	380.1	0.0	380.1
<b><u>Missiles/Munitions</u></b>				
AMRAAM	267	202.2	36.9	239.1
JDAM	11,400	305.9	0.0	305.9
JASSM	300	150.2	67.0	217.2
JAVELIN	300	57.6	0.0	57.6
JSOW	420	145.4	13.5	158.9
Small Diameter Bomb (SDB)	512	59.1	96.0	155.1
Tactical Tomahawk	379	353.4	20.3	373.7
Trident II		932.7	90.0	1,022.7
<b><u>Helicopters</u></b>				
Longbow Apache		683.9	109.7	793.6
MH-60R	12	554.5	48.1	602.6
MH-60S	26	589.1	40.8	629.9
UH-60 Blackhawk	41	618.1	115.0	733.1
<b><u>Combat Vehicles</u></b>				
Future Combat System		0.0	3,404.8	3,404.8
M1 Tank Upgrade Program		450.9	44.9	495.8
Stryker	240	878.4	26.7	905.1

Source: CSBA, April 2005. Based on DoD data.

**Table 6**  
**Department of Defense Budget by Service\***  
(budget authority in billions of dollars)

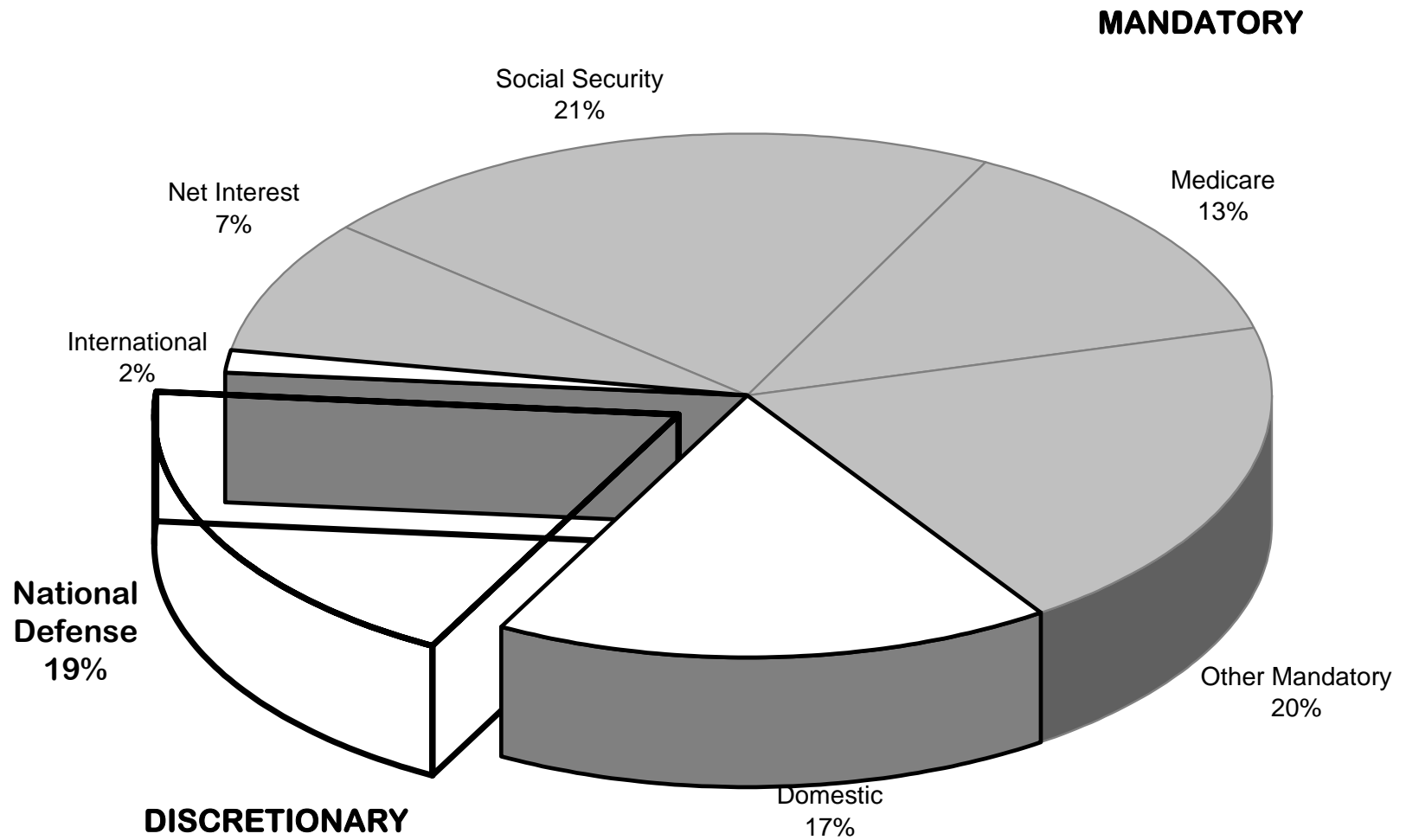
	<u>1980</u>	-	<u>1985</u>	-	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004**</u>	<u>2005**</u>	<b>2006</b>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>
<b>Army</b>																										
Current \$	34.4		74.3		78.5	91.8	73.6	64.8	62.4	63.3	64.5	64.4	64.0	68.4	73.2	77.0	85.9	121.1	132.9	100.3	<b>100.0</b>	111.5	117.5	121.5	124.2	126.7
FY 2006\$	82.6		129.4		118.0	132.9	103.9	89.6	84.5	83.9	83.7	81.7	79.2	82.6	86.1	88.1	95.6	131.1	140.0	102.7	<b>100.0</b>	108.8	111.9	112.9	112.5	111.9
% of total	24%		26%		27%	29%	26%	24%	25%	25%	25%	25%	25%	25%	25%	24%	24%	28%	30%	25%	<b>24%</b>	25%	25%	25%	25%	25%
<b>Navy</b>																										
Current \$	47.2		99.0		100.0	103.5	90.3	83.2	78.1	76.9	80.1	79.6	80.7	84.0	88.8	102.4	110.9	124.1	120.3	119.2	<b>125.6</b>	129.0	134.6	143.3	147.5	153.3
FY 2006\$	113.5		172.6		150.3	149.7	127.4	115.0	105.6	102.0	103.9	100.9	99.8	101.5	104.5	117.1	123.5	134.3	126.7	122.0	<b>125.6</b>	125.9	128.2	133.1	133.6	135.4
% of total	34%		35%		34%	32%	31%	31%	31%	30%	31%	31%	31%	30%	31%	32%	31%	28%	27%	30%	<b>30%</b>	29%	29%	30%	30%	31%
<b>Air Force</b>																										
Current \$	41.7		99.4		92.9	91.3	82.3	79.1	74.6	73.9	73.0	73.2	76.3	81.9	83.1	89.5	100.2	125.2	124.0	117.8	<b>127.5</b>	133.3	139.2	138.7	142.2	146.8
FY 2006\$	100.2		173.3		139.6	132.1	116.2	109.4	100.9	98.0	94.7	92.9	94.3	98.9	97.8	102.4	111.6	135.6	130.6	120.6	<b>127.5</b>	130.1	132.6	128.9	128.8	129.6
% of total	30%		35%		32%	29%	29%	30%	30%	29%	29%	28%	30%	29%	29%	28%	28%	29%	28%	29%	<b>30%</b>	30%	30%	29%	29%	29%
<b>Defense-wide</b>																										
Current \$	17.3		14.1		21.7	32.8	40.8	40.0	36.3	41.6	36.9	40.8	37.6	44.3	45.52	47.9	57.1	67.4	64.5	62.8	<b>66.2</b>	69.3	71.1	78.5	78.2	75.5
FY 2006\$	41.6		24.6		32.5	47.5	57.6	55.4	49.1	55.1	47.9	51.8	46.5	53.5	53.6	54.7	63.6	72.9	68.0	64.3	<b>66.2</b>	67.6	67.7	72.9	70.8	66.7
% of total	12%		5%		7%	10%	14%	15%	14%	16%	15%	16%	15%	16%	16%	15%	16%	15%	15%	16%	<b>16%</b>	16%	15%	16%	16%	15%

Source: CSBA, April 2005. Based on DoD data.

\* Includes funding for the 1991 Gulf War, excludes related allied cash contributions. FY 1980-2004 figures are for total funding. FY 2005-11 are discretionary funding.

\*\* Totals exclude funding exclude \$25 billion provided in FY 2005 appropriations act for military operations.

**Graph 2**  
**FY 2006 Federal Budget Request**



Source: CSBA, April 2005. Based on OMB and CBO data.

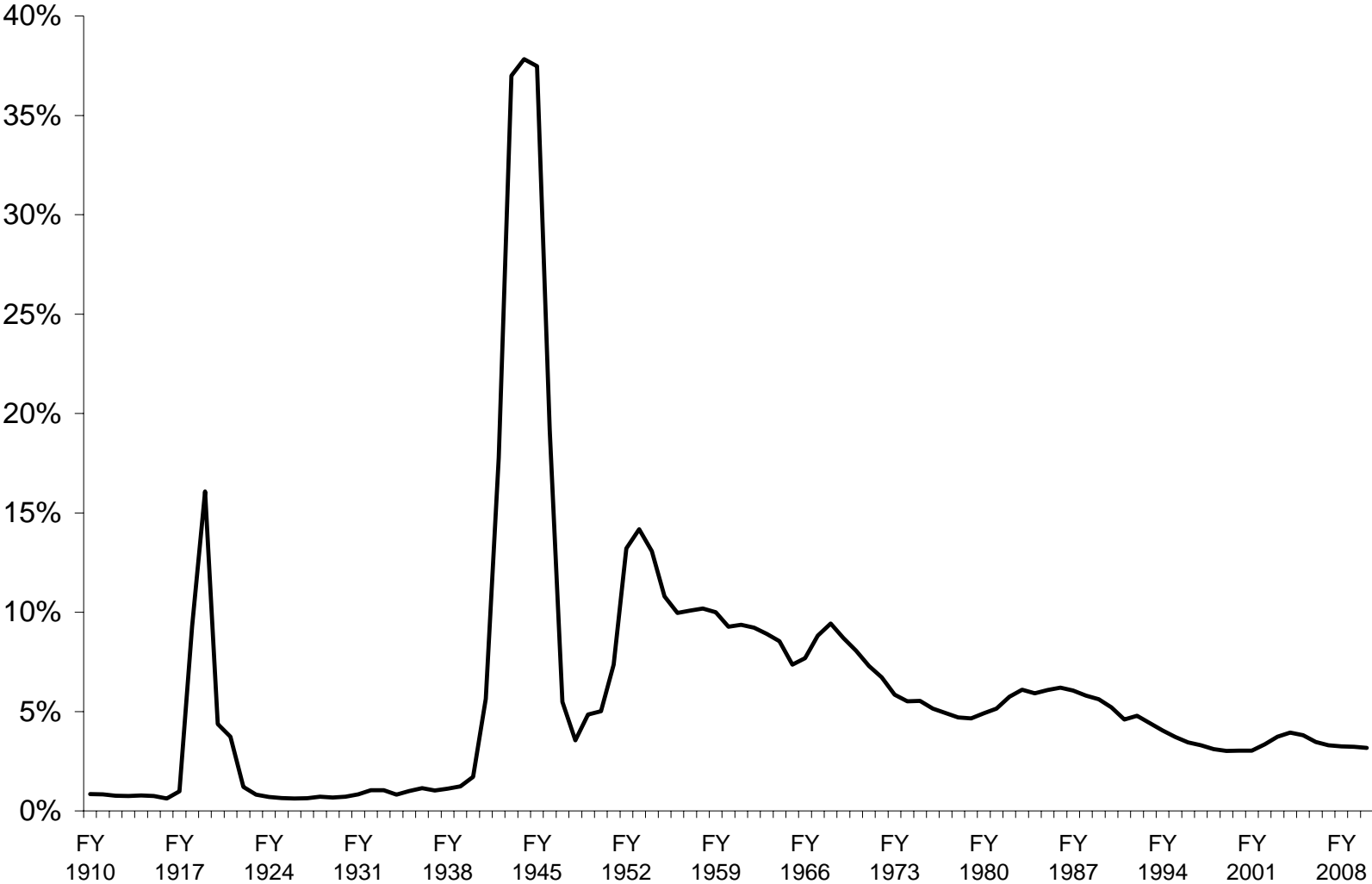
**Table 7**  
**National Defense, Federal Spending and the Gross Domestic Product\***  
**FY 1980-FY 2010**  
(outlays in billions of current dollars)

Fiscal Year	National Defense Outlays (050)	Federal Outlays	050 as % of Federal Outlays	GDP	050 as % of GDP
1980	134.0	590.9	22.7%	2,726.5	4.9%
1981	157.5	678.2	23.2%	3,054.7	5.2%
1982	185.3	745.7	24.8%	3,227.6	5.7%
1983	209.9	808.4	26.0%	3,440.7	6.1%
1984	227.4	851.9	26.7%	3,840.2	5.9%
1985	252.7	946.4	26.7%	4,141.5	6.1%
1986	273.4	990.4	27.6%	4,412.4	6.2%
1987	282.0	1,004.1	28.1%	4,647.1	6.1%
1988	290.4	1,064.5	27.3%	5,008.6	5.8%
1989	303.6	1,143.8	26.5%	5,400.5	5.6%
1990	299.3	1,253.1	23.9%	5,735.4	5.2%
1991	273.3	1,324.3	20.6%	5,935.1	4.6%
1992	298.4	1,381.6	21.6%	6,239.9	4.8%
1993	291.1	1,409.5	20.7%	6,575.5	4.4%
1994	281.6	1,461.9	19.3%	6,961.3	4.0%
1995	272.1	1,515.8	17.9%	7,325.8	3.7%
1996	265.8	1,560.5	17.0%	7,694.1	3.5%
1997	270.5	1,601.2	16.9%	8,182.4	3.3%
1998	268.5	1,652.6	16.2%	8,627.9	3.1%
1999	274.9	1,701.9	16.2%	9,125.3	3.0%
2000	294.5	1,789.1	16.5%	9,709.8	3.0%
2001	304.9	1,863.0	16.4%	10,057.9	3.0%
2002	348.6	2,011.0	17.3%	10,389.2	3.4%
2003	404.9	2,159.9	18.7%	10,838.8	3.7%
2004	455.9	2,292.2	19.9%	11,552.8	3.9%
2005	465.9	2,479.4	18.8%	12,227.4	3.8%
2006	447.4	2,567.6	17.4%	12,907.3	3.5%
2007	448.9	2,656.3	16.9%	13,617.2	3.3%
2008	466.1	2,757.8	16.9%	14,349.0	3.2%
2009	487.7	2,882.9	16.9%	15,111.4	3.2%
2010	504.8	3,028.2	16.7%	15,906.2	3.2%

Source: CSBA, April 2005. Based on OMB, CBO and DoD data.

\* National defense estimates *include* outlays for the 1991 Gulf War and allied cash contributions.

**Graph 3**  
**National Defense Outlays as a Share of GDP**



Source: CSBA, April 2005.