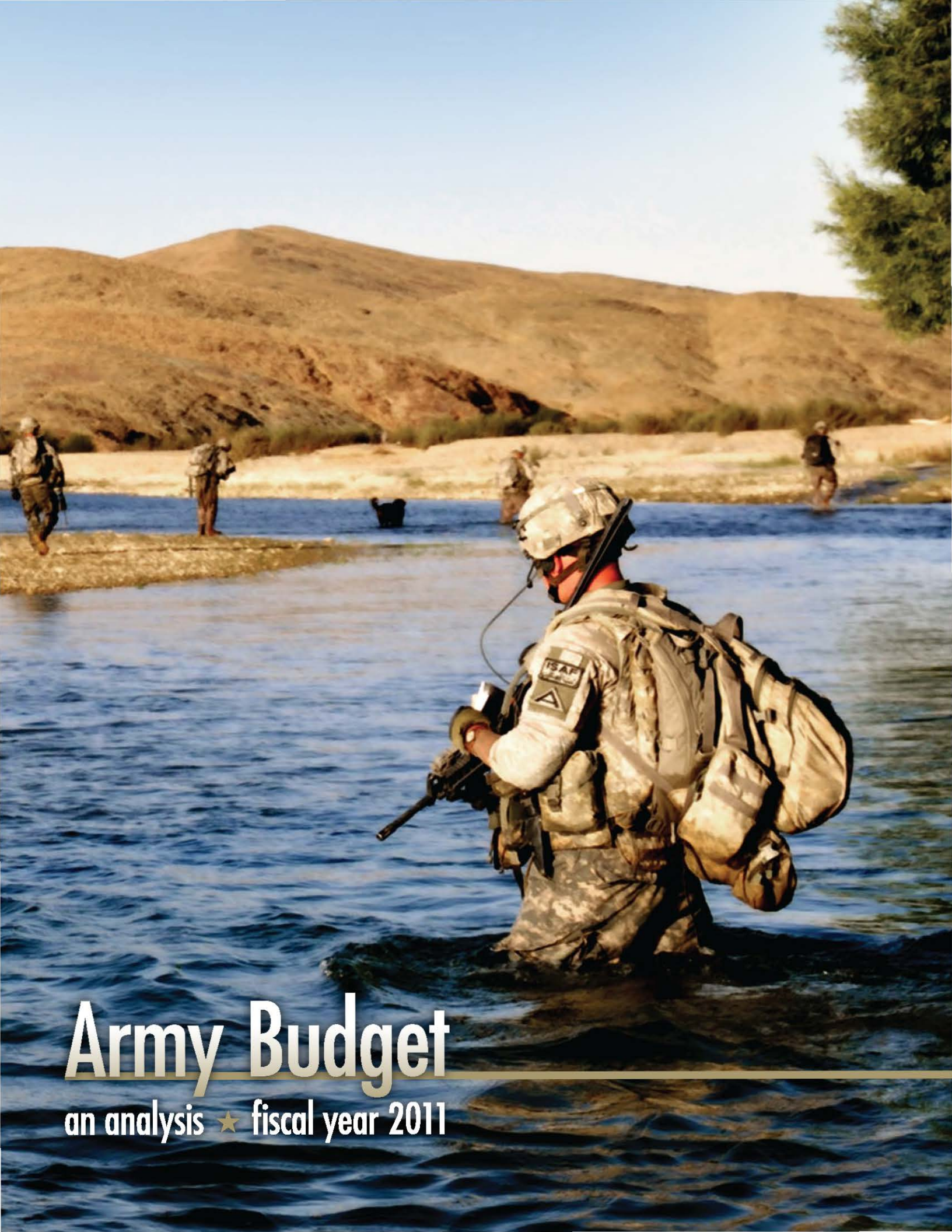

Army Budget

an analysis ★ fiscal year 2011

The Army Budget

Fiscal Year 2011

An Analysis

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Cover photograph
U.S. Soldiers conduct a dismounted patrol across the Arghandad River to assist Afghanistan National Police with humanitarian relief operations in the Kashani village in the Zabul province of Afghanistan, 9 October 2009. The Soldiers are with Alpha Company, 1st Battalion, 4th Infantry Regiment, Joint Multinational Readiness Center, U.S. Army Europe and deployed throughout southern Afghanistan in support of Operation Enduring Freedom. (DoD photo by SPC Tia P. Sokimson, U.S. Army/Released)

Graphics and design
Kevin Irwin

Technical support
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Foreword

The U.S. Army continues its engagements in a multifaceted battle; Soldiers are in combat in Afghanistan, on the ground in Iraq and stationed elsewhere throughout the world. Domestically, Army leaders must ensure that U.S. servicemembers have sufficient resources to uphold and strengthen our national security. To maintain its status as the best fighting force in the world, the Army must have the best equipment, technology and, most important, personnel—all of which requires full funding from the federal government.

With federal budget cuts necessary and expected in coming years, the Army must examine how best to prepare for Department of Defense budget cuts without compromising the safety of the country. This year Secretary of Defense Robert Gates announced plans to cut the Defense Budget by $100 billion over the next five years. In an attempt to reassure Americans that these cuts would not be prioritized over national safety, Gates made clear that "the task before us is not to reduce the [Defense] department's top-line budget. Rather, it is to significantly reduce its excess overhead costs and apply the savings to force structure and modernization." However, to execute current operations, reset our forces while maintaining a high operational tempo, and develop future capabilities to sustain the highest-quality force, timely, predictable and comprehensive funding is crucial.

The size of the Army, and indeed the defense force as a whole, must be sufficient to accomplish our national security goals; the active Army must be at least 700,000 Soldiers strong, and defense spending must be at least 5 percent of the Gross Domestic Product. In addition, the radically changed role of the reserve component (National Guard and Reserve) must result in redesigned structures, pay and benefits (including retirement) that reflect the way that component of the U.S. armed forces is now used.

Fiscal Year 2011 Army Budget—An Analysis details the resources required for the Army to accomplish its missions today and tomorrow. It examines the Army's proposed budget in the context of the federal and Department of Defense budgets and breaks down requests—from Soldiers' pay to research and development—according to funding authority and programs. The analysis explains budget terminology and procedures, including the overseas contingency operations funding process that is necessary for the Army to sustain the current level of operations and provide for Soldiers and their families.

The Association of the United States Army fully supports the Army—active Army, Army National Guard, Army Reserve, Army civilians and the families and communities who stand behind them all—as it faces its many challenges. *Fiscal Year 2011 Army Budget—An Analysis* is just one of many ways we speak out on issues important to the American Soldier, American landpower and the security of the nation and the world.

GORDON R. SULLIVAN
General, United States Army Retired
President, AUSA

September 2010

The Federal Budget

The President's Perspective

The nation is experiencing the worst recession since the Great Depression in 1929, and in his Budget message President Barack Obama predicts continuing unfavorable economic conditions: "Moving from recession to recovery, and ultimately to prosperity, remains at the heart of my Administration's efforts. This Budget provides a blueprint for the work ahead."[1]

The President declares that "we are continuing to lay a new foundation for the future" and specifically identifies the following areas on which the Budget focuses:

- education reform and investment;
- health insurance system reform;
- small business incentives including elimination of capital gains taxes for investments; and
- clean energy economy incentives.

President Obama also affirms his support for national security and veterans' programs:

> And because we know that our future is dependent on maintaining American leadership abroad and ensuring our security at home, the Budget funds all the elements of our national power—including our military—to achieve our goals of winding down the war in Iraq, executing our new strategy in Afghanistan, and fighting al Qaeda all over the world. To honor the sacrifice of the men and women who shoulder this burden and who have throughout our history, the Budget also provides significant resources, including advanced appropriations, to care for our Nation's veterans.[2]

The Budget is much more than simply a funding proposal—it is the President's plan for the next year as well as the strategic plan for the future. In addition to the request for resources to implement the plan, the Budget includes analyses of the economic environment, federal receipts and collections, federal debt and borrowing, interest on the debt, the baseline or current resource estimates for agencies and a large number of technical presentations. The Budget presents funding proposals at both summary and detail levels.

President Obama's Budget proposal is for $3.110 trillion in Budget Authority (BA) in fiscal year (FY) 2011.[3] In addition to proposing funds for government agencies and programs, the President also proposes terminations, reductions and other savings:

> The Budget includes more than 120 programs for termination, reduction, or other savings for a total of approximately $23 billion in 2011, as well as an aggressive effort to reduce the tens of billions of dollars in improper Government payments made each year.[4]

The savings of $23 billion is notable, but its impact on the unified BA proposal of $3.110 trillion is less than 1 percent. The "terminations, reductions, and other savings" imply decisions about ending programs or achieving program objectives through more efficient ways.

The Budget, like all plans, is developed in a context that includes the goals and objectives, the external environment, the resources available and alternative ways of achieving the objectives. Knowing the federal budget context is essential to better understanding the significance of the top-line Budget and the included budgets of the Department of Defense (DoD) and the Army. Therefore, this section of the analysis focuses on the federal budget context and includes a fundamental discussion on the national economy, federal revenues and expenditures and the distribution of funds across government agencies.

Budget Top Line

The Budget proposal for FY 2011 includes BA of $3.110 trillion and Outlays of $3.256 trillion.[5] The Budget Authority proposal for FY 2011 is a 2 percent increase from FY 2010 but a reduction of $438 bi1lion, or 12 percent, from the actual experience in FY 2009. The FY 2010 amount includes the supplemental request that accompanied the FY 2011 Budget. The FY 2011 amount includes the base and overseas contingency operations (OCO) supplemental proposals.

The Outlays proposal increased by 3 percent between FYs 2010 and 2011 and by 8.5 percent from the FY 2009 experience. The FY 2011 Outlays exceed Budget Authority by $146 billion because Outlays include payments from

current-year BA and the balance of BA brought over from prior years that remains available for obligation in the current year.

The top-line Outlays are used to analyze whether the Budget is balanced, i.e., whether revenues and expenditures are equal. If expenditures exceed revenues, then the federal government will operate at a deficit and have to borrow to meet Outlays. Unfortunately, the FY 2011 Budget proposal continues the deficit trend.

Background on the Federal Budget

The federal budget includes funds identified with many different labels and with different dollar amounts. Below is a condensed description of key budget terms, data and processes to facilitate an understanding of the budget and the analysis that follows.

Budget Terms

The federal government uses very specific terms to define the various funding authorities and to account for budget execution.

Funding Authority. Funding authority refers to the various types of funding power granted by Congress to allow agencies to obligate the government to make payments or to make payments on behalf of the government. Three types of funding authority are important in this analysis: Budget Authority, Total Obligational Authority and Outlays. Each has a different meaning and therefore will be a different dollar amount for the same fiscal year.

- **Budget Authority** (BA) is the authority provided by law to incur financial obligations that will result in Outlays.
- **Total Obligational Authority** (TOA) is the sum of:
  - Budget Authority for a given fiscal year;
  - the balance of Budget Authority brought forward from prior years that remains available for obligation in the fiscal year; and
  - amounts authorized to be credited to a specific fund or account during that year, including transfers between funds or accounts.
- **Outlay Authority** is the authority to make actual payments to liquidate obligations, including interest payments, during a fiscal year. Outlays occur when funds are transferred, checks are issued or cash is distributed to liquidate obligations. Outlays may be for payment of obligations incurred in the current or prior fiscal years.

In summary, Budget Authority and Total Obligational Authority refer to funds available for use by government officials, which is somewhat analogous to the money available in a personal line of credit. Outlays refer to the actual amount of cash on hand to make payments during the fiscal year, i.e., to liquidate the checks.

In this section, tables and figures display Budget Authority and Outlays. Outlays are important at the national level because the relationship between Outlays and revenues drives the federal debt or surplus, which is an overall federal issue and not an individual department issue. The DoD and Army sections display dollars in term of Budget Authority or Total Obligational Authority because the agencies focus on the availability of funding authority to initiate and support operations, programs and projects.

Appropriations and Authorizations. An appropriation provides legal authority for federal agencies to incur obligations and to make payments out of the U.S. Treasury for specified purposes. Appropriations bills, such as the Department of Defense bill and the Department of Homeland Security bill, contain funds for specific purposes and restrict the movement of funds among the appropriations. Appropriations bills require Congress to stipulate the amount of funds every year and may include supplemental bills.

An authorization is an act of Congress that establishes or continues a federal program or agency and sets forth the guidelines to which it must adhere. Authorization acts may also require federal action; for example, the Social Security authorization requires federal payments to all qualified persons.

Discretionary and Mandatory. The terms below refer to whether the funds are or are not controllable through the annual congressional appropriation process. The BA and Outlays include both discretionary and mandatory funds. The distinction is important to understanding the degree of flexibility available to the President and Congress.

- **Discretionary funds**—such as funds for defense, homeland security, space exploration, foreign aid, agriculture, commerce, highway construction, justice and law enforcement, education and housing—are annually appropriated by Congress and enacted into law.
- **Mandatory funds** flow from enacted authorization laws—i.e., laws that may have been enacted years before that set criteria for an entitlement—and not from the annual appropriations process. Examples include Social Security, Medicare and Medicaid.

The Glossary of Budget Terms in the final section of this document provides an explanation of frequently used federal budget terms.

Budget Data

All of the budgetary tables and figures in this analysis display Budget Authority, Total Obligational Authority or Outlays, or some combination of the three. The content of each type varies across time—the President's plan for the budget year is an estimate, the current-year amount reflects congressional appropriations and the prior-year amount reflects actual Outlays for the complete fiscal year.

- The prior-year and earlier BA dollars—in this case FY 2009—are *actual appropriated amounts* including supplemental and rescission actions. The prior-year and earlier Outlay dollars are the sum of actual obligations, expenditures and disbursements during the fiscal year regardless of the fiscal year of the BA and include supplemental dollars.
- The current-year BA and Outlay dollars—in this case FY 2010—summarizes the entire BA and Outlay authority enacted at the time the Budget was prepared. It includes supplemental dollars appropriated, but it does not include supplemental requests not yet enacted.
- The budget-year—in this case FY 2011—and any future-year BA and Outlay dollars are *estimates* and do not include supplemental requests.

The Budget is the summation of estimates that are reviewed, approved and consolidated through many organizational levels in each agency of government. This process involves substantial lead time. For example, the FY 2011 Budget incorporates proposals that were prepared, reviewed, integrated, analyzed, modified and consolidated across the government during calendar year 2009. The formulation process normally culminates with the President's Budget submission to Congress in February of the following year.

The congressional appropriation process ideally takes about seven or eight months from Budget submission until enactment by the beginning of the fiscal year on 1 October, about a year and a half after the initial estimates were made.

National Defense Budget

Congress uses a functional classification system, which is not synonymous with the agencies of government, to allocate budgetary resources. Budgets are generally assigned to the single budget function that best reflects the agency's major purpose; for example, DoD is placed in National Defense. A budget function may include a few subfunctions, and a portion of an agency's budget may be assigned to a subfunction that is not in its primary function; for example, part of the Department of Energy's budget for nuclear energy is in a subfunction of National Defense.

The National Defense function includes three subfunctions:

- 051 Department of Defense–Military;
- 053 Atomic Energy Defense Activities; and
- 054 Defense-Related Activities.

National Defense Budget Authority

The Budget proposes $738.7 billion in BA for National Defense in FY 2011. This proposal is the highest amount requested for the next four fiscal years. See **table 1**.

The Department of Defense–Military subfunction includes the budget for the military services and defense agencies. The Defense–Military BA proposal is $712.3 billion for FY 2011—this includes both the base and OCO supplemental requests. The FY 2011 proposal is $15.3 billion, or 2.2 percent, more than the FY 2010 enacted amount plus the OCO supplemental proposal.

Between FY 2000, which is prior to the start of OCO, and FY 2011, the Defense–Military BA increased by $422 billion, or 145 percent. The Defense–Military budget reaches its height in FY 2011. The FY 2012 budget estimate is $91.8 billion, or 13 percent, less than for FY 2011. The FY 2013 through 2015 estimates reflect annual increases but do not reach the FY 2010 and 2011 levels. Operating with $91.8 billion less in one year will require a substantial reduction in forces, operations or acquisitions, or some combination of the three.

Table 1

Budget Authority by Function and Subfunction – 050 National Defense

($ billions[1])

	FY00[2]	FY05[2]	FY09[2]	FY10[2]	FY11[2]	FY12[2]	FY13[2]	FY14[2]	FY15[2]
051 Department of Defense–Military	290.3	483.8	667.5	696.9	712.3	620.5	636.1	652.2	670.6
053 Atomic Energy Defense Activities	12.4	17.9	23.0	17.8	18.8	19.0	19.3	19.8	20.2
054 Defense-related Activities	1.3	4.0	7.3	7.4	7.6	7.1	7.0	7.1	7.3
050 Total, National Defense	**304.0**	**505.8**	**697.8**	**722.1**	**738.7**	**646.6**	**662.3**	**679.1**	**698.2**

[1] Numbers may not add because of rounding.
[2] FY00–09 figures are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 5.1

National Defense Outlays

The Outlays for the Department of Defense–Military subfunction in FY 2011 are $721.3 billion, the highest amount for the next four fiscal years. The $721.3 billion is an increase of $29.3 billion, or 4.2 percent, over FY 2010. See **table 2.**

Between the FY 2000 experience of $281 billion—prior to OCO—and the FY 2011 proposal, Outlays for Defense–Military increased by $440.3 billion, or 157 percent.

The Outlays estimate for FY 2012 is $653.4 billion—$67.9 billion, or 9.4 percent, less than for FY 2011. Although slightly less than the BA reduction, achieving this large a reduction in one year requires a substantial reduction in forces, operations or acquisitions, or some combination of all three.

The Defense–Military Outlays continue the downward trend into FY 2013; in FYs 2014 and 2015 Outlays increase slightly but do not return to the FY 2010 and 2011 levels. These reductions in FY 2012 and beyond are significant and will likely impact future Army budgets.

Discretionary and Mandatory Funds

The federal budget consists of discretionary funds—funds appropriated explicitly by Congress in the annual appropriations process—and mandatory funds that require payment based on a condition such as age of the population for Social Security. The DoD budget is discretionary.

In addition to discretionary and mandatory funds, interest funds are a large category of Outlays. Interest is the amount paid to service the Federal Debt and is a compulsory payment.

Almost all funds for national security are discretionary, and more than half of all discretionary funds are consumed by national security. See **table 3**.

In FY 2000 discretionary Outlays were almost even—52 percent for nondefense and 48 percent for defense.[6] Since FY 2002 the distribution has consistently favored defense. In FY 2011 the proposal is:

- $1.376 trillion, or 36.9 percent, discretionary;
- $2.1 trillion, or 56.3 percent, mandatory; and
- $11 billion, or 6.7 percent, interest.

The discretionary amount includes:

- $846 billion, or 62 percent, for national security, which, beginning in FY 2011, includes DoD, government-wide homeland security activities and international programs; and
- $530 billion, or 38 percent, for nonsecurity, which includes all other agencies, such as agriculture, commerce, education, housing, highway construction, justice, law enforcement and space exploration.

The mandatory Outlays are $2.1 trillion; this includes $730 billion for Social Security and $492 billion for Medicare.

In the nine years from FY 2011 to FY 2020, the Outlays proposals increase for all categories but at very different rates—discretionary funds increase 14 percent to $1.573 trillion; mandatory funds increase 55 percent to $3.255 trillion; and interest increases 265 percent to $912 billion. The result is that mandatory funds increase to nearly 57 percent of Outlays and interest payments more than double from 7 to 16 percent of Outlays. Discretionary funds increase at little more than 1 percent per year for the next nine years.

The President's "new foundation for the future"—education investment, health insurance, small business incentives and clean energy economy incentives—requires discretionary funds. The substantial growth in mandatory and interest Outlays and the continuing unfavorable economic conditions will severely limit total discretionary funds, suggesting that President Obama's initiatives will require trade-offs to generate sufficient funds.

Discretionary for Security

Discretionary funds for security include the proposal for DoD, homeland security and international programs.

Discretionary for Security: Defense. The Budget documents include fact sheets on each agency; this paragraph focuses on the DoD fact sheet.[7] The DoD fact sheet identifies discretionary funds as either base or overseas contin-

Table 2

Outlays by Function and Subfunction – 050 National Defense

($ billions[1])

	FY00[2]	FY05[2]	FY09[2]	FY10[2]	FY11[2]	FY12[2]	FY13[2]	FY14[2]	FY15[2]
051 Department of Defense–Military	281.0	474.1	636.7	692.0	721.3	653.4	633.9	642.9	657.3
053 Atomic Energy Defense Activities	12.1	18.0	17.6	20.0	20.9	21.0	19.4	19.6	20.0
054 Defense-related Activities	1.2	3.2	6.8	7.2	7.5	7.2	7.0	7.1	7.3
050 Total, National Defense	**294.3**	**495.3**	**661.0**	**719.2**	**749.7**	**681.7**	**660.3**	**669.6**	**684.6**

[1] Numbers may not add because of rounding.
[2] FY00–09 figures are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11,* Historical Tables 3.1 and 3.2

Table 3

Discretionary and Mandatory Outlays

($ billions[1])

	FY09[2]	FY10[2]	FY11[2]	FY12[2]	FY13[2]	FY14[2]	FY15[2]	FY16[2]	FY17[2]	FY18[2]	FY19[2]	FY20[2]
Discretionary												
Security[3]	782	844	846	850	863	882	903	921	944	968	993	1,019
Nonsecurity	437	553	530	490	480	484	493	504	516	528	541	554
Subtotal	**1,219**	**1,397**	**1,376**	**1,340**	**1,343**	**1,366**	**1,396**	**1,425**	**1,460**	**1,496**	**1,534**	**1,573**
Mandatory												
Social Security	678	703	730	762	801	846	894	947	1,004	1,067	1,133	1,204
Medicare	425	451	492	502	557	625	654	727	760	795	886	957
Medicaid	251	275	271	274	293	313	337	363	390	420	453	488
Troubled Asset Relief Program	151	-73	11	10	7	6	3	1				
Other	607	701	596	532	532	526	525	542	543	542	588	606
Subtotal	**2,112**	**2,057**	**2,100**	**2,079**	**2,191**	**2,316**	**2,413**	**2,580**	**2,697**	**2,824**	**3,060**	**3,255**
Net interest	187	188	250	340	434	516	586	652	716	779	844	912
Disaster costs[4]		1	3	4	4	4	5	5	5	5	5	5
Total Outlays	**3,518**	**3,643**	**3,728**	**3,762**	**3,973**	**4,203**	**4,400**	**4,661**	**4,879**	**5,103**	**5,443**	**5,746**
Receipts	2,105	2,213	2,583	2,829	3,033	3,269	3,417	3,648	3,838	4,026	4,215	4,400
Deficit (–)	-1,413	-1,430	-1,145	-934	-940	-934	-983	-1,013	-1,041	-1,077	-1,228	-1,346

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual amounts. Remaining years are estimates.
[3] Security includes Department of Defense, Homeland Security, Government-wide and International Affairs.
[4] Amounts are a placeholder for major disasters requiring federal assistance.
Source: *Budget of the United States, FY11*, Summary Table S.3

gency operations. Both the base and OCO funds increase each year from FY 2009 to FY 2011. See **table 4**.

The overview of the DoD budget points out that the base budget increases $18.2 billion, or 3.4 percent, from the FY 2010 enacted level of $530.8 billion to the FY 2011 estimate. In addition, OCO are allocated $159.3 billion in FY 2011, and in FY 2010 a $33 billion supplemental was approved on top of the $129.6 billion enacted for a total of $162.6 billion. However, in 2012 and beyond, only $50 billion per year is allocated as placeholder estimates, indicating that some as yet unknown costs are anticipated, but this $50 million placeholder is $112 billion less than the $162 billion proposal for FY 2010.

Discretionary for Security: Homeland Security. Discretionary funds for security include the Budget proposal for the Department of Homeland Security (DHS). The Homeland Security Act of 2002 establishes DHS with the primary mission to:

- prevent terrorist attacks within the United States;
- reduce the vulnerability of the United States to terrorism; and
- minimize the damage, and assist in the recovery, from terrorist attacks that occur within the United States.

DHS is charged with the responsibility for information analysis and infrastructure protection; chemical, biological, radiological, nuclear and related countermeasures; border and transportation security; emergency preparedness and response; and coordination (including training and provision of equipment) with other executive agencies, with state and local government personnel, agencies and authorities, with the private sector and with other entities.

To accomplish the mission, a large number of organizations and functions were consolidated; however, a vast national network of other organizations and institutions also involved in securing the nation were not consolidated in DHS. DHS has the responsibility to unify and lead national efforts.

The DHS and DoD missions are complementary—both focus on deterrence and prevention or, failing that, protection and response. DoD is responsible for homeland defense—i.e., to protect U.S. sovereignty, territory, domestic population and critical defense infrastructure against external threats and aggression, or other threats as directed by the President. DoD contributes to homeland security through its military missions overseas, homeland defense and support to civil authorities. Homeland defense includes domestic air defense, maritime intercept operations, land-based defense of critical infrastructure

Table 4

Department of Defense Discretionary Outlays
(Budget Authority, $ millions[1])

	FY09[2]	FY10[2]	FY11[2]
Discretionary Base Budget Authority (BA)			
Military Personnel	125,625	134,968	138,541
Operation and Maintenance	179,103	184,488	200,248
Procurement	100,886	104,803	112,873
Research, Development, Test and Evaluation	79,392	80,097	76,131
Military Construction	21,898	21,022	16,924
Family Housing	3,163	2,259	1,822
Revolving and Management Funds	3,155	3,118	2,380
Subtotal, Discretionary Base BA	**513,222**	**530,755**	**548,919**
Discretionary OCO BA			
Enacted	145,741	129,648	
Requested[3]		33,014	159,336
Subtotal, Discretionary OCO BA	**145,741**	**162,662**	**159,336**
Total, Discretionary BA (Base and OCO)	**658,963**	**693,417**	**708,255**
BA from American Recovery and Reinvestment Act	7,435		
Total, Discretionary Outlays (Base and OCO)	**633,797**	**684,436**	**714,428**
Outlays from American Recovery and Reinvestment Act	238	3,991	2,491
Mandatory Outlays			
Existing Law	2,740	3,605	3,959
Legislative Proposal			408
Total, Mandatory Outlays	**2,740**	**3,605**	**4,367**
Total, Outlays	**636,537**	**688,041**	**718,795**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual amounts. Remaining years are estimates.
[3] FY11 figures include $254 million in U.S. Coast Guard funding.
Source: *Budget of the United States Government, FY11*, Budget Overviews for DoD

and assets and, when directed by the President or the Secretary of Defense, the protection of the United States and its territories from attack.

The Homeland Security Act of 2002, Section 889, requires an analysis of all homeland security funding that includes activities in DHS and all other federal agencies, including DoD, plus state and local governments and private sector expenditures.

The President's Budget for FY 2011 includes $74.6 billion in Budget Authority for homeland security across all federal agencies, $3.7 billion more than the amount enacted for FY 2010. The DHS proposal is the largest portion of this amount at $36.6 billion, but not all DHS funds are for homeland security. For example, funding for the Coast Guard's search-and-rescue missions is in the DHS budget but is not part of the homeland security function. DoD funds are the second largest portion of all homeland security funds. See **table 5** for funding by agency.

DHS and five other departments account for 96 percent, or $71 billion, of all homeland security funds:

- $37 billion for DHS;
- $19 billion for DoD, i.e., discretionary defense funds;
- $7 billion for the Department of Health and Human Services;
- $4 billion for the Department of Justice;
- $2 billion for the Department of Energy; and
- $2 billion for the Department of State.

The Budget proposal also presents the DHS budget broken down into critical mission areas. More than 88 percent of the proposal is for preventing and disrupting terrorist attacks and protecting people, infrastructure and key resources. See **table 6**.

Discretionary for Nonsecurity. Nonsecurity funds support the entire federal government excluding DoD, government-wide homeland security activities and international programs. The discretionary funding for nonsecurity proposal is $530 billion, or 38.5 percent, of all discretionary Outlays in FY 2011,[8] a decrease of $23 billion from FY 2010 but an increase of $93 billion over the FY 2009 experience. The term "discretionary" is somewhat misleading because a large portion of the funds for most agencies is for payroll and essential services.

The Budget does not provide a table of discretionary nonsecurity Outlays by agency; however, it does provide discretionary Budget Authority by agency. See **table 7**.

The four largest nonsecurity departments account for $229 billion, or 43 percent, of all nonsecurity discretionary funds:

- $84 billion for Health and Human Services;
- $57 billion for Veterans Affairs (VA);
- $47 billion for Education; and
- $42 billion for Housing and Urban Development.

Of the four, only the Budget proposal for VA is increasing; the others remain close to FY 2010 levels but are down substantially from the FY 2009 experience.

Table 5

Homeland Security Budget Authority by Agency

($ millions[1])

	FY10[2]	FY11[3]
Agency		
Department of Agriculture	599	610
Department of Commerce	255	257
Department of Defense	19,045	19,254
Department of Education	29	29
Department of Energy	2,017	2,041
Department of Health and Human Services	4,802	7,315
Department of Homeland Security	35,886	36,626
Department of Housing and Urban Development	5	5
Department of the Interior	52	53
Department of Justice	4,108	4,220
Department of Labor	51	51
Department of State	1,767	1,868
Department of Transportation	229	236
Department of the Treasury	124	127
Department of Veterans Affairs	428	416
Corps of Engineers	37	37
Environmental Protection Agency	156	159
Executive Office of the President	12	12
General Services Administration	214	216
National Aeronautics and Space Administration	218	220
National Science Foundation	390	394
Office of Personnel Management	2	2
Social Security Administration	209	225
Smithsonian Institution	99	103
Other Agencies	145	147
Total, Homeland Security BA	**70,879**	**74,623**
Less Department of Defense	-19,045	-19,254
Nondefense Homeland Security BA[4]	**51,834**	**55,369**
Less Mandatory Homeland Security Programs	-2,590	-2,646
Less Fee-funded Homeland Security Programs	-5,528	-5,562
Net Nondefense Discretionary BA[4]	**43,716**	**47,161**
Less Transfer from BioShield	-609	0
Net Nondefense Discretionary BA[5]	**43,107**	**47,161**

[1] Numbers may not add because of rounding.
[2] FY10 figures indicate enacted funding.
[3] FY11 figures indicate budget estimates estimated amounts.
[4] Not including BioShield.
[5] Including BioShield Transfer.
Source: *Budget of the United States Government FY11*, Analytical Perspectives, Table 23.2 through 23.4

Table 6

Homeland Security Budget Authority by Mission

($ millions*)

	FY10		FY11
	Enacted	Supp.	Estimate
Prevent and Disrupt Terrorist Attacks	32,361	242	33,758
Protect American People, Critical Infrastructure and Key Resources	31,227		32,087
Respond to and Recover from Incidents	6,394		6,375
Other	897		2,403
Total	**70,879**	**242**	**74,623**

* Numbers may not add because of rounding.
Source: *Budget of the United States Government, FY11*, Analytical Perspectives, Tables 23.2 through 23.4

As evidenced in **table 8**, the discretionary BA increased by more than 100 percent from FY 2000 to FY 2011 for:

- the Department of State at 271 percent (security);
- DHS at 202 percent (security);
- DoD at 146 percent (security);
- the Department of Transportation at 119 percent (nonsecurity); and
- VA at 173 percent (nonsecurity).

Nonsecurity agencies are critical to the President's plans for the future—to invest in education, health insurance reform, small business incentives and clean energy economy incentives. With the economy currently in a recession and with ongoing OCO, providing additional funds for nonsecurity agencies will be difficult.

Mandatory Funds

The FY 2011 Budget proposes mandatory Outlays of $2.174 trillion, or 56 percent of total Outlays. Mandatory programs involve statutory entitlements that obligate the federal government to make payments subject to some criteria until the law is amended or repealed, e.g., to make Social Security payments to everyone who meets the qualification requirements. See **table 8** for mandatory Outlays by program.

The substantial decrease in Income security in FY 2011 cannot be explained with the continuing record levels of unemployment. This table predates the Health Care and Education Reconciliation Act of 2010, which will impact mandatory Outlays.

Economic Considerations

The nation is recovering from the worst economic crisis in nearly 80 years. The President and Congress have

Table 7

Discretionary Budget Authority by Agency

($ millions[1])

Agency	FY00[2]	FY09[2]	FY10[3]	FY11[4]	FY10–FY11		FY00–FY11	
					Dollar	Percent	Dollar	Cumulative
Judicial Branch	**3,669**	**6,080**	**6,443**	**6,895**	**452**	**7%**	**3,226**	**88%**
Legislative Branch	**2,531**	**4,571**	**4,734**	**5,188**	**454**	**10%**	**2,657**	**105%**
Executive Branch								
Agriculture	16,953	32,232	27,348	25,786	-1,562	-6%	8,833	52%
Commerce	8,667	17,297	13,804	8,928	-4,876	-35%	261	3%
Defense–Military	287,280	666,398	693,417	708,001	14,584	2%	420,721	146%
Education	29,362	155,408	46,781	49,697	2,916	6%	20,335	69%
Energy	17,745	70,633	26,406	26,406	1,948	7%	10,609	60%
Health and Human Services	45,366	110,544	84,104	83,485	-619	-1%	38,119	84%
Homeland Security	14,537	45,320	43,284	43,843	559	1%	29,306	202%
Housing and Urban Development	21,111	53,699	43,581	41,590	-1,991	-5%	20,479	97%
Interior	8,462	14,307	12,154	12,035	-119	-1%	3,573	42%
Justice	16,117	30,210	27,646	24,143	-3,503	-13%	8,026	50%
Labor	8,761	17,698	14,266	13,967	-299	-2%	5,206	59%
State	7,776	26,380	29,000	28,816	-184	-1%	25,040	271%
Transportation	10,416	67,912	21,784	22,765	981	5%	12,349	119%
Treasury	9,241	12,942	13,554	13,935	381	3%	4,694	51%
Veterans Affairs	20,850	49,202	53,055	56,967	3,912	7%	36,117	173%
Corps of Engineers	4,119	16,499	5,446	4,881	-565	-10%	762	18%
Other Defense–Civil Programs	134	198	282	218	-64	-23%	84	63%
Environmental Protection Agency	7,572	14,853	10,298	10,020	-278	-3%	2,448	32%
Executive Office of the President	272	375	434	442	8	2%	170	63%
General Services Administration	-284	6,420	596	675	79	13%	959	338%
International Assistance Programs	13,628	24,254	23,400	27,011	3,611	15%	13,383	98%
National Aeronautics and Space Administration	13,601	18,784	18,724	19,000	276	1%	5,399	40%
National Science Foundation	3,912	9,492	6,873	7,424	551	8%	3,512	90%
Office of Personnel Management	198	224	243	243	0.0	0%	45	23%
Small Business Administration	892	1,345	947	993	46	5%	101	11%
Social Security Administration (On-budget)	2,458	4,332	3,509	2,844	335	9%	1,386	56%
Social Security Administration (Off-budget)	3,195	5,297	5,811	6,266	455	8%	3,071	96%
Other Independent Agencies (On-budget)	5,809	9,024	9,083	9,307	224	2%	3,498	60%
Other Independent Agencies (Off-budget)	0	253	258	258	0	0%	258	0%
Total Discretionary	**584,350**	**1,492,183**	**1,247,265**	**1,264,977**	**17,712**	**1%**	**680,627**	**116%**
Total Discretionary less Judiciary and Legislative Branches	**578,150**	**1,481,532**	**1,236,088**	**1,252,894**	**16,806**	**3%**	**674,744**	**117%**
Total Discretionary less Judiciary and Legislative Branches and Defense	**290,870**	**815,134**	**542,671**	**544,893**	**2,222**	**1%**	**254,023**	**87%**

[1] Numbers may not add because of rounding.
[2] FY00–09 numbers are actual amounts.
[3] FY10 figures include both enacted amounts and estimates.
[4] FY11 figures indicates budget estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 5.4

Table 8

Mandatory Outlays by Program
($ billions*)

					Change			
					FY10–FY11		FY00–FY11	
	FY00	FY09	FY10	FY11	Dollar	%	Dollar	%
Education and Health	112.6	255.9	328.6	362.6	34.1	10%	250.0	222%
Medicare	194.1	425.1	451.1	491.1	40.0	9%	297.0	153%
Income Security	212.3	469.7	613.0	521.2	-91.9	-15%	308.9	145%
Social Security	406.0	677.7	715.3	730.1	14.7	2%	324.0	80%
Veterans Benefits and Services	26.3	48.6	72.4	68.6	-3.8	-5%	42.3	161%
Total Mandatory Programs	**951.4**	**1,877.1**	**2,180.4**	**2,173.6**	**-6.9**	**0%**	**1,222.1**	**128%**

* Numbers may not add because of rounding.
Source: *Budget of the United States Government, FY11*, Historical Table 8.5

taken a series of actions to remedy the situation, including passing the Troubled Asset Relief Program (TARP) and the Economic American Recovery and Reinvestment Act of 2009 (ARRA). These remedial actions involve additional federal spending. However, the recession has led to fewer federal receipts and collections, so while the government is spending more, it is taking in fewer funds. When spending exceeds revenue, the government operates at a deficit and must borrow to cover the shortfall. Budget Outlays have exceeded revenue since FY 2001, and the Budget forecasts that trend will continue.

Gross Domestic Product

The Gross Domestic Product (GDP) is the measure of the health of the U.S. economy. The GDP is the total market value, or output, of the goods and services produced by labor and capital located within the United States, regardless of nationality of the corporate entity, during a year.

The President's Budget estimates the GDP at $15.299 trillion for FY 2011, a 4.5 percent increase over FY 2010. This rate of growth is better than the 2.7 increase between FY 2009 and FY 2010, and a reversal of the decline between FYs 2008 and 2009. The FY 2011 rate of growth suggests that the economy is recovering from the recession. See **figure 1** for GDP trend information.

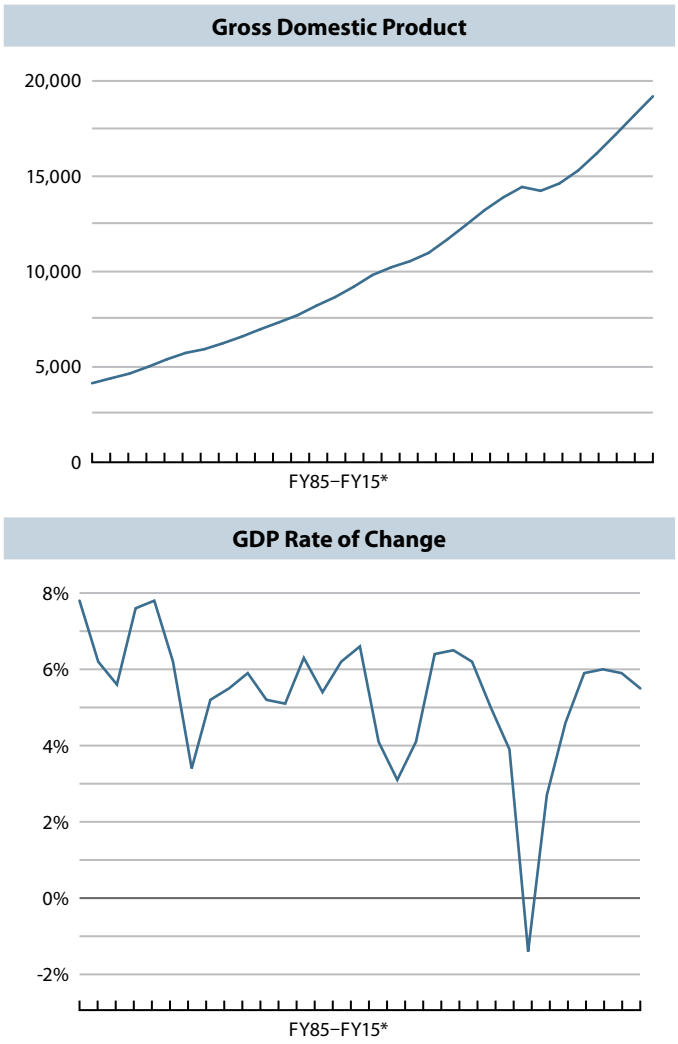
The President's Budget forecasts annual GDP growth averaging nearly 6 percent from FY 2011 to FY 2015. This economic growth is essential for achieving forecasts of receipts, lowering deficits and ultimately balancing the budget.

Balancing the Budget

The Budget estimate for FY 2011 predicts a deficit of $1.145 trillion—the tenth deficit since FY 2002. Receipts and Outlays for FY 2011 are presented in **figure 2**.

Figure 1

Gross Domestic Product (GDP) Trends
($ billions)

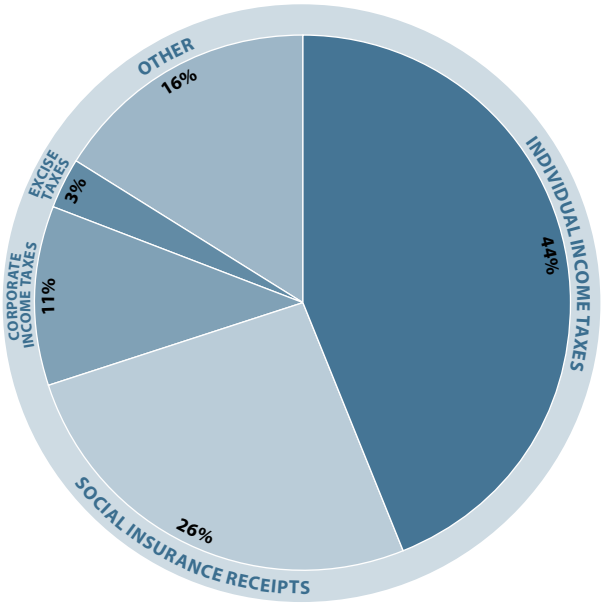


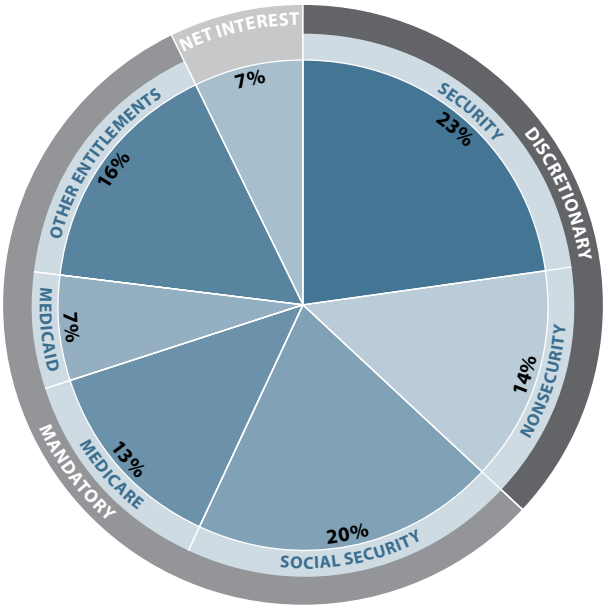
* FY85–09 are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 10.1

Figure 2

Budget Proposal for Fiscal Year 2011

($ billions*)





Where it Comes From

(Receipts)

$	1,126	44%	Individual Income Taxes
$	674	26%	Social Insurance Receipts
$	293	11%	Corporate Income Taxes
$	80	3%	Excise Taxes
$	410	16%	Other
$	**2,583**		**Total**

Where it Goes

(Outlays)

$	**1,376**	**37%**	**Discretionary**
$	846	23%	Security
$	530	14%	Nonsecurity
$	**2,100**	**56%**	**Mandatory**
$	730	20%	Social Security
$	492	13%	Medicare
$	271	7%	Medicaid
$	607	16%	Other Entitlements
$	**250**	**7%**	**Net Interest**
$	**3,726**		**Total**

* Numbers may not add because of rounding.
Source: *Budget of the United States Government, FY11*, Summary Table S.3

Receipts. Federal receipts are analogous to corporate or personal income. The President's Budget estimates receipts at $2.583 trillion for FY 2011, a 17 percent increase over receipts in FY 2010. This amount is a large increase over the 5 percent increase between FYs 2009 and 2010, and a reversal of the decline between FYs 2007 and 2009 that confirms the recession.

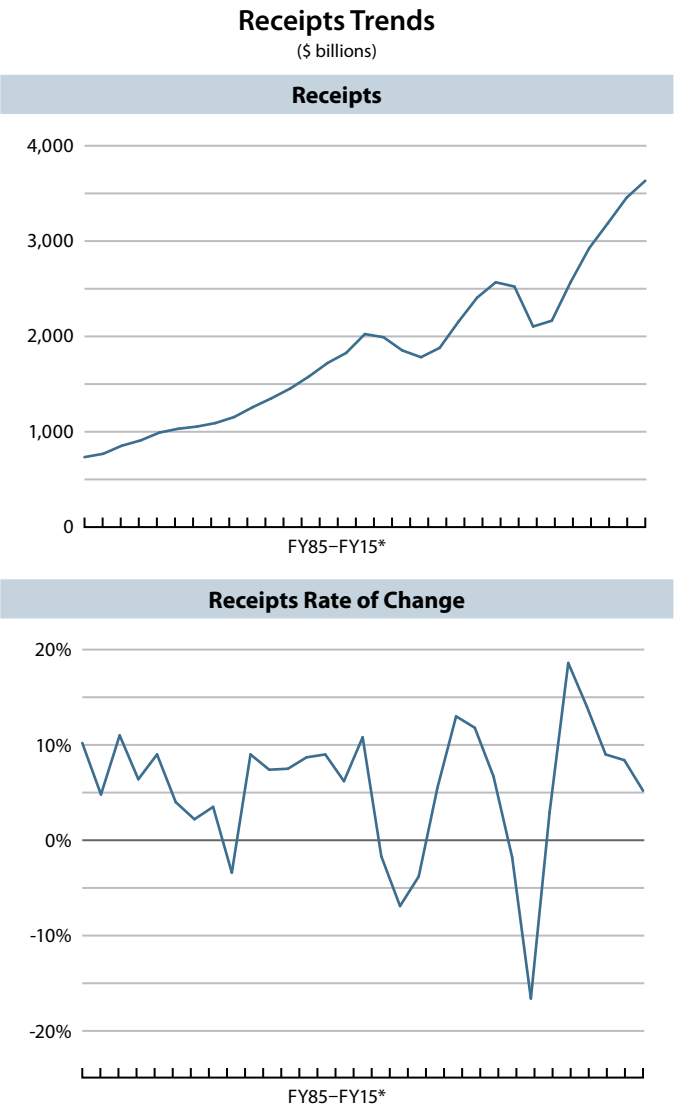
The Budget predicts diminishing increases in receipts each year from FY 2012 to FY 2015. See **figure 3.**

The Budget identifies five specific sources of receipts plus "Other." See **table 9**. The distribution of receipts remains fairly constant over time at approximately:

- 44 percent from individual income taxes;
- 12 percent from corporate income taxes;
- 36 percent from Social Security receipts;
- 3 percent from excise taxes; and
- 4 percent from other.

The current receipts for Social Security exceed entitlement payments; therefore, the federal government borrows from the entitlement funds to meet current spending requirements. As more people become eligible for entitlements, the government will no longer be able to borrow from entitlement receipts. Eventually, the growth of the entitlement pool will require the government to use general funds to maintain the solvency of the entitlement programs.

Figure 3



* FY85–09 are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 1.1

Receipts and the GDP. Receipts are primarily a function of two variables: the size of the economy and the tax policy. In the most basic formulation, a strong economy and a constant tax policy equal greater receipts. With a weaker economy and a constant tax policy, there are fewer receipts.

Because of the recession, receipts decreased at a greater rate than the GDP in FYs 2008 and 2009; both recovered at about the same rate in FY 2010. The President's Budget estimates a GDP increase of 5 percent in FY 2011 and an increase in tax revenue of 19 percent. The Budget estimates receipts outpacing GDP until FY 2015. See **figure 4**.

Spending. Spending is the focus of most budget analyses and the focus of the DoD and Army chapters of this book. As introduced earlier, federal spending may be discretionary, mandatory or interest payments.

- **Discretionary Outlays** are for what the President proposes in the Budget and Congress provides through the annual appropriations bills. Examples include appropriations for defense, homeland security, agriculture, commerce, foreign aid, justice and law enforcement, education, housing, space exploration and more.
- **Mandatory Outlays** are controlled by permanent authorization statutes and are not provided by annual appropriations. Examples include Social Security, Medicare and Medicaid. In addition, some Budget Authority in annual appropriations is treated as mandatory when the authorization legislation either entitles beneficiaries who meet the legal criteria for eligibility to receive payments or obligates the federal government to make payments until the statute is amended or repealed.

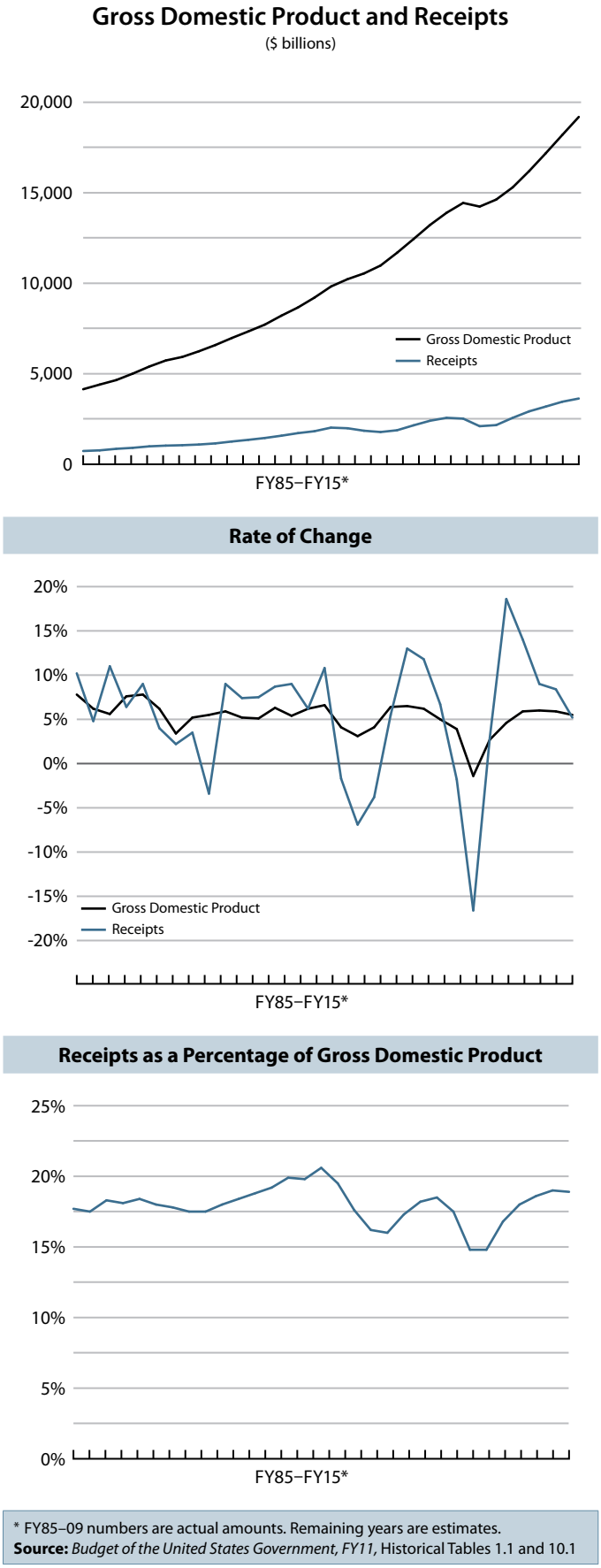
Table 9

Federal Receipts Estimates
($ billions[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[2]	FY11[2]	FY12[2]	FY13[2]	FY14[2]	FY15[2]
Individual Income Taxes	335	467	590	1,004	927	1,044	1,163	1,146	915	936	1,121	1,326	1,468	1,604	1,733
Corporate Income Taxes	61	94	157	207	278	354	370	304	138	157	297	366	394	445	411
Social Security Receipts (On-budget)	79	98	133	172	217	229	235	242	237	241	261	284	305	323	339
Social Security Receipts (Off-budget)	186	262	351	481	577	608	635	658	654	635	674	720	766	809	856
Excise Taxes	36	35	57	69	73	74	65	67	62	73	74	81	85	87	88
All Other	37	56	63	92	81	97	100	106	98	124	140	148	171	188	207
Total	**734**	**1,012**	**1,352**	**2,025**	**2,153**	**2,407**	**2,568**	**2,524**	**2,105**	**2,165**	**2,567**	**2,926**	**3,188**	**3,455**	**3,634**

[1] Numbers may not add because of rounding.
[2] FY85–09 are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 2.1

Figure 4



* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Tables 1.1 and 10.1

- **Interest Outlays** are intended to meet obligations to those holding federal debt instruments. The federal government pays interest when due.

A summary of data on all spending is in **figure 5**.

Total Outlays are up every year from FY 2005 to FY 2020 except for FY 2012. In FY 2000 Outlays were 18 percent of GDP; in FY 2009 Outlays climbed to 25 percent and remain at that level until FY 2011. The Budget estimates Outlays will decrease to 23 percent from FY 2012 to FY 2015, and then begin climbing to 30 percent by FY 2020. Outlays are growing faster than GDP, with the greatest rate of growth in mandatory funds and interest.

Interest. When spending exceeds receipts, the federal government needs to borrow money to cover Outlays. The federal government borrows money from other federal accounts, such as Social Security, and private sources through the sale of debt instruments.

The interest payments to service the Gross Federal Debt (GFD) are a function of the amount of the GFD and interest rates. The GFD increases with each deficit or decreases with each surplus, but interest rates are independent of government action. The Federal Reserve, an independent agency, sets the prime rate that influences all other rates.

Even though the federal government began operating at a deficit in FY 2002, Outlays for interest continued to decline for another two years, an indication of the impact of low interest rates. Interest payments decreased from FY 2000 to FY 2005, in part because of exceptionally low interest rates. However, starting in FY 2006, interest payments increased every year except FY 2009. See **figure 6** for interest trends.

As the amounts of interest payments continue to rise, they consume a greater portion of Outlays. By FY 2015 interest will consume 13 percent of all Outlays—these interest payments consume funds to satisfy earlier debt and divert funds from current operations and programs. See **table 10**.

Surplus or Deficit. Since FY 2002 the federal budgets have generated a string of deficits. Achieving a reduction in the annual deficit requires an increase in GDP, an increase in receipts, a decrease in Outlays, or some combination of the three. See **figure 7**.

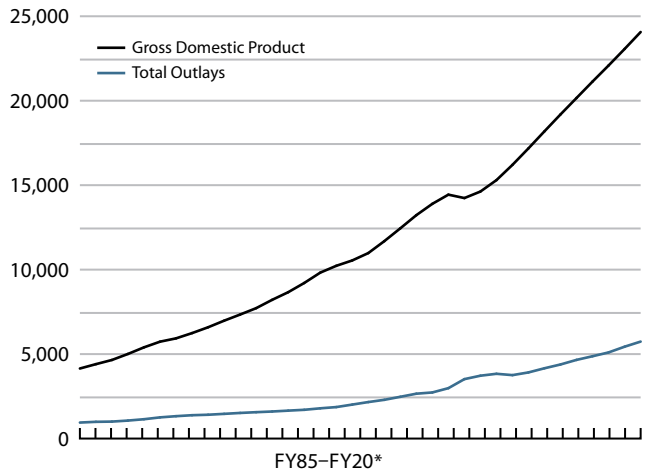
Gross Federal Debt

The Gross Federal Debt is the sum of all annual deficits and surpluses across the fiscal years. The GFD impacts the national economy by causing the federal government to service the debt. The surpluses and more frequent deficits have produced the GFD, and the continuing estimates of deficits produce a growing GFD. See **figure 8** for trend information.

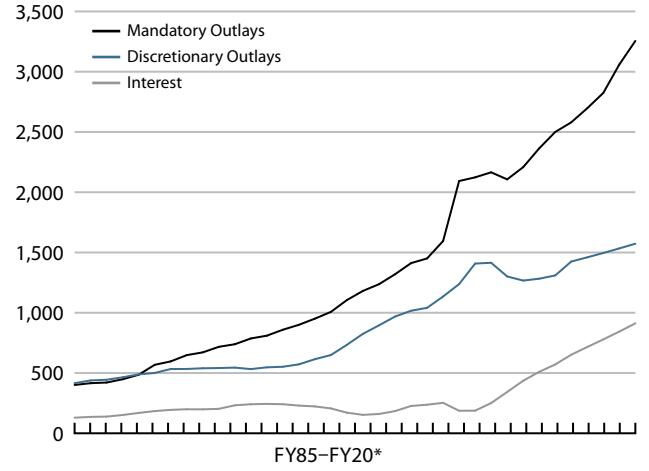
Figure 5

Gross Domestic Product and Outlays

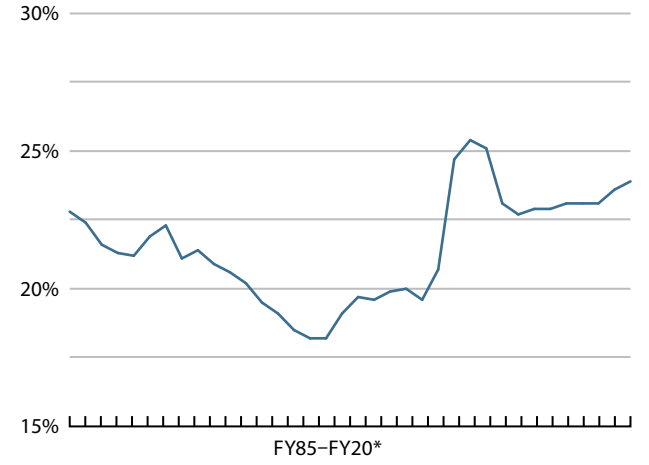
($ billions)



Outlays by Type



Outlays as a Percentage of Gross Domestic Product

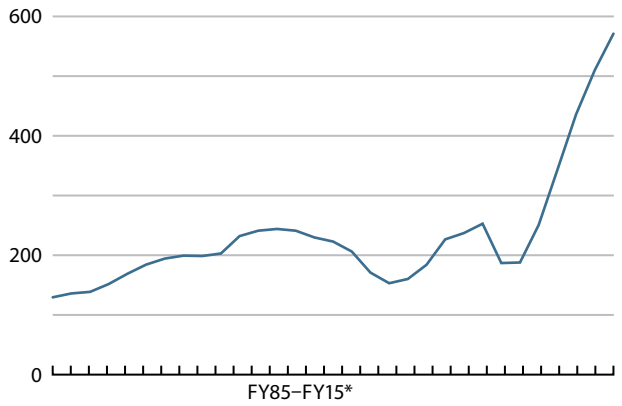


* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Tables 8.1 and 10.1 and Summary Table S.3

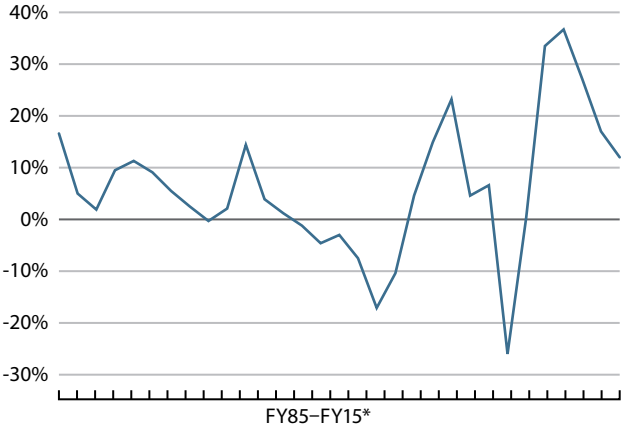
Figure 6

Interest Trends

($ billions)



Interest Rate of Change



* FY85–09 are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 8.1

Table 10

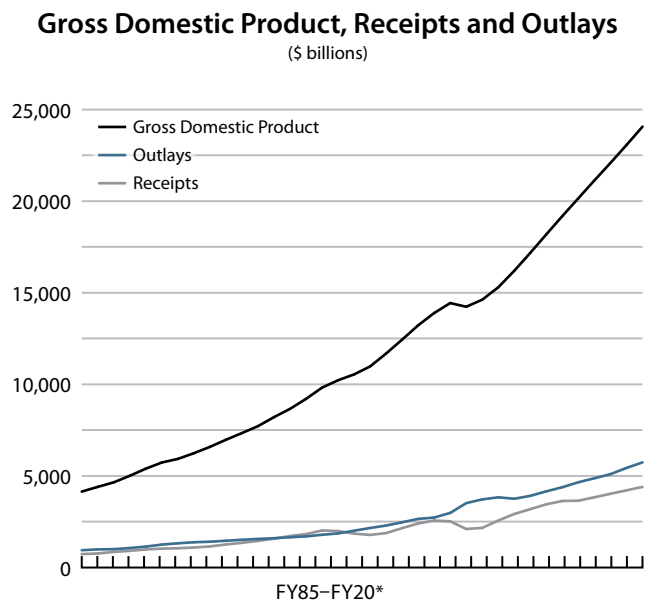
Interest as a Percentage of Outlays

($ billions)

	Net interest	Outlays	Interest as % Outlays
FY85*	130	946	**14%**
FY90*	184	1,253	**15%**
FY95*	232	1,516	**15%**
FY00*	223	1,789	**12%**
FY05*	184	2,472	**7%**
FY09*	187	3,518	**5%**
FY10*	188	3,643	**5%**
FY11*	251	3,728	**7%**
FY12*	343	3,762	**9%**
FY13*	436	3,973	**11%**
FY14*	510	4,203	**12%**
FY15*	571	4,400	**13%**

* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 3.1

Figure 7



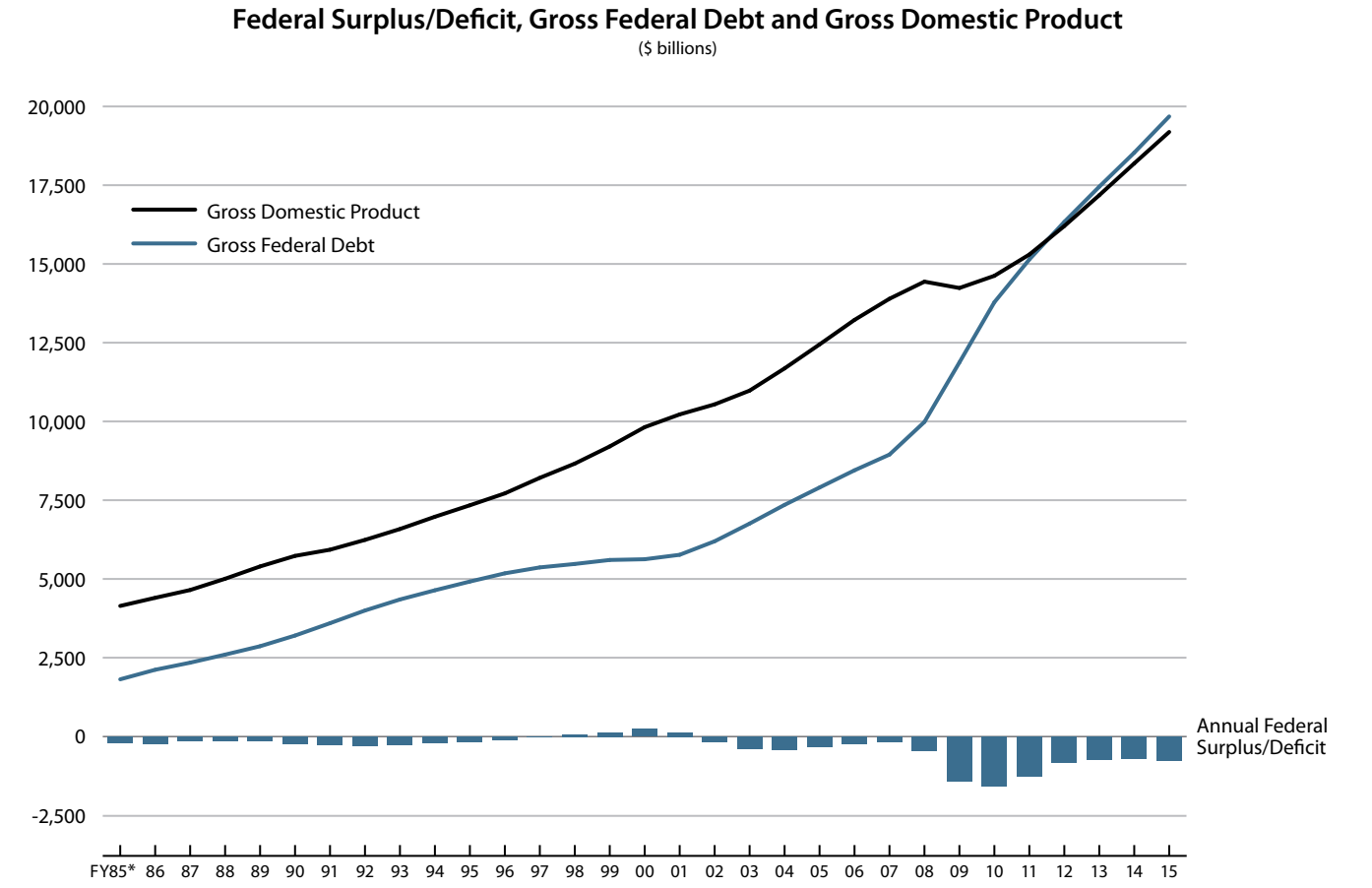
* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Tables 1.2 and 10.1 and Summary Table S.3

The GFD at the end of FY 2009 was $11.876 trillion, an increase of more than $1.9 trillion from FY 2008. The President's Budget estimates another increase of $1.9 trillion in FY 2010, continuing growth in the GFD. As soon as FY 2012, the GFD will exceed the GDP; the President's Budget estimates a GDP of $16.203 trillion and a GFD of $16.336 trillion.

The fiscal situation continues to get worse each year. The continuing deficits and growing GFD are indications of a fiscal crisis and a serious concern, for the following reasons:

- The federal government will have to borrow from both public and private sources to cover expenditures.
- Interest payments consume and otherwise reduce the available funds for necessary discretionary and mandatory programs and may increase annual deficits.
- Foreign governments hold a great deal of the public debt instruments, and they may influence the government and the economy.

Figure 8



* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Tables 1.1, 7.1 and 10.1; Summary Table S.14

- In the future, the government will face unpleasant options and tough decisions involving new or increasing rates of taxes and spending cuts that reduce or eliminate current programs or benefits.

A summary of the GFD and the funding sources is in **table 11**.

The Congressional Budget Office (CBO) produced a graphic of the federal debt beginning with the founding of the nation to the present that provides two alarming projections for the future.[9] Like the President's Budget, both projections reflect a growing imbalance among revenues, non-interest spending and the spiraling cost of interest payments that push the federal debt to unsustainable levels in either the next 10 years or the next 25 years. See **figure 9.**

The projections reflect two alternative sets of assumptions about future policies for revenues and spending:

- One forecast—the *extended-baseline scenario*, which adheres closely to current laws—follows CBO's 10-year baseline budget projections through 2020 (including adjustments for the recently enacted health care legislation). A further extension of this scenario forecasts a decline in budget deficits over the next several years, with both deficits and debt remaining stable relative to GDP for a few years after that. But then deficits would increase as a result of growth in spending for Social Security and health care programs. Debt would again grow faster than the economy, and by 2035 the debt would equal about 80 percent of GDP.
- The second forecast—called the *alternative fiscal scenario*—reflects assumptions about certain changes to current law that are widely expected to be made in some form over the next few years and about other provisions of current law that might be difficult to sustain for a long period. In this scenario, most of the tax cuts originally enacted in 2001 and 2003 are extended (rather than allowed to expire at the end of this year as scheduled under current law); the alternative minimum tax is indexed for inflation; Medicare's payments to physicians increase over time (which would not happen under current law); tax law evolves, allowing tax revenues to remain at about 19 percent of GDP; and other adjustments are made in current law. This scenario projects a decline in deficits for several years after 2010, but they would then begin to grow again, and that growth would occur sooner and at a much faster rate than under the extended-baseline scenario. By 2020 debt would equal nearly 90 percent of GDP. The growing imbalance between revenues and non-interest spending—along with the spiraling cost of interest payments—would quickly propel the federal debt to unsustainable levels. By 2025 debt held by the public would surpass its previous

Table 11

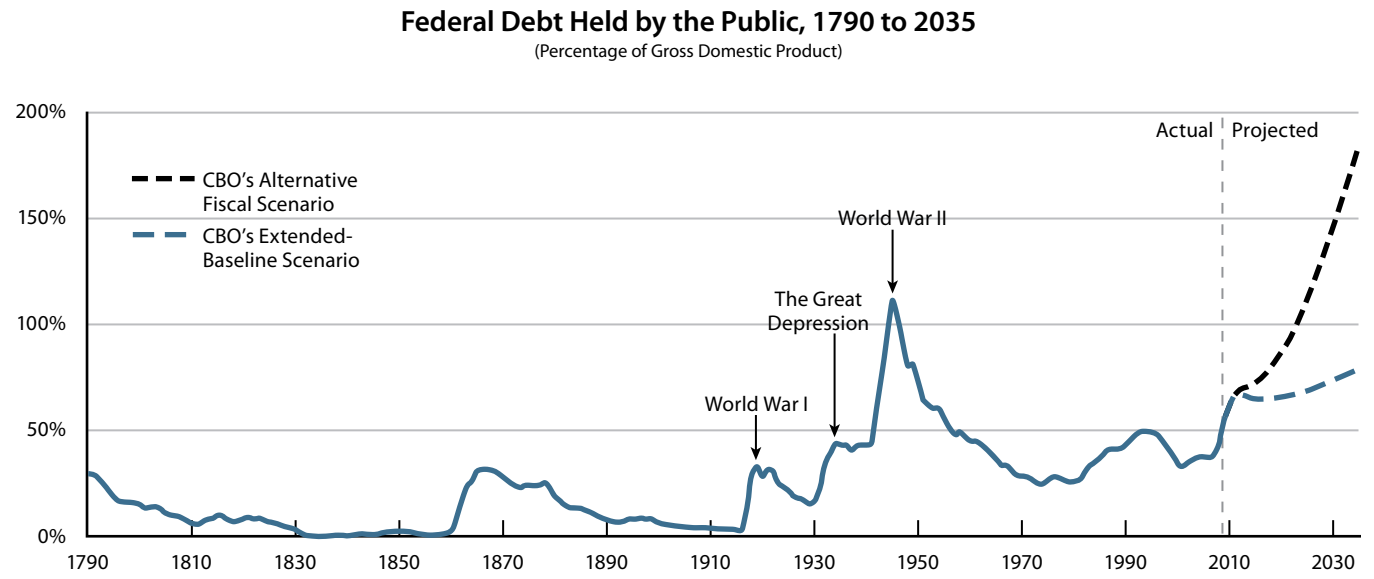
Gross Federal Debt by Source

($ billions)

	Gross Federal Debt	Amount in Federal Government Accounts	Percentage Held By Federal Government	Amount Held by Public	Percentage Held by Public
FY85*	1,817	310	17.1%	1,507	82.9%
FY90*	3,206	795	24.8%	2,412	75.2%
FY95*	4,921	1,316	26.7%	3,604	73.3%
FY00*	5,629	2,219	39.4%	3,410	60.6%
FY05*	7,905	3,313	41.9%	4,593	58.1%
FY09*	11,876	4,331	36.5%	7,545	63.5%
FY10*	13,787	4,489	32.6%	9,298	67.4%
FY11*	15,144	4,646	30.7%	10,498	69.3%
FY12*	16,336	4,864	29.8%	11,472	70.2%
FY13*	17,453	5,128	29.4%	12,326	70.6%
FY14*	18,532	5,393	29.1%	13,139	70.9%
FY15*	19,683	5,695	28.9%	13,988	71.1%

* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Table 7.1

Figure 9



Source: Congressional Budget Office, *The Long-Term Budget Outlook* (June 2010); *Historical Data on Federal Debt Held by the Public* (July 2010)

record of 110 percent of GDP; by 2035 it would be about 180 percent of GDP.

Persistent, large deficits—like the deficits that CBO projects for coming decades—have a number of significant negative consequences, e.g., rising government debt and increased borrowing tend to crowd out private investment in productive capital. Savings are used to buy government securities and are therefore not available for investments. Policies and actions to deal with the debt will likely have implications for DoD as discussed below.

National Defense and GDP

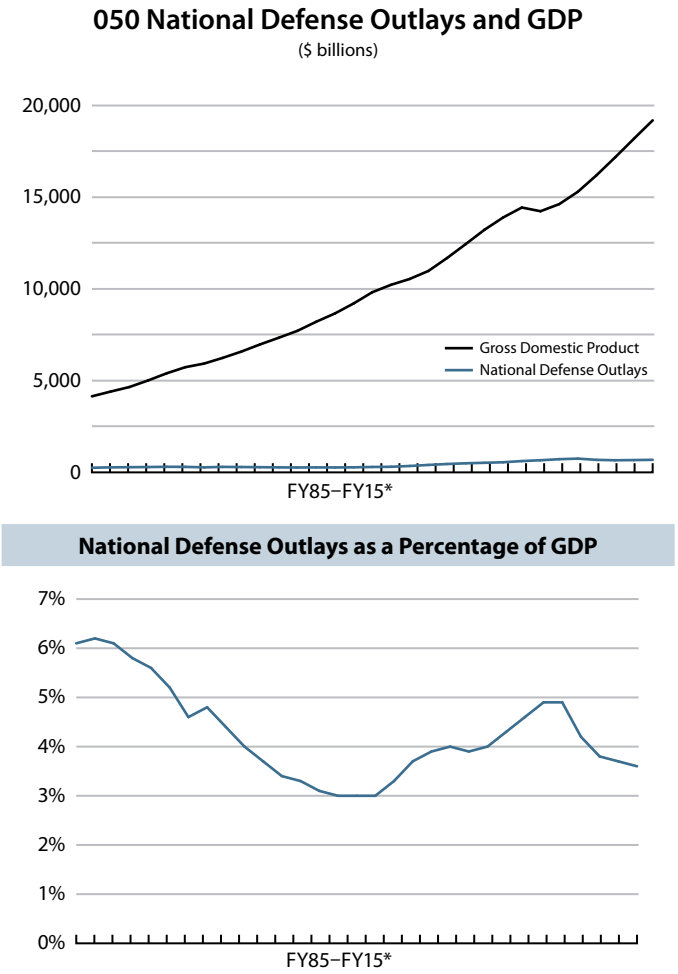
Elected representatives, DoD officials and news commentators sometimes discuss national defense as a percentage of GDP. Some argue that defense consumes too much of GDP, and others argue that defense is not receiving enough of that percentage. However, the percentage of GDP for defense fails to provide insights into whether the Budget adequately accomplishes the national security mission, objectives and plans. Therefore, caution is suggested when using this GDP statistic.

The National Defense Outlays percentage in FY 2011 remains consistent with FY 2010 but decreases when compared to FY 2012 because GDP increases and the DoD budget decreases. See **figure 10**.

The historical trends for the past 25 years illustrate the fact that defense spending as a percentage of GDP refers to the general perception of threats and the need for security. For example, the national defense Outlays in relation to GDP are:

- 6.1 percent in FY 1985 during the Reagan-era buildup;

Figure 10



* FY85–09 numbers are actual amounts. Remaining years are estimates.
Source: *Budget of the United States Government, FY11*, Historical Tables 3.1 and 10.1

- 5.2 percent in FY 1990 at the end of the Cold War;
- 3 percent in FY 2000 at the end of the peace-dividend decade;
- 4.9 percent in FYs 2010 and 2011 with operations in Afghanistan, Iraq and elsewhere; and
- 3.6 percent in FY 2015.

Between FYs 2011 and 2015, the President's Budget estimates a 25 percent increase in GDP and a decrease of 9 percent in national defense Outlays. The percentages do not convey the depth of the change—the fact that defense funds decrease in absolute terms is much more important. The funding proposal for defense:

- decreases by $68 billion between FYs 2011 and 2012;
- decreases by another $22 billion between FYs 2012 and 2013;
- increases by $10 billion between FYs 2013 and 2014; and
- increases by $15 billion between FYs 2014 and 2015.

The Budget indicates that DoD needs to develop plans to operate with less than the FY 2011 level of funding.

Observations and Summary

The nation is passing through a recession. The President's Budget suggests a long recovery with annual deficits and corresponding increases in the GFD through FY 2020.

For FY 2011 the President proposes $3.691 trillion in Budget Authority for the federal government and a deficit of $1.145 trillion,[10] the tenth deficit since FY 2002. The FY 2011 deficit pushes the GFD to nearly as much as GDP; GFD exceeds GDP for the first time in FY 2012.

In the nine years from FY 2011 to FY 2020, all categories of Outlays will increase but at very different rates:

- discretionary funds increase 14 percent to $1.573 trillion;
- mandatory funds increase 55 percent to $3.255 trillion; and
- interest increases 265 percent to $912 billion.

In the FY 2011 Budget, the President proposes a base budget of $548.9 billion in Budget Authority for DoD, an increase of $18.2 billion, or 3.4 percent, over the FY 2010 enacted level of $530.8 billion. In addition, overseas contingency operations are allocated $159.3 billion in FY 2011, and in FY 2010 a $33 billion supplemental was approved on top of the $129.6 billion enacted for a total of $162.6 billion. However, in 2012 and beyond, only $50 billion per year is allocated as placeholder estimates, indicating that some as yet unknown costs are anticipated. This amount is more than $112 billion less than the $162 billion proposal for FY 2010.[11]

The fiscal reality of the Budget is at or approaching a crisis point. The extended estimates imply a slow recovery from the recession. The Budget projects revenues will be less than spending for the next several years, so there will continue to be deficits each year, and the federal debt will keep growing.

Ending annual deficits requires spending cuts or increases to revenue, or some combination of the two. Because discretionary funds are substantially less than mandatory funds, spending cuts in discretionary funds alone cannot solve the deficit problem. Cutting mandatory funds requires changes to entitlement programs—a very difficult choice. Alternatively, increasing revenue means increasing taxes—another unpopular option.

Clearly, the national economy and federal Budget estimates are serious issues that require thoughtful deliberation, consideration of practical options and trade-offs and a sincere focus on remedial solutions that are in the best interest of the nation.

* * * * * *

The subsequent chapters of this analysis focus on the DoD and Army budget proposals and what the funds will buy and provide to the nation.

Endnotes

1 *Budget of the U.S. Government, Fiscal Year 2011*, The Budget Message of the President, http://www.whitehouse.gov/omb/budget/fy2011/assets/message.pdf.

2 *Ibid.*

3 *Ibid.,* Analytical Perspectives, Budget Concepts and Budget Process, Table 11-1, Totals for the Budget and the Federal Government, http://www.whitehouse.gov/omb/budget/fy2011/assets/concepts.pdf.

4 *Ibid.,* Budget Message of the President.

[5] Budget Authority enables incurring financial obligations on behalf of the government; Outlays authority enables making actual payments to liquidate obligations.

[6] In 2000, discretionary funds were grouped as either defense or nondefense; defense did not include homeland security nor international programs funds as security now does. In FY 2011, Security Agencies include: Defense (DoD), Energy-National Nuclear Security Administration, Homeland Security (DHS) (includes $1.8 billion for BioShield in 2009 and a $3 billion transfer in 2010 of BioShield balances to HHS), Veterans Affairs and State and Other International Programs (comprised entirely of International Function 150, including funding for International Food Aid programs in the Department of Agriculture).

[7] *Budget of the U.S. Government, Fiscal Year 2011*, Budget Overview, Department of Defense, http://www.whitehouse.gov/omb/budget/fy2011/assets/defense.pdf.

[8] *Ibid.,* Summary Tables, Table S–11, Funding Levels for Appropriated ("Discretionary") Programs by Agency, http://www.whitehouse.gov/omb/budget/fy2011/assets/tables.pdf.

[9] Congressional Budget Office, Federal Debt and the Risk of a Fiscal Crisis, Economic and Budget Issue Brief, July 27, 2010, http://www.cbo.gov/doc.cfm?index=11659.

[10] *Ibid.,* Analytical Perspectives, Table 11-1, http://www.whitehouse.gov/omb/budget/fy2011/assets/concepts.pdf.

[11] *Ibid.,* Department of Defense, http://www.whitehouse.gov/omb/budget/fy2011/assets/defense.pdf.

The Department of Defense Budget

Introduction

The Department of Defense (DoD) budget for FY 2011 requests Budget Authority (BA) of $548.9 billion in the base budget and $159.3 billion in the supplemental overseas contingency operations (OCO) proposal. The OCO proposal includes support for President Obama's decision to send 30,000 more American troops to Afghanistan. The budget also includes a supplemental request for FY 2010 of $33 billion to support the troop buildup in Afghanistan for the rest of FY 2010.

Along with the budget documents, DoD submitted two strategy documents to Congress—the *2010 Quadrennial Defense Review* (*QDR*) and the *Ballistic Missile Defense Review* (*BMDR*). When describing the relationship among the documents, Secretary of Defense Robert M. Gates said,

> The FY11 request builds on reforms begun in last year's budget, changes that were broadened and deepened by the analysis and conclusions contained in the *QDR* . . . the cumulative effect of this and last year's budgets, along with the recommendations of the *QDR*, is to make sure this department is doing everything we can, and more, to prevail in the wars we are in while preparing our military to confront the most likely and lethal threats of the future.[1]

He went on to say that the budget and strategy reviews develop two major themes:

- Continued reform—"fundamentally changing the way this department does business, the priorities we set, the programs we fund, the weapons we buy and how we buy them."
- Realism with regard to risk and resources—"We have, in a sober and clear-eyed way, assessed risks, set priorities, made tradeoffs and identified requirements based on plausible, real-world threats scenarios and potential adversaries."[2]

Secretary Gates referred to the *QDR* to emphasize the need to continue to reform:

> [T]he department and the nation can no longer afford the quixotic pursuit of high-tech perfection that incurs unacceptable cost and risk, nor can the department afford to chase requirements that shift or continue to increase throughout a program's life cycle.[3]

In addition, Secretary Gates stated:

> [W]e must prepare for a much broader range of security challenges on the horizon. They range from the use of sophisticated, new technologies to deny our forces access to the global commons of sea, air, space and cyberspace to the threat posed by nonstate groups developing more cunning and destructive means to attack and terrorize—scenarios that transcend the familiar contingencies that dominated U.S. planning after the Cold War.[4]

DoD summarizes the budget request:

> The President's Budget request for the Department of Defense sustains the President's commitment to invest in America's security and prepare for the threats and challenges of a new age by funding a high state of military readiness and ground force strength; strengthening combat capabilities of America's Armed Forces; developing the capabilities to deter and defeat future threats to the nation's security; and improving the quality of life for service members and their families.[5]

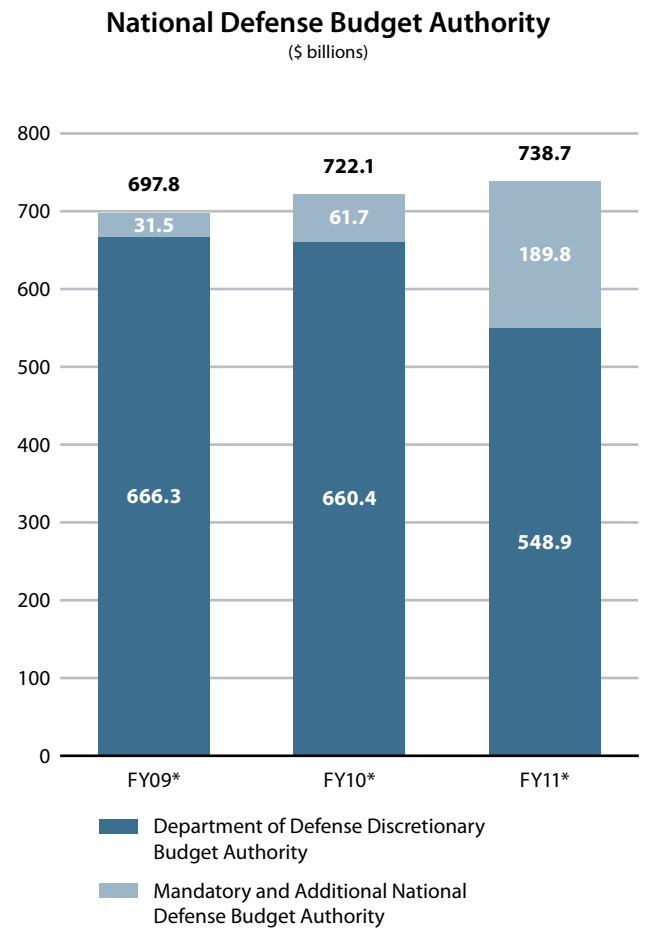
Admiral Michael G. Mullen, Chairman of the Joint Chiefs of Staff, observed that progress was made toward funding current operations through the base budget but that some contingency funding is necessary for FYs 2010 and 2011. He stated that the FY 2010 and FY 2011 OCO requests provide funding to complete a responsible drawdown in Iraq and to execute the President's strategy in Afghanistan and Pakistan. More specifically, Admiral Mullen noted that "the remaining 10 combat brigades in Iraq will be reduced to six advisory and assist brigades, and all troops will be withdrawn by December of 2011." He went on to discuss funds in the FY 2010 supplemental and the FY 2011 OCO requests to develop, outfit, train and sustain Iraqi and Afghanistan security forces.

DoD Budget Top Line

The federal budget is divided into approximately 20 categories known as budget functions. These functions include all spending for a given category, regardless of the federal agency that oversees the individual federal program. The top line for the 050 National Defense function, including the DoD base, OCO supplemental proposals, mandatory and other national defense funds, is $738.7 billion for FY 2011. The mandatory funds are for entitlements, which are authorized by permanent laws rather than annual appropriations acts. The other national defense funds are for Atomic Energy Defense Activities and defense-related activities. The DoD portion of the National Defense Budget Authority[6] is $708.2 billion, which is the sum of the base budget ($548.9 billion) and OCO proposal ($159.3 billion). See **figure 11.**

Most top-line discussions of the DoD budget focus on BA and discretionary funds only. Mandatory funds are not discussed since DoD does not have decision authority to alter these payments.

Figure 11



* Includes enacted supplemental funding.
Source: Department of Defense *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010

The base budget request of $548.9 billion is $18 billion, or 3.4 percent, more than the $531 billion enacted for FY 2010—1.8 percent real growth after adjusting for inflation. The OCO budget proposal of $159.3 billion is $4 billion, or 2.5 percent, less than the $163 billion enacted for FY 2010. This is a decrease of 1.3 percent after adjusting for inflation.

The budget also requests Outlays, i.e., funds to liquidate obligations from the current budget and earlier years that require payment in the current budget year. Most top-line discussions involve BA and Outlays, but most discussions of appropriations involve Total Obligational Authority (TOA).[7] See **table 12** for top-line TOA, BA and Outlays for FYs 2009, 2010 and 2011.

Any discussion of the budget needs to identify the type of funds being discussed, and the differences among the amounts depend upon its type. Additional details of the enacted and base budget proposal and the OCO supplementals for FYs 2010 and FY 2011 are in **tables 13, 14 and 15,** respectively.

The following is a summary of the National Security and DoD data for FY 2011:

- $708 billion in BA that includes discretionary funds only, a base budget of $549 billion and an OCO supplemental proposal of $159 billion;
- $717 billion in Outlays that includes discretionary only, a base budget of $598 billion and an OCO supplemental proposal of $119 billion;
- $708 billion in TOA that includes discretionary only, a base budget of $549 billion and an OCO supplemental proposal of $159 billion.

Top-line Trends

Since 11 September 2001 and the introduction of OCO, the DoD top line has grown annually, although the rate of growth has slowed.

Between FYs 2001 and 2011 the base budget increases by 85 percent in current dollars—41 percent in constant dollars—and the OCO budget increases from $13 billion to $159 billion. The DoD trends for BA are in **figure 12.**

The DoD budget has grown significantly since the war began. Even as DoD budgets have been growing, for two years the nation has been suffering through the worst recession in 80 years. Secretary Gates previously described the size of the budget as "staggering" and causing "sticker shock."[8]

The DoD Budget and the Federal Budget Conundrum

The funds available to the federal government are limited to revenue plus borrowing (if Outlays exceed revenue). The demand for federal funds has exceeded

Table 12

Total Base and Overseas Contingency Operations Supplementals[1]

($ billions[2])

	FY09[3]	FY10[4]	FY11[5]
Mandatory			
TOA[6]			
Budget Authority	-1.8	3.5	3.9
Outlays	4.5	3.6	4.0
Discretionary			
TOA	665.9	698.2	708.4
Budget Authority	666.3	693.4	708.2
Outlays	631.9	688.8	717.1
Total			
TOA	**665.9**	**698.2**	**708.4**
Budget Authority	**664.5**	**696.9**	**712.1**
Outlays	**636.3**	**692.4**	**721.1**

[1] This table is a summary of tables 13, 14 and 15.
[2] Numbers may not add because of rounding.
[3] FY09 figures are actual expenditures and include base and supplemental.
[4] FY10 figures indicate enacted funding and supplemental proposals.
[5] FY11 figures indicate base and supplemental proposals.
[6] No mandatory Total Obligational Authority (TOA) data.
Source: *DoD Budget for FY11*, Financial Summary Tables, FAD 792 and Tab J

Table 13

Base and Enacted Overseas Contingency Operations

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Mandatory			
TOA[5]			
Budget Authority	-1.8	3.5	3.9
Outlays	4.5	3.6	4.0
Discretionary			
TOA	665.9	665.2	549.1
Budget Authority	666.3	660.4	548.9
Outlays	631.9	680.1	597.8
Total			
TOA	**665.9**	**665.2**	**549.1**
Budget Authority	**664.5**	**663.9**	**552.8**
Outlays	**636.3**	**683.7**	**601.8**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures including base and supplemental.
[3] FY10 figures indicate enacted proposals.
[4] FY11 figures indicate base proposals.
[5] No mandatory Total Obligational Authority (TOA) data.
Source: *DoD Budget for FY11*, Financial Summary Tables, FAD 792 and Tab J

Table 14

Overseas Contingency Operations Supplemental for Fiscal Year 2010

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Mandatory			
TOA[5]			
Budget Authority	0	0	0
Outlays	0	0	0
Discretionary			
TOA		33.0	
Budget Authority	0	33.0	0
Outlays	0	8.7	20.6
Total			
TOA		**33.0**	
Budget Authority	**0**	**33.0**	**0**
Outlays	**0**	**8.7**	**20.6**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures including base and supplemental.
[3] FY10 figures indicate supplemental proposals.
[4] FY11 figures are outlays in FY10 supplemental proposals.
[5] No mandatory Total Obligational Authority (TOA) data.
Source: *DoD Budget for FY11*, Financial Summary Tables, FAD 792 and Tab J

Table 15

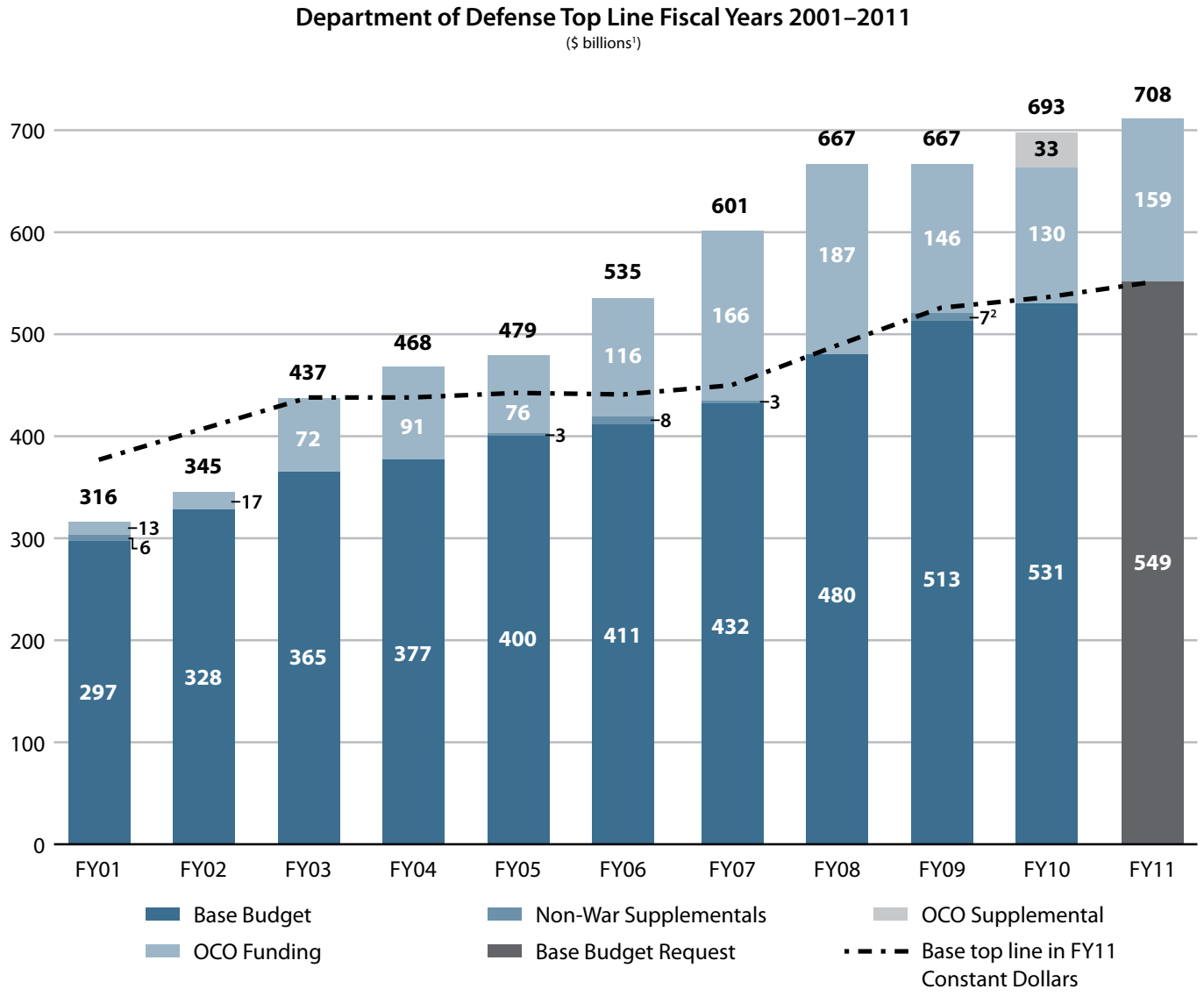
Overseas Contingency Operations Supplemental for Fiscal Year 2011

($ billions[1])

	FY09[2]	FY10[2]	FY11[3]
Mandatory			
TOA[4]			
Budget Authority	0	0	0
Outlays	0	0	0
Discretionary			
TOA			159.3
Budget Authority	0	0	159.3
Outlays	0	0	98.7
Total			
TOA			**159.3**
Budget Authority	**0**	**0**	**159.3**
Outlays	**0**	**0**	**98.7**

[1] Numbers may not add because of rounding.
[2] FY09 and FY10 figures are not applicable.
[3] FY11 figures are supplemental proposals.
[4] No mandatory Total Obligational Authority (TOA) data.
Source: *DoD Budget for FY11*, Financial Summary Tables, FAD 792 and Tab J

Figure 12



[1] Numbers may not add because of rounding.
[2] FY09 Non-war supplemental was appropriated through the American Recovery and Reinvestment Act of 2009.
Source: U.S. Department of Defense News Release, No. 084-10, 1 February 2010

revenue every year since FY 2002. The smallest annual deficit was $158 billion in FY 2002, and the greatest was $1.556 trillion in FY 2010.

When Receipts are not adequate to cover Outlays, as is the present case, the government has several options, including:

- reducing the mission or scope of what is to be accomplished;
- identifying alternative, less resource-intense means;
- identifying trade-offs and reducing resources elsewhere;
- raising receipts; or
- some combination of these options.

None of these options is attractive to those charged with the responsibility of accomplishing the missions or implementing the programs, nor to some elected representatives, nor to advocacy groups who support or oppose the mission or programs.

In addition, the government's flexibility varies depending upon whether discretionary or mandatory funds are used or whether the Outlays are for interest on debt.

The DoD budget consumes more than half of all discretionary funds—the balance of discretionary funds supports the other agencies and programs receiving these annual appropriations. With the recession, receipts are down and the demand for stimulus and "safety-net" funds for Americans hit by the recession are up.

With the continuing war and the United States' current level of engagement, DoD consumes more discretionary funds than ever. The continuing growth of Defense funds is unlikely because of other pressing national needs. To the extent that Defense funds exceed real, essential needs, DoD consumption denies resources to other needs and, arguably, contributes to prolonging the recovery.

Budget Priorities

The DoD budget focuses on the reforms begun by President Obama and Secretary Gates with the FY 2010 Budget and begins to implement the strategy articulated in the *QDR*.

Quadrennial Defense Review

The *QDR* is a congressionally mandated review of the National Security Strategy that is conducted by DoD every four years.[9] The *QDR* includes an assessment of the evolving international environment, the potential challenges and emerging threats and the formulation of national defense strategies, capabilities and forces for success in the current environment as well as in the future.

The 2010 *QDR* recognizes that the interests of the United States are deeply intertwined with an international environment:

> The United States faces a complex and uncertain security landscape in which the pace of change continues to accelerate. The rise of new powers, the growing influence of nonstate actors, the spread of weapons of mass destruction and other destructive enabling technologies, and a series of enduring and emerging trends pose profound challenges to international order.[10]

The *QDR* acknowledges the complexity of the security landscape and that the United States is the only nation able to project and sustain large-scale operations over extended distances, thus concluding that the United States needs to invest in flexible forces and key enablers in its defense strategy.

The 2010 *QDR* recommends a defense strategy that rebalances U.S. military capabilities and reforms defense processes. The strategy leads to four priority objectives:

- prevail in today's wars;
- prevent and deter conflict;
- prepare to defeat adversaries and succeed in a wide range of contingencies; and
- preserve and enhance the all-volunteer force.

These strategic objectives are the foundation for the DoD budget for FY 2011.

Budget Analysis – Top Line

The DoD strategy focuses on maintaining ready forces with unmatched military capabilities to sustain national interests now and in the future. The budget implements the strategy by balancing resources and risk across four themes discussed below.

Support for Troops in the Field

The budget supports the continuing transition and drawdown of forces in Iraq to 50,000 troops and the changing priorities in Iraq and Afghanistan. The focus in Iraq shifts to training and assisting the Iraqi Security Forces, providing force protection and conducting targeted counterterrorism operations. Meanwhile, the U.S. role in Afghanistan is transitioning from lead combat to supporting. The budget includes $2 billion in coalition support funding, mostly to reimburse Pakistan for the support it provides to Operation Enduring Freedom (OEF).

DoD summarizes the OCO funds for support of the troops in the field in **figure 13.**

Taking Care of People

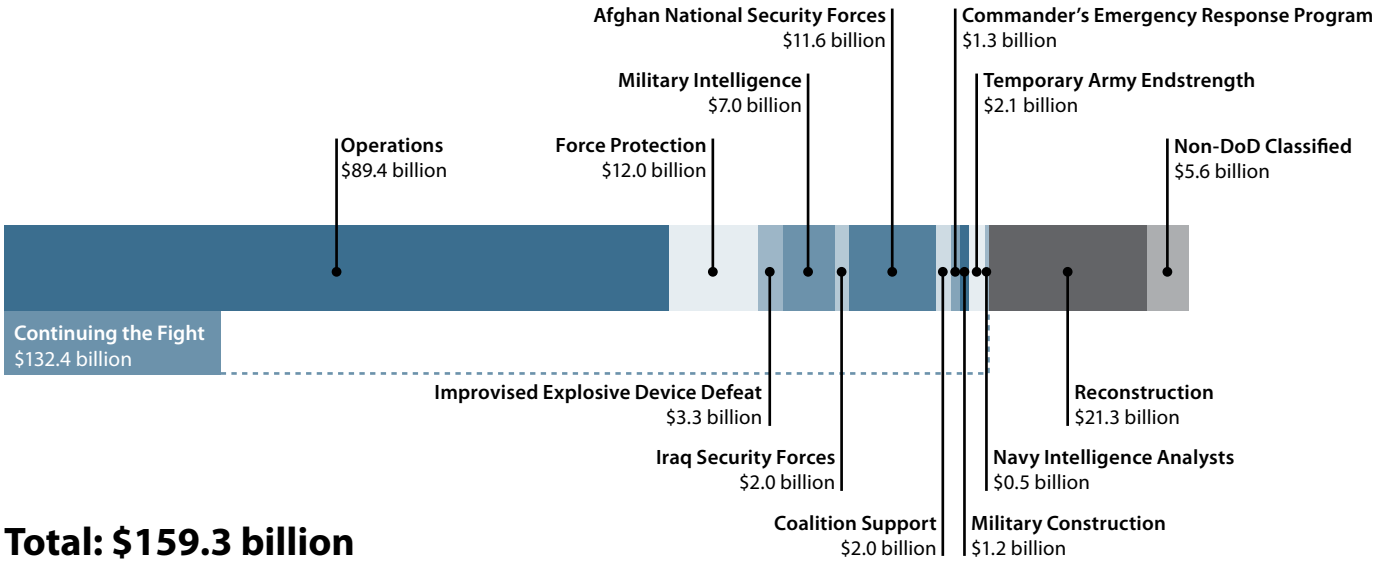
Through nearly nine years of war and multiple deployments, the United States has asked much of its all-volunteer force and the civilians who support that force. The FY 2011 budget includes funds for:

- a 1.4 percent increase in military basic pay and civilian pay;
- $2.2 billion for enduring programs for wounded, ill and injured servicemembers;
- $0.3 billion in infrastructure investments for the completion of the Army's Warrior Transition Units complexes and new medical facilities in the Washington, D.C., area;
- $50.7 billion for the DoD Unified Medical Budget to support the Military Health System (MHS), which currently has 9.5 million eligible beneficiaries including active military members and their families, military retirees and their families, dependent survivors and certain eligible reserve component members and their families;
- $8.1 billion for a variety of family support programs vital to the morale and well-being of military members and their families;
- a five-year plan to replace and recapitalize more than half of the 192 DoD Education Activity schools and upgrade schools in poor or failing condition; and
- $18.7 billion to fund critical military construction and family housing requirements.

Figure 13

Fiscal Year 2011 Overseas Contingency Operations

(Budget Request*)



* Numbers may not add because of rounding.
Source: DoD News Release, No. 084-10, 1 February 2010

Rebalancing the Force

Secretary Gates says that the United States should strive for balance between:

- trying to prevail in current conflicts versus preparing for future contingencies;
- institutionalizing capabilities such as counterinsurgency and foreign military assistance versus maintaining the existing U.S. conventional and strategic technological edge against other military forces; and
- retaining those cultural traits that have made the U.S. armed forces successful versus shedding those that hamper their ability to do what needs to be done.

The FY 2011 budget includes money to help achieve balance in current and future conflicts, with the following breakdown of funds:

Enhance Capabilities for Current Conflicts. The budget includes:

- $9.6 billion for the acquisition of a variety of modern rotary-wing aircraft, including:
  - $1.4 billion for UH-60 Black Hawks;
  - $1.2 billion for CH-47 Chinooks;
  - $2.7 billion for V-22 Ospreys; and
  - $1.7 billion for MH-60R/S Seahawks.
- funds for creating two Army combat aviation brigades (CABs) by consolidating existing aviation assets to create a 12th active-duty CAB in FY 2011 and begin actions to create a 13th active-duty CAB;
- increased funds to continue the program, begun in FY 2010, to increase the number of Army helicopter pilots;
- $2.6 billion (most of which is in the OCO request) for increased intelligence, surveillance and reconnaissance (ISR) capabilities;
- $1.1 billion for the acquisition of 12 EA-18G aircraft and $2.4 billion for 24 aircraft in FY 2012 and to recapitalize four Navy expeditionary EA-6B squadrons; and
- $6.3 billion for U.S. Southern Command—an increase of approximately 6 percent over FY 2010 and about 2,800 personnel, and continuing increases over the next several years.

Enhance Capabilities for Future Conflicts. The budget includes:

- $10.7 billion to continue development of and to procure 42 Joint Strike Fighter (JSF) F-35 aircraft and to restructure the program;
- funds to support continuing development of a new aerial refueling tanker, KC-X, with future procurement of 179 commercial derivative aerial refueling tanker aircraft;
- funds to support production line shutdown activities and to continue the modification of existing C-17s;

- funds to procure nine new Navy ships (50 ships through FY 2015), including:
  - two DDG 51 Aegis destroyers;
  - two *Virginia*-class submarines;
  - two Littoral Combat Ships (LCSs);
  - one Amphibious Assault Ship Replacement (LHA[R]);
  - one Mobile Landing Platform (MLP); and
  - one Joint High Speed Vessel;
- Army funds to procure one Joint High Speed Vessel;
- $3.2 billion for Brigade Combat Team (BCT) Modernization, including $2.5 billion for research and development, funds for increased ISR and related capabilities, better and increased robotic capability (both air and ground), more responsive precision fires and better situational awareness;
- funds to support the development of a new ground vehicle program, to replace aging systems and to take into account the success of Mine-Resistant Ambush Protected (MRAP) vehicles in Iraq and Afghanistan;
- $9.9 billion for Ballistic Missile Defense programs, including the development and fielding of an integrated, layered Ballistic Missile Defense System (BMDS) architecture;
- funds to support the Ready Reserve's approximately 1.1 million members, including 846,200 Selected Reserve, 250,000 Individual Ready Reserve (IRR) and 2,000 Inactive National Guard (ING);
- $49.6 billion to fund pay and allowances, readiness, training, incentives, equipment and operation and maintenance costs.

Reforming DoD Business Practices

President Obama and Secretary Gates have acted decisively to end troubled programs and to achieve a better balance between capabilities needed to succeed in current conflicts and capabilities needed to prepare for possible future conflicts. Secretary Gates uses five principles to evaluate DoD programs:

- **Emphasize proven technologies.** Continue to produce and, as necessary, upgrade systems that work and are the best at what they do.
- **Seek joint, not single-service, solutions.** Look more to capabilities available across the services to counter roughly the same threat or accomplish roughly the same mission.
- **Incorporate combat experience.** Incorporate the experiences of combat operations in modernization programs, particularly for the ground services, which will be in the lead for irregular and hybrid campaigns of the future.
- **Beware of the exquisite solution.** Look more to the 80 percent multiservice solution that can be produced on time, on budget and in significant numbers.
- **Recognize the need for balance.** Future warfare will require capabilities with the maximum possible flexibility to deal with the widest possible range of conflict across a broad spectrum of operations and lethality with large and small adversaries using irregular or asymmetric tactics, targeting traditional military strengths and involving nonstate actors who may have weapons of mass destruction or sophisticated missiles.

Unneeded and Poorly Performing Programs. The budget eliminates wasteful spending by:

- ending production of C-17 aircraft at the current fleet size of 223;
- not developing an alternate engine for the JSF;
- canceling the Navy Large Cruiser CG(X);
- canceling the Navy-planned EP-3 replacement;
- canceling the Third Generation Infrared Surveillance (3GIRS) sensor system;
- canceling the Defense Integrated Military Human Resources System (DIMHRS), which has been in development for more than 10 years and has cost $500 million with little to no progress and limited prospects; and
- canceling the Net-Enabled Command and Control (NECC) joint program, which has been delayed at least two years with cost overruns and performance shortfalls.

Strengthen the Civilian Workforce. The budget includes:

- a 1.4 percent pay raise for DoD civilians;
- $23 million to transition civilian employees from the National Security Personnel System (NSPS) to appropriate non-NSPS civilian personnel systems; and
- $239 million for estimated higher civilian pay for about 225,000 transitioning DoD employees.

Improve Financial Management. The budget includes funds supporting modernizing financial systems with the deployment of Enterprise Resource Planning (ERP) systems, including:

- Naval Sea Systems Command;
- Army General Fund Enterprise Business System;

- Air Force Defense Enterprise Accounting and Management System (DEAMS) deployment at U.S. Transportation Command (TRANSCOM); and
- Defense Agencies Initiative (DAI) deployment at Defense Information Systems Agency (DISA).

Budget Analysis by Title and Service

The military services and DoD agencies first develop their budgets. Then the individual budgets are reviewed, approved and integrated into the overall DoD budget. The appropriations consolidate funds for specific purposes. The DoD budget includes approximately 75 appropriations.

Many of the appropriations involve the same purpose but apply to different services or components within the services. The similar appropriations of the military services and the various Defense-wide agencies aggregate to titles. For example, the Military Personnel title includes the military pay appropriations of the military service including active and reserve appropriations. The titles are:

- Military Personnel;
- Operation and Maintenance;
- Procurement;
- Research, Development, Test and Evaluation;
- Military Construction;
- Family Housing;
- Revolving and Management Funds; and
- Other Related Agencies.[11]

This section of the analysis examines the budget by:

- title in current dollars;
- title in constant dollars;
- title by percentage of distribution;
- service and Defense-wide–current dollars;
- service and Defense-wide–constant dollars; and
- service and Defense-wide–percentage of distribution.

Current dollars are a measure of spending or revenues in a given year that has not been adjusted for differences in prices (such as inflation) between that year and a base year. Constant dollars are a measure of spending (or revenues) in a given year that has been adjusted for differences in prices between that year and a base year.

Various tables in the following analysis begin with data from FY 1985 and continue at five-year intervals to FY 2005, and then present data annually. The budget title tables continue to FY 2011, and the service tables continue to FY 2015. The purpose of the historical data is to reflect:

- the Reagan buildup (FY 1985);
- the final year of the Cold War (FY 1990);
- the drawdown for the peace dividend (FY 1995);
- the new post-Cold War baseline (FY 2000); and
- four years into OCO (FY 2005).

The constant-dollar tables provide insights into changes in buying power at various points in time; the percentage tables provide insights into priorities at various points in time.

DoD Budget by Title – In Current Dollars

Between FYs 2009 and 2010 the total DoD budget increased by 5 percent; between FYs 2010 and 2011 the total increases by 6 percent. In each year, Military Personnel (MILPERS) and Operation and Maintenance (O&M) increase; Procurement remains essentially the same; and Research, Development Test and Evaluation (RDT&E) is down in FY 2011. The Military Construction (MILCON) and Family Housing titles are down substantially from FY 2009 to FY 2011, by 32 and 52 percent, respectively. The budget proposal by title is in **table 16.**

Based on prior-year experience, the OCO supplemental proposals will likely be funded at about the amount proposed. Therefore, the totals include and support essentially comparable operations and organizations, so comparisons are reasonable.

A view of the funding going back further in time provides insights into the changes among the titles. In FY 1985 Procurement was 34 percent and RDT&E was 11 percent; by FY 2000 and before 11 September 2001, Procurement dropped to 19 percent and RDT&E increased slightly to 13 percent. Between FYs 1985 and 2000 O&M increased from 27 to 37 percent of the budget; MILPERS remained about the same. Even with the reductions in endstrength and forces, DoD was spending more for operations and investing less in new materiel.

From FY 2000 to FY 2011 O&M increases from 37 percent to nearly 45 percent; the shifts in the other titles are less than 3 percent. In FY 2011 MILPERS and O&M together consume 67 percent of the budget versus the 51 percent they consumed in FY 1985. Research, Development and Acquisition (RDA)—the combination of Procurement and RDT&E—consumes 30 percent in FY 2011 versus 45 percent in FY 1985. With the continuing war, much more of the budget is consumed in pay and operations, and much less is going for RDA. **See table 17.**

DoD Budget by Title – In Constant Dollars

The use of constant dollars for comparisons of data over long periods of time provides a comparison of consistent buying power. For example, the change in the total

Table 16

Department of Defense Budget Authority by Title

($ billions[1])

	FY09[2]	FY10			FY11		
	Actual	Base Enacted	OCO Supplemental Request	Total	Base	OCO	Total
Military Personnel	149.3	154.4	1.9	156.3	143.5	15.3	158.8
Operation & Maintenance	271.6	272.8	24.5	297.3	200.9	117.0	317.9
Procurement	135.4	129.7	4.8	134.5	112.9	24.6	137.5
Research, Development, Test and Evaluation	80.0	80.4	0.3	80.7	76.1	0.6	76.7
Military Construction	26.8	22.4	0.5	22.9	16.9	1.3	18.2
Family Housing	3.8	2.3	0.0	2.3	1.8		1.8
Revolving and Management Funds	-1.2	3.5	1.0	4.5	2.4	0.5	2.9
DoD Offsetting Receipts	-1.2	-1.6		-1.6	-1.7		-1.7
051 – Total DoD	**664.5**	**663.9**	**33.0**	**696.9**	**552.8**	**159.3**	**712.1**
Delta Office of Management and Budget (OMB) Scoring and Rounding[3]	3.0	0.0	0.0	0.0	0.1		0.1
051 – OMB Total DoD	**667.5**	**663.9**	**33.0**	**696.9**	**552.9**	**159.3**	**712.2**

[1] Numbers may not add because of rounding.
[2] FY09 figures include enacted base, OCO and American Recovery and Reinvestment Act of 2009.
[3] Primarily for contract authority withdrawn.
Source: *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 1.4

Table 17

Department of Defense Budget Authority by Title – Current Dollars

($ billions[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[3]	FY11[4]
Military Personnel	67.8	78.9	71.6	73.8	121.3	128.5	131.8	139.0	149.3	156.4	158.8
Operation and Maintenance	77.8	88.4	93.7	108.7	179.2	213.5	240.3	256.2	271.6	297.0	317.9
Procurement	96.8	81.4	43.6	55.0	96.6	105.4	133.8	165.0	135.4	134.5	137.5
Research, Development, Test and Evaluation	31.3	36.5	34.5	38.7	68.8	72.9	77.5	79.6	80.0	80.6	76.8
Military Construction	5.5	5.1	5.4	5.1	7.3	9.5	14.0	22.1	26.8	22.9	18.2
Family Housing	2.9	3.1	3.4	3.5	4.1	4.4	4.0	10.3	3.98	2.3	1.8
Other[5]	4.7	-0.4	3.4	5.6	6.6	2.3	0.9	1.3	-0.6	2.9	1.2
Total Budget Authority, DoD	**286.8**	**293.0**	**255.7**	**290.5**	**483.9**	**536.5**	**602.2**	**674.7**	**667.5**	**696.9**	**712.3**

[1] Numbers may not add because of rounding.
[2] FY85 to FY09 figures are actual expenditures and include OCO and American Recovery and Reinvestment Act of 2009.
[3] FY10 figures indicate OCO enacted funding and supplemental request.
[4] FY11 figures include OCO budget proposal.
[5] Includes Revolving Funds.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Tables 1.3 and 6.8

BA between FYs 2000 and 2011 is 145 percent, or $421.8 billion, in current dollars, but 90 percent, or $337 billion, in constant dollars.

FY 2000 predated 11 September 2001 and funds for OCO. The FY 2011 funds are for the base budget and exclude the OCO supplemental proposal. In real buying power, the budget is up by 90 percent, so clearly a great deal of this increase relates directly or indirectly to the ongoing wars. See **table 18.**

A historical view in constant dollars shows that MILPERS and Procurement are less in FY 2011 than in FY 1985. MILPERS' reduction is understandable because

Table 18

Department of Defense Budget Authority by Title – Constant Dollars

($ billions[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[3]	FY11[4]
Military Personnel	174.4	166.0	125.9	110.2	144.8	111.0	116.9	151.4	155.4	158.7	158.8
Operation and Maintenance	135.6	129.6	122.1	132.7	199.2	197.4	227.5	265.7	284.0	302.8	317.9
Procurement	167.0	118.1	56.9	67.3	106.7	97.7	126.7	171.7	139.3	136.5	137.5
Research, Development, Test and Evaluation	54.6	53.6	45.0	47.2	76.5	67.4	73.4	82.6	82.1	81.8	76.8
Military Construction	9.5	7.4	7.0	6.2	8.1	8.8	13.2	23.0	27.6	23.3	18.2
Family Housing	5.0	4.5	4.4	4.3	4.5	4.1	3.8	10.7	3.9	2.3	1.8
Other	8.4	-0.6	4.6	7.1	7.4	2.1	0.8	1.4	-2.4	2.9	1.2
Total Budget Authority, DoD	**554.5**	**478.7**	**365.9**	**375.0**	**547.2**	**488.5**	**562.3**	**706.5**	**689.9**	**708.3**	**712.3**

[1] Numbers may not add because of rounding.
[2] FY85 to FY09 figures are actual expenditures and include OCO and American Recovery and Reinvestment Act of 2009.
[3] FY10 figures indicate enacted funding and include OCO supplemental request.
[4] FY11 figures include budget estimates and include OCO budget proposal.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Tables 1.4 and 5.7

of the reductions in military endstrength at the end of the Cold War, but the Procurement drawdown indicates that DoD is buying less.

DoD Budget by Title – Percentage Distribution

Comparing the distribution among titles as percentages across a span of fiscal years provides insights into the shifting priorities during this time. See **table 19.**

In the past 26 years, substantial changes occurred in the continual growth of the O&M title (as a percentage of the budget) and the decline of the Procurement title and its apparent plateau at about 20 percent. All other titles are relatively constant.

DoD Budget by Service and Defense-wide – Current Dollars

The DoD budget is the consolidated and approved budget proposals of the military services and DoD agencies. A review of the top-level DoD budget by service provides general insights into the means available for the national defense. The service and Defense-wide data in current dollars are in **table 20.**

The FY 1985 budget supported the rebuilding of Defense forces after the Vietnam War. The FY 1995 budget reflected the post-Cold War peace dividend with the overall reduction of 11 percent, and greater reductions by services as certain functions were consolidated in Defense-wide agencies. Between FYs 1985 and 1995 Army funds decreased by 14.8 percent, Navy/Marine Corps funds by 22.3 percent and Air Force funds by 25.7 percent. Defense-wide activities had the only increase—but a substantial one, of 195 percent.

In the late 1990s the national leadership decided that Defense reduction had been too drastic, and the DoD budget grew by 14 percent. This growth was shared nearly equally among the services:

- Army – 15.6 percent;
- Navy/Marine Corps – 15.5 percent;
- Air Force – 12.4 percent; and
- Defense-wide activities – 9.4 percent.

The 21st century began with the nation at peace, but the past decade has been one of continuing war. The Defense base budget grew by 90 percent from FY 2000 to FY 2011. Information on the OCO supplemental requests for FYs 2010 and 2011 by service is not available. However, the comparison between FYs 2000 and 2011 is reasonable since both sets of data exclude the OCO supplemental funds. The Army experienced the greatest growth in the base budget among the services, but all had increases:

- Army – 94 percent;
- Navy/Marine Corps – 80 percent;
- Air Force – 80 percent; and
- Defense-wide activities – 122 percent.

The FY 2009 experience includes the base budget and OCO. The difference between the FY 2009 experience and the FY 2011 base budget provides an indication of the reliance on supplemental funds by service. The Army has a decrease of $91.3 billion, or about 82 percent, of the total difference in DoD funds between FYs 2009 and 2011. The other services have a much lower decrease; the Navy/Marine Corps is down $5.8 billion, or about 5 percent, of the DoD total, the Air Force is down $13.7 billion, or about 12 percent, and Defense-wide activities are down

Table 19

Department of Defense Budget Authority by Title as a Percentage of Annual Total

	FY85[1]	FY90[1]	FY95[1]	FY00[1]	FY05[1]	FY06[1]	FY07[1]	FY08[1]	FY09[1]	FY10[2]	FY11[3]
Military Personnel	23.6%	26.9%	28.0%	25.4%	25.1%	24.0%	21.9%	20.6%	22.4%	22.4%	22.4%
Operation and Maintenance	27.1%	30.2%	36.6%	37.4%	37.0%	39.8%	39.9%	38.0%	40.7%	42.6%	42.6%
Procurement	33.8%	27.8%	17.1%	18.9%	20.0%	19.6%	22.2%	24.5%	20.3%	19.3%	19.3%
Research, Development, Test and Evaluation	10.9%	12.5%	13.5%	13.3%	14.2%	13.6%	12.9%	11.8%	12.0%	11.6%	11.6%
Military Construction	1.9%	1.7%	2.1%	1.8%	1.5%	1.8%	2.3%	3.3%	4.0%	3.3%	3.3%
Family Housing	1.0%	1.1%	1.3%	1.2%	0.8%	0.8%	0.7%	1.5%	0.6%	0.3%	0.3%
Other	1.6%	-0.1%	1.3%	1.9%	1.4%	0.4%	0.1%	0.2%	-0.1%	0.4%	0.4%

[1] FY85 to FY09 figures are actual expenditures.
[2] FY10 figures indicate enacted funding and includes OCO supplemental request.
[3] FY11 figures indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.8

Table 20

Department of Defense Budget Authority by Service – Current Dollars

($ billions[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[3]	FY11[4]	FY12[4]	FY13[4]	FY14[4]	FY15[4]
Army	74.3	78.5	63.3	73.2	152.8	174.9	218.5	250.1	233.0	215.6	141.7	147.5	151.2	152.9	154.6
Navy/Marine Corps	99.0	99.9	76.9	88.8	131.7	143.8	150.3	165.3	166.1	169.6	160.3	162.8	168.3	170.7	176.3
Air Force	99.4	92.9	73.9	83.1	127.9	141.7	148.9	157.9	163.5	158.7	149.8	154.1	153.1	159.6	165.5
Defense-wide	14.1	21.7	41.6	45.5	71.5	76.0	84.5	100.2	101.9	120.0	100.9	105.7	113.0	118.5	123.7
Total Budget Authority, DoD	**286.8**	**293.0**	**255.7**	**290.5**	**483.9**	**536.5**	**602.2**	**673.5**	**664.5**	**663.9**	**552.8**	**570.1**	**585.6**	**601.7**	**620.2**

[1] Numbers may not add because of rounding.
[2] FY85 to FY09 figures are actual expenditures and include enacted OCO and American Recovery and Reinvestment Act of 2009.
[3] FY10 figures indicate enacted funding and excludes OCO supplemental.
[4] FY11 to FY15 figures exclude OCO.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.10

$1 billion, or about 1 percent. Another way of interpreting these differences is that the Army relies very heavily on supplemental funds—$91.3 billion is 39 percent of the Army's actual experience in FY 2009 and 64 percent of the FY 2011 request.

DoD Budget by Service and Defense-wide – Constant Dollars

In constant dollars, the FY 2011 budget proposal has less buying power than the FY 1985 budget—$552.8 billion versus $573.2 billion. These comparisons do not reflect adjustments for substantive programmatic changes; e.g., between FYs 1985 and 2011 military endstrength was decreased by 697,000, or 32 percent, which was a substantial change in the force.

Between FYs 2000 and 2011 the DoD budget grew by 40 percent. All services experienced increases, but the Army experienced the greatest growth in constant dollars:

- Army – 44 percent;
- Navy/Marine Corps – 34 percent;
- Air Force – 34 percent; and
- Defense-wide activities – 57 percent.

A comparison of the FY 2009 actual experience including OCO funds and the FY 2011 budget proposal without the OCO supplemental reflects less buying power for all the services. However, the decrease in buying power for the Army is much greater than for the other services:

- Army – 41 percent;
- Navy/Marine Corps – 7 percent;
- Air Force – 12 percent; and
- Defense-wide – 5 percent.

This comparison illustrates how critical the OCO supplemental proposal is for the Army: without the

supplemental funds, the Army has 41 percent less buying power in FY 2011. See **table 21** for BA in constant dollars by service.

DoD Budget by Service and Defense-wide – Percentage Distribution

The analysis by percentage of total DoD BA provides another way of comparing the distribution among the services. The percentages are in **table 22.**

Between FYs 1985 and 1995 about 11 percent of the distribution shifts from the services to Defense-wide agencies. From FY 1995 to FY 2000 the distribution remains constant. After FY 2000 the distribution among the services changes, with the Army shifting from the smallest to the largest percentage of the DoD budget.

However, in the base budget for FY 2011, the Army constitutes 26 percent of the budget—the third largest distribution out of four and a level of funding consistent with the peacetime levels from FY 1985 to FY 2000. While the Army's share of the budget is no indication of whether it is adequate, returning to the historical peacetime level seems questionable after nine years of a war fought primarily on land and the increase in Army endstrength.

Military Forces

The military forces—Army, Navy and Marine Corps and Air Force (and during time of war, the Coast Guard)—organize, recruit, equip, train, maintain, supply and mobilize and demobilize the military forces. The military services produce and provide ready military forces to the Unified Combatant Commands (UCCs).

Combatant Commands

DoD utilizes ten Unified Combatant Commands that exercise unified command and control across service boundaries. The UCCs operate joint task forces that include components from two or more services. The UCCs are specified in U.S. Code Title 10 and the latest annual Unified Command Plan (UCP).

The UCP establishes the missions and geographic responsibilities among the UCCs. Currently, there are six regional UCCs, who are responsible for a geographical area or area of responsibility (AOR), and four functional UCCs, such as U.S. Special Operations Command (USSOCOM).

The military services provide the funding for their forces in the UCC, except for some Operation and

Table 21

Department of Defense Budget Authority by Service – Constant Fiscal Year 2011 Dollars

($ billions[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[3]	FY11[4]	FY12[4]	FY13[4]	FY14[4]	FY15[4]
Army	153.5	139.0	98.9	98.3	174.4	193.3	234.9	262.5	240.9	218.9	141.7	144.6	145.3	143.8	142.3
Navy/Marine Corps	196.7	172.3	117.2	119.3	150.5	159.3	162.4	173.7	172.6	172.4	160.3	159.7	161.9	161.1	162.9
Air Force	195.7	161.3	113.4	111.9	146.9	157.1	161.2	165.3	170.1	161.2	149.8	151.2	147.4	150.7	153.3
Defense-wide	27.3	34.4	65.0	64.4	84.6	87.1	93.5	106.9	106.2	122.2	100.9	103.3	108.1	110.7	112.9
Total Budget Authority, DoD	**573.2**	**507.0**	**394.5**	**393.9**	**556.3**	**596.8**	**652.1**	**708.5**	**689.8**	**674.6**	**552.8**	**558.8**	**562.7**	**566.3**	**571.5**

[1] Numbers may not add because of rounding.
[2] FY85 to FY09 figures are actual expenditures and include enacted OCO and American Recovery and Reinvestment Act of 2009.
[3] FY10 figures indicate enacted funding.
[4] FY11 to FY15 figures indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.10

Table 22

Department of Defense Budget Authority by Service as a Percentage of Annual Total

	FY85[1]	FY90[1]	FY95[1]	FY00[1]	FY05[1]	FY06[1]	FY07[1]	FY08[1]	FY09[1]	FY10[2]	FY11[3]
Army	25.9%	26.8%	24.8%	25.2%	31.6%	32.6%	36.3%	37.1%	35.1%	32.5%	25.6%
Navy/Marine Corps	34.5%	34.1%	30.1%	30.6%	27.2%	26.8%	25.0%	24.5%	25.0%	25.5%	29.0%
Air Force	34.7%	31.7%	28.9%	28.6%	26.4%	26.4%	24.7%	23.4%	24.6%	23.9%	27.1%
Defense-wide	4.9%	7.4%	16.3%	15.7%	14.8%	14.2%	14.0%	14.9%	15.3%	18.1%	18.3%

[1] FY85 to FY09 figures are actual expenditures.
[2] FY10 figures indicate enacted funding.
[3] FY11 figures indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.10

Maintenance funds for each UCC and USSOCOM. USSOCOM is the only UCC with unique Procurement and RDT&E appropriations ($2.5 billion in FY 2011). In addition, the USSOCOM budget includes O&M funds of $3.9 billion, mostly for military and civilian endstrength and to improve capability and capacity.[12]

Military Services

The military services produce, train, maintain and provide the armed forces to the UCCs. After nearly nine continuous years of war, and given the current strategic environment and the changing and unpredictable future strategic environment, the services—particularly the Army and the Marine Corps—are resetting, reconstituting and revitalizing forces. The services are also transforming their doctrine, equipment, military skills and training to produce future armed forces essential to the joint team. In addition, DoD is growing the Army, Marine Corps and special operations forces to sustain the operational demands and allow more time at home station, i.e., dwell time, for ground forces.

A summary of the force structure across all services is in **table 23.**

Endstrength

The DoD budget for FY 2011 proposes an endstrength of 2,357,000 active, National Guard and Reserve servicemembers and 789,000 civilian employees for a total endstrength of 3,146,000. This is an increase of 29,000 servicemembers and 2,000 civilian employees.

Military personnel serve in positions that involve essentially military functions; civilian employees serve in positions that involve essentially government functions. In addition, DoD relies upon thousands of contractor personnel who free up servicemembers and DoD civilians. The contractor personnel conduct research, manufacture and maintain equipment, and provide services and support to servicemembers and their families, retirees and their families and the civilian workforce.

Military Endstrength. The DoD budget proposes an endstrength of 1,484,000 personnel on active duty and 845,000 in the Selected Reserve. The budget proposal and historical military endstrength data are in **table 24**.

The DoD budget proposes the largest military endstrength since the 1990s but substantially less than during the Cold War, as demonstrated in the FY 1985 and FY 1990 data. Between FYs 1985 and 2000 the endstrength reductions were substantial, including a decrease of 34 percent in the active forces and 20 percent in the Selected Reserve.

In response to 11 September 2001 and the subsequent war on terrorism, the demands of the war and the size of the force require frequent deployments with only short

Table 23

Conventional Forces Summary

Army	FY09	FY10	FY11
Brigade Combat Teams (BCTs)	72	73	73
Active Component (AC) BCTs	44	45	45
Reserve Component (RC) BCTs	28	28	28
Multifunction and Functional Support Brigades	200	205	230
Strategic Sealift Ships			
Army Prepositioning Ships	6	7	8
Navy			
Battle Force Ships			
Aircraft Carriers	11	11	11
Surface Combatants	110	112	112
Amphibious Warfare Ships	31	31	29
Attack Nuclear Submarines	53	53	53
Ballistic and Guided Missile Submarines	18	18	18
Support, Logistics, Mine Warfare Ships	62	62	61
Strategic Sealift Ships			
Department of the Navy Maritime and U.S. Army Pacific Command Ammunition Prepositioning Ships	15	17	17
Surge Ships			
Roll-on, Roll-off; Aviation Support; Hospital; and Reserve Ships	65	63	63
Aircraft Force Structure			
Navy Carrier Air Wings	10	10	10
Marine Air Wings	3	3	3
Patrol Wings	4	4	4
Helicopter Antisubmarine and Combat Support Wings	4	4	4
Primary Authorized Aircraft—Navy	2,357	2,360	2,319
Primary Authorized Aircraft—Marine Corps	1,102	1,100	1,151
Air Force			
Active Fighter Squadrons	38	32	32
Reserve Fighter Squadrons	29	28	28
Reserve Air Defense Squadrons	4	4	4
Bombers (Combat-coded)	96	96	96
Strategic Sealift Ships			
Air Force Prepositioning Ships	2	2	2
Marine Corps			
Land Forces			
Expeditionary Forces	3	3	3
Active Infantry Battalions	27	27	27
Reserve Infantry Battalions	9	9	9
Defense Logistics Agency (DLA)			
DLA (DWCF) Prepositioning Ships	1	1	1

Source: Headquarters, Department of the Army; Department of the Navy *President's Budget for FY11*; Air Force Press Desk

periods of time at home station. Between FYs 2000 and 2011 the active force grows by 61,000, or 4 percent, and the Selected Reserve is reduced by 18,000, or nearly 3 percent. The growth occurs in the Army and Marine Corps in response to the demands for land forces in the continuing war. The Army grows by 87,000 and the Marine Corps by 29,000, while the Navy and Air Force experience reductions of 45,000 and 24,000, respectively.

Civilian Endstrength. The DoD budget proposes a civilian endstrength of 789,000 and, like the military, it is the largest since the 1990s. Between FYs 1985 and 2000 civilian endstrength declined by 431,000, or 38 percent. With the continuing war on terrorism, civilian endstrength grows by 91,000, or 13 percent, from FY 2000 to the FY 2011 budget proposal. The civilian endstrength data are in **table 24.**

Military Personnel Funds

The Military Personnel title includes the military pay appropriations for the active and reserve components of all the services. The BA proposal is for $158.8 billion in military pay and benefits in FY 2011. This amount is a 1.5 percent increase over the FY 2010 budget but is low when compared to the military endstrength increase of 1.2 percent (27,000 active and 2,000 Selected Reserve) and the 1.4 percent military pay increase. The Military Personnel title by component is in **table 25.**

In FYs 2009, 2010 and 2011 Army endstrength (active and Selected Reserve) is consistently 48 percent of all military endstrength, and Army Military Pay is 45 percent of the total Military Pay proposal. The difference may be reasonable considering that the Army endstrength includes a substantial number of reserve Soldiers.

Military Accrual Payments

In addition to pay and allowances, the Military Personnel title includes contributions to two accrual accounts—medical accrual and retirement accrual.

The accrual method requires the services to estimate and contribute funds for future medical and retirement benefits. The sum of the two accrual accounts is $36.5 billion in FY 2011. The accrual accounts are 23 percent of the Military Personnel proposal, or essentially the same as all Military Personnel funds for the Air Force. The accounts are nearly 5 percent of the base budget.

Military Medical Accrual. The DoD budget for FY 2011 includes $10.8 billion for military medical accrual. The account grows by $0.2 billion from year to year and con-

Table 24

Department of Defense Personnel Endstrength

(in thousands[1])

	FY85[2]	FY90[2]	FY95[2]	FY00[2]	FY05[2]	FY06[2]	FY07[2]	FY08[2]	FY09[2]	FY10[3]	FY11[4]
Active Military[5]											
Army	781	751	509	482	492	505	522	544	553	547	569
Navy	571	583	435	373	362	350	338	332	329	324	328
Marine Corps	198	197	174	173	180	180	186	199	203	202	202
Air Force	602	539	400	356	352	349	333	327	333	332	332
Active Guard and Reserve, Full-time	55	74	65	65	69	74	72	72	75	78	79
Total Active Military	**2,207**	**2,144**	**1,583**	**1,449**	**1,455**	**1,458**	**1,451**	**1,474**	**1,493**	**1,483**	**1,510**
Selected Reserve[6]											
Army	718	740	604	560	522	536	543	557	564	563	563
Navy	129	152	100	86	76	71	70	68	67	66	66
Marine Corps	41	44	40	40	40	40	39	38	39	40	40
Air Force	185	202	188	179	182	180	177	175	177	176	178
Total Selected Reserve	**1,073**	**1,138**	**933**	**865**	**820**	**826**	**829**	**838**	**847**	**845**	**847**
Civilians (Full-time equivalents)[5]	1,129	1,073	849	698	692	700	695	708	739	752	789

[1] Numbers may not add because of rounding.
[2] FY85 to FY09 figures are actual amounts.
[3] FY10 figures indicate enacted amounts.
[4] FY11 figures indicate proposed amounts.
[5] Includes OCO request.
[6] Includes only Paid Drill Strength of Army-reported Selected Reserve.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller) March 2010, Table 7.5 and Summary Table K

Table 25

Military Personnel Budget
($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Army	67.2	70.6	70.9
Navy	29.7	30.7	31.2
Marine Corps	15.2	15.6	15.8
Air Force	33.5	34.9	35.9
Contribution to Military Retirement Fund	3.7	4.5	5.0
Total	**149.3**	**156.4**	**158.8**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, DoD Financial Summary Table FAD 730

Table 26

Medical Accrual in Military Personnel Budgets
($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Army			
Military Pay	2.9	3.1	3.1
Reserve Personnel	0.7	0.7	0.7
National Guard Personnel	1.2	1.2	1.3
Subtotal	**4.8**	**5.0**	**5.1**
Navy			
Military Pay	1.8	1.8	1.8
Reserve Personnel	0.2	0.2	0.2
Subtotal	**2.0**	**2.0**	**2.0**
Marine Corps			
Military Pay	1.1	1.1	1.1
Reserve Personnel	0.1	0.1	0.1
Subtotal	**1.2**	**1.2**	**1.2**
Air Force			
Military Pay	1.8	1.8	1.9
Reserve Personnel	0.2	0.2	0.2
National Guard Personnel	0.4	0.4	0.4
Subtotal	**2.4**	**2.4**	**2.5**
Total Medical Accrual	**10.4**	**10.6**	**10.8**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.6

sumes 7 percent of all Military Personnel funds and 1.5 percent of the base budget. This proportion has been consistent for many years. See **table 26.**

Military Retirement Accrual. The DoD budget for FY 2011 includes $25.7 billion for military retirement accrual. The trend for the military retirement accrual is to grow from year to year. The FY 2011 proposal is 16 percent of the Military Personnel title and 3.6 percent of the total base budget. The accruals are for an entitlement that is a function of the military endstrength and the statutes that authorize the benefits. Therefore, accrual requirements grow with increases in military endstrength. See **table 27.**

Civilian Personnel Funds

The federal budget structure has no single appropriation for civilian personnel pay. Civilian personnel are paid from the appropriation that employs them. Most DoD civilian personnel work in operation and maintenance functions; therefore, most civilian pay is in the Operation and Maintenance title.

The federal government categorizes civilian personnel into four groups: General Service (GS), Wage Board and Foreign National Direct Hires and Indirect Hires. A summary of civilian pay by these categories is in **table 28.**

Civilian pay is a function of endstrength, grades and pay rates and work hours. The President proposes a 1.2 percent pay increase for the civilian workforce.

Between FYs 2010 and 2011 funds for civilian pay increase by $5 billion, or 7 percent. At the same time, civilian endstrength increases by 37,000, or 5 percent. The relationship between the increases in civilian endstrength and pay rate increases and the budget are reasonable, adding to the concern that the Military Pay budget is out of balance with the increases in endstrength and pay rates.

Operation and Maintenance

The base budget for FY 2011 proposes $317.9 billion in BA and $317.3 billion in Total Obligational Authority for Operation and Maintenance. The O&M title includes appropriations of the active and reserve components of all the services. The O&M budget proposal:

- provides necessary program growth to sustain the military forces, training, base operating support and equipment maintenance;
- sustains readiness levels of the military services—tank miles, flying hours, ship operations and other readiness-related programs;
- supports new and existing weapon systems such as unmanned aerial systems and the F-22;

Table 27

Retirement Accrual in Military Personnel Budgets

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Army			
Military Pay	6.3	7.6	7.6
Reserve Personnel	0.5	0.6	0.6
National Guard Personnel	1.0	1.1	1.1
Subtotal	**7.7**	**9.2**	**9.2**
Navy			
Military Pay	3.5	3.9	4.0
Reserve Personnel	0.2	0.3	0.3
Subtotal	**3.7**	**4.2**	**4.3**
Marine Corps			
Military Pay	1.8	2.1	2.1
Reserve Personnel	0.1	0.1	0.1
Subtotal	**1.9**	**2.2**	**2.2**
Air Force			
Military Pay	3.8	4.4	4.5
Reserve Personnel	0.2	0.2	0.2
National Guard Personnel	0.2	0.3	0.3
Subtotal	**4.2**	**4.8**	**5.0**
Concurrent Receipt Accrual Payment Military Retirement Fund	3.7	4.5	5.0
Total DoD Retired Pay Accrual	**21.2**	**24.9**	**25.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Sources: DoD *National Defense Budget Estimates for FY 2011* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.6; DoD M-1 Exhibits; Department of the Army *Budget Estimates for FY11*, Exhibit PB-30L

Table 28

Civilian Pay

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
General Service (GS)	54.6	59.4	64.1
Wage Board	10.1	10.8	11.1
Subtotal	**64.7**	**70.3**	**75.2**
Foreign National Direct Hires	0.5	0.5	0.5
Total Direct Hires	**65.2**	**70.7**	**75.7**
Indirect Hires	1.2	1.3	1.4
Total Civilian Pay	**66.4**	**72.0**	**77.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.14

- supports increased use of long-haul communication and improved interoperability of information technology systems;
- supports increased demands for specialized training; and
- achieves an effective funding balance between base and OCO by increasing the O&M request for enduring programs.

The O&M appropriations consume the largest part of the DoD budget—45 percent of the base budget in FY 2011. The actual experience in FY 2009 with supplemental funds was nearly 41 percent. The O&M data are in **table 29.**

The FY 2011 total ($317.3 billion) is an increase of $30 billion over FY 2010 and nearly $47 billion, or 17 percent, more than the FY 2009 experience. The Army receives the greatest increase at $19.5 billion.

Defense Health Program

The Defense Health Program (DHP) consumes $29.9 billion, or more than 9 percent, of DoD O&M; O&M constitutes nearly 98 percent of all DHP funds. In addition to O&M, the DHP includes small amounts of Procurement and RDT&E funds.

The DHP provides funding for medical and dental services to active servicemembers and their families and to other eligible beneficiaries worldwide. The program includes funds for providing TRICARE benefits for the health care of eligible active-duty family members, retirees and their family members and surviving members of deceased active-duty servicemembers and retirees. The DHP also provides veterinary services, medical command headquarters, specialized services for the training of medical personnel and occupational and industrial health care. The budget proposal for FY 2011:

- provides high-quality health care for 9.5 million eligible beneficiaries;
- fully funds programs for wounded, ill and injured servicemembers, including $1.1 billion for the treatment, care and research of traumatic brain injuries (TBI) and psychological health issues, such as the development of tools to detect and treat TBI and enhancements to suicide prevention measures;
- adds $0.3 billion to support efforts to modernize DoD's electronic health records and medical information technology infrastructure, while partnering with Veterans Affairs and the private sector to pursue the administration's goal of building a Virtual Lifetime Electronic Record (VLER);
- reflects continued growth in the number of servicemembers utilizing health care services provided to them; and

Table 29

Operation and Maintenance

(Total Obligational Authority,[1] $ billions[2])

	FY09[3]	FY10[4]			FY11[5]		
		Base	OCO	Total	Base	OCO	Total
Army	101.0	88.4	11.8	100.2	43.4	77.1	120.5
Navy/Marine Corps	52.1	51.0	3.3	54.3	45.4	13.2	58.6
Air Force	55.1	52.7	4.0	56.7	46.1	14.0	60.1
Defense-wide	62.4	67.0	1.3	68.3	62.7	10.8	73.5
Other	0.0	14.3	4.0	18.3	2.7	2.0	4.7
Total	**270.5**	**273.4**	**24.4**	**297.8**	**200.2**	**117.1**	**317.3**

[1] Includes Afghan and Iraqi Security Forces as well as Pakistan Counterinsurgency.
[2] Numbers may not add because of rounding.
[3] FY09 figures are actual expenditures.
[4] FY10 figures indicate enacted base and OCO proposals.
[5] FY11 figures indicate budget estimates.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Exhibit O-1 and DoD FY11 Financial Summary Table FAD 730

- reflects savings for federal pricing for retail pharmaceuticals and initiatives to streamline the medical supply chain and reduce fraud, waste and abuse of the TRICARE benefit.

The DHP includes the majority of DoD health care costs but does not include the Medical Accrual fund (which is part of MILPERS), military pay for military doctors and other health care providers, the Medicare-Eligible Retiree Health Care Fund (MERHCF) or Military Construction for medical facilities. The budget overview includes a discussion of the Military Health System and includes budget data on health care costs beyond the DHP. The consolidation of the DHP and the other health care budget data is in **table 30.**

The DoD budget overview notes that medical health care costs have more than doubled between FYs 2001 and 2010. The total of all health care funds in the FY 2011 budget is nearly $60 billion, which is $3 billion, or 5.4 percent, more than for FY 2010. The budget projects medical health care increases of 5 to 7 percent annually through FY 2015.

The total health care proposal of nearly $60 billion, which includes the DHP and other DoD funds for health care, is 8.4 percent of the total DoD budget for FY 2011, including both the base and OCO proposals. The cost of health care is a substantial part of the DoD budget and growing faster than inflation.

Table 30

Defense Health Program Funding

($ billions[1])

	FY00[2]	FY09[2]	FY10[3]	FY11[4]
Defense Health Program				
Operation and Maintenance	11.7	26.6	27.6	29.9
Procurement	0.4	0.4	0.4	0.5
Research, Development, Test and Evaluation	0.3	1.1	1.3	0.5
Total Defense Health Program	**12.3**	**28.1**	**29.2**	**30.9**
MERHCF Receipts[5]		8.0	8.2	8.9
Total Health Care Cost[6]	**12.3**	**36.0**	**37.4**	**39.9**
Additional Health Care				
Military Personnel[7]			7.5	7.9
Medical Accrual Account[7,8]		10.4	10.6	10.8
Military Construction[9]			1.0	1.0
Total Health Care	**12.3**	**46.4**	**56.5**	**59.6**

[1] Numbers may not add because of rounding.
[2] FY00 and FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
[5] DoD Medicare-Eligible Retiree Health Care Fund (MERHCF).
[6] Total health care cost excludes Medical Accrual account and military health care providers both in Military Personnel appropriations and Military Construction.
[7] Military Personnel appropriations.
[8] Medical Accrual Account did not exist in FY00.
[9] Military Construction appropriations.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.6; *Defense-wide Justification Book*, Defense Health Program, Vol 1. PBA-19; DoD *Budget for FY11*, February 2010; Defense Budget Materials, Defense Health Program, FY02

The number of eligible beneficiaries is one of the principal drivers of health care costs. In FY 2001 the DHP provided benefits to 8.4 million eligible beneficiaries; in FY 2011 the budget provides benefits to an estimated 9.5 million beneficiaries—a 13 percent increase. See **table 31.**

Research, Development and Acquisition

The Research, Development and Acquisition (RDA) budget includes the funds for Research, Development, Test and Evaluation (RDT&E) and Procurement appropriations for basic research, exploring new technology and materiel and acquiring equipment and materiel. RDA provides U.S. forces with the best systems and capabilities in the world.

The budget proposal includes the following TOA for RDA:

- $225.1 billion in FY 2009 for base and OCO;
- $225.2 billion in FY 2010 for base and OCO; and
- $219.2 billion in FY 2011 for base and OCO.

The FY 2011 RDA is $6 billion less than the FY 2010 enacted amount plus the OCO proposal and is $5.9 billion less than the FY 2009 experience.

RDA Trends in Current Dollars

The RDA, RDT&E and Procurement totals are relatively consistent across the past three fiscal years. Consistency in RDA expenditures is important because this enables the research and development community and the industrial base to maintain consistent workforce levels, avoiding layoffs of skilled employees during drawdowns then trying to replace them years later with the next buildup.

Consistency has not been the experience over the past 25 years. Between FYs 1985 and 2000 RDA expenditures decreased by 26 percent, although RDT&E increased, reflecting deliberate decisions at the end of the Cold War to "skip a generation" of equipment acquisitions. Between FYs 2000 and 2008 RDA expenditures increased by 161 percent, with Procurement up 100 percent. Extreme usage, combat damage and losses, plus the need for new technology and materiel solutions, are the primary factors that contribute to this very large increase.

The BA trends present a conclusion different from that of the TOA—BA decreases in both FY 2010 and FY 2011 for Procurement and in FY 2011 for RDT&E. Between FYs 2009 and 2011 BA for Procurement decreases by $22.5 billion, or 17 percent; however, the FY 2011 BA does not include the OCO supplemental, which should cover most of this difference. Between FYs 2009 and 2011 BA for RDT&E decreases nearly $4 billion, or 5 percent, but since the OCO supplemental request includes very little RDT&E, this will likely be a real drawdown. See **figure 14** for long-range RDA trends for BA funds.

Table 31

Defense Health Program Beneficiaries
(in thousands[1])

	FY09[1]	FY10[1]	FY11[1]
Total Eligible			
Active Duty Personnel	1,712	1,716	1,714
Active Duty Dependents	2,359	2,364	2,364
CHAMPUS[2]-eligible Retirees and Family Members	3,344	3,363	3,340
Medicare-Eligible Retirees and Family Members	2,017	2,046	2,079
Total Average Beneficiaries Worldwide	**9,432**	**9,489**	**9,497**

[1] Numbers are estimates.
[2] Civilian Health and Medical Program of the Uniformed Services.
Source: DoD *Defense-wide Justification Book*, Defense Health Program, Vol. 1; Managed Care Forecasting and Analysis System v.6.0.0.1 and Beneficiary Population Forecasting Model v. FY2004.0.4

RDA Trends in Constant Dollars

Between FYs 1985 and 2000 RDT&E decreased by 14 percent and Procurement decreased by nearly 60 percent. Over the same 15 years, military endstrength declined by 34 percent—i.e., Procurement reductions outpaced the endstrength drawdown. The RDT&E and Procurement budgets in constant dollars are in **figure 15.**

The RDT&E and Procurement funds reached their peak in FY 2008, since the onset of OCO. In the eight years from FY 2000 to FY 2008, RDT&E increased by 72 percent and Procurement increased by 155 percent. The FY 2009 experience indicated a decrease, and RDA decreases annually after that. The FY 2011 budget proposal for RDT&E is 7 percent less and Procurement is 19 percent less than the FY 2009 experience. However, the FY 2010 amount is enacted only and does not include the supplemental funds requested with the FY 2011 budget, and FY 2011 is the base budget only. The supplemental proposals may reduce the rate of decline.

RDA by Military Services

The distribution of RDT&E and Procurement funds remains fairly consistent among the services and Defense-wide agencies from FY 2009 to FY 2011 when the OCO proposal is included. Without OCO funds, the Army would experience a sharp decline in Procurement. See **table 32.**

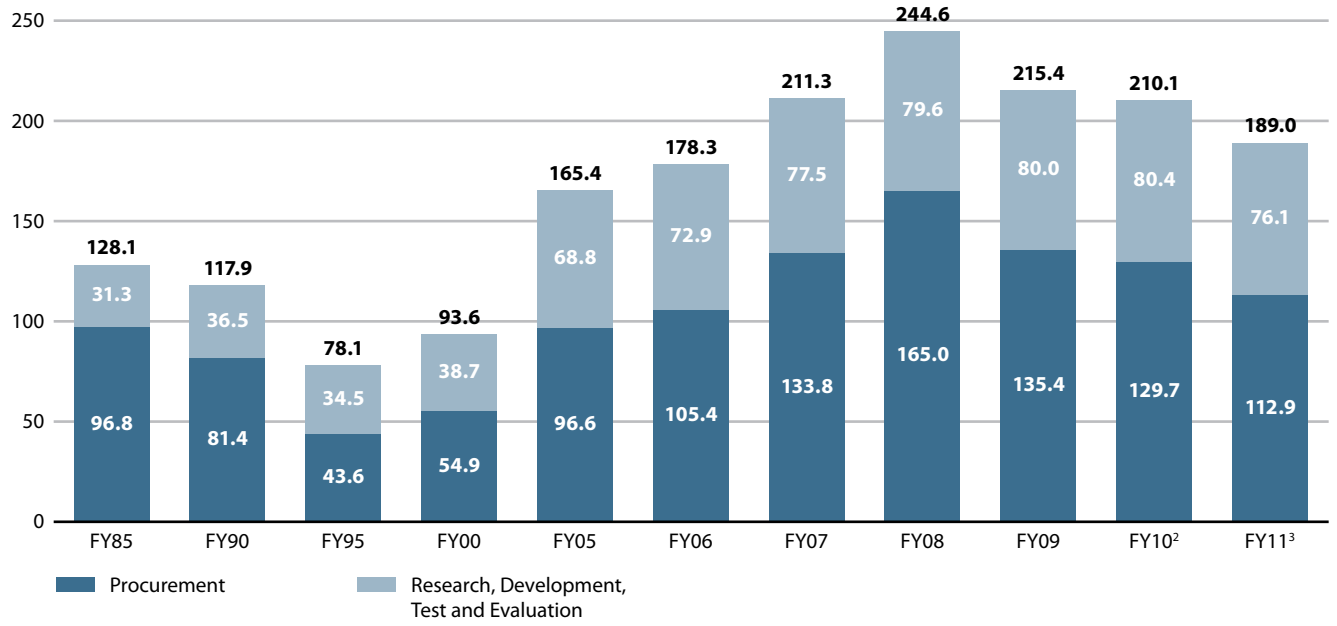
Select Major Weapon Systems. Highlights of the Procurement budget for FY 2011 include:

- procuring 10 ships—nine for the Navy and one for the Army:
  - two *Virginia*-class SSN submarines;
  - two DDG-51 destroyers;

Figure 14

Research, Development and Acquisition – Current Dollars

(Budget Authority, $ billions[1])

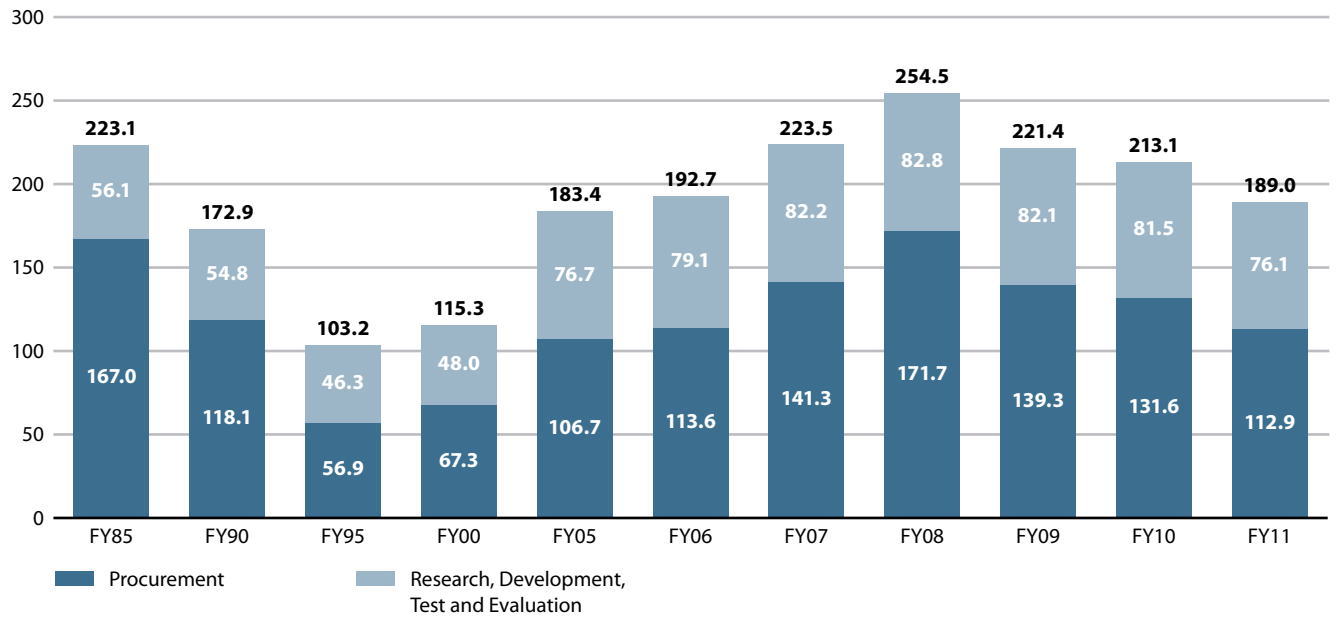


[1] Numbers may not add because of rounding.
[2] Totals include only enacted OCO funding and American Recovery and Reinvestment Act.
[3] Includes proposed cancellation for reappropriation to offset a portion of additional Emergency Request for OCO.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.8

Figure 15

Research, Development and Acquisition – Constant Dollars[1]

(Budget Authority, $ billions[2])



[1] Constant dollars are current year dollars (at the year of execution) adjusted for annual changes in prices.
[2] Numbers may not add because of rounding.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.8

- two Littoral Combat Ships (LCSs);
- Joint High-Speed Vessels for (one each for the Army and Navy);
- one LHA(R) amphibious assault ship;
- one maritime prepositioning force (MPF) mobile landing platform (MLP) ship;

- procuring 42 Joint Strike Fighters and 34 F/A-18E/F/G aircraft;
- funding growth in the inventory of unmanned aerial vehicles;
- increasing procurement of Terminal High-Altitude Air Defense (THAAD) and SM-3 missiles;
- funding additional Army helicopters (UH-60 Black Hawk, CH-47 Chinook and AH-64 Apache); and
- continuing acquisition of 35 V-22 aircraft.

The RDT&E budget for FY 2011 includes:

- funding for a robust science and technology program, particularly basic research and applied research;
- funding for Joint Strike Fighter (F-35) development;
- restructuring the BCT Modernization program to retain and accelerate the spin-out technology enhancements to combat brigades;
- funding rotary-wing survivability improvements;
- continuing research into ballistic missile defense technologies;
- investing in next-generation long-range strike capability;
- continuing investment in the next-generation SSBN submarine; and
- funding development of tanker aircraft.

The Major Defense Acquisition Program includes 73 programs that consume $87 billion, or 40 percent, of all RDA in FY 2011. A list of the major weapon systems—excluding systems that combine a group of line items, such as command, control, communications, computers, intelligence, surveillance and reconnaissance (C4ISR)—and the RDA funds are in **tables 33–37:** 33 contains aircraft; 34 contains missiles, munitions and missile defense; 35 contains ground vehicles; 36 contains shipbuilding and maritime systems; and 37 contains space and C4I.

Table 32

Research, Development and Acquisition Total Obligational Authority

($ billions[1])

Research, Development, Test and Evaluation (RDT&E)	FY09	FY10[2]			FY11[3]		
	Actual	Base Enacted	OCO Supplemental	Total	Base	OCO	Total
Army	12.1	11.5	0.0	11.5	10.3	0.2	10.5
Navy/Marine Corps	19.8	20.0	0.0	20.0	17.7	0.0	17.8
Air Force	26.7	28.2	0.2	28.4	27.2	0.3	27.5
Defense-wide and Other	21.8	20.9	0.0	20.9	20.8	0.2	21.0
Total RDT&E	**80.6**	**80.6**	**0.2**	**80.9**	**76.0**	**0.7**	**76.8**
Procurement							
Army	42.0	30.2	2.6	32.8	21.5	12.2	33.7
Reserve Component	8.4	7.0	0.0	7.0	3.1	1.0	4.1
Navy/Marine Corps	42.3	46.2	0.1	46.3	46.2	3.3	49.5
Reserve Component	0.3	0.3	0.0	0.3	0.1	0.0	0.1
Air Force	43.6	40.7	0.8	41.5	39.3	4.8	44.1
Reserve Component	1.0	1.0	0.0	1.0	0.8	0.0	0.8
Defense-wide and Other	6.9	14.1	1.3	15.4	5.8	4.3	10.1
Total Procurement	**144.5**	**139.5**	**4.8**	**144.3**	**116.8**	**25.6**	**142.4**
Total Research, Development, and Acquisition (RDA)	**225.1**	**220.1**	**5.0**	**225.2**	**192.8**	**26.3**	**219.2**

[1] Numbers may not add because of rounding.
[2] FY10 figures indicate enacted funding;
[3] FY11 figures indicate budget estimates.
Source: DoD *Budget for FY11*, February 2010, Exhibits P-1, P-1R, R-1 and OCO Requests

Table 33

Research, Development and Acquisition
Selected Major Weapon Systems – Aircraft
(Total Obligational Authority, $ millions[1])

Service	Aircraft	FY11[2]		
		Procurement[3]	RDT&E	RDA[4]
Army	AH-64 Longbow Apache Block 3	493.8	93.0	586.8
	CH-47 Chinook	1,229.6	21.0	1,250.6
	Light Utility Helicopter (LUH)	305.3	0.0	305.3
	UH-60 Black Hawk Utility Helicopter	1,391.6	20.6	1,412.2
Navy/ Marine Corps	E-2C/D Hawkeye	961.4	171.1	1,132.5
	EA-18G Growler	1,095.1	22.0	1,117.1
	F/A-18E/F Super Hornet	1,828.4	167.1	1,995.5
	H-1 Huey/Super Cobra	925.0	60.5	985.5
	MH-60R Multimission Helicopter	1,105.2	55.8	1,161.0
	MH-60S Fleet Combat Support Helicopter	549.9	38.9	588.8
	P-8A Poseidon	1,990.6	929.2	2,919.8
Air Force	C-17 Globemaster	14.3	0.0	14.3
	HH-60M Pave Hawk	218.4	0.0	218.4
	KC-X New Tanker	0.0	863.9	863.9
DoD/Joint	C-130J Hercules	1,398.0	42.3	1,440.3
	RQ-4 Global Hawk	736.8	780.6	1,517.4
	Joint Cargo Aircraft (JCA)	351.2	26.4	377.6
	F-35 Joint Strike Fighter (JSF)	9,188.6	2,260.0	11,448.6
	Predator and Reaper Unmanned Aircraft Systems (UAS)	1,585.9	277.5	1,863.4
	V-22 Osprey	2,737.1	64.4	2,801.5
	T-6A Texan II Joint Primary Aircraft Training System (JPATS)	276.7	0.0	276.7
	Shadow and Raven UAS	72.5	17.7	90.2
Total	**Aircraft**	**28,455.4**	**5,912.0**	**34,367.4**

[1] Numbers may not add because of rounding.
[2] FY11 figures indicate base and OCO supplemental proposals.
[3] Procurement includes initial spares.
[4] RDA equals sum of Procurement and Research, Development, Test and Evaluation.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

Special Operations RDA

The U.S. Special Operations Command (USSOCOM) was formed in 1987 and assigned the mission to organize, train and equip special operations forces (SOF) from the Army, Navy and Air Force and to provide those forces to combatant commanders. With the war against terrorism, USSOCOM's mission was expanded to capitalize on the unique capabilities of special operations forces. USSOCOM's expanded mission includes leading, planning, synchronizing and, as directed, executing global operations against terrorist networks.

The USSOCOM statutory charter, U.S. Code Title 10, Section 167, provides the command with certain budget authority similar to that of the military departments, which is unique among the combatant commands. The command is responsible for developing and acquiring "special operations-peculiar" equipment. The FY 2011 budget proposal for RDA is $2.5 billion. The RDA proposal for USSOCOM is in **table 38.**

The top ten weapon systems or groups of line items in terms of budget funds account for $1.3 billion, or 46 percent, of all SOF procurement funds for FY 2011:

Table 34

Research, Development and Acquisition
Selected Major Weapon Systems – Missiles and Munitions
(Total Obligational Authority, $ millions[1])

Service	Missiles and Munitions	FY11[2]		
		Procurement[3]	RDT&E	RDA[4]
Army	Javelin Advanced Antitank Weapon	163.9	0.0	163.9
	High-Mobility Artillery Rocket System (HIMARS)	291.0	51.6	342.6
Navy/ Marine Corps	Evolved Seasparrow Missile (ESSM)	48.2	0.0	48.2
	Rolling Airframe Missile (RAM)	75.0	0.0	75.0
	Standard Family of Missiles	295.9	96.2	392.1
	Tomahawk Tactical Cruise Missile	300.2	10.6	310.8
	Trident II Ballistic Missile	1,106.9	81.2	1,188.1
DoD/ Joint	Medium Air-to-Air Missile (AMRAAM)	511.6	65.5	577.1
	Air Intercept Missile (AIM-9X)	122.2	6.9	129.1
	Chemical Demilitarization	1,467.3	0.0	1,467.3
	Joint Air-to-Ground Missile (JAGM)	0.0	231.1	231.1
	Joint Air-to-Surface Standoff Missile (JASSM)	215.8	20.0	235.8
	Joint Direct-Attack Munition (JDAM)	252.6	0.0	252.6
	Joint Standoff Weapon (JSOW)	131.3	12.6	143.9
	Small-Diameter Bomb (SDB)	134.9	197.6	332.5
Total	**Missiles and Munitions**	**5,116.8**	**773.3**	**5,890.1**
	Missile Defense			
DoD/ Joint	Aegis Ballistic Missile Defense	94.1	1,467.3	1,561.4
	Terminal High-Altitude Area Defense (THAAD)	858.9	420.5	1,279.4
	Patriot/Medium Extended Air Defense (MEADS)	0.0	467.1	467.1
	Patriot Advanced Capability-3 (PAC-3)	487.2	11.5	498.7
	Ballistic Missile Defense[5]	1,433.2	8,462.8	9,896.0
	PAC-3 Missile Segment Enhancement (PAC-3 MSE)	0.0	62.5	62.5
	Ground-based Midcourse Defense	0.0	1,346.2	1,346.2
	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor (JLENS)	0.0	372.5	372.5
Total	**Missile Defense**	**2,873.4**	**12,610.4**	**15,483.8**

[1] Numbers may not add because of rounding.
[2] FY11 figures indicate base and OCO supplemental proposals.
[3] Procurement includes initial spares.
[4] RDA equals sum of Procurement and Research, Development, Test and Evaluation.
[5] Includes $146.5M MILCON.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

- $269 million for SOF Operational Enhancements;
- $180 million for Nonstandard Aviation;
- $179 million for MH-60 SOF Modification Program;
- $124 million for CV-22 SOF Modifications;
- $108 million for the MH-47 Service Life Extension Program;
- $103 million for Military Construction Collateral Equipment;
- $80 million for SOF Ordnance Replenishment;
- $80 million for Rotary-Wing Upgrades and Sustainment;
- $76 million for SOF Intelligence Systems; and
- $58 million for Communication Equipment and Electronics.

Missile Defense Agency

The mission of the Missile Defense Agency (MDA) is to develop the Ballistic Missile Defense System to protect the United States, allies and deployed forces from attacks by ballistic missiles of all ranges in all phases of flight. The FY 2011 budget proposal is for $8.4 billion to continue to reshape the missile defense program and provide greater capability to the warfighter.[13]

The FY 2011 budget request includes funds for the new phased, adaptive approach[14] to missile defense, including funding for developing and testing Aegis Ashore capability and Airborne Infrared (ABIR) sensor platforms. In response to warfighter requests, the budget includes significant funding increases ($3.4 billion for FY 2011 through FY 2015) to procure additional THAAD batteries and interceptors, AN/TPY-2 radars and Aegis BMD Block IB interceptors. The budget also includes funds for the continuing development and testing of the next generation of Aegis weapon systems and

Table 35

Research, Development and Acquisition
Selected Major Weapon Systems – Ground Vehicles
(Total Obligational Authority, $ millions[1])

Service	Ground Vehicles	FY11[2]		
		Procurement[3]	RDT&E	RDA[4]
Army	Armored Security Vehicle (ASV)	167.3	0.0	167.3
	Family of Heavy Tactical Vehicles (FHTV)	738.4	3.5	741.9
	Family of Medium Tactical Vehicles (FMTV)	1,434.6	3.7	1,438.3
	M1 Abrams Tank Upgrade Program	183.0	107.5	290.5
	Stryker Family of Armored Vehicles	299.5	136.3	435.8
	High-Mobility Multipurpose Wheeled Vehicle (HMMWV)	125.5	0.0	125.5
Marine Corps	Expeditionary Fighting Vehicle (EFV)	0.0	242.8	242.8
DoD/ Joint	Joint Light Tactical Vehicle (JLTV)	0.0	84.7	84.7
Total	**Ground Vehicles**	**2,948.3**	**578.5**	**3,526.8**

[1] Numbers may not add because of rounding.
[2] FY11 includes Base and OCO supplemental proposals.
[3] Procurement includes initial spares.
[4] RDA equals sum of Procurement and Research, Development, Test and Evaluation.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

interceptors and the upgrading of additional Aegis BMD ships.

As a hedge against future uncertainty, the budget includes a number of ongoing development programs to push the edge of the technology envelope. For example, the budget requests funds to begin development of a Precision Tracking Space System. It also includes funds to develop technologies that will kill missiles with directed-energy and high-velocity versions of the Standard Missile-3 family of missiles to intercept targets early in flight. See **table 39** for appropriation data. A list of major BMD programs is in **table 40.**

Installations

Defense installations support the training and mobilization of combat forces, the maintenance and deployment of weapon systems and quality of life for servicemembers and their families.

Table 36

Research, Development and Acquisition
Selected Major Weapon Systems – Shipbuilding and Maritime Systems
(Total Obligational Authority, $ millions[1])

Service	Shipbuilding and Maritime Systems	FY11[2]		
		Procurement[3]	RDT&E	RDA[4]
Navy/Marine Corps	CVN-21 Carrier Replacement	2,639.6	93.8	2,733.4
	DDG 51 Aegis Destroyer	2,970.2	0.0	2,970.2
	Littoral Combat Ship (LCS)	1,592.3	226.3	1,818.6
	Landing Platform Dock-17 Amphibious Transport Dock Ship	0.0	1.4	1.4
	SSN 774 *Virginia*-Class Submarine	5,264.7	155.5	5,420.2
	CVN Refueling Complex Overhaul (RCOH)	1,663.8	0.0	1,663.8
	T-AKE Auxiliary Dry Cargo and Ammunition Ship	31.2	0.0	31.2
	Amphibious Assault Ship (LHA Replacement)	949.9	0.0	949.9
	Mobile Landing Platform (MLP)	380.0	0.0	380.0
DoD/Joint	Joint High-Speed Vessel (JHSV)	383.5	6.8	390.3
Total	**Shipbuilding and Maritime Systems**	**15,875.2**	**483.8**	**16,359.0**

[1] Numbers may not add because of rounding.
[2] FY11 figures include base and OCO supplemental proposals.
[3] Procurement includes initial spares.
[4] RDA equals sum of Procurement and Research, Development, Test and Evaluation.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

Table 37

Research, Development and Acquisition Selected Major Weapon Systems – Space and Command, Control, Communications, Computers and Intelligence (C4I)

(Total Obligational Authority, $ millions[1])

Service	Space	FY11[2]		
		Procurement[3]	RDT&E	RDA[4]
Navy	Mobile User Objective System (MUOS)	505.7	405.7	911.4
Air Force	Advanced Extremely High Frequency (AEHF)	246.6	351.8	598.4
	Evolved Expendable Launch Vehicle (EELV)	1,154.0	30.2	1,184.2
	Global Positioning System (GPS)	194.8	862.6	1,057.4
	National Polar-orbiting Operational Environmental Satellite System (NPOESS)	26.3	325.5	351.8
	Space-based Infrared Systems (SBIRS)	995.5	530.0	1,525.5
	Wideband Global Satellite (WGS) Communications	575.7	36.1	611.8
Total	**Space**	**3,698.6**	**2,541.9**	**6,240.5**
	C4I			
Army	Brigade Combat Team (BCT) Modernization	684.0	2,502.0	3,186.0
	Warfighter Info Network-Tactical (WIN-T)	430.0	190.9	620.9
DoD/Joint	Joint Tactical Radio System (JTRS)	305.5	689.1	994.6
Total	**C4I**	**1,419.5**	**3,382.0**	**4,801.5**

[1] Numbers may not add because of rounding.
[2] FY11 figures include base and OCO supplemental proposals.
[3] Procurement includes initial spares.
[4] RDA equals sum of Procurement and Research, Development, Test and Evaluation.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

Table 38

Research, Development and Acquisition U.S. Special Operations Command

(Total Obligational Authority, $ billions[1])

	FY09[2]	FY10[3]	FY11[4]
RDT&E	0.5	0.5	0.4
Procurement	1.9	1.8	2.2
Total	**2.4**	**2.3**	**2.5**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted and OCO supplemental proposals.
[4] FY11 figures indicate base and OCO supplemental proposals.
Source: DoD *Budget for FY11*, Exhibits R-1 and P-1

Defense installations support combat forces in the theater of operations with forward locations in theater and from installations in the United States with direct links and reachback support. For example, Predator drones operate in Afghanistan from a facility in Nevada and analysis of battlefield intelligence occurs at data centers in the United States. In addition, installations provide important staging platforms for homeland defense missions. Installation assets and services need to be available when and where needed, with the joint capabilities and capacities necessary to effectively and efficiently support current and future missions.

Table 39

Missile Defense Program Funding by Title

(Total Obligational Authority, $ millions[1])

Appropriation	FY09[2]	FY10[3]	FY11[4]
RDT&E	8,247	7,061	7,455
Procurement	207	645	953
Military Construction	18	100	0
Base Realignment and Closure (BRAC)	160	87	9
Total	**8,632**	**7,891**	**8,416**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: DoD *President's Budget for FY11* and DoD *Justification Book*, Missile Defense Agency, Vol 2c

Table 40

Missile Defense Program Funding by Major Systems
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Ground-based Midcourse Defense	1,472.7	1,027.4	1,346.2
Ballistic Missile Defense (BMD)	10,004.4	9,234.5	9,904.7
Patriot Advanced Capability-3 (PAC-3)	528.2	363.0	498.7
Aegis BMD	1,156.2	1,661.3	1,561.4
PAC-3/Missile Segment Enhanced (MSE) BMD	0.0	0.0	62.5
Patriot Medium Extended Air Defense System (MEADS)	454.7	566.2	467.1
Terminal High-Altitude Area Defense (THAAD)	855.4	1,080.8	1,279.4
Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS)	344.9	328.4	372.5
Total	**14,816.5**	**14,261.6**	**15,492.5**

[1] Numbers may not add because of rounding.
[2] FY09 are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: DoD *Budget for FY11*, Program Acquisition Costs by Weapons System, February 2010

DoD manages 507 permanent installations that include more than 300,000 buildings and 200,000 other structures. The installations are located on some 5,000 sites and occupy 28 million acres of land in the United States and overseas. The replacement value is more than $800 billion.

The budget includes funds from a number of appropriations to maintain this enormous amount of property and provide installation support to servicemembers and their families. The budget requests $18.7 billion spread across Military Construction (MILCON), Family Housing, Operation and Maintenance and Base Realignment and Closure (BRAC) appropriations. A summary of these funds is in **table 41.**

Table 41

Installation Support – Military Construction, Family Housing and Homeowners' Assistance
(Budget Authority, $ millions*)

	FY11
Military Construction	13,826
NATO Security Investment Program	259
Base Realignment and Closure (BRAC) IV	361
Base Realignment and Closure 2005 (BRAC 2005)	2,354
Family Housing Construction	1,806
Chemical Demilitarization	125
Family Housing Improvement Fund	1
Homeowners' Assistance Program (HAP)	17
Total	**18,747**

* Totals may not add because of rounding.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Exhibit C-1

Military Construction

The Military Construction title includes separate appropriations for Army, Navy, Air Force and Defense-wide agencies and is a significant source of facilities investment funding. See **table 42** for the Military Construction budget proposal by service.

The FY 2011 budget includes $2.4 billion to fully fund the investments needed to complete implementation of the sixth and final year of BRAC 2005. The completion of BRAC is largely the basis for the decline in the level of these investment funds in FY 2011. The pure Military Construction (i.e., excluding BRAC and Family Housing) is $13.7 billion, a $1.2 billion increase over the enacted level of $12.5 billion in FY 2010.

The President's Budget also includes $452 million to support the relocation of Marines from Okinawa to Guam.

The FY 2011 budget initiates a major five-year plan to recapitalize all 134 inadequate DoD-dependent schools in the United States and overseas. The budget request includes $439 million to repair or replace 10 of these schools.

In addition to the base budget, the OCO supplemental proposal for FY 2010 includes another $0.5 billion and for FY 2011 includes $1.3 billion.

Family Housing

Servicemembers deserve safe, desirable and affordable housing for their families. DoD's preferred approach to meet this need is to provide a housing allowance to servicemembers and rely on the local community to provide housing. However, if the market cannot supply sufficient

Table 42

Military Construction, Active
(Budget Authority, $ billions[1])

Components	FY09[2]	FY10[3]	FY11[4]
Army	11.8	9.7	6.5
Navy/Marine Corps	4.7	4.4	4.5
Air Force	3.1	2.8	1.7
Defense-wide	7.2	5.5	4.2
Total	**26.8**	**22.4**	**16.9**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding; excludes OCO supplemental.
[4] FY11 figures indicate base budget estimates; excludes OCO supplemental.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 6.6

quantities of quality and affordable housing, DoD uses privatization to supply housing. If privatization is not feasible, then DoD provides government-owned or government-leased housing.

In the early 1990s, DoD recognized that more than 60 percent of DoD-owned family housing, or approximately 180,000 units, were inadequate, and affordable private housing was unavailable. The traditional means for remedying the problem was Military Construction; however, the costs were projected to be $20 billion, and at expected funding levels, the construction would take 30 years to complete. DoD proposed private-sector participation to replace construction funds in implementing a long-term housing solution.

Congress authorized the Military Housing Privatization Initiative (MHPI) with the National Defense Authorization Act of 1996. The Housing Revitalization Act of 1997 established a Family Housing Improvement Fund and authorized entering into limited partnerships, making guaranteed loans and conveying DoD-owned property to stimulate private-sector participation.[15]

The FY 2011 President's Budget request includes $1.8 billion for Family Housing, a decrease of $436 million from the FY 2010 enacted level. The request provides for the continued reduction of inadequate housing units; for operation and maintenance of government-owned housing; and for the privatization of more than 500 family housing units, most of them to support DoD's Grow the Force initiative.

The reduction in funds largely reflects the maturation of the Military Housing Privatization Initiative. Over the years, the services have increasingly relied on privatization to address the poor condition of military-owned housing and the shortage of affordable private rental housing available to military families. Privatization allows the military services to partner with the private sector to generate housing built to market standards.

Privatization is extremely cost effective. DoD notes that the military services have leveraged DoD housing dollars by a factor of 10 to 1: $2.7 billion in federal investments have generated $27 billion in privatized housing development at DoD installations. The privatized housing is of high quality and often more appealing to young families than what the Military Construction process would produce. Moreover, the private owners have an incentive to maintain quality because they are responsible for maintenance and operation, including necessary recapitalization, during the full 50 years of the contract.

See **table 43** for Family Housing funds by service.

Table 43

Family Housing by Service

(Budget Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Family Housing Operations			
Army	722.8	523.4	518.1
Navy/Marine Corps	384.1	368.5	366.3
Air Force	599.2	502.9	513.8
Defense-wide	48.5	49.2	50.2
Subtotal	**1,754.6**	**1,444.0**	**1,448.7**
Family Housing Construction			
Army	595.4	53.9	57.4
Navy/Marine Corps	384.7	146.6	186.4
Air Force	431.9	66.1	78.0
Defense-wide	0.0	0.0	0.0
Subtotal[5]	**1,412.0**	**266.6**	**321.8**
Total	**3,166.6**	**1,710.6**	**1,770.5**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates; exclude OCO budget proposal.
[5] Excludes DoD Family Housing Improvement Fund and HAP.
Source: DoD FY11 Financial Summary Table FAD 769, February 2010

Reserve Component

The reserve component includes members and units of the Army and Air National Guard and the Army, Navy, Air Force, Marine Corps and Coast Guard Reserves. Reserve component units are located in communities across America, and their members are local. The members are in one of three categories—the Ready Reserve, including the Selected Reserve, the Individual Ready Reserve (IRR) and the Inactive National Guard (ING); the Standby Reserve; and the Retired Reserve.[16]

The budget includes funding for the Ready Reserve, with emphasis on the Selected Reserve forces, who train to the same standards as the active force. The Standby Reserve and the Retired Reserve are not funded and can be activated only under a full mobilization with a formal declaration of war by Congress.

Since 2001 the reserve component has been transitioning to an operational role from a strategic reserve. As an operational reserve force, the reserve component is moving toward a rotational status with a goal of not more than one year mobilized in a six-year period. When mobilized, reservists receive the same pay and allowances as full-time active component personnel.

The National Guard is subject to state and territorial laws that define their use in peacetime; the various Reserve forces are federal troops and always subject to federal control.

The reserve component provides nearly 36 percent of the total military endstrength for 6 percent of the base budget in FY 2011. Since 11 September 2001, 698,100

servicemembers from the reserve component have served on active duty and more than 65,000 are on active duty as of July 2010.

See **table 44** for the reserve component budget proposal.

Defense-wide Programs

In addition to the appropriations that are grouped into titles, the DoD budget includes a number of special visibility programs that involve grouping funds from more than one appropriation and some smaller appropriations. The most significant are described below.

Environmental Restoration Program

DoD serves as the custodian and environmental steward of 28 million acres of land at some 5,000 sites. The lands are home to archaeological and sacred sites, old-growth forests and more than 300 threatened and endangered species. The military's first environmental mandate from Congress was in 1872 for custodial responsibility to protect the natural resources at Yellowstone National Park. The environmental responsibility today includes activities at active installations, BRAC installations and Formerly Used Defense Sites (FUDS).

The Defense Environmental Restoration Program (DERP) has evolved over the past 20 years to include enhancing the overall sustainability of land, air and water resources and supporting the military mission.

DoD categorizes the environmental programs into four areas:

- Conservation—to protect and enhance the natural and cultural resources.
- Restoration—to identify, assess and remediate contamination from hazardous substances, military munitions and pollutants from previous military operations in DERP.
- Compliance—to ensure that DoD operations meet or exceed federal, state, local and host nation environmental requirements.
- Pollution Prevention—to promote the reduction or elimination of the amount of waste, including hazardous and toxic chemicals, that enters the environment by focusing on the source of pollution instead of the end result.

The DoD funds for Conservation, Compliance and Pollution Prevention programs are in a number of appropriations, with the bulk in Operation and Maintenance and some funds in Military Construction, RDT&E, Procurement and the Defense Working Capital Fund (DWCF).

The DoD funds for Restoration activities are in the Environmental Restoration (ER) and BRAC accounts.

Table 44

Reserve Component Budget Authority – All Titles

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Military Personnel			
Reserve[5]	9.6	10.1	10.0
National Guard[6]	13.0	12.9	12.4
Operation and Maintenance			
Reserve[5]	7.3	7.7	7.8
National Guard[6]	12.1	12.7	12.5
Military Construction			
Reserve[5]	1.2	0.9	1.1
National Guard[6]	0.4	0.7	0.4
Total[7]	**43.5**	**45.0**	**44.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures are enacted; exclude OCO supplemental.
[4] FY11 figures indicate base budget estimates; exclude OCO supplemental.
[5] Reserve includes Army, Navy, Marine Corps and Air Force.
[6] National Guard includes Army and Air Force.
[7] Includes Medicare Retirement Contributions.
Source: DoD FY11 Financial Summary Table FAD 730

In FY 1997 Congress established five separate ER accounts—one each for the Army, Navy, Air Force, Defense Agencies and FUDS. The Army is the executive agent for management of FUDS properties, and the U.S. Army Corps of Engineers is the executor for all aspects of the program.

DERP funds are executed within O&M appropriations; therefore, no actual execution data are available from the accounting system.

DERP continues to advance and demonstrate progress over the years. The Comprehensive Environmental Response, Compensation and Liability Act, the Resource Conservation and Recovery Act and various other laws and regulations require DoD to submit an annual report to Congress. Over the past 10 years, DoD has invested nearly $42 billion to ensure the success of its environmental programs. In FY 2009 DoD obligated approximately $4.3 billion in environmental activities, and in FY 2010 DoD is executing another $4.4 billion for natural and cultural resource conservation, pollution prevention, cleanup, compliance and environmental technology.[17]

The FY 2011 budget requests $4.2 billion to continue protecting and preserving the environment on DoD installations. See **table 45** for budget information by category.

Chemical Demilitarization Program

The United States has an obligation under the terms of the Chemical Weapons Convention (CWC) of 1997 to destroy stockpiles of chemical agents, munitions and

Table 45

Environmental Programs Requests
($ millions[1])

	FY10[2]	FY11[3]	$ Change	% Change
Restoration	1,505	1,539	34	2%
Compliance	1,595	1,570	-25	-2%
Conservation	322	320	-2	-1%
Pollution Prevention	99	117	18	15%
Technology	237	216	-21	-9%
BRAC	674	445	-229	-51%
Total	**4,433**	**4,208**	**-225**	**-5%**

[1] Numbers may not add because of rounding.
[2] FY10 figures are enacted.
[3] FY11 figures are requested.
Source: Statement of Dr. Dorothy Robyn, Deputy Under Secretary of Defense (Installations and Environment), before the House Armed Services Committee, Subcommittee on Readiness, 18 March 2010

any other chemical warfare materials that are not in the chemical weapon stockpile. The CWC aimed to destroy all chemical weapons stockpiles worldwide by 2007, or by April 2012 for exceptions. The DoD Chemical Demilitarization Program was created to destroy those chemical weapons. The task involves disposing of some 30,000 tons of chemical agents and about 3.3 million weapons and storage vessels.

In 1991 DoD designated the Secretary of the Army as the Defense Executive Agent for the program and made the Secretary accountable for the destruction of chemical warfare-related materiel. The destruction mission was formerly assigned to the Program Manager for Chemical Demilitarization and is now assigned to the Army's Chemical Materials Agency (CMA).

The program experienced technological difficulties and community concerns regarding safety and assurance of destruction in a risk-free way, slowing down construction of facilities. However, as of 12 May 2010 the United States had destroyed 74 percent of the original stockpile.[18]

The FY 2011 budget for the Chemical Demilitarization Program focuses on achieving the long-term outcome of compliance with the CWC, while meeting the annual performance objectives of zero chemical releases and zero exposures to ensure the achievement of worker, public and environmental safety. See **table 46.**

In the DoD budget justification material, the RDT&E, Procurement and O&M requests for Chemical Demilitarization are carried as a single-line entry in the Procurement title. The Military Construction request is carried in the MILCON title.

Table 46

Chemical Agents and Munitions Destruction Program
($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Research, Development, Test and Evaluation	0.0	0.0	0.0
Procurement	1.5	1.6	1.5
Operation and Maintenance	0.0	0.0	0.0
Construction	0.1	0.2	0.1
Total	**1.7**	**1.7**	**1.6**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: DoD FY11 Financial Summary Table FAD 730, February 2010

Counternarcotics Program

The Counternarcotics (CN) Program is another special-line entry in the DoD budget. Most CN activities involve combating narcotics trafficking and include detecting and monitoring drug movement using military command, control, communications and intelligence resources, as well as military operational planning capabilities.

The CN activities involve extensive use of reserve component personnel. The funds appropriated under this line are restricted to the CN purpose and may be transferred to appropriations that are available for use by the reserve component. This applies particularly to the National Guard, which is active in a number of cooperative antidrug programs. See **table 47** for budget data.

Table 47

Counternarcotics Program
(Budget Authority, $ millions)

	FY09[1]	FY10[2]	FY11[3]
DoD Drug Interdiction	53.5	1,504.8	1,621.9

[1] FY09 figures are actual expenditures.
[2] FY10 figures indicate enacted funding and include OCO requests.
[3] FY11 figures indicate budget estimates and include OCO requests.
Source: DoD FY11 Financial Summary Table FAD 730, February 2010

Base Realignment and Closure

The current Base Realignment and Closure round consists of the 2005 Base Closure and Realignment Commission's recommendations that became law on 9 November 2005. Identified as BRAC 2005, this is the largest round, affecting more than 800 locations across the nation and including 25 major closures, 24 major realignments and 765 lesser actions.[19] BRAC 2005 has a six-year implementation period, from November 2005 to 15 September 2011. This round focuses on the reconfiguration of operational capacity to maximize warfighting capability and efficiency.

In addition to the first BRAC round, which began in 1988, subsequent rounds were enacted in 1991, 1993 and 1995. DoD credits these four BRAC rounds with 97 major closures, 55 major realignments and 235 minor actions. DoD estimates that the closings and realignments in the four rounds have saved approximately $18 billion though FY 2001 and since then, another $7 billion per year.[20]

The BRAC 2005 program involves substantial funds, initially estimated at $22.5 billion from FYs 2006 through 2011 and annual savings of $4 billion after full implementation.

DoD originally estimated the cost of BRAC 2005 using the Cost of Base Realignment Actions (COBRA) model at $22.5 billion (adjusted for inflation) with annual recurring savings of $4.4 billion. Compared to the current requirement, there is a $10.7 billion, or 48 percent, increase in these costs. The $10.7 billion increase over the COBRA estimate, which was fully funded in the President's FY 2009 Budget Request, results primarily from inflation, changes in military construction, environmental restoration and program management costs not included in COBRA, additional Operation and Maintenance funds and construction for additional facilities to enhance capabilities and/or address deficiencies. The savings decrease is primarily a result of revised personnel requirements.[21]

The six-year costs are now estimated at $34.5 billion and are presented along with savings estimates in **table 48.**

BRAC 2005 focuses on reconfiguring operational capacity and includes a great deal of Military Construction, which makes up approximately 70 percent of this BRAC program, compared to about 33 percent in previous BRAC rounds. As a result, the original estimates for the round have increased as construction costs have grown.

In part, the construction in this round relates to the DoD and Army decisions to recapitalize facilities to accommodate larger Army units and a growing force and to improve facilities such as training ranges, reserve component infrastructure and quality-of-life facilities. Other DoD decisions include accelerating the closure of Walter Reed Army Medical Center and applying lessons learned to improve other medical facilities.

On 18 March 2010 the Deputy Under Secretary of Defense (Installations and Environment) testified that:

> [B]y the end date (15 September 2011), the Department will have invested $24.7 billion in military construction to enhance capabilities and another $10.4 billion to move personnel and equipment, outfit facilities, and carry out environmental cleanup. These investments will generate nearly $4 billion in annual savings beginning in FY 2012. The DoD components have implemented BRAC 2005 conscientiously and transparently, according to a well-defined process. The Department continues to monitor the process closely to ensure that we are meeting our legal obligations. To date, 28 BRAC 2005 recommendations have been certified as completed.
>
> The FY 2011 President's Budget includes $2.4 billion for BRAC 2005, which fully funds the investments needed to complete implementation. This represents a $5.1 billion decrease from the FY 2010 enacted level for BRAC 2005. The re-

Table 48

Base Realignment and Closure Account 2005
Costs and Savings by Fiscal Year
($ millions*)

	FY06	FY07	FY08	FY09	FY10	FY11	FY06–FY11
Costs							
One-time BRAC Account	1,502.5	5,634.1	8,478.4	9,028.9	7,455.5	2,354.3	34,453.8
One-time Non-BRAC Accounts	27.9	5.2	9.2	237.0	202.6	207.6	689.5
Annual Recurring, Non-BRAC Account	2.0	147.6	540.8	1,048.4	1,522.8	1,828.4	5,090.0
Total Costs	**1,532.4**	**5,786.9**	**9,028.4**	**10,314.3**	**9,180.9**	**4,390.3**	**40,233.3**
Savings							
One-time Savings	0.0	133.0	122.7	172.6	201.7	318.6	948.6
Recurring Savings	43.7	649.9	1,685.6	2,871.5	4,346.2	5,455.1	15,051.9
Total Savings	**43.7**	**782.9**	**1,808.2**	**3,044.1**	**4,547.9**	**5,773.6**	**16,000.5**

* Numbers may not add because of rounding.
Source: DoD *Budget Estimates for FY11*, Exhibit BC-02, BRAC Implementation Costs and Savings

duction in funding is due primarily to a decrease in construction projects as we near the September 2011 completion date. To support continued property disposal actions at prior BRAC-round sites, the FY 2011 budget request includes $360.5 million, a decrease of $136 million from the FY 2010 enacted level.[22]

Working Capital and Revolving Funds

DoD operates a number of industrial and commercial activities using Working Capital and Revolving Funds to achieve efficiencies and be responsive to warfighting needs. These funds operate in a commercial business manner—they sell their services and products to the military services and other authorized customers, charging rates that generally recover the cost of the services and products and their operations.

The intent is for the funds to operate on a break-even basis over the budget cycle. To do this, the funds establish an activity group rate to recover the full costs plus any adjustment for prior-year operating gains or losses. The funds charge the customers at the established rates, and the payments are effectively revenue to the funds. The payments from other Defense organizations are generally from appropriated funds, which then become part of the funds' cash on hand.

Initially, Congress finances the corpus of the funds with appropriated money. From time to time, the fund may request additional appropriated money from Congress for capitalization.

With the war on terrorism, the mix and volumes of materiel have changed. For example, DoD purchased certain items to have on hand if they were required, but some of these items (such as preventive vaccines) may never be purchased by customers. Therefore, FY 2011 continues to include an infusion of appropriated funds but at a much smaller level than the FY 2010 proposal. See **table 49.**

DoD operates four working capital funds—the Army Working Capital Fund, the Navy Working Capital Fund, the Air Force Working Capital Fund and the Defense-wide Working Capital Fund. Five revolving funds—Pentagon Reservation Maintenance Revolving Fund, Buildings Maintenance Fund, National Defense Stockpile Transaction Fund, Conventional Ammunition Working Capital Fund and Defense Coalition Support Account—are for control and financial accounting purposes.

The four working capital funds include a mix of the activities listed below:

- supply management;
- depot maintenance;
- ordnance;

Table 49

Defense Management and Revolving Funds

(Budget Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Army	-944.5	47.2	54.6
Navy/Marine Corps	315.1	155.3	0.0
Air Force	250.5	817.9	83.9
Defense	-2,568.5	507.9	507.9
Defense Commissary Agency (DeCA)	1,363.4	1,309.8	1,273.6
Other	366.6	1,667.9	944.9
Total	**-1,217.5**	**4,505.9**	**2,864.8**

[1] Numbers may not add because of rounding.
[2] FY09 are actual expenditures and appropriated OCO.
[3] FY10 is enacted funding and OCO supplemental.
[4] FY11 is budget estimate and OCO request.
Source: DoD FY11 Financial Summary Table FAD 764

- information services;
- commissary operations;
- printing and publications;
- transportation;
- financial operations;
- distribution depots;
- research and development (Navy);
- industrial plant equipment services; and
- defense reutilization and marketing service.

The Defense-wide Working Capital Fund includes the Defense Logistics Agency, the Defense Finance and Accounting Service and the Defense Information Systems Agency. Each organization operates different activities within the single Defense-wide Fund.

Provide for the Common Defense

It is DoD's duty to prepare, provide and sustain military forces to protect the United States and its territories. To define its mission, DoD establishes a National Military Strategy that specifies defensive objectives and priorities. The Secretary of Defense summarizes the strategy as "doing everything we can, and more, to prevail in the wars we are in while preparing our military to confront the most likely and lethal threats of the future."[23]

The DoD budget proposal for FY 2011 is supporting the military strategy with a request for $708.2 billion in BA, with $548.9 billion in the base budget and $159.3 billion in OCO funds. In addition, DoD submitted a supplemental request for $33 billion in BA for FY 2010 to support the troop increase in Afghanistan in 2010. The base budget proposal of $549 billion is $18 billion more than the $531

billion enacted for FY 2010—an increase of 3.4 percent, or 1.8 percent real growth, after adjusting for inflation.

In addition to the budget increase, military endstrength grows between FYs 2010 and 2011 by 27,000, or 1.8 percent—the same rate as the real growth in the base budget. The increase includes 22,000 in the Army and 4,000 in the Marine Corps—an acknowledgement of the need for land forces. Even with this growth, the number of Americans in uniform is less than 1 percent of the population.

Within DoD, the most continuing and consistent growth in the budget is in health care, which more than doubled between FYs 2001 and 2010. In FY 2011 the total of all DoD health care funds—including the Defense Health Program and Medical Accrual fund, Military Pay for military doctors and other health care providers, the Medicare-Eligible Retiree Health Care Fund and Military Construction for medical facilities—is nearly $60 billion. This is $3 billion, or 5.4 percent, more than for FY 2010, and the budget projections are for annual medical health care increases of 5 to 7 percent through FY 2015. In addition, the amount for health care is 8.4 percent of the total DoD budget—the base and OCO proposals combined—and is a substantial part of the DoD budget, growing faster than inflation.

While the DoD budget is growing by about 2 percent, endstrength is increasing by nearly 2 percent, health care is increasing by more than 5 percent, and the budget for RDA is declining by 2.7 percent. The RDT&E proposal is $76.8 billion, or $4 billion less, and the Procurement proposal is $219.2 billion, or $6 billion less, than for FY 2010. The total Procurement decline is only $6 billion because of a $26.3 billion infusion of funds from the OCO supplemental.

The decline in RDA reflects Secretary Gates' observation that "the department and the nation can no longer afford the quixotic pursuit of high-tech perfection that incurs unacceptable cost and risk."[24] Likewise, the nation cannot afford the continuing overall growth in Defense funds because of other pressing national needs. The nation is experiencing its worst recession in 80 years and the prediction is for continuing unfavorable economic conditions. President Obama states in his Budget Message that restoring economic growth is critical and that with this budget, "we are continuing to lay a new foundation for the future,"[25] which includes reform of and investment in education, reform of health insurance and incentives for small businesses and clean energy. The federal agencies that have the lead for these programs share in less than half of all discretionary funds—and DoD consumes more than half of all discretionary funds. These facts lead to the conclusion that continuing growth in Defense funds is unlikely. Furthermore, to the extent that Defense funds exceed very real needs, DoD is denying or restricting resources to other agencies.

Secretary Gates comes to essentially the same conclusion as the President about the necessity to be effective stewards of the public resources:

> [A]s I said last year, we must remember that every defense dollar spent on a program excess to real-world military needs is a dollar not available to take care of our people, reset the force, win the wars we are in, and improve capabilities in areas where we are underinvested and potentially vulnerable.[26]

Endnotes

1 U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), News Transcript, 1 February 2010, Subject: DoD News Briefing with Secretary Gates and Admiral Mullen from the Pentagon, http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549.

2 *Ibid.*

3 *Ibid.*

4 *Ibid.*

5 Office of the Under Secretary of Defense (Comptroller), Budget Request, http://comptroller.defense.gov/Budget2011.html.

6 Budget Authority is the authority provided by law to incur financial obligations that will result in immediate or future outlays of federal government funds.

7 TOA is the sum of BA for a given fiscal year, plus the balance of BA brought forward from prior years that remains available for obligation in the fiscal year, plus the amounts authorized to be credited to a specific fund or account during that year, including transfers between funds or accounts

[8] Testimony Delivered by Secretary of Defense Robert M. Gates to the Defense Subcommittee of the Senate Appropriations Committee, 9 May 2007, http://www.defenselink.mil/speeches/speech.aspx?speechid=1150.

[9] United States Department of Defense *Quadrennial Defense Review*, February 2010, http://www.defense.gov/qdr.

[10] U.S. Department of Defense, Fiscal Year 2011 Budget Request, Overview, February 2010, Chapter 2, Quadrennial Defense Review (QDR), http://comptroller.defense.gov/defbudget/fy2011/FY2011_Budget_Request_Overview_Book.pdf.

[11] OSD Comptroller, Department of Defense Budget Titles, http://www.defenselink.mil/comptroller/icenter/budget/budgtitles.htm.

[12] FY 2011 Budget Estimate, U.S. Special Operations Command, http://comptroller.defense.gov/defbudget/fy2011/budget_justification/pdfs/01_Operation_and_Maintenance/O_M_VOL_1_PARTS/SOCOM_FY11.pdf.

[13] Department of Defense Fiscal Year (FY) 2011 President's Budget, Missile Defense Agency, Justification Book Volume 2c, Research, Development, Test & Evaluation, Defense-wide – 0400 http://comptroller.defense.gov/defbudget/fy2011/budget_justification/pdfs/02_Procurement/MDA_PDW_PB11.pdf.

[14] In September 2009, the Obama administration adopted this approach, based on an assessment of the Iranian missile threat and a commitment to deploying technology that is proven, cost-effective and adaptable to an evolving security environment. Starting around 2011, this missile defense architecture will feature deployments of increasingly capable sea- and land-based missile interceptors, primarily upgraded versions of the Standard Missile-3, and a range of sensors in Europe to defend against the growing ballistic missile threat from Iran.

[15] Office of the Deputy Under Secretary of Defense, Installations and Environment, Military Housing Privatization, http://www.acq.osd.mil/housing/housing101.htm.

[16] DoD FY 2009 Budget Request Summary Justification, 4 February 2008, p. 107, http://www.defenselink.mil/comptroller/defbudget/fy2010/fy2010_SSJ.pdf.

[17] Statement of Dr. Dorothy Robyn, Deputy Under Secretary of Defense (Installations and Environment), before the House Armed Services Committee, Subcommittee on Readiness, 18 March 2010, http://www.acq.osd.mil/ie/download/robyn_testimony031810.pdf.

[18] U.S. Army's Chemical Materials Agency (CMA), Agent Destruction Status, http://www.cma.army.mil.

[19] Statement of Mr. Wayne Arny, Deputy Under Secretary of Defense (Installations and Environment), before the Subcommittee on Military Construction, Veterans Affairs and Related Agencies of the House Appropriations Committee, 22 April 2009, http://www.acq.osd.mil/ie/download/arny_042209.pdf.

[20] Donna Miles, "BRAC Deadline Expires; DoD to Begin Closure, Realignments," American Forces Information Service, 9 November 2005, http://www.defense.gov/news/newsarticle.aspx?id=18352.

[21] Statement of Mr. Wayne Arny, 22 April 2009.

[22] Statement of Dr. Dorothy Robyn, 18 March 2010.

[23] U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), News Transcript, 1 February 2010.

[24] *Ibid.*

[25] *Budget of the U.S. Government, Fiscal Year 2011*, The Budget Message of the President, http://www.whitehouse.gov/omb/budget/fy2011/assets/message.pdf.

[26] U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), News Transcript, 1 February 2010.

The Army Budget

Introduction

The Army requests a total of $245.6 billion of Total Obligational Authority (TOA) in the budget proposal for fiscal year 2011, including $143.4 billion in the base budget and $102.2 billion in the overseas contingency operations (OCO) supplemental.[1]

With the FY 2011 budget, President Obama submitted a supplemental budget proposal for FY 2010 that includes an Army request for $20 billion in addition to the FY 2010 enacted base and OCO funds.[2]

The Secretary of the Army and the Chief of Staff, Army testified before and submitted the *2010 Army Posture Statement* to the various committees and subcommittees of the U.S. Senate and House of Representatives. In the *Army Posture Statement* transmittal letter, they conclude by saying, "With the continued support of the President, Congress, and our Departmental leadership, [the FY 2011] budget will allow us to not only restore balance to the Army in 2011, but also sets the conditions for the Army of the 21st century."[3]

The Secretary and Chief of Staff focus their testimony around two overarching challenges facing the Army: restoring balance between the current demands and the sustainment of the all-volunteer force and setting the conditions for the future through a continuous process of transformation. They state that these challenges arise from the demands of the continuing war:

> In more than eight years of war, the Soldiers, Civilians, and Families of our Army have paid a heavy price—more than one million have deployed to combat, over 3,900 Soldiers have sacrificed their lives, and over 25,000 have been wounded. Yet our Army remains the "Strength of the Nation" because of the courage, commitment, and resilience of our people.[4]

America's Army

The Secretary of the Army and the Chief of Staff, Army proudly refer to the Army as "The Strength of the Nation." The Army's strength comes from the Soldiers, who do all that is asked of them by their nation, and from the Army civilians and families who support them. For nearly nine years, they have shouldered the load of war—for many, this dedication has included going in harm's way multiple times.

Today, America's Army includes 1.1 million Soldiers and 279,500 civilians who are fighting two wars, assisting nations building their own security capacity and supporting civil authorities at home and abroad, including helping the people of Haiti rebuild after the devastating earthquake.[5] At the same time, the Army is transforming to provide the nation with the capability to deter or defeat new threats in the future.

The Army continues to answer the nation's call by providing trained and ready land forces with the capability to operate across the spectrum of operations as part of a joint force. The Army provides the preponderance of land forces to combatant commanders—land forces are essential for wresting control of land and people from hostile forces and are essential for defense and stability operations in situations where government is nonexistent, unstable or contending with counterinsurgency.

America's Army continues to evolve and transform its doctrine, tactics, equipment and training to meet and defeat the enemy, often violent extremist groups with very little or no infrastructure or institutions that are geographically dispersed. These extremists focus on winning at any cost and using any means available to achieve their political and ideological ends. Regrettably, so long as groups believe that terrorism is an effective means of attaining their ends, this strategy is likely to persist.

In their testimony, the Secretary and the Chief of Staff observe that the budget includes funds to:

- complete current operations effectively—i.e., to engage and destroy the enemy—and assist host countries in achieving a basic level of peace that will enable personal dignity, economic growth and political stability; and
- generate the capability and capacity to deter future challenges or decisively defeat future enemies.

Global Commitments

The Army's global commitments include more than 230,900 Soldiers—20 percent of the total active

component (AC) and reserve component (RC)—and more than 18,500 Army civilians serving in nearly 80 countries around the world. The remainder of the Army is stationed within the United States and is resetting from recent deployments, preparing for upcoming deployments or supporting domestic missions.[6]

The ongoing wars in Afghanistan and Iraq are the longest sustained conflicts ever fought by an all-volunteer force. In nearly nine years, more than one million Soldiers have deployed[7]—352,700 of them more than once.[8] Today, more than 110,000 Soldiers are deployed in Afghanistan and Iraq.

Sustaining this level of continual deployments and other missions has required activating more than 696,600 RC Soldiers since 11 September 2001, including 513,600 in the Army National Guard[9] and more than 183,000 Army Reserve Soldiers[10] as of May 2010. In these wars, more than 3,900 American Soldiers have given their lives, and more than 25,000 others have been wounded.[11] See **figure 16** for global commitments.

The FY 2011 budget supports the high level of deployments around the world. The budget supports the continuing counterinsurgency operations in Iraq and Afghanistan, including training indigenous forces and building their capability to establish peace and maintain stability. In addition, the budget supports restoring balance between current demands and sustaining a healthy all-volunteer force and setting the conditions for the Army to provide capabilities to meet the nation's global needs in the 21st century.

Top-Line Analysis

The budget generally presents funding data for three fiscal years—the prior, current and budget years—in response to congressional information requirements.[12] The top-line analysis focuses on the total Budget Authority and the base and OCO supplemental proposals.

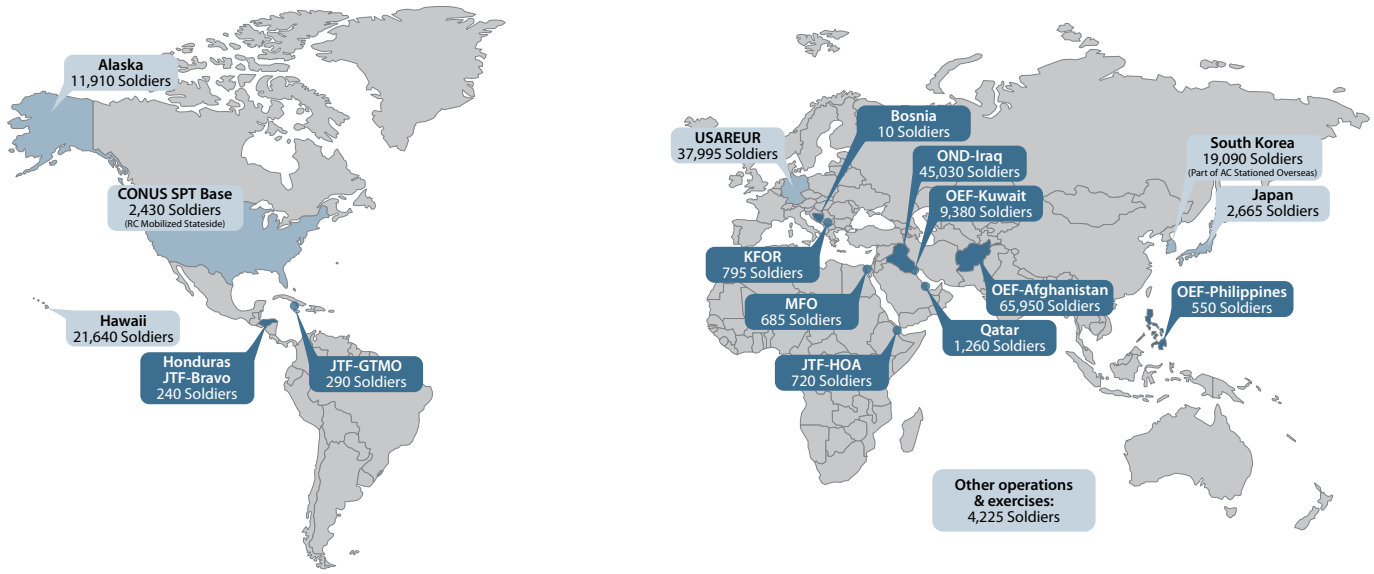
Budget Authority

The Army requests a total of $243.9 billion in Budget Authority (BA) for FY 2011, i.e., new authority provided by law, to incur financial obligations that will result in immediate or future outlays of government funds. The BA request is an increase of $12 billion, or 5 percent, over the FY 2010 top line, including an increase in the base budget of $8 billion, or 6.5 percent, and an increase in the OCO supplemental of more than $4 billion, or 4 percent.

A comparison with the FY 2009 experience reveals almost no change in the base budget but an increase in the

Figure 16

Army Global Commitments
(as of 21 September 2010)



AC – Active Component
CONUS – Continental United States
GTMO – Guantánamo Bay (Cuba)
HOA – Horn of Africa
JTF – Joint Task Force
KFOR – Kosovo Peacekeeping Force
MFO – Multinational Force & Observers
OEF – Operation Enduring Freedom
OND – Operation New Dawn
RC – Reserve Component
SPT – Support
USAREUR – U.S. Army Europe

AC Stationed Overseas:	**101,665**
AC Stationed Stateside:	**466,505**

230,970 Soldiers deployed/forward stationed in nearly 80 countries overseas.
(Includes AC stationed overseas)

Source: Headquarters, Department of the Army

Table 50

Army Summary – Budget Authoirty
($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Base Proposal	141.5	133.7	141.7
Overseas Contingency Operations (OCO) Proposal	90.6	97.8	102.2
Total	232.1	231.5	243.9

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual; base includes Environmental Restoration Act (ERA) and American Recovery and Reinvestment Act of 2009.
[3] FY10 figures are enacted and supplemental; includes $77.8 billion enacted and $20 billion supplemental proposal.
[4] FY11 figures are budget estimates.
Source: DoD *National Defense Budget Estimates For FY11* (Green Book), March 2010, Table 2-1; DoD Financial Summary Tables for FY11, FAD 764

OCO supplemental funds of more than $11 billion. See **table 50**.

Trends and Concerns

Consideration of top-line trends and the current and future financial state of the Army and the nation present a conundrum. The BA base proposal for FY 2011 is $141.7 billion, which can be compared to the prewar BA for FY 2000 of $73.2 billion because neither contains OCO funds. Between FYs 2000 and 2011 the base budget proposal has grown by $68.5 billion, or nearly 94 percent. For a better comparison, the FY 2000 BA provides $92.3 billion in constant dollars (i.e., equivalent or consistent buying power), a 54 percent increase in 11 years.

The conversion to constant buying power does not reflect adjustments for programmatic changes nor for endstrength growth over the same period—e.g., active Army endstrength grew by more than 13 percent, RC endstrength grew by nearly 4 percent and civilian endstrength grew by more than 16 percent. The FY 2011 Army is larger than the prewar Army. In addition to an increase in endstrength, the Army of 2011 is substantially different from the Army of 2000, as most easily demonstrated by today's modular, brigade-centric force versus the division-centric force of 2000. These facts give rise to concerns and a few questions.

Can the Army sustain growth indefinitely?

The Army's top-line growth has averaged nearly 5 percent annually since 11 September 2001 and the subsequent wars. Sustaining this level of growth indefinitely, even during persistent war, is unlikely since the nation has other pressing needs.

The United States is pulling out of the worst recession in 80 years. Federal receipts are down but the demands for funds are up, such as for stimulus and "safety-net" programs. In his budget message, President Obama states his priorities, saying that "restoring economic growth is critical" and that the FY 2011 budget continues to lay "a new foundation for the future."[13] The President specifically identifies education reform and investment, health insurance system reform, small business incentives and clean energy incentives.

Funds for the domestic priorities and for the Army are from the same limited receipts that generate federal discretionary funds. DoD consumes more than half of all discretionary funds and the Army consumes a large portion of those DoD funds. Of the $1.376 trillion in discretionary funds, DoD consumes $708 billion; of that, the Army consumes $245 billion. The nondefense agencies and domestic programs (other than entitlements) of the federal government share the remaining $668 billion in discretionary funds. Therefore, a 5 percent annual increase in Army funding is not likely.

Will funding be adequate after the war?

In the FY 2011 budget, 42 percent of the top line is in the OCO supplemental proposal. This may be appropriate during war years, but it is a concern during a drawdown period or cessation of hostilities. The wear and tear on U.S. forces after nearly nine years of war with high operational tempo, harsh conditions and combat damage and losses will require funding above the normal peacetime readiness requirements of the base budget. Based on prior postwar experiences, remedying this situation will require incremental funding for at least two years after the end of the war and perhaps longer. Therefore, including adequate resources in the base budget after the war to restore and transform Army capabilities is a concern.

Will there be a peace dividend?

The national propensity after a war is to expect and take a peace dividend—i.e., reduce defense spending and redistribute those funds to domestic programs. The demand for a peace dividend after the current wars is as likely as after prior wars.

The Army needs to be innovative when thinking about and exploring new doctrine and capabilities to meet the nation's future needs. The Army needs to be proactive in securing funds after the current wars are concluded to ensure that the progress made over the last decade is not negated and that the Army and its Soldiers continue to receive the funds required to provide the best defense possible.

Budget Highlights

The Army Secretary and Chief of Staff state in their testimony that the budget provides adequate resources to continue the initiatives to restore balance and to set conditions for the 21st century. A summary of their comments

and the *Army Posture Statement* information on meeting each challenge is provided below.

Restore Balance

The first critical challenge identified by the Army is to restore balance among the current demands and sustain the all-volunteer force. The FY 2011 budget is the fourth and final year of the plan to restore balance that involves four imperatives:

- **sustain** the Army's Soldiers, families and civilians;
- **prepare** forces for success in the current conflict;
- **reset** returning units to rebuild the readiness consumed in operations and to prepare for future deployments and contingencies; and
- **transform** to meet the demands of the 21st century.

The Army notes that with the progress that has been made already and with appropriate budget support, "we now are in a better position to achieve balance than we were two years ago. Critical to this progress was the growth in the size of the Army."[14]

Sustain the Force. To sustain the force, the Army is recruiting and retaining quality Soldiers and civilians; furnishing the best support and services for Soldiers, families and civilians with initiatives such as the Army Family Action Plan, the Army Family Covenant, the Army Community Covenant and the Comprehensive Soldier Fitness Program; providing world-class care to wounded, ill and injured warriors through properly led and resourced Warrior Transition Units; and supporting the families of fallen warfighters. Budget highlights include:

- $1.7 billion to standardize vital family programs and services including welfare and recreation, youth services and child care, survivor outreach services and expanded education and employment opportunities for family members;
- a 1.4 percent military basic pay raise and civilian pay raise, a 3.9 percent increase in the basic allowance for housing and a 3.4 percent increase in the basic allowance for subsistence;
- continuing support for Warrior Transition Units including $18 million in Military Construction funds for construction of barracks; and
- continuing support for the Residential Communities Initiatives program that provides quality, sustainable residential communities for Soldiers and their families living on post and continues to offset out-of-pocket housing expenses for those residing off-post.

Prepare the Force. To prepare the force, the Army accelerated the pace of increasing endstrength and transforming to modular brigades, including 73 brigade combat teams (BCTs) and nearly 230 support brigades.[15] The budget also supports improving individual and collective training for the complex and challenging operational environment; working to provide effective equipment in a timely manner; and transforming the Army to a rotational model through Army Force Generation (ARFORGEN).

The ARFORGEN process involves systematically increasing the availability of trained, ready and cohesive units, including allocating resources based on a unit's mission and deployment sequence, regardless of component. The process involves a six-year cycle in which units proceed through three pools to meet operational requirements with increased predictability:

- **Reset and Train**. These forces redeploy from operations, receive and stabilize personnel, reset equipment and conduct individual and collective training. The phase culminates in a brigade-level collective training event. Units in this force pool are not ready or available for major combat operations; however, they should be ready to respond to homeland defense requirements and provide defense support to civil authorities.
- **Ready**. These forces continue mission-specific collective training and are eligible for operations if necessary to meet joint requirements. Their collective training focuses on directed Mission Essential Task List (METL) tasks, such as stability operations.
- **Available.** These forces are in their planned deployment windows and are fully trained, equipped and resourced to meet operational requirements.

Budget highlights include:

- fully funding the all-volunteer force in the base budget at the accelerated levels of 547,400 for the active component, 358,200 for the Army National Guard and 205,000 for the Army Reserve and a 22,000 temporary increase in the active component in the OCO supplemental budget;
- procuring and upgrading the Army's UH-60 Black Hawk, CH-47 Chinook and AH-64 Apache helicopters, which are vital to operations in Afghanistan and Iraq; and
- providing more than $1 billion to fund flying hours, maintenance, fuel, airfield operations and specialized skill training for flight crew training in all components.

Reset Returning Units. To reset returning units, the budget supports Army initiatives to revitalize Soldiers and

families; to repair, replace and recapitalize equipment; to retrain Soldiers, leaders and units to build critical skills to operate across the full spectrum of conflict; and to identify and apply the lessons learned from the reset pilot program. The *Army Posture Statement* notes that the Army must continue the reset program for two to three years after major deployments end.

Budget highlights include $10.8 billion in OCO funds to reset Army equipment and support training and sustainment of Army forces, including individual skills and leader training, combined-arms training toward full-spectrum operations and adaptable, phased training based on the ARFORGEN process.

Transform. Transformation is a continuous process that sets the conditions for success against both near-term and future enemies. The budget includes transformation funds to continue modular reorganization of the force to standardize formations; to accelerate fielding of advanced technologies; to convert the reserve component to an operational force by systematically building and sustaining readiness while increasing predictability for Soldiers, families, employers and communities; to complete Base Realignment and Closure (BRAC) and restationing actions; and to sustain programs for Soldier and leader development and development of civilian leaders.

The budget includes:

- nearly $3.2 billion in BCT modernization programs that include procurement of the first incremental changes packages for Infantry BCTs and additional RDT&E funding for subsequent change packages and the initial development of the Ground Combat Vehicle (GCV);
- funds to begin equipping a 13th combat aviation brigade (CAB);
- funds to support the increase in intelligence, surveillance and reconnaissance (ISR) platforms including the Raven, Shadow and MQ-1C Gray Eagle unmanned aerial vehicles (UAVs) and the Extended Medium Altitude Reconnaissance and Surveillance System.

Set Future Conditions

The second critical challenge identified by the Army is to set the conditions for the future. Addressing this involves producing a range of military capabilities to meet the evolving challenges of the 21st century and maintain a continuous process of transformation.

A 21st Century Army. The Army budget supports setting the conditions for the 21st century by continuing to field a versatile mix of tailorable and networked organizations operating on a rotational cycle. The Army recognizes the need to provide the capability to sustain a flow of trained and ready forces for full-spectrum operations at a tempo that is predictable and sustainable for the all-volunteer force and to hedge against unexpected contingencies.

Budget highlights include support for:

- the modular force with a mix of heavy, Stryker and light BCTs that can be combined to provide multipurpose capabilities and with sufficient capacity to accomplish a broad range of tasks from peacetime engagement to major combat operations;
- networking capability improvements that allow dispersed Army organizations to plan and operate together and provide connectivity to joint, combined and interagency assets;
- the ARFORGEN rotational process that includes three force pools: Reset and Train, Ready and Available. Each force pool consists of an operational headquarters, five division headquarters (of which one or two are Army National Guard), 20 BCTs (three or four are Army National Guard) and 90,000 enablers (about half of which are Army National Guard and Army Reserve);
- modernization of the BCT by leveraging the lessons learned from the past eight years, including network modernization to take advantage of technology upgrades, while simultaneously expanding the network to cover ever-increasing portions of the force; Mine-Resistant Ambush Protected (MRAP) vehicle integration into the force; GCV development and fielding; and capability packages that will be fielded incrementally to meet the needs of Soldiers and units as they train and deploy;
- reserve component integration as part of the operational force but with a deployment rate that is about half that of the AC. The RC is critical to sustaining current operations and for generating the essential capability of the ARFORGEN force pools; and
- the GCV that is being designed from the ground up to operate in an improvised explosive device (IED) environment, provide Soldiers with protected mobility and operate effectively in both urban and off-road environments. The GCVs qualities will reflect lessons learned from the MRAP on survivability, from the Bradley Fighting Vehicle on tactical mobility and from the Stryker on operational mobility.

Realize Change

The Army budget prioritizes modernization programs and initiatives that show the most promise to benefit the Army today and in the future.

Modernization. The *2010 Army Modernization Strategy* reflects the overarching vision for developing and fielding an affordable and interoperable mix of the best equipment available to allow Soldiers and units to succeed in both today's and tomorrow's full-spectrum military operations. A subset of the overall modernization strategy specifically supports the BCT Modernization Plan, which includes four elements:

- modernizing the network over time to take advantage of technology upgrades while simultaneously expanding it to cover ever-increasing portions of the force;
- incorporating MRAPs into the force;
- rapidly developing and fielding a new GCV that meets the requirements of the 21st century Army; and
- incrementally fielding capability packages that best meet the needs of Soldiers and units as they train and deploy.

The FY 2011 budget includes support for the overarching modernization strategy, including:

- $934 million to develop the Army's new GCV and to overcome critical capability gaps in both current and future operations;
- $459 million to procure the MQ-1C Gray Eagle UAV to give commanders longer-dwelling ISR capabilities across a joint area of operations;
- $887 million for the procurement of 16 Block III AH-64 Apache helicopters to improve situational awareness, performance, reliability and sustainment, for upgrading 13 AH-64 helicopters to Block II and for modernizing the Army National Guard aircraft fleet; and
- $505 million to upgrade RQ-7 Shadow UAVs to increase the payload capacity and enhance the performance of this key ISR asset for BCT commanders.

Adapting the Institution and Transforming Business Practices. The Army is seeking institutional agility, similar to the modular-force agility, to effectively and efficiently meet the demands of the 21st century. Recouping intellectual capital by insourcing former contract positions associated with inherently governmental functions is one initiative for achieving institutional agility. Army civilians are assuming increased responsibilities—the budget supports the program to insource 11,084 civilian positions (of which 3,988 are acquisition positions) from FY 2011 to FY 2015.

Budget Basics

Knowledge of particular federal budgeting terms and practices enables a better understanding of the data and analysis. The Army generally expresses the budget proposal as Total Obligational Authority (TOA). The Defense Department generally expresses the budget proposal in terms of Budget Authority (BA). The Office of Management and Budget (OMB) generally expresses the President's Budget in terms of BA or Outlays. Each term has a unique definition and therefore different dollar amounts.

- **Budget Authority** is the authority provided by law to incur financial obligations that will result in Outlays.
- **Total Obligational Authority** is the sum of:
  - Budget Authority for a given fiscal year;
  - balances of Budget Authority brought forward from prior years that remain available for obligation in the fiscal year; and
  - amounts authorized to be credited to a specific fund or account during that year, including transfers between funds or accounts.

Army Appropriations

An appropriation is a legislative act authorizing the expenditure of a designated amount of public funds for a specific purpose. The Army appropriations are listed below and discussed in subsequent paragraphs.

- Military Personnel, Army;
- Reserve Personnel, Army;
- National Guard Personnel, Army;
- Operation and Maintenance, Army;
- Operation and Maintenance, Army National Guard;
- Operation and Maintenance, Army Reserve;
- Aircraft Procurement, Army;
- Missile Procurement, Army;
- Procurement of Weapons and Tracked Combat Vehicles, Army;
- Procurement of Ammunition, Army;
- Other Procurement, Army;
- Research, Development, Test and Evaluation, Army;
- Military Construction, Army;
- Military Construction, Army National Guard;
- Military Construction, Army Reserve;
- Family Housing Construction, Army;
- Family Housing Operations, Army;
- Chemical Agents and Munitions Destruction, Army;

- Environmental Restoration Fund, Army;
- Defense Working Capital Fund, Army;
- Joint Improvised Explosive Device Fund;
- Afghanistan Security Forces Fund;
- Iraq Security Forces Fund; and
- Base Realignment and Closure.

Executive Agent

An organization may be designated as an executive agent; this designation typically occurs when there is a nexus between an organization's experience and a particular program. For example, certain appropriations—e.g., the Environmental Restoration Act—are in the DoD budget proposal, but the funds for the program are executed by the Army. This difference, between where the funds are requested and where the funds are executed, accounts for some differences between the proposal and the actual experience.

In other instances, the Army is the executive agent, and the funds for these appropriations—including the Afghanistan Security Forces Fund, Iraq Security Forces Fund and Joint Improvised Explosive Device Defeat Fund—are in the Army budget.

Budget Formulation Process

The Army budget formulation process is critical because it produces the only product—the budget—that is approved by DoD and the President and submitted to Congress for authorizations and appropriations. Army budget formulation responds to DoD Planning, Programming, Budgeting and Execution (PPBE), and DoD PPBE responds to the federal process that is governed by OMB and is responsive to Congress.

The federal budget formulation process begins with dollar guidance from OMB to the departments, including DoD. DoD distributes the guidance, or controls, to the services and other DoD agencies. Headquarters, Department of the Army distributes the dollar controls and promulgates guidance among the Army commands and direct reporting units.

The Army, like all federal agencies, prepares its budget using the appropriation structure prescribed by Congress. The Army process includes accumulating and integrating budget proposals from across the Army; reviewing, analyzing and prioritizing the budget requests; obtaining approval; and preparing hundreds of exhibits and other detail justification material.

The Army submits its budget proposal to the DoD Comptroller for joint DoD and OMB review. DoD issues draft Program Budget Decisions (PBDs), and the Army prepares reclamas. At the end of process, the Secretary of the Army or the Assistant Secretary of the Army for Financial Management and Comptroller (ASA[FM&C]) meets with the Secretary or Deputy Secretary of Defense to resolve major budget issues. As approved, the Army budget becomes part of the President's Budget that is submitted to Congress in February.

Congress reviews the budget with the intent of providing appropriation acts to the President before the beginning of the fiscal year. However, if no congressional budget agreement is reached by 1 October, Congress passes Continuing Resolution Acts (CRA), which allow the departments to continue operating within stipulated restrictions.

When the President signs the appropriation acts into law, first the U.S. Treasury, then DoD and next the Army receives funds for execution. The various appropriations carry specific restrictions. For example, most appropriations expire at the end of one or three or five fiscal years, and money generally cannot be moved across appropriations without prior congressional reprogramming approval.

Supplemental Proposals

The federal budget process requires a separate submission for emergency requirements, i.e., where the future circumstances are unknown or unpredictable. As the emergency situation becomes clearer, the administration submits a request to Congress. The military operations in Afghanistan and Iraq are considered such an emergency situation and are ongoing, so the President has submitted a budget proposal for OCO with the base budget.

Budget Documents

The Army budget includes separate documents for each appropriation. In fact, the ASA (FM&C) lists about 20 documents, which contain more than 5,000 pages of detail.[16]

In addition to actual budget documents, other documents, such as the *2010 Army Posture Statement* and testimony to Congress, provide pertinent information on the budget and the Army's resource proposal. This analysis integrates key information from the many source documents, organizes the information under topical categories and provides insights on the budget.

Budget Summary

The Army budget is a plan for the next fiscal year along with a proposal for resources to implement the plan. The budget is built with participation from across the Army and includes a great deal of detailed data, such as appropriation, budget activity, program, function and component; within these are various levels of detail. The budget integrates, prioritizes and balances operational, functional and programmatic requirements. The budget presents plans and resources as approved by the Secretary of Defense, OMB and the President.

Congress requires budget information for at least three years—the prior (i.e., last completed), the current and the budget year. In addition, Congress requires that the budget comply with the appropriation structure and associated mandates and restrictions.

The intent of the multiyear display of data is to facilitate comparisons across the years. However, the prior-year data include all supplemental funds; the current year data include enacted funds that likely do not include supplemental funds; and the budget proposal does not include supplemental funds. Every multiyear comparison must account for the differences.

Budget by Appropriation

A summary of the Army budget proposal is available in **table 51**.

The TOA—base plus OCO—for the three fiscal years is:

- FY 2009 – $237.1 billion;
- FY 2010 – $239.4 billion; and
- FY 2011 – $245.6 billion.

The FY 2011 total TOA is $6.2 billion, or 2.5 percent, more than that of FY 2010 and $8.5 billion, or 3.6 percent, more than the FY 2009 actual experience. The totals mask the fact that the growth is primarily in Army executive agent appropriations and not in traditional Army appropriations.

The following analysis examines traditional Army appropriations:

- Operation and Maintenance, Army (OMA) consistently consumes the greatest portion of the budget at 36 percent, 41 percent and 39 percent for FYs 2009, 2010 and 2011, respectively. Adding the Operation and Maintenance for the Army National Guard and the Army Reserve increases the OMA group to 44 percent of total TOA in FY 2011.
- Military Personnel, Army (MPA) consumes the second largest amount at 21 percent, 22 percent and 21 percent for FYs 2009, 2010 and 2011, respectively. Adding the Military Personnel for the Army National Guard and the Army Reserve increases MPA to 27 percent of total TOA in FY 2011.
- Procurement appropriations, as a group, are the third largest at 16 percent, 13 percent and 12 percent for FYs 2009, 2010 and 2011, respectively. Of concern is the fact that the FY 2011 total is $8.7 billion, or 22 percent, less than the FY 2009 experience. The vacillations in every Procurement appropriation are between 10 and 61 percent in those two years, which suggests serious challenges for the industrial base. Specifically:
    - the Aircraft appropriation increases by $1.1 billion, or 15 percent;
    - the Missile appropriation decreases by $0.6 billion, or 22 percent;
    - the Weapons and Tracked Combat Vehicles appropriation decreases by $3.7 billion, or 61 percent;
    - the Ammunition appropriation increases by $0.2 billion, or 10 percent; and
    - the Other Procurement appropriation decreases by $5.6 billion, or 26 percent.
- Research, Development, Test and Evaluation (RDT&E) accounts for 5 percent, 5 percent and 4 percent, respectively, for FYs 2009, 2010 and 2011.
- Total Research, Development and Acquisition (RDA), which comprises both RDT&E and Procurement, is $51.1 billion, $42.1 billion and $40.7 billion, or nearly 22 percent, 18 percent and 17 percent, respectively, for FYs 2009, 2010 and 2011.
- All other appropriations account for 12 percent of the FY 2011 budget proposal.

Overseas Contingency Operations Supplemental

OCO funds provide for the incremental costs for military and intelligence operations, force protection, training, overseas facilities and base support, communications, transportation, maintenance, supplies, weapons and equipment refurbishment or replacement and other essentials for U.S. forces. The funds support the deployed personnel with special pay and benefits, food, medical and other services. In addition to the traditional Army appropriations, the OCO supplemental includes fund proposals for Afghanistan Security Forces, Iraq Security Forces, Pakistan Counterinsurgency and Joint Improvised Explosive Devices Defeat (JIEDD). See **table 52**.

The OCO funds overall increase annually; however, the internal mix changes. The largest changes between FYs 2010 and 2011 are a decrease of $2.3 in the Army Procurement appropriation and an increase of $4.5 billion in Army executive agency appropriations for Afghanistan Security Forces ($2.4 billion), JIEDD ($1.1 billion) and Iraq Security Forces ($1 billion). The OCO supplemental proposal for MPA decreases and for OMA increases by smaller percentages.

Executive Agency Appropriations

The base and OCO proposals include funds for appropriations—such as the Afghanistan Security Forces Fund, Iraq Security Forces Fund and JIEDD—where the Army

Table 51

Army Summary – Total Obligational Authority

($ billions[1])

Army	FY09[2]	FY10		FY11	
	Actual	Base Enacted	OCO Totals[3]	Base Estimate	OCO Totals
Military Personnel, Army	49.2	41.0	11.6	42.0	10.7
Medicare-Eligible Retiree Health Care Fund	2.9	3.1		3.1	0.1
Operation and Maintenance, Army	84.4	39.7	59.4	34.0	62.6
Procurement					
Aircraft[4]	6.4	5.1	1.4	6.0	1.4
Missiles[4]	2.9	1.2	0.5	1.9	0.3
Weapons and Tracked Combat Vehicle	6.1	2.3	1.2	1.7	0.7
Ammunition	2.4	2.1	0.4	2.0	0.7
Other Procurement	21.2	8.6	7.8	9.8	5.8
Total, Procurement	**39.0**	**19.3**	**11.3**	**21.3**	**8.9**
Research, Development, Test and Evaluation	12.1	11.4	0.1	10.3	0.2
Military Construction, Army	6.2	3.5	1.2	4.1	0.9
Army Family Housing	1.4	0.8		0.6	
Homeowners' Assistance Program		0.5			
Base Realignment and Closure 2005 (BRAC 2005)	4.5	4.5		1.1	
Environmental Restoration, Army[4]		0.4		0.4	
Chemical Demilitarization	1.5	1.7		1.6	
Army Working Capital Fund	0.5			0.1	
Joint Improvised Explosive Device Defeat Fund	3.1	0.1	2.2	0.2	3.3
Afghanistan Security Forces Fund	5.6		9.2		11.6
Iraq Security Forces Fund	1.0		1.0		2.0
Pakistan Counterinsurgency Capability Fund[5]	0.4		0.7		
Army National Guard					
Personnel	8.5	7.5	0.9	7.6	0.8
Medicare-Eligible Retiree Health Care Fund	1.2	1.2		1.3	
Operation and Maintenance	6.7	6.2	0.5	6.6	0.5
Military Construction	0.9	0.4		0.3	
Army Reserve					
Personnel	4.3	4.3	0.3	4.4	0.3
Medicare-Eligible Retiree Health Care Fund	0.7	0.7		0.7	
Operation and Maintenance	2.9	2.6	0.3	2.9	0.3
Military Construction	0.3	0.6		0.9	
Subtotal	**237.1**	**140.9**	**98.5**	**143.4**	**102.2**
Total	**237.1**	**239.4**		**245.6**	

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include Appropriated OCO and Appropriated Recovery Act/Stimulus.
[3] OCO totals include $78.5 billion enacted plus $20 billion additional requested.
[4] ERA is executed in OMA (FY09), but budget proposal is in a separate line (FY10 and FY11).
[5] Requested by State Department for FY11.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Table 52

Overseas Contingency Operations Supplemental

(Total Obligational Authority, $ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Military Personnel	13.6	12.7	11.9
Operation and Maintenance	52.2	60.2	63.4
Procurement	13.2	11.3	8.9
Research, Development, Test and Evaluation	0.1	0.1	0.2
Military Construction	1.3	1.2	0.9
Army Working Capital Fund	0.4		
Afghanistan Security Forces	5.6	9.2	11.6
Iraq Security Forces	1.0	1.0	2.0
Pakistan Counterinsurgency[5]	0.4	0.7	
Joint Improvised Explosive Devices Defeat Fund	3.1	2.2	3.3
Total	**91.0**	**98.5**	**102.2**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures from OCO-MILPERS, OCO-OMA/OMAR/OMNG budget exhibits.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
[5] Requested by State Department for FY11.
Source: *President's Budget Highlights for FY11*, February 2010; Army Budget Request for FY11 and DoD Financial Summary Reports for FY11, FAD-769, February 2010

is the executive agent but the funds do not directly support the Army as the traditional Army appropriations do. In addition, in FYs 2009 and 2010 Army OCO funds included the Pakistan Counterinsurgency Capability Fund, which is in the State Department budget requested for FY 2011. The amounts in the base budget and OCO for these appropriations are:

- FY 2009 – $9.7 billion for the continuing executive agent appropriations plus $0.4 billion for the Pakistan Counterinsurgency Capability Fund;
- FY 2010 – $12.5 billion[17] for the continuing executive agent appropriations plus $0.7 billion for the Pakistan Counterinsurgency Capability Fund; and
- FY 2011 – $17.1 billion for the continuing executive agent appropriations.

These executive agent appropriations increase by $2.7 billion, or 27 percent, between FYs 2009 and 2010 and by $4.5 billion, or 36 percent, between FYs 2010 and 2011. Without these executive agent appropriations, Army TOA for traditional appropriations is:

- FY 2009 – $227 billion;
- FY 2010 – $226.3 billion; and
- FY 2011 – $228.8 billion.

The total for the traditional appropriations decreases 0.03 percent between FYs 2009 and 2010 and increases 1 percent between FYs 2010 and 2011. This conclusion is quite different from that observed in the top-line Budget Authority analysis.

Personnel

The American Soldier is the nucleus of Army forces and the ultimate Army capability. These capabilities are generated by the total Army, which also includes Army civilians, families and contractors.

Soldiers operate the high-technology systems of the modern Army, provide "boots on the ground" to close with the enemy and are the face of America as they interact with the local populace in stability and counterinsurgency operations. Soldiers serve in the active component, the Army National Guard and the Army Reserve.

The Army civilian workforce provides support, expertise and continuity of operations at home station and wherever the Army goes, often serving alongside Soldiers. Contractor personnel also support and often serve alongside Soldiers around the world.

Army families continually make sacrifices and endure hardships for their Soldiers. Families—spouses and children, parents and siblings—are the foundation for Soldiers and the all-volunteer Army. More than half of all Soldiers are married, and these Army families include more than 500,000 children.

The Army budget supports: retaining and recruiting quality Soldiers to sustain the all-volunteer force; the Army's commitment to meeting adequate quality-of-life standards for Soldiers and their families; a commitment to provide a safe and conducive work environment for Soldiers, Army civilians and contractors; and a commitment to training and professional development for Soldiers and Army civilians.

Army Endstrength

The Army proposes and Congress authorizes the number of Soldiers and Army civilians who serve in or work for the Army. The authorization is generally for a specified number for the final day of the fiscal year, i.e., endstrength. Endstrength is managed separately by each of the components: active Army, Army National Guard, Army Reserve and Army civilians.

At the end of the Cold War, endstrength was on the decline and continued to decline from FY 1990 to FY 2000. In that decade, the active Army was reduced by 30 percent, the Army National Guard by 20 percent, the Army Reserve by 31 percent and Army civilians by 42 percent.

The wars in Iraq and Afghanistan have required multiple deployments and have placed excessive demands and stress on America's Soldiers and their families. In January

2007 the President decided and Congress supported the decision to increase the overall endstrength of the Army.

Between FYs 2000 and 2011:

- the active Army increases by 13.5 percent;
- the Army National Guard increases by 3.7 percent;
- the Army Reserve has no change; and
- the civilian component increases by 16.7 percent.

See **figure 17** for endstrength information from FY 2000 through the FY 2011 budget proposals.

As of 21 September 2010 the reserve component—the Army National Guard and Army Reserve—had 63,365 Soldiers on active duty. Add to that number 568,170 active component Soldiers and that equals about 631,000 Soldiers serving on active duty. Of the total force, more than 230,000 Soldiers are now serving in nearly 80 countries worldwide.

Separate appropriations provide pay and allowances for each military component. However, the active Army appropriation provides pay and allowances for all Soldiers on active duty, including mobilized RC Soldiers.

Military Personnel Appropriations

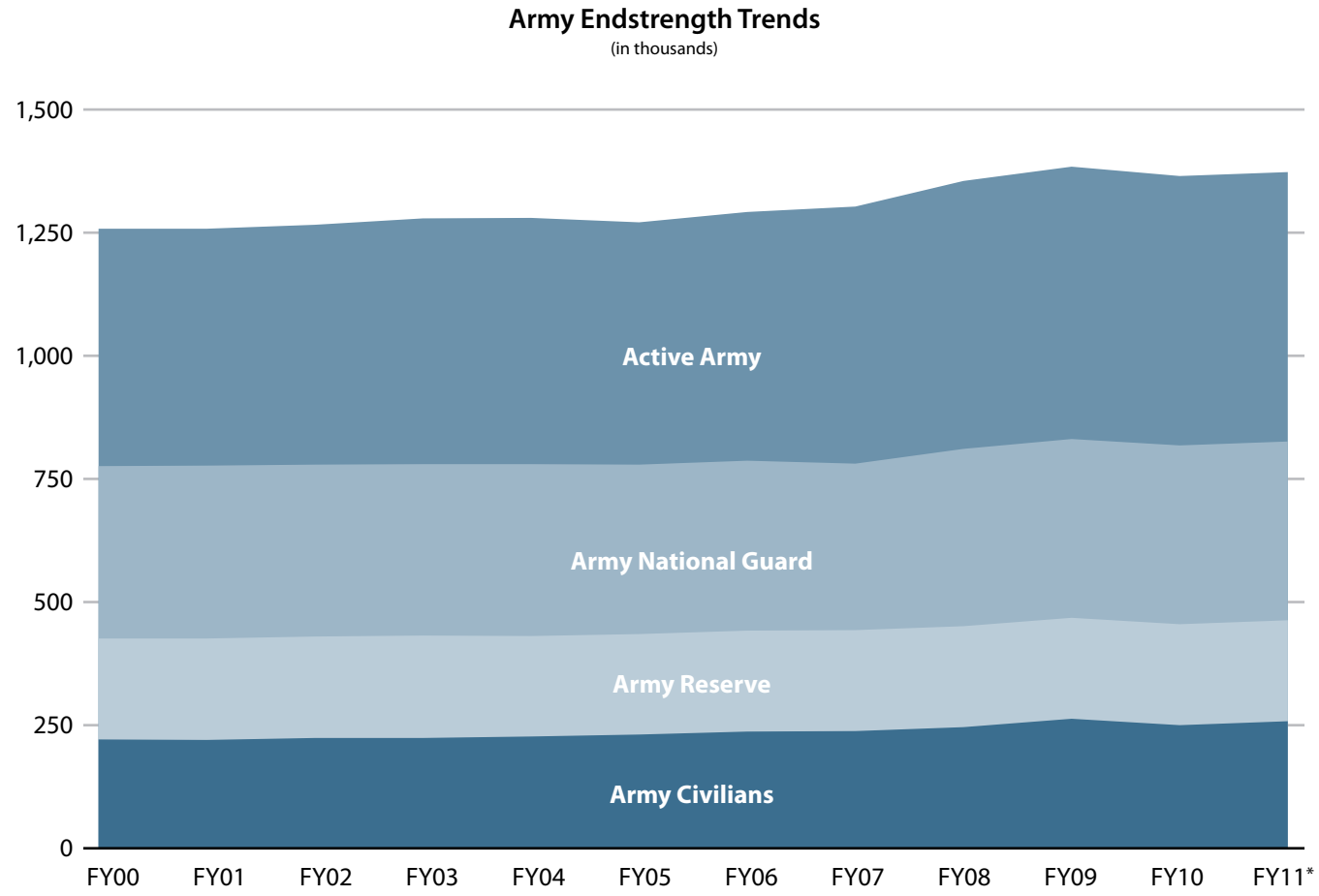
The federal budget process requires separate military pay and allowances appropriations for the military components. Collectively, the three are the Military Personnel (MILPERS) group. The appropriations are:

- Military Personnel, Army (MPA);
- National Guard Personnel, Army (NGPA); and
- Reserve Personnel, Army (RPA).

Military Personnel Budgets

The MILPERS appropriations provide the funds for pay and allowances, monetary benefits and incentives and subsistence. Differences exist among the individual appropriations—e.g., MPA includes funds for permanent change of station; NGPA and RPA include funds for certain training (such as annual training, inactive-duty training, active duty for school training or special training); and both of the reserve appropriations provide for the pay and benefits for active Guard and Reserve Soldiers, who manage the day-to-day support for their units, support

Figure 17



* An additional 22,000 Active endstrength is requested in the OCO supplemental for FY11.
Source: Department of Defense *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 7.5

recruiting and retaining a quality force and assist with mobilization and demobilization.

The MILPERS appropriations are centrally managed and driven primarily by endstrength and entitlements. In fact, military personnel retirement and health care accrual accounts consume more than 22 percent of all MILPERS.

The FY 2011 budget proposal provides a 1.4 percent military basic pay raise, a 3.9 percent increase in the basic allowance for housing and a 3.4 percent increase in the basic allowance for subsistence. The budget continues to offset out-of-pocket housing expenses for Soldiers and families residing off-post and the Residential Communities Initiative program, which provides quality, sustainable residential communities for Soldiers and their families. The budget also provides funds for the Defense Personnel Property Program, which provides Soldiers full replacement value for household goods lost during permanent change of station moves.

The President's Budget for the MILPERS appropriations is in **table 53.**

Table 53

Military Personnel Appropriations, Army

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Military Personnel	52.1	44.1	45.1
National Guard Personnel	9.7	8.8	8.9
Reserve Personnel	5.0	5.0	5.1
Total[5]	**66.7**	**57.9**	**59.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO and Appropriated Recovery Act/Stimulus.
[3] FY10 figures indicated enacte funding; excludes OCO supplementals.
[4] FY11 figures indicate base; excludes OCO supplementals.
[5] Includes Medicare-Eligible Retiree Health Care Fund.
Source: *President's Budget Highlights for FY11*; DoD *Budget Request for FY11*, Military Personnel Programs (M-1), February 2010

Military Personnel Accrual Accounts

The military personnel accrual accounts are for retirement and health care, regardless of when the payout is made. The amount is a function of the statutory entitlements and endstrength; therefore, as endstrength increases, the contributions to the Retired Pay Accrual and Health Accrual accounts increase.

The sum of the accrual payments in the FY 2011 budget proposal is $13.3 billion—22.5 percent of the MILPERS appropriations for health care and retirement benefits. See **table 54**.

The Retired Pay Accrual account consumes $8.3 billion, or 14 percent, of the MILPERS group in FY 2011—less than the enacted amount for FY 2010, but since endstrength remains consistent across the two years, the FY 2011 proposal seems low. Similarly, the Health Accrual account consumes $5.1 billion, or 8.6 percent, of the MILPERS group in FY 2011, but again because endstrength remains consistent, the proposal seems low.

Table 54

Army Retired Pay Accruals

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Retired Pay Accrual			
Active Component Personnel	6.3	7.1	6.6
National Guard Personnel	1.0	1.1	1.1
Reserve Personnel	0.5	0.6	0.6
Subtotal	**7.7**	**8.8**	**8.3**
Health Fund Accrual[5]			
Active Component Personnel	2.9	3.1	3.1
National Guard Personnel	1.2	1.2	1.3
Reserve Personnel	0.7	0.7	0.7
Subtotal	**4.8**	**5.0**	**5.1**
Total	**12.5**	**13.8**	**13.3**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate base budget proposals.
[5] Medicare-eligible Retiree Health Fund Contribution.
Source: Department of the Army Budget Estimates, *Justification Book for FY11*; *President's Budget Highlights for FY11*, February 2010; DoD *National Defense Budget Estimates for FY09* (Green Book), Office of the Under Secretary of Defense (Comptroller), Table 6.6

Civilian Personnel

Unlike the military pay appropriations, no single appropriation exists for civilian pay; rather, civilian pay is included in the appropriations where the Army civilians work. In addition, unlike for military personnel, civilian personnel authorizations focus on full-time equivalents (FTEs)—the primary cost driver for civilian pay. An FTE is one worker occupying a paid full-time job for a full year or two workers each working half a year. The focus is on the sum of the paid hours across the year and not the endstrength on the final day of the fiscal year.

The Army civilian FTE proposal is 258,300 for FY 2011, 22.8 percent of the total military personnel endstrength; but the percentage changes dramatically when the FTEs for the RC in the Operation and Maintenance appropriations are removed. The remaining 216,500 Army civilians support the 547,000 Soldiers in the active Army, at nearly 39 percent of the active Army endstrength. This ratio provides an indication of how important Army civilians are to America's Army. See **table 55** for FTE data.

The Operation and Maintenance group employs more than 72 percent of the civilian workforce; civilian pay

Table 55

Civilian Personnel Full-Time Equivalents
(in thousands[1])

	FY10	FY11	FY11 % of total
Appropriation			
Operation and Maintenance, Army	155.5	163.6	63.3%
Operation and Maintenance, Army National Guard	29.1	29.8	11.5%
Operation and Maintenance, Army Reserve	11.9	12.0	4.6%
Research, Development, Test and Evaluation	17.5	18.2	7.1%
Military Construction	5.9	6.0	2.3%
Family Housing	0.8	0.7	0.3%
Army Working Capital Fund	29.8	27.9	10.8%
Total[2]	**250.5**	**258.3**	**100.0%**

[1] Numbers may not add because of rounding.
[2] Numbers exclude OCO supplementals.
Source: *President's Budget Highlights for FY11*, February 2010

consumes more than 25 percent of the O&M appropriations. In the overall context, civilian pay consumes approximately 11 percent of the top-line budget. See **table 56** for civilian pay data.

Pay Raise Rates

Pay raise rates are key contributors to increases in the MILPERS and O&M appropriations. The President's Budget proposal for FY 2011 includes an equal pay raise of 1.4 percent for military and civilian personnel. The budget also includes estimates of future pay raises. See **figure 18.**

Operation and Maintenance

The Operation and Maintenance appropriations provide the funds to restore balance and support a versatile mix of tailorable and networked organizations operating on a rotational cycle. The funds provide for recruiting the all-volunteer force, individual training, leadership training and realistic unit training to produce readiness, supplies and maintenance to sustain the force and funds to cover the day-to-day costs of operating the Army, including installation operations and warfighter

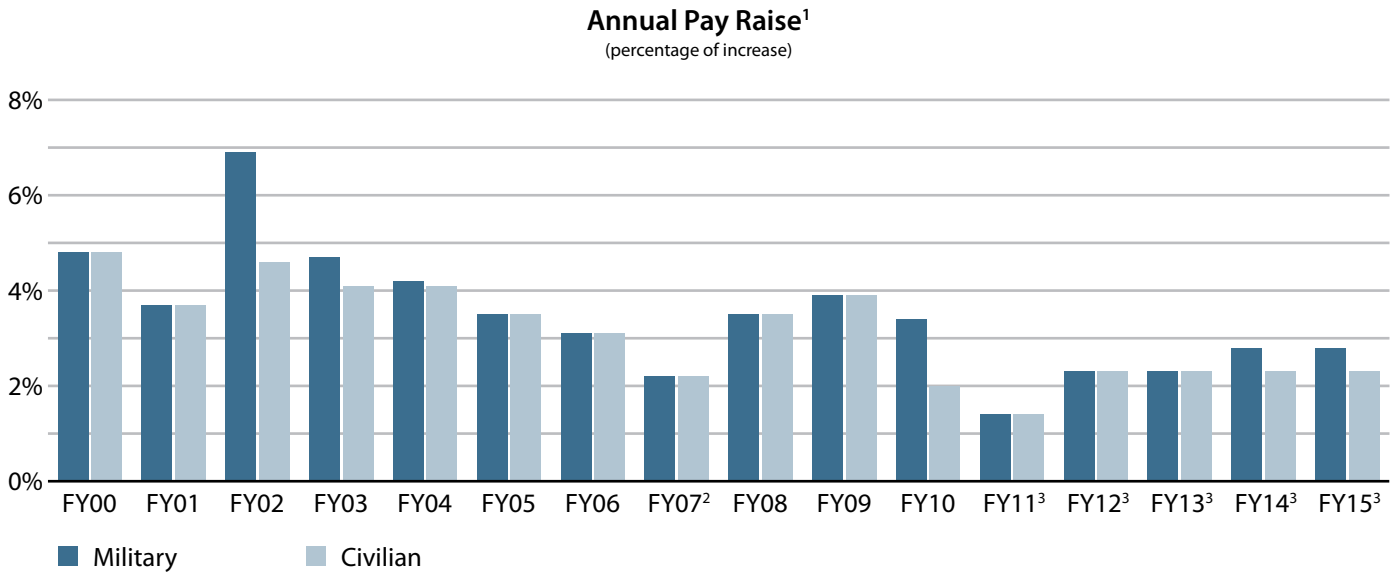
Table 56

Army Civilian Full-Time Equivalents and Budgets[1]
($ millions[2])

	FY09		FY10		FY11	
	FTE	Budget	FTE	Budget	FTE	Budget
Direct hires						
Operation and Maintenance, Army	152,401	$10,592.7	140,126	$12,543.6	148,696	$13,602.2
Operation and Maintenance, National Guard	29,013	2,120.5	29,056	2,217.8	29,779	2,317.5
Operation and Maintenance, Reserve	10,169	758.7	11,868	903.3	12,008	930.1
Research, Development, Test and Evaluation	19,932	2,501.2	17,454	2,216.9	18,248	2,356.8
Military Construction	6,560	690.2	5,699	560.0	5,756	574.1
Family Housing	485	36.3	484	39.8	444	36.7
Army Working Capital Fund	28,692	2,831.9	29,641	2,559.9	27,764	2,428.2
Subtotal	**247,266**	**$19,531.5**	**234,340**	**$21,041.3**	**242,707**	**$22,245.6**
Indirect hires						
Operation and Maintenance, Army	15,144	$640.7	15,398	$743.8	14,943	$769.1
Research, Development, Test and Evaluation	0	0.0	0	0.0	0	0.0
Military Construction	0	0.0	0	0.0	251	6.9
Family Housing	0	0.0	0	0.0	260	19.6
Army Working Capital Fund	186	0.0	0	0.0	183	14.2
Subtotal	**15,330**	**640.7**	**15,398**	**743.8**	**15,637**	**809.8**
Total	**262,596**	**$20,172.2**	**249,738**	**$21,785.1**	**258,344**	**$23,055.4**

[1] Dollars relate to FTE and not endstrength.
[2] Numbers may not add because of rounding.
Source: OP-8 CABS Budget Report extract provided by ASA(FM&C), March 2010

Figure 18



[1] The effective date for each pay raise is 1 January following the beginning of the fiscal year.
[2] FY07 excludes selected targeted increase for certain warrant officers and mid-grade/senior enlisted personnel.
[3] FY11–15 are FY11 budget proposals.
Source: DoD *National Defense Budget Estimates for FY11* (Green Book), Office of the Under Secretary of Defense (Comptroller), March 2010, Table 5.12

and family support programs, such as Comprehensive Soldier Fitness (CSF).

The O&M appropriations fund administration and service-wide programs, which provide increased capabilities through key information, security and personnel systems as well as improved financial and audit readiness. The OMA appropriation also provides the DoD contribution to the North Atlantic Treaty Organization (NATO) and funds for the Army's executive agent responsibilities for U.S. European Command (USEUCOM), U.S. Southern Command (USSOUTHCOM) and U.S. Africa Command (USAFRICOM).

The O&M group includes three appropriations:

- Operation and Maintenance, Army (OMA);
- Operation and Maintenance, Army National Guard (OMNG); and
- Operation and Maintenance, Army Reserve (OMAR).

The OMA appropriations include four Budget Activities (BAs); each BA includes Budget Activity Groups (BAGs); and each BAG includes subactivity groups (SAGs). The title of each activity or subactivity is generally descriptive of the purposes, projects or types of activities financed by it. The four BAs are:

- BA1: Operating Forces;
- BA2: Mobilization;
- BA3: Training and Recruiting; and
- BA4: Administration and Service-wide Activities.

The reserve component uses only two of the four BAs:

- BA1: Operating Forces; and
- BA4: Administration and Service-wide Activities.

The O&M group is $100.9 billion, or 46 percent, of the total Army TOA proposal (made up of the base budget and OCO funds and excluding funds for Afghanistan Security Forces, Iraq Security Forces and Pakistan Counterinsurgency) for FY 2011. This amount is greater than the proposal for FY 2010 ($100.2 billion, or 44 percent) and the actual experience in FY 2009 ($92.6 billion, or 42 percent).

The budget data on OMA, OMNG and OMAR with BA and BAG level of detail are in **table 57**.

Operation and Maintenance, Army

The OMA appropriation includes the following four Budget Activities.

Budget Activity 1: Operating Forces. The Budget Activity 1 (BA1) proposal is for $75.9 billion, or nearly 79 percent, of all OMA, and is larger than any other appropriation. BA1 includes three budget activity groups:

- **Land Forces** ($5 billion) provides resources for executing the ground operational tempo and flying-hour training strategy, the operations of the forces such as brigade combat teams and the modular support brigades, echelons above brigades, theater-level assets and special force-related training activities. This Budget Authority Group increases more than

Table 57

Army Operation and Maintenance

(Total Obligational Authority, $ millions[1])

Operation and Maintenance, Army (OMA)	FY09[2]	FY10[3]	FY11[4]
BA1: Operating Forces			
Land Forces	4,518.0	4,517.0	5,067.1
Land Forces Readiness	2,863.1	3,405.0	4,007.2
Land Forces Readiness Support	58,359.1	62,888.3	66,852.4
Subtotal BA1	**65,740.2**	**70,810.3**	**75,926.7**
BA2: Mobilization			
Strategic Mobilization and War Reserves	313.3	320.9	441.2
Subtotal BA2	**313.3**	**320.9**	**441.2**
BA3: Training and Recruiting			
Accession Training	703.8	706.2	747.2
Basic Skills and Advanced Training	2,583.4	2,824.7	2,987.4
Recruiting and Other Training and Education	1,288.0	1,282.1	1,334.4
Subtotal BA3	**4,575.3**	**4,813.0**	**5,069.0**
BA4: Administration and Service-wide Support			
Security Programs	2,162.1	2,742.3	3,389.2
Logistics Operations	4,803.4	7,374.6	6,675.1
Service-wide Support	4,850.4	3,779.3	4,591.6
Support of Other Nations	432.5	444.0	481.7
Subtotal BA4	**12,248.5**	**14,340.3**	**15,137.6**
Subtotal OMA	**82,877.2**	**90,284.5**	**96,574.6**
Operation and Maintenance, Army National Guard (OMNG)			
BA1: Operating Forces	5,987.7	5,889.2	5,847.7
BA4: Administration and Service-wide Support	444.2	617.3	698.0
Subtotal OMNG	**6,431.9**	**6,506.6**	**6,572.7**
Operation and Maintenance, Army Reserve (OMAR)			
BA1: Operating Forces	2,653.4	2,729.8	3,003.7
BA4: Administration and Service-wide Support	140.3	156.1	162.3
Subtotal OMAR	**2,793.6**	**2,885.9**	**3,166.0**
Total Operation and Maintenance (excludes Security Forces)	**92,102.7**	**99,676.5**	**106,313.3**

[1] Numbers may not add because of rounding and exclude Afghanistan, Iraq and Pakistan funds.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include both enacted OCO and OCO supplemental request.
[4] FY11 figures indicate budget estimates and includes OCO.
Source: *President's Budget Highlights for FY11* and O-1 and OCO exhibits

$550 million over the FY 2010 proposal and the FY 2009 experience.

- **Land Forces Readiness** ($4 billion) includes activities essential to operational readiness, such as depot maintenance, participation in joint exercises, communications infrastructure, intelligence support for combatant commands and combat development. This BAG increases by more than $600 million over the FY 2010 proposal and more than $1.1 billion over the FY 2009 actual expenditure. Under this BAG falls the Depot Maintenance program SAG at $890 million, a very large increase—$204 million—over FY 2010. The Depot Maintenance program sustains the investment in weapon systems by extending the useful life of mission-critical weapon systems and by providing

Post Production Software Support (PPSS) for fielded weapon systems.[18]

- **Land Force Readiness Support** ($66.9 billion) provides for infrastructure maintenance and support, management headquarters, unified command support and special activities of the operating forces to include contingency operations. This BAG increases by nearly $4 billion over FY 2010 and $8.5 billion over the FY 2009 actual experience.

Budget Activity 2: Mobilization. The Budget Activity 2 (BA2) proposal is $441 million in FY 2011, an increase of more than $120 million over FY 2010 and the FY 2009 experience. BA2 comprises a single BAG, Strategic Mobilization and War Reserves, which includes three Subactivity Groups (SAGs):

- **Strategic Mobility** includes $333 million, an increase of $116 million over FY 2010. Strategic Mobility executes the Army Power Projection Program (AP3), which rapidly deploys and sustains military forces. AP3 enables a well-balanced deployment of forces into areas of operation, without relying on vulnerable sea and aerial ports of debarkation, and sustains a continental United States (CONUS)-based military force capable of achieving decisive victory.
- **Army Prepositioned Stocks (APS)** funding proposal is for $102 million, which is about the same as for FY 2010. APS support the Army's capability to power-project unit sets, operational projects and sustainment supplies immediately from CONUS, Europe, Northeast Asia and Southwest Asia to trouble spots anywhere in the world.
- **Industrial Preparedness** was funded at $1.6 million in FY 2009; the proposal for both FY 2010 and FY 2011 is for $5.7 million. Industrial Preparedness finances industrial analysis tools to help the Army obtain end-item and repair part support (excluding ammunition) and weapon system acquisition.

Budget Activity 3: Training and Recruiting. The Budget Activity 3 (BA3) funding proposal is for $5 billion in FY 2011, which is $255 million more than the FY 2010 proposal and $494 million more than the FY 2009 experience. As the title implies, the budget activity supports recruiting and training and includes three BAGs:

- **Accession Training** ($747 million) provides funds for the U.S. Military Academy (USMA), U.S. Military Academy Preparatory School (USMAPS) and Officer Candidate School (OCS); and funds for trainee processing at reception stations, trainee support and basic combat training for enlisted Soldiers. This BAG provides funds to produce trained Soldiers and officers to meet force structure requirements.
- **Basic Skill and Advanced Training** ($2.9 billion) provides funds for military occupational specialty (MOS) and mid-level promotion qualifying courses for enlisted Soldiers and officers and produces technically competent leaders. This amount is an increase of nearly $162 million over FY 2010 and $404 million over FY 2009.
- **Recruiting, Other Training and Education** ($1.3 billion) provides the funds for the Recruiting and Advertising Program for officers and enlisted Soldiers for the active Army, Army National Guard and Army Reserve. This BAG also provides funds for examining recruits; for the Army Continuing Education System (ACES), Army Tuition Assistance (TA) and Veterans Education Assistance Program (VEAP); and for training and continuing education of Army civilians. This amount is an increase of $50 million over FYs 2009 and 2010.

Budget Activity 4: Administration and Service-wide Activities. The Budget Activity 4 (BA4) proposal is for $15.1 billion in FY 2011, which is an increase of $797 million over the FY 2010 proposal and nearly $3 billion over the FY 2009 experience. BA4 finances logistics, communications and other support functions required to secure, equip, deploy, transport and sustain the Army, to protect the homeland and to defeat terrorism around the world. BA4 consists of four SAGs:

- **Security Programs** ($3.4 billion) consists of six subprograms: the Consolidated Cryptologic Program (CCP), General Defense Intelligence Program (GDIP), the Foreign Counterintelligence Program (FCIP), National Geospatial-Intelligence Program (NGP), Military Intelligence Program (MIP), Security and Intelligence Activities Program (S&IAP) and Arms Control Treaties implementation and compliance. The CCP, GDIP, FCIP and NGP are part of the National Intelligence Program (NIP). The proposal is an increase of $646 million over FY 2010 and $1.2 billion over FY 2009.
- **Logistics Operations** ($6.7 billion) provides resources for the movement of the Army worldwide and manages end items, ammunition and logistics support activities. This is a decrease of $699 million from FY 2010 but an increase of $1.8 billion over the FY 2009 experience.
- **Service-wide Support** ($4.6 billion) supports the Army Management Headquarters Activities, communications to key organizations, Information Security,

Computer Security, Defense Satellite Communications System, information system initiatives including the General Fund Enterprise Business System, logistics and personnel initiatives, personnel management, real estate management, the Army claims program and the commissary. This SAG increases more than $812 million over FY 2010 but decreases more than $258 million from the FY 2009 experience.

- **Support of Other Nations** ($481 million) fulfills the U.S. commitment to NATO and the Republic of Korea (ROK)–U.S. Combined Forces Command (CFC) and supports combatant commanders' security cooperation strategies and Miscellaneous Support of Other Nations. The proposal is an increase of more than $30 million over the FY 2010 proposal and $50 million over the FY 2009 experience.

Operation and Maintenance, Army National Guard

Since 11 September 2001 the Army National Guard has evolved into an operational force that enables the Army to sustain the level of deployment necessary to fight the persistent war. A career in the Army National Guard no longer means the possibility of a "once-in-a-lifetime" deployment as the strategic reserve. Today, the Army National Guard is populated by seasoned veterans with multiple deployments in support of operations in Iraq, Afghanistan, the Balkans and many other locations around the world.

The OMNG appropriation provides funds to operate and maintain Army National Guard units in 50 states, the District of Columbia and the territories of Puerto Rico, Guam and the U.S. Virgin Islands. The Army National Guard forces support the nation's global operations and homeland defense and homeland security missions, now and in the future.

The OMNG account includes two budget activities: Budget Activity 1: Operating Forces, and Budget Activity 4: Administration and Service-wide Activities. The total budget proposal for FY 2011 is $7.1 billion, an increase of $116 million over FY 2010 and $172 million more than the FY 2009 experience.

Budget Activity 1: Operating Forces. BA1 includes the same three BAGs as OMA: Land Forces, Land Forces Readiness and Land Forces Readiness Support. BA1 funds provide for the day-to-day operational and readiness training activities of the Army National Guard in the 50 states, the District of Columbia and the territories of Puerto Rico, Guam and the U.S. Virgin Islands. The BA1 proposal for FY 2011 is $35 million more than for FY 2010 but $80 million less than the FY 2009 experience.

Budget Activity 4: Administration and Service-wide Activities. BA4 provides funds for Staff Management, Service-wide Communications, Manpower Management and Other Personnel Support. The BA4 proposal for FY 2011 is $80 million more than for FY 2010 and $250 million more than the FY 2009 experience.

Operation and Maintenance, Army Reserve

Since 11 September 2001 the Army Reserve has realigned to meet the demand for an operational force. The Army Reserve has the largest share of logistical, engineer, military police, medical and civil affairs capabilities, and the demand for these capabilities has been heavy and persistent.

Today, the Army Reserve is populated by seasoned veterans with multiple deployments in support of wartime operations in Iraq and Afghanistan and humanitarian and peacekeeping missions in the Balkans, Somalia, Haiti and many other locations around the world. In addition, homeland defense, homeland security and defense support of civil authorities has become an increasingly important mission for the Army Reserve and its applicable capabilities.

The Army Reserve has transformed low-demand operational tempo (OPTEMPO) units into high-demand OPTEMPO units. The OMAR appropriation provides funds for:

- operational, logistical, administrative, engineering and management support;
- installation management, maintenance of real property and record maintenance;
- personnel support to retirees, veterans and their families; and
- civilian pay, information systems, networks, telecommunications, supplies, fuel, equipment and base operations support.

The FY 2011 OMAR budget request is for $3.2 billion, an increase of about $280 million over FY 2010 and $372 million more than the FY 2009 experience.

Budget Activity 1: Operating Forces. The budget proposal for BA1 is $3 billion, $273 million more than for FY 2010 and $350 million more than for FY 2009. The funds are distributed among the same three SAGs as for OMA and OMNG: Land Forces, Land Forces Readiness and Land Forces Readiness Support.

Budget Activity 4: Administration and Service-wide Activities. BA4 provides funds for Staff Management, Service-wide Communications, Manpower Management and Other Personnel Support. The BA4 proposal is $162

million, which is about $6 million more than for FY 2010 and about $22 million more than the FY 2009 experience.

Research, Development and Acquisition

The Research, Development and Acquisition (RDA) title refers to the aggregation of the Research, Development, Test and Evaluation (RDT&E) appropriation and the Army's five Procurement appropriations. The RDA appropriations provide funds to develop and field new materiel capabilities and to acquire materiel to modernize and sustain the force engaged in current operations, reset and readiness training.

The RDA budget proposal is $40.7 billion for FY 2011, which includes the base and OCO supplemental proposals for RDT&E and the Procurement appropriations. See **table 58**.

The Army RDA proposals from FY 2009 to FY 2011 reflect a downward trend, and the reductions occur in both RDT&E and Procurement. The Procurement reduction is primarily in the Weapons and Tracked Combat Vehicles appropriation. This downward trend is of concern for a number of reasons.

The Army RDA proposal accounts for 16.6 percent of the total budget proposal for FY 2011; total DoD RDA accounts for 30.1 percent of the total DoD budget for FY 2011, indicating that the other services have made a decision to invest in RDA at about twice the rate of the Army.

In addition, during the last prolonged war, in Vietnam, the Army budget went largely to operations and the Army came out of that war with limited modernization and serious equipment shortfalls. The general concern was over a "hollow Army." In the *2010 Army Modernization Strategy*, the Deputy Chief of Staff, G-8 expresses a similar concern: "After eight years of combat, our Army is stretched—the demand on forces exceeds our sustainable supply, putting the Army out of balance."[19]

A large part of the Army RDA proposal—22 percent—is included in the OCO supplemental as shown in table 45. While only 1 percent of RDT&E is in the OCO supplemental, 30 percent of Procurement ($8.9 billion) is in the supplemental. This is a concern because it suggests that these funds are not required in the base budget, but a review of the use of those funds shows that is not the case. The supplemental funds pay for:

- **Force Protection** (non-intelligence related) with $3.9 billion, which includes aircraft survivability equipment, electronic countermeasures to improvised explosive devices, various Stryker combat vehicle protection kits and other force protection enhancements;
- **Reset** with $3 billion to procure replacements for battle losses and washed-out equipment and to recapitalize equipment to higher standards, as needed;

Table 58

Army Research, Development and Acquisition

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Research, Development, Test and Evaluation	12.1	11.5	10.5
Procurement	43.1	30.5	30.3
Total	**55.2**	**42.1**	**40.7**

[1] Numbers may not add because of rounding.
[2] FY09 are actual expenditures and include OCO.
[3] FY10 is enacted base plus OCO and supplemental OCO request.
[4] FY11 is budget estimate and includes OCO estimate.
Source: *President's Budget Highlights for FY10*; DoD *Budget for FY11*, P-1 and R-1 exhibits for FY09

- **Intelligence Programs** with $1.1 billion for equipment associated with surveillance and reconnaissance such as the new and modified aircraft supporting the Extended Medium Altitude Reconnaissance and Surveillance System; and
- **Munitions** with $1 billion for replenishment of various caliber ammunition, mortars, rockets and Hellfire missiles.

The RDA proposal supports the Army's modernization goal and objectives as presented in the new *2010 Army Modernization Strategy*:

> Build a versatile mix of tailorable and networked organizations operating on a rotational cycle to provide a sustained flow of trained, equipped and ready forces for full-spectrum operations and to hedge against unexpected contingencies—at a tempo that is predictable and sustainable for our All-Volunteer Force.[20]

Top Ten Weapon Systems by Funding

The RDA budget involves research into many different technologies and the acquisition of hundreds of weapon and other materiel systems. However, ten weapon systems account for 37 percent of all RDA funds in FY 2011. Of the top ten, Brigade Combat Team Modernization accounts for 10 percent of all RDA and 24 percent of all RDT&E. The top ten systems in terms of RDA dollars are in **table 59**.

Research, Development, Test and Evaluation

The RDT&E appropriation enables the Army to explore and examine new technologies and to transition emerging technology into weapon and materiel systems, system upgrades and other products for the warfighter.

The RDT&E budget includes seven Budget Activities; each BA includes Program Elements (PEs) and each PE contains one or more projects. The breadth and scope of the individual projects are amazing—e.g., independent

laboratory research; avionic, ballistics, engineering, information technology; medical and warfighter technologies; test ranges and facilities; and product improvement programs.

In the Army budget, the RDT&E funding declines from year to year. The FY 2011 budget proposal is $10.5 billion (9 percent less than the FY 2010 proposal and 13 percent less than the FY 2009 expenditures). See **table 60** for RDT&E by BA.

The Army RDT&E proposal is proportionately less than the overall DoD RDT&E and the RDT&E of the other services. The Army RDT&E proposal accounts for 7.2 percent of the base budget for FY 2011; by comparison, the DoD RDT&E proposal accounts for nearly 14 percent of the DoD base budget—almost twice as much. However, RDT&E for the other services accounts for more than 86 percent of DoD RDT&E—the other services and DoD agencies invest much more in RDT&E than the Army. The following paragraphs provide information on each RDT&E BA and PE and on selected individual projects.

Table 59

Research, Development and Acquisition[1]
Top Ten Systems in FY11 Funds
($ millions[2])

	RDT&E	Procurement	Total RDA
Brigade Combat Team Modernization	2,502.0	683.0	**3,185.0**
Ammunition[3]		1,635.0	**1,635.0**
UH-60 Black Hawk Utility Helicopters	20.6	1,393.0	**1,414.0**
CH-47 Chinook Helicopters		1,225.0	**1,225.0**
PAC-3 and Patriot/MEADS	467.0	480.0	**947.0**
Family of Medium Tactical Vehicles (FMTV)		918.0	**918.0**
AH-64 Apache Longbow Attack Helicopters		795.0	**888.0**
Warfighter Information Network – Tactical (WIN-T)	190.9	421.0	**612.0**
RQ7 (Shadow) Tactical UAV Modifications		505.0	**505.0**
MQ-1C Gray Eagle UAV[4]			**459.0**
Total	**3,180.5**	**8,055.0**	**11,788.0**

[1] Research, Development & Acquisition (RDA) equals Procurement plus Research, Development, Test and Evaluation (RDT&E).
[2] Numbers may not add because of rounding.
[3] Excludes Facilities and Demilitarization costs.
[4] Also known, unofficially, as the MQ-1C Sky Warrior.
Source: DoD Weapon Program Acquisition Costs by Service; Army Press Release (Green Top); *Presidential Budget Highlights for FY11*

Table 60

Research, Development, Test and Evaluation
(Budget Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Science and Technology, BA1–3			
Basic Research	422.1	431.8	406.9
Applied Research	1,224.9	1,337.1	841.4
Advanced Technology Development	1,438.8	1,373.6	696.6
BA4 Advanced Component Development and Prototypes	1,010.5	932.0	804.1
BA5 System Development/Demonstration	5,025.9	4,454.7	5,035.0
BA6 Management Support	1,470.2	1,196.7	1,142.4
BA7 Operational Systems Development	1,482.8	1,823.4	1,553.4
Total	**12,075.1**	**11,549.4**	**10,479.9**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted base and OCO funding plus OCO supplemental request.
[4] FY11 figures indicate base budget estimates plus OCO estimates.
Source: *President's Budget Highlights for FY11* and Department of the Army's *Budget Estimates for FY11*, RDT&E, R-1 exhibit

Budget Activities 1–3: Science and Technology BA1 is for Research, BA2 is for Applied Research and BA3 is for Advanced Technology Development; the three BAs constitute the Science and Technology (S&T) program. The S&T program focuses on developing and transitioning technology into weapon systems, system upgrades and other products for the warfighter. A summary of the S&T program with the high-dollar PEs is in **table 61**.

Budget Activity 4: Advanced Component Development and Prototypes. BA4 involves examining technologies for future combat systems and Soldiers, assessing advantages and disadvantages of each technology, its costs and implementation impact. If successful, the technology can move into further development or into production.

The BA4 program for FY 2011 accounts for $0.8 billion, or 8 percent, of the RDT&E budget. BA4 is down 14 percent from FY 2010 and 20 percent from the FY 2009 experience. The funding in individual PEs varies a great deal from year to year, as evidenced in **table 62**.

Table 61

Research, Development, Test and Evaluation
BA 1–3: Science and Technology
(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
BA1: Basic Research			
In-house Laboratory Independent Research	19.4	19.6	21.8
Defense Research Sciences	194.0	197.5	195.8
University Research Science (Health)	87.5	99.4	91.2
University and Industry Research Centers	121.3	115.3	98.1
Subtotal	**422.1**	**431.8**	**406.9**
BA2: Applied Research			
Medical Technology	198.1	221.9	96.8
Electronics and Electronic Devices	119.2	156.8	78.2
Weapons and Munitions Technology	106.3	114.9	42.6
Combat Vehicle and Automotive Technology	84.4	78.9	64.7
Missile Technology	57.5	70.9	49.5
Ballistic Technology	84.8	78.0	60.3
Sensors and Electronic Survivability	76.2	70.3	48.9
Materials Technology	80.7	99.4	29.9
Military Engineering Technology	58.7	60.8	79.2
Other	359.0	385.1	291.1
Subtotal	**1,224.9**	**1,337.1**	**841.4**
BA3: Advanced Technology Development			
Warfighter Advanced Technology	72.3	54.3	37.4
Medical	329.3	339.8	71.5
Aviation	102.2	112.4	57.5
Weapons and Munitions	112.5	89.9	64.4
Combat Vehicle and Automotive	270.2	240.2	89.5
Missile and Rocket Advanced Technology	75.0	86.6	84.6
Night Vision	69.8	72.3	39.9
Electronic Warfare Advanced Technology	32.5	21.9	18.4
Advanced Tactical Computer Science and Sensor Technology	91.7	57.1	24.9
Other	283.3	299.4	208.6
Subtotal	**1,438.8**	**1,373.6**	**696.6**
Total Science and Technology[5]	**3,085.8**	**3,142.5**	**1,944.9**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funging and include OCO.
[4] FY11 figures are budget estimates and include OCO.
[5] Budget activities of Basic Research, Applied Research and Advanced Technology Development together are summarized as Science and Technology.
Source: *President's Budget Highlights for FY11* and Department of the Army's Budget Estimates for FY11, RDT&E, R-1 exhibit

Budget Activity 5: System Development and Demonstration. BA5 is by far the largest RDT&E activity with $5 billion, or 48 percent, of all RDT&E funds. The FY 2011 proposal is slightly higher than the FY 2009 level. The Manned Ground Vehicle, i.e., Ground Combat Vehicle (GCV), consumes the largest amount of funds ($1.3 billion). See **table 63**.

Budget Activity 6: Management Support. BA6 provides a wide variety of support activities and accounts for nearly 11 percent of all RDT&E. The FY 2011 proposal is $55 million less than the FY 2010 proposal and $230 million less than the FY 2009 experience.

Two PEs account for nearly 49 percent of all BA6 dollars: Army Kwajalein Atoll ($164 million) and Army Test Ranges ($394 million). The proposal for the Army Test Ranges PE is $40 million more than for FY 2010; the Army Kwajalein Atoll remains consistent. A list of the BA6 PEs is in **table 64**.

Budget Activity 7: Operational System Development. The RDT&E BAs are a continuum from basic research (BA1) to developing operational systems in this final BA. BA7 involves leveraging technology to enhance performance and increase capability through new systems and product improvement programs for existing systems.

BA7 is $1.5 billion, or 15 percent, of RDT&E. BA7 is $170 million less than FY 2010 but $70 million more than the FY 2009 experience. A list of the BA7 PEs is in **table 65**.

Two PEs account for 37 percent of BA7: Aerostat Joint Project Office (JPO) for Land Attack Cruise Missile Defense (LACMD) and Aircraft Combat Vehicle Improvement Programs.

Procurement

The Army Procurement proposal for FY 2011 is $30.3 billion, which is

Table 62

Research, Development, Test and Evaluation
BA4: Advanced Component Development and Prototypes

(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Army Missile Defense Systems Integration	90.6	71.8	11.5
Army Space Systems Integration	53.4	118.6	27.6
Air and Missile Defense Systems Engineer	115.6	166.1	
Advanced Tank Armament System (ATAS)	76.1	89.8	136.3
Soldier Support and Survivability	18.1	33.2	76.5
Warfighter Information Network – Tactical	392.1	169.8	190.9
Soldier Systems – Advanced Development	41.6	73.8	48.3
Medical Systems – Advanced Development	29.6	35.9	28.1
Endurance Unmanned Aerial Vehicles			93.0
Tank and Medium Caliber Ammunition	39.6	33.8	42.2
Logistics and Engineering Equipment – Advanced Development	42.9	59.7	80.5
Other	111.0	79.7	69.4
Total	**1,010.5**	**932.0**	**804.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and *RDT&E Justification Book*

Table 63

Research, Development, Test and Evaluation
BA5: System Development and Demonstration

(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Infantry Support Weapons	57.7	83.2	80.3
Future Combat Systems (FCS) Manned Ground Vehicles and Common Ground Vehicle	760.7	275.1	
FCS Unmanned Ground Vehicles	104.6	125.0	249.9
FCS System of Systems Engineering and Program Management	1,022.2	912.4	568.7
FCS Sustainment and Training Research and Development	819.8	655.7	610.4
Non-Line-of-Sight Launch System (NLOS-LS)	253.7	91.2	81.2
Army Integrated Air and Missile Defense (AIAMD)			251.1
Command, Control, Communication System - Engineering Development	9.5	58.7	90.7
Army Integrated Military Human Resources System (A-IMHRS)			101.5
Army Tactical Command and Control Hardware and Software	63.6	79.4	61.0
Landmine Warfare/Barrier – Engineering Development	113.6	72.4	95.6
Weapons and Munitions	101.8	87.0	24.3
Joint Air-to-Ground Missile (JAGM)	114.8	126.8	130.3
Patriot/MEADS Combined Aggregate Program (CAP)	454.7	566.2	467.1
Manned Ground Vehicle		79.6	934.4
Other	1,149.3	1,242.0	1,288.3
Total	**5,025.9**	**4,454.7**	**5,035.0**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and *RDT&E Justification Book*

Table 64

Research, Development, Test and Evaluation
BA6: Management Support

(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Major Test and Evaluation Investment	62.7	51.6	42.1
Army Kwajalein Atoll	169.4	162.7	163.8
Concept Experimentation	33.2	26.4	17.7
Army Test Ranges/Facilities	356.7	352.8	393.9
Army Technical Test Instrumentation and Targets	84.9	84.4	59.0
Technical Information Activities	44.1	51.4	48.3
Survivability/Lethality Analysis	40.0	44.8	41.8
Munitions Standardization, Effectiveness, Safety	44.3	72.9	53.3
Support of Operation Testing	76.2	77.5	68.2
Army Evaluation Center	61.5	67.6	61.5
Program-wide Activities	72.7	77.4	73.7
Other	424.5	127.4	119.0
Total	**1,470.2**	**1,196.7**	**1,142.4**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and *RDT&E Justification Book*

Table 65

Research, Development, Test and Evaluation
BA7: Operational Systems Development

(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Multiple Launch Rocket System (MLRS) Product Improvement Program (PIP)	54.0	27.5	51.6
Aerostat Joint Project Office	344.9	328.4	372.5
Combat Vehicle Improvement Programs	139.1	196.4	204.5
End-Item Industrial Preparation Activities	89.0	102.9	61.1
MQ-1C Gray Eagle Unmanned Aerial Vehicle[5]			123.2
Aircraft Modifications/PIPs	298.6	231.8	135.0
Distributed Common Ground/Surface Systems	88.5	188.5	119.2
Aerial Common Sensor (ACS)		115.4	
Information System Security Program	39.7	60.9	118.1
Global Combat Support System	107.7	144.0	125.6
Satellite Communications (SATCOM) Ground Environment	46.8	39.9	33.7
Tactical Unmanned Aerial Vehicles	100.5	202.1	54.3
Missile/Air Defense PIPs	34.2	39.1	24.3
Other	139.9	146.6	130.5
Total	**1,482.8**	**1,823.4**	**1,553.4**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
[5] Also known, unofficially, as the MQ-1C Sky Warrior UAV.
Source: *President's Budget Highlights for FY11* and *RDT&E Justification Book*

nearly $2 billion more than for FY 2010 but $8.9 billion less than the FY 2009 experience. The FY 2011 total includes $21.3 billion in the base plus $8.9 billion in the OCO supplemental proposal.

The Army Procurement proposal is actually the summation of five separate appropriations:

- Aircraft Procurement, Army;
- Missile Procurement, Army;
- Weapons and Tracked Combat Vehicles Procurement, Army;
- Ammunition Procurement, Army; and
- Other Procurement, Army

The budget proposal for each of the five Procurement appropriations is presented in **table 66**.

A review of the Army Procurement proposal in relation to the DoD Procurement proposal reveals the following:

- The Army Procurement proposal accounts for nearly 14 percent of the total budget for FY 2011, while the overall DoD Procurement budget accounts for 19 percent of the total DoD budget.
- The Army Procurement proposal accounts for nearly 25 percent of the DoD Procurement proposal while the other services and Defense agencies account for 75 percent of DoD Procurement.
- Army Procurement relies on the OCO supplemental for $8.9 billion, i.e., 26 percent of all Army Procurement funds, while only 18 percent of all DoD Procurement funds are in the OCO supplemental. The Army is more dependent than DoD on OCO supplemental funds for material acquisition.

The Procurement appropriations include various budget activities, among them:

- procuring end items, such as the Apache Longbow weapon systems and Stryker;
- modifying existing systems, typically to enhance capability, reduce operating costs and extend system life;
- acquiring spares, which are typically depot-level reparables; and
- improving facilities that support the manufacture and modification of systems.

In addition, individual systems within each appropriation are identified by a Budget Line Item Number (BLIN). A system may, in fact, be a system of systems, such as the Army Data Distribution System (ADDS), which includes three radio systems.

Table 66

Procurement Summary by Appropriation

($ billions[1])

	FY09[2]	FY10[3]	FY11[4]
Aircraft	6.4	6.5	7.4
Missiles	2.9	1.7	2.2
Weapons and Tracked Combat Vehicles	6.1	3.5	2.4
Ammunition	2.4	2.4	2.7
Other Procurement	21.3	16.4	15.6
Total	**39.1**	**30.5**	**30.3**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD Budget Request for FY11 (Comptroller) Exhibit P-1, February 2010

The following sections provide information on each Procurement appropriation.

Aircraft Procurement, Army. The Aircraft Procurement, Army (APA) appropriation includes funds for the procurement of aircraft, aircraft modifications, spare parts and repair and support equipment and facilities. The FY 2011 budget proposal is for $7.3 billion, which is $1 billion more than for both FY 2010 and FY 2009.

The APA appropriation is the second largest Procurement appropriation and accounts for 24 percent of the Procurement budget. See **table 67**.

Seven systems account for 66 percent of all Aviation Procurement in FY 2011, and for the first time, two of the seven systems are unmanned aerial vehicles (UAVs):

- UH-60 Black Hawk ($1.291 billion);
- CH-47 Chinook Cargo Helicopter ($1.172 billion);
- RQ-7 Shadow UAV Modifications ($603 million);
- AH-64 Apache Modifications ($593 million);
- MQ-1C Gray Eagle UAV ($506 million);
- Aircraft Survivability Equipment (ASE) ($24.5 million);
- Infrared Countermeasures ($372 million); and
- AH-64 Apache Helicopter Block III ($333 million).

Missile Procurement, Army. The Missile Procurement, Army appropriation includes funds for the procurement of missiles, missile modifications, spare parts and support equipment and facilities.

The budget proposal for FY 2011 is $2.2 billion, which is $5 billion more than in FY 2010 but $6 billion less than the FY 2009 experience. The Missile Procurement

Table 67

Aircraft Procurement, Army

(Total Obligational Authority, $ millions[1])

	FY09[2]		FY10[3]		FY11[4]	
	QTY	$	QTY	$	QTY	$
Aircraft						
UH-60 Black Hawk Utility Helicopter (Multiyear Procurement)[5]	66	974.7	81	1,292.1	74	1,291.1
CH-47 Chinook Cargo Helicopter[5]	28	695.7	37	950.2	42	1,171.9
C-12 Cargo Airplane					5	78.1
AH-64 Apache Helicopter Block III			8	160.7	16	332.7
MQ-1C Gray Eagle Unmanned Aerial Vehicle (UAV)[6]			876	79.5	312	37.6
RQ-11 Raven UAV			24	480.2	29	506.3
Other		674.9		532.5		766.8
Subtotal		**2,345.3**		**3,495.2**		**4,184.4**
Modifications						
Guardrail/Airborne Reconnaissance Low		147.7		111.5		60.1
Multisensor Airborne Reconnaissance (Multiyear Procurement)		23.2		75.3		103.2
AH-64 Apache Modifications[5]		1,769.1		589.1		593.0
CH-47 Cargo Helicopter Modifications (Multiyear Procurement)[5]		651.7		87.0		149.1
C-12 Airplane Modifications						122.3
MQ-1 Payload Unmanned Aircraft System (UAS)				87.2		104.0
Utility Helicopter Modifications		41.0		88.6		77.6
Kiowa Warrior		120.2		174.7		281.7
Airborne Avionics		147.0		233.7		244.4
Global Air Traffic Management Rollup		80.0		102.9		100.9
RQ-7 Shadow Unmanned Aerial Vehicle (UAV) Modifications				607.9		602.8
Other		111.7		57.6		29.3
Subtotal		**3,091.6**		**2,215.3**		**2,468.4**
Spares						
Spare Parts (Aircraft)		6.9		25.2		7.3
Subtotal		**6.9**		**25.2**		**7.3**
Support Equipment and Facilities						
Aircraft Survivability Equipment (ASE)		59.1		25.9		24.5
ASE Infrared Countermeasure		565.5		285.0		372.2
Airborne Communications		24.6		11.1		
Common Ground Equipment		95.7		111.1		141.8
Aircrew Integrated Systems		48.1		61.6		52.4
Air Traffic Control		122.4		76.8		90.4
Other		10.0		9.2		9.3
Subtotal		**925.5**		**580.6**		**690.6**
Total		**6,369.2**		**6,316.3**		**7,350.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimate and include OCO.
[5] Less Advance Procurement.
[6] Also known, unofficially, as the MQ-1C Sky Warrior UAV.
Source: *President's Budget Highlights for FY11* and DoD Budget Request for FY11 (Comptroller) Exhibit P-1, February 2010

Table 68

Missile Procurement, Army

(Total Obligational Authority, $ millions[1])

	FY09[2]		FY10[3]		FY11[4]	
	QTY	$	QTY	$	QTY	$
Missiles						
Patriot Advanced Capability-3 (PAC-3)	108	510.6	58	341.3	78	480.2
Surface-Launched Advanced Medium Range Air-to-Air System (SLAMRAAM)[5]						116.7
Hellfire[5]	2,945	253.1	2,165	227.1	240	222.3
Javelin	1,320	367.9	1,265	258.6	715	163.9
Tube-Launced Optically-Tracked, Wire-Guided (TOW) 2 System[5]	9,022	394.3	1,849	141.9	1,200	143.1
Guided Multiple Launch Rocket System (MLRS) Rockets	2,652	309.2	3,228	353.3	2,592	291.0
MLRS Reduced Range Practice Rockets	4,014	25.2	2,064	15.6	2,058	15.9
High Mobility Artillery Rocket System (HIMARS)	57	227.5	46	208.4	44	211.5
Other		40.3				
Subtotal		**2,128.2**		**1,546.2**		**2,043.7**
Modifications of Missiles						
Patriot		515.4		44.6		57.2
Improved Target Acquisition (ITAS) for TOW		136.7		7.0		53.9
Multiple Launch Rocket System (MLRS)		1.9		22.4		8.2
High Mobility Artillery Rocket System (HIMARS)		33.1		70.9		39.4
Subtotal		**687.1**		**144.9**		**158.6**
Spares and Repair Parts		25.9		22.3		19.6
Support Equipment and Facilities		10.5		9.7		9.3
Total		**2,851.7**		**1,723.1**		**2,231.3**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
[5] Less Advance Procurement.
Source: *President's Budget Highlights for FY11*; DoD *Budget Request for FY11*, Exhibit P-1, February 2010

appropriation proposal is the smallest Procurement appropriation but has the largest proportional increase at nearly 30 percent. In this appropriation, the actual procurement of the eight missile systems accounts for 92 percent of all funds. See **table 68**.

Weapons and Tracked Combat Vehicles Procurement, Army. The Weapons and Tracked Combat Vehicles (WTCV) appropriation includes funds for four budget activities: Tracked Combat Vehicles, Modification of Tracked Combat Vehicles, Weapons and Other Combat Vehicles, and Modification of Weapons and Other Combat Vehicles.

The Army budget proposal is $2.4 billion, which is just 8 percent of all Procurement funds. The FY 2011 proposal is down from FY 2010 by $1 billion and down $3.7 billion from the FY 2009 experience. These amounts are a dramatic shift from the days of the heavy force, when as recently as FY 2000, WCTV was second only to OPA in funding. See **table 69**.

Within the WTCV appropriation, the only acquisition is for 83 Stryker vehicles at $300 million, as opposed to a modification. In addition, funds for modifications to Stryker vehicles systems ($591 million) are the largest single proposal in the modification activity. Stryker accounts for 37 percent of all WCTV funds in FY 2011.

Ammunition Procurement, Army. The Ammunition Procurement appropriation includes funding for the acquisition of ammunition end items and ammunition production base support. The Army budget proposal for FY 2011 is $2.6 billion, which is an increase of more than $200 million over both FY 2010 and the FY 2009 experience. Even with the continuing wars, the Ammunition appropriation is only 9 percent of all Procurement. See **table 70**.

Table 69

Weapons and Tracked Combat Vehicles, Army

(Total Obligational Authority, $ millions[1])

	FY09[2]		FY10[3]		FY11[4]	
	QTY	$	QTY	$	QTY	$
Tracked Combat Vehicles						
Bradley Fighting Vehicle	94	394.8				
Future Combat Systems (FCS)		128.0				
FCS Spin-outs		24.1		285.0		
Stryker	352	1,499.0	93	512.8	83	299.5
Other		57.1		41.9		
Subtotal		**2,103.0**		**839.7**		**299.5**
Modifications of Tracked Combat Vehicles						
Armored Breacher Vehicle			13	63.1	17	77.9
Stryker Modifications						591.4
Fire Support Team (FIST) Vehicle Modifications		28.9		70.1		31.1
Bradley Fighting Vehicle Systems (BFVS) Modifications		1,095.6		768.3		215.1
Howitzer M109A6 Paladin		36.4		42.6		105.3
Abrams Upgrade Program	111	580.5	22	185.0	21	183.0
Improved Recovery Vehicle	91	254.1	24	96.5	17	69.6
Joint Assault Bridge	2	10.0	212	70.4	9	44.1
M1 Abrams Tank Modifications		737.1		183.3		230.9
Production Base Support		7.1		6.6		3.1
M88 Family of Vehicles Modifications						9.2
Subtotal		**2,749.8**		**1,485.9**		**1,560.7**
Total, Tracked Combat Vehicles		**4,852.8**		**2,325.6**		**1,860.3**
Weapons and Other Combat Vehicles						
Howitzer, Light Towed, 105mm, M119	90	112.6	70	95.3	2	5.6
M240 Medium Machine Gun 7.62mm	8,416	83.9	1,400	23.4	1,655	28.2
Machine Gun, .50-caliber M2 Roll	7,568	99.6	6,330	84.3	5,900	79.5
M249 Machine Gun, 5.56mm Squad Automatic Weapon (SAW)	5,150	22.1	1,550	7.5		
MK-19 Grenade Machine Gun (40mm)	976	17.3	349	7.7	238	4.5
Mortar Systems	351	17.0	315	14.7	274	25.7
XM320 Grenade Launcher Module	7,857	21.0	7,324	29.9	9,297	38.8
XM110 Semi-Automatic Sniper System	439	7.4	422	6.2	155	5.2
Carbine M4, 5.56mm	29,220	52.0	12,000	20.4	11,494	20.2
Shotgun, Modular Accessory System	4,884	9.1			3,659	7.2
Common Remotely Operated Weapons Stations (CROWS)	2,423	601.5	2,106	495.0	425	100.0
Howitzer, 155mm, Light Weight	38	120.9	53	157.4	14	62.0
Other		1.9		4.6		22.5
Subtotal		**1,166.2**		**946.5**		**399.2**
Modifications of Weapons and Other Combat Vehicles		60.3		191.2		139.3
Support Equipment and Facilities		40.9		34.7		12.3
Total, Weapons and Other Combat Vehicles		**1,267.4**		**1,172.5**		**550.6**
Total		**6,120.2**		**3,498.1**		**2,411.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD *Budget Request for FY11*, Exhibit P-1, February 2010

Table 70

Ammunition Procurement, Army
(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Small- and Medium-Caliber	903.4	796.7	987.9
Mortars	214.8	184.2	254.9
Tank	140.6	120.9	122.6
Artillery	247.5	313.1	311.5
Artillery Fuzes	19.0	27.6	37.6
Mines/Countermine	5.4	7.8	8.8
Rockets	217.1	311.8	321.3
Demolitions, Grenades, Signals	170.6	151.5	114.9
Non-Lethal Ammunition Equipment	69.4	39.4	20.3
Production Base Improvements	358.6	325.0	382.2
Other	100.6	137.6	120.0
Total	**2,447.0**	**2,415.4**	**2,682.0**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD *Budget Request for FY11* (Comptroller) Exhibit P-1, February 2010

The Ammunition appropriation is somewhat different from the other Procurement appropriations because the budget lines are actually consolidations of types of munitions and not a particular system. Small- and medium-caliber ammunition accounts for 37 percent of the entire appropriation. In addition, Production Base Improvements account for $382 million, or 14 percent, of the entire appropriation. Six ammunition lines account for 79 percent of the appropriation in FY 2011:

- Small- and Medium-Caliber ($988 million);
- Rockets ($321 million);
- Artillery ($311 million);
- Mortars ($255 million);
- Tank ($123 million); and
- Demolitions, Grenades, Signals ($115 million).

Other Procurement, Army. The budget proposal for Other Procurement, Army (OPA) is $15.6 billion in FY 2011, which is more than 51 percent of all Army Procurement funds. The $15.6 billion is an increase of more than $1.2 billion, or 8 percent, over the FY 2010 amount but $7 billion less than the FY 2009 experience.

The OPA appropriation includes three principal BAs plus spare and repair parts. The principal activities involve very different types of equipment:

- OPA1: Tactical and Support Vehicles—29 percent of OPA;
- OPA2: Communications and Electronics Equipment—46 percent of OPA;
- OPA3: Other Support Equipment—25 percent of OPA; and
- OPA4: Spares and Repair Parts—less than 1 percent.

A set of nine lines account for 55 percent of all OPA:

- Family of Medium Tactical Vehicles ($1.435 billion) (OPA1);
- Family of Heavy Tactical Vehicles ($738 million) (OPA1);
- Electronic Equipment–Tactical Surveillance ($2.347 billion) (OPA2);
- Base Communications ($809) (OPA2);
- Electronic Equipment–Tactical C2 ($765 million) (OPA2);
- Electronic Equipment–Electronic Warfare (EW) ($715 million) (OPA2);
- Electronic Equipment–Tactical Intelligence and Related Activities (TIARA) ($558 million) (OPA2);
- Combat Communications ($502 million) (OPA2); and
- Combat Services Support Equipment ($676 million) (OPA3).

See **table 71** for a summary of the OPA proposal. Information on each of the three principal OPA budget activities and the lines within each follows.

Table 71

Other Procurement, Army
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
OPA1: Tactical and Support Vehicles	9,458.7	5,085.9	4,488.8
OPA2: Communications and Electronics Equipment	7,914.3	6,101.6	7,232.2
OPA3: Other Support Equipment	3,894.7	3,130.5	3,830.0
OPA4: Spares and Repair Parts	33.5	35.5	38.7
Total OPA	**21,301.3**	**14,353.4**	**15,589.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD *Budget Request for FY11* (Comptroller) Exhibit P-1, February 2010

OPA1: Tactical and Support Vehicles. The OPA1 proposal is $4.5 billion, or 29 percent, of OPA for FY 2011. The proposal is $0.6 billion less than for FY 2010 and nearly $5 billion less than the FY 2009 experience. The principal decline is in High-Mobility Multipurpose Wheeled Vehicles (HMMWVs), Family of Heavy Tactical Vehicles and All Other Vehicles and Trailers. See **table 72**.

OPA1 includes two high-dollar groups of systems:

- Family of Medium Tactical Vehicles (FMTV), funded at $1.435 billion, is a complete series of trucks and trailers, based on a common chassis, that vary by payload and mission.
- Family of Heavy Tactical Vehicles (FHTV), funded at $738 million, is a complete series of trucks and trailers, based on a common chassis, and used for line haul, local haul, unit resupply and other missions throughout the tactical environment. The FY 2011 level is 47 percent less than FY 2010 and 63 percent below the FY 2009 experience.

OPA2: Communications and Electronics Equipment. The OPA2 proposal is $6.7 billion for FY 2011, which is 46 percent of all OPA. The FY 2011 amount is nearly $1.2 billion more than for FY 2010 but $0.8 billion less than the FY 2009 experience. See **table 73**.

In OPA2, individual lines are grouped by functions; OPA3 uses this same method. The five largest groups account for 77 percent of OPA2:

- Electronic Equipment–Tactical Surveillance ($2.347 billion);
- Base Communications ($809 million);
- Electronic Equipment–Tactical Command and Control (C2) ($765 million);
- Electronic Equipment–Electronic Warfare (EW) ($715 million); and
- Electronic Equipment–Tactical Intelligence and Related Activities (TIARA) ($558 million).

OPA3: Other Support Equipment. The OPA3 proposal is $3.8 billion, or 25 percent, of OPA in FY 2011. This amount is $0.7 billion more than FY for 2010 and virtually the same as the FY 2009 experience. See **table 74**.

Table 72

Other Procurement, Army
OPA1: Tactical, Non-Tactical and Support Vehicles
(Total Obligational Authority, $ millions[1])

	FY09[2]		FY10[3]		FY11[4]	
	QTY	$	QTY	$	QTY	$
Tactical and Support						
High-Mobility Multipurpose Wheeled Vehicles (HMMWV)	9,202	1,511.1	8,102	1,344.2		
Family of Medium Tactical Vehicles (FMTV)	1,877	631.5	4,349	1,359.6	4,652	1,434.5
Family of Heavy Tactical Vehicles (FMTV)		1,975.0		1,414.2		738.4
Mine Protection Vehicle Family	155	890.8	379	278.3	2,233	367.7
Modification of In-Service Equipment		479.6		2.3		369.3
All Other Vehicles and Trailers		3,956.4		682.2		1,554.1
Subtotal		**9,444.4**		**5,080.9**		**4,464.0**
Non-Tactical						
Heavy Armored Sedan	3	2.3	4	2.0	4	1.9
Passenger Carrying Vehicles		8.6				3.3
Other Non-Tactical Vehicles		3.4		3.0		19.6
Subtotal		**14.3**		**5.0**		**24.8**
Total OPA1		**9,458.7**		**5,085.9**		**4,488.8**
Total OPA		**21,301.3**		**14,353.4**		**15,589.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD *Budget Request for FY11* (Comptroller) Exhibits P-1 and P-40, February 2010

Table 73

Other Procurement, Army
OPA2: Communications and Electronic Equipment
(Total Obligational Authority, $ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Joint Communications	413.6	572.7	446.1
Satellite Communications	296.6	487.4	256.0
Combat Support Communications		6.1	0.9
Command, Control and Communications (C3) System	31.4	22.9	20.4
Combat Communications	523.8	209.3	502.0
Intelligence Communications	1.5	1.4	1.5
Information Security	222.0	94.6	89.3
Long Haul Communications	349.6	58.5	110.1
Base Communications	614.4	955.1	809.2
Tactical Intelligence and Related Activities (TIARA)	1,078.9	422.7	557.7
Electronic Warfare (EW)	597.0	383.1	715.0
Tactical Surveillance	2,634.2	1,883.1	2,346.9
Tactical Command and Control (C2)	757.0	656.5	765.4
Automation	351.2	369.8	427.6
Audio Visual Systems (A/V)	19.4	7.9	7.1
Modifications to Tactical Systems and Equipment	15.1		
Support	8.6	0.5	177.1
Total OPA2	**7,500.8**	**5,558.9**	**6,728.7**
Total OPA	**21,301.3**	**14,353.4**	**15,589.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD *Budget Request for FY11* (Comptroller) Exhibit P-1, February 2010

Table 74

Other Procurement, Army
OPA3: Other Support Equipment
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Smoke/Obscurant Systems	86.4	200.4	198.7
Bridging Equipment	407.5	201.9	171.9
Engineer Equipment (Non-construction)	324.4	163.0	327.6
Combat Service Support Equipment	289.8	471.5	676.3
Petroleum Equipment	75.3	143.2	230.2
Water Equipment	50.6	10.2	15.7
Medical Equipment	73.1	48.2	39.0
Maintenance Equipment	61.8	152.8	204.4
Construction Equipment	343.0	287.0	343.1
Rail Float Containerization Equipment	193.7	224.3	248.5
Generators	240.6	212.6	151.1
Materiel Handling Equipment	149.8	189.5	120.9
Training Equipment	414.7	505.1	453.4
Test Measuring and Diagnostic Equipment	78.1	138.6	163.0
Other Support Equipment	1,105.8	182.1	486.3
Total OPA3	**3,894.7**	**3,130.5**	**3,830.0**
Total OPA	**21,301.3**	**14,353.4**	**15,589.7**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11* and DoD *Budget Request for FY11* (Comptroller) Exhibit P-1, February 2010

In OPA3, individual lines are grouped by function, which is the same as OPA2. The five largest groups account for 53 percent of OPA2:

- Combat Service Support Equipment ($676 million);
- Training Equipment ($453 million);
- Construction Equipment ($343 million);
- Engineer Equipment (Nonconstruction) ($328 million); and
- Rail Float Containerization Equipment ($248 million).

OPA4: Spares and Repair Parts. OPA4 includes only $39 million, or less than 1 percent, of OPA. This is $3 million more than in FY 2010 and $5 million more than the FY 2009 experience.

Joint Improvised Explosive Device Defeat Fund

The Army Chief of Staff established the Army Improvised Explosive Device (IED) Task Force in October 2003. This was followed by a joint task force and, in February 2006, by the permanent Joint IED Defeat Organization (JIEDDO). JIEDDO's mission is to comprehensively attack and defeat the IED threat.

The Joint Improvised Explosive Device Defeat Fund (JIEDDF) is the budget request for resources to counter and defeat the IED threat globally. The budget proposal includes funds to sustain JIEDDO's rapid acquisition capability as

Table 75

Joint Improvised Explosive Device Defeat Fund
($ millions[1])

	FY09[2]	FY10	FY11
Lines of Operation (LOO)			
LOO 1: Attack the Network[3]	1,075	865	1,434
LOO 2: Defeat the Device[3]	1,407	735	1,529
LOO 3: Train the Force[3]	534	162	286
LOO 4: Staff and Infrastructure[4]	101	121	217
Total	**3,117**	**1,883**	**3,467**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] Include OCO requests.
[4] FY09 figures include OCO request; FY10 and FY11 figures are base.
Source: DoD *Budget Request for FY11* (Comptroller) Exhibit P-1, February 2010

well as its research and development efforts to reduce the effect of IEDs as weapons of strategic influence.

The budget is organized along JIEDDO's four lines of operation (LOOs). Three LOOs directly focus on the mission: Attack the Network, Defeat the Device and Train the Force. The fourth LOO provides Staff and Infrastructure support to the mission-oriented LOOs.

The FY 2011 JIEDDO proposal is nearly $1.6 billion more than in the FY 2010 budget and more than $0.3 billion greater than the FY 2009 experience. See **table 75**.

Installations and Facilities

Army installations and facilities are the platforms for generating, projecting and sustaining Army forces. They support training, readiness and transformation and sustain operations around the world with reachback capability. Army installations provide safe workplaces for Army civilians and many of the contractors who support the Army. In addition, installations provide homes and communities for Soldiers and their families.

The locations of installations and facilities in the United States and around the world are generally the result of the 40-year Cold War strategy. However, DoD and the Army are pursuing new strategic stationing that creates a global infrastructure with modern power-projection capabilities to better respond to worldwide threats. The Army is integrating and synchronizing various initiatives including Global Defense Posture Realignment (GDPR), Base Realignment and Closure and Army Transformation.

As part of GDPR, the Army is returning more than 50,000 Soldiers and their families from Germany and elsewhere to installations in the United States. The Army BRAC 2005 implementation involves completing some 1,200 stationing actions by the statutory deadline of 15 September 2011. The Grow the Army initiative increases the active Army by 65,000, the Army National Guard by 8,200 and the Army Reserve by 1,000 Soldiers—all with stationing implications.

Soldiers deserve modern barracks and family housing commensurate with the service they provide to the nation. Funding for construction, renovation and disposing of facilities and infrastructure is in the Military Construction (MILCON) appropriation, Army Family Housing (AFH) and BRAC. The MILCON, AFH and BRAC funds are essential to achieving strategic stationing for the 21st century. The FY 2011 budget proposal includes $6.2 billion for MILCON, $610 million for AFH and $1.1 billion for BRAC.

Military Construction

The MILCON budget proposal is for $6.2 billion in FY 2011. The MILCON group includes Military Construction, Army (MCA) for the active component, Military Construction, Army National Guard (MCARNG) and Military Construction, Army Reserve (MCAR) appropriations.

The MILCON appropriations provide funding for construction projects involving new and renovated facilities in five-year funds—i.e., the FY 2011 appropriation remains available for obligation until 30 September 2015.

The total MILCON proposal for FY 2011 is $773 million more than in the FY 2010 budget and nearly $1 billion less than the FY 2009 experience. The MCA and MCARNG increase from FY 2010 to FY 2011, but MCAR decreases by $114 million. A summary of the three MILCON appropriations is in **table 76**. The subsequent subparagraphs provide insights into each of the MILCON appropriations.

The MILCON budget continues to support facilities improvements across the Army, with focus on facilities in support of the Army's transformation to a brigade-centric modular force, the growth of the Army and whole barracks renewal. It also supports readiness by recapitalizing aging

Table 76

Military Construction
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Army	6,062.1	4,413.9	5,009.0
Army National Guard	850.4	582.1	873.7
Army Reserve	282.6	431.6	318.2
Total	**7,195.1**	**5,427.5**	**6,200.8**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO and Recovery Act/Stimulus.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Table 77

Military Construction, Army
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Facility Categories			
Grow the Army		651	698
Replace Aging Facilities		987	845
Modularity		364	1,268
Planning and Design		227	249
Barracks Initiative		655	749
Global Defense Posture		279	189
Minor Construction		25	23
Improve Quality of Life		14	51
Overseas Contingency Operations	1,326	1,167	930
Other[5]	4,736	287	6
Total	**6,062**	**4,656**	**5,008**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
[5] For FY09, "Other" refers to all Facility Categories listed here, excluding OCO.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

military facilities, providing facilities for training and deployment, revitalizing infrastructure and providing reserve component readiness facilities. The MILCON budget integrates BRAC, GDPR and Army Transformation into a fully synchronized program.

Military Construction, Army. The MCA budget proposal is $5 billion, which is 7.6 percent more than in the FY 2010 budget but $1 billion less than the FY 2009 experience. The MCA provides money for engineering and construction projects to improve operational and quality-of-life infrastructure—where Soldiers train, work and live in the United States and overseas. See **table 77.**

Military Construction, Army National Guard. The MCARNG appropriation proposal is for $874 million in FY 2011, which is nearly $292 million more than in FY 2010 but about the same amount as in FY 2009. The budget proposal focuses on replacing aging facilities and preparing facilities to support the conversion to the modular force. The budget proposal pursues providing state-of-the-art, community-based installations and training sites. See **table 78**.

Military Construction, Army Reserve. The MCAR proposal is for $318 million in FY 2011, which is $114 million less than in FY 2010 but $35 million more than the FY 2009 experience. The request for Grow the Army is by far the largest. See **table 79**.

Table 78

Military Construction, Army National Guard
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Facility Categories			
Grow the Army		91	86
Replace Aging Facilities		246	374
Modularity		98	299
Planning and Design		47	26
Barracks Initiative		2	55
Minor Construction		30	11
New Mission			23
Other		68	
Total	**850**	**582**	**874**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Table 79

Military Construction, Army Reserve
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Facility Categories			
Grow the Army		304	212
Replace Aging Facilities		45	77
Planning and Design		23	26
Minor Construction		4	3
Other		56	
Total	**283**	**432**	**318**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include OCO.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Family Housing

The Army Family Housing (AFH) budget proposal is for $610 million, which is a decrease of $187 million from FY 2010 and $747 million from FY 2009. The AFH appropriation includes two separate accounts: Family Housing Construction ($92 million) and Family Housing Operations ($518 million). See **table 80**.

Table 80

Army Family Housing Budget Proposal

($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Construction			
New/Replace Construction		50	55
Improvement[5]		219	35
Planning and Design		4	2
Subtotal	**630**	**273**	**92**
Operations			
Operation and Utilities		170	167
Maintenance		116	123
Leasing		206	201
Privatization		32	27
Subtotal	**727**	**524**	**518**
Total	**1,357**	**797**	**610**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include Recovery Act/Stimulus.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
[5] Residential Communities Initiative equity transferred to Family Housing Improvement Fund.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

AFH supports the operation, maintenance, leasing, privatization and construction of Army family housing worldwide and the implementation of the Army Family Housing Master Plan. The AFH construction program provides for building new housing units at locations where building is more economical than revitalizing or where adequate off-post housing and privatization are not feasible or available (see **table 81**). The construction program also includes site preparation, demolition and initial outfitting with fixtures and integral equipment, along with associated facilities such as roads, driveways, walks, utility systems and community facilities.

The Army follows the DoD policy for providing quality housing to military families: First, provide a housing allowance to the servicemembers and rely on the local community to provide housing for military families; second, if the market cannot supply sufficient quantities of quality and affordable housing, then use privatization to supply housing; third, if privatization is not feasible, then provide government-owned or government-leased housing.

Privatization involves private-sector participation to replace construction funds in implementing a long-term housing solution. Privatization enables the Army to leverage housing dollars and replace inadequate housing stock rapidly rather than over 30 years. See **table 81** for the list of privatization actions in the FY 2011 budget proposal.

Table 81

Army Family Housing – Construction/Privatization

($ millions*)

	FY11	
	Units	$
New Construction		
Baumholder, Germany	64	26
Subtotal	**64**	**26**
Privatization		
Carlisle Barracks, PA Phase II	56	15
Fort Eustis, VA Phase II	125	20
Subtotal	**181**	**35**
Total	**245**	**61**

* Numbers may not add because of rounding
Source: *President's Budget Highlights for FY11*; DoD Budget Request for FY11, Exhibit C-1

Table 82

Base Realignment and Closure, Army[1]

($ millions[2])

	FY09[3]	FY10[4]	FY11[5]
BRAC	102.7	139.0	73.6
BRAC 2005	4,354.4	4,057.0	1,012.4
Total	**4,457.1**	**4,196.0**	**1,086.0**

[1] BRAC is a DoD-centralized summary appropriation with budget year information passed from each DoD component.
[2] Numbers may not add because of rounding.
[3] FY09 figures are actual expenditures.
[4] FY10 figures indicate enacted funding.
[5] FY11 figures indicate budget estimates.
Source: *President's Budget Highlights for FY11*; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Base Realignment and Closure

In addition to the MILCON appropriations, Congress appropriates funds for Base Realignment and Closure to close excessive installations, to save operation and maintenance costs and to move forces and other organizations to improve installation efficiency.

The current round, BRAC 2005, focuses on the reconfiguration of operational capacity to maximize warfighting capability and efficiency. The BRAC proposal for FY 2011 is $1.1 billion, which is $3 billion less than in FY 2010 and nearly $3.5 billion less than the FY 2009 experience. See **table 82**.

The first BRAC round began with the Defense Base Realignment and Closure Act of 1988 (Public Law 100-526), which had a goal of identifying and closing unneeded military installations in the United States. Subsequently, Congress authorized three additional rounds in FY 1991, FY 1993 and FY 1995. As of 13 July 2001 the closures

(112) and realignments (27) from the first four rounds of BRAC were complete.

In addition, the Army has executed an aggressive overseas closure program since 1990. The Army closed 680 installations overseas—the majority in Europe; this was comparable to closing 12 of the Army's largest installations.

The Army recognizes that installations and facilities are essential to support the expeditionary Army at war, to support training and force readiness and to provide Soldiers and their families with the quality of life they deserve. The budget proposes resources to support unit restationing, endstrength growth and the transition to a modular force. The budget also proposes resources to provide high-quality housing, schooling and support services that are essential to helping retain the all-volunteer force.

Environmental Restoration Program

The Environmental Restoration, Army (ERA) proposal is $445 billion, which is a slight increase from the FY 2010 proposal. The accounting for ERA funds is in OMA; therefore, actual obligation data are not available for FY 2009. See **table 83**.

The ERA program focuses on reducing the risks to human health and the environment at active installations, BRAC installations and Formerly Used Defense Sites (FUDS). The Army is the DoD executive agent for FUDS and therefore responsible for cleanup at all DoD FUDS properties. Congress requires DoD to comply with federal, state and local environmental laws, as well as applicable host-nation environmental standards. The Environmental Restoration program includes:

- conservation to protect and enhance natural and cultural resources;
- restoration to identify, assess and remediate contamination from hazardous substances, military munitions and pollutants from previous military operations in the Defense Environmental Restoration Program;
- compliance to ensure that DoD operations meet or exceed federal, state, local and host-nation environmental requirements; and
- pollution prevention to promote the reduction or elimination of the amount of waste, including hazardous and toxic chemicals, that enters the environment by focusing on the source of pollution instead of the end result.

Table 83

Environmental Restoration, Army

($ millions)

FY09[1]	FY10[2]	FY11[3]
	423	445

[1] ERA is executed in Operation and Maintenance, Army; therefore, no FY09 actual data are available.
[2] FY10 figures indicate enacted funding.
[3] FY11 figures indicate budget estimates.
Source: *President's Budget Highlights for FY11*, February 2010

Chemical Demilitarization Program

The FY 2011 budget proposes nearly $1.5 billion in the Chemical Agents and Munitions Destruction, Army (CAMD,A) account, which is nearly $1 billion less than the FY 2010 proposal and nearly the same as the FY 2009 experience. The Chemical Demilitarization Program provides for the destruction of the U.S. stockpile of lethal chemical agents and munitions and related (non-stockpile) materiel. The program complies with the U.S. obligation to destroy all such weapons under the Chemical Weapons Convention (CWC) of 1997. See **table 84**.

Table 84

Chemical Agents and Munitions Destruction, Army

($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
BA1: Operation and Maintenance	1,152.7	1,146.8	1,067.4
BA2: Research and Development	288.9	401.3	392.8
BA3: Procurement	64.1	12.7	7.1
Total	**1,505.6**	**1,560.8**	**1,467.3**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: *DoD* Budget Estimates for FY11, Chemical Agents and Munitions Destruction, Defense

Army Working Capital Fund

The Army Working Capital Fund (AWCF), also known as the Defense Working Capital Fund, Army (DWCF,A), operates numerous commercial and industrial facilities that provide essential readiness and sustainability support services to the warfighting force. The AWCF includes two activities group: Supply Management and Industrial Operations.

The AWCF, like all DWCFs, operates under a revolving fund concept—i.e., the AWCF relies upon revenue from sales to finance operations rather than on appropriations from Congress. Since the AWCF operates on revenue and not direct appropriations, the AWCF is not subject to fiscal-year limitations on obligating money. The AWCF functions as a businesslike enterprise, managing expenses, generating revenue to cover the full costs of operations on a break-even basis over time but without making a profit or incurring a loss, and managing cash on hand to support current operations.

Table 85

Army Working Capital Fund Revenues and Expenses
($ millions[1])

	FY09[2]	FY10[3]	FY11[3]
Revenue			
Supply Management	10,116.7	8,620.7	7,566.9
Industrial Operations[4]	6,235.5	6,549.0	6,510.3
Total	**16,352.2**	**15,169.7**	**14,077.2**
Expenses			
Supply Management	9,600.2	8,635.7	7,890.4
Industrial Operations[4]	6,267.1	6,546.0	6,607.1
Total	**15,867.3**	**15,181.7**	**14,497.5**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 and FY11 figures indicate budget estimates.
[4] Previously reported as Depot Maintenance and Ordnance.
Source: Department of the Army's *Army Working Capital Fund FY11, President's Budget*, February 2010

Revenues and Expenses

The AWCF generates revenue from the sale of materiel and services and accumulates expenses from the materiel that it buys as well as all in-house costs. The intent is to break even annually, but breaking even across multiple years is more likely. In FY 2009 the net of revenue minus expenses was a profit of almost $500 million; the FY 2010 and FY 1011 estimates are to essentially break even.

The AWCF is a big business with annual revenue of between $14 billion and $16 billion. The bulk of the revenue is from sales to Army customers. The FY 2011 revenue estimate equates to almost 6 percent of the Army total budget. See **table 85** for revenue and expense data.

Customer Rates

The customer rates establish the ultimate price that customers pay for materiel or services. To continue to operate, the AWCF needs to recover full costs, which includes all direct and indirect costs and any losses from prior years. The fund computes rates to recover the full costs of operations, which include the accumulated operating results from prior years, i.e., losses or profits. The customer rates should enable the AWCF to break even at the end of the year, without making a profit or incurring a loss. The customer rates vary by activity group:

- **Supply Management** buys and maintains assigned stocks of materiel for sale to its customers.
- **Industrial Operations** maintains end items and depot-level reparables and manufactures, renovates, stores and demilitarizes munitions for all services within DoD and for foreign military customers.

Table 86

Army Working Capital Fund Customer Rate Changes

	FY09	FY10	FY11[1]
Supply Management	11.8%	12.0%	14.8%
Industrial Operations[2]	-3.6%	-8.2%	-1.2%

[1] FY11 price change to customer reflects lower sales based on fewer deployed forces in support of Operation Iraqi Freedom. Negative Industrial Operations price change to customer results from return of positive accumulated operating results.
[2] Previously reported as Depot Maintenance and Ordnance.
Source: Department of the Army's *Army Working Capital Fund FY11, President's Budget*, February 2010

Table 87

Army Working Capital Fund Direct Appropriation
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
War Reserve Secondary Items	102.2	38.4	54.6
Supplemental Funding			
Army Prepositioned Stocks	443.2	0.0	0.0
Fuel	0.0	8.8	0.0
Total	**545.4**	**47.2**	**54.6**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 figures indicate enacted funding.
[4] FY11 figures indicate budget estimates.
Source: Department of the Army's *Army Working Capital Fund FY11, President's Budget*, February 2010

Rate changes are expressed as a percentage of change from the previous year. The rate changes in the budget proposal are in **table 86.**

Direct Appropriated Funds

The AWCF may request direct appropriated funds from Congress to cover expenses that are not directly related to the cost of doing business. The fund may request direct appropriation to ensure competitive, stabilized rates for peacetime customers.

The fund may also request direct appropriations for the increases in capacity and capability to meet mobilization and wartime surge requirements. The budget request for direct appropriated funds is $54.6 million in FY 2011, which is 42 percent more than the FY 2010 proposal but nearly 50 percent less than the FY 2009 experience. See **table 87**.

Capital Funds

The AWCF also request direct appropriated funds for capital investment. The Supply Management Capital Investment includes replacing outdated automation hardware and software; Industrial Operations Capital

Table 88

Army Working Capital Fund Capital Budget
($ millions[1])

	FY09[2]	FY10[3]	FY11[3]
Supply Management	63.7	59.9	12.6
Industrial Operations[4]	213.7	248.1	205.6
Total	**277.4**	**308.0**	**218.2**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures.
[3] FY10 and FY11 figures indicate budget estimates.
[4] Previously reported as Depot Maintenance and Ordnance.
Source: Department of the Army's *Army Working Capital Fund FY11, President's Budget*, February 2010

Investment includes equipment modernization, automation hardware and software and minor construction. See **table 88**.

Reserve Component

The Army reserve component includes both the Army National Guard and the Army Reserve. The RC is a substantial part of the Army's land forces capabilities; in fact, the RC has all or most of the Army's capabilities in certain areas. The RC includes 28 of the Army's 73 brigade combat teams and 98 of the 230 functional or multifunctional brigades. The RC includes nearly 51 percent of the total Army military endstrength.

The RC enables the Army to accomplish its missions at home and abroad; this role has been particularly true with the continuing requirements for land forces in the wars in Afghanistan and Iraq.

Since 11 September 2001 more than 696,600 RC Soldiers have been activated, including 513,600 Army National Guard[21] and nearly 180,000 Army Reserve Soldiers,[22] in support of operations in Iraq, Afghanistan and elsewhere.

The demand for land forces in these continuing wars as well other operational requirements has led to a complete change in the strategic concept of the RC. The RC has been transformed from a strategic reserve to an operational reserve that is continually mobilized. As an operational reserve, the RC is moving into a predictable mobilization cycle as part of the ARFORGEN process.

RC units rotate through the ARFORGEN Reset and Train, Ready and Available pools on a periodic basis, like their active counterparts. However, the goal for their rotation cycle is six years versus three years for the active Army. As part of the operational reserve, the RC units receive equipment and support based on their position in the ARFORGEN process and not on tiered readiness.

This level of readiness is the context for the Army National Guard and Army Reserve budgets. Both organizations have three appropriations: Military Personnel, Operation and Maintenance and Military Construction. These appropriations were discussed with the MILPERS, O&M and MILCON appropriation groups.

Army National Guard

The Army National Guard is the oldest component of America's armed forces, tracing its origin to militia companies that were formed in 1637. The Army National Guard trains and maintains units to protect life and property in the 50 states, three territories and the District of Columbia.

The Army National Guard has a unique dual mission that consists of both federal and state roles. In the state mission, the governor commands the state's Guard forces through the state Adjutant General. The governor can call the Guard into action during local or statewide emergencies, such as storms, fires, earthquakes or civil disturbances. In the federal mission, the President can mobilize the National Guard for national emergencies or as otherwise needed. When mobilized, National Guard Soldiers are on active federal duty status.

Following 11 September 2001 more than 50,000 Guardsmen were called up by states and the federal government to provide security at home and to combat terrorism abroad. At one point in 2005, half of the combat brigades in Iraq were Army National Guard units—this level of reliance on the Guard has not occurred since the early years of World War II.

Army National Guard Soldiers and Staff. The Army National Guard military endstrength comprises the Selected Reserve and the Individual Ready Reserve (IRR).

- The Selected Reserve is the most readily available group of Soldiers and includes Troop Program Units (TPUs), Active Guard and Reserve (AGR) Soldiers and Individual Mobilization Augmentees (IMAs).
- The Individual Ready Reserve (IRR) is a manpower pool comprised principally of trained Soldiers who have served previously in the active component or the Selected Reserve and with some period of time remaining for their military service obligation. The IRR also includes the Inactive National Guard, consisting of Soldiers in an inactive status who muster once a year with their assigned unit but do not participate in training activities.

In addition, the Army National Guard includes technicians and civilian employees. Technicians work full time at various functions, including organizing, administering, instructing, training and recruiting new personnel, and maintaining supplies, equipment and aircraft. The technicians include dual-status military technicians

Table 89

Army National Guard Personnel Summary
Military Endstrength
(thousands[1])

	FY09[2]	FY10[2]	FY11[2]
Selected Reserve			
Paid Drill Strength	336	328	326
Full-time Active Strength	27	31	31
Inactived Personnel/ Individual Ready Reserve	3	5	5
Technicians			
Dual Status	27	27	27
Other than Dual Status	2	2	3
Other Civilians	29	29	30
Total	**452**	**453**	**452**

[1] Numbers may not add because of rounding.
[2] Numbers shown represent average instead of beginning or end numbers.
Source: Department of the Army's Budget Estimate for FY11, Congressional Reporting Requirement Exhibit PB-30G for NGPA and Exhibit PB-31R for OMNG

and other competitive technicians. The military technicians maintain military membership and train with their units, and also perform full-time work in their units. Competitive technicians are not required to maintain military membership.

The Army National Guard is authorized 392,000 members in the Selected Reserve; they serve at armories and training facilities in more than 2,800 communities. See **table 89** for endstrength information.

Army National Guard Key Force Contributions. The FY 2011 budget supports 28 BCTs, 48 multifunctional support brigades and 38 functional support brigades across the 50 states, three territories and the District of Columbia. The Army National Guard forces provide a great deal of specific capabilities. See **table 90**.

Table 90

Army National Guard
Key Contributions

44 percent of Combat Units
(includes Field Artillery and Air Defense)

9 percent of Field Artillery
(20 percent of Combat Structure)

1 percent of Air Defense
(2 percent of Combat Structure)

19 percent of Combat Support

27 percent of Combat Service Support

Source: National Guard Future Force Allocations, February 2010

Table 91

Army National Guard Budget Summary
($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Appropriation			
Personnel	8,540.5	8,371.8	8,452.2
Operation and Maintenance	6,432.4	6,506.6	7,117.2
Military Construction	900.3	582.0	874.0
Total	**15,873.2**	**15,460.0**	**16,443.4**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include both enacted OCO and OCO supplemental request.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD Budget Request for FY11, Exhibit O-1; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Army National Guard Budget Summary. The Army National Guard accounts for nearly 33 percent of the Army's military endstrength but only 11.6 percent of the Army base budget in FY 2011. The Army National Guard budget is distributed among three appropriations: Military Personnel (NGPA), Operation and Maintenance (OMNG) and Military Construction (MCARNG). The Army National Guard also receives equipment that is acquired with Army Procurement appropriations. In addition, the Guard receives state funds for state-related functions. The Army National Guard appropriation data are in **table 91**.

Army Reserve

The Army Reserve complements the active Army by providing trained and ready Soldiers and units with critical combat support and combat service support capabilities. The Soldiers of the Army Reserve respond to the call for support in peacetime, contingency and wartime operations. The Army Reserve, which began in 1908 when Congress established the Medical Reserve Corps, is the newest of the Army components.

Since 1990 Army Reserve Soldiers have mobilized and deployed in support of every American military operation, including peacekeeping and humanitarian missions. Since 11 September 2001 nearly 180,000 Army Reserve Soldiers have been mobilized to support contingency operations in Iraq, Afghanistan, Guantánamo Bay, the Balkans and the Sinai; they continue to serve in operations in more than 80 countries.[23] The continuing activation of Army Reserve Soldiers and units demonstrates the transformation of the Army Reserve from a strategic reserve to an operational force.

Army Reserve Soldiers and Staff. The Army Reserve military endstrength comprises three groups of Soldiers:

Selected Reserve, Individual Ready Reserve and Retired Reserve. The budget proposal includes funding for 280,000 Soldiers in the Selected Reserve and 59,000 in the Individual Ready Reserve. In the event of an emergency, the President can mobilize all members of the Selected Reserve and up to 30,000 members of the Individual Ready Reserve.

The distinctions among the three groups of Army Reserve Soldiers are:

- **Selected Reserve**—the most readily available group of Army Reserve Soldiers—includes:
  - **Troop Program Units** – Soldiers who typically train in units on selected weekends and perform annual training;
  - **Active Guard and Reserve** – Soldiers who serve full time on active duty in units and organizations of the Army Reserve or who directly support the Army Reserve Soldiers; and
  - **Individual Mobilization Augmentees** – Soldiers who are assigned to high-level headquarters where they would serve if mobilized. Most IMAs train annually for two weeks.
- **Individual Ready Reserve** – trained Soldiers who may be called upon to replace Soldiers in active and Reserve units. Many in the IRR have left active duty and still have a Reserve commitment while others have chosen to remain in the Army Reserve but not as a unit member or IMA.
- **Retired Reserve** – retirees from the active Army, Army National Guard and Army Reserve who remain part of the Army Reserve family.

The Army Reserve proposes a total endstrength of 205,000 in FY 2011. See **table 92** for endstrength information.

Army Reserve Key Force Contributions. With the transition to the modular brigade structure, the Army Reserve budget for FY 2011 includes 12 multifunctional and 48 functional support brigades, an increase of two multifunctional support brigades and 10 functional support brigades since FY 2009. The multifunctional brigades perform operational roles including combat aviation, combat support (maneuver enhancement), sustainment, fires and battlefield surveillance. The functional brigades perform broad support roles—including air defense, engineer, explosive ordnance disposal, military police, signal and others—on a theater-wide basis.

The Army Reserve provides a great deal of specific combat support and combat service support capabilities as summarized in **tables 93** and **94**.

Table 92

Army Reserve Personnel Summary
Military Endstrength
(thousands[1])

	FY09[2]	FY10[2]	FY11[2]
Selected Reserve			
Paid Drill Strength	203	206	205
Full-time Active Strength	16	16	16
Individual Ready Reserve	64	60	59
Technicians			
Dual Status	9	9	9
Other than Dual Status	0	0	0
Other Civilians	3	3	3
Total	**295**	**294**	**292**

[1] Numbers may not add because of rounding.
[2] Numbers shown represent average instead of beginning or end numbers.
Source: Department of the Army's Budget Estimate for FY11, Congressional Reporting Requirement Exhibit PB-30G for NGPA and Exhibit PB-31R for OMNG

Table 93

Army Reserve Key Contributions

1 percent of Army Combat Units

30 percent of Combat Support

38 percent of Combat Service Support

Source: Army Reserve Budget Office, March 2010

Army Reserve Budget Summary. The Army Reserve accounts for 18 percent of the Army's military endstrength but only 3.8 percent of the total Army budget in FY 2011. The Army Reserve budget is distributed among three appropriations: Military Personnel (RPA), Operation and Maintenance (OMAR) and Military Construction (MCAR). The Reserve also receives equipment that is acquired with Army Procurement appropriations.

The FY 2011 budget includes funds for transforming 105 units and 5,456 spaces into more specialized capabilities in chemical, logistical headquarters, engineer, quartermaster and transportation units. The Army Reserve appropriation data are in **table 95**.

Summary

The Army's budget proposal for FY 2011 requests $241.6 billion in TOA, which includes the base and OCO supplemental proposals. The Army's supplemental budget proposal for OCO in FY 2010 requests $20 billion in addition to the enacted OCO funds.[24]

The base budget includes funds for meeting enduring defense requirements, while the supplemental budget

Table 94

Army Reserve Key Units

The Army Reserve contributes to the Army's Total Force by providing 100 percent of the:
Judge Advocate General Unit
Railway Units
Training and Exercise Divisions
Engineer Commands
. . . more than two-thirds of the Army's:
Civil Affairs Units
Psychological Operations Units
Quartermaster Battalions
Chaplain Detachments
Military History Detachments
Petroleum Groups
Medical Brigades
Ordnance Ammunition Units
. . . and nearly half of the Army's:
Medical Commands
Adjutant General Units
Transportation Units
Transportation Battalions
Military Police Commands
Information Operations Units

Source: Army Reserve Budget Office, March 2010

Table 95

Army Reserve Budget Summary

($ millions[1])

	FY09[2]	FY10[3]	FY11[4]
Appropriation			
Personnel	4,996.7	5,034.0	5,147.8
Operation and Maintenance	2,794.0	2,885.9	3,166.1
Military Construction	282.6	431.6	318.2
Total	**8,073.3**	**8,351.5**	**8,632.1**

[1] Numbers may not add because of rounding.
[2] FY09 figures are actual expenditures and include OCO.
[3] FY10 figures indicate enacted funding and include enacted OCO and OCO supplemental request.
[4] FY11 figures indicate budget estimates and include OCO.
Source: *President's Budget Highlights for FY11*; DoD Budget Request for FY11, Exhibit O-1; DoD Financial Summary Tables for FY11, FAD 769, February 2010

Table 96

Army Budget Summary, TOA

(Total Obligational Authority, $ billions*)

	FY09	FY10	FY11
Base	146.1	140.9	143.4
Overseas Contingency Operations	91.0	98.5	102.2
Experience	91.0		
Enacted		78.5	
Supplemental Proposal		20.0	102.2
Total	**237.1**	**239.4**	**245.6**

* Numbers may not add because of rounding.
Source: *President's Budget Highlights for FY11*, February 2010

includes funds for emergency requirements, including OCO. A summary of the base and OCO enacted and proposals are in **table 96**.

The FY 2011 budget is greatly influenced by the continuing war. In his testimony, Army Chief of Staff General George W. Casey, Jr., observed, "We've all seen the manifestations of the stresses of eight and a half years at war." The Army Secretary and Chief of Staff stated that the budget enables the Army to pursue two overarching challenges: restoring balance between current demands and sustaining a healthy all-volunteer force; and setting the conditions for the Army to provide capabilities to meet the nation's global needs in the 21st century through a continuous process of transformation.

In their testimony and in the *2010 Army Posture Statement*, the Army Secretary and Chief of Staff state that the FY 2011 budget: [25]

- fully funds the all-volunteer force at the accelerated levels of 547,400 for the active component, 358,200 for the Army National Guard and 205,000 for the Army Reserve;
- supports the high level of deployments around the world and the continuing counterinsurgency operations in Iraq and Afghanistan, including training indigenous forces and building their capability to establish peace and maintain stability;
- supports the conversion to the modular, brigade-based organization that began in 2004 and notes that "today, we're almost 90 percent complete with that conversion";
- contains funds for important programs to sustain Soldiers, civilians and families, including housing, barracks, child care and youth centers;
- provides funds for Warrior Transition Units, surviving spouse programs and programs "to build resiliency into the force to help them deal, not only with the challenges of the past, but with the challenges of the future";

- provides almost $11 billion to reset equipment and sustained funding for reset that is essential to the long-term health of the force; and
- provides funds for a modernization program that contains four elements:
  - incrementally modernizing the networks over time to take advantage of rapid advances in technology;
  - incrementally fielding capability packages to put the best equipment into the hands of Soldiers as rapidly as it is available;
  - incorporating MRAPs into the force; and
  - rapidly developing and fielding a new Ground Combat Vehicle that meets the requirements of a 21st century Army.

This analysis of the budget leads to some significant observation about prior trends, the current and budget year proposals and recent guidance. Prior to 11 September 2001 the Army budget for FY 2000 was $73.2 billion; by FY 2009 the base budget had doubled to $146.1 billion. In addition, the Army went from no supplemental funding in FY 2000 to a $91 billion supplemental proposal for OCO in FY 2011. This tremendous rate of growth is not sustained in FYs 2010 and 2011—the base budget decreases by more than $5 billion and the OCO increases by $7.5 billion for a total increase of $2.5 billion, or 1 percent, between FYs 2009 and 2010; the base budget increases by $2.5 billion and the OCO increases by $3.7 billion for a total increase of $6.2 billion, or 2.5 percent, between FYs 2010 and 2011. These marginal increases are not consistent with the larger rate of growth in previous fiscal years.

These increases fail to accurately reflect the changes to the traditional Army appropriations—i.e., Military Pay, O&M, RDA, etc.—since the totals include appropriations (the Afghanistan Security Forces Fund, Iraq Security Forces Fund and Joint Improvised Explosive Device Defeat Fund) for which the Army is the executive agent. In addition, the OCO funds for FY 2009 and FY 2010 include the Pakistan Counterinsurgency Capability Fund, which is in the State Department budget request for FY 2011.

The following executive agent appropriations, including the Pakistan Counterinsurgency Capability Fund in FY 2009 and FY 2010, received or propose funding of:

- $10.1 billion in FY 2009, or 4.3 percent, of the Army total;
- $13.2 billion in FY 2010,[26] or 5.5 percent, of the Army total; and
- $17.1 billion in FY 2011, or 7 percent, of the Army total.

When these executive agent appropriations are set aside, the Army totals decline by $0.7 billion between FYs 2009 and 2010 and increase by $2.2 billion between FYs 2010 and 2011. The totals excluding executive agent appropriations are:

- $227 billion in FY 2009;
- $226.3 billion in FY 2010; and
- $228.5 billion in FY 2011.

The purpose of this analysis is to shed light on the facts, not to suggest that budget amounts or trends are good or bad. The rate of growth in the first decade of the 21st century cannot be sustained indefinitely; arguably, the rate of growth should not be sustained even with the persistent conflict once the level of conflict has reached a plateau.

In addition, other pressing national needs demand attention and funds. The nation is beginning to pull out of the worst recession in 80 years, averting an economic meltdown and restoring lost jobs. Federal receipts are down, but the demands for funds are up, e.g., for stimulus and "safety-net" programs. In his budget message, President Obama identifies restoring economic growth and laying "a new foundation for the future" as critical priorities. The President specifically recognizes education reform and investment, health insurance system reform, small business incentives and clean energy incentives as priorities for the future.

Funds for domestic priorities and for the Army come from the same limited receipts. Therefore, an increase for the Army means either less funding for other agencies and programs or a greater deficit. Neither of these is a good choice. Secretary Gates seems to have this situation in mind when he calls for taking "a hard, unsparing look" at what the military is costing the U.S. taxpayer during difficult economic times and looking for serious belt-tightening measures.[27]

Secretary Gates has expressed the need for spending cuts and has taken actions to cut weapon systems that are seriously behind schedule, inappropriate for the future missions or simply overkill. In addition to the weapon systems, Secretary Gates is demanding a 2 to 3 percent reduction in overhead costs in the FY 2012 budget request. Regarding these cuts, Secretary Gates said, "Simply taking a few percent off the top of everything on a one-time basis will not do." The Secretary is looking for systemic changes—"savings [that] must stem from root-and-branch changes that can be sustained and added to over time."[28]

In his closing remarks at the budget news conference, Secretary Gates said, "We must remember that every defense dollar spent on a program excess to real-world military needs is a dollar not available to take care of our

people, reset the force, win the wars we are in, and improve capabilities in areas where we are underinvested and potentially vulnerable."[29]

General Casey's recent assessment of the Army situation is that "we need to refine this great Army and I say refine rather than adapt. We're in pretty good shape but there are still things we could do differently."[30]

The conclusion from this analysis of the budget data and Secretary Gates' comments is that the Army must continue to be forward thinking in terms of essential capabilities and the levels of those capabilities and must continue to develop and implement transformational ways and means to deliver those capabilities where and when needed in the next decade and beyond. The Army needs to identify and terminate organizations, positions, equipment, processes and anything else that does not or only marginally contributes to essential present and future capabilities.

An appropriate close to this analysis is Secretary Gates' statement that President Eisenhower had a "passionate belief that the U.S. should spend as much as necessary on national defense—and not one penny more."[31]

Endnotes

1 TOA is the sum of Budget Authority (BA) for a given fiscal year, plus the balance of BA brought forward from prior years that remains available for obligation in the fiscal year, plus the amounts authorized to be credited to a specific fund or account during that year, including transfers between funds or accounts.

2 DoD Financial Summary Tables Fiscal Year 2011 (FAD 730), FY 2010 OCO Supplemental Request, http://comptroller.defense.gov/defbudget/fy2011/fy2011_summary_tables_whole.pdf.

3 Letter from the Secretary and Chief of Staff of the Army, *2010 Army Posture Statement*, 19 February 2010, https://secureweb2.hqda.pentagon.mil/vdas_armyposturestatement/2010/aps_pages/letter.asp.

4 *Ibid.*

5 *Ibid.*

6 *2010 Army Posture Statement,* "Roles of Land Forces," February 2011, https://secureweb2.hqda.pentagon.mil/vdas_armyposturestatement/2010/aps_pages/roles_of_land_forces.asp.

7 *2010 Army Posture Statement,* Letter from the Secretary and Chief of Staff of the Army.

8 Michelle Tan, "A million soldiers deployed since 9/11," *Army Times,* 20 December 2009, http://www.armytimes.com/news/2009/12/army_deployments_121809w/

9 Army National Guard Public Affairs Office.

10 *2010 Army Reserve Posture Statement,* March 2010, http://www.usar.army.mil/arweb/mission/ARPS2010/Pages/ARPShomepage.aspx.

11 *2010 Army Posture Statement,* "Roles of Land Forces."

12 The three fiscal years are the prior year, which provides actual obligations for the most recently completed FY (FY 2009); the current year, which provides the congressional appropriation as enacted (FY 2010); and the budget year, which provides the President's Budget proposal to Congress (FY 2011).

13 *Budget of the U.S. Government, Fiscal Year 2011*, The Budget Message of the President, http://www.whitehouse.gov/omb/budget/fy2011/assets/message.pdf.

14 *2010 Army Posture Statement.*

15 *2010 Army Posture Statement.*

16 Assistant Secretary of the Army (Financial Management and Comptroller), Budget Materials, FY 2011, http://asafm.army.mil/offices/BU/BudgetMat.aspx?OfficeCode=1200.

17 The enacted OCO for FY 2010 includes $8.4 billion; the supplemental request includes another $4 billion.

[18] Department of the Army FY 2011 Budget Estimates, Volume I, Operation and Maintenance, Army, February 2010, Justification Book, http://asafm.army.mil/Documents/OfficeDocuments/Budget/BudgetMaterials/FY11/opmaint//oma-v1.pdf.

[19] *2010 Army Modernization Strategy,* LTG Robert P. Lennox, Deputy Chief of Staff, G-8, 23 April 2010, https://www.g8.army.mil/pdf/AMS2010_hq.pdf.

[20] *Ibid.*

[21] National Guard Bureau Public Affairs.

[22] *2010 Army Reserve Posture Statement.*

[23] *Ibid.*

[24] *FY 2011 President's Budget Highlights*, Assistant Secretary of the Army for Financial Management and Comptroller, February 2010, http://asafm.army.mil/Documents/OfficeDocuments/Budget/BudgetMaterials/FY11/pbhl.pdf.

[25] Testimony of General George W. Casey, Jr., 25 February 2010, to House Armed Services Committee, http://www.army.mil/-speeches/2010/03/01/35133-feb-25-2010--hasc-testimony-opening-remarks-as-delivered/; Testimony of General George W. Casey, Jr., 4 March 2010, to Senate Appropriations Defense Subcommittee, http://www.army.mil/-speeches/2010/03/04/35313-march-3-2010---sac-d-testimony-hearing-as-delivered.

[26] The enacted OCO for FY 2010 includes $8.4 billion and the supplemental includes another $4 billion.

[27] Brad Knickerbocker, "Secretary Gates wants 'hard, unsparing look' at military spending," *The Christian Science Monitor,* 8 May 2010, http://www.csmonitor.com/USA/Military/2010/0508/Secretary-Gates-wants-hard-unsparing-look-at-military-spending.

[28] *Ibid.*

[29] U.S. Department of Defense, Office of the Assistant Secretary of Defense (Public Affairs), News Transcript, 1 February 2010, Subject: DoD News Briefing with Secretary Gates and Admiral Mullen from the Pentagon, http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549.

[30] L.A. Shively, "Casey rolls out plan for 21st century Army," 1 April 2010, http://www.army.mil/-news/2010/04/01/36704-casey-rolls-out-plan-for-21st-century-army/

[31] Knickerbocker, "Secretary Gates wants 'hard, unsparing look' at military spending."

Appendix I
Glossary of Budget Terms

Appropriation is the specific authority to obligate and expend funds provided for in appropriation bills, which are prepared by the appropriation committees, passed by Congress and signed into law by the President. Appropriations are provided in line-item detail. The time over which monies may be obligated is specified, varying from one year for personnel and operation and maintenance to two years for research, development, test and evaluation and three years (normally) for procurement and construction (extended to five years for shipbuilding).

Authorization is substantive legislation that provides the authority for an agency to carry out a particular program. Authorization may be annual, for a specified number of years, or indefinite. Most national defense activities require annual authorization before Congress may appropriate funds.

Budget Authority (BA) is the authority to enter into obligations that will result in the payment of government funds. Budget Authority is normally provided in the form of appropriations. The defense budget as presented to Congress is expressed in terms of Budget Authority.

Constant dollars measure the value of purchased goods and services at price levels that are the same as the base or reference year. Constant dollars do not reflect adjustments for inflationary changes that have occurred or are forecast to occur outside the base year.

Current or "then year" dollars are the dollar figures in the budget (or in the accounting records) actually associated with the stated date (past, present or projected). When a price or cost is stated in current dollars, it contains all inflationary increases expected to occur in a program over the duration of the spendout of an appropriation. Current dollars are also called "then year" dollars or "budget" dollars.

Deficit is the amount by which Outlays exceed receipts. The reverse is called "surplus."

The Department of Defense (DoD) Budget, which carries the Federal Account Number 051, includes funding of DoD itself. The budget that comes under the jurisdiction of the Secretary of Defense, it is frequently referred to as the "Pentagon budget."

Discretionary spending is what the President and Congress must decide to spend for the next fiscal year through 13 annual appropriation bills. Two of the annual appropriation bills (the Department of Defense Appropriation Bill and the Military Construction Appropriation Bill) pertain to the Department of Defense.

Emergency spending is spending which the President and Congress have designated as an emergency requirement. Such spending is not subject to limits established on discretionary spending or "pay-as-you-go" rules established for direct (mandatory) spending.

Entitlement authority is a provision of law that legally obligates the federal government to make specified payments to any person or government that meets the eligibility requirements established by that law. Example: Social Security.

Fiscal year (FY) is the federal government's accounting period. It begins 1 October and ends 30 September, and is designated by the calendar year in which it ends.

Gross Domestic Product (GDP) measures the market value of all goods and services produced during a particular period by individuals, businesses and government in the United States, whether they are U.S. or foreign citizens or American-owned or foreign-owned firms. GDP is currently used as the most reliable indicator of U.S. economic activity.

Gross National Product (GNP) measures the market value of all goods and services produced during a particular period by U.S. individuals, businesses and government, including income earned by U.S.-owned corporations overseas and by U.S. residents working abroad but excluding income earned in the United States by residents of other nations.

National Defense Budget, which carries the Federal Account Number 050 as a designator, includes not only the Department of Defense (military) budget, but also funding for defense-related activities of the Department of Energy (primarily weapons activities and related support) and miscellaneous military activities of federal agencies.

Obligations are binding agreements that will result in Outlays, immediately or in the future.

Outlays are the measure of government spending. They are the payments actually made for goods and services and interest payments during a particular year. These payments (Outlays) lag obligations because of the sequential cycle of congressional appropriations, contracting, placing orders, receiving goods or services and (finally) making payments.

Receipts are collections from taxes or other payments to the federal government.

Supplemental appropriation is enacted subsequent to a regular annual appropriations act when the need for funds is too urgent to be postponed until the next regular annual appropriation act.

Total Obligational Authority (TOA) is a DoD term that includes the total value of the direct program regardless of the method of financing. As a practical matter TOA totals in the aggregate do not differ significantly from Budget Authority (BA). TOA is used in managing the service budgets, as it is the most accurate reflection of program value. The differences are attributed principally to offsetting receipts, such as recoveries from foreign military sales, and financing adjustments. For example, application of sales receipts will increase TOA but not BA. Legislation transferring unobligated funds for which the purpose has changed are reflected in the BA with no effect on TOA.

Appendix II
The Budget Process

This appendix provides a summarized description of the budget process at the national (federal) level.

The overall process has three fundamental phases: formulation; subsequent actions by Congress and the President to provide a legally executable budget; and actual execution.

The entire cycle is a continuum. While the last approved budget is being executed, the next budget is undergoing review and approval in Congress. When passed by Congress and signed by the President, it becomes the Budget of the United States for the following fiscal year. Concurrently, formulation of the next budget for submission to Congress is taking place within the departments and agencies.

For purposes of this paper, we will focus primarily on formulation and on the review and approval aspects of the cycle.

The Budget of the United States

First is a review of the overall process at the national level, followed by a description of actions within the Department of Defense (DoD) providing the DoD part of the President's Budget.

From an overall perspective, this process has a lead time of at least nine months before formal submission to Congress and 18 months before the fiscal year actually begins. In the spring, the President establishes general budget and policy guidelines while the Office of Management and Budget (OMB), working with federal departments and agencies, establishes policy directives and levels covering the budget year plus the four following years.

The budget calendar for major budget events during the review and approval process is summarized in the figure below.

Budget Calendar

Date	Action
Between first Monday in January and first Monday in February	Transmission of the President's Budget to Congress
April 15	Action on the congressional budget resolution scheduled for completion
May 15	House consideration of annual appropriations bills may begin
June 15	Action on reconciliation scheduled for completion
June 30	Action on appropriations by the House scheduled for completion
Throughout this period	Hearings; committee reports; reconciliation by conference committees; floor votes; appropriations bills; more floor votes; signature or veto by the President
October 1	Fiscal year begins
Post-October 1	Continuing Resolution of all appropriations bills not yet signed

Most agencies submit budget requests to OMB in the fall, followed by a review of details and resolution of issues. For the Department of Defense, the OMB review is concurrent with the review in the Office of the Secretary of Defense (OSD) during the September-to-December period. By the end of December, all decisions are complete, including issues requiring involvement by the President or other White House policy officials. The budget is then finalized and budget documents prepared. This is now the President's Budget.

Transmittal to Congress is scheduled by law on or after the first Monday in February of each year. As a practical matter, this has been an early February event, and additional delays sometimes occur in special cases such as a new President.

Congress receives the budget proposals and approves, modifies or disapproves them. Through the process of a budget resolution, it agrees on levels for total spending, receipts and other matters. This resolution provides the framework for congressional committees to prepare the required appropriations bills. In so doing, Congress votes on Budget Authority—the authority to incur legally binding authorizations of the government. In a separate process, Congress usually enacts legislation that authorizes agencies to carry out particular programs and may limit the amounts that can be appropriated for various programs. Normally, authorizations precede appropriations, but this is not always the case.

The Congressional Act of 1994 requires that Congress consider budget totals before completing action on the separate appropriations. To do this, the budget committees formulate a budget resolution setting levels for Budget Authority, both in total and by functional areas (such as national defense, energy, transportation, etc.). The budget resolution is scheduled for adoption by the whole Congress by April 15, but delays are frequent. This resolution allocates amounts to the appropriations committees that have jurisdiction over the programs, and these committees are required, in turn, to allocate amounts to their respective subcommittees. Budget resolutions are not laws and do not require presidential approval.

The appropriations committees in both the House and Senate are divided into subcommittees that hold hearings and review detailed budget justification in their jurisdictional areas. Appropriations bills are initiated in the House. After a bill has been approved by the committee and the whole House, it is forwarded to the Senate, where a similar review takes place. When disagreements occur between the two houses of Congress, a conference committee meets to resolve these differences. The report of the conference committee is returned to both houses for approval. It then goes to the President as an enrolled bill for approval or veto.

If actions on one or more appropriations bills are not completed by the beginning of the fiscal year (1 October), Congress enacts a Continuing Resolution to authorize continued operations at some designated level for a specified time, pending a regular appropriation. Continuing Resolutions require presidential approval and signature.

So far, the actions described pertain to annual appropriations included in 13 separate appropriations bills. These apply to what is described as discretionary spending because of the need for annual Budget Authority by Congress. While the majority of federal programs are dependent on annual appropriations, the discretionary portion covers only about one-third of annual federal Outlays. The rest of federal expenditures come from Budget Authority in permanent laws which do not need to be reenacted annually. This applies to the large entitlement programs and the interest on the public debt, which are funded by permanent law. Therefore, the majority of Outlays in a year are not controlled through separate appropriations actions for the year. The terms used are "discretionary" for the annual appropriations and "direct spending" for those based on permanent laws.

Congress may enact new legislation or change existing legislation relating to direct spending, but need take no action on an annual basis, in which case the spending continues in accordance with existing law. Without legislative change, it is on automatic pilot.

For more information on the budget process at the federal level, see *A Citizen's Guide to the Federal Budget, Fiscal Year 2002* (the most recent edition available online) and *A Brief Introduction to the Federal Budget Process*, Congressional Research Report 96-912, last updated on 20 October 1997.

The Department of Defense Budget Process

Agencies of the U.S. government submit and justify budget packages for inclusion in the President's Budget. The Department of Defense budget is an important segment of the discretionary funding portion.

The DoD budget submitted for inclusion in the President's Budget is a product of its Planning, Programming, Budgeting and Execution (PPBE) process. DoD prepares a Future Years Defense Program (FYDP) spanning six years; the

FYDP is periodically updated. The first year for the FYDP is the basis for the next budget requiring congressional action. Actually, a two-year budget is prepared in even-numbered years, but Congress acts on only one year at a time, and the second year's budget is updated and resubmitted the following year.

The specific calendar of events varies somewhat from year to year, but the basic cycle goes something like this:

Defense Fiscal Guidance (DFG) provided in March is followed by revised programs from the services. This is in the form of a Program Objective Memorandum (POM) each service provides to OSD in May or early June. The OSD review leads to a Program Decision Memorandum (PDM) in August/September. In the meantime, budgets for the next fiscal year are being prepared based on OSD guidance and directives. Budget Execution Submissions (BESs) are made to OSD by the beginning of October, and the DoD budget now undergoes a detailed review within OSD.

The October-to-December review is actually a joint review by OSD and OMB. Decisions are made through a series of Program Decision Memoranda under supervision of a senior review panel, the Defense Resources Board. After the Secretary of Defense makes final decisions on major issues, the budget is presented to OMB and the President for final review and incorporation into the President's Budget.

With OMB and presidential approval, the backup documentation for submission to Congress is completed and the DoD budget request (now part of the President's Budget) is delivered in early February.

Next comes the congressional justification, review and approval period, ending with the authorization and appropriations bills, passed by Congress and signed by the President. Ideally, all this is completed by the beginning of the fiscal year on 1 October. If not, operations continue with an appropriate Continuing Resolution. A schematic of the basic flow is shown in the figure on page 98.

After a series of hearings, Congress provides both authorization and appropriations bills. While authorization is important for program approvals, it is the appropriations bills that provide DoD with the authority to obligate funds and make payments (Outlays) against these obligations.

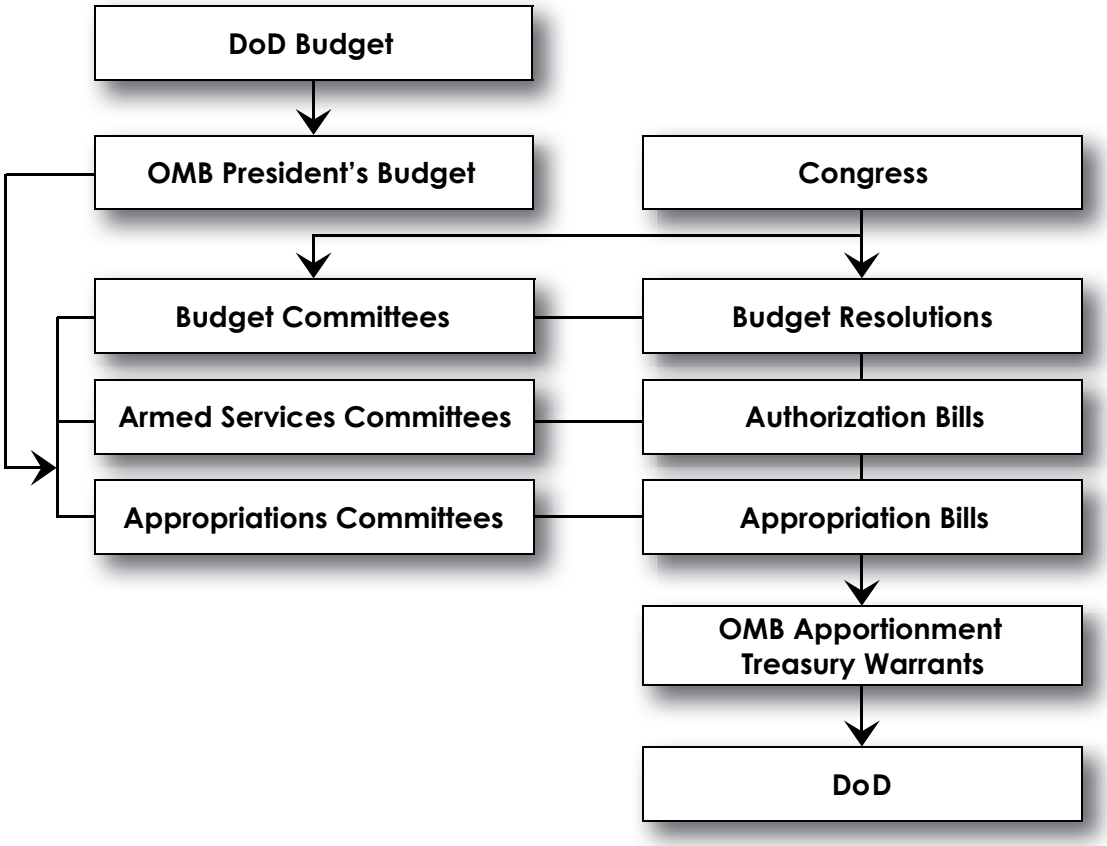
Appropriations for the Department of Defense are covered by two separate bills: the Military Construction Appropriations Bill, which addresses Military Construction and Family Housing, and the Department of Defense Appropriations Bill for all other DoD appropriations. These bills incorporate a number of individual appropriations covering Military Personnel, Operation and Maintenance, Procurement, RDT&E (Research, Development, Test and Evaluation), Military Construction and Family Housing. They are identified in the appropriations bills by title and military service.

At the start of the new fiscal year, providing the bills are passed and signed by the President, the execution phase begins. Before funds can be obligated, however, OMB must apportion the funds to DoD and Treasury warrants must be issued. DoD, in turn, subapportions for further allocation to operating agencies.

The services play a subordinate role to DoD in all of this, in both the formulation and justification of their respective portions of the DoD budget. All the services conform to the same calendar and procedures with respect to the DoD budget process.

At any one time a number of concurrent actions involving different budgets are occurring. Using the Department of the Army (DA) as an example, the present budget-related actions look something like this: DA is executing the FY 2010 budget that extends through September 2010 while concurrently justifying its portion of the FY 2011 Army budget in Congress. At the same time DA is also engaged in extending the program through FY 2018 and getting ready for the next Army budget proposal to DoD. This remains a dynamic, ongoing process.

DoD Budget Process



Appendix III
Glossary of Acronyms

3GIRS	Third Generation Infrared Surveillance
A/V	Audio Visual System
ABIR	Airborne Infrared
AC	Active Component
ACES	Army Continuing Education System
ACS	Aerial Common Sensor
ADDS	Army Data Distribution System
AEHF	Advanced Extremely High Frequency
AFH	Army Family Housing
AGR	Active Guard and Reserve
AIM–9X	Air Intercept Missile–9X
AMRAAM	Advanced Medium Range Air-to-Air Missile
AOR	Area of Responsibility
AP3	Army Power Projection Program
APA	Aircraft Procurement, Army
APS	Army Prepositioned Stocks
ARFORGEN	Army Force Generation
ARRA	American Recovery and Reinvestment Act
ASA(FM&C)	Assistant Secretary of the Army for Financial Management and Comptroller
ASE	Aircraft Survivability Equipment
ASV	Armored Security Vehicle
ATAS	Advanced Tank Armament System
AWCF	Army Working Capital Fund
BA	Budget Authority; Budget Activity
BA1	Budget Activity 1: Operating Forces
BA2	Budget Activity 2: Mobilization
BA3	Budget Activity 3: Training and Recruiting
BA4	Budget Activity 4: Administration and Service-wide Activities
BA5	Budget Activity 5: System Development and Demonstration
BA6	Budget Activity 6: Management Support
BA7	Budget Activity 7: Operational System Development
BAG	Budget Activity Group
BCT	Brigade Combat Team
BFVS	Bradley Fighting Vehicle System
BLIN	Budget Line Item Number
BMD	Ballistic Missile Defense
BMDR	Ballistic Missile Defense Review
BMDS	Ballistic Missile Defense System
BRAC	Base Realignment and Closure
C2	Command and Control
C3	Command, Control and Communications
C4I	Command, Control, Communications, Computers and Intelligence
C4ISR	Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance
CAMD,A	Chemical Agents and Munitions Destruction, Army
CAP	Combined Aggregate Program
CBO	Congressional Budget Office
CCP	Consolidated Cryptologic Program
CFC	Combined Forces Command
CHAMPUS	Civilian Health and Medical Program of the Uniformed Services
CMA	Chemical Materials Agency
CN	Counternarcotics
COBRA	Cost of Base Realignment Actions
COCOM	Combatant Command
CONUS	Continental United States
CRA	Continuing Resolution Act
CROWS	Common Remotely Operated Weapons Stations
CSF	Comprehensive Soldier Fitness
CWC	Chemical Weapons Convention
DAI	Defense Agencies Initiative
DEAMS	Defense Enterprise Accounting and Management System
DeCA	Defense Commissary Agency
DFAS	Defense Finance and Accounting Service
DHP	Defense Health Program
DHS	Department of Homeland Security
DIMHRS	Defense Integrated Military Human Resources System
DISA	Defense Information System Agency
DLA	Defense Logistics Agency
DoD	Department of Defense
DWCF	Defense Working Capital Fund
DWCF,A	Defense Working Capital Fund, Army
EELV	Evolved Expendable Launch Vehicle
EFV	Expeditionary Fighting Vehicle
ER	Environmental Restoration
ERA	Environmental Restoration, Army
ERP	Enterprise Resource Planning
ESSM	Evolved Seasparrow Missile

EW	Electronic Warfare
FCS	Future Combat Systems
FHIF	Family Housing Improvement Fund
FHTV	Family of Heavy Tactical Vehicles
FIST	Fire Support Team
FMTV	Family of Medium Tactical Vehicles
FTE	Full-time Equivalent
FUDS	Formerly Used Defense Sites
FY	Fiscal Year
GCV	Ground Combat Vehicle
GDIP	General Defense Intelligence Program
GDP	Gross Domestic Product
GDPR	Global Defense Posture Realignment
GFD	Gross Federal Debt
GPS	Global Positioning System
GS	General Service
HAP	Homeowners' Assistance Program
HHS	U.S. Department of Health and Human Services
HIMARS	High Mobility Artillery Rocket System
HMMWV	High-Mobility Multipurpose Wheeled Vehicle
IED	Improvised Explosive Device
IMA	Individual Mobilization Augmentees
ING	Inactive National Guard
IRR	Individual Ready Reserve
ISR	Intelligence, Surveillance and Reconnaissance
ITAS	Improved Target Acquisition
JAGM	Joint Air-to-Ground Missile
JASSM	Joint Air-to-Surface Standoff Missile
JCA	Joint Cargo Aircraft
JDAM	Joint Direct Attack Munition
JHSV	Joint High-Speed Vessel
JIEDDF	Joint Improvised Explosive Device Defeat Fund
JIEDDO	Joint Improvised Explosive Device Defeat Organization
JLENS	Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System
JLTV	Joint Light Tactical Vehicle
JPATS	Joint Primary Aircraft Training System
JPO	Joint Project Office
JSF	Joint Strike Fighter
JSOW	Joint Standoff Weapon
JTF	Joint Task Force
JTRS	Joint Tactical Radio System
LACMD	Land Attack Cruise Missile Defense
LCS	Littoral Combat Ship
LOO	Line of Operation
LPD	Landing Platform Dock
LUH	Light Utility Helicopter
MCA	Military Construction, Army
MCAR	Military Construction, Army Reserve
MCARNG	Military Construction, Army National Guard
MDA	Missile Defense Agency
MEADS CAP	Medium Extended Air Defense System Combined Aggregate Program
MERHCF	Medicare-Eligible Retiree Health Care Fund
METL	Mission Essential Task List
MHPI	Military Housing Privatization Initiative
MILCON	Military Construction
MILPERS	Military Personnel
MIP	Military Intelligence Program
MLP	Mobile Landing Platform
MLRS	Multiple Launch Rocket System
MOS	Military Occupation Specialty
MPA	Military Personnel, Army
MPF	Maritime Prepositioning Force
MRAP	Mine-Restistant Ambush Protected
MUOS	Mobile User Objective System
NATO	North Atlantic Treaty Organization
NGP	National Geospacial Intelligence Program
NGPA	National Guard Personnel, Army
NIP	National Intelligence Program
NPOESS	National Polar-Orbiting Operational Environmental Satellite System
NSPS	National Security Personnel System
O&M	Operation and Maintenance
OCO	Overseas Contingency Operation
OCS	Officer Candidate School
OEF	Operation Enduring Freedom
OMA	Operation and Maintenance, Army
OMAR	Operation and Maintenance, Army Reserve
OMB	Office of Management and Budget
OMNG	Operation and Maintenance, Army National Guard
OND	Operation New Dawn
OPA	Other Procurement, Army
OPA1	Other Procurement, Army 1: Tactical and Support Vehicles
OPA2	Other Procurement, Army 2: Communications and Electronics Equipment
OPA3	Other Procurement, Army 3: Other Support Equipment
OPA4	Other Procurement, Army 4: Spares and Repair Parts
OPTEMPO	Operational Tempo

OSD	Office of the Secretary of Defense
PAC-3	Patriot Advanced Capability-3
PBD	Program Budget Decision
PCS	Permanent Change of Station
PE	Program Element
PIP	Product Improvement Program
PPBE	Planning, Programming, Budgeting and Execution
PPSS	Post Production Software Support
QDR	Quadrennial Defense Review
RAM	Rolling Airframe Missile
RC	Reserve Component
RCOH	Refueling Complex Overhaul
RDA	Research, Development and Acquisition
RDT&E	Research, Development, Test and Evaluation
ROK	Republic of Korea
RPA	Reserve Personnel, Army
S&IAP	Security & Intelligence Activities Program
S&T	Science and Technology
SAG	Subactivity Group
SATCOM	Satellite Communications
SAW	Squad Automatic Weapon
SBIRS	Space-based Infrared Systems
SDB	Small-Diameter Bomb
SF	Special Forces
SM3	Standard Missile 3
SOF	Special Operations Forces
SR	Space Radar
TARP	Troubled Asset Relief Program
THAAD	Terminal High-Altitude Area Defense
TIARA	Tactical Intelligence and Related Activities
TOA	Total Obligational Authority
TOW	Tube-Launched Optically-Tracked, Wire-Guided
TPU	Troop Program Unit
UAS	Unmanned Aircraft System
UAV	Unmanned Aerial Vehicle
UCC	Unified Combatant Command
UCP	Unified Command Plan
USAFRICOM	U.S. Africa Command
USEUCOM	U.S. European Command
USMA	U.S. Military Academy
USMAPS	U.S. Military Academy Preparatory School
USSOCOM	U.S. Special Operations Command
USSOUTHCOM	U.S. Southern Command
VA	U.S. Department of Veteran Affairs
VEAP	Veterans Education Assistance Program
VLER	Virtual Lifetime Electronic Record
WGS	Wideband Global Satellite Communications
WIN-T	Warfighter Information Network–Tactical
WTCV	Weapons and Tracked Combat Vehicles

Appendix IV
References

The Federal Budget

Budget of the U.S. Government, Fiscal Year 2011, Government Printing Office, Main Page.
http://www.gpoaccess.gov/usbudget/

"DoD Releases Defense Reviews, 2011 Budget Proposal, and 2010 War Funding Supplemental Request – Update," News Release No. 084-10, 1 February 2010.
http://www.defenselink.mil/releases/release.aspx?releaseid=13281

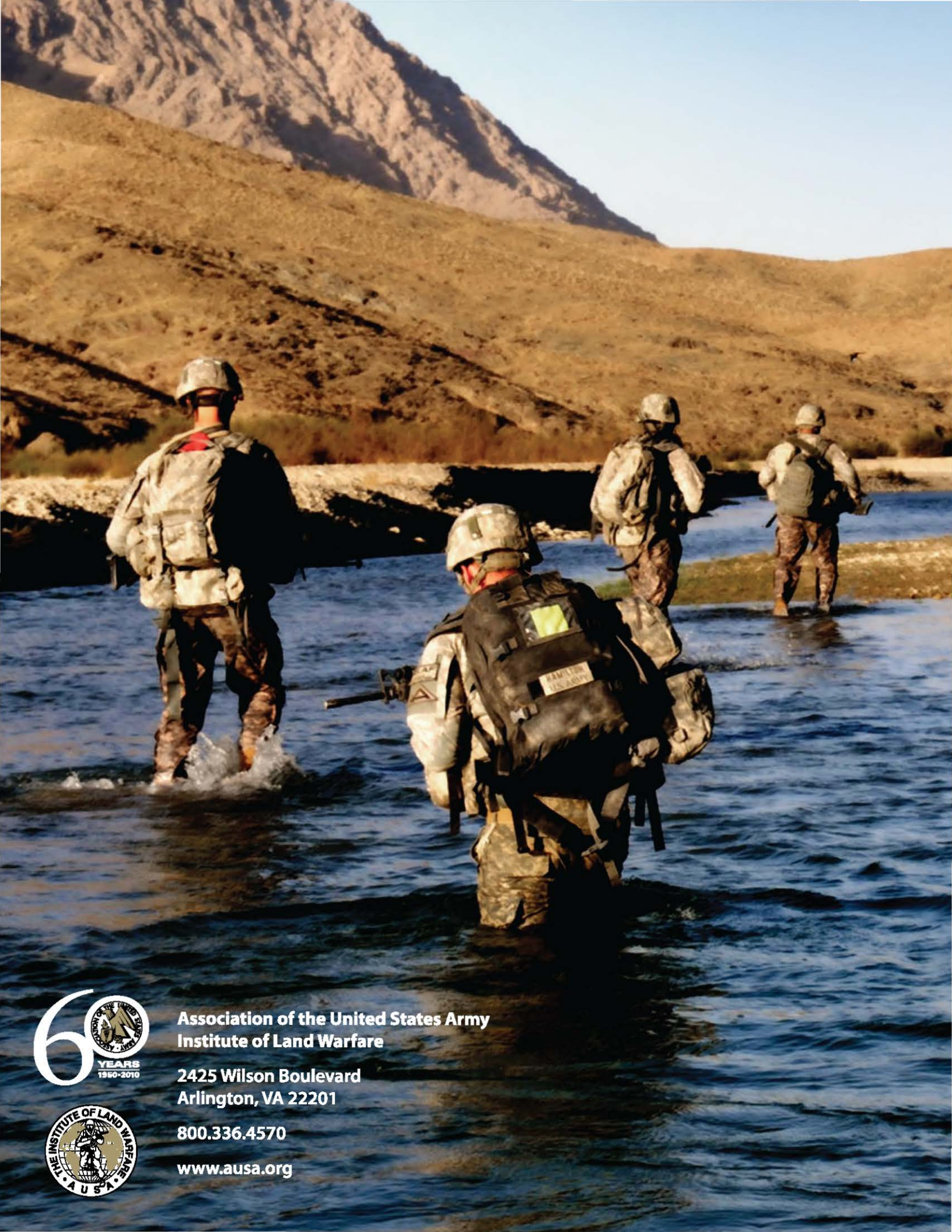
The Department of Defense Budget

Defense Budget Materials, FY 2011 Budget, Under Secretary of Defense (Comptroller).
http://comptroller.defense.gov/Budget2011.html

The Army Budget

FY 2011 Budget Materials, ASA(FM&C), Military Deputy for Budget (ABO).
http://www.asafm.army.mil/offices/BU/BudgetMax.aspx?OfficeCode=1200

2010 Army Posture Statement, Kenneth O. Preston, Sergeant Major of the Army; General George W. Casey, Jr., Army Chief of Staff, and John McHugh, Secretary of the Army, February 2010.
http://ocll.hqda.pentagon.mil/documents/2010_army_posture_statement.pdf



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