CRS Report for Congress

Received through the CRS Web

The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11

Updated September 22, 2006

Amy Belasco Specialist in National Defense Foreign Affairs, Defense, and Trade Division

The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11

Summary

Through FY2006, Congress has appropriated a total of about \$437 billion for military operations, base security, reconstruction, foreign aid, embassy costs, and veterans' health care for the three operations initiated since the 9/11 attacks: Operation Enduring Freedom (OEF) covering Afghanistan and other Global War on Terror (GWOT) operations, Operation Noble Eagle (ONE) providing enhanced security at military bases, and Operation Iraqi Freedom (OIF), Iraq.

In the last week of September 2006, the House and Senate are slated to consider the conference versions of the FY2007 defense appropriations bill, H.R. 5631, and the national defense authorization bill (H.R. 6122/S. 2766), both of which include an additional \$70 billion for war costs. This \$70 billion bridge fund is to cover war costs in the first half of the fiscal year plus \$23 billion for reset — to repair and replace war-worn equipment. The Administration is expected to submit a FY2007 supplemental for additional war costs some time next year.

If the FY2007 defense appropriation bill passes, total war appropriations for all three operations would reach about \$507 billion. Another \$2 billion is included in other appropriations bills for foreign and diplomatic operations in Iraq and Afghanistan and VA medical costs. In its July 2006 mid-session update, the Office of Management and Budget (OMB) estimates that war funding in FY2007 will total \$110 billion, including bridge funding. Based on this OMB projection, cumulative war funding for all of FY2007 would reach about \$549 billion. OMB also assumes a \$50 billion bridge fund for FY2008.

DOD has not provided Congress with the individual costs of each operation. Based on previous spending and a rough allocation of the FY2007 bridge fund, CRS estimates that Iraq will receive about \$379 billion (75%), OEF about \$97 billion (20%), and enhanced base security about \$26 billion (5%), with about \$4 billion (1%) that CRS cannot allocate. Generally, about 91% of these funds are for DOD and about 8% are for foreign aid programs and embassy operations, with 1% for medical care for veterans and 1% are unallocated.

On a monthly basis, DOD spent an average of about \$6.4 billion for OIF, \$1.3 billion for OEF, and \$180 million for enhanced base security in FY2005. During FY2006, these monthly spending levels may increase to about \$8.0 billion for OIF and \$1.5 billion for OEF, an overall increase of 20%.

Based on an alternate path that assumes a drawdown from about 258,000 troops currently engaged in these operations to 74,000 in FY2010, the Congressional Budget Office (CBO) estimates that war costs could total \$371 billion between FY2007 and FY2016. If that CBO estimate is added to funds already appropriated, total funding for Iraq and the GWOT could reach \$808 billion by 2016. DOD's annual war funding rose from about \$73 billion in FY2004 to \$102 billion in FY2005, \$118 billion in FY2006, and is projected by OMB to drop to \$110 billion in FY2007. This report will be updated as warranted.

Contents

Introduction	1
Key War Cost Questions	2
Major Unknowns	
•	
War Funding in Total and By Operation	3
War Appropriations: FY2001-FY2006	4
How DOD's War Costs Evolve	
Estimates for Iraq and Afghanistan and Other Operations	9
Trends in Iraq	
Trends in Operation Enduring Freedom	
Trends in Enhanced Security	
Foreign Operations Funding	
Iraq	
Afghanistan	
Training Security Forces	
DOD Spending Thus Far	
Total Obligations to Date	
Monthly Average Costs for Iraq, OEF, and Enhanced Secu	
Change Since FY2003 for Each Operation	•
Potential Oversight Issues for Congress	17
Effects on DOD's Regular Budget of Replacing Worn Equipme	
CBO and Service Estimates of Reset Costs	
War-Related Procurement Issues	19
Potentially Controllable Support Costs	21
Military Personnel Policy Choices	
Affecting Operational Costs	
Changes in Troop Levels for OIF and OEF Since 9/11	
Changes in Overall Troop Levels	
Changes in OEF Troop Levels	
Changes in OIF Troop Levels	
Estimating Future Costs	
Average Annual Cost Per Troop	
Illustrative Future Costs	31
Oversight Options for War Cost Reporting	
Reporting Alternatives	
Appendix	35
List of Figures	
Figure 1. Active-Duty and Reserve Shares of Forces Deployed for O	OIF &
OEF, FY2002-FY2005	
Figure 2. Military Personnel Deployed for OIF and OEF, by Month,	
September 2001-November 2005	

List of Tables

Table 1. War-Related Funding, Total and By Operation:
FY2001/FY2002-FY2006 Supplemental
Table 2. DOD War Budget Authority By Title: FY2003-FY2006
Supplemental 8
Table 3. Budget Authority for Iraq, Afghanistan, and Other Global War
on Terror (GWOT) Operations: FY2001-FY2006 Supplemental11
Table 4. Foreign and Diplomatic Funds: FY2001-FY2006 Bridge
Table 5. DOD's Obligations by Operation: FY2001-March 2006
Table 6. OIF and OEF War Obligations By Expense: FY2004-FY2005 22
Table 7. Average Annual Cost Per Deployed Troop by Operation:
FY2003-FY2005
Table A1. Defense Department, Foreign Operations Funding, and VA
Medical Funding for Iraq, Afghanistan and Other Global War on Terror,
and Enhanced Base Security, FY2001- FY2006

The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11

Introduction

Since the terrorist attacks of September 11, 2001, the United States has initiated three military operations:

- Operation Enduring Freedom (OEF) covering Afghanistan and other Global War on Terror (GWOT) operations ranging from the Philippines to Djibouti, that began immediately after the 9/11 attacks and continues:
- Operation Noble Eagle (ONE) providing enhanced security for U.S. military bases and other homeland security, that was launched in response to the attacks; and
- Operation Iraqi Freedom (OIF) that began in the fall of 2002 with the build up of troops for the March 2003 invasion of Iraq and continues with counter-insurgency and stability operations.

In the fifth year of operations since the 9/11 attacks, there is considerable interest in Congress about the cost of each operation to date as well as the scope and duration of future costs. In congressional hearings, the Department of Defense (DOD) has typically provided estimates of the current or average monthly costs over a period of time for military operations, referred to as the "burn rate." While this figure covers some of the costs of war, it excludes the cost of upgrading or replacing military equipment and of improving or building facilities overseas, and it does not cover all funds appropriated.

Beginning in 2004, Congress required the Defense Department to report on April 1 and October 31 of each year the cumulative and most recent cost of OIF and OEF. Although this reporting requirement was included in three separate statutes (Sec. 1120, P.L. 108-106, Section 9010, P.L. 108-287, and Sec. 1024, P.L. 109-13), DOD has not yet submitted the report. Two of these statutes also required that DOD send Congress estimates of costs for the next 12 months and for the period, FY2006-FY2011.

DOD has a financial system that tracks funds for each operation once they are obligated — as pay or contractual costs — but has not yet submitted the semiannual reports with cumulative and current obligations for OIF and OEF, or estimates for the next year, or for the next five years that are required by statute.¹

Key War Cost Questions

Because the Administration has not provided estimates, CRS used DOD's financial reports and other sources to estimate the total cost of OIF, OEF, and enhanced security in order to address the following frequently asked questions:

- How much has Congress appropriated for each of the three missions since the 9/11 attacks — Operation Iraqi Freedom (Iraq), Operation Enduring Freedom (Afghanistan and other Global War on Terror operations), and Operation Noble Eagle (enhanced security for defense bases) for defense, foreign operations, and related VA medical care?
- How much has DOD obligated on average per month for each of the three missions each year?
- What do trends in costs tell us about likely spending levels in the future?

Major Unknowns

This report also discusses several areas that Congress may wish to pursue because information is limited and the cost effect is significant.

- What is the estimated cost to reset repair and replace war-worn equipment — and how might that funding affect DOD's regular or baseline budget?
- How are some types of war costs affected by policy and contracting decisions as well as operational needs and troop levels?
- How have deployed troop levels changed since the 9/11 attacks and how could Congress get accurate information on past and future troop levels?
- What is the average cost per deployed troop for OIF and OEF, and how might that cost affect future war costs?
- What are estimates of future war costs?

¹ (...continued)

^{1120,} P.L. 108-106, Section 9010, P.L. 108-287, and Sec. 1024, P.L. 109-13, which also required an estimate of the "reasonably foreseeable costs for ongoing military operations ... for the next 12 months." Section 9012, P.L. 108-287 required an estimate for FY2006-FY2011 or a written certification from the President that national security reasons made that impossible; the Administration sent a letter from Director of OMB Joshua B. Bolten to Speaker of the House J. Dennis Hastert on May 13, 2005, saying an estimate was not possible but the President did not submit a national security waiver.

• How might Congress improve current reporting of war costs to get accurate and complete information to be used to assess current and future requests?

Answers to these questions could help Congress compare war spending to other spending, assess current requests, and project future costs.

War Funding in Total and By Operation

With passage of the FY2006 supplemental (H.R. 4939, H.Rept. 109-494, P.L.109-234), war-related appropriations would total about \$436.8 billion for OIF, OEF, and enhanced security to the Department of Defense, the State Department, and the Department of Veterans Affairs (VA). This total includes the FY2006 bridge fund (H.R. 2863/P.L. 109-148) and the FY2006 supplemental.² The conference version of the House and Senate authorization bills (H.R. 5122/S. 2766) and the FY2007 DOD appropriations bills provide \$70 billion in Title IX for war costs (H.R. 5631). If that \$70 billion is enacted, war appropriations would total \$507 billion to cover war costs in the first half of FY2007 and \$23 billion for reset — the repair and replacement of war-worn equipment.

In its mid-session review, OMB estimated that DOD's war costs would total \$110 billion (including a bridge fund). This would be a decrease from the \$118 billion in FY2006. OMB also included a \$50 billion bridge fund for FY2008.³

In testimony before the Subcommittee on National Security, Emerging Threats and International Affairs, Government Reform Committee, on the accuracy and reliability of cost estimates for the Global war on Terror, Administration witnesses and congressional support agencies each presented estimates of total funding for the Global War on Terrorism. Estimates ranged from a low of \$416.6 billion for Administration witnesses from the Defense and State Department to \$433 billion for CBO and \$437 billion for CRS, a \$20 billion discrepancy. Issues at the hearing included the Administration's failure to present long-term estimates required by law,

² The range included in **Table 1** reflects that it is not clear whether DOD spent \$7.1 billion designated for GWOT in its regular FY2003 appropriations on war costs, a conclusion reached by both CRS and GAO (see "Oversight Options for War Reporting," below). Totals include funds appropriated in both regular and supplemental appropriation bills and \$8.6 billion in DOD funds transferred from its baseline accounts for GWOT needs; these funds were available primarily because scheduled troop training or equipment repair was postponed since units were deployed, programs were executing slower than anticipated, or GWOT needs were considered higher priority; CRS calculation of transfers from listings on DOD website [http://www.defenselink.mil/comptroller/budgetexec.html].

³ Office of Management and Budget, *FY2007 Mid-Session Review*, p. 6 and p. 19; see [http://www.whitehouse.gov/omb/budget/fy2007/pdf/07msr.pdf].

these differences in cost estimates, and problems with current budgeting methods and the quality of cost estimates.⁴ It is not clear why these estimates differ.

War Appropriations: FY2001-FY2006

The total cost for all three operations — Iraq, Afghanistan, and other GWOT and enhanced security — has risen steeply since the 9/11 attacks primarily because of higher DOD spending in Iraq. Annual war appropriations more than doubled from about \$31 billion in FY2001/FY2002 to between \$74 and \$81 billion with the preparation for and invasion of Iraq in FY2003.⁵ By FY2004, annual war funding had trebled over the FY2002 level to \$94 billion (see **Table 1**).

By FY2005, annual war-related appropriations increased to \$107 billion. If the FY2006 supplemental request is approved, annual funding will have risen from \$31 billion in FY2001/2002 — dedicated primarily to U.S. operations in Afghanistan — to \$122 billion in FY2006 for the continuation of Iraq and Operation Enduring Freedom and enhanced DOD security, a fourfold increase since the first year of operations (see **Table 1**).

Table 1. War-Related Funding, Total and By Operation: FY2001/FY2002-FY2006 Supplemental

(in billions of dollars of budget authority)

Fiscal Year & Agency	FY01 & FY02	FY03	FY04 ^b	FY05 ^b	FY06 Total including FY2006 supp conf. (H.R. 4939) ^c	Cum.: FY01-FY06 ^c
Defense	30.8	70.3 to 77.4 ^a	72.6	102.5	117.6	393.9 to 401.0 ^{ac}
State/AID	0.6	3.8	21.7	4.8	4.2	35.1
Veterans Affairs	0	0	0	0	0.7	0.7
Budget Authority	31.4	74.1 to 81.2 ^a	94.3	107.2	122.2	429.7 to 436.8 ^{ac}
By Operation: Iraq.	, Operati	on Endur	ing Freed	om (OEF), and Enhand	ced Security ^e
Iraq	2.5 ^d	51.0	77.3	87.3	100.4	318.5
OEF	18.1	17.0	15.1	18.1	19.9	88.2
Enhanced Security	12.0	6.5	3.7	2.1	1.9	26.2
Unable to Allocate	0	3.9^{ad}	0	0	0	3.9

⁴ July 20, 2006 letter from Congressman Christopher Shays, Chair, Subcommittee on National Security Emerging Threats, and International Affairs, to Chair, House and Senate Armed Services Committees, Chair, House and Senate Appropriations Committees, Majority Leader House, President of the Senate, July 20, 2006. The Hearing was held on July 18, 2006.

⁵ The range is with and without about \$7.1 billion in DOD funds that CRS and GAO could not track.

Notes and Sources: NA=Not Applicable. Numbers may not add due to rounding. Year-by-year totals may not be consistent due to discrepancies and gaps in DOD data.

- a. Range shows amounts with and without the \$7.1B in DOD's regular FY2003 appropriations (P.L. 107-48) that may or may have been spent for war and GWOT. CRS calculations based on public laws and transferred funds listed in **Table A1** in the appendix.
- b. Of the \$24.9 billion provided in Title IX of the FY2005 DOD appropriations bill, CRS included \$1.86B in FY2004 because it was obligated that year and the remaining \$23 billion in FY2005. Because Congress made the funds available in FY2004, they are formally scored by CBO and OMB as FY2004 monies.
- c. Includes funds through the FY2006 supplemental conference bill, H.R. 4939.
- d. Amount shown in DOD table but source of funds unclear; funds were used for initial buildup of troops before Iraq invasion.
- e. For distribution of funds by agency, see **Table 3.**

The \$437 billion in **Table 1** for appropriations through the FY2006 Supplemental conference is divided as follows:

- \$397 billion, or about 91%, for military operations and support, and equipment and facilities for the Department of Defense;
- \$35 billion, or about 8%, for reconstruction, embassy costs;
- \$4 billion in DOD funds that cannot be allocated or about 1%; and
- \$700 million, or less than 1%, for the VA for medical care for veterans of these operations.

(For the distribution of funds by agency, see **Table 3.** For a detailed listing of warrelated appropriations by public law, see **Table A1**.)

The enacted version of FY2006 supplemental bill — H.R. 4939/P.L.109-234 — includes \$69.0 billion for military operations, foreign aid programs, and embassy operations for Iraq and Afghanistan and other GWOT — \$2.2 billion below the request. H.R. 4939 was passed by the House on June 13, 2006 and by the Senate on June 15th and signed by the president the same day.

DOD's funding covers the cost of special pays, military operations and support of deployed personnel, repairing and buying equipment, building and improving military facilities overseas, training Afghan and Iraqi security forces, and providing enhanced security at DOD bases. The remainder was provided in regular defense bills or in transfers from regular appropriations.⁶ All funds were either categorized as emergency funding or were otherwise exempted from ceilings applying to discretionary spending in Congress's annual budget resolutions.⁷ Some members have argued that continuing to fund ongoing operations in supplementals reduces

⁶ These funds were characterized as "additional appropriations," and put in a separate title of DOD's regular appropriation bill. For discussion of using regular vs. supplemental appropriations for war funding, see CRS Report RL32924, *Defense: FY2006 Authorization and Appropriations*, by Stephen Daggett.

⁷ Title IX of P.L. 108-287 and P.L. 109-13, DOD's regular FY2005 and FY2006 appropriations acts, included these bridge funds; the budget resolutions in FY2005 and FY2006 exempted up to \$50 billion in overseas contingency operations funds from budget controls (see Section 403, H.Con.Res. 95 (FY2005) and Sec. 402, S.Con.Res. 95 (FY2006)).

Congressional oversight and makes less apparent the likely effect of this spending on the budget deficit.

Through the FY2006 supplemental, the State Department and USAID have together would receive about \$35 billion for Iraq and Afghanistan for reconstruction, embassy operations and construction, and various foreign aid programs in regular and supplemental appropriation acts.⁸

How DOD's War Costs Evolve

What makes war costs change? Changes in war costs reflect a variety of factors that result from the situation on the ground faced by U.S. troops, policy plans and decisions, and external factors, such as the price of oil. Important war cost drivers are:

- the number of troops deployed or anticipated to deploy;
- changes in the pace of operations or optempo;
- changes in the amount of equipment and number of personnel to be transported to the theater of operations and the type and level of various other support for troops;
- how quickly equipment breaks down and the extent and pace of replacing and upgrading equipment; and
- military basing plans that underlie construction requests.

To see trends by types of DOD costs, **Table 2** shows changes in the budget authority (BA) provided by Congress since FY2003 by title ranging from military personnel to construction. (CRS could not break out figures for FY2001/FY2002 appropriations by title because most of the funds were allocated and spent from the Defense Emergency Response Fund rather than traditional appropriation accounts.) Between FY2004 and FY2006, BA for Operations & Maintenance (O&M) is slated to grow from \$42.7 billion to \$60.9 billion while procurement BA increases from \$7.2 billion to \$22.9 billion.

Some of the reasons for higher operating costs are known. For example, higher operating costs reflect:

- the purchase of more body armor for troops (using O&M funds);
- the jump in oil prices;
- the coming due of maintenance bills as equipment wears; and
- the inclusion of funds to train and equip Afghan and Iraq forces that was previously carried in foreign operations accounts.

These factors, however, are not enough to explain a 50% increase of over \$20 billion in operating costs.

⁸ Funds for foreign operations activities are managed by both the State Department and USAID, which handles most U.S. development assistance programs. Figures on these programs were provided by CRS analyst, Larry Nowels.

Since FY2004, the rise in investment costs has been dramatic — a more than threefold increase since FY2003 with BA rising from \$7.2 billion in FY2003 to \$24.4 billion in FY2006. Including the FY2006 supplemental bill, DOD will have received about \$60 billion in war-related procurement funds since the 9/11 attacks (see **Table 2**).

The upsurge in war-related investment costs reflects:

- a push by both DOD and Congress to provide more force protection equipment and increase situational awareness (e.g., uparmored High Mobility Multipurpose Wheeled Vehicles (HMMWVs), radios, sensors, night-vision goggles);
- a decision to temporarily fund equipment for new Army and Marine Corps units, known as modularity or restructuring;
- the growing bill to rebuild or replace damaged equipment, a process known as reset; and
- the building of more extensive infrastructure to support troops and equipment in and around Iraq and Afghanistan.

Table 2. DOD War Budget Authority By Title: FY2003-FY2006 Supplemental

(in billions of dollars)

Title	FY2003 ^a			Supp. Conf. ^a	Cumul. Total thru FY2006
Military Personnel	15.9			16.5	
Operation &	42.9 to	42.7	49.3	60.9	195.8 to
Maintenance/Health/Other ^c	46.5				199.4
Afghan Sec. Forces Training	0.0			1.9	
Iraq Security Forces Training ^d	0.0	[5.100]	5.7	3.0	8.7
Natural Resources Remediation Fund (NRRF) ^e	0.8	0.0	0.0	0.0	0.8
Joint Improvised Explosive Device Defeat Fund ^b	0.0	0.0	0.0	2.0	2.0
Working Capital Fund/National Sealift Fund ^f	0.8 to 1.1	1.6	2.1	3.0	7.5 to 7.8
Procurement	7.7 to 9.5	7.2	20.9	22.9	58.7 to 60.5
Research, Dev., Testing & Evaluation	1.1 to 2.4	0.4	0.7	0.8	3.0 to 4.3
Military Construction	0.2 to 0.9	0.5	1.1	0.2	2.1 to 2.8
Iraqi Freedom Fund (IFF) ^g	[15.7]	2.0	3.8	4.6	10.3
Enhanced security in FY2006 base budget (estimate)	NA	NA		1.9	
Total	70.1 to 77.2	72.3	102.5	117.7	360.7 to 367.8

Notes and Sources:

- a. P.L.109-148 is FY2006 bridge fund and P.L.109-234 is FY2006 supplemental. Range for FY2003 shows funds from DOD FY2003 appropriations bill that may not have been tracked in DOD's war cost finance system. Cumulative total includes \$7.1 billion. CRS allocated the \$15.7 billion provided in the Iraqi Freedom Fund, by title based on notifications to Congressional defense committees; includes a \$3.5 billion rescission enacted the following year. Includes funds provided in supplemental and regular appropriations acts plus transfers of DOD funds from baseline funds to GWOT after enactment; excludes the \$30 billion appropriated in FY2001 and FY2002 primarily in the Defense Emergency Response Fund (DERF) rather than regular accounts. Includes both FY2006 Title IX bridge funds and the FY2006 Supplemental request. Includes estimate of \$1.9 billion in DOD's baseline budget for ONE, which was formerly funded in supplementals.
- b. Congressional report language permitted DOD to use \$2.1 billion of military personnel funds and \$802 million in O&M funds in the FY2005 supplemental funds to 'restore' funds transferred from DOD's baseline accounts earlier in the year (H.Rept. 109-72, p.100); CRS reduced transfers to reflect restorals.
- c. "Other" includes counterdrug and Office of Inspector General funds.
- d. Funding for training that was provided to the State Department is shown in brackets, and not included in DOD totals.
- NRRF was set up in the FY2003 Supplemental (P.L. 108-11) to fund anticipated damage to Iraq's oil facilities.
- f. Working capital funds finance unanticipated increases in support costs such as fuel.
- g. In some years, Congress included national intelligence funds in the IFF, as well as smaller amounts, which DOD could transfer to where it was needed.

These reasons are not sufficient, however, to explain the level of increases or predict whether these procurement levels are temporary or likely to rise still further. DOD has provided little information about overall requirements to replace worn equipment or to upgrade capabilities, or how war requirements relate to ongoing peacetime investment.

Estimates for Iraq and Afghanistan and Other Operations

How much has Congress provided for each of the three operations launched since the 9/11 attacks—Iraq, Afghanistan and other GWOT, and enhanced security? Using a variety of sources and methods, CRS estimated the distribution of warrelated funds appropriated for defense, foreign operations, and VA medical costs from the 9/11 attacks through the FY2006 supplemental request (see **Table 3**).

The F2006 supplemental included \$65.9 billion for DOD and \$3.1 billion in foreign and diplomatic operations funds for Iraq and Afghanistan, some \$2.3 billion below the request. (CRS did not include funds requested for Iran, Darfur, Pakistan or Liberia.)

With passage of the FY2006 supplemental bill (H.R. 4939), CRS estimates that the \$437 billion in cumulative war-related appropriations would be split as follows

- \$319 billion for Iraq (or 73%);
- \$88 billion for Afghanistan (or 20%);
- \$26 billion for enhanced security (6%); and
- \$4 billion unallocated (1%) (see **Table 3**).

For additional information on the FY2006 supplemental request, see CRS Report RL33298, FY2006 Supplemental Appropriations: Iraq and Other International Activities; Additional Katrina Hurricane Relief, coordinated by Paul M. Irwin and Larry Nowels.

Since the 9/11 attacks, DOD's costs have shifted with sharp increases for Iraq since the invasion in 2003, fairly stable costs for OEF in later years, and sharp decreases for enhanced security. Foreign operations costs peak in FY2004 with the \$20 billion appropriated for Iraq reconstruction and decline thereafter to about \$3 billion to \$4 billion a year. This section discusses trends for each mission including not only DOD costs but also foreign operations and VA medical costs (see **Table 4**).

Trends in Iraq. What is the total cost of the war in Iraq to date and how has funding changed over time? CRS estimates that Iraq will receive appropriations totaling about \$318.5 billion in the FY2006 supplemental (P.L.109-234). From the initial \$2.5 billion tapped from previous appropriations to prepare for the invasion, Iraq costs may rise to \$100.4 billion in FY2006 to continue current military operations, foreign aid programs, embassy support, and VA benefits.⁹

⁹ This initial funding generated controversy in 2004 because it appears that few in Congress were aware that DOD used \$2.5 billion from funding appropriated before the resolution (continued...)

In FY2003, the year of the invasion, funding for Iraq reached \$51 billion and rose by over 50% to almost \$77 billion in FY2004 including almost \$20 billion for reconstruction. By the next year, funding for Iraq grew to \$87 billion, reflecting a \$27 billion increase in DOD costs due to the continued intensity of U.S. military operations in the face of insurgent attacks, a trebling of investment funds to upgrade equipment and add force protection, plus \$5.7 billion to train Iraqi forces. Increases for DOD more than offset the steep drop in foreign operations funds from \$19.5 billion to \$2 billion. Including the FY2006 supplemental funds, the total for Iraq in FY2006 may reach \$100 billion, about 30 percent above the amount in FY2004, two years earlier (see **Table 3**).

Trends in Operation Enduring Freedom. What is the total cost to date for Afghanistan and other Global War on Terror Operations and how has that changed over time? The cost for Afghanistan and other GWOT operations peaked at \$18 billion in the first full year of operations. Since then, OEF costs dropped to \$17 billion in FY2003 and \$15 billion in FY2004.

In FY2005 and FY2006, costs are likely to rise to \$18 billion to \$20 billion per year because of higher troop levels, the cost to train Afghan forces, and a portion of the cost to equip new modular units.¹²

Trends in Enhanced Security. How has the cost of Operation Noble Eagle or enhanced security for DOD bases changed since 9/11? Funding for enhanced base security and other costs halved from the \$12 billion available in the first year to \$6.5 billion in FY2003 as one-time costs like Pentagon reconstruction (\$1.3 billion) and some security upgrades were completed, and as DOD scaled back combat air patrol (about \$1.3 billion for around-the-clock coverage) and the number of reservists guarding bases. ¹³

⁹ (...continued)

authorizing the use of force was passed. A note in a DOD table listing monthly obligations for Iraq from the FY2003 and FY2004 supplementals stated that an additional \$2.5 billion for Iraq was available from "prior year funds" (presumably P.L. 107-38, P.L. 107-117, or P.L. 107-206, the previous two supplementals). CRS could not obtain details on this spending.

¹⁰ Funds to train Iraqi security forces were funded in the State Department. For information on military construction in and in support of Iraq and Afghanistan, see memo by Amy Belasco, available from the author.

¹¹ Funds appropriated at the end of FY2001 were mostly spent in FY2002.

¹² DOD's rationale for considering modularity a war cost is that the new units will reduce stress on personnel; CRS therefore allocates those funds based on the relative shares of military personnel for OIF and OEF.

¹³ For more information, see CRS Report RL31187, Combating Terrorism: 2001 Congressional Debate on Emergency Supplemental Allocations, by Amy Belasco and Larry Nowels; and CRS Report RL31829, Supplemental Appropriations FY2003: Iraq Conflict, Afghanistan, Global War on Terrorism, and Homeland Security, by Amy Belasco and Larry Nowels.

Table 3. Budget Authority for Iraq, Afghanistan, and Other Global War on Terror (GWOT) Operations:

FY2001-FY2006 Supplemental

(CRS estimates in billions of budget authority)

	FY01& FY02ª	FY02	FY03	FY04		FY06 Bridge	FY06 Supp Conf.	FY06 Total w/ Supp	Cum. Total w/ FY06 Supp Conf.
Department of Defense	2.5 ^b	0.0	48.0	57.7	85.1	41.9	54.9	96.8	290.1
Foreign Aid and Diplomatic Ops ^c	0.0	0.0	3.0	19.5			3.0	3.2	27.6
VA medical ^d	0	0	0	0	0.2		0.0	0.4	0.7
Total: Iraq	2.5	0.0	51.0	77.3	87.3		57.9		318.5
	JRING FREEDOM(OEF)/Afghanistan and GWOT								
Department of Defense	8.8	8.4	16.3	12.9	15.4	7.9	11.0	18.9	80.7
Foreign Aid and Diplomatic Ops ^c	0.3	0.5	0.7	2.2	2.8	0.9	0.1	1.0	7.5
VA Medical ^d	0	0	0	0	0	0.1	0.0	0.0	0.1
Total: OEF	9.1	9.0			18.1	8.9	11.1	19.9	88.3
Enhanced Security (O	peratio	n Nobl	e Eagle	e)					
Department of Defense	7.0	5.0	6.5	3.7	2.1	1.9	0.0	1.9	26.2
Total: Enhanced Security ^e	7.0	5.0	6.5	3.7	2.1	1.9	0.0	1.9	26.2
ALL MISSIONS									
Department of Defense	18.3	13.4	70.8	74.3	102.5	51.7	65.9	117.6	396.9
Foreign Operations ^c	0.3	0.5	3.7	21.7	4.8	1.1	3.1	4.2	35.2
VA Medical ^d	0	0	0	0	0.2	0.5	0.0	0.5	0.7
Total: All Missions	18.6	14.0	74.5	96.1	107.5	53.2	69.0	122.3	432.8

Notes and Sources: Numbers may not add due to rounding. DOD has not provided a breakdown by operation for its funding. CRS began with mission breaks in DOD's Defense Finance Accounting Service (DFAS) reports, "Supplemental & Cost of War Execution Reports," through September 2005 and then allocated over \$140 billion in unobligated or requested funds using DFAS shares by title in FY2005, information in DOD's request (e.g., security training), or other methods; see DOD's FY2005 Supp. Request, February 2005 and FY2006 Supplemental Request, February 2006; see [http://www.dod.mil/comptroller/defbudget/fy2006/fy2005_supp.pdf]. The current CRS estimate is higher than previous estimates because it includes the enacted version of the FY2006 bridge supplemental, \$1.5 billion in FY2005 DOD transfers, and the FY2006 bridge and FY2006 supplemental request. CRS splits the \$25 billion provided in the FY2005 Title IX bridge between the \$1.8 billion obligated in FY2004 and the remainder available for FY2005; all those funds are scored as FY2004 because they were available upon enactment in August 2005. Includes funds provided in P.L. 107-38, the first emergency supplemental after 9/11, and funds allocated in P.L. 107-117, the FY2002 DOD appropriations. Foreign operations figures were prepared with the help of CRS analyst Larry Nowels from CRS Report RL31311, Appropriations for FY2003: Foreign Operations, Export Financing, and Related Programs; CRS Report RL32311, Appropriations for FY2005: Foreign Operations, Export Financing, and Related Programs, all by Larry Nowels and CRS Report RL32919, Foreign Operations (House)/State, Foreign Operations, and Related Programs (Senate):

FY2006 Appropriations by Larry Nowels and Susan Epstein and CRS Report RL33420, Foreign Operations (House)/State, Foreign Operations, and Related Programs (Senate): FY2007 Appropriations by Larry Nowels, Connie Veillette, and Susan Epstein; CRS Report RL31406, Supplemental Appropriations for FY2002: Combating Terrorism and Other Issues; CRS Report RL32783, FY2005 Supplemental Appropriations for Iraq and Afghanistan, Tsunami Relief, and Other Activities, all by Amy Belasco and Larry Nowels. CRS built its appropriations estimates for OIF and OEF from obligations data reported in DOD, Execution & Cost of War Execution Reports, September 2003, September 2004, September 2005, estimating unobligated funds from previous obligations, and other methods and sources.

- a. CRS combined funds for FY2001 and FY2002 because most were obligated in FY2002 after the 9/11 attacks at the end of FY2001.
- b. Includes \$2.5 billion obligated for Iraq using funds prior to FY2003 according to a DOD table.
- c. Foreign operations figures include monies for reconstruction, development and humanitarian aid, embassy operations, counter narcotics, initial training of the Afghan and Iraqi army, foreign military sales credits, and Economic Support Funds.
- d. VA estimates of funds for medical care for veterans of Iraq and Afghanistan.
- e. Known as Operation Noble Eagle, these funds provide higher security at DOD bases, support combat air patrol, and rebuilt the Pentagon.

In FY2004, the cost of enhanced security almost halved again, dropping to \$3.7 billion. In FY2005, when funding for enhanced base security was included in DOD's regular rather than supplemental appropriations, the level dropped to about \$2 billion (See **Table 3**).

Foreign Operations Funding

Although DOD has received the bulk of funding for these operations since the 9/11 attacks, Iraq and Afghanistan have also received some \$32.1 billion for foreign aid and reconstruction programs as well as embassy construction and operations (see **Table 4**). Of that total, 77% is for Iraq and 23% for Afghanistan.

Iraq. How much has been appropriated or requested for reconstruction, training of security forces, and embassy operations for Iraq? In the case of Iraq, about 60% of the \$24.7 billion total is for reconstruction, about 13% for embassy construction and operations, and about 20% to train Iraq security forces. In FY2005, funds to train Iraqi and Afghan security forces were appropriated in DOD's budget.

The FY2006 supplemental includes an additional \$3.0 billion for Iraq — split between mission operations and reconstruction/stabilization assistance. (DOD would also receive includes an additional \$3.0 billion to train Iraq's security forces in FY2006.) For more information, see CRS Report RL33298, FY2006 Supplemental Appropriations: Iraq and Other International Activities; Additional Katrina Hurricane Relief, coordinated by Paul M. Irwin and Larry Nowels; see also CRS Report RL31833, Iraq: Recent Developments in Reconstruction Assistance, by Curt Tarnoff.

Afghanistan. How much has been appropriated or requested for foreign aid, security forces training, and embassy operations for Afghanistan? Of Afghanistan's \$7.4 billion total for foreign and embassy operations funding to date, about 40% is for reconstruction and 37% for other foreign aid programs, 17% to train Afghan security forces (now funded in DOD) and 5% for embassy operations.

The FY2006 supplemental includes an additional \$97 million for Afghanistan with about two-thirds for mission operations and one-third million for aid programs and debt cancellation. (An additional \$1.9 billion in DOD funds would be to train Afghan security forces.)

Table 4. Foreign and Diplomatic Funds: FY2001-FY2006 Bridge

(in billions of dollars and as percent of total)

		Iraq	Afghanistan		
Activity	Funding	Percent of total	Funding	Percent of total	
Reconstruction	\$15.9	64%	\$3.1	41%	
Training Security Forces	\$5.0	20%	\$1.3	17%	
New Embassies ^a	\$3.1	13%	\$.3	5%	
Foreign Aid programs ^b	\$.6	2%	\$2.8	37%	
Total	\$24.7	100%	\$7.4	100%	

Source: CRS reports summarizing public laws and Congressional reports.

Notes: Numbers may not add due to rounding. Includes funds appropriated in regular FY2006 bills but not the pending FY2006 supplemental request.

Training Security Forces. How much has been provided or requested to train Afghan and Iraqi security forces? Because funding to train security forces was shifted from the State Department to the Defense Department in FY2005, funds appropriated to both agencies need to be counted to get a complete picture. Taking all funds into account, funding dedicated to train and equip security forces is \$10.7 billion to date for Iraq, with another \$3.0 billion in the FY2006 supplemental conference bill. That would bring the total to \$13.7 billion.

According to GAO, funding to train and equip Afghanistan's military and police forces totals \$4.1 billion thus far including \$1.3 billion funded by DOD in FY2005. (Some of these funds are not captured in **Table 4** above.) The FY2006 supplemental conference bill includes an additional \$1.9 billion, which would bring the total to \$6.0 billion. Congress also permitted DOD to use a total of up to \$500 million to train either Iraq or Afghan security forces in the FY2006 bridge fund.

a. Includes funding for the Coalition Provisional Authority.

b. Foreign aid programs include Economic Support Fund, counter narcotics, anti-terrorism, law enforcement, disaster assistance, and other programs.

¹⁴ See Table 1 in GAO-05-575, Afghanistan Security: Efforts to Establish Army and Police Have Made Progress, but Future Plans Need to be Better Defined, June 2005; [http://www.gao.gov/new.items/d05575.pdf]; see also CRS Report RL30588, *Afghanistan: Post-War Governance, Security, and U.S. Policy*, by Kenneth Katzman.

¹⁵ See Section 9006, Title IX, P.L. 109-148.

DOD Spending Thus Far

While tracking budget authority for each operation and all agencies gives the most complete picture of costs, the measure most frequently cited by the Department of Defense in hearings or in statements to the press is the monthly cost of "military operations" or the "burn rate" either at a particular point in time or an average for several months or a year. Most recently, for example, DOD Comptroller Tina Jonas told reporters that the current average monthly "burn rate" for both Iraq and Afghanistan and other GWOT is \$6.8 billion.¹⁶

That figure covers the war-related costs of military personnel and operations and maintenance, which might be characterized as the *immediate* costs of ongoing military operations, but it excludes funds for military equipment; Research, Development, Test & Evaluation (RDT&E); and military construction intended to upgrade or replace equipment or facilities deemed necessary to conduct war operations. In FY2006, the "burn rate" captures only about 70% of DOD's request.¹⁷

To be more complete, CRS has developed estimates for average monthly obligations that include both operations and investment costs (see **Table 5**). CRS bases these estimates on reports issued by the Defense Finance and Accounting Service (DFAS) that capture each fiscal year's obligations — for pay and contractual costs — but which are funded using appropriations from various fiscal years.

Because it takes time to negotiate contracts, produce, and deliver military goods, or build military facilities, DOD's procurement monies are available for three years, RDT&E for two years, and military construction funds for five years. Thus, procurement obligations in FY2005 may tap funds appropriated in FY2003, FY2004, and FY2005. Although obligations figures have the advantage of coming closest to answering the question "how much has been spent to date," they have the disadvantage of not capturing funds appropriated by Congress but not yet obligated. Because DOD does not track outlays — the amount spent rather than contracted for — obligations are the closest measure of ongoing spending.

The budget authority figures in **Table 1** and **Table 3** may provide the most complete answer to the question "What is the cost to date?" For monthly averages based on these appropriations, budget authority can be divided by 12. (See, for example, **Table 6** in CRS Report RL33298, *FY2006 Supplemental Appropriations: Iraq and Other International Activities; Additional Katrina Hurricane Relief* coordinated, by Paul M. Irwin and Larry Nowels.)

¹⁶ Federal News Service, "White House Conference Call with Deputy Director of the Office of Management and Budget Joel Kaplan and Undersecretary of Defense Comptroller Tina Jonas," Feb. 16, 2006.

¹⁷ For example, military personnel, O&M, and working capital funds account for \$73.5 billion or 70% of the \$105 billion for DOD in FY2005.

¹⁸ Obligations also do not reflect outlays or actual monies spent, which DOD does not track.

Table 5. DOD's Obligations by Operation: FY2001-March 2006 (in billions of dollars)

		Average monthly obligations ^a						
Mission and type of spending	FY2003	FY2004	FY2005: DFAS reported	FY2005 Adjusted estimate ^b	FY2006 Estimate ^b	Obligations, FY2002 thru March FY2006		
Operation Iraqi F	reedom							
Operations ^c	4.3	4.4	4.6	4.8	6.0	NA		
Investment ^d	0.1	0.6	1.5	1.6	1.9	NA		
Total	4.4	5.0	6.1	6.4	8.0	219.4		
Afghanistan and t	he Global	l War on '	Terror ^e					
Operations ^c	1.3	1.1	1.1	1.2	1.5	NA		
Investment ^d	0.0	0.0	0.0	0.1	0.0	NA		
Total	1.3	1.1	1.1	1.3	1.5	58.3		
Enhanced security	and other	e r f	-	-				
Operations ^c	0.5	0.3	0.2	0.2	0.2	NA		
Investment ^d	0.0	0.0	0.0	0.0	0.0	NA		
Total	0.5	0.3	0.2	0.2	0.2	24.5		
All missions								
Operations ^c	6.1	5.8	5.9	6.2	7.7	NA		
Investment ^d	0.2	0.6	1.5	1.7	2.0	NA		
Total	6.3	6.4	7.4	7.9	9.7	302.2		

Note: NA = Not available. Numbers may not add due to rounding.

- a. CRS calculations based on obligations during each fiscal year from all available funds as reported by the Defense Finance Accounting Service plus CRS estimates for intelligence; updated for FY2006 supplemental conference bill (H.R. 4939).
- b. Adjusted CRS estimate for FY2005 includes other funding that DFAS did not capture: \$1.8 billion in military personnel, \$1.6 billion obligated for Afghan and Iraq security Forces Training, and about \$4 billion in modularity funds. For FY2006, CRS estimated obligations assuming all military personnel, O&M, and intelligence funds are obligated (since the funds are only available for one year) and that investment funds for procurement, RDT&E, and military construction obligate at rates experienced in FY2005.
- Includes funds appropriated for military personnel, operation and maintenance, working capital, and defense health.
- d. Includes funds appropriated for procurement, RDT&E, and military construction.
- e. Operation Enduring Freedom funds Afghanistan and other global war on terror (GWOT) activities.
- f. 'Enhanced security and other' includes additional security at defense bases, combat air patrol around U.S. cities, and reconstruction of the Pentagon after the 9/11 attacks.

The monthly averages for OIF and OEF in **Table 5** are useful ways to mirror current spending rates for FY2003, FY2004, FY2005, and FY2006, particularly operational costs which are largely spent in the first year.¹⁹ For investment, however, average monthly obligations tend to lag budget authority.

¹⁹ Operational costs also include working capital funds, defense health, and counterdrug monies.

Total Obligations to Date. What was DOD spending or obligating for each operation in each year between FY2002 and March 2006 DOD obligated about \$312 billion for all three missions including:

- \$219 billion for Iraq;
- \$68 billion for Afghanistan and other GWOT; and
- \$25 billion for enhanced security (see **Table 5**).

Based on DFAS figures in **Table 5**, average monthly reported spending for all three missions rose by about 17% from about \$6.3 billion in FY2003 to about \$7.4 billion in FY2005. Because DFAS obligations for FY2005 do not appear to have captured about \$7 billion in appropriated funds, CRS did an alternate estimate for FY2005 including these monies. With these funds, CRS estimates that FY2005 obligations would be closer to \$8 billion rather than \$7.4 billion reported, almost 25% increase higher than the level two years earlier.

Including the FY2006 supplemental, average monthly obligations for all operations may be about 50% higher compared to three years ago.²⁰ Although some of the increase in average monthly cost is attributable to rising operational costs, the most dramatic increase is for investment costs in Iraq.

Monthly Average Costs for Iraq, OEF, and Enhanced Security. What is the average monthly cost for each operation and how have these changed over time? By FY2006, average monthly costs for Iraq may reach \$8 billion per month, over 80% higher than in FY2003, with about three-quarters dedicated to operational costs and one-quarter to investment.

Average monthly obligations for Afghanistan and other GWOT operations initially hovered around \$1.1 billion in FY2004 and FY2005. That rate could rise to \$1.5 billion in FY2006 with the addition of funds to train Afghan security and police forces and part of the funds to equip new Army and Marine Corps units.²¹

The monthly average for enhanced security (Operation Noble Eagle) has fallen substantially from \$520 million per month in FY2003 to an estimated \$180 million in FY2006 as one-time costs ended and could fall further.

Change Since FY2003 for Each Operation. In summary, based on CRS estimates, monthly average costs — including both military operations and investment spending — will change between FY2003 and FY2006 as follows:

- Iraq costs will grow by 80% from \$4.4 billion to \$8.0 billion;
- OEF costs will grow by 20% from \$1.3 billion to \$1.5 billion;

²⁰ CRS calculated the average cost for Iraq in FY2003 assuming 10 months of operations based on when forces began to deploy. For FY2006, CRS estimated how quickly funds would obligate based on DFAS data for FY2005 and judgments. CRS did not include FY2002 obligations because the data is unreliable and because Iraq costs were small.

²¹ Since forces are deployed for both OIF and OEF, CRS splits the costs based on the roughly 75%, 25% split in DFAS obligations for military personnel.

- Enhanced security costs will fall by 70% from \$500 million to below \$200 million;
- Overall Iraq and GWOT costs will grow by about 50% from \$6.3 billion to \$9.5 billion.

Potential Oversight Issues for Congress

Based on difficulties in capturing war costs by operation and recent cost trends, there are several potential oversight issues that Congress may want to pursue:

- How might repairing and replacing war-worn equipment earlier than anticipated affect DOD's regular or baseline budget?
- Are some types of war costs more controllable because they are affected by policy as well as operational needs?
- How have deployed troop levels changed for OIF and OEF since the 9/11 attacks and how might Congress get accurate information on past and future levels?
- How could past trends be used to help predict war costs?
- How might Congress get better information on DOD war costs in order to evaluate better its requests for additional funds?

Effects on DOD's Regular Budget of Replacing Worn Equipment

Recently, concern has grown among many in Congress, the Administration, and DOD about the size of the bill to repair and replace equipment worn down by war operations, that is, the "reset" issue. Reset is defined as the "process of bringing a unit back to full readiness once it has been rotated out of a combat operation," by repairing and replacing equipment and resting and retraining troops.²² As equipment is stressed by war operations, the cost to repair that equipment — also called reconstitution or depot maintenance — is anticipated to grow. To the extent that equipment cannot be repaired (the 'washout' rate), it may be replaced with the same version or a rebuilt or upgraded version, sometimes referred to as "recapitalization."

Much of this equipment may have been slated for repair or replacement at a later date but because of the stress of war operations, it may need to be replaced now. To the extent that war operations results in earlier repair and replacement of equipment, DOD's baseline budget may be able to be reduced.

There is an ongoing debate about the anticipated cost of reset for the Army and Marine Corps, the services most heavily involved in OIF and OEF. The amount needed for new equipment depends on not only how quickly equipment wears out or

²² Office of the Secretary of Defense, Report to Congress, *Ground Force Equipment Repair, Replacement, and Recapitalization Requirements Resulting from Sustained Combat Operations*, April 2005, p. 8; see also GAO-06-604T, *Defense Logistics: Preliminary Observations on Equipment Reset Challenges and Issues for the Army and Marine Corps*, p. 3.

is damaged beyond repair but also DOD's decisions about whether and how quickly particular equipment needs be upgraded. The effect of this earlier replacement on DOD's baseline budget is also an open question that Congress may want to address. Another factor in estimating future equipment needs is what equipment may ultimately be left behind for Iraqi or Afghan forces when U.S. forces withdraw.

CBO and Service Estimates of Reset Costs. How large is the likely reset bill and how might that affect DOD's baseline budget? Last year, in March 2005, CBO estimated that the backlog of maintenance and replacement costs for warworn equipment was about \$13 billion, about the same as the services' estimates at that time, and that annual repair and replacement costs would run about \$8 billion a year based on the current pace of operations. These CBO estimates, however, do not reflect substantial procurement funding received by DOD in the FY2005 Supplemental, the FY2006 bridge fund, DOD's baseline or regular budgets, or requested in the FY2006 supplemental. The House Appropriations Committee, for example, estimated that about \$8 billion in the FY2006 bridge fund was for replacing worn equipment.²⁴

In its most recent alternative funding path for GWOT, CBO estimates that about \$60 billion would be needed through FY2016 assuming a gradual drawdown in deployed forces from about 258,000 in FY2006 to a steady state of 73,000 in FY2010. This estimate does not include the \$24 billion in procurement funds appropriated or requested in FY2006, much of which is probably for reset.²⁵

Neither DOD nor other Administration sources have publicly endorsed reset requirements for any of the services. The Army's current position on the size and scope of its reset requirement is unclear. In testimony in mid-February, 2006, Army Chief of Staff Schoomaker and Army Secretary Harvey cautioned against accepting a recent \$36 billion in-house estimate for reset, the Army Equipment Plan, that is predicated on a drawdown of forces between FY2006 and FY2008. This estimate includes \$13.5 billion in FY2006 from both supplemental and baseline funds with additional funds in later years.²⁶

In late March, Army Lt. General Melcher testified that the Army had submitted a \$13.5 billion reset requirement to OMB for FY2006 for repair and recapitalization including:

²³ CBO Testimony by Douglas Holtz-Eakin, Director, "The Potential Costs Resulting from Increased Usage of Military Equipment in Ongoing Operations," before the Subcommittee on Readiness, House Armed Services Committee Apr. 6, 2005, p. 2

²⁴ House Appropriations Committee, Press release, "Conferees Approve Defense-Disaster Assistance-Avian Flu Preparedness Package," Dec. 18, 2005.

²⁵ CBO, An Alternative Budget Path Assuming a Reduction in Spending for Military Operations in Iraq and Afghanistan and in support of the Global War on Terrorism, Feb. 24, 2006; contact with CBO staff.

²⁶ Inside the Army, "Schoomaker: Reset, Recap Likely to Exceed \$36 billion Over five Years," February 20, 2006; Defense Daily, "Marine Corps Needs \$12 Billion For Reset," Hagee Says," Feb. 16, 2006; Testimony of General Schoomaker before the Senate Armed Services Committee, *Hearing on FY2007 Defense Authorization*, Feb. 14, 2006.

- \$1.5 billion for battle losses:
- \$5.2 billion for equipment repair;
- \$5.2 billion for equipment recapitalization; and
- \$1.6 billion to repair and replace prepositioned equipment.

Lt. General Melcher also estimated that an additional \$12 billion to \$13 billion per year would be needed "through the period of conflict and for two years beyond." These requirements do not include the cost of leaving equipment behind which General Melcher said was a "subject of great debate right now between the CENTCOM [Central Command] staff and the Third Army and the department." 28

The Marine Corps recently estimated that it would need \$11.7 billion to reset all its equipment including \$5.1 billion received or requested in FY2006.²⁹ In FY2006, the Marine Corps' reset requirement is more than three times its regular procurement budget of \$1.3 billion.³⁰

It is not clear whether these estimates take into account the \$60 billion in procurement funds already received or requested in war appropriations or current and future requests in the baseline budgets of the services (see **Table 2**). To the extent the services repair or replace equipment sooner than planned because of the effects of war operations, DOD's current and future baseline budgets may be able to be reduced.

War-Related Procurement Issues. To evaluate the overall reset requirement, Congress may want to ask the Administration:

- What are current reset estimates and the underlying assumptions about force levels, the pace of operations, and how quickly equipment needs to be replaced?
- How much of the overall requirement has been met by previous appropriations and current requests?
- How does war-related maintenance and procurement funding affect the baseline budget?

²⁷ Statement by Lt. General David F. Melcher, Deputy Chief of Staff, G-8, U.S. Army, before the House Armed Services Subcommittee on Readiness and Tactical Airland Forces, "On Army Equipment Reset," Mar. 30, 2006, p. 5 and 8; Lt. General James J. Lovelace, Deputy Chief of Staff, G-3/5/7, U.S. Army before the Senate Armed Services Committee, Subcommittee on Readiness and Management Support, "On Army Readiness and Soldier Support," Mar. 15, 2006, p. 7.

²⁸ General Melcher in transcript, House Armed Services Subcommittee on Readiness and Tactical Airland Forces, "On Army Equipment Reset," Mar. 30, 2006.

²⁹ Defense Daily, "Marine Corps Needs \$12 billion for Reset, Hagee Says," February 16, 2006; see also, testimony of Lt. General Gardner before the House Armed Services Committee Subcommittees on Readiness and Tactical and Land Forces, "Repair of Army and Marine Corps Damaged Equipment," Mar. 30, 2006.

³⁰ Statement of Lt. General Jan Huly and Lt. General John F. Sattler before the Subcommittee on Military Readiness of the Senate Armed Services Committee, "Readiness and Resetting the Force," Mar. 15, 2006, p. 19.

The same questions could be asked about DOD's past and future plans for warrelated procurement for force protection, upgraded capabilities, and equipment for new modular Army units and restructured Marine Corps units. DOD has provided little or frequently changing estimates of war-related procurement requirements (such as for uparmored High Mobility Multipurpose Wheeled Vehicles (HMMWVs), making it problematic to assess requests. In some cases, like HMMWVs and other force protection gear, requirements have changed in response to operational experience in ways that were not anticipated in DOD's baseline budget.

In other cases, however, the distinction between what is war-related and what instead is part of DOD's ongoing transformation or modernization is less clear. For example, DOD decided to fund the first two years of the Army's modularity and the Marine Corps' restructuring requirements in supplementals in FY2005 and FY2006 and then fund future years in its baseline budgets. The rationale for that decision was that these costs should be considered war-related because the additional units created would ease the stress on troops, a conclusion questioned by two studies by CBO and the RAND corporation because few of the units created would deploy for OIF or OEF.³¹ Because funding for modularity was provided in supplementals for two years, monies were freed up in the Army's baseline budget for other procurement items in FY2005 and FY2006.

To some extent, these war-related requirements for recapitalization, modularity, force protection, and upgrades may overlap with each other and with the baseline budget since all involve the purchase of new equipment to improve capability. Since DOD is constantly modernizing, some of the funding for these requirements may have been included in estimates for the later years of DOD's baseline budget.

Thus, because DOD has received substantial war-related procurement funding since FY2003, some of these anticipated requirements may already have been met. As long as funding levels remain roughly the same, the services may simply have substituted other less urgent requirements. On the other hand, estimates of the cost of DOD's new weapon systems tend to rise — as has been the case with modularity for example — placing pressure on future budgets. To the extent that war leads to funding more urgent requirements sooner, Congress may be able to adjust the baseline budget.

Moreover, although DOD is supposed to carry only war-related incremental costs in its supplementals, it is often difficult to unravel how much fits appropriately in the baseline and how much in supplemental funding. Since war funding is not subject to budget resolution constraints, it is in the interest of both DOD and defense advocates in Congress to maximize the costs covered in war appropriations. With the frequent shifts in requirements and the possible conflation of war and baseline requirements, it may be difficult for Congress to gauge whether the amounts requested by DOD are too high, too low, or about right.

³¹ CBO, An Analysis of the Military's Ability to Sustain an Occupation in Iraq: an Update, October 5, 2005; [http://www.cbo.gov/ftpdocs/66xx/doc6682/10-05-05-IraqLetter.pdf]; RAND, Stretched Thin: Army Forces for Sustained Operations, 7-15-05; [http://www.rand.org/pubs/monographs/2005/RAND_MG362.pdf].

Potentially Controllable Support Costs

Although it is often assumed that all war-related operational costs reflect on-the-ground requirements of commanders and hence cannot and should not be adjusted, recent cost trends suggest that some war-related support costs reflect a mixture of operational needs and policy and contracting choices. **Table 6** shows the FY2004 and FY2005 costs for OIF and OEF by expense categories used by DOD to track past costs and estimate future costs.³² DFAS categories range from "optempo" — the cost of fuel and replacing parts after operations — to facilities/base support, covering housing and support services for deployed troops. As a benchmark, **Table 6** also shows estimated average troop levels for OIF and OEF.³³

Costs that are largely determined by either commanders on the ground or external factors include:

- operating tempo or optempo for short the cost of fuel and replacement parts for equipment used in operations, which largely reflects the intensity of operations and the price of fuel;
- most equipment maintenance requirements which reflect repairs needed after operations; and.
- special pays for soldiers, such as imminent danger pay and family separation allowances, set by statute.

Even where costs are largely uncontrollable, Congress may wish to ask DOD to explain changes in costs and the assumptions underlying its requests in order to assess current requests, predict future costs, and look at any effects on DOD's baseline budget. For example, the rise in optempo costs between FY2004 and FY2005 from \$6.1 billion to \$7.0 billion for OIF and from \$900 million to \$1.6 billion for OEF may reflect a combination of more troops, higher fuel costs, and a more intense pace (see **Table 6**). To better understand this type of change, Congress may want to ask:

- What is the impact on costs of higher fuel prices?
- Are optempo costs rising due to more intensive operations (measured in miles per vehicle), more troops or other factors?
- Has the baseline budget been reduced to reflect training that cannot be conducted or equipment cannot be repaired because troops are deployed?

³² These categories appear in both DOD, *Execution & Cost of War Execution Reports*, which track obligations by month, year, and appropriation, and in DOD's Contingency Operations Support Tool (COST) model that was developed in the mid-1990s to track the cost of contingencies and is now used to estimate some OIF and OEF costs.

³³ CRS estimated average personnel levels from DFAS funding for hostile fire or imminent danger pay. Since each troop is entitled to \$225 per month in hostile fire pay, total funding can be divided by 12 to get a monthly level and that figure can be divided by \$225 to get average troop levels.

Table 6. OIF and OEF War Obligations By Expense: FY2004-FY2005

(in thousands of troops, billions of dollars, or percent of total)

(in thousands of troe		eration				during
Defense Finance Assembling	_	Freedo	m		Freedo	
Defense Finance Accounting Service Category ^a	FY04	FY05	Percent Change FY05/04	FY04	FY05	Percent Change FY05/04
Avg. No. Military Personnel ^b	206,000	202,000	-2%	33,000	50,000	51%
Military Personnel Costs	12.2	11.5	-6%	2.8	3.4	23%
Special Pays ^c	3.3	2.6	-23%	1.9	0.9	-51%
Activating Reservists	6.9	6.1	-12%	0.7	1.8	170%
Subsistence	2.0	1.2	-38%	0.2	0.4	67%
Active Component Overstrgth ^d	0.0	1.6	e	0.0	0.3	¥
Operation & Maintenance	37.4	41.9	12%	6.9	6.8	-1%
OPTEMPO and Training	6.1	7.0	16%	0.9	1.6	72%
Reconstitution/Equipment Maintenance ^f	4.6	4.9	7%	0.2	0.2	17%
Transportation	5.1	5.9	15%	1.0	0.9	-5%
Facilities/Base Support	8.0	8.0	0%	0.9	0.8	-8%
Other Supplies & Equipment	4.4	5.3	20%	0.8	0.9	11%
Other Services/Misc. Contracts	4.6	5.1	12%	2.0	1.2	-42%
Comm., Control, Comm, Computers & Intelligence	0.8	1.1	40%	0.5	0.5	5%
Civilian personnel	0.2	0.3	65%	0.1	0.1	-1%
Personnel Support	3.7	4.3	16%	0.5	0.6	15%
Investment	2.5	17.5	592%	0.2	0.4	106%
Procurement	2.4	16.1	565%	0.2	0.4	112%
RDT&E	0.0	0.1	788%	0.0	0.0	63%
Military Construction	0.1	1.2	1266%	0.0	0.0	0%
TOTAL	52.1	70.9	36%	9.8	10.6	8%

Notes and Sources:

- a. Includes all obligations for pay and contracts in the fiscal year, drawing on budget authority from various years.
- b. Average personnel levels calculated by CRS from DFAS funding for hostile fire or imminent danger pay; since each troop is entitled to \$225 per month in hostile fire pay, total funding can be divided by 12 to get a monthly level and that figure can be divided by \$225 to get average troop levels. Rounded to thousands.
- c. Special pays include hostile fire pay, family separation allowance, foreign duty pay and other special pays.
- d. Covers costs of military personnel above authorized strength levels.
- e. Includes unit, intermediate, and depot maintenance.

Similarly, for equipment maintenance — expected to rise by 40% from \$5.1 billion in FY2005 to \$7.3 billion in FY2006 — Congress may want to know the full scope of the anticipated requirement and whether the services can reduce their regular repair budgets because war-worn equipment is being repaired sooner than

anticipated.³⁴ Many Army systems, such as the 37,000 light trucks in theater, are being operated at far higher rates than peacetime — about 6,000 miles a year for a truck in Iraq, though that is not a high rate by civilian standards.³⁵ The House Appropriations Committee requires DOD to submit a study on past and future maintenance requirements and funding by May 1, 2006 in its recent report on the FY2006 Supplemental.³⁶

Other costs may reflect a mixture of operational requirements and policy choices. For example, while the number of military personnel deployed may reflect the recommendations of commanders on the ground, the mix of active-duty vs. reservists reflects a personnel policy decision. The cost of base support reflects not only the level of facilities and support services provided to troops but also the skill of government negotiators and the extent to which support contracts are competed.

Military Personnel Policy Choices. Changes in war costs for military personnel cannot be explained solely by changes in the average number of deployed troops. Between FY20004 and FY2005, OIF average deployed troop levels declined by 2% from 206,000 to 202,000 while military personnel costs, declined by 6%, three times as much. For OEF, troop levels increased by over 50% from 33,000 to 50,000 while costs rose by 23%, or half as much.

These differences appear to reflect the effects of policy choices about how much to rely on active-duty vs. reserves, how many active-duty forces above standard authorized levels (known as overstrength) are recruited and retained, as well as the effects of contracting decisions about feeding troops.

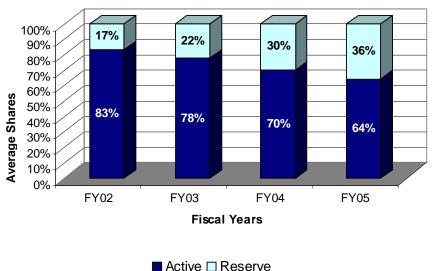
Extent of Reliance on Reservists. How has DOD's reliance on reservists changed in the past four years and how might that affect costs? While overall troop levels are expected to reflect the recommendations of commanders, the mix of activeduty and reserve forces may reflect decisions about how to distribute the burden of deployments among active and reserve units with the requisite skills, essentially, a policy choice. Between FY2002 and FY2005, DOD's reliance on reservists for OIF and OEF grew from 17% to 36% in FY2005 (see **Figure 1**). In FY2006, DOD has stated that it is reducing its reliance on reservists for OIF and OEF so those shares may fall in the future.

³⁴ DOD, FY 2006 Supplemental Request For Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF), Feb. 2006, p. 10; hereinafter, DOD, FY 2006 Supp Request.

³⁵ Office of the Secretary of Defense, Report to Congress, *Ground Force Equipment Repair*, *Replacement, and Recapitalization Requirements Resulting from Sustained Combat Operations*, April 2005, p. 2-4; see also, CBO, Estimates of cost implications of war-related stress on equipment; [http://www.cbo.gov/ftpdocs/62xx/doc6235/04-06-WornEquip.pdf].

³⁶ See H.Rept. 109-388, p. 14.

Figure 1. Active-Duty and Reserve Shares of Forces Deployed for OIF & OEF, FY2002-FY2005



Notes and Sources: CRS calculations based on Defense Manpower Data Center, *Contingency Tracking System, Deployed Military Personnel by Country*, November 2005 run.

Between FY2004 and FY2005, DOD also apparently decided to rely *less* on reservists for OIF — where costs dropped from \$6.9 billion to \$6.1 billion — and to rely *more* on reservists for OEF — where costs rose from \$700 million to \$1.8 billion (see **Table 6**). In terms of incremental war costs (above peacetime levels), activating reservists is more expensive than using active-duty forces because DOD pays not only special pays for combat but also full-time rather than part-time salaries. For active-duty troops, the only additional war-related costs are special pays.

According to DOD, troop levels are expected to remain the same in FY2006 as in FY2005.³⁷ To assess current requests and predict future costs, Congress may want to ask the following questions about troop levels and military personnel costs:

- What are past, current, and planned average troop levels?
- What are DOD's plans and rationales for the extent to which they plan to rely on reserves overall and for OIF vs. OEF?
- To what extent does DOD plan to exceed authorized strength levels to meet its wartime needs and for how long?
- Why are military personnel costs for OEF rising steeply?

Subsistence Costs. Surprisingly, the cost of feeding troops — known as subsistence — fell sharply from \$2 billion to \$1.2 billion for OIF despite almost identical troop levels (see **Table 6**). Subsistence costs for OIF have been volatile — with the annual cost per troop rising from \$4,900 in FY2003 to \$9,500 in FY2004 and then falling to \$6,000 in FY2005. The decline in FY2005 may reflect successful

³⁷ DOD, FY2006 Supp Request, p. 3; [http://www.dod.mil/comptroller/defbudget/fy2007/FY06_GWOT_Supplemental_Request__FINAL.pdf]

efforts by Army logisticians — responsible for feeding all soldiers — to reduce costs. Between FY2003 and FY2005, the daily cost went from \$13 to \$26 to \$17.³⁸

In the OEF theater, the Army appears to have been less successful and the costs are higher. Although the annual OEF cost to feed a troop halved between FY2003 and FY2004 from \$12,000 to \$6,500 a year, it rose to \$7,100 in FY2005. The daily rate went from \$33 to \$18 to \$20 between FY2003 and FY2005. The rate in FY2005 may also be affected by the activities and locations of the additional 17,000 troops deployed for OEF — whether they are in remote areas or at base camps — as much as by contract negotiations.

Congress may want to ask what cost control efforts are underway and how is that expected to reduce military personnel costs. In a report last year, GAO recommended that DOD capitalize on the cost control efforts of some individual theater commanders by setting overall guidelines, a recommendation that DOD rejected.⁴⁰

Affecting Operational Costs. With the exception of optempo costs — which are primarily driven by operational conditions and fuel costs — other operational costs also may be significantly affected by policy and contracting decisions.

Transportation Costs. How are transportation costs affected by operational vs planning and policy choices? Although the cost of transportation reflects some uncontrollable factors such as the amount of equipment and supplies to be shipped, the price of fuel, and security requirements in theater, it also reflects DOD's ability to plan in advance so as to maximize its use of less expensive but slower sea lift rather than more expensive but quicker airlift. Between FY2004 and FY2005, transportation costs increased by 15% or from \$5.1 billion to \$5.9 billion for OIF and decreased by 5% or from \$1 billion to \$900 million for OEF for reasons that are not clear.

To clarify DOD's policy and planning decisions, the following questions could be asked:

- How have the amount of equipment and supplies changed and what is projected (generally measured in ton miles)?
- How much of goods and supplies are shipped by air and how much by sea?
- Given the duration of operations, has DOD increased its reliance on cheaper sealift, a DOD goal, and if not, why not?

Base Support Costs. How have base support costs changed and what does that suggest about ways to control costs? Between FY2003 and FY2004, the cost

³⁸ CRS calculations based on figures in **Table 6**.

³⁹ CRS calculations based on figures in **Table 6** and DFAS obligations for FY2003.

⁴⁰ GAO-05-882, *Global War on Terrorism: DOD Needs to Improve the Reliability of Cost Data and Provide Additional Guidance to Control Costs*, Sept. 2005, p. 6-7 and p. 33ff.

of base support for OIF more than trebled from \$2.5 billion to \$8 billion a year or from about \$16,000 to \$39,000 per troop possibly because the Army and Marine Corps established more extensive facilities and support in the second year of operations (e.g., moving from tents to barracks). In FY2005, base support remained level for OIF at \$8 billion or about \$40,000 per troop per year.

Between those two years, OEF costs increased from \$700 million to \$880 million or from \$20,000 to \$27,000 per person per year. In FY2005, the total cost remained about the same but the per capita cost fell by 40% to \$16,000 because of the jump in troop levels. Base support costs for OEF are generally much lower than for OIF. Although some of these differences may reflect different conditions, the changes over time suggest that efforts to cost control efforts could have an impact.

Other Support Costs. There is little way to assess the \$10.4 billion for OIF and the \$2.1 billion spent for OEF for "Other supplies & Equipment" and "Other Services/Miscellaneous Contracts" because it's unclear what drives the costs (see **Table 6**). In 2004, GAO recommended that DOD reduce the amount of funding carried in these categories for that reason.⁴¹

Changes in Troop Levels for OIF and OEF Since 9/11

The Defense Department has provided little systematic information publicly about how and why war costs are rising including the key variable of the number of deployed troops. In testimony and in press conferences, Defense Department witnesses typically say that there are 138,000 troops deployed in Iraq and 18,000 in Afghanistan.⁴²

These figures, however, include only troops in those two countries — not all troops deployed for Operation Iraqi Freedom and Operation Enduring Freedom which includes not only Afghanistan but other counter-terrorism operations. The cost of paying, supporting, and equipping these troops is funded in DOD's war costs.

DOD's Contingency Tracking System (CTS), a data base compiled to track military personnel who are deployed for OIF and OEF, may capture troop levels more accurately. That data base shows that about 300,000 troops were deployed for

⁴¹ GAO-04-915, Military Operations: Fiscal Year 2004 Costs for the Global War on Terrorism Will Exceed Supplemental, Requiring DOD to Shift Funds from Other Uses, July 2004, p. 4, 19, 21.

⁴² Secretary of Defense Rumsfeld before Senate Appropriations Committee, May 12, 2004 and before Senate Armed Services Committee on Sept. 23, 2004, and before Senate Armed Services Committee, Feb. 7, 2006; Deputy Secretary of Defense Wolfowitz before the House Armed Services Committee, June 22, 2004. For Afghanistan troop levels, see DOD News Transcript, Secretary Rumsfeld Remarks at Townhall Meeting, MacDill Air Force Base, Oct. 11, 2005; DOD News Release, "Operation Enduring Freedom Rotation Adjustment Announced," Dec. 20, 2005.

these missions in FY2005. This total of about 300,000 may include some 30,000 troops who were deployed at bases in the region before the 9/11 attacks.⁴³

In earlier war cost estimates, CBO assumes about 240,000 troops deployed for OIF and OEF in FY2005 — about 60,000 lower than CTS figures.⁴⁴ CBO's figures may exclude the 30,000 troops deployed in the region before the initiation of OEF. CBO does not separately break out troops for OIF and OEF.

Of the 300,000 shown in the CTS data base, about 240,000 are deployed for OIF and about 40,000 for OEF, including about half in Afghanistan and half elsewhere in the region or deployed in other counter terrorism operations such as the Philippines (Other GWOT).⁴⁵ Another 30,000 are in unknown locations including about 15,000 to 20,000 on Navy ships in the region (see **Figure 2**).⁴⁶ A recent House Appropriations Committee report, based on data from the services, says that there are currently some 228,000 troops deployed, including about 190,000 for OIF and 38,000 for OEF, somewhat lower than the CTS or CBO figures.⁴⁷

Congress may want to require more accurate information about annual past and future military personnel levels for each mission in order to assess funding requests.

Changes in Overall Troop Levels. How many troops were in the region before September 11, 2001? Because DOD's CTS includes monthly troop levels, it can show the rise and fall of troop levels over time (see **Figure 2**). As of September 2001, about 60,000 troops were deployed including:

- 15,200 for OEF including 200 in Afghanistan and 15,000 in other neighboring countries like Saudi Arabia and Bahrain or other counter terrorism operations;
- 4,500 in Kuwait, a U.S. headquarters operation which became a staging area for OIF; and

⁴³ Table entitled "Total Military, Civilian and Dependent Strengths by regional Area and By Country, September 30, 2001," in Department of Defense, *Worldwide Manpower Distribution by Geographical Area*, Sept. 30, 2001, shows 27,000 military personnel for North Africa, Near East, and South Asia.

⁴⁴ CBO also shows about 60,000 reservists activated to 'backfill' or perform the duties of deployed active-duty forces or provide enhanced security at U.S. bases. See CBO, "Estimate of War Spending, FY2005-FY2015," Feb. 1, 2005; [http://www.cbo.gov/ftpdocs/60xx/doc6067/02-01-WarSpending.pdf].

⁴⁵ CRS used DOD's definition of OEF as Afghanistan and other Global War on Terrorism (GWOT) operations to calculate these figures from CTS which lists personnel by country.

⁴⁶ CRS calculations from Department of Defense, Defense Manpower Data Center, Contingency Tracking System, Military Personnel Deployed in Support of the Global War on Terrorism, by country, November 2005 run. For OIF, CRS includes military personnel in Iraq and Kuwait because Kuwait is the headquarters and a staging area for OIF.

⁴⁷ See H.Rept. 109-388, p. 6. The House report estimate is as of February 2006, the CBO and CTS estimates are averages for FY2005, which may explain some but not most of the differences among the estimates.

• 40,000 in unknown locations including about 20,000 Navy personnel in ships in the area.

About half of these troops may have been deployed at bases in the region before the 9/11 attacks.⁴⁸

Overall deployed troop levels for OIF and OEF peaked in May 2003 at about 410,000. In the next five months, overall troop levels dropped rapidly to 240,000. Until December 2004, troop levels remained about that level. Since then, however, total troops deployed for both missions increased to about 300,000 in January 2005 and have continued to grow to about 340,000 by November 2005.

Changes in OEF Troop Levels. OEF troop levels doubled from about 15,000 in September 2001 to 35,000 by March 2002 with the number in Afghanistan itself growing from 800 to 4,400 and about 30,000 in other GWOT operations. From March 2002 to March 2003, the number of troops for OEF almost doubled to 63,000 including an increase in Afghanistan from 4,000 to 16,000 while other GWOT grew from 30,000 and 46,000 (see **Figure 2**).

By March 2004, OEF levels had fallen to about 37,000 including 15,000 in Afghanistan and 23,000 in Other GWOT. In the next year, OEF troop levels gradually increased to about 43,000 in March 2005, then edging up to about 50,000 by August 2005 where it remained as of November 2005. During 2005, OEF troop levels hovered close to 50,000 with about half in Afghanistan and the other half in other GWOT.

Changes in OIF Troop Levels. How did troop levels change between May 2003 and November 2005? By December 2002, the buildup for the Iraq invasion had begun with increases in OIF to 10,000 plus a buildup in the number of "unknown" from about 40,000 — the pre-buildup level — to 50,000, some of whom may have been destined for Iraq. By the March invasion of Iraq, OIF troop levels reached 155,000 for OIF or possibly over 200,000 if some of the 105,000 troops shown as "Unknown" were for Iraq. (If the number of troops in unknown locations is assumed to continue to be about 40,000, the pre-buildup level, then some 60,000 may have been destined for Iraq.)

In May 2003, OIF troop levels peaked at between 240,000 and 300,000 (the higher number assumes all but 40,000 in unknown locations were for OIF). In the five months after the invasion, troop levels for OIF dropped from about 300,000 to 170,000. "Unknown" troop levels returned to about 40,000, the pre-OIF buildup level.

Except for an uptick in February/March 2004 for the Iraqi elections, troop levels for OIF remained at about 170,000 levels for FY2004. In November 2004, OIF troop

⁴⁸ Table entitled "Total Military, Civilian and Dependent Strengths by Regional Area and By Country (309), Sept. 30, 2001, in Department of Defense, *Worldwide Manpower Distribution by Geographical Area*, Sept. 30, 2001, shows 27,000 military personnel for North Africa, Near East, and South Asia.

levels began to rise, reaching 260,000 in September 2005. About 30,000 troops were in unknown locations in FY2004 and FY2005.

Congress may want to get actual and planned monthly or quarterly deployed troop levels for each operation in order to get a better understanding of DOD's experiences and plans.

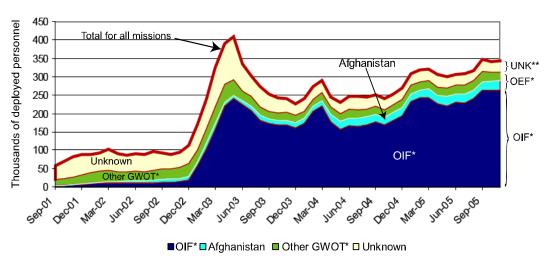


Figure 2. Military Personnel Deployed for OIF and OEF, by Month, September 2001-November 2005

Notes and Sources *OEF = troops deployed for Operation Enduring Freedom or Afghanistan and Other Global War on Terror operations; OIF = troops deployed in Iraq and Kuwait for Operation Iraqi Freedom; Other GWOT = Other Global War on Terror operations including all locations other than Iraq, Afghanistan, and Unknown in data base. **Unknown = country location not identified, includes 15,000 to 20,000 Navy personnel on ships in the region. Figure constructed by CRS from data in *Defense Manpower Data Center, Contingency Tracking System, Military Personnel Deployed for OEF/OIF, by Country*, November 2005 run.

Estimating Future Costs

Future costs will depend on not only changes in the number of deployed troops but also the pace of operations, DOD policy and contracting decisions, and the size of the overall reset bill in years to come. For cost purposes, average annual troop levels may be the most useful benchmark but DOD has not provided those figures. Based on DOD's reporting of war obligations, CRS estimates that the average number of deployed troops for both missions was about 190,000 in FY2003, 238,000 in FY2004 and about 252,000 in FY2005 (see **Table 7**).⁵⁰

⁴⁹ CRS calculations based on Defense Manpower Data Center, *Contingency Tracking System, Military Personnel Deployed in Support of the Global War on Terrorism, by country*, November 2005 run.

⁵⁰ CRS calculated average personnel levels from DFAS funding for hostile fire or imminent danger pay; since each troop is entitled to \$225 per month in hostile fire pay, total funding (continued...)

To give another window into trends and how changes in troop levels may affect costs, CRS estimated the average cost to support each troop deployed — both support and investment costs (see **Table 7**). Only some costs (e.g., for meals, body armor, operating tempo, and ammunition) are likely to vary directly in proportion with troop levels, so the average cost per troop cannot be used by itself to predict future costs.

Other support costs, like base support for example, are likely to change gradually, perhaps only with substantial decreases or increases that would cause individual facilities to be closed or opened. To predict future costs, one would need to make some reasonable assumptions about the portion of costs that vary directly with changes in troop levels and those that lag or are more fixed in the short-term. Investment costs to replace equipment also appear to lag operations and are now expected to persist after operations are complete according to the services.

Average Annual Cost Per Troop. Based on average troop levels, the annual operational cost per troop participating in OIF operations was about \$275,000 in FY2005. If the cost of investment in additional equipment or facilities is included, the annual average rises to about \$360,000 per troop (see **Table 7**).⁵¹

Table 7. Average Annual Cost Per Deployed Troop by Operation: FY2003-FY2005

AVERAGE TROOP LEVELS AND COST	FY2003	FY2004	FY2005				
Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF)							
Average Monthly Troop Levels: OIF and OEF	190,000	238,000	252,000				
Average annual operational cost per troop	\$310,000	\$275,000	\$273,000				
Average annual obligations per troop	\$318,000	\$305,000	\$355,000				
Operation Iraqi Freedom							
Average monthly troop levels	157,000	206,000	202,000				
Average annual operational cost per troop	\$278,000	\$257,000	\$275,000				
Average annual obligations per troop	\$284,000	\$289,000	\$361,000				
Operation Enduring Freedom							
Average monthly troop levels	34,000	33,000	50,000				
Average annual operational cost per troop	\$463,000	\$390,000	\$267,000				
Average annual obligations per troop	\$478,000	\$405,000	\$275,000				

Notes and Sources: Numbers may not add due to rounding. CRS calculations based on hostile fire pay, total obligations, and sum of military personnel and operation and maintenance obligations as reported by the Defense Finance Accounting Service, *Supplemental & Cost of War Execution Reports*, FY2003, FY2004, FY2005 plus intelligence obligations; understates FY2005 costs because does not include cost to train and equip Afghan and Iraqi security forces, Army modularity costs and possibly some military personnel costs.

can be divided by 12 to get a monthly level and that figure can be divided by \$225 to get average troop levels. These figures are similar to but do not match average levels calculated from DMDC's Contingency Tracking System.

⁵⁰ (...continued)

⁵¹ This estimate is based on CRS estimates of average troop levels and DFAS-reported costs which do not include such costs as intelligence, modularity, or the training of Afghan and Iraqi security forces.

By FY2005, operational costs for OEF troops declined to roughly the same amount as OIF — \$267,000 — probably because of the spike in the number of troops from 33,000 to 50,000. Before that, operational costs were over \$100,000 higher per troop for the OEF mission. Little of DOD's procurement monies is slated for the OEF mission so the \$275,000 overall average cost is lower than for the OIF mission (see **Table 7**).

These costs are considerably higher than the \$90,000 average to "sustain a U.S. service member in a theater ..." that was cited by Secretary Rumsfeld in recent testimony.⁵² The DOD figure may be a narrow definition of support including only military pay and base support costs.

Illustrative Future Costs. The Administration and DOD have not been willing to estimate war costs beyond the current fiscal year citing the uncertainties of ongoing operations. Based on an illustrative scenario in which dedicated force levels for the global war on terror (GWOT) fall from about 258,000 in FY2006 to about 73,000 by FY2010, CBO estimates that war costs could total an additional \$197 billion between FY2007 and FY2010 and \$371 billion between FY2007 and FY2016.⁵³ Based on that rough CBO estimate, the cumulative cost of the global war on terror could reach \$634 billion by FY2010 and \$808 billion by FY2016.

CBO's alternative path assumes that funding will decline from about \$95 billion supporting 258,000 troops in FY2006 to:

- \$75 billion in FY2007 with 220,000 troops;
- \$55 billion in FY2008 with 170,000 troops;
- \$40 billion in FY2009 with 123,000 troops;
- \$30 billion in FY2010 with 73,000 troops; and
- an annual average of \$29 billion between FY2011 and FY2016 for 73,000 troops.⁵⁴

In CBO's illustrative estimate, overall war costs would drop by \$20 billion between FY2006 and FY2007 if the number of dedicated troops fell by 38,000 from 258,000 to 220,000. CBO's estimate includes about \$60 billion in investment — mostly in FY2006 for accrued costs some of which may already be financed in the FY2005 and FY2006 supplemental. In CBO's estimates, operational costs do not

⁵² Secretary Rumsfeld in hearing before Senate Appropriations Committee, *Supplemental Budget Request for Operations in Iraq and Afghanistan*, March 9, 2006.

⁵³ CBO's estimate of troops includes both those deployed and reservists activated to do the jobs of active-duty troops deployed and provide enhanced security at bases.

⁵⁴ CBO, An Alternative Budget Path Assuming a Reduction in Spending for Military Operations in Iraq and Afghanistan and in support of the Global War on Terrorism, Feb. 24, 2006; [http://www.cbo.gov/ftpdocs/70xx/doc7048/02-24-AlternativePath.pdf]; see also, [http://www.cbo.gov/publications/collections/iraq.cfm].

immediately fall with drops in troop levels but fall more proportionately in later years.⁵⁵

To get a more precise figure, Congress may want DOD to construct illustrative scenarios showing rough estimates of how costs would change with different troop levels as well as the size of overall reset requirements in light of funding already provided or programmed.

Oversight Options for War Cost Reporting

Both CRS and GAO have found that DOD's war cost reports appear to leave out substantial amounts of war spending, including over \$7 billion in FY2003 funding provided in DOD's regular defense appropriations act that was intended for the global war on terror, as well as \$10 billion each year for the next five years included in DOD's budget plans for the same purpose. ⁵⁶ CRS also found that about \$2.5 billion used by DOD to prepare for the invasion of Iraq came from funds appropriated before Congress passed the resolution approving the use of force in Iraq. ⁵⁷

CRS also found that DOD's cumulative figures for war obligations understate expenses by over \$20 billion because DOD's financial system for tracking war costs has excluded certain types of expenses. Although CRS has tried to capture accurately all of DOD's war-related spending — including transfers from baseline appropriations — CRS estimates may not capture all war-related spending or may, in some cases, be overstated because of possible double-counting.

⁵⁵ CBO, An Alternative Budget Path Assuming a Reduction in Spending for Military Operations in Iraq and Afghanistan and in support of the Global War on Terrorism, Feb. 24, 2006; [http://www.cbo.gov/ftpdocs/70xx/doc7048/02-24-AlternativePath.pdf]; see also, [http://www.cbo.gov/publications/collections/iraq.cfm].

⁵⁶ CRS's conclusion is based on an analysis comparing DOD's budget authority with its war obligations reports. GAO also found that DOD had lost visibility over \$10 billion added to DOD's planned funding for each year between FY2003 and FY2007 for the global war on terrorism; see U.S. Government Accountability Office, *Global War on Terrorism: DoD Needs to Improve the Reliability of Cost Data and Provide Additional Guidance to Control Costs*, GAO-05-882, Sept. 2005, pp. 33, 35; [http://www.gao.gov/new.items/d05882.pdf].

⁵⁷ A DOD table attributes \$2.5 billion in funds for Iraq to years before FY2003, probably from the first two war supplementals (P.L. 107-38 and P.L. 108-206), which were to "respond to the terrorist attacks," of September 11th and "to continue the global war on terrorism" These funds probably included the \$700 million that according to Bob Woodward's book, *Plan of Attack*, President Bush used to upgrade facilities and prepare for the war in Iraq in the summer of 2002 before passage of the joint resolution authorizing the use of force in Iraq. This account was disputed by then-Deputy Defense Secretary Wolfowitz.

⁵⁸ For example, DOD told press representatives that its cumulative obligations for OIF, OEF, and ONE totaled \$251 through FY2005 based on its Supplemental & Cost of war reports. That total does not include funds for intelligence, some funds for Army modularity and military personnel, and \$7.0 billion to train and equip Afghan and Iraqi security forces.

Keeping track of costs is also problematic because since FY2003, Congress has provided funds to DOD twice a year — in bridge funds and a supplemental. Congress has provided funds in DOD's regular appropriations to cover the initial months of the fiscal year and bridge the gap until passage of a supplemental later in the year, without receiving a DOD request. DOD's justification materials for its supplementals typically do not show expenses for the full year in any consistent fashion so it is difficult to compare individual types of expenses between years.

Reporting Alternatives. How might Congress get better, accurate information on war costs? To get official figures and a better sense of DOD's plans, Congress may want to consider directing DOD to do one or more of the following:

- allocate all funds by military operation in its requests;
- report previous and projected funding and actual and planned troop levels by operation after enactment;
- compare budget authority appropriated with obligations and outlays by operation and type of expense in a timely manner;
- estimate and explain the rationale for reset requirements to repair and replace equipment that is worn or lost in combat;
- estimate and explain recapitalization requirements to upgrade equipment; and
- show how funding provided in supplemental appropriations may reduce DOD's baseline requests by funding maintenance or procurement earlier than anticipated.

Particularly if the global war on terror is likely to become "the long war" as some Administration spokesman have suggested, Congress may want to consider requiring that DOD request a full year's war funds concurrently with the regular budget as well as provide the same level of detail as in its regular requests. This option would make it easier to see DOD's full costs each year and to compare war and baseline-funding. On the other hand, it would also be more difficult for DOD to estimate its requirements at an earlier point in time.

Another option that Congress may want to consider to improve the tracking and visibility of war costs, would be to set up separate accounts for war-related funding. Because DOD currently mixes its war-related and baseline program funds in the same accounts, it is difficult if not impossible to segregate all war-related funds or track war outlays. On the other hand, mixing baseline and war funds gives the services more flexibility to move funds from one purpose to the other.

Disclosing and developing more accurate war cost information could provide another metric for measuring progress in each operation. Although Congress required that DOD report quarterly on a wide range of metrics for measuring success in Iraq beginning in July 2005, this requirement does not include estimates of current or future costs.⁵⁹

⁵⁹ H.Rept. 109-72, p. 97; DOD, Report to Congress, "Measuring Stability and Security in Iraq," July 21, 2005; [http://www.defenselink.mil/news/Jul2005/d20050721secstab.pdf].

The State Department has provided Congress with more detailed reports on its various reconstruction activities in Iraq including both monthly reports — required by statute — and with weekly updates at its discretion. ⁶⁰ Accurate, consistent and complete reporting by DOD to Congress on an ongoing and current basis could help Congress assess trends in war-related spending and DOD's additional requests for Iraq and Afghanistan in the years to come.

⁶⁰ See for example, State Dept. 2207 Reports to Congress, July 2005, executive summary [http://www.state.gov/documents/organization/48891.pdf].

Appendix

Table A1. Defense Department, Foreign Operations Funding, and VA Medical Funding for Iraq, Afghanistan and Other Global War on Terror, and Enhanced Base Security, FY2001- FY2006

(in billions of dollars of budget authority)^a

(in bilinons o				Foreign	T 7.4	m ()
Name of law	Public Law No.	Date Enacted	DOD Funds	Aid Embassy	VA Medical	Total cost
FY2001 Emerg. Supp. Approp. Act	Law 110.	Enacted	Tulius	Linuassy	Medicai	COST
for Recovery from and Response to	107-38	9/18/01	13.6	0.3	0.0	13.9
Terrorist Attacks on the United States						
FY2002 Dept. Of Defense and	107-117	1/10/02	3.4	0.0	0.0	3.4
Emergency Terrorism Response Act						
FY2002 Emergency Supplemental	107-206		13.8	0.4	0.0	14.1
FY2002 Regular Foreign Operations	107-115		0.0	0.2	0.0	0.2
FY2003 Consolidated Approps	108-7	2/20/03	10.0	0.4	0.0	10.4
FY2003 Emergency Supplemental	108-11	4/16/03	62.6	3.3	0.0	66.0
FY2003 DOD Appropriations ^b	107-48	10/23/02	[7.1] ^b	0.0	0.0	[7.1]*
FY2004 DOD Appropriations Act (rescission of FY03 funds)	108-87	9/30/03	-3.5	0.0	0.0	-3.5
FY2004 Emergency Supplemental	108-106	11/6/03	64.9	21.2	0.0	86.1
FY2004 Foreign Operations	108-199	1/23/04	0.0	0.5	0.0	0.5
FY2005 DOD Appropriations Act, Titles IX and X	108-287	8/5/04	24.9	0.7	0.0	25.6
FY2005 Supplemental Approps ^c	109-13	5/11/05	75.7	3.1	0.0	78.8
FY2005 Omnibus Appropriations	108-447	12/8/04	0.0	1.0	0.0	1.0
FY2005 DOD Appropriations Act ^d	108-287	8/5/04	2.1	0.0	0.0	2.1
FY2006 DOD Approps Act, Title IX ^e	109-148	12/30/05	49.9	0.0	0.0	49.9
FY2006 DOD Appropriations Act ^d	109-148	12/30/05	1.9	0.0	0.0	1.9
FY2006 Foreign Operations and Rel. Ag. Approp. Act	109-102	11/14/05	0.0	1.0	0.0	1.0
FY2006 Science, State, & Rel. Agencies Appropriations Act ^e	109-108	11/22/05	0.0	0.1	0.0	0.1
FY2006 Interior & Rel. Ag. Approp. ^f	109-54	8/2/05	0.0	0.0	0.2	0.2
FY2006 Military Quality of Life & Veterans Affairs _f	109-114	11/30/05	0.0	0.0	0.5	0.5
TOTAL APPROP. W/O \$7.1B	NA	NA	319.2	32.1	0.7	352.0
TOTAL APPROP. W/ \$7.1B	NA	NA	326.3	32.1	0.7	359.1
FY2003 Transfers	various	NA	1.2	0.0	0.0	1.2
FY2004 Transfers	various	NA	5.8	0.0	0.0	5.8
FY2005 Transfers	various	NA	1.6	0.0	0.0	1.6
Subtotal Transfers ^g			8.6	0.0	0.0	8.6
TOTAL ENACTED (w/ transfers)	NA	NA	334.9	32.1	0.7	367.7
FY2006 Emergency Supplemental, P.L. 109-234, 6-14-06	NA	NA	65.9	3.1	0.0	69.0
GRAND TOTAL WITH FY2006 SUPPLEMENTAL, P.L.109-234	NA NA	NA NA	393.7 to 400.8*	35.2		429.7 to 436.8*

Source: CRS calculations based on public laws and DOD documents.

Notes: NA=Not Applicable. Totals may not add due to rounding.

- a. Totals reflect budget authority for war-related expenses from appropriations and transfers, and exclude funds transferred to other agencies, contingent appropriations not approved, rescissions that do not affect war-related funds, and transfers that were later restored in supplemental appropriations.
- b. Range reflects totals with and without \$7.1 billion in regular FY2003 defense appropriations that may or may not have spent on GWOT.
- c. Excludes funds for tsunami relief and for the new office for the Director of National Intelligence.
- d. Reflects funds obligated for enhanced security (Operation Noble Eagle) in FY2005 from DOD's baseline funds; CRS estimated FY2006 based on FY2005 level; Title IX of DOD's regular appropriations bills in FY2005 and FY2006 provided DOD with "additional appropriations" or a bridge fund for Iraq and Afghanistan until passage of a supplemental.
- e. Includes funds for embassy operations.
- f. Interior bill included additional emergency VA medical care funding for veterans of Iraq and Afghanistan; VA estimate of medical costs for veterans of Iraq and Afghanistan in both acts.
- g. CRS calculated funding for transfers from DOD's list on their website.