



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

July 14, 2009

S. 1390 **National Defense Authorization Act for Fiscal Year 2010**

*As reported by the Senate Committee on Armed Services
on July 2, 2009*

SUMMARY

S. 1390 would authorize appropriations totaling \$681 billion for fiscal year 2010 for the military functions of the Department of Defense (DoD), for certain activities of the Department of Energy (DOE), and for other purposes. That total includes \$129 billion for the cost of overseas contingency operations, primarily in Iraq and Afghanistan. In addition, S. 1390 would prescribe personnel strengths for each active-duty and selected reserve component of the U.S. armed forces. CBO estimates that appropriation of the authorized amounts would result in outlays of \$670 billion over the 2010-2014 period.

The bill also contains provisions that would increase and decrease costs of discretionary programs in future years. Most of those provisions would affect force structure, military compensation, and health benefits. In total, such provisions would raise costs by an average of about \$10 billion annually from 2011 to 2014, assuming appropriation of the necessary amounts.

S. 1390 contains several provisions that would affect direct spending. In total, those changes would increase outlays by \$1.8 billion over the 2010-2014 period and \$2.7 billion over the 2010-2019 period. Enactment of the bill would have an insignificant effect on revenues.

S. 1390 contains intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the cost of the intergovernmental mandates to public entities would not exceed the threshold established in UMRA (\$69 million in 2009, adjusted annually for inflation). We cannot determine whether the costs to the private sector would exceed the annual threshold (\$139 million in 2009, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary impact of S. 1390 is summarized in Table 1. Almost all of the \$681 billion that would be authorized by the bill is for programs and activities within budget function 050 (national defense). Other smaller costs fall within other budget functions, including: \$134 million in 2010 for the Armed Forces Retirement Home (function 600—income security); and about \$15 million annually from 2011 through 2015 for the Department of Veterans Affairs (function 700—veterans benefits and services).

BASIS OF ESTIMATE

For this estimate, CBO assumes that S. 1390 will be enacted near the start of fiscal year 2010 and that the authorized amounts will be appropriated.

Spending Subject to Appropriation

The bill would specifically authorize appropriations totaling \$680.6 billion in 2010 (see Table 2). Of that amount, \$551.3 billion would be for authorizations of regular (non-emergency) appropriations—\$534.8 billion for DoD, \$16.4 billion for atomic energy activities, primarily within DOE, and \$0.1 billion for other programs.

Compared to regular appropriations currently enacted for 2009, the 2010 level authorized for DoD would be an increase of \$21.3 billion (4.2 percent), while the level authorized for DOE would be an increase of \$0.5 billion (3.2 percent). The four largest categories of DoD spending would receive increases as follows: military personnel—\$10.7 billion (8.6 percent); operation and maintenance—\$5.7 billion (3.2 percent); procurement—\$7.1 billion (7.0 percent), and research and development—\$0.4 billion (0.5 percent).

The \$129 billion that would be authorized for overseas contingency operations—primarily for military operations in Iraq and Afghanistan—represents a decrease of about 11.5 percent compared to an estimated \$146 billion currently appropriated to DoD for those operations in 2009. The decreases are primarily in accounts for military personnel and procurement.

The bill also contains provisions that would increase and decrease the costs of discretionary programs in future years. Most of those provisions would affect end strength, military compensation, and health benefits. The estimated costs of those provisions are shown in Table 3 and discussed below. The following discussion does not address the timing of outlays from those estimated authorizations.

TABLE 1. BUDGETARY IMPACT OF S. 1390, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2010

	By Fiscal Year, in Millions of Dollars					2010-
	2010	2011	2012	2013	2014	2014
SPENDING SUBJECT TO APPROPRIATION						
Authorization of Regular Appropriations for 2010, primarily for the Departments of Defense and Energy						
Authorization Level	551,311	0	0	0	0	551,311
Estimated Outlays	353,530	125,249	43,060	14,512	5,735	542,086
Authorization of Appropriations for 2010 for Overseas Contingency Operations						
Authorization Level	129,260	0	0	0	0	129,260
Estimated Outlays	66,503	42,059	14,076	3,920	1,259	127,817
Other Authorizations						
Estimated Authorization Level	0	15	15	16	16	62
Estimated Outlays	0	14	15	16	16	61
Total						
Estimated Authorization Level	680,571	15	15	16	16	680,633
Estimated Outlays	420,033	167,322	57,151	18,448	7,010	669,964
CHANGES IN DIRECT SPENDING ^a						
Estimated Budget Authority	0	595	550	430	430	2,005
Estimated Outlays	0	315	480	515	475	1,785

Notes: For 2010, the authorizations of appropriations include amounts that would be specifically authorized by the bill for DoD, DOE, and the Armed Forces Retirement Home. (For more detail, see Table 2.) In addition, the estimated authorization levels shown for 2011 through 2014 include amounts for the Department of Veterans Affairs. (Those estimated authorizations are included in Table 3.) The bill also implicitly authorizes some DoD activities in 2011 and later years; those authorizations are not reflected above (but are included in the estimates in Table 3) because funding for those activities would be covered by specific authorizations in future years.

Enactment of the bill would have an insignificant effect on revenues.

Numbers may not add to totals because of rounding.

- a. In addition to the changes in direct spending shown above, S. 1390 would have effects on direct spending past 2014. CBO estimates that, in total, S. 1390 would increase direct spending outlays by \$2.7 billion over the 2010-2019 period (see Table 4).

Force Structure. The bill would affect force structure by setting end-strength levels for the various military services.

Under title IV, the authorized end strengths in 2010 for active-duty personnel and personnel in the selected reserves would total about 1,410,000 and 855,000, respectively. Of those selected reservists, about 78,900 would serve on active duty in support of the reserves. In total, active-duty end strength would increase by about 40,200 and selected-reserve end strength would increase by about 6,400 when compared with levels authorized in 2009.

Also, this title would allow DoD to temporarily increase end strength for active-duty personnel in the Army by 30,000 in fiscal years 2011 and 2012 above the level authorized in this bill for 2010.

Active-Duty End Strengths. Section 401 would authorize 15,000 additional active-duty personnel for the Army, 8,100 additional active-duty personnel for the Marine Corps, about 2,500 additional active-duty personnel for the Navy, and about 14,700 additional active-duty personnel for the Air Force—which CBO estimates would increase costs to DoD by \$31 billion over the 2010-2014 period. Those costs include the pay and benefits of the additional personnel, as well as costs for operation and maintenance. Costs for procurement and construction are included for the cost of additional personnel in both the Army and Marine Corps to support adding and reorganizing units as part of the “Grow the Force” initiative.

Army Temporary 30,000 Increase. Section 402 would allow the Secretary of Defense to temporarily increase the Army’s active-duty end strength by 30,000 in 2011 and 2012 compared with the level authorized in section 401 for 2010. CBO estimates that the temporary increase in end strength for the Army would raise costs for salaries and other expenses by roughly \$2 billion in 2011, \$4 billion in 2012, and \$2 billion in 2013.

Reserve Component End Strengths. Sections 411 and 412 would authorize the end strengths for the reserve components, including those who serve on active duty in support of the reserves. Under this bill, the selected reserve would experience a net increase in end strength of about 6,400, with the Navy Reserve and Air National Guard losing personnel while the Army National Guard and Air Force Reserve would see an increase. On net, the number of full-time reservists who serve on active duty in support of the reserves would increase by about 170. CBO estimates that the net result of implementing those provisions would be an increase in costs for salaries and other expenses for selected reservists of \$571 million in 2010 and about \$2 billion over the 2010-2014 period.

Reserve Technicians End Strengths. In addition, section 413 would authorize the minimum end-strength levels for dual-status military technicians, who are federal civilian personnel required to maintain membership in a selected-reserve component as a condition of their employment. Under this bill, the required number of technicians would increase on net by 275 relative to the levels currently authorized. CBO estimates the costs in civilian salaries and expenses that would result from those additional military technicians would total about \$120 million over the 2010-2014 period.

Coast Guard Reserve End Strength. The bill also would authorize an end-strength level of 10,000 servicemembers in 2010 for the Coast Guard Reserve. Because this authorization is the same as that under current law, CBO does not estimate any additional costs for this provision.

Compensation and Benefits. S. 1390 contains several provisions that would affect military compensation and benefits for uniformed personnel. The bill would specifically authorize regular appropriations of \$135.6 billion for the costs of military pay and allowances in 2010. For related costs due to overseas contingency operations (primarily in Iraq and Afghanistan), the bill would authorize an additional \$13.6 billion for 2010.

Pay Raises. Section 601 would raise basic pay for all individuals in the uniformed services by 3.4 percent, effective January 1, 2010. CBO estimates the total cost of a 3.4 percent military pay raise would be about \$2.4 billion in 2010. Compared with current law (under which CBO estimates the across-the-board increase that will go into effect on January 1 will be 2.9 percent), this section would increase the pay raise in 2010 by an additional 0.5 percent. CBO estimates the incremental cost of this larger raise would be about \$350 million in 2010 and \$2.3 billion over the 2010-2014 period.

Expiring Bonuses and Allowances. Sections 611 through 616 would extend DoD's authority to enter agreements to pay certain bonuses and allowances to military personnel. Those bonuses and allowances would be extended for an additional year beyond their scheduled expiration on December 31, 2009. Some bonuses are paid in lump sum, while others are paid in annual or monthly installments over the period of obligated service. Based on DoD's budget submission for fiscal year 2010, CBO estimates that extending those authorities would cost \$1.7 billion in 2010 and \$2.8 billion over the 2010-2014 period.

TABLE 2. SPECIFIED AUTHORIZATIONS IN S. 1390

	By Fiscal Year, in Millions of Dollars					
	2010	2011	2012	2013	2014	2010-- 2014
Authorization of Regular Appropriations						
Department of Defense						
Military Personnel ^a						
Authorization Level	135,616	0	0	0	0	135,616
Estimated Outlays	129,568	5,560	68	14	0	135,210
Operation and Maintenance						
Authorization Level	184,837	0	0	0	0	184,837
Estimated Outlays	133,822	38,271	8,440	2,073	838	183,444
Procurement						
Authorization Level	108,778	0	0	0	0	108,778
Estimated Outlays	28,097	39,600	23,161	8,902	3,524	103,284
Research and Development						
Authorization Level	79,901	0	0	0	0	79,901
Estimated Outlays	43,629	28,755	4,920	1,181	366	78,851
Military Construction and Family Housing						
Authorization Level	22,923	0	0	0	0	22,923
Estimated Outlays	4,470	8,482	5,627	2,404	1,018	22,001
Revolving Funds						
Authorization Level	2,698	0	0	0	0	2,698
Estimated Outlays	2,112	398	101	58	29	2,698
General Transfer Authority						
Authorization Level	0	0	0	0	0	0
Estimated Outlays	560	-120	-240	-120	-40	40
Subtotal, Department of Defense						
Authorization Level	534,753	0	0	0	0	534,753
Estimated Outlays	342,258	120,946	42,077	14,512	5,735	525,528
Atomic Energy Defense Activities						
Authorization Level ^b	16,424	0	0	0	0	16,424
Estimated Outlays	11,158	4,283	983	0	0	16,424
Armed Forces Retirement Home						
Authorization Level	134	0	0	0	0	134
Estimated Outlays	114	20	0	0	0	134
Subtotal, Authorization of Regular Appropriations						
Authorization Level	551,311	0	0	0	0	551,311
Estimated Outlays	353,530	125,249	43,060	14,512	5,735	542,086

(Continued)

TABLE 2. CONTINUED

	By Fiscal Year, in Millions of Dollars					2010-
	2010	2011	2012	2013	2014	2014
Authorization of Appropriations for Overseas Contingency Operations						
Military Personnel						
Authorization Level	13,586	0	0	0	0	13,586
Estimated Outlays	12,892	650	7	2	0	13,551
Operation and Maintenance						
Authorization Level	89,191	0	0	0	0	89,191
Estimated Outlays	48,544	29,708	7,537	1,949	666	88,404
Procurement						
Authorization Level	24,370	0	0	0	0	24,370
Estimated Outlays	4,454	10,873	6,073	1,846	555	23,801
Research and Development						
Authorization Level	310	0	0	0	0	310
Estimated Outlays	161	117	21	5	1	305
Military Construction						
Authorization Level	1,405	0	0	0	0	1,405
Estimated Outlays	145	567	436	145	61	1,354
Working Capital Funds						
Authorization Level	397	0	0	0	0	397
Estimated Outlays	149	189	47	9	3	397
Special Transfer Authority						
Authorization Level	0	0	0	0	0	0
Estimated Outlays	158	-45	-45	-36	-27	5
Subtotal, Overseas Contingency Operations						
Authorization Level	129,260	0	0	0	0	129,260
Estimated Outlays	66,503	42,059	14,076	3,920	1,259	127,817
Total Specified Authorizations						
Authorization Level	680,571	0	0	0	0	680,571
Estimated Outlays	420,033	167,308	57,136	18,432	6,994	669,903

Notes: This table summarizes the authorizations of appropriations explicitly stated in the bill—in specified amounts. Various provisions of the bill also would authorize activities and provide authorities that would result in additional costs in 2011 and in future years. Because the bill would not specifically authorize appropriations to cover those costs, they are not reflected in this table. Rather, Table 3 contains the estimated costs of a select number of those provisions.

Numbers may not sum to totals because of rounding.

- a. The authorization of appropriation in section 421 for military personnel includes \$10.8 billion for accrual payments for the TRICARE For Life program.
- b. This authorization is primarily for atomic energy activities within the Department of Energy.

TABLE 3. ESTIMATED AUTHORIZATIONS FOR SELECTED PROVISIONS IN S. 1390

	By Fiscal Year, in Millions of Dollars					2010- 2014
	2010	2011	2012	2013	2014	
FORCE STRUCTURE						
Active-Duty End Strengths	8,145	7,351	5,513	5,269	5,148	31,426
Army Temporary 30,000 Increase	0	2,133	4,206	2,053	0	8,392
Reserve Component End Strengths	571	545	198	201	206	1,721
Reserve Technicians End Strengths	13	26	27	27	27	120
COMPENSATION AND BENEFITS (DOD)						
Pay Raises	351	481	493	503	511	2,339
Expiring Bonuses and Allowances	1,738	599	134	221	143	2,835
Health Care Personnel	1	10	17	23	31	82
PDMRA Pay	57	0	0	0	0	57
Other Military Compensation Provisions	24	3	12	12	12	63
HEALTH PROGRAMS						
DoD-VA Incentive Fund						
Department of Defense	0	15	15	16	16	62
Department of Veterans Affairs	0	15	15	16	16	62
Autism Support	10	20	20	20	20	90
Reimbursement of Travel Expenses	9	9	9	9	10	46
Mental Health Assessments	3	13	13	9	7	45
Transitional Dental Care	11	10	8	6	7	42
TRICARE Eligibility in Instance of Retroactive						
Medicare	4	4	4	4	4	20
TRICARE for Gray-Area Retirees	10	5	0	0	0	15
Dental Care for Survivors	2	2	2	2	2	10
OTHER PROVISIONS ^a						
Energy Security for Defense Installations	0	430	430	430	430	1,720
Small Business Research and Technology	16	17	17	17	18	85

Notes: For items in this table, the 2010 levels are assumed to be included in amounts specifically authorized to be appropriated by the bill (and reflected in Table 2). Excluding the estimated authorizations for the Department of Veterans Affairs, the costs shown in this table for 2011 through 2014 are not included in Tables 1 or 2 because authorizations for those amounts would be covered by specific authorizations in future years.

Figures shown here may not sum to numbers in the text because of rounding; PDMRA = Post-Deployment/Mobilization Respite Absence.

- a. Title XXXIII would authorize the appropriation of such amounts as may be necessary to carry out the responsibilities of the Maritime Administration. This estimate does not assign any costs to title XXXIII because the bill restates the authority already contained in current law.

Health Care Personnel. Sections 521, 523, and 722 would increase certain benefits for medical students and health care professionals. Section 521 would authorize pay-grade promotions for certain officers while attending medical school. Section 523 would allow the Secretary of Defense to assign a limited number of commissioned officers to duty as students to earn a Doctor of Philosophy in clinical psychology. Under the program, DoD would pay expenses incident to the assigned duty, such as tuition, fees, and the cost of books. In addition, section 722 would require the Secretary of Defense to design and implement a plan to significantly increase the number of DoD mental health and development specialists by September 30, 2013. Based on information from DoD, CBO estimates that providing the expanded benefits authorized under those three provisions would cost \$1 million in 2010 and \$82 million over the 2010-2014 period.

Post-Deployment/Mobilization Respite Absence (PDMRA) Pay. The PDMRA program was enacted on January 19, 2007, as part of the National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364) and was fully implemented by October 1, 2007. Section 604 would authorize the Secretary of Defense to pay current and former servicemembers up to \$200 for each day of leave earned under the PDMRA program that was not credited because the program was not yet fully implemented.

The PDMRA program provides additional administrative leave when a member of the armed forces deploys more frequently than the rate specified by DoD rotation policy. Based on information from DoD, CBO estimates that under section 604 DoD would pay about 8,100 former and 14,000 current servicemembers \$200 per day for an average of 13 PDMRA days. Implementing this section would cost \$57 million in 2010. Because this authority would expire after one year, there would be no costs beyond 2010.

Other Military Compensation Provisions. CBO estimates that other provisions in titles V and VI would increase DoD military compensation costs by \$63 million over the 2010-2014 period. Those other provisions would:

- Grant permanent authority for the Secretary of Defense to allow children of members of foreign militaries to attend, tuition free, the schools in Mons, Belgium, operated by the Defense Dependents' Education System.
- Raise the maximum cap on the monthly family subsistence supplemental allowance (FSSA) from \$500 to \$1,100. FSSA is an additional allowance paid by DoD to servicemembers with dependents, whose incomes fall below 130 percent of the poverty line. FSSA was designed to increase certain servicemembers' incomes by enough to make them no longer eligible for Supplemental Nutrition Assistance Program benefits (previously called Food Stamps).

- Provide a monthly allowance for members with catastrophic injuries or illnesses that are combat related, to defray the cost of either a medical or personal attendant.
- Temporarily extend the authority to pay up to \$500 per month to servicemembers who are retained on active duty, under stop-loss authority, beyond their period of obligated service or despite eligibility for retirement. The authority would be extended through June 30, 2011.

Health Programs. S. 1390 contains several provisions that would affect the cost of health care benefits provided by DoD and the Veterans Health Administration.

DoD-VA Incentive Fund. Section 1047 would extend through 2015 the authority for the DoD-VA Health Care Sharing Incentive Fund. Authority for the fund is currently set to expire at the end of 2010. The fund is used to pay for joint projects that improve the quality, access, and cost effectiveness of health care provided by DoD and VA. Current law requires that DoD and VA each contribute a minimum of \$15 million to the fund each year. Including the effects of inflation, CBO estimates that extending the fund would increase spending subject to appropriations by about \$124 million over the 2011-2014 period.

Autism Support. Section 553 would require the Secretary of Defense to establish a program for military families with autistic children. The program would include research, counseling, and training. This section also would require the Secretary to carry out pilot programs to evaluate the effectiveness of various approaches to helping such families. CBO estimates there are about 8,000 children of active duty members with an autism spectrum disorder, based on prevalence statistics published by the Centers for Disease Control. Based on the costs of other family support programs within DoD, and adjusting for the size of the affected population, CBO estimates the support programs required by section 553 would cost about \$20 million per year, although costs would be lower in the first year because of the time needed to develop the program.

Reimbursement of Travel Expenses. Section 634 would allow the Secretary of Defense, in certain cases, to reimburse the travel expenses of dependents of active-duty members who must travel to receive specialty health care. CBO believes the Secretary would use this authority mainly to reimburse trips totaling between 50 and 100 miles, which is not reimbursable under current law (the Secretary is currently required to reimburse expenses for travel of distances greater than 100 miles).

Based on data from DoD, CBO estimates that each year there are about 90,000 referrals of active-duty dependents to providers located between 50 and 100 miles from the dependents' homes, and that the department would reimburse travel expenses in only half

of those cases. Based on current mileage and per diem rates, CBO estimates the average reimbursement would be about \$200. In total, CBO estimates section 634 would require an increase in appropriations of \$46 million over the 2010-2014 period.

Mental Health Assessments. Section 711 would require the Secretary of Defense to provide members that deploy in support of a contingency operation with a series of five, in-person, assessments of their mental health. Part of the requirement could be met with current periodic health assessments, and the assessments would not be required for those with no exposure to combat operations. Based on deployment statistics and the timing of current health assessments, CBO estimates that once fully implemented this new requirement would result in the need for an additional 150,000 mental health assessments annually for each of the next few years. The number would decrease over time because CBO assumes deployments in support of contingency operations will gradually decrease. Based on TRICARE allowable charges for mental health exams, CBO estimates each additional assessment would cost about \$80 and that the total cost of this section would be \$45 million over the 2010-2014 period. Costs would be lower in the first year because of the time needed to establish regulations.

Transitional Dental Care. When reserve-component members are released from active duty in support of a contingency operation, they may continue to receive dental benefits on a space available basis at military clinics for 180 days. In many cases, however, military clinics have no space available. For purposes of dental care, section 712 would allow those reserve members to be treated as if they were still on active duty during the 180 day transition period. That change would allow TRICARE to refer those personnel to contracted dental providers when space is not available at military clinics. It also would effectively extend the benefit to those who do not live near a military facility. Based on recent mobilization statistics, CBO estimates this provision would allow an additional 100,000 reserve members per year to receive six months of dental care, although CBO expects this number would decrease over time as deployments decrease. CBO estimates the cost of the additional six months of dental care would be about \$250 per person, based on DoD budget data. In total, CBO estimates that section 712 would cost \$42 million over the 2010-2014 period.

TRICARE Eligibility in Instance of Retroactive Medicare. When a military retiree becomes eligible for Medicare, TRICARE no longer remains the first-payer of health benefits for that individual and instead acts as a Medicare supplement. In instances where a retroactive Medicare determination is made (which often occurs when a person is ruled eligible for Social Security Disability Insurance), this requirement causes DoD and Medicare to have to re-file claims for any care received between the retroactive determination date and the date the retiree received the notice of Medicare eligibility.

Section 703 would amend this requirement to allow TRICARE to remain the first-payer of benefits through the retroactive eligibility period.

Based on information from DoD and the Social Security Administration, CBO estimates this section would affect about 1,500 former members each year and that the average retroactive Medicare determination would be about two months. CBO estimates the additional cost to DoD to provide those two additional months of health benefits would be about \$2,500 per person, or about \$4 million per year. In total, CBO estimates section 703 would require additional appropriations of about \$20 million over the 2010-2014 period.

TRICARE for Gray-Area Retirees. Section 701 would establish a new TRICARE program for reserve-component members who have completed 20 years of service but have not yet reached the age of 60 (so called “gray-area” retirees). The program would offer benefits and cost sharing similar to that offered as part of the TRICARE Standard health plan. However, to participate in the program beneficiaries would be required to pay premiums equal to the cost of the services provided. Because the collection of those premiums are intended to offset the added costs to DoD, CBO estimates the net cost to the government of this new program would be insignificant over the long run. DoD would incur some start-up costs related to outreach and changes to personnel databases. CBO estimates those costs would total about \$15 million over the 2010-2011 period, based on the start-up costs incurred by the TRICARE Reserve Select program.

Dental Care for Survivors. Section 702 would extend TRICARE dental benefits to the survivors of members who die on active duty until they reach the age of 21, or, if they are still enrolled in college, age 23. Currently, dental benefits for survivors cease three years after the death of the sponsor. Based on DoD casualty statistics, demographic information, and budget data, CBO estimates this section would allow about 7,000 additional survivors to receive dental benefits through the TRICARE program each year, at an annual cost of about \$300 per person. In total, CBO estimates this extended benefit would cost \$2 million per year.

Other Provisions. S. 1390 contains other provisions that would result in costs in 2010 and future years.

Energy Security for Defense Installations. Section 331 would require DoD to assess the degree to which military installations and any critical operations that are conducted on those installations are vulnerable to disruption in the electrical supply, and to develop a plan for addressing those vulnerabilities.

CBO expects that military bases would acquire electrical control systems and other infrastructure that would allow base personnel to manage the demand for and supply of electrical power on installations and to insulate base operations in the event that the power supply from external utility providers is disrupted. Such systems would allow the installation to disconnect nonessential electrical loads from the base's power grid, start up and manage backup electrical generators, and distribute power to essential facilities and equipment. Installations also would acquire additional backup generation capacity, which could provide power that could be sold to the electric utility provider during periods of peak demand, and supply the military installation in the event of service disruption from the utility company.

CBO expects that DoD would focus on addressing electrical vulnerabilities at 230 large and medium-sized military installations, and forgo costly improvements at several thousand small facilities. On the basis of information from DoD and DOE, CBO estimates that installing the control systems needed to protect against external disruption would cost \$10 million to \$20 million per base. We expect that DoD would conduct studies in 2010 to determine its requirements, then acquire and install the equipment over the next four years. CBO expects that DoD would pay for the improvements at about half of those installations upfront, increasing the need for discretionary appropriations by \$1.7 billion over the 2010-2014 period.

CBO also expects that the department would enter into contracts that would allow it to pay for the remaining improvements over time, and would increase its supply of backup generators through similar financing methods. The cost of those activities is discussed under the section on "Direct Spending."

Small Business Research and Technology. Section 833 would reauthorize two programs, the Small Business Innovation Research program and the Small Business Technology Transfer program—through 2023—that set aside a portion of DoD's research and development budget for contracts to small businesses. CBO estimates that the cost of administering the programs would be about \$17 million annually.

Direct Spending and Revenues

Several provisions in S. 1390 would affect direct spending. CBO estimates that those provisions, in total, would increase outlays by \$1.8 billion over the 2010-2014 period and \$2.7 billion over the 2010-2019 period (see Table 4). The bill also would have an insignificant effect on revenues.

TABLE 4. ESTIMATED IMPACT OF S. 1390 ON DIRECT SPENDING

	By Fiscal Year, in Millions of Dollars											2010-	2010-	
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2014	2019		
Energy Security for Defense Installations														
Estimated Budget Authority	0	430	430	430	430	190	190	200	200	200	1,720	2,700		
Estimated Outlays	0	300	390	410	420	150	175	185	195	200	1,520	2,425		
Multiyear Contracts for Aerial Refueling														
Estimated Budget Authority	0	120	120	0	0	0	0	0	0	0	240	240		
Estimated Outlays	0	10	70	90	50	15	5	0	0	0	220	240		
Pilot Projects for Military Unaccompanied Housing														
Estimated Budget Authority	0	45	0	0	0	0	0	0	0	0	45	45		
Estimated Outlays	0	5	20	15	5	0	0	0	0	0	45	45		
Total Changes in Direct Spending														
Estimated Budget Authority	0	595	550	430	430	190	190	200	200	200	2,005	2,985		
Estimated Outlays	0	315	480	515	475	165	180	185	195	200	1,785	2,710		

Energy Security for Defense Installations. Section 331 would authorize DoD to enter into contracts with public or private-sector entities to reduce the vulnerability of military installations to disruptions in the electrical supply. It also would authorize DoD to pay for the cost of those actions over time.

When the department uses its authority to enter into multiyear contracts, energy savings performance contracts, utilities privatization contracts, and similar authorities to obtain third-party financing for government assets, it incurs a long-term contractual obligation. In such cases the department has typically obtained and recorded budget authority only in the amount of the payments due in the first year of the contract, even though actual obligations exceeded that amount. CBO expects that DoD would use the authority in section 331 in a similar manner. CBO thus believes that this section would provide DoD with contract authority—a form of budget authority—because it would allow the department to incur obligations in excess of available appropriations. Providing such authority constitutes direct spending.

The systems and equipment acquired to reduce the vulnerability to service disruptions would have many years of useful life. CBO expects that in many instances, DoD would use contracts with utilities and other service providers that allow the department to pay

for the systems and equipment over time through higher utility rates, or other payment mechanisms that amortize the cost of the equipment over its useful life.

CBO estimates that DoD would finance over time the cost of equipment and control systems needed to manage backup electrical power at about half of its 230 major installations. At a cost of \$10 million to \$20 million per installation, CBO estimates that acquiring those systems would increase direct spending by \$1.7 billion over the 2011-2019 period. (The cost of such equipment at the other installations that would be paid for up front is discussed in the section on “Discretionary Spending.”)

CBO expects that the department also would use the contract authority provided by section 331 to increase the amount of power it produces at its installations to ensure it could operate essential equipment in the event of a power disruption. According to information from DOE, mission-critical loads account for 10 percent to 20 percent of DoD’s electrical power use—approximately 4.5 million megawatt hours per year. The department has some backup generation capacity already, so CBO estimates it would acquire enough new equipment to generate another 2.2 million megawatt hours per year. Those generators would be used to provide power to the base in the event of disruption of the external power supply, and to generate electricity that could be sold back to the utility company during periods of peak demand.

CBO expects that DoD would primarily acquire conventional power sources such as natural gas and oil-fired facilities, because such equipment provides a continuous source of power that is reliable and relatively inexpensive. Renewable power sources—such as photovoltaic, wind, geothermal, and biomass generators—are more expensive than conventional power sources and have significant limitations, such as providing power intermittently and being dependent on specific geographic conditions. Nonetheless, CBO expects that the department would acquire some renewable energy equipment as well, because it would satisfy goals established by the Congress and by executive orders to use renewable power.

Accounting for the productivity factors and capital costs of those various sources, CBO estimates the department would need to acquire equipment with a total capacity of 425 megawatts, at a cost of about \$1 billion. On the basis of information from the Department of Energy, CBO estimates that it would take several years to establish the regulations and agreements needed for DoD to be able to sell the electricity generated by this new capacity back to the public utility companies, and to arrange the financing mechanisms to acquire that equipment. CBO expects that DoD would acquire and install such equipment over a five-year period beginning in 2015, and that it would take manufacturers several years to produce and install some of that equipment, resulting in

some outlays after 2019. Expenditures on that equipment would increase direct spending by \$0.7 billion over the 2015-2019 period, CBO estimates.

In total, CBO estimates that the use of contract authority provided by section 331 would have no effect on direct spending in 2010, and would increase direct spending by \$2.4 billion over the 2011-2019 period.

Multiyear Contracts for Aerial Refueling. The National Defense Authorization Act for Fiscal Year 2008 directed the Air Force to conduct a pilot program to evaluate the feasibility of using fee-for-service contracts with commercial aviation firms to augment the aerial refueling capabilities of the Department of Defense. Section 1058 would allow the Air Force to enter into one or more multiyear contracts to procure such aerial refueling services.

Current law (title 10, United States Code section 2306c) requires that multiyear contracts for services in excess of \$500 million be specifically authorized in law and limits the term of those contracts to five years or less. Such contracts may obligate the government to pay for contractors' unrecovered costs if the contract is canceled before completion, but current law limits that obligation to \$100 million, of which no more than \$20 million may be an unfunded liability.

In addition to authorizing the use of multiyear contracts for aerial refueling services, section 1058 would extend the maximum term of contracts for aerial refueling to eight years, and waive the limitations in current law regarding cancellation liabilities. According to the Air Force, those enhancements to current law are necessary to facilitate the award of contracts under the pilot program.

When DoD enters multiyear contracts for the acquisition of property and services, it commits to making payments over the term of the contract—without appropriations for the full cost of those items. For those contracts, DoD obtains budget authority and records obligations only for the payment due in the first year of the contract, even though its actual contractual obligations exceed those initial payments. That budgetary treatment, however, is inconsistent with government-wide accounting principles indicating that the budget should reflect the full cost of those commitments as new obligations at the time that such a contract is signed. CBO thus believes that section 1058 would provide DoD with contract authority—a form of budget authority—because it would allow the department to incur obligations in excess of available appropriations. Providing such authority constitutes direct spending.

Under section 1058, CBO expects that the Air Force would enter into several multiyear contracts with commercial air carriers, in which the service would guarantee payment for

a minimum number of flight hours for refueling missions from the carriers. That guarantee would be necessary to enable the contracted firms to obtain the financing needed to acquire, modify, test, and certify the aircraft for aerial refueling missions. Those capital and start-up costs would be fully amortized over the minimum number of flight hours or missions guaranteed in the contracts and the carriers would recover those costs as they charge the Air Force for the aerial refueling services on the basis of the numbers of hours or missions flown by the tanker aircraft. If the contracts were cancelled before completion, the Air Force would be required to pay for any unrecovered capital costs.

On the basis of information from DoD, CBO estimates that under the program, the Air Force would enter into two contracts with commercial carriers that would outfit a total of four planes with aerial refueling equipment. Some of the aircraft that would be modified as tankers would come from the carriers' existing fleets of planes and some additional aircraft would be acquired for the purpose of the program. The government would be obligated to pay for—either through purchased refueling services or cancellation charges—the costs of acquiring and modifying those aircraft, totaling \$120 million per contract, CBO estimates. (Additional operating costs would total \$70 million over the term of each contract, although the Air Force would not be liable for those variable operating costs if the contract were canceled prior to completion.) Budget authority should be recorded in the amount of the total capital costs in the year in which the contract is signed, and outlays should be recorded over the period needed to acquire, modify, and field the aircraft. CBO estimates that the process of reviewing bids and awarding contracts would take at least a year, and that contracts would be awarded beginning in 2011, thereby increasing direct spending by \$240 million over the 2011-2019 period.

Pilot Projects for Military Unaccompanied Housing. Section 2814 would extend the Navy's authority to use third-party financing to acquire housing for unaccompanied military personnel by extending the expiration of that authority from September 30, 2009, to September 30, 2011.

Currently, DoD is authorized to use direct loans, loan guarantees, long-term outleases, rental guarantees, barter, direct government investment, and other financial arrangements to renovate, build, and operate military housing in concert with housing developers. DoD typically enters into a series of long-term agreements with a developer, who establishes a limited liability company (LLC) or other special-purpose entity, specifically for the purpose of renovating, constructing, operating, and maintaining the military housing at the project. DoD contributes some combination of land, existing housing, and cash to the partnership or LLC. On behalf of the government, the LLC then borrows additional money for the project from a third party, such as a commercial mortgage corporation, to

finance construction. In other words, the third-party financier acts as an intermediary by borrowing money—instead of the U.S. Treasury—to finance a governmental activity. The value of the assets contributed by the government serve as collateral for the borrowing and the future rent payments (over a period of 30 to 50 years) from military personnel provide a reliable source of income for debt service.

CBO believes that acquiring housing for military personnel in that manner is a governmental activity that uses a financial intermediary in the private sector to serve as an instrument of the federal government. In CBO's view, ventures that borrow funds to construct or refurbish military housing should be treated as governmental and their investments should be recorded up front, as borrowing authority—a form of budget authority. Amounts expended by such public-private ventures should be recorded in the budget as outlays at the time they occur.

Current law (title 10, United States Code, section 2881a) provides authority for the Navy to pursue three projects to acquire housing for unaccompanied sailors. Under that authority, the Navy can make rental payments directly to the housing developer in excess of the partial basic allowance for housing paid to personnel living in government quarters. To date, the Navy has acquired two housing projects under that authority. Based on information from the Navy, CBO estimates that the third project will not be initiated before the current expiration date of September 30, 2009. CBO expects that extending the deadline until the end of fiscal year 2011 would allow the Navy to acquire one more housing project than it could acquire under current law. In the budget request for 2010, Navy barracks projects cost an average of \$33 million. The cost of financing the project through a third party at market rates rather than at lower U.S. Treasury rates increases the costs of the project by about 35 percent. Thus, CBO estimates that if the Navy begins that additional project in 2011, outlays would increase by \$45 million over the 2011-2014 period.

Stockpile Sales. Section 1411 would extend by two years the period to sell cobalt from the National Defense Stockpile as previously authorized in the National Defense Authorization Act for Fiscal Year 1998 (Public Law 105-85, most recently revised by Public Law 110-417). That authority is set to expire on September 30, 2009, and CBO expects that all remaining cobalt will be sold by that date. Thus, CBO estimates that no additional receipts would be achieved by extending the sales through fiscal year 2011.

Other Provisions. The following provisions would have an insignificant effect on direct spending, primarily because they would affect few individual, or because they would authorize both the collection and spending of funds, resulting in a net budgetary impact would be quite small. One provision also would have an insignificant effect on revenues.

- Section 603 would increase the maximum monthly amount of family subsistence supplemental allowance (FSSA) from \$500 to \$1,100. FSSA is an additional allowance paid by DoD to certain servicemembers in lieu of Supplemental Nutrition Assistance Program (SNAP) benefits, previously called Food Stamps. Based on information from DoD, CBO estimates that raising the cap would increase the number of servicemembers who earn FSSA. Some of those new FSSA recipients could come off the SNAP rolls, thereby reducing direct spending for SNAP.
- Section 632 would allow the military services to reimburse the travel expenses of friends and family who attend to the needs of members and former members who are ill or seriously wounded. Such reimbursements could increase outlays from Medicare Eligible Retiree Health Care Fund.
- Section 701 would allow the Secretary of Defense to collect and spend premiums as part of a new health benefit for certain reservists.
- Section 821 would authorize support contractors to have access to technical data from prime contractors and would require such support contractors to abide by statutory nondisclosure agreements. Individuals who violate the nondisclosure agreements might be subject to criminal penalties. Those revenues would be deposited in the Crime Victims Fund and available for expenditure without further appropriation.
- Section 911 would allow DoD to provide satellite tracking services to foreign and domestic governments and commercial entities. Currently, DoD provides those services under a pilot program that is due to expire on September 30, 2009. Under that pilot program DoD is allowed to charge fees to cover the costs of providing such services, and to spend such fees. CBO anticipates that DoD would continue providing similar services under the new authority.
- Section 921 would extend to the Defense Intelligence Agency the authority of the military departments to retain and spend proceeds generated by counterintelligence operations.
- Section 932 would allow certain private-sector employees to attend the Defense Cyber Investigations Training Academy. Under this section, the Secretary of Defense would charge those students tuition and then retain and spend those funds.

- Section 1045 would create a new fund in the U.S. Treasury. VA and DoD would transfer monies into the fund to be used for the operation of the new Captain James A. Lovell Federal Health Care Center. Because monies in the fund would be available until expended, this fund could be used to extend the life of previously enacted appropriations that would otherwise expire.
- Section 1046 would authorize cost sharing arrangements between VA and DoD for operation of the new Federal Health Care Center. It is possible that such arrangements could increase outlays from the Medicare Eligible Retiree Health Care Fund.
- Section 1303 would allow DoD to accept contributions from the private sector and foreign governments for use on activities associated with the Biological Threat Reduction program. Spending of amounts contributed would not be subject to further appropriation actions. The authority to both accept contributions and to spend them would expire on December 31, 2015. Any amounts not spent would be returned to the donor within three years of the date of the contribution.

INTERGOVERNMENTAL AND PRIVATE-SECTOR IMPACT

S. 1390 contains intergovernmental and private-sector mandates as defined in UMRA. CBO estimates that the cost of complying with the mandates to public entities would not exceed the intergovernmental threshold established in UMRA (\$69 million in 2009, adjusted annually for inflation). We cannot determine whether the costs to the private sector would exceed the annual threshold (\$139 million in 2009, adjusted annually for inflation).

Sections 401, 402, and 412 would increase the costs of complying with existing intergovernmental and private-sector mandates by increasing the number of servicemembers and reservists on active duty. Specifically, the number of active-duty servicemembers would increase by more than 40,000 personnel in fiscal year 2010, with an additional increase of 30,000 for the Army in fiscal years 2011 and 2012, combined.

Those additional servicemembers would be eligible for existing protections under the Servicemembers Civil Relief Act (SCRA). SCRA includes the right to maintain a single state of residence for purposes of paying state and local personal income taxes and the right to request a deferral in the payment of certain state and local taxes and fees.

SCRA also requires creditors to reduce the interest rate on servicemembers' loan obligations to 6 percent when the acquisition of such obligations predate active-duty service, allows courts to temporarily stay certain civil proceedings, such as evictions, foreclosures, and repossessions, and precludes the use of a servicemember's personal assets to satisfy the member's trade or business liability while he or she is in military service.

By increasing the number of individuals eligible for existing benefits under the SCRA, the bill would impose mandates and could result in lost revenues to government and private-sector entities. CBO estimates that the net impact of the residency provisions on state and local government income taxes would be small, with some additional costs associated with delayed collections.

CBO does not have sufficient information to estimate precisely the increased costs to the private sector of complying with the provisions in SCRA. Servicemembers' utilization of the various provisions of the SCRA depends on a number of uncertain factors, including how often and how long they are deployed. While some of the SCRA protections might affect a greater number of servicemembers, the cost per person could be relatively small. On the other hand, other SCRA protections could have relatively high per-person costs even though they affect a small number of servicemembers. Because the proposed increase in authorized active-duty and reserve end strength is relatively larger than the increases in recent years, CBO cannot determine whether the costs to the private sector would exceed the annual threshold of \$139 million.

PREVIOUS CBO ESTIMATE

On June 22, 2009, CBO transmitted a cost estimate for H.R. 2647, the National Defense Authorization Act for Fiscal Year 2010, as reported by the House Committee on Armed Services on June 18, 2009. Differences in the estimated costs of S. 1390 and H.R. 2647 reflect differences in the two versions of the legislation.

Both S. 1390 and H.R. 2647 would authorize similar levels of appropriations for 2010: \$680.6 billion for S. 1390 and \$681.0 billion for H.R. 2647. Within those amounts, both bills would authorize appropriations for costs associated with DoD overseas contingency operations (primarily in Iraq and Afghanistan); the Senate bill, however, would authorize \$0.7 billion less than the \$130 billion that would be authorized by the House bill.

S.1390 contains provisions that would increase direct spending by \$2.7 billion over the 2010-2019 period, while the direct spending provisions in the H.R. 2647 would have no net effect on spending over that period.

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