

CONGRESS OF THE UNITED STATES  
CONGRESSIONAL BUDGET OFFICE

# Budget Options

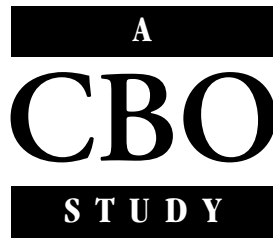


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# **Budget Options**

February 2005

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## Notes

Unless otherwise indicated, all years referred to in this report are fiscal years.

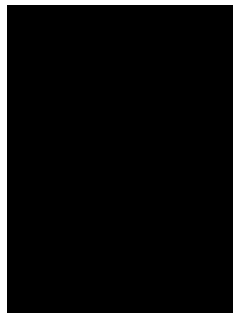
Numbers in the text and tables may not add up to totals because of rounding.

The budgetary effects of the options are estimated in various ways. For options involving defense discretionary spending, changes are measured against the Department of Defense's fiscal year 2005 Future Years Defense Program, as modified by lawmakers in enacting 2005 appropriations.

For almost all of the options involving nondefense discretionary spending, changes are measured in comparison with the level of 2005 appropriations adjusted for inflation. For options that affect mandatory spending, changes are measured in relation to the Congressional Budget Office's current-law baseline. For revenue options, the effects are estimated relative to current-law projections; almost all of the estimates come from the Joint Committee on Taxation.

For most options that affect mandatory spending, the tables show solely the change in outlays because the budget authority would be identical.

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## Preface

**T**his volume—one of the Congressional Budget Office's (CBO's) regular reports to the House and Senate Committees on the Budget—presents options for altering federal spending and revenues. The volume aims to help policymakers in their annual tasks of making budgetary choices, setting priorities, and adapting to changes in circumstances.

The options discussed in this report stem from various sources. They are derived from legislative proposals, the President's budget, Congressional and CBO staff, other government entities, and private groups. The options are intended to reflect a range of possibilities; they are neither ranked nor comprehensive. The inclusion or exclusion of a particular idea does not represent an endorsement or rejection by CBO. In keeping with CBO's mandate to provide objective and impartial analysis, the report makes no recommendations, and the discussion of each option presents the cases for it and against it.

*Budget Options* begins with an introductory chapter that explains how to use the volume. Chapter 2 presents options that affect spending, organized by the functional categories of the budget—national defense; international affairs; general science, space, and technology; and so forth. The options for each function are introduced with a page of background information about spending trends in that function. Chapter 3 contains options that affect revenues. The appendix lists contributors to the report. The volume is available in multiple formats on CBO's Web site, including a version that permits users to search and retrieve options by function, agency, and other criteria.

Douglas Holtz-Eakin  
Director

February 2005



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## Introduction

**T**he Congressional Budget Office (CBO) regularly issues a compendium of options to help inform federal lawmakers about the budgetary implications of policy choices. Policymakers must decide which programs to fund and at what levels and how those revenues are to be raised. Those choices are framed by current fiscal and economic conditions, such as the size of the annual deficit or surplus, the budget outlook for the near term and the long term, and the fiscal and budgetary challenges that lawmakers face. They are also made in light of broad goals for fiscal policy, such as enhancing economic growth and stability, ensuring sustainable fiscal policies, limiting the size of government, or balancing the budget. They may entail considerations like offsetting the cost of new initiatives and making programs more efficient or effective.

This report is intended to help lawmakers assess the spending or revenue effects of the likely types of choices that they may face in the 109th Congress. It does not advocate or adopt a particular fiscal goal or budget target. Furthermore, it does not recommend specific options or provide a comprehensive list of alternatives. Instead, it presents a variety of options to help policymakers in their annual tasks of making budgetary choices, setting priorities, and adapting to changed circumstances. The options in this volume include policy changes that would decrease spending and ones that would increase it, as well as changes that would reduce revenues and that would raise them.

The volume presents budgetary effects over the 10 years covered by CBO's January 2005 budget baseline, although a number of options would have significant effects beyond that horizon. Comprehensive discussions of

long-term budgetary pressures—especially those affecting the Social Security, Medicare, and Medicaid programs—appear in other recent CBO reports.<sup>1</sup>

### Using This Volume

The spending options in Chapter 2 are classified according to the functional categories of the budget—national defense (050); international affairs (150); general science, space, and technology (250), and so on. For each function, an introductory page provides summary information and data since 2000 on overall trends in mandatory and discretionary spending within that function. For each option, the discussion provides general background information, summarizes arguments for and against the option, identifies whether it affects mandatory or discretionary spending, estimates the annual change in spending for 2006 to 2010, and provides total changes both for that period and for the 10-year period of 2006 to 2015. When appropriate, the options include references to related options and to relevant CBO publications.

The estimated changes from options affecting mandatory spending were computed relative to baseline levels estimated to occur under current law. The changes from options affecting nondefense discretionary spending generally were calculated from appropriation levels for 2005 adjusted for inflation. Savings affecting discretionary spending for defense were measured relative to the Department of Defense's most recent plan as modified by

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1. See, in particular, *The Long-Term Budget Outlook* (December 2003) and *The Outlook for Social Security* (June 2004). See also "Slowing the Long-Term Growth of Social Security and Medicare," in Congressional Budget Office, *Budget Options* (March 2003), pp. 253-273.

lawmakers in enacting appropriations for 2005. Estimated amounts from new or increased fees may be classified as offsets to spending (offsetting receipts or offsetting collections) or as new revenues (governmental receipts).<sup>2</sup>

Chapter 3 discusses options that affect revenues, following the format used in Chapter 2. Each option includes general background information, summarizes arguments for and against the change, and provides estimates of the change in revenues in each of the next five years and the cumulative impact on revenues over the 2006-2010 and 2006-2015 periods. The estimates were computed from baseline revenue levels projected under current law.<sup>3</sup> The options also include references to related options and to applicable CBO publications.

An “interactive” version of this volume offering enhanced search capabilities is available on CBO’s Web site ([www.cbo.gov](http://www.cbo.gov)). That version allows users to search the entire volume by word or phrase. For the options that affect spending, users can search by spending category (mandatory or discretionary), by budget function, and by federal agency. Those searches can be performed singly or in combination.

## Exclusions and Limitations

The budget options discussed in this volume derive from various sources, including legislative proposals, the President’s budget, Congressional and CBO staff, other government entities, and private groups. The options are intended to reflect a range of possibilities; they are neither

- 
2. In general, if the fee supports a businesslike activity, it is classified as an offset to spending. If it is based on the government’s sovereign power to tax, it is classified as a revenue. Fees classified as spending offsets may be further categorized as either mandatory or discretionary, depending generally on the type of legislation that provided for the collections.
  3. For cost estimates of legislation that would amend the Internal Revenue Code, CBO is required by law to use estimates provided by the Joint Committee on Taxation.

ranked nor comprehensive. The inclusion or exclusion of a particular option does not represent an endorsement or rejection by CBO. The volume does not include policy recommendations.

Because the options that address spending are also intended to facilitate the case-by-case review of individual programs, they exclude certain types of broad options that would produce savings in many programs or agencies. Such options might, for example, freeze or cut federal spending across the board or eliminate an entire department or major agency.

Some of the options affecting state, local, or tribal governments or the private sector may involve federal mandates. Under the Unfunded Mandates Reform Act of 1995, which establishes procedures that are intended to promote informed decisions about mandates, CBO estimates the costs of mandates imposed by new legislation that the Congress is considering. However, the options in this volume do not address the costs of potential mandates.

In calculating the changes to spending or revenues for the individual options, CBO did not include changes in federal interest costs. Interest costs or savings typically are estimated as part of a comprehensive budget plan, such as the Congressional budget resolution, but such adjustments are not made for individual options of the type discussed in this volume.

Subsequent CBO cost estimates (as well as subsequent revenue estimates by the Joint Committee on Taxation) for legislative proposals that resemble options in this volume may differ from the estimates shown in this report. The policy proposals on which those later estimates are based may not precisely match the options in this volume. Furthermore, the baseline budget estimates or levels against which such proposals ultimately are measured may have been updated and thus would differ from those used here.

**CHAPTER**

**2**

**Spending Options**





## National Defense

**B**udget function 050 primarily comprises spending for the military activities of the Department of Defense (DoD) and for the atomic energy activities of the Department of Energy (DOE). After experiencing declines following the end of the Cold War, spending on defense programs started to grow in the late 1990s and has increased steadily since then. Discretionary outlays rose by 54 percent between 2000 and 2004, from \$295 billion to \$454 billion. Some of that increase is associated with operations in Iraq and Afghanistan and with other activities related to the global war on terrorism. Thus far, the Congress has appropriated \$421 billion for function 050 for 2005. That level will rise significantly, however, when additional funds are provided to cover the costs of operations in Iraq and Afghanistan.

Most components of defense spending have experienced increases in recent years. Spending on pay and benefits for military personnel grew by 50 percent between 2000 and 2004, and spending on operations and maintenance—which pays for many of the day-to-day costs of military operations—rose by 65 percent. (Most of the costs associated with military operations in Iraq and Afghanistan fall into those two categories.) Spending to purchase weapon systems and ammunition has also increased in recent years, as has the pace of research and development (R&D) activities within DoD. In total, spending on procurement and R&D grew from \$89 billion in 2000 to \$137 billion in 2004. Spending on DOE's atomic energy activities also rose during that period—from \$12 billion in 2000 to \$16 billion in 2004.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
<b>Budget Authority (Discretionary)</b>								
Military operations in Iraq and Afghanistan and other activities related to the global war on terrorism <sup>a</sup>	*	13.6	17.2	78.6	88.1	b	n.a.	n.a.
Other defense activities	300.8	318.2	343.7	376.4	397.6	421.1	7.2	5.9
Total	300.8	331.7	360.8	455.0	485.7	421.1	12.7	-13.3
<b>Outlays</b>								
Discretionary	295.0	306.1	348.9	404.9	454.1	464.1 <sup>b</sup>	11.4	2.2 <sup>b</sup>
Mandatory	-0.5	-1.2	-0.4	*	1.8	1.8	n.a.	**
Total	294.5	304.9	348.6	404.9	455.9	465.9	11.5	2.2

Note: \* = between -\$50 million and \$50 million; \*\* = between zero and 0.05 percent; n.a. = not applicable (because some years have zero or negative values).

- a. Most of this funding has been provided in supplemental appropriation acts.
- b. To date, no supplemental appropriations have been provided in fiscal year 2005 for operations in Iraq and Afghanistan or for other activities related to the global war on terrorism. When they have been provided, budget authority and outlays for 2005 will be higher.

**050-01—Discretionary****Delay the Fielding Date of the Future Combat System from 2011 to 2015**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-821	-674	-1,729	-1,286	-3,029	-7,539	-26,853
Outlays	-416	-360	-31	-637	-1,332	-2,777	-24,606

The Future Combat System (FCS) program is the centerpiece of the Army's transformation efforts. The program includes the development of 18 separate ground and air platforms, sensors, and munitions that will be linked together with advanced communications networks into an integrated combat system. Because the FCS program is still in the early stages of development, its full costs are not yet known. But according to the Army's plan submitted with the President's 2005 budget, the costs from 2006 through 2020 to develop and purchase the first increment, which would equip 15—or about one-third—of the active Army's combat brigades, could approach \$90 billion.

To meet the needs of a more agile Army, the weapons developed as part of the FCS are intended to be as lethal and survivable as current systems—such as the Abrams tank and Bradley fighting vehicle—but at only a fraction of the weight. Developing such systems carries substantial risks because many of the advanced technologies needed to achieve the goals of the FCS program are not yet mature. In fact, according to the Government Accountability Office (formerly the General Accounting Office), 75 percent of those technologies were not mature in May 2003, when the FCS entered the system development and demonstration phase. Nonetheless, the Army's plan submitted with the President's 2005 budget anticipated that the decision about whether to start producing the FCS would be made in November 2008—five-and-a-half years after the program started—and would involve fielding the first unit equipped with FCS systems in the first quarter of fiscal year 2011.

This option would delay the planned initial fielding date of the FCS by four years and reduce funding accordingly. It would be similar to changes in the FCS program that

the Army announced in July 2004 that would delay the fielding of the first unit equipped with FCS systems by four years. In contrast to this option, however, the Army's restructured program would start introducing some components of the FCS program (portions of the network and some sensors and munitions) into units in 2008. Because this option would not field any of the FCS's 18 components before 2015, it would yield greater savings over the next five years—a total of about \$7.5 billion in budget authority—than the Army's restructured program would.

Given the FCS program's ambitious goals, many external observers and technical experts believe that the schedule included in the President's 2005 budget, which allows less time than DoD has needed in the past to develop a single major system, is too ambitious. The delay envisioned in this option could help reduce the risk that some technologies would not be sufficiently mature and proven prior to production. Allowing more time for development could also reduce the possibility that otherwise-achievable capabilities would have to be sacrificed to meet the current production and fielding dates.

Although the FCS program faces technical challenges, opponents of delaying the program argue that the Army should pursue its transformation into an agile force equipped with the FCS as quickly as possible. Delaying the program might suggest that the rapid transformation of the Army was not a priority, thereby undermining the service's efforts to carry out needed changes. Furthermore, the longer it takes to get the FCS into the field, the more funding the Army will need to devote to recapitalizing and sustaining its existing fleet of aging weapon systems, some of which were purchased more than 20 years ago.

**050-02—Discretionary****050****Cancel the Future Combat System**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-2,675	-2,769	-3,820	-3,104	-4,486	-16,855	-56,247
Outlays	-1,966	-2,579	-2,128	-2,632	-3,041	-12,346	-44,147

The Army regards the Future Combat System (FCS) program as the cornerstone of its efforts to transform itself into a more agile and expeditionary force that is able to respond to crises in remote locations much more rapidly than it can today. The Army has set demanding goals for deploying its combat units anywhere in the world: 96 hours for a brigade combat team, five days for a division, and 30 days for five divisions. By contrast, an existing Army division equipped with tanks and other armored vehicles would typically take three to four weeks to deploy to many locations in Africa, Asia, or Eastern Europe. The FCS program, as envisioned by the Army, would develop the next generation of combat vehicles, which would be as lethal and survivable as current weapons but weigh much less and require far less fuel and other logistics support. The program would develop eight new combat vehicles as well as new unmanned air and ground vehicles, sensors, and munitions, all of which would be linked by advanced communications networks into an integrated combat system. According to the 2005 Future Years Defense Program, the costs from 2006 through 2020 for the first increment of the FCS, which would equip one-third of the active Army's combat brigades, could approach \$90 billion.

This option would cancel the FCS program—except for a residual research and development effort to explore promising technologies for later use in existing systems—in favor of investing more funds in systems that are heavier but have been used with success in Iraq. This option would also convert about one-third of the Army's heavy combat units—those that require the most lift assets and time to deploy—into units equipped with medium-weight vehicles. Those units, known as Stryker Brigade Combat Teams, have been used successfully in operations in Iraq and are more easily transported than units equipped with tanks. This option would also continue the Army's programs to upgrade its Abrams tanks and Bradley fighting vehicles, some of which were pur-

chased in the early 1980s, so that they can continue to operate effectively for 20 more years. The cost of buying more Stryker vehicles and upgrading current systems would offset some of the \$71 billion in budget authority that would be saved over 10 years by canceling the FCS program. As a result, this option would save a total of \$17 billion in budget authority through 2010 and \$56 billion through 2015 relative to the 2005 Future Years Defense Program.

The Army's ability to achieve its goals for the FCS program has been questioned by the Government Accountability Office and other defense experts. The technologies required to build combat vehicles that weigh only 25 percent as much as current tanks but are no more vulnerable to enemy weapons and that are more than 40 times as reliable are not yet mature. In addition, the assumption that underlies the Army's strategy for making lightly armored vehicles as survivable as the heavily armored Abrams tank—that superior knowledge of the enemy's whereabouts will enable U.S. combat vehicles to avoid being targeted—may need to be rethought in light of the Army's experiences in Iraq. The threat there has come primarily from individually launched weapons in urban settings, which may be difficult to counter using any technology currently envisioned.

Opponents of this option argue that canceling the FCS program might preclude transforming the Army in any meaningful way. Without the substantial reductions in weight and logistics support promised by the FCS program, moving Army units (except for unsupported light infantry brigades) to remote locations would continue to require significant lift assets and time. Canceling the FCS program would also mean that almost half of the Army would continue to be equipped with weapon systems originally developed in the 1980s. Some of those systems, notably the Abrams tank, are inefficient in their use of fuel and require intensive maintenance. Furthermore, im-

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proving the data processing and communications capabilities of those older systems would require integrating newer components into old frames, a process that is

sometimes difficult. Finally, some opponents argue that if the United States retained old systems, it would eventually lose its technological edge and military dominance.

RELATED OPTION: 050-01

**050-03—Discretionary****050****Add Two New Active Army Divisions**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+7,300	+10,500	+8,900	+8,400	+8,500	+43,600	+77,600
Outlays	+2,800	+7,200	+9,700	+9,600	+9,200	+38,500	+75,700

The Army currently has 10 divisions in its active component and eight in its reserve component. Most divisions include three maneuver combat brigades; in addition, the Army has a number of separate, independent combat brigades that are not part of any division, as well as armored cavalry regiments that are similar to separate brigades. In total, the Army had 36 active combat brigades and 36 reserve combat brigades at the end of 2004. The service draws on those forces to conduct warfighting or peacekeeping missions. Almost all other Army units are intended, in some way, to support those combat brigades and divisions.

Since the mid-1990s, the Army has been increasingly called upon to keep combat brigades deployed overseas for a number of commitments, including operations in Bosnia, Kosovo, Kuwait, Afghanistan, and Iraq. To keep forces deployed overseas while preserving high levels of training and readiness, the Army rotates units through those operations. Thus, the more commitments the service has, the more often any unit (and soldier) can be expected to be deployed.

This option would increase the Army's force structure by two divisions, or an additional six combat brigades. One of the divisions would be a heavy, mechanized infantry division, and the other would be a light infantry division. In addition to adding the two divisions, this option would create a number of support units that the new divisions would rely on in combat situations—corps support groups, artillery brigades, engineer battalions, truck companies, and the like. Some of those support units would be part of the Army Reserve or National Guard. To man all of those units, the active Army's authorized

end strength would be increased by 57,000 personnel, and the reserve component's end strength would be increased by 21,000 personnel. Fully recruiting, organizing, equipping, and training all of those new units would take about five years, the Congressional Budget Office estimates, and would require about \$39 billion in outlays over that period. (Option 050-05 presents a less expensive way to create those units, by eliminating some existing Army forces.)

The main argument for this option is that the Army, as currently sized, may be too small to execute all of the missions assigned to it. The service's peacetime commitments have increased since the mid-1990s, especially in recent years with the war on terrorism. When the Army must sustain significant levels of forces deployed overseas, individual soldiers are separated from their families for long periods of time, equipment is degraded by the stress of heavy use (and in some cases, harsh environments), and units are unable to maintain the training schedule the Army expects. Some proponents of this option suggest that the current pace of deployments has exacerbated those problems to unacceptable levels and that the only way to reduce deployment tempos and preserve the Army's readiness is to add forces to the service. In the absence of new active-component divisions, the Army would need to mobilize and deploy more reservists, increasing stress on reserve-component units and personnel. Finally, some people argue that it is inappropriate to regularly mobilize and deploy reserve-component units, that the active Army should be large enough to handle peacetime commitments, and that the reserve component should be employed only in exceptional cases.

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An argument against this option is that the cost and time needed to increase the size of the Army's combat forces could make the addition of two divisions a poor response to pressures that may only be temporary. Although the need to maintain large forces in Iraq has placed considerable stress on the active Army, that burden might be re-

duced five years from now, when the new divisions would be fully available. Increasing the force structure would also carry with it large long-term fiscal obligations, some of which would extend decades after this option was enacted.

RELATED OPTIONS: 050-04 and 050-05

**050-04—Discretionary****050****Increase the Army's End Strength by 40,000**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+3,040	+3,750	+4,290	+4,420	+4,550	+20,050	+44,920
Outlays	+2,640	+3,590	+4,170	+4,360	+4,500	+19,260	+43,930

The Army's 2005 appropriation for military personnel funds an active-duty force of 482,400 people. However, the Army is authorized by law to maintain 502,400 active-duty personnel in 2005 (an increase of 20,000 from the 2004 level of 482,400). Moreover, the Secretary of Defense has authorized the Army to maintain as many as 510,000 active-duty personnel if necessary, and all of the military services are authorized to exceed their statutory end-strength levels by up to 3 percent. Over the past three years, the size of the active Army has consistently been above its statutory authorization because of the pressure of ongoing military operations.

Additional military personnel are useful to the Army for a variety of purposes, even when those personnel are not used to establish and man new units. Not all Army units are maintained at 100 percent of their required levels in peacetime, and additional personnel could be used to improve the manning of such units. Also, some number of authorized personnel are unable to deploy for a variety of reasons (illness, personal circumstances, or medical conditions). Thus, to ensure that units can deploy with 100 percent of their required personnel and maximize their overall readiness, it can be desirable to man units at greater than 100 percent of their required levels.

This option would increase the active Army's statutory end-strength authorization by 20,000 and fund an additional 40,000 active-duty personnel in the Army's regular appropriation, to bring the service to an authorized and funded end strength of 522,400 active-duty personnel. Those changes would cost \$20 billion over the next five years and \$45 billion over the 2006-2015 period. They would effectively make permanent the Army's current temporary authorization of additional personnel and its

use of the authority to exceed end-strength levels by 3 percent. The 40,000 additional personnel would be sufficient to establish one additional active-component division and supporting units. (The Congressional Budget Office has not estimated the costs to establish those units, but option 050-03 shows the costs associated with adding two divisions to the Army's force structure.) Because the Army is already operating at a strength of at least 495,000 active-duty personnel, CBO estimates that the additional personnel required for this option could be recruited or retained within two years.

Proponents of such an increase argue that the Army's current missions and the global war on terrorism require a significantly more ready force and that the additional personnel associated with this option would greatly improve the Army's ability to execute its missions. They also note that the Army has already been operating with more than its 482,400 personnel for more than three years and that, to some degree, this option would formalize a variety of temporary measures. Further, with the pace of ongoing operations, individual soldiers in the Army have been deployed away from their home stations and families with increasing frequency. And therefore, increasing the size of the Army would help reduce the burden of deployments on individual soldiers.

Opponents of this option make arguments similar to those against creating additional divisions in the Army. Adding personnel to the Army carries with it substantial long-term costs, and permanently increasing the size of the Army may be a poor response to missions, such as the occupation of Iraq, that may be greatly reduced in scope within a few years.

**050-05—Discretionary****Reduce the Army's Short-Range Air-Defense and Field Artillery Force Structure and Use the Personnel Savings to Create New Army Divisions**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+5,700	+7,000	+3,400	+2,500	+1,900	+20,500	+26,400
Outlays	+2,000	+4,400	+4,900	+3,800	+2,800	+17,900	+25,800

Currently, the Army maintains about 14,000 personnel in short-range air-defense (SHORAD) units equipped with a variety of platforms that fire the Stinger surface-to-air missile. The Army also maintains about 80,000 personnel in field artillery (FA) units, including self-propelled cannon, towed cannon, and multiple-launch rocket system units. The Army is now engaged in a large-scale restructuring of its forces, which includes reducing the numbers of SHORAD and FA units and changing their composition while increasing the number of front-line combat units. (The Army has not yet announced the full details of that restructuring.)

This option would make larger changes than the Army is planning. It would eliminate all SHORAD units in the Army and restructure FA units into a smaller number of larger battalions (eliminating numerous brigade, battalion, and company headquarters) while doing away with corps-level cannon artillery battalions. Finally, it would eliminate some support units associated with the discontinued SHORAD and FA units. Those moves would free up about 50,000 personnel slots in the Army, the Congressional Budget Office estimates. This option would use those personnel slots, along with an additional 6,000 active-duty personnel, to create two new active Army divisions. CBO estimates that those divisions would take about five years to fully recruit, organize, equip, and train, at a cost of about \$17.9 billion in outlays over that period. (Option 050-03, by contrast, would create the divisions without making changes to other parts of the Army.)

If the personnel slots associated with the SHORAD and FA units, along with their support units, were eliminated rather than used to create new divisions, savings would be about \$11 billion higher over the next five years than shown here. Another possible use of those personnel slots would be to offset the Army's current need for additional

personnel above what it is normally authorized, thus eliminating the need for about \$3 billion in supplemental funding for an additional 30,000 active-duty soldiers each year through 2007.

The rationale for doing away with SHORAD units is that U.S. tactical aircraft have rapidly achieved air superiority (and sometimes full air supremacy) in every conflict they have engaged in since World War II and that U.S. SHORAD units have not destroyed a hostile aircraft since 1950. However, that may be because the U.S. military relies heavily on airpower during operations and that SHORAD units frequently operate under highly restrictive rules of engagement to prevent accidental destruction of U.S. or allied aircraft.

The rationale for reducing field artillery is that Department of Defense data indicate that the volume of cannon fire required of FA units has been steadily declining for about a century, driven in part by the increasing accuracy of modern artillery and in part by the availability of numerous alternative forms of fire support (such as fixed-wing aircraft, attack helicopters, and rocket artillery). Additionally, the Army is in the advanced stages of developing several types of precision munitions for both cannon and rocket artillery. Because precision munitions are able to destroy targets with fewer rounds expended and because the overall volume of fire needed is declining, FA units can be reduced without compromising capability to fight wars.

Although the reductions under this option would be greater than those being planned by the Army, they are consistent with the rationale underlying the Army's plans. Proponents argue that reducing the Army's SHORAD and FA structure would free up a substantial number of personnel slots, allowing the Army to create additional combat units that would provide more capability to the



service than the eliminated support units would. Supporters also argue that reducing the SHORAD and FA structure would improve the Army's ability to deploy forces overseas because units would be smaller and lighter and would have reduced logistics requirements.

Opponents of this option argue that reducing the SHORAD structure would leave U.S. Army forces less well protected against aerial threats. In particular, in an era when U.S. opponents may acquire unmanned aerial

vehicles, the additional protection provided by SHORAD units may become more important than it has been. Regarding field artillery, cannon-based fire support has numerous advantages that are either difficult or impossible to provide with other forms of fire support—for example, cannon fire is possible in all weather conditions, unlike air support. Moreover, cannon fire has traditionally been capable of greater accuracy and a superior level of sustained fire than rocket artillery.

RELATED OPTIONS: 050-03 and 050-04

**050-06—Discretionary****Cancel the Army's Tactical Command and Control System**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-189	-147	-130	-135	-160	-762	-1,474
Outlays	-72	-139	-137	-132	-142	-621	-1,340

Combat operations in Iraq have presented the first battlefield test of the Army's major modernization initiative of the past decade: the effort to introduce modern computers and communications equipment into all elements of the fighting force. That effort, comprising about 100 different programs and usually called Army digitization, is harnessing modern electronics to increase the Army's awareness of the location and disposition of all of its and the enemy's forces. By providing that increase in situation awareness, digitization is meant to enable the Army to achieve military objectives more swiftly while minimizing casualties.

This option would cancel the subset of digitization programs that have performed poorly in Iraq. Specifically, it would terminate the Army Tactical Command and Control System (ATCCS), a group of four programs that have fared badly in after-action reports written by officers responsible for assessing the performance of command-and-control systems during the conflict. (For the past 25 years, the ATCCS had comprised five programs, but the Army terminated funding for one of them in its 2005 budget request.) The four programs are the Maneuver Control System (MCS), the All Source Analysis System (ASAS), the Army Field Artillery Tactical Data System (AFATDS), and the Forward Area Air Defense Command and Control (FAADC2) system. The MCS is the clearinghouse for data transfer and data display for all of the ATCCS's programs. Additionally, it maintains specific information on Army maneuver forces. The ASAS focuses on the location and status of enemy forces plus the status of U.S. reconnaissance assets. The AFATDS is used for controlling the employment of artillery fire against enemy forces, and the FAADC2 controls Army forces employed to counter enemy air threats.

The Department of Defense has not released information on funding for ASAS, AFATDS, and FAADC2 past 2009. But if funding continued at current levels and MCS was phased out in 2011 as planned, this option would save approximately \$621 million in outlays over the next five years and about \$1.3 billion over 10 years relative to the 2005 Future Years Defense Program.

The ATCCS comprises computer software hosted on workstations that are linked by local area networks employing various controller devices and file servers. One problem that arose during battle conditions was that the equipment composing ATCCS could not be moved rapidly enough to keep pace with the ongoing operation. In addition, users noted shortfalls in software capability and in some cases found off-the-shelf substitutes. Those substitutes could be characterized as having capabilities that substantially overlapped the ATCCS, had mobility more appropriate to the pace of operations, were more reliable, and were more flexible with regard to the changing communications links involved in the operation.

Proponents of this option note that after-action reports by soldiers in the Army's V Corps, the 101st Airborne Division, and the 3rd Infantry Division cited MCS, ASAS, and AFATDS as inadequate and included recommendations to either "start over" or cancel those programs. FAADC2 was rarely mentioned, possibly because the tactical mission of air defense artillery has effectively shifted to the Air Force since the Korean War. In addition, the off-the-shelf substitute software used by soldiers during operations in Iraq is now fielded as a workable substitute for the yet-to-be-demonstrated capability of ATCCS and is undergoing improvements in the Army.

Opponents of this option argue that the capability of U.S. forces to maintain awareness of enemy forces is widely viewed as inadequate and that terminating ATCCS would jeopardize attempts to overcome that deficiency. They also argue that testing demonstrates that the

ATCCS's capability has been continually improving and that experience gained during wartime operations will be used with the ongoing development programs to correct identified deficiencies.

RELATED CBO PUBLICATION: *The Army's Bandwidth Bottleneck*, August 2003

**050-07—Discretionary****Reduce Procurement of Virginia Class Attack Submarines**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+200	-330	-450	-2,550	-2,480	-5,610	-25,960
Outlays	+100	+70	-80	-360	-900	-1,170	-13,890

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

In 1999, the Chairman of the Joint Chiefs of Staff (CJCS) released a study calling for a force of 55 to 68 attack submarines (SSNs), of which 18 should be the new Virginia class, by 2015. Subsequently, the Department of Defense decided that 55 submarines would be the goal, meeting both the minimum peacetime and wartime force levels identified in the study. To modernize its submarine force, the Navy had until recently planned to buy one Virginia class submarine per year from 2005 to 2008 and two or three per year between 2009 and 2015. It also plans to retire early one Los Angeles class submarine in 2006. That submarine would still have years of useful life remaining, however, if its nuclear reactor was refueled.

This option would refuel the reactor to keep that Los Angeles class submarine in service and would procure 10 Virginia class submarines at a rate of one per year through 2015, nine fewer than planned. In addition, the option would make permanent the Navy's plan to temporarily base three submarines in Guam and would transfer six additional submarines there by 2012 to take advantage of having those subs be 3,300 nautical miles closer to their operating areas, thereby increasing their number of operating days. Those changes would cost \$200 million in budget authority in 2006 but would save about \$5.6 billion in budget authority over five years and nearly \$26 billion over the 2006-2015 period. Those savings would come from buying nine fewer Virginia class submarines and operating fewer of them (a savings of about \$27.5 billion over 10 years) offset slightly by increased costs for refueling one Los Angeles class submarine instead of retiring it (about \$200 million), operating that submarine (about \$300 million), operating more submarines in Guam instead of the continental United States (about \$300 million), and improving the infrastructure in Guam

(about \$1 billion). This option is similar to the Administration's recently announced proposal to reduce procurement of Virginia class submarines to one per year through 2011. (Compared with that proposal, the savings provided by this option would be substantially lower.)

To help bridge the gap between force levels and requirements, the Navy announced in 2001 that it would begin basing three attack submarines in Guam. Two have already been transferred, and a third will join them in 2005. By moving those ships 3,300 nautical miles west of Pearl Harbor and employing an operating concept different from the one used for subs based in Hawaii or the continental United States, the Navy can eventually get about three times the number of mission days from Guam-based SSNs as from other SSNs. (On its first deployment, a Guam-based submarine provided a number of mission days equivalent to only two submarines based in the continental United States. Navy officials believe that once training and maintenance schedules are refined, that ratio will be close to three to one.) However, the attack submarines being transferred to Guam will reach the end of their service lives around 2015, and the Navy has not said whether they will then be replaced by other submarines, although press reports indicate that the Navy is considering transferring additional submarines there. Basing nine attack submarines in Guam indefinitely, as this option envisions, would require the construction of additional infrastructure to make the submarine facilities there equivalent to a submarine base. The Navy estimates that the cost for that infrastructure would total about \$1 billion. Infrastructure improvements would include new family housing, new maintenance facilities, expanded training facilities, and improved dry docks and berthing piers.

This option would maintain a force of at least 52 SSNs through 2015, equivalent in the number of mission days they could perform to a force of 70 attack submarines (including 18 Virginia class) based only in the United States. Under the Navy's 2005 FYDP, the force would have 54 attack submarines by 2015, including 12 Virginia class, but would provide mission days equivalent to only 60 SSNs, assuming the Navy kept three submarines in Guam.

Proponents would argue that in addition to saving money, this option would improve cost-effectiveness. Although new SSNs cost around \$2.5 billion apiece (in 2005 dollars), they spend an average of 36 days per year—or 10 percent of their 33-year service life—on-station performing missions. Like other Navy ships, SSNs spend the rest of their service life in training missions, port calls, transit, and maintenance. Consequently, the cost per additional mission day provided by building and operating a new attack submarine is \$3.4 million (in 2005 dollars) per year. But the cost per additional mission day of transferring an SSN to Guam is only \$0.3 million.

This option would have several disadvantages, however. First, with fewer submarines based in San Diego and Pearl Harbor, having SSNs available to train with carrier battle groups and support them during their deployments might be more difficult. Attack submarines would also be less available to assist other Navy units, such as ones practicing antisubmarine warfare.

Second, because existing submarines are less capable than new Virginia class submarines, an SSN force with fewer Virginias might be less capable of prosecuting a major war. However, that difference would probably be substantial only if the United States fought a sophisticated opponent with potent antisubmarine warfare capabilities.

Third, because Los Angeles class submarines were built at rates of three or four per year in the 1980s and therefore will start retiring at the same rate after 2015, by the late 2020s, a construction rate of one submarine per year would leave the Navy with about 26 submarines. That number might prove insufficient in the event of a war. The CJCS study stated that 55 attack submarines were needed to meet wartime requirements.

Fourth, a potential difficulty with this option—as with the Navy's decision to base three submarines in Guam—is the quality of life for sailors and their families on that island. Guam does not offer the same opportunities for family members and crews as submarine bases in San Diego and Pearl Harbor do. At those large bases, it is relatively easy for members of a submarine crew to find other jobs in the Navy when they finish their sea tours. Thus, they and their families can put down roots and stay in one place longer than a few years. Such opportunities are few in Guam. Still, if the Navy found that Guam-based duty led to much lower levels of retention for submariners, monetary bonuses might help.

**050-08—Discretionary****Cancel the DDX Destroyer and the Littoral Combat Ship and Build New Frigates Instead**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+1,380	-1,870	-1,780	-3,890	-5,040	-11,200	-28,820
Outlays	-220	-300	-520	-920	-2,030	-3,990	-21,050

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

The Navy is developing a new destroyer, the DDX, as well as a new surface combatant for inshore operations, called the littoral combat ship (LCS). The DDX, which is expected to carry up to 80 missiles and two advanced gun systems, is being designed principally to attack targets on land, although it will be able to perform other missions. A small ship, the LCS is expected to counter either diesel-electric submarines; mines; or small, fast-attack craft in coastal regions—missions for which the Navy believes a large ship like the new destroyer is not suitable. Although the Navy has not yet stated how many of each ship it wants, a report on long-term ship construction plans, which the Navy sent to the Congress in May 2003, indicated that the service wanted 24 DDXs and 56 littoral combat ships. The cost of buying those ships would total \$57 billion (\$43 billion for the DDXs and \$14 billion for the LCSs), the Congressional Budget Office estimates.

This option would cancel the Navy's plans to build a new destroyer and littoral combat ship in favor of building a new frigate, a ship that would be considerably smaller than the DDX but larger and more capable than the LCS. Relative to the plans outlined in the Department of Defense's 2005 Future Years Defense Program, this option would save \$11 billion in budget authority over the next five years and about \$29 billion between 2006 and 2015. (CBO did not include savings from research and development funding as a result of canceling the DDX because, according to the Navy, many of the new technologies being developed for that ship would eventually be used in other ship programs, including the future carrier, the Virginia class submarine, and the future cruiser. CBO

assumed that the new frigate would incorporate those technologies as well.)

Under this option, the Navy would initially purchase 22 frigates through 2015 and eventually buy a total of 38. The first ship would not be ordered until 2009 to allow the Navy time to reorient its ship-design efforts toward a new frigate. If the Navy employed rotational crewing on the new frigate, a program of 38 ships would be sufficient to provide full-time presence with a squadron of four ships in the European, Indian Ocean, and western Pacific operating areas. (Rotational crewing involves deploying a ship for 18 months and rotating a new crew to it every six months. That system increases the overall presence the ship provides by about one-third compared with the current system, in which the ship returns to its base and is replaced by a new ship deploying.) In addition, to sustain the industrial base for surface combatants until the new frigate was ready for production, this option would buy an additional seven DDG-51 destroyers, at a rate of two per year between 2006 and 2008 and one in 2009.

Some of the larger LCS designs under consideration could be scaled up and used as a basis for the new frigate. Alternatively, the national security cutter of the Coast Guard's Deepwater program is the size of a frigate—about 4,000 to 5,000 tons—and perhaps could be used as a basis for the Navy's frigate. However, the new frigate would require a substantially different combat system and payload than the national security cutter. In design, the frigate would need both a substantial payload to accomplish its multiple missions and long endurance. Consequently, the ship's maximum speed would have to be more in line with that of existing warships—about 30

knots—rather than with the goal of 50 or more knots for the LCS program. (In ship design, payload, endurance, and speed are traded off against one another. It is difficult to design a ship with high speed, long endurance, and a large payload. The LCS design favors speed at the expense of endurance and payload. The frigate envisioned in this option would have greater emphasis on payload and endurance than on speed.)

Supporters of this option argue that the most likely maritime challenges that the United States and its allies will face include terrorism, drug smuggling, violations of economic sanctions, illegal immigration, and arms trafficking. The DDX, which appears to be designed for major wars, would be an exceptionally large and expensive ship to use for those missions. With a reported displacement of about 14,000 tons, the DDX would be larger than any other surface combatant in the Navy. The high cost of the ship appears to be driven by its large size to accommodate the features that make it difficult to detect and its two advanced gun systems—capabilities not particularly useful in the aforementioned missions.

In addition, supporters argue that in pursuing the LCS, the Navy went too far in the opposite direction, designing a ship that may be too small. The LCS would be a single-mission ship with a modular combat system, which would be tailored to the mission it was expected to take on. If the LCS was sent to counter mines, it would have a mine countermeasures payload. If it was sent to counter diesel-electric submarines, it would have an anti-submarine-warfare suite. How easily or effectively the Navy could change mission modules should the threat require it is unclear. A frigate-sized ship, by contrast, would have enough payload, along with more-robust self-defense systems, to perform all three missions simultaneously, making it easier to address multiple threats. Further, the Navy's experience with small warships has not

been encouraging. Such ships usually have insufficient payload and range, poor handling and stability at sea, and short longevity. Frigates in the Navy today, such as the Oliver Hazard Perry class, have held up much better and have remained in the fleet much longer than did smaller craft such as the Cyclone Class patrol ship (which was discarded by the service after 10 years) or high-speed hydrofoils (which the Navy experimented with in the 1970s).

Canceling the DDX program would have a number of disadvantages, however. First, the program is highly innovative. The destroyer is intended to have a completely new design; to use a new, efficient power system; and to operate with a relatively small crew. Other development programs could benefit from the research and innovation being pursued in the DDX program. Restructuring that program could disrupt and slow the process of innovation in ship design for the Navy for several years, although many of the technologies being developed for the DDX could be used effectively in the new frigate.

Second, the fire-support capabilities available to support the Marine Corps would be reduced in the absence of the DDX destroyer. The largest gun in the Navy today has a five-inch diameter. The 155-millimeter gun on the DDX (slightly larger than a six-inch gun) would provide better fire support for amphibious landings and Marine operations ashore. The 155-millimeter guns would have a much longer range and be three times as powerful as the current five-inch guns. However, it has been more than 10 years since a Navy ship has carried a larger gun. In the wars that the United States has fought over the past 10 years, the need for a larger naval gun has been unclear. Furthermore, a larger gun may be unnecessary given improvements in the missile technology and precision munitions carried by existing as well as new Navy and Marine strike aircraft, such as the Joint Strike Fighter.

RELATED OPTION: 050-09

RELATED CBO PUBLICATION: *Transforming the Navy's Surface Combatant Force*, March 2003

**050-09—Discretionary****Reduce the Number of DDX Destroyers to Six**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	0	-1,290	-970	-2,300	-2,440	-7,000	-28,350
Outlays	0	-140	-390	-720	-1,210	-2,460	-16,860

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

The Navy's proposed new destroyer, currently designated the DDX, is a large warship designed to provide volume fire support to Marine Corps units conducting operations ashore. With a reported displacement of 14,000 tons, it will be larger than any other surface combatant in the Navy. It will carry up to 80 land-attack missiles and two 155-millimeter advanced guns to provide gunfire support up to 100 nautical miles away. In the long-term ship construction plan sent to the Congress in March 2003, the Navy proposed buying 24 DDXs between 2005 and 2017. Those ships would cost a total of \$43 billion, the Congressional Budget Office estimates. At other times, senior Navy officials have suggested other quantities for the DDX program.

Under this option, only six DDXs would be built. That number would be sufficient to provide the full-time presence of one DDX each in the western Pacific and the Arabian Sea. To achieve that level of presence, the Navy would have to base one DDX in Japan (along with the other Navy ships already there) and employ a rotational crewing concept for the ship deployed in the Arabian Sea. (Rotational crewing involves deploying a ship for 18 months and rotating a new crew to it every six months. That practice increases the ship's overall presence by about one-third compared with the current system, in which the ship returns to its base and is replaced by a new ship deploying.) Under those assumptions, the Navy would have a DDX available in the regions of the world that were most likely to require its capabilities. This option would not save any money in 2006 but would save about \$7 billion in budget authority through 2010 and \$28 billion through 2015. An additional \$4 billion to \$5 billion in savings would be realized over the 2016-2017 period from not buying the last four DDXs in the

Navy's long-term plan. This option is consistent with the Administration's 2005 budget plan to buy only five DDXs through 2011, at a rate of one per year starting in 2007, with the number of additional ships to be bought unspecified. Compared with that proposal, the savings provided by this option would be substantially lower.

Some supporters of trimming the DDX program cite recent experience as a guide: in the major conflicts that the United States has fought since the first Gulf War, there has been little or no use of naval gunfire. Thus, it is not clear that the Navy needs a large number of ships designed primarily, though not exclusively, to provide naval gunfire support for operations on land. However, in the event that such a capability was required in a future conflict, this option would ensure that one DDX would already be on-station. And under the Navy's new concept for wartime surge of ships, an additional two or three DDXs could be sent to the theater of operations within 90 days. In addition, continuing improvements in the precision munitions that tactical aircraft carry may reduce the need for volume surface fire from Navy ships.

Opponents of curtailing the program argue that describing the DDX primarily as a gunfire support ship may understate its capabilities and usefulness to the future Navy. The ship will be difficult to detect and have a range of systems designed to defeat anti-access threats in the world's coastal regions, a capability that many analysts and defense officials regard as crucial to maintaining the viability and effectiveness of U.S. military forces in the future. The ship will have a new power and electrical distribution system that will enable it to carry new and more powerful weapons in the future, thus expanding its capabilities and the missions it can perform. For example, if



the Navy is successful in developing an electromagnetic rail gun for the DDX, the ship may eventually be able to provide fire-support capability beyond 200 nautical miles. (A rail gun uses magnetic fields to hurl a solid metal projectile at a target at several times the speed of sound. The projectile's destructive power is caused by the kinetic energy created by the speed at which it hits, rather than by an explosive.) Further, the United States may find

itself conducting more operations that require fire support than it has in the recent past. As the Marine Corps adapts its warfighting doctrine to rely more on logistical and fire support from ships—thereby cutting the amount of support and materiel that needs to be put on land—the role of the DDX may become more important. In that event, six DDXs might prove insufficient to perform all of the missions that could be required of the ships.

RELATED OPTION: 050-08

RELATED CBO PUBLICATION: *Transforming the Navy's Surface Combatant Force*, March 2003

**050-10—Discretionary****Cut the Number of Aircraft Carriers to 11 and the Number of Navy Air Wings to 10**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-2,090	+20	-500	-510	-520	-3,600	-6,470
Outlays	-740	-730	-1,020	-500	-520	-3,510	-6,350

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

The Administration's 2005 defense plans call for maintaining a fleet of 12 aircraft carriers and 11 active-duty naval air wings. (The number of active air wings is one less than the number of carriers because, at any time, one of the Navy's carriers is usually undergoing a major overhaul.) Aircraft carriers are also accompanied by a mix of surface combatants (usually cruisers and destroyers) and submarines to defend against aircraft, ships, and submarines that might threaten the carrier. In the past, such a grouping was called a carrier battle group and notionally included six surface combatants. Currently, the force is called a carrier strike group and includes three surface combatants, one attack submarine, and one logistics support ship.

This option would reduce the carrier force by one ship and one air wing, leaving a total of 11 and 10, respectively. It would do so primarily by immediately retiring a Nimitz class carrier, the *Carl Vinson*, and a number of planes equivalent to most of that carrier's air wing. Those changes would save the refueling and overhaul costs that the Navy is expected to incur in 2006 and the operating costs associated with the ship and about 60 planes. Under this option, the other ships associated with a carrier strike group would be retained and deployed to support other Navy missions. Overall, this option would save nearly \$2.1 billion in budget authority in 2006 and about \$3.6 billion through 2010. Additional savings of about \$3 billion over 10 years would be possible if the Navy decided to decrease planned purchases of F/A-18 E/F or Joint Strike Fighter aircraft to reflect the reductions in inventory requirements for air wings.

As an alternative to this option, the *Carl Vinson* could be refueled and its air wing kept active, and the CVN-21 carrier replacement program could be delayed for five years. The first ship of that new class of aircraft carriers is expected to be authorized in 2007 and commissioned around 2013, when it would replace the *Enterprise*, which would have reached the end of its service life. Delaying the CVN-21 would mean that the *Enterprise* would not be replaced and that its air wing would be retired in 2013, at which point the carrier force would fall to 11 ships. Such an approach would generate more savings than retiring the *Carl Vinson* but would substantially reduce the anticipated workload at the Northrop Grumman Newport News shipyard in Virginia. Northrop Grumman is the only U.S. shipbuilder capable of building aircraft carriers. Current long-term shipbuilding plans assume construction of an aircraft carrier every five years over the next 30 years.

Proponents of this option argue that the Navy could make do with fewer aircraft carriers. The 11 remaining carriers in the fleet would still provide a force of at least seven carriers within 90 days to fight a major theater war under the Navy's new concept for surging ships, the Fleet Response Plan. Recent experience suggests that the Navy mobilizes five to seven carriers to fight a major theater war. In addition, although the Navy would lose some ability to provide carrier presence overseas, 11 carriers would be enough to provide full-time presence in the western Pacific and the Arabian Sea, with the Mediterranean covered a little less than three months out of the year. Some analysts have argued that because the security environment in the Mediterranean has improved dramatically, that region no longer requires continuous or near-

continuous presence by an aircraft carrier. And should the need arise for one, the carrier in the Arabian Sea could be sent there quickly via the Suez Canal.

Other developments may also boost the effective presence of the Navy's carrier force. Some senior Navy officials have stated that rotational crewing concepts may eventually lead to more carrier presence. (Rotational crewing involves deploying a ship for 18 months and rotating a new crew to it every six months, which increases the overall presence that the ship provides by about one-third.) The Navy is also considering whether basing a carrier in Guam would be feasible and cost-effective. A Guam-based carrier would both boost the presence in the western Pacific and allow for more-effective presence in the Mediterranean. Finally, the Air Force's new Air and Space Expeditionary Force concept allows greater flexibility in deploying squadrons of airplanes around the globe to key trouble spots very quickly, thus relieving some of the pressure on the Navy's carrier fleet.

Opponents of this option disagree with those arguments. They say that by giving up an aircraft carrier, the Navy would significantly reduce its ability to fight two major wars at the same time, the benchmark for defense planning throughout the 1990s. Further, the European, Central (Middle East), and Pacific Commands all have a re-

quirement for full-time carrier presence in their regions. Under current crewing and operating practices, 15 carriers would be needed to meet that goal. In addition, the United States has fought two wars since 1990 in the Mediterranean area (in Bosnia and Kosovo) that involved the support of carrier battle groups. Thus, opponents would argue, now would not be a good time to reduce the presence provided by naval forces in that region or any other, because those forces have the flexibility to operate anywhere in the world without the permission of another country. The Air Force's Air and Space Expeditionary Force would require the permission and support of a host country, which might not be available in the event of a conflict.

Opponents of this option also argue that it is not clear that new rotational crewing concepts or a forward base in Guam would prove practicable for an aircraft carrier. The rotational crewing concepts that the Navy is currently testing are an experiment and have only included surface combatants. Rotating a new crew of 300 to a forward-deployed surface combatant is a less complex task than rotating the 5,000 personnel of an aircraft carrier and its air wing. In addition, even if a new base in Guam proved to be a good idea (and it might not be), it would take years to build and probably require billions of dollars in new investment on the island.

**050-11—Discretionary****Gradually Reduce the Number of Expeditionary Strike Groups to Eight**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	0	-3,590	-1,230	-1,250	-4,140	-10,210	-14,970
Outlays	0	-390	-920	-1,130	-1,660	-4,100	-12,840

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

Expeditionary strike groups (ESGs) are new task forces that the Navy is forming by reorganizing the way it deploys amphibious ships, surface combatants, and submarines. The Navy's amphibious ships (those designed primarily to transport and deploy U.S. Marines) were organized into 12 amphibious ready groups. Each amphibious ready group usually comprised three amphibious ships and carried a battalion-sized Marine expeditionary unit, operating primarily without other elements of the fleet. Under the ESG model, however, the Navy assigns three surface combatants and an attack submarine to operate with those three amphibious ships. The logic of that reorganization is that the Navy increasingly needs to be in more places with forces that can perform a variety of missions. An ESG carries the same number of Marines as an amphibious ready group. One or two of the surface combatants are equipped with the Aegis combat system to provide fleet air defense. The surface combatants and attack submarine also carry Tomahawk land-attack cruise missiles, which can strike targets more than 1,000 nautical miles away. The Navy envisions that, unlike an amphibious ready group or surface combatants operating alone, an ESG will be able to perform almost any mission that does not require the presence of a large aircraft carrier.

This option, which would affect only the amphibious ships of ESGs, would reduce the total number of expeditionary strike groups to eight from the Navy's force of 12. Under this option, amphibious ships would not be retired immediately but instead would simply not be replaced as they reached their scheduled retirement dates. Thus, the number of ESGs would fall from 12 today to 10 by 2015 and then to eight by 2021. This option would generate savings of about \$13.3 billion in procurement costs and

\$1.7 billion in operating costs between 2006 and 2015. (This option would not reduce the number of surface combatants or attack submarines in the fleet, because those associated with ESGs would be redeployed to support other Navy missions. However, if the Navy also decided not to replace the 12 surface combatants and four submarines associated with the four eliminated ESGs, that decision could result in substantial additional savings.)

Specifically, this option would reduce purchases of the LPD-17 amphibious transport dock to eight from the current plan of 12 and delay the need for constructing a new replacement for the remaining amphibious assault ships for at least 10 years. Under the 2005 Future Years Defense Program, the Navy expected to buy one LPD-17 each year through 2010 and one new amphibious assault ship, the LHA(R), in 2007, 2010, 2013, and 2016. Under this option, the Navy would cancel the planned purchase of four LPD-17s from 2007 to 2010, as well as the three LHA(R)s from 2007 to 2015. (The LHA(R) purchased in 2016 would also be canceled, but those savings fall outside the time period considered in this option.) The LPD-17 expected to be authorized in 2006 would be retained. (In its 2006 FYDP, however, the Administration proposes reducing the number of LPD-17s to nine; compared with that plan, this option would save less than the amounts shown here.)

Both the LPD-17 and the LHA(R) are intended to replace classes of ships that are scheduled to retire over the next decade. The LPD-17 will replace the LPD-4 class ships, which are reaching the end of their 40-year service life. The four ships of the LHA(R) program would replace four of five ships of the existing LHA Tarawa class,

which are already serving beyond their originally planned service life. The first LHA will be replaced by the LHD-8, a Wasp class amphibious assault ship currently under construction. Once that occurs, each of the Navy's 12 expeditionary strike groups will have one LPD-17; in addition, four of the ESGs would have one LHA(R) apiece and the remaining eight would have a Wasp class amphibious assault ship.

Although the LHA(R) is not yet under construction, the LPD-17 program has experienced significant cost growth. Per-ship (unit) costs for the LPD-17 have grown by more than 50 percent, requiring the Navy to report a Nunn-McCurdy breach in 2002. (Under current law, the Secretary of Defense must report when a major weapons program is experiencing unit cost growth of 25 percent or more. The Secretary also must certify that the program is in the national interest and that the cost and management of the program is now under control. The cost growth reported under current law is called a Nunn-McCurdy breach, named after the former Members of Congress who sponsored the provision.) Originally expected to cost \$830 million each, a class of 12 LPD-17s is now expected to have an average cost per ship of about \$1.3 billion. Procurement of the first ship of the class was delayed for several years as a result of problems with the program's management, according to both the Government Accountability Office and the Navy.

Proponents of this option argue that it is not clear that the Navy needs all 12 LPD-17s and four LHA(R)s. The Navy and Marine Corps are currently working on new warfighting concepts, which may involve new types of ships. Depending on what the Navy ultimately decides to pursue, it may not need as many LPD-17s as thought when the program was conceived. (For example, if the Navy decides to buy new, large, aviation-capable maritime prepositioning ships, the need for all 12 LPD-17s is less compelling.)

In addition, several senior Navy officials have stated that rotational crewing concepts, which increase the amount of time that ships spend on-station, could reduce the requirement for ESGs to eight. (Rotational crewing involves deploying a ship for 18 months and rotating a new

crew to it every six months. That process increases the overall presence the ship provides by about one-third compared with a ship that returns to its base and is replaced by a new ship going on deployment.)

Furthermore, this option would build enough LPD-17s and retain a sufficient number of amphibious assault ships to provide one each to eight expeditionary strike groups. Moreover, the gradual reduction, rather than the immediate retirement, of a large number of ships would provide a transition for the Navy as it developed its rotational crewing concepts and a hedge in case those concepts did not work or a decision was made later to keep a larger number of ESGs.

Opponents of this option argue that the demand for naval presence around the globe in the form of expeditionary strike groups has not abated over the past 10 years. Thus, they say, the Navy needs to maintain 12 ESGs, and the LPD-17 and LHA(R) will be an integral part of that force. In addition, both the LPD-17 and LHA(R) will be far more capable than their predecessors and, particularly, provide better living conditions for the crews and troops on board.

Opponents also argue that the rotational crewing concepts being contemplated for the ESGs are still experimental and that applying them to amphibious ships populated by large crews and large numbers of Marines would be complicated, if not impossible. Further, those crewing concepts would increase only the peacetime presence that the remaining ESGs would provide; in wartime, when the actual number of ships matters, the force would be smaller. For example, the Navy's requirement for amphibious lift in wartime (moving and deploying the assault echelons of two-and-a-half Marine expeditionary brigades on amphibious assault ships) would not be achievable under this option.

Finally, cutting the number of LPD-17s and LHA(R)s could also affect the shipyards involved in their construction, depending on where and how many of the new types of ships that would substitute for the LPD-17 would be built. LPDs and LHAs are usually produced by

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Northrop Grumman Ship Systems in its Avondale, Louisiana, and Ingalls, Mississippi, operations. If planned procurement of new amphibious ships was reduced by the

quantities suggested in this option, the workload at those shipyards would be affected. Avondale and Ingalls currently employ 7,000 and 12,000 people, respectively.

RELATED CBO PUBLICATION: *The Future of the Navy's Amphibious and Maritime Prepositioning Forces*, November 2004

**050-12—Discretionary****050****Reduce the Trident Submarine Force to 12 and Buy 48 Fewer D5 Missiles**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-150	-20	-190	-210	-210	-780	-2,200
Outlays	-80	-80	-90	-150	-190	-590	-2,140

Until recently, the Navy maintained a fleet of 18 Trident submarines. Eight of those submarines were based in Bangor, Washington, and the other 10 were stationed in Kings Bay, Georgia. All of the submarines at Kings Bay and two of the submarines at Bangor deployed 24 newer, more capable D5 missiles that, under the Strategic Arms Reduction Treaty, each carried eight nuclear warheads. The six remaining submarines stationed at Bangor deployed 24 older C4 missiles that carried six nuclear warheads apiece. In all, about 3,200 warheads were deployed on those 18 submarines.

The Navy has begun converting four of the Trident submarines that carried C4 missiles to a conventional (non-nuclear) role. Two of the conversions began in 2003, and the remaining two started in 2004. The C4 missiles that are being removed from the submarines will be transported to a Department of Defense (DoD) facility for disposal. The warheads removed from those missiles will either be reloaded onto the newer D5 missiles or stored at a DoD facility. The Navy's plan to pursue those conversions was announced in January 2002 after the Nuclear Posture Review, which concluded that a force of 14 Trident submarines would be sufficient. Under that plan, each of the remaining 14 Trident submarines will be equipped to carry 24 D5 missiles by 2008. According to the Navy, an average of two submarines a year will undergo a major overhaul, during which they will not carry any missiles. The 12 other operationally deployed submarines will carry a total of 288 D5 missiles and about 2,300 warheads (about 192 warheads on each submarine).

The Administration plans to buy a total of 540 D5 missiles—288 for the Trident submarines and the other 252 for flight tests and spares. By the end of 2004, the Navy had purchased 420 missiles; it plans to buy the remaining 120 missiles by 2013. The Congressional Budget Office assumes that to meet the limits of the Moscow Treaty's

goal of no more than 2,200 warheads, the 12 operationally deployed submarines would carry a total of 1,152 warheads, or about 96 warheads on each submarine.

This option would retire the two remaining Trident submarines that have not yet been upgraded to carry D5 missiles (one of those upgrades started in 2005 and the other is planned for the following year). The option would also cancel the planned purchase of 48 D5 missiles because fewer missiles would be needed to support a 12-submarine force. To keep a similar number of warheads overall, the smaller Trident force would carry 111 warheads on each submarine instead of 96. Compared with the Administration's 2005 Future Years Defense Program, this option would save about \$780 million in budget authority over the 2006-2010 period and \$2.2 billion over 10 years. Specifically, by retiring the two submarines early, the Navy would save about \$0.6 billion from reduced operations during the 2006-2015 period, net of the costs to retire the submarines. In addition, retiring the submarines by 2007 would save \$1.7 billion in planned upgrades and purchases over that 10-year period. (That figure results because not overhauling the two submarines to accommodate the D5 missiles would save about \$300 million and not buying the D5 missiles that would be deployed on the overhauled submarines would save about \$1.4 billion.)

Purchasing 48 fewer D5s would have several drawbacks, however. The Navy recently extended the service life of Trident submarines from the original 30 years to 44 years and has begun to extend the service life of D5 missiles. That program involves redesigning the guidance sets and retrofitting every missile with them, requiring additional flight tests to judge the guidance sets' performance. Those flight tests are scheduled to take place over the 2008-2013 period. If production of D5 missiles ceased before then (as it would under this option) and more D5s

were required later for the flight test program, reopening production lines could be costly.

Opponents of this option also argue that loading more warheads on existing missiles would reduce their range and lessen the flexibility of the submarine force. In addition, cutting the number of operationally deployed submarines from 12 to 10 could increase their vulnerability to attack by enemy antisubmarine forces. Nevertheless, some people would consider the capability retained under

this option to be sufficient to deter nuclear war. Fewer submarines and less targeting flexibility might not reduce the force's nuclear deterrent: 1,152 warheads deployed on 288 missiles might not deter an adversary notably more than the 1,110 warheads on 240 missiles envisioned in this option. Moreover, the end of the Cold War and the amount and projected state of Russia's nuclear forces may have weakened the rationale for the United States to increase its forces by adding more D5 missiles.

RELATED CBO PUBLICATION: *Letter to the Honorable Joseph R. Biden Jr. regarding estimated costs and savings from implementing the Moscow Treaty*, September 24, 2002



**050-13—Discretionary and Mandatory****050****Simplify and Speed the Disposal of Excess Naval Vessels**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays							
Discretionary	-20	-12	-12	-8	-4	-56	-156
Mandatory (Asset sales)	-3	-76	-30	-6	-7	-122	-288

The disposal to another nation of excess naval vessels with a displacement greater than 3,000 tons or with an age of less than 20 years requires a specific act of Congress. Under current law, the restriction applies to any disposal of naval vessels, whether by sale, lease, or grant. In contrast, other excess defense articles such as older models of military jets or tanks may be disposed of with only Congressional notification—by sale or lease under the Arms Export Control Act or by grant under the Foreign Assistance Act. This option would simplify and speed the disposal process by eliminating the requirement for specific authorization for the sale of excess naval vessels, thereby permitting their disposition under the same general authorities as other weapon systems. The Congressional Budget Office estimates that implementing the option would generate collections from asset sales of about \$122 million over the next five years and would reduce discretionary spending for ship storage by \$56 million over the same period.

In the coming decade, approximately 80 ships will reach the end of their active service lives and be decommissioned. If the disposal pattern experienced over the past 10 years continues, 10 acts of Congress would be required to effect their disposal, CBO estimates. Thirty percent of those vessels could be sold to other nations, 30 percent would be given away, and the rest would be held in the strategic reserve or sunk in training exercises. Because disposals require Congressional action, CBO's baseline contains no assumed proceeds from asset sales.

The rationale for this option is that the special requirement that each disposal be specifically authorized by law is cumbersome and costly. Enacting specific legislation can add a year to the time between developing a proposal for a transfer and making an offer to a prospective customer. The delay complicates matching the Navy's schedule for decommissioning ships with a potential customer's requirements. If the Navy cannot execute a "hot transfer"—that is, a walk-off, walk-on transfer from the U.S. Navy to the navy of another country—it will spend an estimated \$4 million mothballing and storing each ship. A "cold transfer" also reduces the proceeds from any subsequent sale because the cost of reactivating a ship is taken from the sale price.

Under this option, 24 ships would be sold over the next 10 years, generating about \$290 million from the proceeds of asset sales, CBO estimates. The estimate assumes that the majority of sales would be by hot transfer, thus generating more proceeds than under the current process of annual authorizations. In addition, \$160 million in savings would be realized on all ships disposed of through a hot transfer, including those disposed of by grant.

Opponents of this option argue that it could weaken Congressional oversight of ship transfers. Specific legislation requires the approval of the whole Congress, whereas notification would limit oversight to specific committees of the Congress. Opponents note that over the past decade, 86 ships have been disposed of under the current system and that modifying current procedures might not yield higher sales than in the past.

**050-14—Discretionary****Cancel Production of the V-22 Aircraft**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,560	-1,981	-1,969	-1,271	-1,013	-7,794	-9,974
Outlays	-308	-1,025	-1,647	-1,731	-1,453	-6,164	-9,899

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be different if calculated relative to that FYDP.

The V-22 aircraft, which entered production in 1997, is designed to help the Marine Corps perform its amphibious assault mission and its subsequent operations ashore. The Marine Corps plans to buy a total of 360 of the planes. In addition, the Air Force plans to buy 48 V-22s to support special-operations forces, and the Navy plans to buy 48 V-22s for combat search-and-rescue missions and logistics support of its fleet. The V-22 can transport more than 20 Marines or about 10,000 pounds of their equipment from ship to shore. The plane's tilt-rotor technology enables it to take off and land vertically as a helicopter does and, by tilting its rotor assemblies, to become a propeller-driven airplane when in forward flight. As a result, the V-22 can fly faster than conventional helicopters can. The Marine Corps maintains that the plane's increased speed and other design features make it less vulnerable than other aircraft when flying over enemy terrain and enable it to provide over-the-horizon amphibious assault capability—which minimizes the exposure of amphibious ships to coastal fire and increases tactical surprise by obscuring the destination of an attack. In addition, the V-22 is designed to fly longer distances without refueling than conventional helicopters do. Thus, it can fly directly to distant theaters, whereas many helicopters must be transported there on planes or ships.

Despite those advantages, critics of the V-22 have questioned whether the new aircraft will demonstrate enough improved capabilities to justify its higher cost. At an average procurement cost of \$74 million (in 2005 dollars), the V-22 is significantly more expensive than the Marine Corps's conventional helicopters. If the Department of Defense (DoD) canceled the program, it might instead buy conventional helicopters for the Marine Corps. Sev-

eral helicopters have been proposed as alternatives to the V-22:

- An updated version of the CH-53E, which the Marines use for heavy amphibious lift missions;
- The MH-60S, a variant of the Army's Blackhawk helicopter, which the Navy uses for fleet combat support; or
- The H-92, a military version of the medium-lift S-92, a commercial transport helicopter developed by the Sikorsky Aircraft Corporation, which has a passenger and cargo capacity between that of the MH-60S and the CH-53E.

This option assumes that DoD would buy a total of 360 H-92s for the Marine Corps and 48 H-92s for the Navy in place of an equal number of V-22s. (Only 350 of those H-92s would be purchased through 2015, however—58 fewer than the number of V-22s that would have been bought for the Marines and the Navy by then under DoD's 2005 plan.) Although the H-92 can transport roughly the same number of troops and carry about the same amount of weight externally as the V-22 can, some analyses of alternatives to the V-22 have suggested that more than one type of helicopter would need to be purchased to replace the lift capability lost from cutting the number of V-22s. Consequently, under this option, DoD would also buy 80 improved CH-53s (called the CH-53X) for the Marine Corps between 2010 and 2015, and those CH-53Xs would incorporate a number of improvements over the CH-53Es in the fleet today. Together with the H-92s, the CH-53Xs would provide almost as much capability as the planned fleet of V-22s. Relative to the Administration's 2005 Future Years Defense Program,

this option would save nearly \$310 million in outlays in 2006 and \$6.1 billion over five years. (Lesser savings would be achieved during that period if some V-22 purchases were deferred, a plan that DoD adopted as part of the 2006 budget.)

The 80 CH-53Xs purchased under this option would be in addition to any CH-53Xs that might be purchased to replace the existing fleet of CH-53Es. The Marine Corps explored alternatives for replacing its current CH-53Es and included funding in the 2005 Future Years Defense Program for research, development, and initial production of a new aircraft. The Marine Corps chose the CH-53X as the most cost-effective alternative. Consequently, this option does not include the costs to develop a new aircraft because those costs would be funded in DoD's plans. However, this option does include funding to increase the manufacturing capacity required to build the 80 aircraft purchased under this option without displacing the production of aircraft to replace the existing CH-53Es. This option also assumes that Marine Corps V-22s that have already been purchased are transferred to the Air Force for conversion to special-operations V-22s. The estimated cost of those conversions are included in the

savings shown here. Those savings would be lower if DoD opted for a different special-operations aircraft.

Opponents of the V-22 cancellation argue that conventional helicopters cannot perform amphibious operations as quickly or safely as the V-22 can. Because the aircraft can fly faster and carry more equipment (or carry it longer distances) than helicopters can, Marine forces with V-22s could build up combat power ashore—especially from long distances—more quickly than forces with helicopters could. As a result, amphibious assaults relying on V-22s could prove less risky. Similarly, slower helicopters could present a target for ground-to-air missiles over longer periods, and some types, including perhaps the H-92s, might be more vulnerable to small-arms fire than the V-22s.

In addition, unlike the V-22s, the helicopters purchased under this option might not be able to self-deploy (fly from their base directly to a theater of operations rather than be partially disassembled and carried on transport aircraft). They also lack other improvements that the Marine Corps hopes to gain with the V-22s, including systems that better inform pilots about potential threats.

**050-15—Discretionary****Cancel Purchases of the Air Force's F/A-22 Fighter**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-4,427	-4,258	-4,128	-3,978	+32	-16,759	-11,282
Outlays	-1,173	-3,143	-3,872	-4,029	-2,934	-15,151	-11,155

Note: Savings are calculated relative to the President's 2005 budget and associated Future Years Defense Program. The FYDP associated with the President's 2006 budget was not available when this report was prepared. Savings would be lower if calculated relative to that FYDP.

The F/A-22, under development as the Air Force's next premier fighter aircraft, is scheduled to begin replacing the older F-15 fighter soon. The F/A-22 program is the only new tactical fighter program to survive from the Cold War period. (The military's other new fighters—the Navy's F/A-18E/F and the planned F-35 Joint Strike Fighter—entered development after 1990.) The disappearance of the threat from sophisticated Soviet fighter aircraft that the F/A-22 was designed to counter has led some analysts to suggest ending the program. This option would cancel the remaining purchases of F/A-22s included in the Administration's 2005 Future Years Defense Program and procure joint-service F-35s instead, thereby saving a total of \$11 billion in budget authority through 2015. (Recent reports indicate that the Department of Defense may cut F/A-22 quantities by 96 aircraft relative to the 2005 plan. The savings from this option would be smaller if measured against that lower production quantity.)

The Air Force had originally planned to buy more than 600 F/A-22s. After a series of cuts, the 2005 Future Years Defense Program planned a total purchase of 277 aircraft through 2011, with 98 already bought through 2005. The average procurement cost of the 179 F/A-22s not yet purchased is about \$120 million per aircraft. (The average cost over the entire 277-aircraft program is about \$265 million apiece in 2005 dollars with research and development and other program costs included.)

Supporters of canceling the F/A-22 argue that although the aircraft offers a number of improvements in capability

over other fighters, it will also be the most expensive fighter ever built. The F-35, which is still in early development, is expected to be less capable (and cost less) than the F/A-22. But it would still be more capable than the fighters of almost any of the United States' potential adversaries.

One possible disadvantage of this option is that it would make the Air Force's fighter fleet, which is already aging under current plans, even older. Buying additional F-35s to make up for the cut in F/A-22s could remedy that problem because this option assumes an accelerated purchase rate for the F-35s that would substitute for the canceled F/A-22s. However, critics note that the schedule for developing the F-35 has already slipped, making it risky to rely on that yet-unproven fighter to replace the aging fleet of F-15s.

Critics of this option also argue that the nature of the threats that the United States must face over the next 30 years is uncertain. Potential adversaries could develop more-advanced aircraft than currently projected over that period, or the United States might engage in aerial combat against an enemy force that, although less sophisticated, was large and outnumbered the air forces that the United States could field. In either case, prudence would dictate that all currently planned F-22s should be purchased to ensure that the United States could prevail in those circumstances. Canceling remaining F/A-22 purchases would leave the Air Force with only about one air wing of the advanced fighter to counter such a threat.

**050-16—Discretionary****050****Slow the Schedule of the F-35 Joint Strike Fighter Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	0	-1,219	-3,046	-4,489	-2,205	-10,960	-18,536
Outlays	0	-323	-1,362	-2,807	-3,285	-7,777	-17,967

The F-35 Joint Strike Fighter program is one of the military's most ambitious aircraft development programs. A team of several manufacturers led by the Lockheed Martin Aeronautics Company was awarded a contract in 2002 to develop three versions of the stealthy aircraft: a conventional-takeoff version for the Air Force; a longer-range, carrier-based version for the Navy; and a short-takeoff/vertical-landing version for the Marine Corps. From 2006 through 2020, those planes are expected to account for roughly 80 percent of the manned fighter aircraft that the military will buy, at a procurement cost of about \$156 billion (in 2005 dollars). With development and other costs included, the entire F-35 program is expected to cost about \$200 billion, according to the Administration's estimates.

This option would defer purchase of the first F-35s until 2009—two years later than the Department of Defense (DoD) planned in the 2005 Future Years Defense Program. A slowdown in production would give the program more time to clear development hurdles and would decrease budget authority by \$11 billion over the next five years. The slowdown would save more than \$18 billion through 2015 because DoD would purchase 330 fewer planes through that year. This delay would be in addition to the one-year delay in the program that DoD an-

nounced in 2004 to allow additional time for development of the Marine Corps version of the F-35.

Slowing the schedule for the F-35 could have a number of disadvantages. Any up-front savings from lengthening the program might be offset by higher total costs. In addition, delays would increase the average age of DoD's fighters—which is already much higher than in the past—before they were replaced. As a result, DoD might have to adapt its future plans for tactical fighter fleets. For example, if DoD had to wait longer for F-35s, it might keep the production lines of current-generation aircraft open longer than it now plans. Also, anticipating delays in the F-35 program might cause DoD to modify current aircraft to make them last longer.

Alternatively, pursuing development at a more measured pace than under this option might result in additional savings. The F-35's development has already faced challenges. Variants of the aircraft are intended to perform significantly different missions, although the planes themselves are expected to have much in common. Addressing that challenging objective has already taken longer than DoD and the contractors had envisioned, and experience indicates that additional delays could occur. Slowing the planned rate of purchases further might permit DoD to avoid producing aircraft before the design was mature and to avoid costly retrofits.

RELATED OPTIONS: 050-15 and 050-17

RELATED CBO PUBLICATIONS: *The Effects of Aging on the Costs of Operating and Maintaining Military Equipment*, August 2001; and *A Look at Tomorrow's Tactical Air Forces*, January 1997

**050-17—Discretionary****Substitute Unmanned Combat Air Vehicles for Manned Aircraft**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	0	0	0	0	0	0	+725
Outlays	0	0	0	0	0	0	+550

During military operations in Afghanistan and Iraq, unmanned Predator surveillance and reconnaissance aircraft have been armed with Hellfire missiles and used to attack enemy targets. The Department of Defense (DoD) is now developing unmanned combat air vehicles (UCAVs) that are designed explicitly to deliver air-to-ground weapons. DoD established a joint program office for unmanned combat air systems within the Defense Advanced Research Projects Agency to oversee the development of such aircraft for both the Navy and the Air Force. That office combines previous service efforts on UCAVs such as the X-45 for the Air Force and the X-47 for the Navy. (As part of the 2006 budget, the Administration is establishing a new joint program office for UCAVs, with the Air Force as the lead service.) The first operational UCAVs may be available shortly after the end of this decade. UCAVs could eventually be purchased to augment the force of manned strike aircraft or as a substitute for some portion of that force. Because UCAVs are expected to cost less than their manned counterparts, some officials have suggested that a mix of manned and unmanned strike aircraft could offer a more cost-effective ground-attack force than manned aircraft alone.

This option illustrates the cost implications of such a force-structure mix by replacing Air Force purchases of manned F-35 aircraft (also known as the Joint Strike Fighter) on a one-for-one basis with UCAVs. The Air Force is currently scheduled to increase annual production of F-35s from six planes in 2007 to 110 by 2014. This option assumes that the Air Force would reduce F-35 production to a peak rate of only 88 planes per year and purchase UCAVs instead. Thus, this option would replace 56 Air Force F-35s with a like number of UCAVs over the 2006-2015 period and would ultimately replace 298 of the 1,763 F-35s planned for the Air Force through 2027. The Congressional Budget Office assumed that UCAVs would begin replacing F-35s at a rate of four in

2012, eight in 2013, and 22 per year thereafter. (The option also assumes that an additional 20 UCAVs per year would be bought for other missions, but their costs are not included in the table above.)

This option would require an additional \$550 million in outlays through 2015 but would just break even at the end of F-35 production, in 2027. The initial cost is a result of UCAV production starting later and progressing less rapidly than that of the F-35. Consequently, a given UCAV would replace an F-35 with a cost that had experienced a substantial reduction because of learning during the production process. (Aircraft produced later in a production run typically cost less than those produced at the beginning. That effect is called “learning” because it occurs as managers and workers learn how to produce the aircraft more efficiently as they gain experience with assembly. Under similar production conditions, a UCAV would cost about two-thirds as much as an F-35, CBO estimates.)

Supporters argue that introducing more UCAVs into the tactical aircraft fleet would have several operational advantages. First, unmanned vehicles can perform dangerous missions without risking the lives of their operators. Second, improvements in technology to detect, recognize, and attack targets may have lessened the benefits of having a pilot in the cockpit. Indeed, for many missions, fighter aircraft must fly at such speeds and heights that they depend on the same target information that will be supplied to UCAVs. (However, even the most autonomous UCAVs being designed today will not decide whether to bomb targets; human operators will make that decision.) Third, UCAVs are expected to have greater endurance than planned manned fighters, potentially enabling attacks deeper in enemy territory and giving the UCAV a better ability to loiter in the vicinity of suspected enemy targets.

UCAVs may also have some disadvantages. Predators operating in Afghanistan had success in eliminating some of their targets, but they also experienced some failures. Moreover, the success of the more sophisticated UCAVs may depend on unproven technologies. One such technology—automatic target recognition—will determine whether a UCAV can find the targets that it is supposed to attack. However, automatic recognition is an objective that has proved elusive. Additionally, UCAVs will probably lack the multirole capability for both air-to-air and air-to-ground combat inherent in the F-35. Unmanned aircraft have also experienced more mishaps than expected. If more UCAVs had to be bought to offset higher attrition, the long-term costs would be higher. Such costs also would be higher if UCAVs grew significantly in price—a possibility that cannot be ruled out given the

technological challenges that will need to be overcome to successfully field those aircraft.

In addition to Air Force F-35s, Navy and Marine Corps F-35s could also be replaced by Navy UCAVs. CBO has not estimated the costs or long-term savings of such an option because of greater uncertainties about whether UCAVs would be a suitable alternative. A Navy UCAV would face the additional challenge of operating from aircraft carriers, and the limited deck space available for Navy aircraft would put a premium on the multirole capability that early UCAVs might not offer. Similarly, UCAVs might not be as suitable as manned aircraft for close air support, the main mission for the Marine Corps F-35.

RELATED OPTION: 050-16

RELATED CBO PUBLICATION: *A Look at Tomorrow's Tactical Air Forces*, January 1997

**050-18—Discretionary****Terminate the Airborne Laser Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-280	-610	-470	-460	n.a.	n.a.	n.a.
Outlays	-160	-460	-510	-470	n.a.	n.a.	n.a.

Note: n.a. = estimates not available at this time.

The Airborne Laser (ABL) program, managed by the Missile Defense Agency (MDA), is working toward the goal of developing a system to detect, track, target, and destroy enemy ballistic missiles hundreds of miles away through the use of a high-energy chemical laser that will be carried on board a modified Boeing 747 aircraft. The ABL's mission is to shoot down ballistic missiles during their boost phase, which lasts for a few minutes before the rocket motors burn out. Initially, the ABL was envisioned as a defense against short-range theater ballistic missiles, but now its mission has grown to defend against short-, medium-, and long-range ballistic missiles.

The ABL program was started by the Air Force in 1996 and transferred to the Missile Defense Agency in 2002. From 1996 to 2001, the Air Force invested almost \$1 billion in the program, and MDA spent an additional \$1 billion total in 2002 and 2003. Development is continuing in a series of three two-year blocks: 2004, 2006, and 2008. Block 2004 is expected to demonstrate the use of the laser to shoot down a short-range ballistic missile, and Block 2006 would continue testing the initial aircraft and focus on integrating the ABL into the larger Ballistic Missile Defense System. Under Block 2008, MDA would buy a second aircraft and improve the performance of the laser. However, because of delays and technical problems, MDA has realigned funds from Blocks 2006 and 2008 to Block 2004 and delayed the purchase of the second aircraft. The Administration has not provided budget information beyond 2009.

This option would terminate the ABL program—which, relative to the Administration's 2005 Future Years Defense Program, would save \$280 million in budget authority in 2006 and a total of nearly \$2 billion through 2009. Savings over the next five or 10 years would be larger if the costs to complete development, buy, and op-

erate a fleet of ABL aircraft were included. In the absence of information from the Department of Defense (DoD) about technical characteristics, production quantities, and deployment schedules, the Congressional Budget Office has no basis on which to estimate the costs to complete development, buy, and operate the ABL. In earlier budgets, the Air Force indicated that it would purchase up to seven ABL aircraft at a cost of about \$500 million apiece. Recent information from DoD indicates that the costs to develop and build the first ABL aircraft will exceed \$3 billion. Assuming that the cost of each aircraft was between \$500 million and \$3 billion, the savings from not buying six additional aircraft would total several billions of dollars.

A recent report by the Government Accountability Office (GAO) noted that the ABL program has progressed more slowly and been much more costly than anticipated. Four of six key test events, including the first ground demonstration of the laser, were either deferred indefinitely or delayed for more than a year. In 2003 alone, the program incurred cost overruns of \$242 million, or about 40 percent of the planned costs in 2004. In addition, GAO estimates that on the basis of the ABL contractor's past performance, the current Block 2004 prime contract will overrun its budget by \$431 million to \$942 million, or from 20 percent to 43 percent.

Supporters of canceling the ABL argue that the technical problems, cost growth, and schedule slippage encountered over the past eight years cast doubt on whether the program can succeed. For instance, the laser power demonstrated to date would be insufficient to disable an intercontinental ballistic missile at long ranges. If the ABL has to operate closer to a missile's launch site, it may be vulnerable to potential enemy air defenses. In addition, the ABL is not the only program in MDA's broader Boost



Defense Segment. MDA also has a new boost-phase interceptor program that is developing a kinetic-energy hit-to-kill interceptor launched from land or sea that is intended to intercept a ballistic missile in boost phase. Those interceptors are potentially more promising for boost-phase defenses because they are not as technically challenging to develop as the ABL. Furthermore, analysis indicates that three to four aircraft would be needed to maintain a constant presence at a single location to defend against a potential enemy missile launch. While one aircraft would be on station, one or two would be transiting between the base and the orbiting location, and another would be at the base for refueling, reloading laser chemicals, and any required maintenance. In addition, the ABL aircraft might need air-refueling tankers, depending on where the aircraft were based. In contrast, a

single fixed ground- or sea-based interceptor battery could provide similar coverage at lower cost.

Opponents of ending the ABL program argue that although the laser is inherently a technically challenging undertaking, it will provide a leap in the United States' ability to defend against attack by ballistic missiles. Furthermore, although the boost-phase interceptor program may be a more viable alternative, it will not be ready for operational use until at least 2010 to 2012. Hence, any capability that the ABL might provide in the interim would be useful. In addition, the Air Force claims it has made significant progress in overcoming the technical difficulties the program has encountered and remains confident it will be able to build a laser with the power needed to disable threats at long range.

**050-19—Discretionary****Terminate Future Satellites of the Space Tracking and Surveillance System Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-250	-640	-920	-1,110	-1,060	-3,980	-12,280
Outlays	-150	-460	-770	-1,010	-1,020	-3,410	-11,360

The Space Tracking and Surveillance System (STSS), which is being developed by the Missile Defense Agency (MDA), will be a constellation of satellites in low-Earth orbit using optical sensors to provide global tracking of enemy ballistic missiles and to discriminate between enemy missile warheads and decoys. The STSS program grew out of efforts initiated by the Air Force in 1996 to develop satellites for detecting and tracking enemy missiles from low-Earth orbit. Initially known as Space-Based Infrared System-Low (SBIRS-Low), the program experienced cost and schedule overruns. However, SBIRS-Low did partially manufacture two satellites, for what was called the flight-demonstration system, that were subsequently placed in storage. In 2000, the Congress directed the transfer of SBIRS-Low to the Missile Defense Agency (at that time the Ballistic Missile Defense Organization). MDA is currently completing construction of the flight-demonstration satellites and plans to launch them in 2007. Those two satellites would demonstrate the capability to acquire, track, discriminate, and report on ballistic missile launches and intercept tests.

In 2002, SBIRS-Low was renamed STSS, and its development is continuing in a series of three two-year blocks: 2006, 2008, and 2010. Block 2006 involves the completion and launch of the two demonstration satellites, and Block 2008 would continue to test and upgrade the system's software. Block 2010 would design and develop a new generation of satellites incorporating more-robust technologies, the first of which would be launched in 2011. However, by 2011, MDA expects to have developed other deployable ground-based radars for missile defense, and the Air Force expects to have an improved missile warning capability with the Space-Based Infrared System constellation.

This option would terminate the Block 2010 portion of the STSS program. At this time, the Administration has

not provided detailed information on the number of satellites that would be purchased under the current STSS program. To estimate the savings from implementing this option, the Congressional Budget Office has relied on estimates that were prepared for a CBO report on missile defenses that was completed in 2001. In that report, CBO estimated that each satellite—in a constellation of about 27—would weigh about 4,500 pounds and cost about \$230 million in 2001 dollars (or \$250 million in 2005 dollars). On the basis of those figures, CBO estimates that this option would save about \$4 billion in budget authority over the next five years and about \$12 billion over 10 years. Those 10-year savings would come from not starting the Block 2010 research and development phase (about \$4.5 billion), not buying and launching the new satellites (about \$7.7 billion), and not operating the constellation (about \$100 million). However, MDA would still be able to use the demonstration satellites to test certain technologies and gather data from a series of planned tests.

The major advantage of this option is the significant savings from not acquiring the full constellation of STSS satellites needed to provide global coverage. Programs that MDA and the Air Force now plan to have operational at the same time as STSS would also provide detection, tracking, and discrimination of ballistic missiles. The optical sensors on board the STSS spacecraft may not be as effective as ground-based radars for discrimination purposes, and tracking during some portion of a missile's flight can be accomplished by the SBIRS constellation that the Air Force is developing. In addition, the kinetic-energy hit-to-kill boost-phase interceptors that MDA is developing have the potential to aid in discrimination for missile launches occurring within range of the areas where those interceptors would be deployed.

The primary argument against this option is that the STSS flight-demonstration system could successfully validate the concept of using space-based optical sensors for tracking and discrimination. Although using those sensors to perform discrimination would require resolving some technical issues, using ground-based radars to perform that task also poses technical challenges. Moreover,

ground-based radars and interceptors cannot provide the global coverage that a full constellation of STSS satellites would provide. In addition, the Air Force's SBIRS program may not be on schedule and its performance may not be sufficient for tracking ballistic missiles throughout their flight. Hence, the capabilities planned for the STSS constellation may be needed.

RELATED CBO PUBLICATION: *Letter to the Honorable Thomas Daschle regarding potential costs of national missile defense systems*, January 31, 2002

**050-20—Discretionary****Cancel Development of the Ground-Based Midcourse Defense System After Fielding the Testbed/Initial Defensive Capability**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,930	-1,910	-1,040	-1,040	-1,120	-7,040	-13,380
Outlays	-930	-1,710	-1,460	-1,120	-1,100	-6,320	-12,530

The Ground-Based Midcourse Defense (GMD) Block 2004 segment of the Ballistic Missile Defense System (BMDS) will consist of two components, a “testbed” and an “operational segment.” Components of the Block 2004 segment include interceptor missiles based at Fort Greely in Alaska and Vandenberg Air Force Base in California; detection and tracking radars located around the United States; battle management; command-and-control software; and a communications system used to relay information to and from the interceptors in flight and among other elements of the system. Future block developments would provide more interceptors, more radars, and expansion to a third ground-based interceptor site.

This option would cancel development and deployment of the GMD system after Block 2004. The option would retain the capability of the Block 2004 segment alone to conduct testing and would spend about \$200 million a year to develop possible improvements to the initial capability to be incorporated into the system sometime in the future. It would also retain Block 2004’s partial defensive capability against ballistic missiles launched from selected regions in Asia. This option would not, however, provide the enhanced defenses that later block segments of the GMD system would provide, such as radars capable of tracking launches from locations worldwide and interceptor missiles capable of defeating ballistic missiles launched from threat countries in the Middle East. This option would save \$1.9 billion in budget authority in 2006 and \$13 billion over the 2006-2015 period, CBO

estimates. Those estimates assume that spending over the 2010-2015 period would be a constant level of effort based on the planned 2009 budget level in the 2005 Future Years Defense Program. The Administration has provided no information on its spending plans beyond 2009.

As justification for this option, some proponents argue that the GMD system is not ready to field without further maturation of technology and testing of its components, both individually and linked as an integrated system. Fielding the Block 2004 system alone would allow that testing while providing limited tracking and engagement capacity for ballistic missiles launched from North Korea at Alaska or the west coast of the United States. Moreover, with additional deployments delayed, missile defense technologies could continue to be developed and would be better prepared to incorporate in a more capable operational system if a decision was made subsequently to deploy one.

Opponents of this option argue that ballistic missile launches from rogue nations pose a threat to the United States now. Thus, developing and fielding all of the currently planned GMD segments would provide badly needed capabilities to protect the United States and its allies against those threats. In particular, only by fielding all segments of the GMD will the United States obtain the capability to defend all of its territory against all potential rogue nations, as well as be able to extend missile defenses to its allies.

RELATED CBO PUBLICATION: *Letter to the Honorable Thomas Daschle regarding potential costs of national missile defense systems*, January 31, 2002

**050-21—Discretionary****050****Cancel the Space-Based Radar Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-470	-500	-1,180	-1,550	n.a.	n.a.	n.a.
Outlays	-270	-460	-890	-1,350	n.a.	n.a.	n.a.

Note: n.a. = estimates not available at this time.

The Space-Based Radar (SBR) program is intended to provide near-continuous day/night, all-weather global surveillance capability to the U.S. military. SBR would complement the capability provided by airborne radars (or sensors), such as the Joint Surveillance and Target Attack Radar System (JSTARS) and other aircraft-based systems, which provide surveillance and tracking of enemy forces over areas inherently more limited than those that a space-based system could cover. The proposed SBR system would potentially provide capabilities to track moving targets both on the ground and in the air, providing the military with information about enemy activities deep inside that enemy's territory. Such information would include tracking of enemy convoys and troop movements, as well as detailed terrain mapping and reconnaissance. Currently, the military relies on in-theater airborne sensors such as JSTARS, as well as other satellite systems, for the battle-planning information that SBR would provide.

This option would cancel the SBR, saving \$470 million in budget authority in 2006 and \$3.7 billion through 2009. Savings over 10 years would be larger if the costs to complete development, buy, and operate the satellite system were included, but the Administration has provided little or no information on the cost of the program beyond 2009. In the absence of information from the Department of Defense about technical characteristics, production quantities, and deployment schedule, the Congressional Budget Office has no basis on which to estimate the costs to complete development, purchase, and operate the system.

The justification for this option stems from the significant technical challenges and high costs associated with implementing space-borne radar technology. Technical challenges include the power limitations associated with employing a radar system on a satellite, the range needed to collect and process radar data over orbital distances of thousands of kilometers versus airborne distances of hundreds of kilometers, and the ability to process and analyze the volumes of incoming data collected from the large areas covered by the SBR satellites quickly enough to support battle planning. Substantial costs arise from designing, building, testing, and launching the constellation of at least 10 SBR satellites that would be needed to provide global coverage.

An argument against terminating the SBR program is that the radar could be seen as the next logical and necessary step in military transformation, which emphasizes the use of superior intelligence to prevail in conflicts. Only the use of space-based assets can provide global coverage and continuous surveillance capability. The SBR constellation would not be constrained by the need to have access to bases in the region of a conflict, nor would it suffer from the delay in operations associated with transporting airborne sensors to an area of interest. The SBR would also be much less vulnerable to attack than airborne sensors operating close to areas of combat would be. Further, some proponents of the SBR argue that the technologies needed for power generation and signal processing are mature and ready for use in an operational system.

**050-22—Discretionary****Consolidate Military Personnel Costs in a Single Appropriation**

More than half of the federal government's cost to compensate military personnel falls outside the military personnel appropriations for the Department of Defense. DoD pays for many noncash benefits—for example, commissaries, some medical care, DoD schools, and on-base family housing—out of other appropriations. The Department of Veterans Affairs (VA) pays for some additional benefits, such as ones under the Montgomery GI bill and veterans' disability payments.

Under this option, the DoD-funded personnel-support costs mentioned above would become part of military personnel appropriations. Some VA programs might also be funded in the defense budget. That realignment of funding would have two related goals: to provide more-accurate information about how much money is being allocated to support military personnel and to give DoD managers a greater incentive to use resources wisely. The amount this option might save is unknown (so no table of year-by-year savings is shown). But with the DoD-funded cost of supporting military personnel at about \$130 billion in 2005, the potential savings from better management are substantial. Savings of just 1 percent, for example, would equal about \$1 billion annually.

The current distribution of personnel costs among different appropriations makes it difficult for DoD, the Congress, and taxpayers to track the total level of resources devoted to supporting military personnel. Changes in the level of the appropriations for military personnel can be either offset or enhanced by changes in the resources devoted to health care, housing, or education benefits that are funded from other appropriations. The total picture is

rarely, if ever, seen—making it hard to analyze total compensation or to make comparisons with civilian compensation.

DoD has some recent experience in consolidating costs into the military personnel appropriations. When DoD adopted accrual funding for the cost of health care for Medicare-eligible retirees in 2003, those payments—which represent the future cost of providing health care benefits to future retirees—were added into the military personnel accounts of each service. (The current costs of providing health care benefits to Medicare-eligible retirees were removed from DoD's operations and maintenance budget and paid from a new fund.) This option would expand that concept by incorporating additional personnel-support costs within the military personnel appropriations.

Advocates of this option argue that further consolidation would improve the incentives for DoD managers to use military personnel effectively, encouraging them to substitute less costly civilian employees of the department, contractors, or labor-saving technology for military personnel where possible. This option would also help DoD and the Congress by providing greater visibility of the extensive array of noncash benefits that make up part of the military compensation package.

Critics of this option argue that implementation could be difficult. For example, new financial management systems and a new structure for appropriations would be required.

**050-23—Discretionary****050****Substitute Reenlistment Bonuses for Part of Planned Future Pay Raises**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-510	-1,330	-2,320	-2,630	-2,810	-9,590	-25,490
Outlays	-480	-1,290	-2,270	-2,610	-2,800	-9,450	-25,310

The cash compensation that military members receive includes basic pay, which depends on rank and years of service, as well as bonuses, allowances, and the federal tax advantage that arises because some allowances are not subject to federal income tax. Basic pay is the most important element, averaging 55 percent or more of total cash compensation. In recent years, the Department of Defense (DoD) requested, and the Congress authorized, several provisions to increase basic pay. The defense authorization act for fiscal year 2001, for example, included provisions to increase basic pay at a greater rate than recent pay growth in the private sector. Those provisions set the annual military pay raise between 2001 and 2006 at 0.5 percentage points above the increase in the employment cost index for wages and salaries of private-sector workers. In addition to those general pay increases, DoD requested in the defense authorization acts for fiscal years 2002, 2003, and 2004, and the Congress authorized, changes in the pay table to improve retention of both officers and enlisted personnel in certain pay grades. Those legislative changes raised the average pay for enlisted personnel overall by 28 percent between 1999 and 2005 and the pay for senior enlisted personnel by 43 percent (in inflation-adjusted terms). Real pay for officers rose by 31 percent over the same period. Those changes appear to have improved retention, as all of the military services reported strong overall retention of active-duty personnel in 2004.

In addition to pay raises, another tool that the services have used to increase retention is selected reenlistment bonuses (SRBs), which are cash incentives that encourage the reenlistment of qualified service members in occupational specialties with high training costs or demonstrated shortfalls in retention. Eligible personnel generally receive half of their bonus when they reenlist and the remainder in annual payments over the course of their additional obligation. Each service regularly adjusts its SRBs to address current retention problems, adding or dropping eli-

gible specialties and raising or lowering bonus levels. Yet shortages remain among specific occupations. On average, about 30 percent of occupations for enlisted personnel had shortages between 1999 and 2004, while about 40 percent were overstaffed.

This option would substitute reenlistment bonuses for part of the planned future pay raises to address current occupational shortages of experienced personnel. It would limit annual pay raises to 2 percent in 2006 through 2008 and offer SRBs to service members in those occupations where shortages remained. This option would approximately double the services' spending on initial bonus payments over four years by adding about \$108 million in bonuses annually from 2006 through 2009 and removing current restrictions on the maximum bonus amount that an individual can receive. After 2008, pay raises for all personnel would be in step with increases in the employment cost index. Those changes would save just over \$500 million in budget authority in 2006 and more than \$9 billion through 2010. Service members receiving the bonuses would receive higher overall pay than under the current plan between 2006 and 2008. But because bonuses do not compound in the same way as general pay raises, those service members would have lower overall compensation in 2009 and beyond, unless the bonus program was extended.

Advocates of this option argue that increasing selected reenlistment bonuses is more efficient than increasing pay in general because bonuses would allow DoD to target military pay to specific occupational skills for which shortages exist. General pay increases would lessen shortages in some occupations but would also worsen surpluses in other occupations. Moreover, there is no strong evidence that certain senior enlisted personnel with post-secondary education—to whom some pay raises have been targeted—are disproportionately leaving the military for private-sector jobs. In addition, compared with

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pay increases, bonuses would be easier to adjust from year to year as recruiting and retention goals changed. Furthermore, bonuses would not incur the heavy cost of “tag-alongs,” the elements of compensation, such as retirement benefits, that are tied to basic pay.

Supporters of this option also argue that bonuses could be focused on the years of service in which personnel make career decisions. In addition, they argue that the current bonus levels are too small to provide meaningful differences in pay among occupations and that larger bo-

nuses could be a cost-effective tool for improving military readiness.

Some critics of expanding reenlistment bonuses argue that large pay differences among occupations violates a long-standing principle of military compensation: that personnel with similar levels of responsibility should receive similar pay. Critics also say that increasing bonuses would unfairly deprive service members of the retirement and other benefits that they would receive if that money was part of basic pay throughout their career.

RELATED OPTION: 050-26

RELATED CBO PUBLICATIONS: *Educational Attainment and Compensation of Enlisted Personnel*, February 2004; and *Military Compensation: Balancing Cash and Noncash Benefits*, January 16, 2004



**050-24—Discretionary****050****Reduce Military Personnel in Overseas Headquarters Positions**

The last fundamental reorganization of military headquarters occurred under the Goldwater-Nichols Act of 1986. That law gave the unified theater commands—such as the European and Pacific Commands—the lead role in planning operations and executing policy and had them report directly to the President. When a crisis develops requiring additional military forces and support, a unified commander calls on the four military services to provide that support. The services' roles are to recruit, train, equip, and support unified commanders' forces, whereas unified commanders actually employ those forces in their geographic area of responsibility.

In practice, however, unified commanders are another management layer over existing overseas service "component" commands, such as U.S. Army Europe and the Pacific Fleet. The unified commanders' requests for forces and support are relayed through those component commands to the services' U.S. headquarters. With each service maintaining a separate headquarters component in a region, redundancies exist in many management functions. And in some regions, the only personnel in a particular service branch are those at the component command headquarters. The overseas component command headquarters currently comprise some 6,000 personnel, or 10 percent of all headquarters staff.

This option would reorganize the military's command structure by eliminating the overseas component headquarters. Such a reorganization could release 4,000 troops for more-critical missions. Although the reorganization under this option would not produce cuts in end strength, the cost of day-to-day operations of the eliminated service component commands—amounting to about \$200 million a year—might be saved. But because estimating those savings has many uncertainties, no year-by-year table is shown.

The services assert that continued commitments overseas, combined with new requirements at home, have stretched the active-duty military to its limits. Also, the newly created Northern Command and the Department of Defense's emphasis on creating standing joint forces—multiservice units that can deploy anywhere with little

notice—may require additional personnel. Instead of simply eliminating the positions for budgetary savings, this option would provide the Secretary of Defense with available personnel without increasing personnel costs.

According to proponents of this option, eliminating overseas component commands would tighten command and control as well as free up troops for other duties. It would streamline communications by eliminating an entire layer of headquarters between the services and the unified commanders. Nevertheless, assuming that some of the overseas component commands' responsibilities could not be eliminated, this option would retain some of those personnel.

Critics of this option argue that the overseas component commands provide essential support to the unified commanders, including dedicated and responsive support for staging operations and integrating personnel and equipment deployed to a region, thus freeing the unified commanders to concentrate on the responsibilities of warfighting. Additionally, overseas component commands bolster theater "enablers" such as medical support, engineering, intelligence, fuel handling, and the movement of supplies. They also manage the planning and execution of joint and coalition military exercises and treaty obligations as directed by NATO (the North Atlantic Treaty Organization) and by bilateral agreements, for example. Finally, those commands support legally mandated functions such as contracting, logistics support, and facilities management.

Opponents of this option also cite the political and practical difficulties involved in restructuring, particularly considering the uncertainties in the world. The reorganization envisioned in this option would be the single largest restructuring since the 1986 Goldwater-Nichols Act, and it could eliminate up to 45 general-officer positions overseas. Others, however, including senior staff members of the Office of the Secretary of Defense, argue that despite the difficulty, the new threat environment and the need for additional combat troops demand consideration of just such a widespread reorganization.

**050-25—Discretionary****Replace Military Personnel in Some Support Positions with Civilian Employees of the Department of Defense**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+200	+400	+620	+860	+890	+2,970	+7,870
Outlays	+190	+400	+610	+850	+890	+2,930	+7,820

This option would replace 20,000 of the 1.4 million uniformed military personnel in certain support jobs with civilian employees of the Department of Defense (DoD) over four years and make those military positions available for combat functions. An examination of those job functions reveals some jobs that one service considers “military essential” but the others do not and some functions that clearly could be open to civilians. Those support jobs are in military units that do not deploy overseas for combat operations. In addition, the jobs do not involve sensitive functions that might be subject to security concerns.

Some analysts put the number of military positions that could be converted to civilian jobs as high as 90,000. Successfully converting 20,000 jobs would make that many military positions available to satisfy new demands for combat units for the global war on terrorism. Fewer civilians would replace the number of converted military positions because civilians, unencumbered by military-specific responsibilities, have more time available to perform their jobs. Nevertheless, the addition of civilian personnel could increase outlays by \$2.9 billion over the 2006-2010 period and \$7.8 billion over the 2006-2015 period, on the basis of DoD’s experience in substituting civilians for military personnel. That cost could be smaller if some of the converted positions were deemed eligible for competition with contract personnel. In developing its 2006 budget, DoD is proposing to convert 10,000 Army military positions to civilian positions, replacing those military personnel with a lesser number of civilians than assumed in this option. Depending on the extent to which that objective was realized, the cost of implementing this option would be smaller.

Although a number of proposals to convert military positions to civilian ones have been made in recent years, only a small percentage of the department’s total personnel have been subject to review. In 2003, DoD undertook an inventory of all positions (civilian and military), categorizing them by function and determining whether they were inherently governmental and, if so, whether they had to be filled by military personnel. That inventory could be used to identify many support positions that, although currently occupied by military personnel, could be performed by civilian employees of DoD.

For positions in the functional category of morale, welfare, and recreation services, for example, the Army fills 2 percent of those jobs with military personnel, whereas the Navy fills 13 percent, and the Air Force categorizes 32 percent as military. Removing the military designation on the Air Force positions could open up 1,000 jobs to civilians. In another example, the Army fills 35 percent of its positions in the functional category of legal services and support with military personnel, and the Navy fills 53 percent. However, the Air Force requires 70 percent of those positions to have military personnel. Removing the military designation on some Air Force and Navy positions could open another 500 jobs to civilians.

Opponents of this option argue that the process of defining, evaluating, and then redesignating positions would be lengthy and cumbersome, with hard-to-define savings. Furthermore, they point out, comparisons among services can be misleading to some extent because certain functional areas have service-specific aspects. For example, the Navy claims that it must rely on military personnel on board ships to serve in support positions.

Finally, substituting civilian employees of DoD for military personnel without reducing end strength would increase DoD's total costs. However, proponents of transferring military personnel out of nonmilitary tasks argue

that even if military end strength was not reduced, "warfighters" would still be freed up to fulfill their primary mission.

**050-26—Discretionary****Increase the Use of Warrant Officers and Limit Military Pay Raises**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-230	-200	-160	-120	-60	-770	-1,240
Outlays	-220	-200	-160	-120	-70	-770	-1,230

Warrant officers, who account for only about 1 percent of active-duty military personnel, serve as senior technical experts and managers in a wide variety of occupations and, in the Army, as pilots of helicopters and fixed-wing aircraft. In rank, they fall between enlisted personnel and other commissioned officers. They—and the closely related limited-duty officers in the Navy—tend to have long careers in which they gain considerable expertise.

This option would slowly expand the number of warrant officers as a means of attracting and retaining highly qualified, skilled personnel, particularly in occupations with attractive civilian alternatives. To achieve savings, it would offer smaller pay raises to senior enlisted personnel than those prescribed by current law.

Programs designed to help the military meet its labor force needs tend to be more cost-effective when they are more narrowly focused on the people and decisions they are intended to affect. Some analysts have pointed out that growing numbers of midcareer and senior enlisted personnel have substantial college training, which current military pay scales may not adequately recognize. In part to address that trend, the Department of Defense (DoD) has increased pay for senior enlisted personnel more rapidly than for other military personnel. For example, between 1999 and 2005, real pay for senior enlisted personnel rose by about 43 percent while real pay for enlisted personnel generally increased by about 28 percent.

Instead of raising the pay of all midcareer and senior enlisted personnel, however, DoD could offer warrant officer positions (with their higher pay) to those people it most wanted to retain or to those who were serving in

military occupations with the best-paying civilian alternatives. Over a period of five years, this option would limit pay increases for personnel in grades E-6 and above to an amount that was 1.25 percent lower than the amount prescribed under current law. It would convert 10,000 positions for enlisted personnel in the top four grades to warrant officer positions. The net outlay savings would total \$770 million from 2006 through 2010. A program that expanded opportunities for warrant officers could be focused on specific occupational areas, such as information technology, where a robust civilian sector can make military compensation noncompetitive. Traditionally, DoD has used enlistment and reenlistment bonuses to fill such positions, although some people might argue that current bonus levels are too small to provide meaningful differences in pay among occupations.

This option might also have efficiency advantages that did not result in near-term budget savings. Expanded opportunities for warrant officers might be more attractive to graduates of two-year colleges, who could come in as professionals instead of having to serve a long apprenticeship in the enlisted ranks. Serving as a warrant officer rather than as an enlistee might also appeal to people who would rather remain technical specialists than assume leadership responsibilities. It is possible that the resulting more-experienced workforce could reduce the size of the force that DoD needs.

Converting senior enlisted positions to warrant officer positions might create a new set of problems, however. Currently, there are relatively few warrant officers—only about 15,700 were serving on active duty at the end of 2004. Adding another 10,000 officers to that pool could

make the force more top-heavy without a commensurate increase in leadership skills. Some people within the military might object to having a larger group of senior tech-

nicians who did not have leadership responsibilities. Also, reducing overall pay raises could negatively affect recruitment and retention of military personnel.

RELATED OPTION: 050-23

RELATED CBO PUBLICATION: *The Warrant Officer Ranks: Adding Flexibility to Military Personnel Management*, February 2002

**050-27—Discretionary****Introduce a “Cafeteria Plan” for the Health Benefits of Family Members of Active-Duty Military Personnel**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-20	-83	-211	-238	-255	-807	-2,367
Outlays	-16	-70	-184	-228	-249	-747	-2,276

Under the Department of Defense’s (DoD’s) current health care system, many families may be overinsured—that is, given a choice, many would prefer a less generous health care plan and greater cash compensation. This option would give families that choice by having DoD provide the family members of active-duty personnel with a special cash allowance for their health coverage. The allowance, which would be nontaxable (like the current housing allowance), could be used in one of three ways. First, family members could purchase TRICARE coverage, which would include any of the current options (TRICARE Standard, TRICARE Extra, and TRICARE Prime). Second, they could use some of the money to purchase a new “low option” TRICARE plan and keep the remaining funds. That version of TRICARE would be similar to TRICARE Prime in that it would have many managed care features. However, it would incorporate a substantial deductible as well as copayments for health care services obtained at either military treatment facilities or from civilian providers. Third, military family members could show proof of employer-provided insurance and apply the allowance toward their share of the premiums, copayments, and deductibles.

This option would save about \$750 million in outlays over the next five years. That estimate incorporates the cost of the cash allowances. It also accounts for the decrease in demand for health care by people choosing the new low-option plan, because the deductible and copayments would encourage more prudence in the purchase of health care. In addition, the estimate takes into consideration the fact that there are a few eligible family mem-

bers of active-duty personnel who are not currently using TRICARE and thus cost the system nothing but who would be likely to apply for the cash allowance.

This option would offer several advantages. First, families of active-duty personnel would have greater choice about the mix of benefits and cash that they received. Second, those who chose the low-option plan would be more likely to use medical services cost-effectively because they would face a share of the costs of those services. Third, some health coverage costs would be shifted from DoD to spouses’ civilian employers, reducing the department’s spending. Finally, because family members would have to commit annually to an arrangement for their health insurance, total utilization would be easier to predict than it is under the current system, in which users may join or leave at any time. Thus, this option would improve resource planning within the military health system and allow DoD to negotiate firmer contracts for pharmaceuticals and civilian medical services. That advantage would exist even if most beneficiaries chose to remain in one of the three traditional TRICARE plans.

This option would also entail potential disadvantages. People who selected the low-option TRICARE coverage would be taking on additional risks and might face financial difficulties if someone in their family fell seriously ill. However, that level of coverage would be designed to include a reasonable “stop-loss” limit—the maximum annual out-of-pocket expenditure—to control the financial consequences of catastrophic illness.

In addition, families who chose an employer-provided plan might have their coverage disrupted if the active-duty spouse experienced a permanent change of station in

the middle of the year. DoD would have to develop methods to prorate cash allowances and deductibles for people forced to change their health plans midyear.

RELATED CBO PUBLICATIONS: *Military Compensation: Balancing Cash and Noncash Benefits*, January 2004; and *Growth in Medical Spending by the Department of Defense*, September 2003

**050-28—Mandatory****Introduce More Copayments into TRICARE For Life**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-747	-819	-896	-976	-1,057	-4,495	-11,213

TRICARE For Life was introduced at the beginning of fiscal year 2002 as a supplement to Medicare for military retirees and their families over age 65. The program pays nearly all of their remaining medical costs and leaves users with very few out-of-pocket costs to temper their demand for services. Because the Department of Defense's (DoD's) role in the program is as passive payer—not price negotiator or manager of care—DoD has virtually no means to control the costs of TRICARE For Life.

This option would help reduce the costs of TRICARE For Life as well as Medicare by introducing small copayments for services and increasing copayments for prescription drugs to levels similar to those commonly charged by civilian plans. Because the program acts as a wraparound benefit, the Congress or DoD would need to establish new rules to ensure that users paid minimum out-of-pocket charges—for example, \$20 for a doctor's visit and \$100 for the first day in a hospital—before TRICARE For Life coverage would begin.

Introducing such charges would reduce federal spending (to include Medicare savings) by almost \$750 million in 2006, by \$4.5 billion over the next five years, and by

\$11.2 billion over 10 years. Much of those savings would come from reduced demand for medical services rather than a transfer of spending from the government to military retirees and their families.

The main advantage of introducing copayments into TRICARE For Life would be a reduction in the number of unnecessary medical services and an increased awareness by beneficiaries of the cost of health care. Research has generally shown that introducing modest cost sharing can substantially reduce medical expenditures without a corresponding rise in measurable adverse health effects for most individuals.

Among its disadvantages, this option could have the unintended result of discouraging patients from seeking needed medical care and could negatively affect the health of TRICARE For Life users with low income and chronic conditions such as high blood pressure. Some recent research has shown a link between rapid increases in copayments and significant reductions in beneficiaries' use of pharmaceuticals, including some that are important for the control of certain chronic conditions.



**050-29—Discretionary****050****Consolidate and Encourage Efficiencies in Military Exchanges**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-76	-133	-191	-196	-201	-796	-1,882
Outlays	-56	-113	-170	-189	-197	-725	-1,795

The Department of Defense (DoD) operates three chains of military exchanges—the Army and Air Force Exchange Service, the Navy Exchange Command, and the Marine Corps exchange system. Those chains, which provide an array of retail goods and consumer services at military bases, have combined annual sales of about \$10 billion.

This option would consolidate the three systems into a single organization. In addition, it would introduce incentives for more-efficient operations by requiring the combined system to pay all of its operating costs out of its own sales revenue, rather than relying on DoD to provide some services free of charge. Those changes would save about \$200 million annually after a three-year phase-in period. (The next option, 050-30, would go one step further and consolidate the exchanges with DoD's separate network of commissaries.)

Studies sponsored by the Office of the Secretary of Defense have shown that consolidating the exchange systems could lead to significant efficiencies. It would eliminate the costs of duplicative purchasing and personnel departments, warehouse and distribution systems, and management headquarters. Although consolidation would entail some one-time costs, the Congressional Budget Office estimates that those costs would be more than offset by one-time savings from the reduction in inventories that consolidation would permit.

DoD provides the exchanges with about \$400 million in free services each year, CBO estimates. Those services include maintaining some parts of buildings, transporting goods overseas, and providing utilities at overseas stores. Under this option, the combined system would reim-

burse DoD for the cost of such services and would thus have an incentive to economize on their use. Furthermore, the requirement for the system to pay all of its own operating costs would improve the exchanges' visibility in the defense budget.

Today, earnings from the exchanges support the military's morale, welfare, and recreation programs, which contribute to service members' quality of life. If the combined exchange system continued to provide earnings to support those programs, it would do so from earnings that represented receipts in excess of the full cost of operations. To compensate the morale, welfare, and recreation programs for the lower level of support that could result, this option assumes that the Congress would appropriate about \$50 million annually in additional funds for those programs. That direct funding would increase the Congress's control over spending on the programs.

One obstacle to implementing this option would be the need to find an acceptable formula for allocating among the individual services the funds for morale, welfare, and recreation activities. The services might worry that they would not receive a fair share of the earnings from a combined exchange system or of the additional appropriations for those activities. They might also fear that the Congress would gradually reduce the amount of additional funding appropriated for those activities.

Some critics of consolidation argue that the Navy Exchange Command and the Marine Corps system, with their unique service identities, are better able to meet the needs of their patrons than a larger, DoD-wide system would be. But proponents of consolidation point to the

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Army and Air Force Exchange Service, which has successfully served two distinct services for many years. People who shop in exchanges say their main concern is the abil-

ity of exchanges to offer low prices and a wide selection of goods—a concern that a consolidated system might be able to satisfy more effectively.

RELATED OPTION: 050-30

RELATED CBO PUBLICATION: *The Costs and Benefits of Retail Activities at Military Bases*, October 1997

**050-30—Discretionary****050****Consolidate the Department of Defense's Retail Activities and Provide a Grocery Allowance to Service Members**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-331	-412	-497	-550	-605	-2,395	-5,656
Outlays	-235	-345	-436	-503	-563	-2,081	-5,248

The Department of Defense (DoD) operates four separate retail systems on military bases: a network of grocery stores (commissaries) for all of the services and three chains of general retail stores (exchanges) for the Army and Air Force, the Navy, and the Marine Corps. This option would consolidate those systems into a single retail chain that would operate more efficiently, without any appropriated subsidy. The consolidated system, like the current separate systems, would be responsible for giving military personnel access to low-cost groceries and other retail goods at all DoD installations, including those in isolated or overseas locations.

The current commissary and exchange systems operate under very different funding mechanisms. The commissary system, which is run by the Defense Commissary Agency (DeCA), has annual sales of about \$5 billion, but it also receives an appropriation of about \$1 billion a year. The three exchange systems (the Army and Air Force Exchange Service, the Navy Exchange Command, and the Marine Corp exchange system) have annual sales totaling about \$10 billion. They do not receive direct appropriations; instead, they rely on sales revenue to cover their costs.

One reason that exchanges can operate without an appropriated subsidy is that they charge their customers a higher markup over wholesale prices than commissaries do. Another reason is that the exchange systems are non-appropriated-fund (NAF) entities rather than federal agencies, which enables them to use more flexible and businesslike practices concerning personnel and procurement. DeCA, by contrast, is a federal agency, so its employees are civil service personnel, and it follows standard federal procurement practices. This option assumes that consolidation would eliminate duplicative overhead

headquarters functions and that DeCA's civil service employees would be converted to a NAF workforce.

Under this option, the commissary and exchange systems would be consolidated over a five-year period. When that process was complete, DoD's costs would be about \$1.1 billion lower, in 2006 dollars, per year—about \$900 million from eliminating the subsidy for commissaries and \$200 million from eliminating duplicate functions among the exchange systems. This option would return half of the \$1.1 billion to active-duty service members through a tax-free grocery allowance of about \$500 per year payable to people who were eligible to receive the current cash allowances to cover food costs. The grocery allowance would be phased in to coincide with the consolidation of commissary and exchange stores at each base. The remaining \$550 million would represent savings for DoD.

To break even without appropriated funds, the consolidated system would have to charge about 10 percent more for groceries than commissaries do now. (That estimate is based on the difference between the 20 percent markup that exchanges charge and the 5 percent markup that commissaries charge, the amount that commissary customers currently pay to have their groceries bagged, and evidence that exchanges pay lower wholesale prices than commissaries do for the same goods.) At the current level of commissary sales, a 10 percent price increase would cost customers an extra \$500 million annually.

Active-duty members and their families would benefit from consolidation. On average, those families would pay about \$150 more per year for groceries—but that figure would be more than offset by the grocery allowance that they would receive under this option. (A military family would have to spend about \$5,000 per year on groceries

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in commissaries before a 10 percent price increase outweighed the benefits of a \$500 allowance.) Cash allowances would be particularly attractive to personnel who lived off-base and could shop near their home or on-line more conveniently than on-base. Moreover, all military families—active-duty, reserve, and retired—would gain from longer store hours, more convenient one-stop shopping, access to private-label groceries (not currently available in commissaries), and the security of a military shopping benefit that did not depend on the annual appropriation process. Another advantage is that the \$500 average grocery allowance could be targeted to certain pay grades or groups, with larger allowances given to enhance retention or to benefit those junior enlisted members with large families.

The retail system would benefit as well. Both commissaries and exchanges must now compete with large discount chains that offer low-cost, one-stop shopping for grocer-

ies and general merchandise just outside the gates of many military installations or over the Internet. Recent increases in security on bases and changes in the civilian retail industry have made it more difficult and costly for DoD's fragmented retail systems to provide those services. This option would allow a consolidated system with NAF employees to better compete with civilian alternatives.

Nonetheless, some people might oppose the change, arguing that low-cost shopping on bases has long been a benefit of military service. Under this option, about \$300 million of the price increase would be borne by the military retirees who now shop in commissaries and who would not receive a grocery allowance. As a result, this option could face strong opposition from associations of retirees. The average family of a retired service member would pay an additional \$150 per year for groceries.

RELATED OPTION: 050-29

RELATED CBO PUBLICATIONS: *Military Compensation: Balancing Cash and Noncash Benefits*, January 16, 2004; and *The Costs and Benefits of Retail Activities at Military Bases*, October 1997

**050-31—Discretionary****050****Eliminate the Department of Defense's Elementary and Secondary Schools**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+18	0	-25	-47	-72	-126	-788
Outlays	+14	+3	-19	-41	-66	-109	-750

The Domestic Dependent Elementary and Secondary Schools (DDESS) system operates schools on several military bases in the United States to educate children of military personnel living there. The Department of Defense (DoD) also operates a separate school system for military children living overseas.

This option would phase out most of the schools that the DDESS system runs in favor of increased use of local public schools and would consolidate management of any remaining schools into the much larger overseas school system. To ease the transition, DoD's schools would be phased out at a rate of one per district per year rather than all at once. Those changes would save DoD a total of about \$300 million in outlays between 2006 and 2010. Savings for the federal government as a whole would be less—about \$100 million through 2010—because the Department of Education is assumed to spend more on Impact Aid, which it provides to local school districts that enroll children of federal employees. (These cost estimates assume that appropriations to the Impact Aid program would immediately increase so that the average amount paid per student living on federal land would remain at its current level.)

Proponents of this option argue that DoD's school system is no longer necessary. The distribution of DDESS schools generally dates to the time when segregated public schools in the South did not adequately serve an integrated military. The great majority of military bases in the United States have no DDESS school. Where such schools do exist, they generally enroll only children of active-duty members who live on-base; those living off-base, and children of civilian employees, are the responsibility of local school districts. In addition, most

bases with DDESS facilities offer only elementary and middle schools; high school students living on-base use the public schools. In most of the places where the DDESS system operates schools, accredited public schools are readily available—with the possible exceptions of Guam, Puerto Rico, and West Point, where DoD would continue to run schools under this option.

Closing DoD schools need not create major disruptions. The roughly 25,000 students who might be affected already change schools frequently, in large part because they move often as their military parent is reassigned. In many locations, the public school district could continue to use DoD's facilities. (DoD already offers support to some local districts by allowing public schools to operate on-base or providing additional limited funding on a per-student basis.) Further, the local school districts would receive extra one-time funding and would have facilities and equipment transferred to help them absorb their new teaching load.

This option could have several disadvantages, however. First, critics of this proposal may believe that DoD schools offer higher-quality education than local public schools do. Second, if local school districts did not maintain the on-base schools, former DDESS students might face longer commutes. Third, some of the savings to the federal government from this option would be offset by increased costs to local school districts. Currently, some of those districts are effectively subsidized by not having to pay any of the costs of educating DDESS students while receiving at least some direct and indirect tax revenues from their parents. This option would impose costs on school districts (and states) that exceed the added revenue they would receive from the Impact Aid program.

**050-32—Discretionary****Change Depots' Pricing Structure for Repairs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-44	-91	-139	-143	-146	-563	-1,356
Outlays	-32	-76	-123	-137	-143	-512	-1,293

Unit commanders can either repair many components of weapon systems, such as transmissions and radars, in their own local repair facilities or pay to have the components repaired in centralized maintenance depots. Under current policies, however, the prices that the depots charge units for repairing such components (known as depot-level reparables, or DLRs) exceed the actual cost of making the repairs. Those pricing policies raise total costs to the Department of Defense (DoD) because they discourage commanders from relying on the depots, even when doing so would be less costly for DoD as a whole. For example, one avionics sensor used by the Army cost \$16,000 to repair at a local facility and \$12,000 to repair at a depot. Nevertheless, under the existing pricing structure, the depot charged \$71,000 to repair the sensor—creating an incentive for unit commanders to use their local facilities even though the actual cost of the repair was lower at the depot.

This option would change depots' pricing policies so that depots would charge only the cost of repairs at the margin. Currently, depot charges for DLRs include both the additional labor, material, and transportation costs that the depots incur in making the repairs as well as an allocated share of the depots' fixed overhead costs. Under this option, the prices charged for repairing DLRs would cover only those costs that vary with the number of DLRs being repaired in the depot—for instance, transportation, materials, and direct labor costs. Fixed costs that do not vary with the level of workload, including overhead, would be covered through an annual flat charge paid by customers. Such a pricing policy could save about \$500 million in outlays over five years.

That two-part pricing structure, which is similar to the pricing structures used by some telephone and utility companies, has been proposed as a cost-saving initiative by analysts at the RAND Corporation, the Center for Naval Analyses, and elsewhere. A study by RAND concluded that two-part pricing would reduce the prices that

depots charge by more than one-third in many cases. Such a reduction could shift a significant amount of the workload for DLRs that is now being done in local facilities to depots. That shift could in turn reduce DoD's total cost of repairs because—according to studies by RAND, the Navy, and the Office of the Secretary of Defense (OSD)—maintenance done locally can range from 25 percent more expensive than repairs done at depots to twice the cost.

In 2003, OSD estimated the total cost of repairs to be in the range of \$25 billion a year. If a two-part pricing structure shifted just 2 percent of the local workload to depots, about \$500 million worth of repairs would be shifted each year, and DoD could realize savings of \$129 million in outlays a year, on average, over the 2006-2015 period.

Shifting some repair work to depots might also improve the quality of maintenance. Because local facilities are not as well equipped for some tasks as depots are, repairs can take longer or have higher failure rates. In addition, the high prices currently charged by depots for repairs give local maintenance personnel an incentive to scavenge parts from a broken DLR to use in repairing others. Eventually, the scavenged DLR may be sent on to a depot with multiple broken or missing parts, thus increasing labor costs at both local facilities and depots.

One disadvantage of this option is that developing accurate two-part prices for the depot facilities could prove difficult. Depot managers, eager to attract work by keeping their prices as low as possible, might try to move costs that vary with workload into the flat charge or pay for those costs with direct appropriations. Alternatively, depot managers might be reluctant to separate repair costs

that varied with workload from those that were fixed because doing so would highlight their degree of excess capacity. Such influences on prices would invalidate comparisons between depot and local-facility costs.

Another disadvantage of this option is that two-part pricing would eliminate a primary benefit of the current DLR pricing system: total cost visibility. By including fixed and workload-dependent costs in charges, the current system is intended to boost cost-consciousness and encourage commanders to be more careful in their use of

DLRs. The system has had that desired effect, but it has also created an inappropriate incentive for unit commanders to undertake repairs in local facilities. Although the potential benefits of a two-part pricing system are significant, there is a risk that a new system might also have unexpected and unintended consequences.

**050-33—Discretionary****Substitute Sponsored Reservists for Active-Duty Military**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-200	-410	-640	-880	-910	-3,040	-8,070
Outlays	-190	-400	-630	-870	-910	-2,990	-8,020

In 1996, the British Parliament authorized the Ministry of Defense to institute a new form of reserve duty called “sponsored reserves.” That system allows contractors performing peacetime operations to become activated reservists when they deploy overseas. The system is similar to the U.S. concept of dual-status civilians currently serving with Reserve and National Guard units. Those federal workers serve as civilians while the unit is at home, but when the unit deploys overseas, they become reservists serving on active duty.

A sponsored-reserve program would consist of a contract (or contracts) for the delivery of services or equipment that included a provision in which the contractor agreed to maintain a specified portion of its workforce as members of the inactive reserve component of the military. A sponsored reservist would act as a contract employee performing routine tasks during peacetime but would agree to be “activated” to military status when deploying to perform the same job overseas. Currently, many contractors also serve as reservists, but when they deploy as military personnel, they do different jobs or work with different units than their peacetime contract function. Under the sponsored-reserve concept, the contractor would perform the same job but would act as a member of the military when deployed.

This option would gradually institute a new program of sponsored reservists as a means of attracting and retaining highly qualified, skilled personnel, particularly in those functions that rely extensively on contractors already. To achieve savings, it would reduce the number of active-duty personnel performing logistics functions or installation/facility management and physical security functions by 20 percent. Under this option, 20,000 active-duty personnel in those occupations would be replaced with sponsored reservists over a period of four years. Successfully

converting 20,000 positions—and reducing active-duty end strength by that amount—could save about \$3 billion in outlays from 2006 through 2010. Some of those savings would occur because sponsored reservists would have military-specific responsibilities only when they deployed. Because they would be unencumbered by those responsibilities when they were not deployed, they would have more time available to perform their jobs, so fewer could be substituted for military personnel.

One advantage of this option is that it would bridge the gap between wholly privatized functions performed by contractors and functions performed by the military. It would place deployed contractors within the military chain of command (better ensuring military command and control) and afford them the protections of military status. In particular, the conduct of sponsored reservists would be addressed by the Geneva Conventions and the Uniform Code of Military Justice. Another advantage is that sponsored reservists could provide military capability in occupations that are hard to fill with military personnel or jobs that require cutting-edge technical expertise. As members of the Inactive Ready Reserve, those personnel would not count against legislated caps on end strength.

Converting active-duty positions to sponsored-reserve positions could create some difficulties, however. Although the Department of Defense has explored creating a sponsored-reserve program, some people might be concerned that details of its implementation have not been explored fully. As a first step, a few demonstration projects could be preferable to the creation of a new personnel category. There might also be a concern about having personnel in uniform who had not received the same level of training and leadership development opportunities as current military members.



If the Department of Defense chose to implement a sponsored-reserve program without reducing active-duty end strength, those personnel would be freed up to perform other functions, but the savings shown in the table

would not be achieved. A variant of this option could add sponsored reservists to a currently outsourced function. Such an option would probably cost more than a purely outsourced function.

**050-34—Discretionary****Create a Defense Base Act Insurance Pool for Department of Defense Contractors Deployed Overseas**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-49	-84	-97	-68	-42	-340	-570
Outlays	-36	-72	-90	-74	-50	-321	-551

The Defense Base Act (DBA) requires that Department of Defense (DoD) contractors purchase workers' compensation insurance for employees working overseas. Traditionally, firms purchase their own DBA insurance coverage on the competitive market for each DoD contract. There is evidence that insurance premiums, commonly listed as a rate per \$100 of direct labor costs, are currently much higher than predicted by historical rates. Those increased costs, which are passed along to DoD as overhead, are probably occurring because of the magnitude and riskiness of contractor operations in the Middle East.

This option would enable DoD to negotiate a large-scale DBA insurance pool with a single broker for all contractors. That blanket coverage would provide a worldwide DBA rate for an agreed period of time. Creating a larger DBA insurance pool would reduce risk premiums and strengthen the buyer's negotiating position. The Department of State and the U.S. Agency for International Development (USAID) use the blanket-coverage approach, and their contractors currently pay lower DBA insurance premiums than DoD contractors do. A similarly modeled pilot program is under way for contractors associated with the Army Corps of Engineers.

The savings generated by this option would depend on the cost advantages of an insurance pool as well as the number of contractors deployed and the dangers associated with their locations. Under the assumptions that contractors pass savings along to DoD through reduced overhead charges and that the pace of military activities

in support of the global war on terrorism will eventually slow down, this option would save an average of \$55 million in outlays annually over the 2006-2015 period.

The major rationale for this option is that pooling risk is a proven and effective method for reducing insurance premiums. Firms with small numbers of deployed contractors would especially benefit from an insurance pool, as their premiums tend to be higher than those of larger companies when DBA insurance rates are independently negotiated.

An argument against this option is that a DBA insurance pool would essentially provide a subsidy to contractors in more-dangerous locales. Moreover, the creation of a DBA insurance pool would present a number of administrative challenges and would not guarantee savings for DoD. The State Department and USAID are much smaller agencies than DoD, and their successful use of blanket DBA insurance may not translate to defense contracts. It is unclear whether a single insurance provider, or even several providers working together, would be willing to underwrite DBA insurance for all DoD contractors. Firms with large numbers of deployed employees, particularly those in relatively safe locations, might be reluctant to participate in an insurance pool because it would limit their negotiating leverage and flexibility. In addition, the costs of initiating and administering a large-scale DBA insurance program (which are not reflected in the estimates shown here) could greatly diminish the savings.

## International Affairs

**B**udget function 150 covers all spending on international programs by various departments and agencies. It includes spending by the Department of State to conduct foreign relations, economic and humanitarian aid to developing countries, military and other assistance to strengthen allied nations and enhance U.S. security, radio and television broadcasting and exchange programs to promote democracy and U.S. ideals, and financing for the export of U.S. goods and services. The Congressional Budget Office estimates that discretionary outlays for function 150 will total \$36.2 billion in 2005. Repayments of loans and interest income to the Exchange Stabilization Fund account for the negative amounts of mandatory spending for this function.

In the past five years, discretionary spending for international affairs grew by \$14.9 billion, or about 70 percent, from \$21.3 billion in 2000 to an estimated \$36.2 billion in 2005. While a portion of that growth in outlays (\$6.3 billion) derives from supplemental appropriations in 2003 and 2004 for the reconstruction of Iraq, most of the growth (\$6.6 billion) is from three continuing commitments—to conduct foreign relations and protect U.S. diplomatic missions overseas, to strengthen coalition partners in the global wars on terrorism and illegal drugs, and to prevent the spread and treat the victims of the HIV/AIDS pandemic.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	23.5	24.2	25.2	33.5	49.3	30.0	20.4	-39.1
Outlays								
Discretionary	21.3	22.5	26.2	27.9	33.2	36.2	11.8	8.7
Mandatory	-4.1	-6.0	-3.8	-6.7	-6.4	-3.9	n.a.	n.a.
Total	17.2	16.5	22.4	21.2	26.9	32.3	11.8	20.0

Note: n.a. = not applicable (because all years have negative values).

**150-01—Discretionary****Eliminate the Export-Import Bank and the Overseas Private Investment Corporation**

150

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-84	-94	-120	-152	-166	-616	-1,507
Outlays	-13	-46	-85	-126	-147	-417	-1,238

The Export-Import Bank (Eximbank) and the Overseas Private Investment Corporation (OPIC) are intended to promote U.S. exports and overseas investment by providing a range of services to U.S. companies wishing to do business abroad. Eximbank offers subsidized direct loans to private U.S. exporters, guarantees of private loans that finance those exports, and, through export credit insurance, insurance against the risk that foreign buyers will not pay for the exported goods. OPIC offers private U.S. firms subsidized investment financing and insurance against political risks. Appropriations in 2005 for Eximbank and OPIC are \$132 million and \$67 million, respectively.

This option would eliminate additional subsidy appropriations for Eximbank and OPIC. The two agencies could not provide new financing or issue new insurance but would continue to service their existing portfolios. Those changes would save \$13 million in outlays in 2006 and \$417 million over five years. In contrast, the President's budget request for 2006 would maintain funding for OPIC and would double the appropriation for Eximbank, thereby increasing spending by \$25 million in 2006 relative to its level in 2005 adjusted for inflation.

The main rationale for this option is that the services those agencies provide do not on balance benefit the U.S. economy. Eximbank and OPIC finance transactions for which private firms would have trouble raising funds in

private markets at private market terms. Therefore, their terms represent a U.S. government subsidy that is either retained by the U.S. company or passed on to the foreign country. That subsidy could compensate for conditions in foreign countries that might prevent U.S. firms from undertaking otherwise profitable exports and investments. For example, foreign buyers might not be able to finance imports from the United States because such loans are risky in countries that have weak debt collection systems; or foreign investments might be risky in countries that lack legal frameworks to enforce contracts. A more appropriate U.S. policy might seek to alleviate the legal and institutional problems, paving the way for broadly higher U.S. exports and more profitable foreign investment. Eximbank and OPIC, however, by guaranteeing loans and investments in countries that have not undertaken reforms, transfer to the taxpayer the same high risk that private U.S. companies now face.

An argument against this option is that the two agencies may play an important role in helping U.S. businesses, especially small businesses, understand and penetrate overseas markets. Those agencies level the playing field for U.S. exporters by offsetting the subsidies that foreign governments provide to their exporters, thereby promoting sales of U.S. goods. By encouraging U.S. investment in developing and transitional economies, those agencies may also serve a foreign policy objective.

RELATED OPTIONS: 350-04, 350-05, 350-06, and 370-03

RELATED CBO PUBLICATIONS: *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees*, August 2004; *The Domestic Costs of Sanctions on Foreign Commerce*, March 1999; *The Role of Foreign Aid in Development*, May 1997; and *The Benefits and Costs of the Export-Import Bank of the United States*, March 1981

**150-02—Discretionary****End the United States' Capital Subscriptions to the European Bank for Reconstruction and Development**

150

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-36	-36	-37	-37	-38	-184	-386
Outlays	-19	-23	-28	-32	-37	-139	-336

The European Bank for Reconstruction and Development (EBRD) provides loans in the nations of Central and Eastern Europe and the former Soviet Union. Unlike the International Bank for Reconstruction and Development (the main component of the World Bank) and the International Monetary Fund, which lend to governments to support the reform of government policy, nearly 79 percent of the projects approved by the EBRD in 2003 represented loans to private entities. At the end of that year, the EBRD had a portfolio of more than 1,000 projects with a net value of \$18.6 billion.

The United States contributed 10 percent of the capitalization of the EBRD, or \$35 million, in 2005. The 2005 subscription is the last installment of an eight-year capitalization agreement with the bank. This option would terminate U.S. subscriptions to the EBRD, saving \$139 million in outlays over five years, assuming that the level of U.S. support would otherwise remain steady. The President is requesting \$1 million in 2006 for a final payment to the capitalization of the EBRD.

The major rationale for this option is that loans from such public entities to the private sector either displace loans that the private sector would otherwise make, in

which case the program provides no additional benefit, or they represent loans that the private sector considers too risky. In the latter case, a better course for foreign assistance lies in strengthening markets and reducing creditor risk. For example, more effective frameworks for bankruptcy and debt collection would better protect creditors and encourage them to make loans that they might now consider too risky. Such reforms may be best handled through the international financial institutions that support policy reform or by grants-in-aid to foreign countries. The EBRD's strategy of making public loans to private companies without undertaking underlying reforms transfers to taxpayers risks that private investors will not take. Investments funded by private sources that respond to market conditions, including risk, are more likely to allocate capital efficiently and thereby promote economic growth.

EBRD funds are used to promote investment in a region that only recently made the transition to a market-based economy, however, and the loans provide economic support to those countries. Without institutions such as the EBRD, there could be less private investment and economic growth in the region.

RELATED CBO PUBLICATIONS: *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees*, August 2004; and *The Role of Foreign Aid in Development*, May 1997

**150-03—Discretionary****Reduce Assistance to Israel and Egypt**

150

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-614	-823	-1,032	-1,091	-1,150	-4,710	-11,395
Outlays	-572	-762	-965	-1,046	-1,117	-4,462	-11,037

As part of the 1979 Camp David peace accords, the United States agreed to provide substantial amounts of aid to Israel and Egypt to promote economic, political, and military security. That aid, which for two decades totaled over \$5 billion annually for the two countries, is paid through the Economic Support Fund (ESF) and the Foreign Military Financing (FMF) program. From 1993 to 2002, Israel received an annual average of \$3.1 billion. Over this time period, the ESF provided an annual average of \$1.1 billion and the FMF program provided an annual average of \$2 billion—although the ratio between the two began to change in 1999. Egypt received an annual average of \$2.1 billion, with \$770 million through the ESF and \$1.3 billion from the FMF program. Those annual averages take into account the shift in ESF and FMF program funding that occurred in 1999.

In January 1998, Israel proposed phasing out its ESF payments—which up until then were \$1.2 billion a year—while increasing its FMF assistance by \$600 million a year. The conference report for the 1999 Foreign Operations Appropriations Act endorsed that proposal with a 10-year phase-in. As a result, it cut ESF aid to Israel by \$120 million and increased FMF aid by \$60 million. The conference report also reduced economic assistance to Egypt from \$815 million in 1998 to \$775 million in 1999—and proposed cutting it to \$415 million by 2008—while keeping military aid constant. In 2005, U.S. aid to the two nations will total \$4.4 billion.

This option would forgo the proposed increase in military funding for Israel (maintaining that aid at its 1998 level). The option would also continue to cut economic assistance to both Israel and Egypt each year through 2008. The reductions in Israeli aid would save \$560 million in outlays in 2006, compared with this year's funding

level; a total of \$4.1 billion over five years; and almost \$9.8 billion over 10 years. The cuts to Egyptian aid would increase total savings in outlays by \$12 million in 2006, \$400 million over five years, and \$1.2 billion over 10 years.

Proponents of this option argue that Israel's strategic security situation has improved recently because Saddam Hussein's regime in Iraq has been destroyed; Israel has concluded a peace treaty with Jordan; and peace talks with the Palestinians and Syrians are continuing. In addition to those developments, Israel's per capita income (in excess of \$19,500) approaches that of the United States' European allies, who have long been prodded by the Congress to assume greater responsibility for their own defense.

As for Egypt, some analysts say U.S. assistance to that country is not being spent wisely or efficiently. Critics note that the historical levels of appropriations have exceeded Egypt's ability to spend the funds, leading to the accumulation of undisbursed balances, inefficient use of assistance, and delays in making the reforms needed to foster self-sustaining growth. Furthermore, many other countries and organizations contribute substantial amounts of money to Egypt, which could make reducing U.S. assistance more feasible.

Opponents of this option argue that the continuing Palestinian resistance movement has placed burdens on the Israeli military and economy—particularly the tourist, construction, and agricultural sectors—and thus economic and military assistance must continue at current levels. Furthermore, some would argue that funding to Israel is important to U.S. strategic interests in terms of

maintaining and strengthening ties with the region's only democracy. Opponents also argue that assistance to Egypt should be continued to help further the President's U.S.-Middle East Partnership Initiative given Egypt's important moderating role in the Israeli-Palestinian conflict.

Finally, some critics contend that if the current government in Egypt lost financial backing, the influence of anti-American fundamentalist Islamic political forces may increase with undesirable consequences to U.S. interests in the region.

RELATED CBO PUBLICATION: *The Role of Foreign Aid in Development*, May 1997





## General Science, Space, and Technology

**F**unction 250 includes federal funding for broadly based scientific research and development. It includes research funding for three agencies: the National Aeronautics and Space Administration (NASA), the National Science Foundation, and the Department of Energy's (DOE's) general science programs. (Federal funding for research and development related to agency missions or particular industries, such as defense, health, or agriculture, is included in those respective budget functions.)

Over half of the funding in function 250 is devoted to NASA's space and science programs, including the International Space Station, space shuttle, space-based observatories, and various robotic missions. The National Science Foundation, which accounts for about 22 percent of

the 2005 funding in this function, is the government's principal sponsor of basic research at colleges and universities; most of its money is distributed as grants to individual researchers. DOE's general science programs (which received appropriations of about \$3.6 billion for 2005) support specialized facilities and basic research in such areas as high-energy and nuclear physics, advanced computing, and biological and environmental sciences.

Almost all of the funding in function 250 is discretionary. Spending for this function has increased consistently for several years, growing at an average annual rate of 5.5 percent from 2000 through 2004. In 2005, spending is projected to reach \$23.4 billion, an increase of 1.6 percent from the previous year.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	19.2	20.9	21.9	22.9	23.4	24.3	5.0	4.0
Outlays								
Discretionary	18.6	19.7	20.7	20.8	23.0	23.4	5.4	1.7
Mandatory	*	*	0.1	0.1	0.1	0.1	25.7	-13.3
Total	18.6	19.8	20.8	20.9	23.1	23.4	5.5	1.6

Note: \* = between zero and \$50 million.

**250-01—Discretionary****Cut the National Science Foundation's Spending on Elementary and Secondary Education**

250

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-188	-191	-194	-198	-202	-973	-2,036
Outlays	-23	-98	-152	-176	-184	-633	-1,617

In 2005, the National Science Foundation (NSF) received \$182 million to promote better science and math education in elementary and secondary schools. Those programs primarily work to improve teacher training and continuing education, but also to develop instructional and assessment materials. This option would eliminate funding for those efforts. Implementing this option would save \$23 million in outlays in 2006 and \$633 million over five years. (This option would not affect the Math and Science Partnership, which is included in the No Child Left Behind programs.)

Proponents of this option argue that the NSF's efforts duplicate the efforts of much larger programs in the Department of Education and of state and local governments. Such programs include those under the No Child Left Behind Act, which mandates more qualified teachers (in all fields, not just science and mathematics) and provides some resources to develop teachers' skills. The act also mandates more systematic assessments of students' progress in science, reading, and math over different grades. Currently, the Department of Education is spending \$24 billion helping elementary and secondary schools with the No Child Left Behind efforts, including in the areas of science and mathematics. As noted above, the

NSF currently operates a program to aid the No Child Left Behind Act in meeting its math and science goals.

In the 2000-2001 school year, state and local governments spent \$370 billion on public elementary and secondary education. Many state and local governments continue to devote resources to the quality of education that all their teachers receive, including their math and science teachers. Given the high levels of funding that are being spent in agencies with the primary responsibility for education, the NSF's efforts may be inconsequential.

Opponents of this option argue that the NSF leverages its small contribution by focusing on the basic aspects of educational research while allowing other agencies to implement and develop programs that apply such research. Thus, for example, NSF programs focus on providing professional resources for instructors of science teachers, while the No Child Left Behind and Math and Science Partnership programs implement quality improvement measures for the science teachers themselves. Furthermore, some note that the current federal funds for teacher quality grants under the No Child Left Behind Act are inadequate.

**250-02—Discretionary****Cancel the Crew Exploration Vehicle and Lunar and Mars Exploration Programs in 2006 and Retire the Shuttle After Completion of the International Space Station in 2010**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,493	-2,023	-2,097	-2,720	-3,178	-11,511	-44,042
Outlays	-1,015	-1,749	-2,006	-2,497	-2,976	-10,243	-40,801

Note: Estimates are based on the National Aeronautics and Space Administration's fiscal year 2005 program and longer-term plans for implementing the Administration's new vision for space exploration.

**250**

On January 14, 2004, President Bush proposed a new vision for space exploration that includes human and robotic exploration of the Moon and Mars. The National Aeronautics and Space Administration's (NASA's) 2005 budget allocates the majority of funding for the Moon/Mars initiative to two programs: the Crew Exploration Vehicle (CEV), to be used to transport humans to both the International Space Station and to lunar orbit; and Lunar Exploration, robotic exploration of the moon that includes the development and launch of lunar orbital satellites and landing rovers. In later years, the initiative would also include costs for projects not reflected in the current budget, including development of a heavy launch vehicle and a lunar exploration module. Current NASA projections indicate that much of the funding for the initiative will come from phasing out the space shuttle by 2012. NASA envisions returning humans to the Moon no later than 2020.

This option considers the savings from avoiding all planned and expected activities associated with the initiative. It would cancel Moon/Mars Exploration Initiative activities while continuing to phase out the space shuttle as currently planned. Thus, the option would postpone America's robotic exploration of the Moon and human exploration of space beyond the confines of low-Earth or-

bit (LEO). This option would reduce planned NASA spending by \$1 billion in 2006 and \$10 billion over five years.

Proponents of this option contend that the new vision for space exploration supersedes the obligations the United States has made to its international partners on the International Space Station and causes unnecessary turmoil to the robotic and scientific missions NASA had previously planned to perform. They also note that pursuing the initiative requires abandoning NASA's previous plans for a space-launch initiative to develop more affordable and reliable means of transporting both humans and cargo to space. Supporters further argue that without real growth in NASA's budget, pursuing the initiative requires that the space shuttle be retired from service in 2010, leaving the United States dependent on the Russian Soyuz capsule for transportation to space for at least four years while the CEV is in development. Although this option phases out the shuttle by 2012, canceling the Moon/Mars initiative could free up funding to be used to recertify the space shuttle for continued flight or to pursue an affordable and reliable replacement for it. Such an approach would be necessary if the United States wanted to sustain a capability to conduct human spaceflight.

Opponents of this option argue that the Moon/Mars Exploration Initiative is the next logical, long-postponed step in human space travel. Without the challenges of exploring beyond LEO—in particular, returning to the Moon and traveling to Mars—NASA will lack the focus

that was essential to the success of the original Apollo moon-landing program. Further, they argue that without those challenges, NASA and the American aerospace industry will be unable to attract and retain the scientific talent they need to remain vital.

**250-03—Discretionary****Cancel Research on the Next Generation of Nuclear Reactors for Powering and Propelling Spacecraft**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-441	-449	-459	-468	-478	-2,295	-4,842
Outlays	-300	-416	-446	-462	-472	-2,096	-4,609

**250**

Project Prometheus is slated to develop the technology needed for a high-power, space-qualified nuclear reactor. The nuclear systems developed under Project Prometheus would provide at least 100 times more power than current solar or nuclear power systems provide for spacecraft. Such high-power nuclear systems could be used to support long-duration human stays on the Moon, human flights to Mars, and long-duration robotic exploration of the solar system. For example, the National Aeronautics and Space Administration (NASA) had planned the Jupiter Icy Moon Orbiter (JIMO) program to be a mission to use the technology developed under Project Prometheus. The JIMO mission proposes to orbit the three planet-sized moons of Jupiter—Callisto, Ganymede, and Europa—and investigate the origin and evolution of those moons, examine each moon’s potential to sustain life, and survey locations for landing craft. (The President’s 2006 budget plan postpones the JIMO mission, pursuing first a demonstration of the use of nuclear power in space.)

By canceling Project Prometheus, this option would save NASA \$300 million in outlays in 2006 and \$2.1 billion over five years, according to figures in NASA’s 2006 budget request and associated longer-term plan.

Proponents of this option argue that the risks associated with launching the amount of nuclear material needed for high-power space reactors outweigh the benefits associated with the improved ability to explore the solar system. In addition, some supporters of this option question whether the long-duration human missions beyond low-Earth orbit that Project Prometheus would enable should be a priority in a time of constrained budgets.

Opponents argue, however, that canceling Project Prometheus would severely constrain future options for both human exploration beyond low-Earth orbit and robotic exploration of the solar system. In particular, canceling the project would make it unlikely that NASA’s current plan for JIMO could be achieved and also could preclude future human exploration of Mars and long-duration human presence on the Moon.

RELATED CBO PUBLICATION: *A Budgetary Analysis of NASA’s New Vision for Space Exploration*, September 2004

**250-04—Discretionary****Cancel the Shuttle Program and Additional Assembly of the International Space Station**

250

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-4,981	-5,075	-5,182	-5,290	-5,400	-25,928	-54,688
Outlays	-3,387	-4,696	-5,042	-5,221	-5,330	-23,676	-52,058

On February 1, 2003, the Shuttle Columbia was lost during re-entry. On January 14, 2004, the National Aeronautics and Space Administration (NASA) unveiled the President's long-term vision for space exploration, which stated that the remaining fleet of space shuttles would return to flight to complete construction of the International Space Station (ISS) by about 2010. The ISS would operate through 2017, with its research agenda refocused to explore issues associated with long-duration human spaceflight. According to NASA, about 25 to 30 space shuttle flights will be needed to complete construction of the ISS.

Under this option, the shuttle program would be terminated immediately and the ISS would remain in its current configuration, saving NASA \$3.4 billion in outlays in 2006 and \$23.7 billion through 2010, according to the agency's latest five-year program plan. Access to the ISS would continue to be provided by Russian Soyuz launches.

Supporters of this option argue that the goal of completing construction of the ISS by 2010 using the space shuttle is optimistic. That schedule dictates that the space shuttle make an average of six flights per year over the next five years. Taking into account NASA's implementation of the findings of the Columbia Accident Investigation Board (CAIB), especially the constraints of executing

only daytime launches and the need to have a backup orbiter prepared to conduct a potential rescue, it may be a challenge for NASA to achieve that launch schedule.

Justification for this option stems from the observation that even if the space shuttle is used to complete construction of the ISS, retiring the shuttle as planned in 2010 could jeopardize the capability to conduct the scientific experiments planned by the station's international partners. This is the case because only the shuttle has the capability to transport the materials to and from the station for those experiments. In addition, retiring the shuttle will constrain, if not eliminate, the capability to conduct maintenance and repair of the station needed to keep it viable through 2017.

Opponents of this option argue that the United States has an obligation to its international partners to complete ISS construction and that the shuttle is essential to that task. Moreover, they add that the ISS is a critical component to executing the President's vision for space exploration by providing a platform for carrying out tests and observations into the biological effects of long-duration human exposure to zero gravity. In addition, NASA is currently working on plans that might make it possible to support the international experimentation program originally planned to provide transportation capability in the absence of the shuttle.

Furthermore, opponents argue that by retiring the shuttle in 2005, production lines for support components like the external tank, solid rocket boosters, and the shuttle's main engines would be lost. Closing those production lines in 2005 could make it more difficult to use those systems or derivatives of them in future launch vehicles.

For example, developing a cargo version of the shuttle launch system—the so-called Shuttle-C—has been proposed as a low-cost path to a new heavy launcher, a capability that may be required for lunar exploration missions and that will almost certainly be required for human exploration of Mars.

RELATED CBO PUBLICATION: *A Budgetary Analysis of NASA's New Vision for Space Exploration*, September 2004





# 270

## Energy

**T**he programs in budget function 270 fund energy research, production, conservation, and regulation. This function includes the Department of Energy's (DOE's) civilian programs, such as energy-related research and development; operation of the Strategic Petroleum Reserve; environmental cleanup of federal sites used for civilian energy research and production; development of a repository for nuclear waste at Yucca Mountain, Nevada; and grants to states for energy conservation measures. The costs of regulating energy production and distribution are also part of this function, but those expenses are offset almost entirely by fees charged to the regulated entities. In addition, function 270 covers federal agencies that generate and sell electricity, such as the Tennessee Valley Authority (TVA, an independent agency) and the four power marketing administrations (PMAs) that are managed by DOE. Loan programs to benefit rural electric and telephone cooperatives, managed by the Rural Utilities Service within the Department of Agriculture, are

also included in this budget function. (DOE's atomic weapons activities are included in budget function 050, national defense.)

The net outlays of function 270 are typically small—and in some years negative—because they include offsetting receipts from the sale of electricity by TVA and the PMAs, fees paid by the nation's nuclear utilities for future storage of nuclear waste, and loan repayments to the Rural Utilities Service. Excluding those receipts, spending for this function will total about \$3.8 billion in 2005, the Congressional Budget Office estimates. That amount, although significantly lower than the levels of discretionary spending in much of the 1990s, is about 25 percent higher than the figure for 2003—largely because of increased funding for energy research, conservation programs, and environmental cleanup expenses for certain DOE facilities.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	2.7	3.2	3.2	3.2	3.6	3.8	7.1	7.3
Outlays								
Discretionary	3.0	2.9	3.0	3.1	3.4	3.8	3.4	13.6
Mandatory	-3.7	-2.9	-2.5	-3.8	-3.6	-3.0	n.a.	n.a.
Total	-0.8	*	0.5	-0.7	-0.2	0.9	n.a.	n.a.

Note: \* = between zero and \$50 million; n.a. = not applicable (because some years have negative values).

**270-01—Discretionary****Eliminate the Department of Energy’s Applied Research for Fossil Fuels**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-428	-554	-565	-576	-586	-2,709	-5,818
Outlays	-128	-316	-470	-530	-568	-2,013	-5,051

The Department of Energy (DOE) receives about \$500 million in appropriations each year to fund research on applied technologies for finding and using petroleum, coal, and natural gas. Those research programs were created at a time when the prices of some fossil fuels were controlled and, as a result, market incentives for technology development were muted. Now that energy markets have been partially deregulated and are operating more freely, the value of federal spending for such research and development efforts is more in question.

This option would eliminate DOE’s applied research programs for fossil fuels, saving \$128 million in outlays in 2006 and \$2.0 billion over the next five years.

A rationale for ending those programs is that energy markets give suppliers sufficient incentives to develop better technologies and bring them to market. Private entities are generally more attuned than federal officials are to which new technologies have commercial promise. Federal programs have a long history of funding fossil-fuel technologies that, although interesting technically, have little chance of commercial implementation. A related rationale for eliminating the applied fossil-fuel research programs is that DOE should concentrate on basic energy research—such as developing the basic science for a new energy source—and reduce its involvement in developing applied technology. Arguably, the federal government has a clearer role to play in funding such basic research because the benefits are widespread rather than concentrated in individual companies.

Contrary to those assertions, a panel of the National Academy of Sciences concluded in 2001 that “DOE’s RD&D [research, development, and demonstration] programs in fossil energy and energy efficiency have yielded significant benefits (economic, environmental, and national security-related), important technological options

for potential application in a different (but possible) economic, political, and/or environmental setting, and important additions to the stock of engineering and scientific knowledge in a number of fields.” The panel reported that although many of the earliest fossil-fuel programs (which emphasized synthetic fuels and other large-scale demonstrations) had produced below-average returns, projects since 1986 (which were more diverse and less focused on high-risk demonstrations) had yielded higher returns.

Another argument against this option is that DOE’s applied research may help curtail the environmental damage resulting from the production and consumption of fossil fuels by supporting research that allows those fuels to be used with less harm to the environment, thus decreasing their cost to society. DOE’s research programs may also increase the efficiency of energy use and thereby lessen U.S. dependence on foreign oil. A further argument against eliminating those programs is the role they are playing in the continued development of fuel-cell technology. Fuel cells, which have declined in cost, appear to be just a few years away from displacing more-conventional energy sources in a wide variety of markets, from cell-phone batteries to household electrical use. However, as fuel cells come closer to the market, private firms will have greater incentive to invest in the technology and better market information than DOE does.

In its assessment of federal programs for the President’s 2005 budget, the Office of Management and Budget (OMB) concluded that DOE’s program to fund research on fuel cells to power the electrical grid has a clear purpose, is free of design flaws, and serves a national need. However, OMB stated that programs in other areas of fossil-fuel research, such as oil and natural gas technologies, duplicate private-sector spending.

**270-02—Discretionary****Eliminate the Department of Energy’s Applied Research for Energy Conservation**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-485	-617	-629	-641	-653	-3,026	-6,488
Outlays	-243	-478	-603	-633	-645	-2,603	-6,023

270

In 2005, the Department of Energy (DOE) received appropriations of \$596 million for programs to develop energy-conserving technologies. Those programs fund research on automobiles that use fuel cells (the FreedomCAR Partnership discussed in option 270-05) and on industrial and residential energy efficiency. (In addition, DOE provides grants to state and local agencies for energy conservation; those grants are discussed in option 270-04.) The involvement of federal agencies in selecting and developing technologies with near-term commercial prospects may be questionable.

This option would eliminate DOE’s applied energy-conservation research programs, saving \$243 million in outlays in 2006 and \$2.6 billion over five years. (Because those programs and the FreedomCAR Partnership overlap, savings from eliminating both would be smaller than the sum of individual savings shown for the two options.)

The major rationale for this option is that the federal government should forgo developing applied energy technology, which benefits specific firms in the short run, and concentrate on basic research in the underlying science, which provides broader, long-term benefits to the energy sector as a whole. Many projects funded through DOE’s applied energy-conservation research are small and discrete enough—and have a sufficiently clear market—to warrant private investment. In such cases, DOE may be crowding out private companies. In other cases, the results of the research and development conducted by those programs may prove too expensive or esoteric for the intended recipients to implement. Moreover, those programs may duplicate support provided by other federal policies. For example, federal law sets minimum energy-efficiency standards for appliances and cars, and the tax code favors investments in conservation technologies.

Addressing those concerns, a 2001 panel of the National Academy of Sciences determined that “DOE’s RD&D [research, development, and demonstration] programs in fossil energy and energy efficiency have yielded significant benefits (economic, environmental, and national security-related), important technological options for potential application in a different (but possible) economic, political, and/or environmental setting, and important additions to the stock of engineering and scientific knowledge in a number of fields.” The panel concluded that the energy-conservation research programs had particularly benefited the construction industry—a widely dispersed industry with no substantial record of technological innovation.

Another argument against eliminating those programs is that federal research and development in the area of energy conservation may help offset failures in energy markets. For example, current energy prices may not reflect the damage to the environment—including the potential for global warming—caused by excessive reliance on fossil fuels. Energy conservation could decrease that damage (and thus the costs to society of producing and using energy) as well as the nation’s dependence on foreign oil.

For the President’s 2005 budget, the Office of Management and Budget assessed some of DOE’s applied energy-conservation research programs and rated them as adequate. The building-technology program was cited as coordinating well with private industry and other parts of the government to ensure that its work focused on technologies not yet ready for commercial exploitation. It was also lauded for providing road maps of technological development for industry. Other programs were similarly cited.

**270-03—Discretionary****Eliminate the Department of Energy's Applied Research for Renewable Energy Sources**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-314	-400	-407	-415	-423	-1,959	-4,202
Outlays	-141	-306	-374	-405	-417	-1,644	-3,855

In 2005, the Department of Energy (DOE) received appropriations of \$386 million to fund research and development (R&D) of solar power and other renewable sources of energy. By far the largest efforts funded by those programs involve developing alternative liquid fuels from plant materials (or biomass) and producing electricity from photovoltaic cells. Smaller efforts involve electric-energy storage and wind power.

This option would eliminate federal funding for applied research on renewable energy, saving \$141 million in outlays in 2006 and \$1.6 billion through 2010.

The principal rationale for this option is the belief that the federal government should support basic scientific research, which can benefit the energy sector as a whole over the long term, rather than development of applied energy technology, which will benefit specific firms. Federally sponsored researchers lack the market incentives and information that help researchers in private companies recognize marketable technologies.

Another argument for ending DOE's renewable-energy R&D programs is that many of the projects they fund are sufficiently small and discrete, and have a clear enough market, to attract private funding. Commercial markets exist for several renewable-energy technologies—most notably, wind power and photovoltaic cells. According to industry estimates, the global market for wind-energy systems has grown rapidly and is now worth several billion dollars. Similarly, the photovoltaic market has been expanding by more than 30 percent per year. In such cases,

the time may have come for an orderly withdrawal of federal support. Given the large U.S. venture-capital market, continued federal funding may be displacing private investment.

A further rationale for eliminating DOE's applied renewable-energy research is that other government efforts promote the same goals. The federal tax code provides incentives for development of liquid fuels from renewable resources, especially biomass. For example, ethanol fuels receive special treatment under the federal highway tax (see Revenue Option 29). In addition, federal regulations authorized by many different statutes favor alcohol fuels, which now usually mean fuels based on corn.

Several arguments, however, weigh against ending federal funding for renewable-energy research. First, incentives for private research may be insufficient because energy prices fail to incorporate the risks posed by the nation's dependence on fossil fuels. Second, the United States plays the role of international R&D laboratory for less-developed countries, which often have much higher energy costs. Third, a recent analysis by the National Academy of Sciences showed that many DOE-sponsored renewable-energy programs had met their goals to lower the costs and improve the performance of specific technologies. The fact that those technologies are not in widespread use results not from technical failures, according to the analysis, but from even larger decreases in the cost of conventional energy and, to some extent, from institutional obstacles.

The Office of Management and Budget (OMB) reviewed some of DOE's renewable-energy initiatives as part of its assessment of federal programs for the President's 2005 budget and rated them as moderately effective on the whole. In many instances, OMB said, program offices worked to ensure that the research they sponsored did not

duplicate efforts by the private sector or other government programs. For example, although the geothermal energy program focuses on drilling methods, as does the oil industry, the geothermal environment is different enough (deeper, hotter, and more challenging chemically) to require specialized technologies.

RELATED OPTIONS: 270-01, 270-02, 270-04, 270-05, and Revenue Option 29

**270-04—Discretionary****Eliminate the Department of Energy’s State and Community Grants for Energy Conservation**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-36	-46	-46	-47	-48	-223	-479
Outlays	-18	-35	-45	-47	-48	-192	-445

The Department of Energy’s (DOE’s) Office of State and Community Programs provides various grants to support energy-conservation efforts at the state and municipal level. Weatherization-assistance grants help low-income households reduce their energy bills by installing weather stripping, storm windows, and insulation. Institutional-conservation grants help lessen the use of energy in educational and health care facilities; they add federal funds to private-sector and local-government spending to encourage local investment in improvements to buildings. The Office of State and Community Programs also supports state and municipal programs that establish energy-efficiency standards for buildings and promote public transportation and carpooling, among other initiatives.

This option would eliminate funding for DOE grant programs that support energy-conservation activities by states and localities. Ending those grant programs would save \$18 million in outlays in 2006 and \$192 million over the next five years.

One rationale for eliminating those energy-conservation grants is that other federal programs (such as the Low Income Home Energy Assistance Program block grants) and laws (such as the Clean Air Act Amendments of 1990) promote similar conservation actions. Moreover, direct federal funding may principally serve to enable state and local governments to replace local funding for energy conservation and redirect their tax revenues to altogether different uses.

Opponents of this option maintain that ending DOE’s grant programs could make it harder for states to continue their energy-conservation efforts. Many states rely heavily on such grants to help low-income households and public institutions. In addition, reductions in energy use because of those programs could help lower emissions of greenhouse gases.

RELATED OPTIONS: 270-01, 270-02, 270-03, 270-05, and 300-14

**270-05—Discretionary****Eliminate Funding for the FreedomCAR Partnership**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-163	-166	-169	-172	-175	-845	-1,774
Outlays	-81	-140	-167	-170	-173	-731	-1,649

270

The FreedomCAR Partnership is a joint federal/private research effort to foster the development of energy-efficient vehicles, mainly by promoting research into fuel-cell technology. (Fuel cells produce electricity by stripping the electrons from hydrogen fuel. They are relatively clean sources of power because when the electrons are recycled back into the remaining fuel mixture and combined with oxygen, the only emissions they produce are air and water vapor.) The FreedomCAR Partnership—which is led by the Department of Energy’s (DOE’s) Office of Energy Efficiency and Renewable Energy—also sponsors research into combustion and emission systems, lightweight materials, electronics, and batteries suitable for use in energy-efficient vehicles. The partnership complements a broader federal effort to develop hydrogen-based sources of energy for automotive and other uses.

This option would eliminate federal funding for the FreedomCAR Partnership, which would reduce discretionary outlays by \$81 million in 2006 and \$731 million over the 2006-2010 period. However, because the FreedomCAR Partnership and DOE’s energy-conservation and renewable-energy programs (discussed in options 270-02 through 270-04) are related, if those programs were eliminated as well, the total savings would be less than the sum of the savings shown for the programs individually.

One argument for ending federal support for the FreedomCAR Partnership is that the program that preceded it—the Partnership for a New Generation of Vehicles—lagged in its efforts to create a production-ready hybrid vehicle (one powered by a combination gas and electric motor). By mid-2004, the primary hybrid vehicles available to U.S. consumers were produced by Honda and Toyota, two foreign automakers. Thus, the efficacy of yet another U.S. research partnership between the public and private sectors in this area may be questionable. Further, U.S. automakers have already begun conducting fuel-cell research, and competitive pressure from their foreign

counterparts may spur those efforts. In 2002, Honda began leasing a fuel-cell-powered vehicle to employees of the city of Los Angeles, and Toyota has made fuel-cell vehicles available to U.S. government test fleets. As a result, sufficient economic incentives to undertake such efforts may already exist in the private sector—in which case, government financial support would simply provide a subsidy without inducing more research.

Another argument for this option is that rather than supporting applied research, the federal government could more effectively increase the efficiency of the nation’s automotive fleet by raising gasoline taxes, imposing user fees on the purchase of low-mileage-per-gallon vehicles, or both. When gasoline prices rose in 2004, demand for hybrid vehicles increased sharply, causing buyers to endure unexpected waiting lists and, in some cases, to pay a markup over list price to purchase those vehicles. Likewise, higher gasoline taxes or user fees would increase the incentives for consumers to buy energy-efficient automobiles. Such policies might also spur more-productive research—because automakers would have a greater incentive not only to conduct research into fuel-cell technology but also to broaden their research efforts to include other potential sources of fuel efficiency, such as more-sophisticated drive trains and transmissions and lightweight but durable chassis and body materials. Indeed, although hydrogen-powered vehicles may emit no pollutants, generating hydrogen fuel using current production technologies imposes a significant environmental burden.

An argument against eliminating the FreedomCAR Partnership is that imperfections in energy markets and environmental considerations make it desirable for the government to promote energy-efficient technologies, because the private sector has less incentive to undertake that research than society has to see it undertaken. Thus, without government sponsorship, the private sector might underfund research in energy efficiency.

**270-06—Mandatory****Restructure the Power Marketing Administrations to Charge Higher Rates**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	+220	+220	+220	+220	+880	+1,980

270

The three smallest power marketing administrations (PMAs) of the Department of Energy—the Western Area Power Administration, the Southwestern Power Administration, and the Southeastern Power Administration—sell about 1 percent of the nation’s electricity. The PMAs generate electricity mainly from hydropower facilities constructed and operated by the Army Corps of Engineers and the Bureau of Reclamation. Current law requires that the electricity be sold at cost—a pricing structure intended ultimately to reimburse taxpayers for all of the costs of operating those facilities, a share of the costs of construction, and interest on the portion of total costs that has not been repaid. Interest charges are generally below the government’s cost of borrowing. Those lower charges, along with the low cost of generating electricity from hydropower, mean that the PMAs can charge their customers much lower rates than other utilities do. Current law also requires the PMAs to offer their power first to rural electric cooperatives, municipal utilities, and other publicly owned utilities.

This option would require those three PMAs to sell electricity at market rates to any wholesale buyer. The higher rates would provide the federal government with about \$880 million in additional receipts over the 2006-2010 period. (The President’s budget for 2006 indicates that the Administration intends to “propose legislation to very gradually bring PMA electricity rates closer to average market rates throughout the country.”)

Supporters of this change argue that the rationale for continuing to subsidize federal electricity sales is weak, for several reasons. First, they say, such subsidies are not needed to counter the market power of private utilities because those utilities are kept in check by federal and state regulation of the electricity supply, by federal anti-trust laws, and increasingly by competition from independent producers. Second, in many cases, the communities that receive federal power are similar to neighboring communities that do not. Third, federal sales of electricity meet only a small share of the total power needs of households in the regions that the three PMAs serve; thus, raising federal rates would have only a modest impact on those households’ electricity costs. Fourth, the PMAs face the prospect of significant future costs to perform long-deferred maintenance and upgrades—costs that could be budgeted for by increasing power rates now. Finally, selling electricity at below-market rates can encourage inefficient use of energy.

A potential drawback of this option is that changing the pricing structure of those three PMAs could greatly increase electricity rates for the many small and rural communities they serve. Other arguments against this change are that the federal government should continue providing low-cost power to counter the uncompetitive practices of investor-owned utilities and to bolster the economies of certain parts of the country.

RELATED OPTIONS: 270-07, 270-08, 270-09, and Revenue Option 30

RELATED CBO PUBLICATION: *Should the Federal Government Sell Electricity?* November 1997



**270-07—Mandatory****Sell the Southeastern Power Administration and Related Power-Generating Assets**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	0	+1,304	-214	-218	+872	-278

The Department of Energy's Southeastern Power Administration (SEPA) sells electricity from hydropower facilities constructed and operated by the Army Corps of Engineers. SEPA pays private transmission companies to deliver that power to more than 300 wholesale customers, such as rural cooperatives, municipal utilities, and other publicly owned utilities. SEPA charges rates that are designed to recover for taxpayers all of the costs of current operations, some of the costs of construction, and a nominal interest charge on the portion of total costs that has not yet been recovered. On average, SEPA sells power for about 2.2 cents per kilowatt-hour, compared with as much as 5.0 cents per kilowatt-hour for some utilities in its region.

This option would sell the power-generating assets that SEPA uses, such as turbines and generators owned by the Army Corps of Engineers, though not the related dams, reservoirs, or waterfront properties. The sale would also include rights of access to the water flows necessary for power generation, subject to the constraints of competing uses for the water. That sale would net the federal government \$872 billion in added receipts over the 2006-2010 period—\$1.5 billion in proceeds from the sale (based on SEPA's most recent audited statement of its assets and liabilities) minus about \$640 million in lost electricity revenues over that period. (In addition, the federal government would save about \$45 million a year in discretionary outlays from ending appropriations to SEPA and reducing appropriations to the Corps of Engineers for operations. Those discretionary savings are not included in the table above.)

Supporters of this option argue that selling federal power-generating assets is consistent with the policy goal of making energy markets more efficient. They say that the original reasons for establishing SEPA—marketing low-cost power to promote competition and foster economic development—are no longer compelling because of the small amount of power that SEPA sells and because of competitive and regulatory constraints on commercial power rates. Moreover, selling federal hydropower facilities would not mean transferring all responsibility for managing and protecting water resources to the private sector. The Corps of Engineers could remain directly responsible for managing water flows for all uses, including the upkeep of basic physical structures and surrounding properties. Or, as has happened with other nonfederal dams, the terms of the federal licenses to operate the facilities (issued by the Federal Energy Regulatory Commission) could determine the management of water flows for competing purposes.

An argument against ending federal ownership of SEPA is that nonfederal entities may lack the proper incentives to perform all of SEPA's functions. Many Corps of Engineers facilities serve multiple purposes, such as managing water resources for navigation, flood control, or recreation as well as for power generation. In addition, selling SEPA could result in higher power rates for its customers. Although electricity sold by SEPA meets only about 1 percent of total power needs in the 11 states in which the agency operates, a few rural communities depend heavily on that electricity.

RELATED OPTIONS: 270-06, 270-08, 270-09, and Revenue Option 30

RELATED CBO PUBLICATION: *Should the Federal Government Sell Electricity?* November 1997

**270-08—Mandatory****Sell Most of the Tennessee Valley Authority's Electric Power Assets**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	-5	-5	-5	+16,000	-800	+15,185	+11,385

270

The Tennessee Valley Authority (TVA) was established in 1933 to control flooding, improve navigation, and develop the hydroelectric resources of the Tennessee River for the benefit of a seven-state region in the southeastern United States. Since then, TVA has developed an extensive network of transmission facilities and nuclear and fossil-fuel-powered generating plants and has become the largest producer of electricity in the nation. Under current law, TVA controls its spending and rate setting, with no regulatory oversight. The agency has ready access to capital because investors assume that its obligations would be paid off by the government in the event of default, even though current law states that TVA's debt is not backed by the government. The only limit on the agency's liabilities—a statutory cap of \$30 billion on its bonds—has less meaning now than in the past because TVA has been able to raise capital using various third-party financing arrangements, which both circumvent that cap and enable TVA to take advantage of certain tax benefits.

This option would return TVA to its original, more limited function of managing the region's hydropower resources. Other TVA power assets for which a commercial market exists—such as the agency's fossil-fuel and nuclear power plants and its transmission lines—would be sold. If, as is likely, proceeds were less than the amount of TVA's outstanding debt, taxpayers would probably have to bear some of the cost of servicing that debt (whatever was not defrayed using future receipts from hydropower activities).

This option assumes that the sale of TVA's generation and transmission assets would be completed by the end of 2009 and would raise about \$16 billion. That estimate is based on recent market transactions for electricity-

generating facilities, but proceeds could be higher or lower. The \$16 billion estimated market value of TVA's assets is less than the agency's outstanding financial obligations—which have risen to about \$26 billion—in part because TVA invested some \$6 billion in nuclear power plants that were never completed and also experienced significant cost overruns in the construction of other nuclear plants. Thus, some portion of TVA's debt would probably be retained by the government.

One rationale for this option is that electricity generation and transmission are fundamentally private-sector activities. In addition, this option would reduce the scope—and hence the risk to taxpayers—of future investments by TVA. Selling the agency's commercial power assets would also eliminate the implicit subsidy that TVA receives because its status as a federal agency earns it high bond ratings. Finally, private-sector operation of TVA's electric power assets in a competitive environment could result in some increased efficiencies relative to those under federal operation.

An argument against selling most of TVA is that the agency has played, and should continue to play, a central role in the economic development of its seven-state region. The net benefit to taxpayers from the sale is uncertain because it would depend on the price actually paid for facilities, on the costs that TVA would otherwise incur if it continued to invest in power and transmission facilities, and on trends in electricity prices and markets. In addition, TVA's ratepayers could face higher electricity prices in the absence of federal subsidies.

As an alternative to privatization, the government could add a surcharge to TVA's transmission rates (see option 270-09).

RELATED OPTIONS: 270-06, 270-07, 270-09, and Revenue Option 30

RELATED CBO PUBLICATION: *Should the Federal Government Sell Electricity?* November 1997

**270-09—Mandatory****Require the Tennessee Valley Authority to Impose a Transmission Surcharge on Future Electricity Sales**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	+275	+275	+275	+275	+1,100	+2,475

The Tennessee Valley Authority (TVA) is the biggest producer of electricity in the United States and the sole supplier to retail utilities, large industrial customers, and federal agencies in much of the Southeast. TVA is supposed to set electricity rates on the basis of its costs so that, over time, its receipts from selling power will be sufficient to pay for routine operations, depreciation of productive assets, and certain other activities. However, current rates are not high enough to pay off the \$4.1 billion that the agency has invested in nuclear power plants that have never been completed.

TVA may have difficulty raising funds to recover the costs of those investments, for a number of reasons. First, it expects to compete with other utilities in the future and believes that charging higher rates would cause it to lose customers to those competitors, possibly resulting in lower revenues overall. Second, TVA has made commitments to its customers that it says effectively preclude it from raising rates before 2007. Third, TVA has additional liabilities to cover that were financed through leasebacks and other nontraditional means. Those arrangements have raised concerns about circumventing the \$30 billion statutory limit on the agency's debt.

This option would require TVA to impose a surcharge on electricity transported over its transmission lines, regardless of the source of the power. The surcharge would be set so as to recoup \$2.5 billion of TVA's \$4.1 billion investment in uneconomic nuclear power assets over 10 years. (The rest of that investment would be recouped from existing TVA rates.) The higher surcharge would increase federal receipts by \$1.1 billion over the next five

years. This option would also redefine TVA's debt limit to include related liabilities arising from long-term contracts and would gradually scale back that limit to \$20 billion (\$6 billion less than the current level of outstanding financial obligations) to ensure that revenues collected from the surcharge went toward lowering the agency's debt burden.

If TVA fails to recoup the costs of its investments through increased rates, the burden may fall on taxpayers nationwide. Imposing a surcharge on transmission services would mean that customers in TVA's traditional service area would pay for the agency's uneconomic investments (even if they switched electricity suppliers), thus lessening the possibility that taxpayers at large would be saddled with those costs. Moreover, such a surcharge would probably not cause TVA to lose customers because it would apply to all sales of electricity in the area. Many states have authorized similar tariff surcharges to help local utilities recover the costs of investments that proved to be uneconomic when competition was introduced in the wholesale electricity market.

An argument against a transmission surcharge is that if it resulted in raising the rates charged by all electricity suppliers, the Southeast region could be adversely affected. In addition, requiring a transmission surcharge could constrain TVA's ability to formulate plans for paying off its uneconomic investments. For example, some people could argue that the most efficient solution would be for TVA to write off part of the \$4.1 billion investment in unproductive nuclear assets at taxpayers' expense.

RELATED OPTIONS: 270-06, 270-07, 270-08, and Revenue Option 30

RELATED CBO PUBLICATIONS: *Electric Utilities: Deregulation and Stranded Costs*, October 1998; and *Should the Federal Government Sell Electricity?* November 1997

**270-10—Discretionary****Eliminate the Department of Energy's Clean-Coal Technology Programs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-50	-51	-52	-53	-54	-259	-543
Outlays	-2	-8	-15	-28	-48	-101	-373

The Department of Energy (DOE) funds investment in new technologies that are designed to increase efficiency and reduce emissions at coal-fired electricity-generating plants. Such funding was originally provided through DOE's Clean Coal Technology Program, which was created in 1984 as part of a U.S.-Canadian agreement to help curb acid rain. Currently, two DOE programs provide funding for industry projects intended to demonstrate the commercial feasibility of advanced clean-coal technologies. One program is the Clean Coal Power Initiative (CCPI), a cost-sharing partnership in which the government pays up to 50 percent of each project's cost. The other is the Power Plant Improvement Initiative (PPII), a program that calls for government support to be paid back from future project earnings. To date, funds have been obligated for four projects in the first round of the CCPI selection process. Additional projects that could be funded under the CCPI and PPII are in various stages of negotiation.

This option would end new appropriations for the Clean Coal Power Initiative and the Power Plant Improvement Initiative, saving \$101 million in outlays over the next five years. That change would not affect the \$545 million that has already been appropriated, though not fully obligated, for other new projects.

Supporters of ending further federal funding for coal-technology demonstration projects point out that DOE had trouble finding demonstration projects that merited support even under the original Clean Coal Technology Program. Moreover, they say, the projects funded at that time have yielded almost no payoffs in terms of new technologies for the government or industry: some projects were not completed, and others demonstrated technologies that were not adopted elsewhere. According to those

supporters, the few projects that were successful would probably have been completed without federal aid.

Advocates for curtailing the CCPI and PPII also argue that federal support for clean-coal technologies may be redundant because the private sector already has an incentive to invest in cost-effective technologies that enable coal users to meet existing environmental standards. In addition, many states with significant coal production have their own programs to promote clean-coal use. Also, where federal support is not redundant, they argue, it is likely to be of limited value—for example, because new power-generating technologies and structural changes in electricity markets favor investment in natural-gas-fired plants over coal-fired plants.

Opponents of eliminating support for clean-coal demonstration projects argue that the CCPI and PPII hasten the adoption of new technologies even if those technologies would have been developed anyway. With prices of other fossil fuels high relative to the price of coal, existing coal-burning facilities are likely to be used more intensively. Thus, the benefits from investing in clean-coal technologies sooner rather than later may be all the greater. Opponents of ending the two programs also note that their projects support multiple environmental and economic policy goals, including some not fully addressed by other federal programs—such as reducing emissions of greenhouse gases, supporting employment in regions that produce high-sulfur coal, and encouraging the export of clean-coal technologies to other countries. The Bush Administration supports the programs as furthering the goals of the President's National Energy Policy and several of the President's environmental initiatives, including Clear Skies, Global Climate Change, and Sequestration and Hydrogen Research (also known as FutureGen).

**270-11—Mandatory****Index the Fee for the Nuclear Waste Fund to Inflation**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+28	+58	+87	+114	+141	+428	+1,527

The Nuclear Waste Policy Act of 1982 authorized the Department of Energy (DOE) to build a long-term storage facility for high-level radioactive waste generated by civilian nuclear power plants and defense activities. Disposing of that waste (mainly spent uranium) safely requires isolating it for perpetuity at secure sites, far from population centers and commercially valuable property. In 1987, the Congress directed DOE to concentrate on the Yucca Mountain region of Nevada as the site for the waste disposal facility. About 90 percent of the waste to be stored there is expected to come from civilian nuclear power plants. To fund the disposal of their radioactive waste, those plants are required to pay a fee of 0.1 cent per kilowatt-hour of electricity they generate. Receipts from the fee are allocated to the federal Nuclear Waste Fund. At the end of fiscal year 2004, that fund held about \$16.3 billion; another \$6 billion had already been spent on site preparations and design.

This option would index the Nuclear Waste Fund fee to increase with inflation each year rather than remain fixed. That change would boost federal revenues by \$28 million in 2006 and \$428 million over the 2006-2010 period.

Storage at Yucca Mountain was originally set to begin in 1998, but DOE does not plan to start accepting radioactive waste before 2010. Final construction of the site awaits the establishment of safety standards by the Environmental Protection Agency and licensing by the Nuclear Regulatory Commission. With such delays, the nominal costs of construction and annual operations are increasing. Currently, the site is expected to cost a total of more than \$57 billion (in 2000 dollars)—nearly double the original estimate.

Proponents of this option note that the Nuclear Waste Fund fee has not changed since 1983 even though estimates of the cost of the storage project have continued to rise. In addition, the national threat of terrorism has in-

creased the importance of the project—and the value of expediting its completion, which would require additional funding. Terrorist groups have shown an interest in attacking nuclear power plants, and such attacks could involve setting fire to the spent uranium that is stored at the plants (generally not in secure facilities). Moreover, as currently designed, the Yucca Mountain facility would only be large enough to store the amount of spent material that civilian nuclear power plants are now holding—about 38 million tons. By 2010, the industry will have accumulated enough additional waste to require another storage area. Thus, continuing collections will be needed for a second, probably more expensive, facility.

An argument against this option is that electricity producers should not pay higher fees because the delays and other increased costs have resulted from poor government management of the project. Some opponents go further and say that waste producers should not have to continue paying anything, now that large uncertainties exist about whether the Yucca Mountain facility will ever be built. The project faces technical challenges involving the design of the storage casks and the geological integrity of the selected site (specifically, how impervious the caverns at Yucca Mountain would be to water seepage or earthquakes). The project is also facing opposition about the location of the storage facility: the site has become less remote since 1982 because of the rapid growth of nearby Las Vegas. Opponents also argue that storing spent nuclear material in many places around the United States may be safer than moving massive amounts of such material across the country to Yucca Mountain through densely populated areas and on critical bridges and tunnels. In their view, spending a smaller amount to improve the security of storage at power plants (using the amounts already collected for the Nuclear Waste Fund) would be more cost-effective than proceeding with the current plan.

**270-12—Mandatory****Reduce the Size of the Strategic Petroleum Reserve**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+525	+499	+484	+472	+476	+2,457	+2,457

270

The Strategic Petroleum Reserve (SPR)—a stock of government-owned crude oil stored at four underground sites along the Gulf of Mexico—is intended to help safeguard the United States against the threat of a severe disruption in oil supplies. The reserve currently holds about 675 million barrels of oil and is more than 90 percent full. The Department of Energy (DOE) can draw oil from the SPR at a maximum sustained rate of over 4 million barrels per day—or 25 percent of the oil processed by the nation’s refineries—for about 90 days (after that, the maximum draw rate declines). Over the history of the SPR, the government’s net investment has totaled about \$18 billion for oil and about \$4 billion for storage and transportation facilities. At a price of \$40 per barrel (the average cost of imported oil at the end of 2004), the oil in the SPR would be worth more than \$27 billion.

This option would require DOE to reduce the size and excess capacity of the SPR by closing the smallest storage site, Bayou Choctaw in Louisiana, and selling its 71 million barrels of oil. If the sale took place over five years to minimize the impact on world oil prices, the federal government would gain receipts of about \$525 million in 2006 and \$2.5 billion through 2010. (After that, once the Bayou Choctaw site was decommissioned, appropriations for operating the SPR could be reduced. Those discretionary savings are not included in the table above.)

Since the SPR was established in 1975, DOE has released oil from it in emergency circumstances on five occasions: more than 17 million barrels during the 1991 Gulf War to prop up the U.S. supply of oil, 1 million barrels in 2000 to aid Louisiana refineries after a dry-dock accident, nearly 3 million barrels later in 2000 to help establish a heating-oil reserve for the Northeast in anticipation of a frigid winter, 295,000 barrels in 2002 to help pipeline operators respond to a hurricane, and 5.4 million barrels after hurricanes in 2004. In addition, in 1996 and 1997, the Congress directed DOE to sell oil from the reserve to offset spending on the SPR and other programs.

Although DOE has not received new appropriations for oil purchases, it is continuing to add to the SPR in several ways. Royalties that private companies owe to the federal government for oil production on federal lands are being taken in kind, rather than in cash, and diverted to the reserve. (Almost 110 million barrels are expected to be diverted before that program’s scheduled end.) DOE has also entered into exchange agreements whereby oil companies that borrow government oil or use SPR facilities repay the government with oil. This option does not include any budgetary savings from avoiding government losses in those exchange programs.

Several arguments for reducing the SPR spring from changes in the reserve’s benefits and costs since 1975. Structural shifts in energy markets and the U.S. economy at large have lowered the potential costs of a disruption in oil supplies and consequently the potential benefits from releasing oil in a crisis. In particular, the increasing diversity of world oil supplies and the growing integration of the economies of oil-producing and oil-consuming nations have lessened the risk of a sustained, widespread disruption. In addition, costs to maintain the SPR are rising because many of the reserve’s facilities are aging and have required unanticipated spending for repairs. Moreover, there is doubt about the government’s ability to smooth oil prices through SPR purchases and releases. DOE’s experience with selling oil during the Gulf War and more recently indicates that the process of deciding to release oil and setting its price can add to market uncertainty.

An argument against lowering the current level of SPR reserves is that oil supplies from the Persian Gulf and other regions continue to be unstable. U.S. reliance on imported crude oil—particularly from the Middle East—is predicted to keep growing, so the benefits from programs such as the SPR that are intended to guard against supply disruptions may be growing as well. In addition, an assessment of federal programs by the Office of Management and Budget for the President’s 2005 budget rated the overall SPR program as effective.

## Natural Resources and Environment

**B**udget function 300 encompasses programs administered by the Department of the Interior, the Forest Service, and the Army Corps of Engineers, including programs that deal with land and water management, resource conservation, recreation, wildlife management, and mineral development. This function also includes funding for the National Oceanic and Atmospheric Administration, which oversees ocean and fisheries programs, and the Environmental Protection Agency, which administers the Superfund program, makes grants to states, and issues and enforces environmental regulations.

Discretionary funding for function 300 totals more than \$31 billion in 2005. Appropriations for programs in this function rose by 18 percent in 2001 but have since risen by an average of less than 2 percent per year. Most of the 2001 increase financed fire management on wild lands and new conservation initiatives, such as land acquisition, facilities maintenance, and grants to states and landowners. Mandatory spending in this function—for farm conservation, forest restoration, and recreation programs—is mostly offset by receipts from the sale of minerals, timber, and land; recreation fees; and other user charges. Those offsetting receipts totaled about \$4.7 billion in 2004.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	24.6	29.1	29.6	30.1	31.1	31.3	6.0	0.6
Outlays								
Discretionary	25.0	26.0	28.6	30.3	30.6	31.4	5.2	2.7
Mandatory	*	-0.3	0.8	-0.6	0.1	0.4	n.a.	n.a.
Total	25.0	25.6	29.5	29.7	30.7	31.9	5.3	3.7

Note: \* = between zero and \$50 million; n.a. = not applicable (because some years have negative values).

**300-01****Increase Fees for Permits Issued by the Army Corps of Engineers**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+12	+23	+24	+25	+26	+110	+255

Note: This fee could be classified as a discretionary offsetting collection or a mandatory offsetting receipt, depending on the specific language of the legislation establishing the fee.

300

The Army Corps of Engineers administers laws that pertain to the regulation of the nation's navigable waters. Section 10 of the Rivers and Harbors Act of 1890 requires the Corps to issue permits for work that would affect navigable waters or materials around those waters. In addition, section 404 of the Clean Water Act of 1977 requires the Corps to issue permits for dredging or placing fill material in navigable waters. In 2002, the Corps received about 85,000 permit applications. Currently, companies applying for commercial permits pay a fee of \$100, and people applying for private permits pay \$10. (Government applicants are not charged a fee.) That fee structure, which has not changed since 1977, falls far short of covering the costs of administering the program, particularly for applications that require detailed review.

This option would raise the fee for commercial permits issued under sections 10 and 404 by an amount sufficient to recover the costs associated with awarding those permits, perhaps more than doubling the fee. (The fee for private permits would not change.) That increase would generate \$12 million in additional receipts in 2006 and \$110 million over the 2006-2010 period. As a result, the Corps could fully recover its annual regulatory costs for those permits rather than recovering only about 5 percent of those costs, as it does now.

Section 404 has become the core of the nation's effort to protect wetlands. As legally interpreted, it applies to waters that would not conventionally seem "navigable," such as wetlands adjacent to navigable waters and possibly wetlands adjacent to nonnavigable tributaries of traditionally navigable waters. As a result, the Corps has regulatory jurisdiction over a large number of wetlands. (In the wake of a 2001 Supreme Court ruling, the extent of

that jurisdiction will ultimately be determined by federal agencies' interpretations of terms such as "adjacent" and "tributary" that withstand the scrutiny of the courts.) Moreover, as legally interpreted, "dredging" and "placing fill material" encompass virtually any activity in which dirt is moved, which means that a wide variety of actions require permits.

Under section 404, the Corps must evaluate each application and grant or deny a permit on the basis of expert opinion and statutory guidelines. Most applications are quickly approved through existing general or regional permits, which grant authority for many low-impact activities. Evaluation of applications not covered by existing permits may require the Corps to undertake detailed, lengthy, and costly reviews.

The principal rationale for imposing cost-of-service fees on commercial applicants is that the party pursuing a permit, not the taxpaying public, should bear the cost of the permit. According to that argument, taxpayers should not have to pay for something that advances a commercial interest whose benefits accrue to a comparative few.

An argument against higher fees is that permit seekers should not have to pay more for a process that might ultimately deny them the right to use their land as they wish. The goal of the section 404 program, for example, is to advance a public interest by protecting wetlands. Arguably, since the public benefits from wetlands protection (sometimes at the expense of property owners), it should bear the costs. Critics maintain that the regulatory process that property owners must deal with is already onerous, so raising permit fees would further infringe on property owners' rights.

RELATED OPTIONS: 300-02, 300-03, 400-02, 400-08, and 400-09

RELATED CBO PUBLICATION: *Regulatory Takings and Proposals for Change*, December 1998



**300-02****Impose Fees on Users of the Inland Waterway System**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+135	+265	+545	+559	+574	+2,078	+5,192

Note: This fee could be classified as a discretionary offsetting collection, a mandatory offsetting receipt, or a tax receipt, depending on the specific language of the legislation establishing the fee.

In 2002, the Army Corps of Engineers spent about \$800 million on the nation's system of inland waterways. About 40 percent of that spending was devoted to construction of new navigation channels, locks, and other infrastructure, and about 60 percent was used for the operation and maintenance (O&M) of existing infrastructure. Current law allows up to half of the Corps's new construction on inland waterways to be funded with revenues from the inland waterway fuel tax, a levy on the fuel consumed by the towboats that use most segments of the system.

This option would impose user fees that were high enough to fully recover the Corps's costs for both O&M and construction on inland waterways. Those fees—which could take the form of higher fuel taxes, charges for the use of locks, or fees based on the weight of shipments and the distance they travel—would generate receipts of \$135 million in 2006 and about \$2.1 billion over five years.

The principal rationale for this option is that it would increase economic efficiency. Imposing user fees based on the actual cost of the inland waterway system would en-

courage shippers to choose the most efficient routes and modes of transportation (road, rail, air, or water). In addition, more-efficient use of existing waterways could reduce the need for new construction to alleviate congestion. Further, user fees based on costs would send market signals that would help identify which additional construction projects would be likely to provide the greatest net benefits to the public.

The effects of user fees on efficiency would depend largely on whether the fees were set at the same rate for all segments of a waterway or were based on the cost of each segment. Because costs vary dramatically by segment, systemwide fees would offer weaker incentives for the efficient use of resources.

A drawback of this option is that higher user fees might slow economic development in some regions dependent on waterway commerce. The increase could be phased in to lessen those effects, but doing so would reduce receipts in the near term. Imposing higher user fees would also reduce the income of barge operators and shippers in some areas, although those losses would be small in the context of overall regional economies.

RELATED OPTIONS: 300-01, 300-03, 400-02, 400-08, and 400-09

RELATED CBO PUBLICATION: *Paying for Highways, Airways, and Waterways: How Can Users Be Charged?* May 1992

**300-03****Impose a New Harbor-Maintenance Fee**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+87	+177	+157	+135	+116	+672	+906

Note: This fee could be classified as a discretionary offsetting collection or a mandatory offsetting receipt, depending on the specific language of the legislation establishing the fee.

300

The Army Corps of Engineers spends an average of about \$625 million annually to operate and maintain commercial harbors nationwide, particularly to keep channels at adequate depths. Under the Water Resources Development Act of 1986, as amended, cargo entering U.S. ports—whether as domestic shipments or imports—is subject to a harbor-maintenance tax of 0.125 percent of its value. That tax, whose revenues are credited to the Harbor Maintenance Trust Fund, is intended to cover all of the Corps's operating and maintenance costs for ports and the St. Lawrence Seaway. The harbor-maintenance tax was initially levied on exports as well, but in 1998, the Supreme Court ruled that application of the tax unconstitutional.

This option would replace what remains of the harbor-maintenance tax with a new system of cost-based harbor fees that would cover all of the Corps's operating and maintenance costs for ports and the St. Lawrence Seaway. Under such a system, commercial users of U.S. ports would pay a fee based on port use rather than on cargo value. The fee would apply to imports, exports, and do-

mestic shipments, and the taxes currently levied on imports and domestic shipments would be rescinded. Those changes would generate net receipts of \$87 million in 2006 and \$672 million over the 2006-2010 period.

The main argument for a user fee is that the activities it would finance, such as dredging by the Corps of Engineers, provide a commercial service to identifiable beneficiaries. Modern and well-maintained ports save shippers money by allowing the use of larger vessels and by minimizing inland transport costs. Moreover, exporters currently make no payments directly associated with their use of port facilities.

A potential drawback of this option is that designing a cost-based fee could be complicated. The Corps's operating and maintenance costs differ from port to port as well as from one year to the next. Varying the fee between ports to reflect those cost differences, however, could alter how much business particular harbors received—increasing economic efficiency overall but reducing commerce and employment at some locations.

RELATED OPTIONS: 300-01, 300-02, 400-02, 400-08, and 400-09

**300-04—Discretionary****Eliminate Federal Funding for Beach-Replenishment Projects**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-94	-98	-100	-103	-105	-500	-1,063
Outlays	-33	-97	-100	-102	-104	-436	-995

The Army Corps of Engineers conducts various operations to counter beach erosion, typically by dredging sand from offshore locations and pumping it on shore to rebuild eroded areas. The Corps supplies part of the funding, and state and local governments pay the rest. Those operations have two primary goals: mitigating damage and enhancing recreation. Replenishment helps beaches act as barriers to waves and protect coastal property from severe weather. It also helps them continue to serve as recreational areas.

This option would end federal funding for beach-replenishment activities. Doing so would reduce discretionary outlays by \$33 million in 2006 and \$436 million through 2010.

Proponents of halting federal spending for beach replenishment argue that its benefits accrue largely to the states and localities in which the projects occur and that the cost should therefore be borne entirely at the state and local level, not by federal taxpayers. Furthermore, the ultimate effectiveness of replenishment efforts is question-

able. Beach erosion is an irreversible natural process, and replenishment projects serve only to temporarily delay the inevitable natural shifting of beaches. One alternative to beach-replenishment projects is to remove the various retention structures that sometimes exacerbate erosion by inhibiting the natural flow of sand along a beach.

Opponents of eliminating federal funding argue that beach replenishment not only benefits specific states and localities but also serves the interests of nonresident beachgoers. Moreover, replenishment projects can help ensure that coastal areas continue to generate economic activity through tourism. Opponents also contend that calling a halt to federal funding would be unfair because municipalities and owners may have invested in beach-front property with the expectation of continuing federal support. Finally, they argue that in some cases federal projects (such as those intended to keep coastal inlets open) contribute to beach erosion, so federal taxpayers should bear part of the cost of replenishment in those areas.

RELATED OPTIONS: 270-06, 400-06, 400-07, 450-01, 450-07, and Revenue Option 30

**300-05—Mandatory****Eliminate Subsidies When Renewing Water Service Contracts for Agricultural Users of the Central Valley Project**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+15	+30	+45	+60	+60	+210	+510

For more than a century, the federal government has helped finance and build water infrastructure to support irrigation, municipal and industrial water supplies, hydroelectric power generation, flood control, and recreational opportunities. Under reclamation law, agricultural, municipal, and industrial users of water, as well as users of hydropower produced from federal water projects, must make payments intended to recover some of the government's construction costs. Those payments may be amortized over a 40- or 50-year period. Agricultural users receive more-favorable payment terms than other users do because they are not responsible for interest costs that accrue during that period. In addition, the Bureau of Reclamation, which manages federal water projects, may decrease the repayment obligations of agricultural users on the basis of their ability to pay. (When that happens, the costs are shifted to users of hydropower.) In special circumstances, such as a drought, agricultural users may also be relieved of some or all of their repayment obligations through specific legislation.

A portion of agricultural users' outstanding obligation to the federal government is due to be repaid under "water service contracts," in which two types of charges related to a water project—one for capital costs and one for operation and maintenance costs—are combined into a single fee levied per acre-foot of water delivered. Those types of contracts are renewed on occasion. (Some agricultural water users repay their debt under "repayment contracts," which have different terms and are not renewed.)

Under this option, agricultural users who have water service contracts with the Central Valley Project in California would have to repay their outstanding capital obligation with interest (calculated from 1982 onward) if their contracts were renewed. Further, the Bureau of Reclamation would no longer be able to adjust repayment obligations under those contracts on the basis of users' ability to

pay. Those changes would increase federal receipts by \$15 million in 2006 and by \$210 million over five years. (The estimates shown here do not reflect projections by the Bureau of Reclamation that water use is likely to increase. Such increases would lead to higher receipts in the later years of the projection period.)

The Central Valley Project contracts have already been renegotiated (although not along the lines envisioned in this option), and almost all are expected to go into effect by April 2006. Thus, lawmakers would have to act quickly if they wished to adopt this option.

The principal rationale for this option is that it would promote efficient water use by bringing the wholesale prices charged to some agricultural users in line with those charged to municipal and industrial users, because everyone would have to pay the same interest costs. That situation would also be more equitable than the current arrangement. Further, this option would limit the extent to which hydropower users were compelled to assume some of the repayment obligations of agricultural users on the grounds of the latter's limited ability to pay.

A disadvantage of this option is that restructuring contracts would not necessarily contribute to efficient water use by individual irrigators in agricultural water districts that set their rates on a per-household or per-acre basis. Without per-unit water prices—and devices to measure and account for water use—individual irrigators cannot respond to price signals. In addition, this option would not eliminate all of the water subsidies to agricultural districts simultaneously because it would apply only to Central Valley Project water service contracts coming up for renewal. (Water service contracts associated with other federal projects are also coming up for renewal, and similar treatment could be considered for them.)

**300-06—Discretionary**

**Eliminate Money-Losing Timber Sales**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-130	-140	-140	-150	-150	-710	-1,550
Outlays	-130	-140	-140	-150	-150	-710	-1,550

The Forest Service manages federal timber sales from national forests. According to annual reports by the agency’s Forest Management Program, the Forest Service has spent more in recent years on the timber program than it has collected from companies that harvest the timber. In 2002, for example, when it sold roughly 1.6 billion board feet of public timber, expenses reported for the program exceeded receipts by about \$146 million.

This option would eliminate all future timber sales in four regions of the National Forest System—the Southwestern, Intermountain, Pacific Southwest, and Alaska regions—where expenditures were more than twice as high as receipts in 2002. Ending those sales would reduce the Forest Service’s net outlays by \$130 million in 2006 and \$710 million over the 2006-2010 period. The Forest Service does not maintain the necessary data to estimate the annual receipts and expenditures associated with indi-

vidual timber sales. Thus, it is hard to estimate precisely the budgetary savings from phasing out all timber sales in the National Forest System for which expenditures are likely to exceed receipts. This option focuses on the four regions listed previously to illustrate possible savings.

Arguments in favor of ending timber sales in regions where expenditures exceed receipts are that such sales may lead to excessive depletion of federal timber resources and to the destruction of roadless forests that have recreational value.

An argument against ending the sales is that they may help bring stability to communities dependent on federal timber for logging and related jobs. Timber sales also provide access to forested land—as a result of road construction—for fire protection and recreational uses.

RELATED OPTIONS: 300-07, 300-08, and 300-09

**300-07****Reauthorize Holding and Location Fees and Charge Royalties for Hardrock Mining on Federal Lands**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+5	+5	+5	+30	+30	+75	+225

Note: Holding and location fees could be classified as discretionary collections (as they are now) or as mandatory offsetting receipts, depending on the specific language of the legislation reauthorizing them. Royalties would be treated as offsetting receipts.

300

The General Mining Law of 1872, originally intended to encourage settlement of the American West, governs access to hardrock minerals—such as gold, silver, copper, and uranium—on public lands. Unlike producers of other minerals or of fossil fuels from public lands, miners do not pay royalties to the government on the value of hardrock minerals they extract. Instead, under the mining law, holders of more than 10 mining claims on public lands pay an annual holding fee of \$125 per claim. Holders also pay a one-time \$30 location fee when recording a claim. (Before September 2004, those fees were \$100 and \$25, respectively.) Authorization for the federal government to collect the holding and location fees expires in 2008.

The gross value of hardrock mineral production on public lands totals about \$600 million a year, according to current estimates (excluding claims for which patent applications are in process). That value has declined greatly in recent years because of patenting activity. In patenting, miners gain full title to public lands by paying a one-time fee of \$2.50 or \$5.00 per acre.

This option would reauthorize the current holding and location fees. It would also halt new patenting of public lands and impose an 8 percent royalty on all future production of hardrock minerals from those lands. The royalty would apply to net proceeds—defined as revenues from sales minus costs for mining, separation, transportation, and other items. Together, those changes would increase federal receipts by \$75 million over five years: \$50 million from reauthorization of holding and location fees

and \$25 million from royalty collections. (If the 8 percent royalty were applied to gross proceeds rather than net proceeds, it would raise more money and be less costly to administer.)

The Congressional Budget Office's estimates assume that the states in which mining takes place would receive 10 percent of the royalty receipts. The estimates also assume that there would be no surge in patenting activity before royalties were imposed; such a surge could boost immediate patenting receipts and diminish future royalties.

Supporters of this option—including many environmental advocates—argue that low holding fees and lack of royalties make mineral production less costly on federal lands than on private lands (where the payment of royalties is the rule). That difference, they contend, encourages overdevelopment of public lands, which may cause severe environmental damage. Changing that situation could promote other uses of those lands, such as recreation or wilderness conservation.

An argument against ending patenting and imposing royalties is that without free access to public resources, miners (especially small-scale miners) would limit their exploration for hardrock minerals in the United States. In addition, royalties could diminish the profitability of many mines, leading to scaled-back operations or closure and adverse economic consequences for mining communities in the West. Because the prices of many minerals are set in world markets, miners would be unable to pass their new royalty costs on to buyers.

RELATED OPTIONS: 300-06, 300-08, 300-09; and Revenue Option 28

RELATED CBO PUBLICATION: *Reforming the Federal Royalty Program for Oil and Gas*, November 2000

**300-08****Use State Formulas to Set Grazing Fees for Federal Lands**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+5	+16	+19	+22	+23	+85	+160

Note: This fee could be classified as a discretionary offsetting collection or a mandatory offsetting receipt, depending on the specific language of the legislation establishing the fee.

The federal government owns and manages more than 670 million acres of public lands, which have many uses, including to provide grazing for privately owned livestock. The Forest Service and the Bureau of Land Management administer grazing on some 145 million acres of public lands, largely in the West. Ranchers are authorized to use that acreage for almost 20 million animal unit months (AUMs)—a standard measure that reflects the amount of forage needed by a cow and calf for a month. As of March 1, cattle owners who graze their animals on federal lands in the West will have to pay the government a fee of \$1.79 per AUM, but that fee may not give the public a fair return.

This option would set grazing fees for federal lands in each state in the same way that the state determines such fees on state-owned lands. If the federal government implemented this option over 10 years as existing grazing permits expired, the fee would rise almost sixfold, on average. That increase would boost federal receipts by \$5 million in 2006 and by a total of \$85 million through 2010. (Under current law, the governments of states and counties in which grazing takes place receive a portion of the federal fees. The estimates shown here are net of additional payments to states and counties, which would total roughly \$30 million over the 2006-2010 period. The estimates do not include any additional appropriations for range improvements that could result from the added receipts. However, they do incorporate an assumption about the extent to which an increase in fees might cause ranchers to reduce their use of AUMs.)

The current formula for federal grazing fees was established in the Public Rangelands Improvement Act of 1978. The formula uses a 1966 base value of \$1.23 per AUM and adjusts it to account for changes in the market for beef cattle as well as in the markets for feed, fuel, and

other production inputs. Over the years, the Congress has considered various proposals to increase grazing fees.

The principal justification for an increase is that the current formula appears to result in fees that are well below market rates and also below the federal costs of administering the grazing program. For example, in 1990, the appraised value of public rangelands in six Western states varied between \$5 and \$10 per AUM, far above the \$1.81 fee charged that year. Likewise, a 1993 study indicated that the Forest Service and the Bureau of Land Management spent \$4.60 per AUM to manage rangelands for grazing, although the fee that year was \$1.86 per AUM. Critics charge that such low fees subsidize ranching and contribute to overgrazing and deteriorating range conditions.

A rationale for using state formulas to set federal fees is that such an approach rejects the uniform nature of the current formula and instead follows decisions made at the state level. Grazing fees and methods for calculating them vary widely from state to state and sometimes even within a state. States' interest in the revenue received from both state and federal fees would lessen any incentive to manipulate state fees to lower federal fees.

An argument against this option is that state rangelands may be more valuable than federal lands for grazing purposes. Therefore, some formulas that states use to set fees might not reflect those differences in quality and conditions of use if applied to federal lands. In addition, using different procedures to set federal grazing fees in each state would result in higher administrative costs than those incurred under the current uniform federal formula. (The estimates for this option do not take into account possible differences in administrative costs.)

**300-09—Mandatory****Open the Coastal Plain of the Arctic National Wildlife Refuge to Leasing**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	0	+2,000	+1	+500	+2,501	+2,575

The Arctic National Wildlife Refuge (ANWR) consists of 19 million acres in northeastern Alaska, 1.5 million of which are coastal plain. That plain appears to have the most promising oil-production potential of any unexplored onshore area in the United States. It is also the least disturbed coastal region in the Arctic and is valued for species conservation and used by indigenous people to support their daily lives.

ANWR was established to conserve fish and wildlife habitats, fulfill international treaty obligations related to wildlife and habitat protection, provide opportunities for indigenous people to continue their traditional lifestyles, and protect water quality. The Alaska National Interest Lands Conservation Act of 1980, which set up the reserve, prohibits industrial activity on ANWR's coastal plain unless specifically authorized by the Congress.

This option would open ANWR's coastal plain to the production of oil and natural gas. (The President's budget for 2006 includes such a proposal.) The federal government would receive proceeds first from auctioning leases for oil and gas development rights and then, once production began, from royalties. If lease sales were held in 2008 and 2010, this option would generate receipts of about \$5 billion over the 2006-2010 period, the Congressional Budget Office estimates. As in some legislative

proposals, half of those receipts would go to the State of Alaska, leaving net federal receipts of \$2.5 billion over the 2006-2010 period. That estimate is based on information from the State of Alaska, the Energy Information Administration, and other sources. It also relies on estimates by the Department of the Interior of the amount of oil that might be produced from ANWR's coastal plain.

Proponents of this option highlight the national security advantages of reducing U.S. dependence on imported oil. They argue that most of ANWR would remain closed to development and that the part of the coastal plain that would be directly affected by oil drilling and production represents less than 1 percent of the entire refuge area. Moreover, they maintain, technological changes have improved the ability of the oil and gas industries to safeguard the environment.

Opponents of this option argue that whatever the still-uncertain gain from oil production in ANWR, extracting a nonrenewable resource for a relatively short time will not provide lasting energy security. In addition, they say, ANWR's coastal plain is a crucial area for the biological productivity of the refuge, and industrial activity there would pose a threat to wildlife and the environment, despite efforts to mitigate its impact. Moreover, such activity could affect international treaty obligations.

RELATED OPTIONS: 300-06, 300-07, and 300-08



**300-10—Mandatory****Scale Back the Department of Agriculture's Conservation Security Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays							
From prohibiting new enrollments	-58	-183	-314	-406	-461	-1,419	-4,065
From eliminating bonus payments	0	-67	-167	-254	-310	-797	-2,611

The Conservation Security Program (CSP), first authorized in the Farm Security and Rural Investment Act of 2002, gives agricultural producers financial and technical help to promote the conservation and improvement of soil, water, air, energy, and plant and animal life on lands used for production. (By contrast, the Conservation Reserve Program, which is the subject of option 300-11, encourages conservation by taking land out of agricultural production.) Under the CSP, producers enroll in five-year to 15-year contracts in which they agree to undertake various conservation measures in exchange for annual payments. For each acre enrolled in the program, producers receive a base payment equal to a certain percentage of their county's prevailing rental rate for similar land. In addition, they may receive a bonus payment for undertaking further conservation measures. Together, those payments may exceed the cost of implementing the required conservation measures.

Implementation of the CSP has been hampered by uncertainty about how to administer the program's vaguely specified provisions. The Department of Agriculture recently announced a limited CSP focusing on selected watersheds as an attempt to control potential costs and begin enrollment. Various laws in the past few years have limited program spending to \$41.4 million in 2004, \$202 million in 2005, and \$6.0 billion over the 2005-2014 period.

This option would curtail the Conservation Security Program in one of two ways: by prohibiting new enrollments or by allowing additional enrollments but eliminating bonus payments starting in 2006. (The President's 2006 budget contains a similar proposal.) The first change would reduce spending by the department's Commodity Credit Corporation (CCC) by \$58 million in 2006 and

\$1.4 billion over five years. The second change would not affect CCC spending in 2006 but would save \$797 million through 2010. (Both approaches assume that the \$6.0 billion cap would be reduced by the total amount of the savings.) Neither of those changes would affect the terms of existing contracts. Even with no additional enrollments, contracts begun during 2004 (the first year they were initiated) will cost a total of nearly \$900 million over the next 10 years, the Congressional Budget Office estimates.

An argument for scaling back the CSP is that it is one of a number of entitlement programs that provide subsidies to agriculture. Moreover, certain provisions of the program cast doubt on its likely effectiveness. Making payments to producers who have already adopted conservation practices does not add to the nation's conservation efforts. And making payments that exceed producers' costs to adopt and maintain conservation measures can be seen as a wasteful use of federal funds. In addition, the criteria used to determine CSP bonus payments are not readily apparent, which may make the program subject to misunderstanding on the part of participants.

Supporters see the Conservation Security Program as a better way to support agriculture—through a form of “green payment”—than the traditional programs of crop-based subsidies. When fully implemented, the CSP could foster the adoption of more conservation practices to protect the nation's natural and productive resources. Such practices often require significant up-front costs to undertake and can reduce the economic output of land; CSP payments may offset those costs. Further, since CSP base payments are restricted by legislation, unrestricted bonus payments may be useful to encourage participation in the program.

**300-11—Mandatory****Limit Future Enrollment of Land in the Department of Agriculture's Conservation Reserve Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays							
From returning to the 36.4-million-acre limit	-14	-119	-186	-195	-180	-694	-1,460
From prohibiting new enrollments	0	-122	-193	-284	-618	-1,216	-3,825
From prohibiting reenrollments	0	-122	-193	-1,467	-1,661	-3,442	-12,451

The Conservation Reserve Program (CRP) is intended to promote soil conservation, improve water quality, and provide wildlife habitat by removing land from active agricultural production. Landowners offer to sign contracts with the Department of Agriculture to keep land out of production, usually for 10 to 15 years, in exchange for annual rent payments and for cost-sharing assistance in establishing appropriate conservation practices on the enrolled land. Not all contract offers are accepted, however; acceptance is based on an evaluation of the costs and potential environmental benefits of a landowner's plan. The CRP is funded by the Department of Agriculture's Commodity Credit Corporation at about \$2.0 billion to \$2.5 billion per year.

Currently, some 36 million acres are enrolled in the CRP. Total enrollment is capped at 39.2 million acres under the 2002 Farm Security and Rural Investment Act—up from 36.4 million acres under the 1996 Federal Agriculture Improvement and Reform Act. The Congressional Budget Office estimates that enrollment in the program will reach 39.184 million acres by 2015.

This option would limit the scope of the Conservation Reserve Program in one of three ways. Restricting future enrollment to 36.4 million acres (as under the 1996 farm law) would reduce outlays by \$14 million in 2006 and \$694 million over the 2006-2010 period. Prohibiting new enrollments beginning in 2006, but allowing current participants to reenroll when their contracts expire, would reduce spending by \$1.2 billion through 2010. Prohibiting any new enrollments (including reenrollments) beginning in 2006 would lower spending by \$3.4 billion through 2010.

Under the second and third approaches, the amount of land enrolled in the CRP would drop significantly. Current contracts covering about 16 million acres will expire in 2007. Contracts for another 6 million acres are set to expire in 2008. By 2015, acreage in the CRP would total 27.4 million if reenrollment was permitted and 5.2 million if it was not.

Although there is widespread agreement about the need to take at least some environmentally sensitive land out of production, some supporters of scaling back the CRP see the program as expensive and poorly focused. They argue that the CRP's funding could be put to other uses that would provide greater environmental benefits. Other supporters of limiting the program worry that retiring large amounts of cropland in a given area can dampen economic activity (for example, by reducing the demand for seed, fertilizer, and other farm supplies), thus hurting rural communities.

Opponents of scaling back the CRP note that the program helps landowners because its payments are often larger and more certain than profits from continued agricultural production. Conservationists and environmentalists particularly support the Department of Agriculture's plan to accept the most environmentally sensitive land in future enrollments. That plan involves special provisions for enrolling land devoted to the most effective conservation practices, such as the use of filter strips, grass waterways, and riparian buffers. Studies have indicated that those and several other practices yield high returns—in enhanced wildlife habitat, improved water quality, and reduced soil erosion—for every dollar spent on them.

**300-12—Discretionary****Eliminate the National Park Service’s Local Funding for Heritage Area Grants and Statutory Aid**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-26	-26	-27	-27	-28	-134	-280
Outlays	-26	-26	-27	-27	-28	-134	-280

The National Park Service runs two programs, National Heritage Area (NHA) grants and Statutory Aid, that assist local efforts to establish, preserve, or operate areas of natural, historical, cultural, or recreational importance. Locations that have been designated National Heritage Areas by the Congress are eligible for grants under the first program. Under the second, each individual allocation of statutory aid must be given a specific authorization. Sites that receive support from either program are operated or managed not by the National Park Service but by state or local agencies, nonprofit groups, or private partnerships. As of 2004, 24 sites had been designated National Heritage Areas and had received grants, and another 21 sites had received statutory aid. In its budget for 2006, the Administration proposes eliminating funding for the Statutory Aid program and cutting funding for the NHA grant program by about two-thirds.

This option would eliminate funding for both NHA grants and Statutory Aid. Ending those programs would reduce discretionary outlays by \$26 million in 2006 and \$134 million between 2006 and 2010.

NHA grants are intended to serve as “seed money” to help the organizations that receive them become self-sustaining by setting up partnerships with state and local governments, nonprofit groups, and businesses to fund ongoing operations. Those grants are limited to no more than \$1 million annually for up to 15 years (with a total cap of \$10 million) for areas designated since 1996. Heritage areas may receive other federal funding as well (primarily from the Department of Transportation for road and infrastructure improvements). By statute, half of their funding must come from nonfederal sources. The Statutory Aid program provides financial assistance on an as-needed basis to local establishment, preservation, and operation efforts. Both programs are intended to allow the National Park Service to extend its mission of preserv-

ing nationally significant natural and historical resources without acquiring and managing those resources itself.

The Government Accountability Office (GAO) has criticized the National Park Service for its administration of the NHA grant program. According to GAO, the Park Service lacks systematic processes for identifying potentially qualified NHA sites and recommending them to the Congress for approval; it has not established “results-oriented performance goals and measures” in its oversight of heritage areas; and it has failed to track federal funding or determine the appropriateness of expenditures for the program. (However, the Park Service maintains that it has not been funded to carry out those latter tasks.) GAO also contends that the “sunset” provisions (dates for grant aid to end) included in the NHA program have been ineffective. Since the first area was designated in 1984, five areas have reached their original sunset dates. However, all have had those dates extended by the Congress and have continued to receive funding under the originally enacted authorization levels.

One argument for eliminating the NHA grant program is that the local groups receiving grants have failed to become self-sufficient, as evidenced by the continued funding of heritage areas past their sunset dates. Moreover, the efforts funded by that program and the Statutory Aid program are—in the words of the Park Service itself—“secondary to the primary mission of the National Park Service.”

An argument against eliminating the programs is that public interest in creating new heritage areas is growing. GAO notes that the number of bills introduced in the Congress to study or designate new heritage areas has risen considerably in recent years. At least 30 such bills were submitted in the previous Congress. In addition, both programs are said to protect important resources.

**300-13—Discretionary****Eliminate Federal Grants for Wastewater and Drinking Water Infrastructure**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-950	-1,447	-2,456	-2,501	-2,545	-9,899	-23,332
Outlays	-47	-215	-625	-1,212	-1,816	-3,915	-16,005

Two major laws administered by the Environmental Protection Agency (EPA)—the Clean Water Act (CWA) and the Safe Drinking Water Act (SDWA)—seek to protect the quality of the nation's waters and the safety of its drinking water supply by requiring municipal wastewater and drinking water systems to meet certain performance standards. Both laws provide for grants to capitalize state-level revolving funds. States use the revolving funds to offer various forms of assistance (such as market-rate and subsidized loans, loan or bond guarantees, and bond purchases) to communities to help them build or replace systems to meet the federal standards. For 2005, EPA received total appropriations of about \$2.3 billion for water infrastructure grants, including \$1.1 billion for the clean water funds, \$0.8 billion for the drinking water funds, and \$0.4 billion for targeted grants to specific wastewater systems.

This option would phase out all of EPA's grant funding for wastewater and drinking water facilities over a transition period of three years. Doing that would reduce federal outlays by \$47 million in 2006 and \$3.9 billion through 2010.

Amendments to the CWA in 1987 phased out the previous program of direct grants for construction of wastewater treatment facilities and replaced it with the program of state revolving funds (known as SRFs). Under that program, states contribute matching funds of 20 cents per federal dollar and operate their SRFs within broad limits, defining eligible projects (which may focus not only on treatment facilities but also on sewer pipes, control of urban and agricultural runoff, and other water-quality efforts), choosing the terms of the assistance, and setting priorities. In 2003, 67 percent of the loans made by SRFs—representing 20 percent of the total funding—went to communities with populations under 10,000. Authorization for the SRF program under the Clean Water Act has expired, but the Congress continues to

provide annual appropriations for grants, distributing them according to the state shares specified in the 1987 amendments.

Amendments to the SDWA in 1996 authorized EPA to make grants to capitalize state revolving loan funds for drinking water systems. Although generally modeled on the CWA's wastewater program, the drinking water program allocates federal funding according to a formula based on needs identified in a quadrennial EPA survey. In turn, states are required to establish a priority-setting system that focuses on the most serious health risks, compliance with SDWA quality standards, and financial need.

One justification for eliminating federal grants to water-related SRFs is that such grants may encourage inefficient decisions about water infrastructure by allowing states to lend money at below-market interest rates, which in turn could reduce incentives for local governments to find less costly ways to control water pollution and provide safe drinking water. Another rationale is that federal contributions to wastewater SRFs were originally viewed as a temporary step on the way to full state and local financing. Moreover, those contributions may not be increasing total investment in water systems if they are merely replacing funding that state and local sources would have provided otherwise. In addition, assessments of the grant programs by the Office of Management and Budget concluded that the programs' effectiveness had not been demonstrated.

Opponents of such cuts argue that the need for investments to replace aging infrastructure, reduce health threats in drinking water (such as from cryptosporidium), and protect the nation's waters (from sewer overflows, for example) is so large that federal aid should be increased, not reduced. Without external assistance, they say, water systems in many small or economically disadvantaged communities will be unable to maintain the quality of

their service and comply with the CWA's and SDWA's new and forthcoming requirements. States, they contend, cannot supply all of the necessary funding. Opponents also argue that eliminating the federal grants would force

even many large systems—which tend to have lower costs because of economies of scale—to charge rates that would pose significant hardships for low- and moderate-income households.

RELATED OPTION: 450-02

RELATED CBO PUBLICATIONS: *Future Investment in Drinking Water and Wastewater Infrastructure*, November 2002; and *The Economic Effects of Federal Spending on Infrastructure and Other Investments*, June 1998

**300-14—Discretionary****Eliminate the Environmental Protection Agency's Energy Star Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-75	-76	-78	-80	-82	-391	-835
Outlays	-63	-75	-78	-80	-82	-378	-819

Energy Star is a product-labeling and certification program run by the Environmental Protection Agency (EPA). Its goal is to help consumers and organizations save energy and reduce emissions of greenhouse gases by choosing products or management practices that are energy efficient or that rely on clean forms of energy. EPA allows businesses, institutions, and local governments that meet certain guidelines for energy efficiency in their products or management practices to use the Energy Star label in their marketing. The types of products that EPA has certified include lighting fixtures, home appliances, office equipment, home construction materials, and new houses. EPA also disseminates information on sellers of labeled products and offers program participants some technical assistance in implementing changes that increase energy efficiency. Energy Star is one of several climate-protection partnerships in which EPA works to disseminate information on energy-efficient technologies and clean forms of energy.

This option would cease to make appropriations for the Energy Star program. Ending such appropriations would save \$63 million in outlays in 2006 and \$378 million over the 2006-2010 period.

Advocates of eliminating the program question whether it yields any actual energy savings and, if so, whether those savings reduce greenhouse-gas emissions. Putting an Energy Star label on products that already meet federal efficiency standards for appliances and buildings may produce few gains, especially since the labels provide little information that would help inform consumers' choices. In particular, they do not clarify the potential savings of a product relative to competing products. Furthermore, encouraging consumers to buy an electric appliance with an Energy Star label rather than a less-efficient gas appliance could actually increase greenhouse-gas emissions because coal-fired electricity-generating plants produce a large amount of carbon dioxide (a greenhouse gas).

Opponents of eliminating the Energy Star program argue that the energy savings and related reductions in greenhouse-gas emissions that it produces can be significant. They also maintain that EPA is addressing existing failures in the marketplace, because without the labels and EPA's public education efforts, consumers would not see the full social benefits of using energy-saving products. Insufficient consumer interest in energy efficiency may compound industry's reluctance to invest in uncertain new technologies.

RELATED OPTIONS: 270-02 and 270-04

**300-15—Discretionary****Eliminate the Environmental Protection Agency's Science to Achieve Results Grant Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-90	-92	-94	-97	-99	-472	-1,007
Outlays	-76	-90	-94	-96	-99	-455	-987

Through its Science to Achieve Results (STAR) program, the Environmental Protection Agency (EPA) funds scientific and engineering research relevant to its mission that it lacks the resources to perform internally. Created in 1995, STAR is a competitive, peer-reviewed grant program that accounts for 15 percent to 20 percent of the research budget for EPA's Office of Research and Development, which manages the program. In 2004, the program received \$86 million in appropriations. (The level of 2005 appropriations has not yet been finalized by EPA.)

This option would eliminate the STAR program, saving \$76 million in outlays in 2006 and \$455 million over five years.

STAR provides grants—typically of about \$500,000 annually for several years—to leading scientists in the academic and nonprofit research communities. It also funds fellowships for graduate work in environmental sciences, with the aim of strengthening the nation's foundation in that field and attracting a continuing supply of new researchers. Requests for applications for the program are written with the help of EPA staff members who expect to be the primary users of the research. According to an independent report by the National Research Council (NRC), those requests are subjected to an "extensive" internal review before they are issued, which seeks to ensure that they are directed toward the "issues most important to EPA" and are consistent with the agency's strategic plans. Applications submitted in response to the requests undergo a "rigorous" peer-review process, according to the NRC, that is designed to prevent conflicts of interest between proposal review and project oversight. Historically, about 10 percent of fellowship applications and slightly less than 15 percent of grant applications have been funded.

Advocates of canceling the STAR program point to several criticisms contained in an assessment that the Office of Management and Budget conducted for the President's 2005 budget. That assessment concluded that STAR's research in water quality, land use, and wildlife is similar to research conducted by other federal agencies; that the program's coordination with other EPA offices and other agencies is inadequate to ensure that the agencies have access to research findings; that the program has not shown "adequate progress toward achieving long-term goals"; and that the NRC's evaluation of STAR, which was intended to improve program management, was "insufficient in scope" and failed to address the effectiveness and policy relevance of the funded research. Although the NRC's evaluation was generally laudatory, it concluded that EPA makes insufficient use of outside experts in planning STAR's research agenda and that substantial delays often occur between the completion of STAR-funded research and the use of that research in related EPA rule-making.

Opponents of eliminating STAR cite the NRC's positive evaluation of the importance and intrinsic value of the research funded by the program. That evaluation stated that STAR's size relative to the Office of Research and Development's total research budget is a "reasonable recognition of the value of independent, peer-reviewed research to the agency"; that the program has "established and maintains a high degree of scientific excellence"; and that it helps satisfy EPA's requirement for a "strong and balanced" research program. Moreover, the NRC concluded that the STAR program supports research that is not conducted or funded by other government agencies—particularly research related to ecology, airborne particulates, and pollution prevention—and thus expands the nation's scientific foundations in the areas of human health and the environment.





## Agriculture

**B**udget function 350 includes programs that support farm income, promote agricultural research, and enhance marketing opportunities for farmers. Almost all of the activities in this function are administered by the Department of Agriculture. Mandatory programs, which account for most of the spending in function 350, include revenue-support programs for producers of major crops (such as corn, wheat, soybeans, and cotton), crop insurance, and farm credit programs. Discretionary programs include agricultural research and extension, economic analysis and statistics collection, inspection of plants and livestock, agricultural marketing, and some international food aid. The Congressional Budget Office estimates that outlays for function 350 will total \$30.8 billion in 2005, about double the 2004 total and the highest level since 2000.

Farm revenue-support programs, which extend through 2007 under the Farm Security and Rural Investment Act of 2002, account for most of the mandatory spending in function 350. Although the 2002 farm law provided for higher levels of income support for farmers, spending for those programs declined from \$30.5 billion in 2000 to about \$8.8 billion in 2004 because of higher crop prices. But declining prices this year will push spending for those programs up sharply—to an estimated \$22.0 billion. In addition, the higher subsidy levels authorized in the Agricultural Risk Protection Act of 2000 increased spending for the crop insurance program from \$2.3 billion in 2000 to about \$3.2 billion in 2004.

**Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)**

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	4.6	5.0	5.6	6.2	5.8	5.7	6.2	-2.2
Outlays								
Discretionary	4.5	5.0	5.2	5.6	5.8	5.9	6.2	2.0
Mandatory	<u>31.9</u>	<u>21.3</u>	<u>16.8</u>	<u>16.9</u>	<u>9.7</u>	<u>25.0</u>	-25.8	157.9
Total	36.5	26.3	22.0	22.5	15.4	30.8	-19.3	99.8

**350-01—Mandatory****Eliminate the Research Initiative for Future Agriculture and Food Systems**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-300	-200	-200	-200	-200	-1,100	-2,100
Outlays	-45	-135	-190	-220	-200	-790	-1,790

The Initiative for Future Agriculture and Food Systems is a competitive grant program designed to support research, extension, and education activities in new priority areas for U.S. agriculture. The program funds work on food genomics, food safety, human nutrition, alternative uses for agricultural commodities, biotechnology, and “precision farming” (precise monitoring and control of livestock as well as crop- or forest-management practices that focus on a specific area rather than an entire field or forest). The Agricultural Research, Extension, and Education Reform Act of 1998 created the initiative and provided mandatory funding for it. The program was reauthorized in the Farm Security and Rural Investment Act of 2002 and was mandated to receive rising annual appropriations—\$120 million for 2004, growing to \$200 million for 2007 and later years.

This option would eliminate the Initiative for Future Agriculture and Food Systems, reducing mandatory outlays by \$45 million in 2006 and by \$790 million through 2010. (The President’s 2006 budget contains a similar proposal.)

One argument for ending the program is that federal funding for agricultural research may be merely replacing private funding and thus not filling a vital national need. In addition, for all but two years of the program’s existence, the Congress has chosen to block its mandatory funding in the appropriation process and divert the budgetary savings to other purposes. Hence, if such research needs federal support, it may be able to receive that support through discretionary funding (which is subject to annual Congressional review) rather than mandatory funding. That is the approach used for another \$2 billion or so of agricultural research funding elsewhere in the Department of Agriculture’s budget.

The main rationale for keeping the initiative is that various factors—such as competition from foreign producers, increased attention to food-safety issues, and the growing pace of technological change in agriculture—have increased the need for research funding beyond what is available through traditional discretionary programs. More generally, the program may be necessary to improve agricultural productivity, environmental quality, and farm income.

**350-02—Mandatory****Impose New Limits on Payments to Producers of Certain Agricultural Commodities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-97	-362	-267	-267	-240	-1,234	-2,206

The government supports producers of various farm commodities—including wheat, feed grains, cotton, rice, oilseeds, and peanuts—in three main ways. First, producers can receive direct payments based on their historical production. Those payments are not affected by market prices. Second, producers may be entitled to additional payments, known as countercyclical payments, that depend on market prices. Third, they can receive benefits from the marketing-assistance loan program, which essentially guarantees them a minimum price for their crop. Under that program, producers take out loans at harvest whose value is tied to the minimum price, using the crops from that harvest as collateral. If the market price falls short of the loan value in subsequent months, producers receive “marketing-assistance loan benefits” that amount to forgiveness of part of the loan. Payments—which are made by the Department of Agriculture’s Commodity Credit Corporation (CCC)—are based on a specified amount per unit of eligible production (bushel or pound) on the farm. Hence, larger farms earn larger payments. Also, as a general rule, the higher the average market price, the lower are total farm program payments.

Since 1970, the amount that a producer can collect under those programs has been subject to a dollar limit. Currently, those limits are \$40,000 for direct payments, \$65,000 for countercyclical payments, and \$75,000 for marketing-assistance loan benefits. However, the limits are “per person,” with “person” defined to include individuals, corporations, and other legal entities. An individual producer may qualify for payments through up to three different farming entities, with the effect of receiving twice the nominal limits. For example, the producer could receive \$40,000 in direct payments as an individual and \$20,000 (up to a 50 percent share) in direct payments as an owner from each of two separate corporations producing agricultural commodities, for a total of \$80,000 in direct payments.

This option would cut the current payment limits in half for two of those programs—to \$20,000 per person for direct payments and \$32,500 per person for countercyclical payments—while retaining the three-entity rule. It would leave the cap on marketing-assistance loan benefits at \$75,000 per person but would modify the program to include generic certificates and loan-forfeiture gains as part of that cap.<sup>1</sup> Savings in CCC payments would total \$97 million in 2006 and \$1.2 billion over five years. Most of the savings would come from reducing the limit on direct payments; savings in the other types of payments would be smaller because of the higher payment limits. (The President’s 2006 budget contains a proposal similar to this option.)

Policy positions about payment limits, both pro and con, are heavily influenced by perceptions of fairness. Advocates of lowering the limits generally view the purpose of farm support programs to be keeping smaller, family farms in business, particularly those that are struggling financially. Payment limits are intended both to reduce overall federal spending on farm programs and to promote greater equity in the distribution of program benefits. Lower limits would not directly increase payments to small producers, but they would reduce the budgetary costs of the programs and the proportion of total payments going to large farms. Thus, supporters maintain, lower limits could help small farms indirectly, slowing the rate at which such farms are lost by reducing larger farmers’ incentives to buy them to expand operations.

1. Generic-certificate gains are an alternative means of settling marketing-assistance loans whenever the market price is less than the loan rate. Although the final result is similar in value to marketing-assistance loan benefits, certificate gains do not count as cash payments for purposes of payment limits. Loan-forfeiture gains are the additional income that producers may derive, when the market price falls below the loan rate, from forfeiting their marketing-assistance loan (keeping the loan proceeds but turning over their collateral crop to the Department of Agriculture) rather than repaying the loan.

Opponents of this option argue that the farm programs are not intended or well suited to provide a more equal distribution of income among farm households. They also contend that payment limits undermine the competitiveness of U.S. agriculture in global markets. Some producer organizations have called for eliminating the limits altogether, saying that tighter restrictions on program benefits hurt the larger, more-efficient farming operations that are better able to take advantage of economies of scale in production. Payment limits also introduce disparities between commodities and regions of the country. Most of the savings from reducing payment limits would

come from producers of cotton and rice (who are concentrated in the southern and western United States) because those crops have a relatively high value of program benefits per acre. A more proportional distribution of payments among farmers would require a significant change in the criteria for making program payments.

The August 2003 final report of the Commission on the Application of Payment Limits for Agriculture (which was established by the 2002 farm law) proposed that any major change in payment limits be delayed until debate over the next farm bill in 2007.

RELATED OPTION: 350-03

**350-03—Mandatory****Reduce Payment Acreage by One Percentage Point**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-31	-107	-103	-107	-104	-452	-941

Direct and countercyclical payments to agricultural producers (described in option 350-02) are expected to make up around 70 percent of the Commodity Credit Corporation's (CCC's) total spending for program commodities—wheat, feed grains, oilseeds, cotton, rice, and peanuts—over the next 10 years. Those payments are calculated as 85 percent of a producer's base acreage times an assumed yield per acre times a payment rate per unit of production (bushel, pound, or hundredweight). In general, a farm's base acreage for each participating crop is calculated as the average number of acres planted with that crop between 1998 and 2001. Direct and countercyclical payments are made regardless of what is actually produced on the farm now; hence, those payments tend not to distort people's decisions about production. Program participants may also receive benefits for those commodities through marketing-assistance loans, which are paid according to actual production on a farm.

This option would reduce the eligible payment acreage for direct and countercyclical payments by 1 percentage point—from 85 to 84 percent. That change would lower the CCC's outlays for farm programs by \$31 million in 2006 and \$452 million over the 2006-2010 period.

Producers of commodities that are not covered by direct and countercyclical payments—such as wool, mohair, dry peas, lentils, small chickpeas, dairy products, and sugar—receive federal benefits primarily through marketing-loan gains, loan-deficiency payments, purchases, or marketing quotas. The 1990 law that established the 85 percent

limit on payment acreage reduced program benefits for those other commodities (through loan origination fees or assessments) in an effort to distribute benefit cuts fairly. The payment-reduction provisions for those commodities were not reauthorized in the 1996 or 2002 farm laws, however, in part because they proved too difficult to administer. Reducing program benefits for those other commodities proportionately to the reductions in this option would lower CCC spending by an additional \$4 million in 2006 and \$22 million over the 2006-2010 period.

The primary advantage of reducing payment acreage is that it would yield significant savings with a relatively small adjustment in program provisions. The spending cuts would affect all program participants in proportion to their expected payments instead of disproportionately affecting producers of any particular commodity. In contrast, spending reductions from changes in payment limits (the subject of option 350-02) would tend to have a particularly large impact on producers of cotton and rice.

The main disadvantage of this option is that it would focus cuts in commodity programs on the least market-distorting payments (direct and countercyclical payments) rather than on marketing-loan benefits. In addition, although reducing payment acreage would be relatively straightforward, achieving proportionate reductions in spending for other commodities would be more complicated.

**350-04—Mandatory****Eliminate the Foreign Market Development Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-24	-31	-35	-35	-35	-160	-335

The Department of Agriculture's Foreign Agricultural Service (FAS) runs various programs to promote exports of U.S. agricultural products and provide food aid and technical assistance to other countries. In the Foreign Market Development Program, FAS acts as a partner in joint ventures with "cooperators," such as agricultural trade associations and commodity groups, to develop markets for U.S. exports. The program, also known as the Cooperator Program, typically promotes generic products and basic commodities, such as grains and oilseeds, although it also covers some higher-value products, such as meat and poultry.

This option would eliminate funding for the Foreign Market Development Program, reducing mandatory outlays by \$24 million in 2006 and \$160 million over five years.

The effectiveness of the Cooperator Program and the extent to which it replaces private spending for marketing efforts with public spending are uncertain. Supporters of ending federal funding for the program argue that cooperators should bear the full cost of foreign promotions be-

cause they directly benefit from those promotions. Supporters also argue that the program's services duplicate those of FAS's Market Access Program (described in option 350-05), which also works to create and expand foreign markets for U.S. agricultural products.

Opponents of this option argue that ending federal funding for the Cooperator Program could place U.S. exporters at a disadvantage in international markets because other countries provide support to their exporters. In regard to whether the program is duplicative, critics of this option contend that the Cooperator Program differs from other programs in part because it focuses on basic commodities and sales to foreign manufacturers and wholesalers. Moreover, some critics argue that the program helps the U.S. economy as a whole—not just the cooperators—by reducing the trade deficit. However, analysis shows that government efforts to support or subsidize exports have at best a temporary effect on the trade deficit, which is largely driven by the difference between domestic investment and domestic saving. Moreover, by distorting the allocation of economic resources, such efforts generally impose costs that exceed their benefits.

RELATED OPTIONS: 350-05 and 350-06

RELATED CBO PUBLICATIONS: *The Decline in the U.S. Current-Account Balance Since 1991*, August 2004; and *Causes and Consequences of the Trade Deficit: An Overview*, March 2000

**350-05—Mandatory****Freeze Funding for the Market Access Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-3	-48	-60	-60	-60	-231	-531

The Market Access Program, run by the Department of Agriculture's Foreign Agricultural Service, provides funds to trade associations, commodity groups, and for-profit firms to help them build markets for U.S. agricultural products overseas. Under current law, funding for the program will increase from \$140 million in 2005 to \$200 million in 2006 and thereafter, the Congressional Budget Office estimates.

This option would freeze funding for the Market Access Program at \$140 million for 2006 and subsequent years. That freeze would reduce mandatory outlays by \$231 million over the 2006-2010 period. (The President's budget for 2006 contains a similar proposal.)

The Market Access Program promotes a wide range of products, including fruit, tree nuts, vegetables, meat, poultry, eggs, and seafood. About 20 percent of its funding goes to promote brand-name goods. The program requires varying degrees of cost sharing. For promotions of brand-name products, cooperatives or small private firms must pay at least 50 percent of the costs. For promotions of generic products, trade associations and others must pay at least 10 percent of the costs.

Some supporters of a freeze on funding argue that the Market Access Program does not warrant additional money because the extent to which it has developed markets or replaced private expenditures with public funds is

uncertain. Others argue that taxpayers' money should not be spent to advertise brand-name products and that participants should bear the full cost of foreign promotions because they directly receive the benefits. Some proponents of this option note that the Market Access Program may duplicate the Foreign Agricultural Service's Foreign Market Development Program (described in option 350-04), which also provides funds for overseas marketing.

An argument against freezing funding for the Market Access Program is that in recent years it has targeted its funds toward small companies and cooperatives and reduced the share going to promotions of brand-name products. Furthermore, limiting the program could place U.S. exporters at a disadvantage in international markets because other countries support their exporters. On the issue of duplication, some opponents of this option maintain that the Market Access Program differs from other programs partly because it focuses on specialty crops, value-added products, and consumer promotions. In addition, some opponents of a freeze in funding argue that the program helps the U.S. economy as a whole—not just participants—by reducing the trade deficit. However, analysis shows that the trade deficit depends primarily on the gap between domestic investment and domestic saving. Thus, federal intervention to promote exports has no lasting impact on the deficit and distorts the allocation of economic resources.

RELATED OPTIONS: 350-04 and 350-06

RELATED CBO PUBLICATIONS: *The Decline in the U.S. Current-Account Balance Since 1991*, August 2004; and *Causes and Consequences of the Trade Deficit: An Overview*, March 2000

**350-06—Mandatory****Limit the Repayment Period for Export Credit Guarantees**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-147	-147	-147	-147	-147	-735	-1,470
Outlays	-79	-143	-147	-147	-147	-663	-1,398

The Department of Agriculture promotes exports of U.S. farm products through several credit guarantee programs administered by the Foreign Agricultural Service. Those programs protect exporters and banks in the United States against default on financing they provide to foreign importers and banks to cover purchases of U.S. products. Under those programs, if the foreign recipients of export credit fail to repay what they owe, the federal government makes up most of the shortfall.

The principal export credit guarantee programs for agricultural products are the Supplier Credit Guarantee Program and the Export Credit Guarantee Program; the former covers credit with repayment terms of up to six months, and the latter covers credit with terms of up to three years. Two other programs, the Intermediate Export Credit Guarantee Program and the Facilities Guarantee Program, cover credit with repayment terms of up to 10 years. Of those four programs, the Export Credit Guarantee Program accounts for most of the exports that are financed and most of the associated federal credit subsidy.

This option would limit federal guarantees of export credit to short-term credit—that with repayment periods of no more than six months. It would do so by eliminating the two programs with repayment terms of up to 10 years (the Intermediate Export Credit Guarantee Program and the Facilities Guarantee Program) and by restricting the repayment period for the Export Credit Guarantee Program to no more than six months. Those changes would reduce mandatory outlays by \$79 million in 2006 and \$663 million through 2010.

Supporters of this option argue that the credit guarantees of up to three years provided under the Export Credit Guarantee Program provide substantial benefits to participating foreign and domestic banks but have little if any impact on the overall level of U.S. agricultural exports. In addition, in ongoing multilateral trade negotiations, the United States recently indicated support for limiting the term of its credit-guarantee programs to no more than six months if other countries agree to eliminate their export subsidy programs. Furthermore, some advocates of this option argue that government programs that support or subsidize exports hurt the economy as a whole by distorting the allocation of economic resources and thus imposing costs that exceed their benefits. Moreover, a September 1997 report by the General Accounting Office (now the Government Accountability Office) found little evidence that those programs provide measurable income and employment benefits to the U.S. agricultural sector.

Opponents of this option say that despite U.S. support in trade talks for reforming the export credit programs, any changes in those programs should be contingent on parallel changes in the export subsidy programs of other countries. Other critics of this option maintain that the current longer-term credit guarantees reduce the cost of financing purchases and allow suppliers in the United States to increase sales in countries where they could not otherwise provide financing. In addition, some critics claim that export credit guarantee programs help the U.S. economy as a whole by reducing the trade deficit. However, analysis shows that government efforts to support exports have at most a temporary effect on the trade deficit, which is largely determined by the difference between domestic investment and domestic saving.

RELATED OPTIONS: 350-04 and 350-05

RELATED CBO PUBLICATIONS: *The Decline in the U.S. Current-Account Balance Since 1991*, August 2004; *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees*, August 2004; and *Causes and Consequences of the Trade Deficit: An Overview*, March 2000



## Commerce and Housing Credit

**B**udget function 370 covers a wide array of programs designed to promote and regulate commerce within the United States and with other countries. Included in this function are programs that provide housing credit, loans to small businesses, deposit insurance for banks and credit unions, universal telecommunications services, and mortgage guarantees to home buyers. (Proceeds from spectrum auctions are recorded in budget function 950, undistributed offsetting receipts.) The agencies encompassed by this function are correspondingly diverse and include the Department of Commerce, Small Business Administration (SBA), Federal Housing Administration (FHA), Postal Service, Federal Deposit

Insurance Corporation, Federal Communications Commission (FCC), Securities and Exchange Commission, and Patent and Trademark Office. Spending for several of those agencies has historically been offset by collections of regulatory fees and other fees resulting from transactions with the private sector.

Fluctuations in annual outlays for function 370 usually stem from periodic adjustments in estimates of the cost of loan programs administered by the SBA, FHA, and FCC. The spike in discretionary spending in 2000 reflected funding for the decennial census that year. In 2005, outlays for this function are projected to total \$6.3 billion.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	5.1	1.4	0.6	-0.3	*	1.6	n.a.	n.a.
Outlays								
Discretionary	4.5	1.5	1.0	-0.6	0.1	1.2	n.a.	n.a.
Mandatory	-1.3	4.3	-1.4	1.3	5.1	5.1	n.a.	-1.7
Total	3.2	5.7	-0.4	0.7	5.3	6.3	n.a.	18.8

Note: \* = between -\$50 million and zero; n.a. = not applicable (because some years have negative values).

**370-01—Mandatory****Charge All Banks and Savings Associations a Premium for Deposit Insurance**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+1,100	+1,200	+900	+600	+550	+4,350	+6,050

Most banks and savings associations in the United States offer federal deposit insurance, which covers depositors' accounts up to a limit of \$100,000. If a financial institution fails and cannot pay off all of its insured deposits, the Federal Deposit Insurance Corporation (FDIC) makes up the difference using money from the Bank Insurance Fund or the Savings Association Insurance Fund (depending on the type of institution involved). The FDIC finances those funds by charging banks and savings associations a premium—which, since 1991, has been based on their riskiness. That premium had ranged from 4 to 27 basis points (4 to 27 cents per \$100 of deposits), but the Deposit Insurance Funds Act of 1996 eliminated premiums for the least risky institutions as long as the accumulated reserves of their applicable deposit insurance fund exceed 1.25 percent of insured deposits. Consequently, about 90 percent of FDIC-insured institutions have not paid any deposit insurance premiums since 1997, even though those entities pose some risk of loss to the government.

This option would apply half of the minimum premium rate that was in effect before the Deposit Insurance Funds Act to all FDIC-insured institutions. As a result, the vast majority of institutions that now pay nothing for deposit insurance would pay a premium of 2 cents for each \$100 of deposits per year. That change would increase federal receipts by \$1.1 billion in 2006 and by more than \$4.3 billion over the 2006-2010 period.

Several rationales exist for charging all FDIC-insured institutions a premium for deposit insurance even when the insurance funds' reserves exceed 1.25 percent of insured deposits. First, that target level of reserves bears no relation to expected losses. In addition, it is below the average level of reserves maintained in the Bank Insurance Fund during its first 50 years (more than 1.4 percent of insured deposits between 1934 and 1983). Second, even institutions in the least risky category pose some risk of failure over time and thus should pay some premium. (Private

insurers, for example, charge premiums to even their best risks.) Recent experience indicates that some financial institutions fail abruptly because of risks that cannot easily be monitored, such as fraud or losses by rogue traders. If deposit insurance has some value, the correct premium is greater than zero. Third, this option would promote equitable treatment of all banks and savings associations. Since 1996, more than 1,000 institutions have entered the banking system and benefited from deposit insurance without ever paying premiums for it.

Another rationale for this option is that it would reduce the likelihood that premiums would have to be raised in bad economic times. When an insurance fund's reserves fall below 1.25 percent of insured deposits, the FDIC must raise premium rates sufficiently to bring that ratio back to 1.25 within a year. Charging all FDIC-insured institutions a small premium in good economic times would reduce the need to charge high premiums when the industry or the economy was weak. Moreover, to the extent that banks and savings associations absorb the cost of deposit insurance rather than passing it on to borrowers and depositors, paying higher premiums in bad times could lead those institutions to reduce their lending precisely at the point in the business cycle when policymakers seek to expand credit.

The main arguments against this option are that the current level of reserves provides ample protection to taxpayers and that institutions in the best risk categories should not have to pay anything for deposit insurance as long as those reserves exceed the designated ratio of 1.25 percent. In that view, the benefits of not paying deposit insurance premiums in good economic times outweigh the drawbacks of having to pay high premiums in bad times. In addition, some observers argue that a strengthened regulatory regime and better risk-management practices make a repeat of the high number of failures of the 1980s unlikely.

**370-02—Discretionary****Require Government-Sponsored Enterprises to Register with the Securities and Exchange Commission**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+490	+150	+170	+200	+240	+1,250	+2,710

Note: These registration fees would be offsetting collections rather than revenues and would be credited against discretionary spending.

Government-sponsored enterprises (GSEs)—private financial institutions chartered by the federal government—are intended to promote the flow of credit to targeted uses, primarily housing and agriculture. To do that, they raise funds in the capital markets on the strength of an implied federal guarantee, which reduces their borrowing costs and enables them to borrow much larger sums than would be available to other borrowers while holding less capital. The federal government also exempts GSEs from paying state and local income taxes. In addition, four GSEs—Fannie Mae, Freddie Mac, the Federal Home Loan Bank System, and the Farm Credit System—are exempt from provisions of the Securities Act of 1933, which requires publicly traded companies to register the securities they issue with the Securities and Exchange Commission (SEC).

This option would repeal those GSEs' exemption from SEC rules, requiring them to pay registration fees and to disclose information about their securities. (A fifth GSE, Farmer Mac, is already subject to SEC requirements.) Such a change would increase federal receipts by about \$490 million in 2006 and more than \$1.2 billion over five years. Those estimates assume that the GSEs would pay the same registration fee as other firms: about 1.8 basis points (0.018 percent of the securities' value) in 2006, the Congressional Budget Office projects. The estimates also assume that the statutory basis of SEC fees would be changed. Under current law, the SEC sets rates for registration fees in order to collect target amounts spelled out in law (\$689 million in 2006, for example). Under this option, the SEC would be authorized to col-

lect the target amount plus additional amounts from registering GSE securities.

Supporters of this option argue that it would help level the playing field between the GSEs and other firms that issue securities, including issuers of mortgage-backed securities (MBSs). In addition, the disclosures required by the SEC might provide additional information that could help investors predict more accurately the speed with which mortgages will be paid off—a key uncertainty affecting the value of individual MBS issues. (Alternative proposals that have been introduced in the Congress would require the GSEs to make those disclosures but not pay the full SEC registration fees. Another possibility would be to require the disclosures without imposing any fees.) Supporters also maintain that electronic registration would pose little administrative burden on the GSEs and that, contrary to some claims, registration requirements would not affect borrowers' ability to lock in mortgage rates before closing.

Opponents of this option argue that registration is unnecessary. In accord with recommendations made by a multiagency task force in January 2003, the GSEs have already agreed to disclose additional information about their MBS pools. (Similarly, Fannie Mae voluntarily registered its common stock in March 2003 under the Securities Exchange Act of 1934, and Freddie Mac and the 12 Federal Home Loan Banks plan to do so as well. Registrants under that law pay no fees to the SEC.) Opponents also argue that registration fees would impose costs on home buyers nationwide. If the fees were fully passed on to borrowers, the closing costs on a \$300,000 mortgage in 2006 would increase by about \$55.

RELATED OPTION: 920-02

RELATED CBO PUBLICATIONS: *Letter to the Honorable Richard C. Shelby regarding updated estimates of the subsidies to the housing GSEs*, April 8, 2004; *Testimony on Regulation of the Housing Government-Sponsored Enterprises*, October 23, 2003; *Effects of Repealing Fannie Mae's and Freddie Mac's SEC Exemptions*, May 2003; and *Federal Subsidies and the Housing GSEs*, May 2001

**370-03—Discretionary****Eliminate the International Trade Administration's Trade Promotion Activities or Charge the Beneficiaries**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-401	-413	-425	-437	-449	-2,125	-4,579
Outlays	-299	-373	-417	-429	-441	-1,959	-4,366

The International Trade Administration (ITA) of the Department of Commerce runs a trade development program that assesses the competitiveness of U.S. industries and promotes exports. The ITA also operates the U.S. and foreign commercial services, which counsel U.S. businesses on exporting. The agency charges some fees for its services, but those fees do not cover the cost of all such activities.

This option would either eliminate the ITA's trade promotion activities or charge the beneficiaries for them. Either change would save \$299 million in outlays in 2006 and a total of about \$2 billion through 2010.

The principal rationale for this option is that business activities, such as trade promotion, are usually better left to the firms and industries that stand to benefit from them than to a government agency. When beneficiaries do not pay the full costs of services, the ITA's activities effectively subsidize the industries involved. Those implicit subsidies are an inefficient means of helping the industries because they are partially passed on to foreigners in the form of lower prices for U.S. exports. Moreover, they tend to cause the industries' products to be sold abroad for less than the cost of production and sales, and thus they lower U.S. economic well-being. Further, in the Program Assessment Rating Tool evaluation included in the President's 2005 budget, the Office of Management and Bud-

get concluded that businesses can obtain services similar to those of ITA's foreign commercial services from state, local, and private-sector entities.

An argument against eliminating the ITA's trade promotion activities is that such activities are subject to some economies of scale, so having one entity (the federal government) counsel exporters about foreign legal and other requirements, disseminate knowledge of foreign markets, and promote U.S. products abroad might make sense. In that case, net federal spending could be reduced by charging the beneficiaries of those programs their full costs. However, fully funding the ITA's trade promotion activities through voluntary charges could prove difficult or impossible. For example, in many cases, promoting the products of selected firms that were willing to pay for such promotion would be impossible without also encouraging demand for the products of other firms in the same industry. In those circumstances, firms would have an incentive not to purchase the services because they would be likely to receive the benefits regardless of whether they paid for them. Consequently, if the federal government wanted to charge beneficiaries for the ITA's services, it might have to require that all firms in an industry (or the industry's national trade group) decide together whether to buy the services. If the firms opted to purchase them, all firms in the industry would be required to pay according to some equitable formula.

RELATED OPTIONS: 150-01, 350-04, 350-05, and 350-06

RELATED CBO PUBLICATIONS: *The Decline in the U.S. Current-Account Balance Since 1991*, August 2004; and *Causes and Consequences of the Trade Deficit: An Overview*, March 2000

**370-04—Discretionary****Eliminate the Advanced Technology Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-139	-141	-144	-147	-150	-721	-1,523
Outlays	-22	-71	-121	-138	-146	-498	-1,275

The Commerce Department's Advanced Technology Program (ATP), part of the National Institute of Standards and Technology, is intended to increase the competitiveness of U.S. industry by helping discoveries in basic research be converted more quickly into technological advances with commercial potential. The program awards research and development (R&D) grants to companies, independent research institutes, and joint ventures. The grants, which are limited to \$2 million over a three-year period when awarded to a single firm, typically require a matching commitment from private sources. They support research in generic technologies that have applications for a broad range of products as well as research that precedes product development.

This option would end the Advanced Technology Program (as the Administration proposes in its 2006 budget). Eliminating funding for the ATP would save \$22 million in outlays in 2006 and \$498 million over the 2006-2010 period.

The Administration argues that private investors are better able than the federal government to decide which research efforts should be funded. Furthermore, government financing of R&D may be displacing private capital. U.S. venture capital markets focus on many of the same research areas as the Advanced Technology Program. Since the ATP was conceived, annual venture capital investment in the United States has increased fourfold, to \$10.6 billion. In addition, according to industry sources, venture capital firms have several times that amount in reserves committed to them but not yet invested. The fact that the available pool of venture capital is many times the size of the ATP suggests that the pro-

gram is funding work that could be financed by venture capital firms.

Surveys of companies that participate in the Advanced Technology Program appear to counter those arguments, however. A 2001 survey found that 63 percent of the companies that applied for an ATP grant but did not receive one did not proceed with their research. Another 17 percent continued with their research but on a much smaller scale. Only 5 percent of the firms that did not secure ATP funding went ahead with their R&D programs as originally designed. Furthermore, the survey indicated that the ATP has refined its selection process to reduce the overlap between its projects and those likely to be financed by private sources, even if the general research areas are similar. That result is a change from earlier practices, according to a survey by the Government Accountability Office, which found that fully half of nonwinners were able to find private sources of funding.

In addition, surveys of companies that did receive ATP grants indicate that the awards accelerated the development and commercialization of advanced technology by two years or more for the majority of planned commercial applications. They also show that recipients were more willing to tackle high-risk technology development projects as a result of the grants, presumably increasing both the amount and the breadth of the R&D funded.

Other arguments against eliminating the ATP are that venture capital firms spend only a small fraction of their funds on the very early stages of technology development—the area on which the ATP focuses—and that the Office of Management and Budget's assessments of federal programs for the President's 2004 budget concluded that the ATP was well managed.

**370-05—Discretionary****Eliminate the Hollings Manufacturing Extension Partnership and the Baldrige National Quality Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-110	-112	-115	-117	-119	-573	-1,210
Outlays	-18	-73	-98	-112	-116	-417	-1,036

In addition to its various research and development activities, the National Institute of Standards and Technology runs two programs designed to improve the performance of U.S. businesses: the Hollings Manufacturing Extension Partnership (HMEP) program and the Baldrige National Quality Program. The HMEP program consists primarily of a network of manufacturing extension centers that help small and midsize firms by providing expertise in the latest management practices and manufacturing techniques as well as other knowledge. The nonprofit centers are not owned by the federal government but are partly funded by it. The National Quality Program consists mainly of the Malcolm Baldrige National Quality Award, which is given to companies (and, in recent years, to education and health care institutions) for achievements in quality and performance.

This option would eliminate the Hollings Manufacturing Extension Partnership and Baldrige National Quality Programs, reducing discretionary outlays by \$18 million in 2006 and \$417 million through 2010.

The need for the government to provide the technical assistance given by the HMEP program is questionable. Many professors of business, science, and engineering are also consultants to private industry, and other ties between universities and private firms facilitate the transfer of knowledge. For example, some of the centers that HMEP subsidizes predate the program. In the Program Assessment Rating Tool evaluation included in the President's 2005 budget, the Office of Management and Budget (OMB) noted that, according to a recent survey by the Modernization Forum, half of HMEP clients said

that the services they obtained from the program were available from alternative sources, although at higher cost.

HMEP's positive effect on productivity is also questionable. Federal spending for HMEP represents a subsidy for the firms that the program helps. In most cases, subsidies allow inefficient companies to remain in business, tying up capital, labor, and other resources that would otherwise be used more productively elsewhere. According to OMB's evaluation, manufacturing extension centers were originally intended to become self-sufficient, supported entirely by fees and perhaps state contributions. However, the federal government still covers one-third of the centers' costs, with state governments and user fees each covering another third. To promote self-sufficiency, the President's budgetary requests in recent years have recommended funding individual centers for no longer than six years. (The President's 2006 budget proposes a 50 percent reduction from the 2005 grant level.)

Opponents of eliminating the HMEP program point to the economic importance of small and midsize companies, which they say produce more than half of U.S. output and employ two-thirds of U.S. manufacturing workers. They argue that small firms often face limited budgets, lack of expertise, and other barriers to obtaining the sort of information that HMEP provides. Moreover, larger firms rely heavily on small and midsize companies for supplies and intermediate goods. For those reasons, opponents of this option argue that the HMEP program promotes U.S. productivity and international competitiveness.

In regard to the Baldrige National Quality Program, one argument for eliminating it is that businesses need no government incentives to maintain quality—the threat of lost sales is sufficient. Furthermore, winners of the Baldrige Award often mention it in their advertising, which

means they value the award. If so, they should be willing to pay contest entry fees large enough to eliminate the need for federal funding. The primary argument for retaining the Baldrige National Quality Program is that it promotes U.S. competitiveness.

RELATED OPTION: 370-04

**370-06—Mandatory****Repeal the Continued Dumping and Subsidy Offset Act of 2000**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,300	-800	-300	-300	-300	-3,000	-4,500
Outlays	0	-1,300	-800	-300	-300	-2,700	-4,200

U.S. antidumping (AD) law deals with imports that are priced below their cost of production or below their price in the producer's home market. Countervailing-duty (CVD) law addresses imports that have been subsidized by the producer's government. Those laws provide for the imposition of duties on imports when the Department of Commerce determines that the imports have been subsidized or dumped in the U.S. market and the International Trade Commission determines that those practices are threatening or causing material injury to competing U.S. industry. Under the Continued Dumping and Subsidy Offset Act of 2000 (CDSOA), the revenues from such duties on any given import are distributed on an annual basis to the domestic producers that were petitioners, or interested parties supporting the petition, in the case that resulted in the duties being levied on that import.

This option would repeal CDSOA, as proposed in the President's 2006 budget, and return to the previous practice, in which revenues from AD/CVD duties were retained by the federal government. That change would reduce outlays by a total of \$2.7 billion through 2010.

Several arguments can be made in favor of this option. First, the World Trade Organization Appellate Body has ruled that CDSOA violates the World Trade Organization agreement, and it has authorized the European Union and a number of countries to retaliate against U.S.

exports. Second, the duties imposed under AD/CVD laws are intended to offset the effects of any continued dumping or subsidy. Distributing revenues from those duties to U.S. producers provides a duplicate remedy. Third, those distributions subsidize the output of some firms at the expense of others, both within and among industries, causing inefficiency in the economy. Finally, CDSOA increases the incentive for U.S. industries to pursue AD/CVD complaints. To the extent that the result is more duties being imposed, research suggests that the cost to purchasers of the products in question exceeds the benefit to competing domestic producers of the products.

Proponents of CDSOA have argued that AD/CVD laws are intended to restore conditions of fair trade so that jobs and investment that should be in the United States are not lost through false market signals, and the continued dumping or subsidization of imported products after AD or CVD orders have been issued can frustrate the remedial purpose of the laws by preventing market prices from returning to fair levels. When dumping or subsidization continues, domestic producers may be reluctant to invest or hire and may be unable to maintain pension and health care benefits that conditions of fair trade would permit. Similarly, small businesses and farmers may be unable to pay down accumulated debt, obtain working capital, or otherwise remain viable.

RELATED OPTION: 370-03

RELATED CBO PUBLICATIONS: *Antidumping Action in the United States and Around the World: An Update*, June 2001; *Antidumping Action in the United States and Around the World: An Analysis of International Data*, June 1998; and *How the GATT Affects U.S. Antidumping and Countervailing-Duty Policy*, September 1994



**370-07—Mandatory****Permanently Extend the FCC's Authority to Auction Licenses to Use the Radio Spectrum**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	0	-300	+1,000	+1,000	+1,700	+6,950

Note: Proceeds from spectrum auctions are recorded in budget function 950 (undistributed offsetting receipts).

In 1993, the Federal Communications Commission (FCC) was first granted limited authority to use competitive bidding to assign licenses for use of the radio spectrum. The Balanced Budget Act of 1997 went further—not just permitting but requiring the FCC to auction licenses in all circumstances in which more than one private applicant seeks a license. From 1994 through 2003, those auctions generated a total of \$20 billion in federal receipts.

The FCC's authority to auction spectrum licenses is set to expire at the end of fiscal year 2007. This option would permanently extend that authority, producing \$7 billion in additional federal receipts over the next 10 years. (The President's budget for 2006 includes a similar proposal.)

One rationale for extending the FCC's authority is that the receipts raised by auctioning licenses compensate the public for private use of the radio spectrum. Moreover, competitive bidding directly places licenses in the hands of the parties that value them most—a more efficient outcome than the one produced by lotteries or comparative hearings, the methods previously used to assign licenses. (In a comparative hearing, entities that wished to be granted a license made their case to the FCC in terms of the public-interest standard, an imprecise criterion under

which authority to use the spectrum was supposed to go to the parties that would make the best use of it from society's point of view.)

Opponents of extending the FCC's authority maintain that the auctions held since 1994 have harmed both the telecommunications industry and the public interest. They argue that auction winners pay such high prices for the right to use the radio spectrum that the winners are unable to make the capital investments necessary to deliver telecommunications services. Nevertheless, the investments that have been made since 1994 have been sufficient to greatly expand the depth and breadth of services offered to consumers.

Opponents of continuing to auction licenses also argue that the lure of auction receipts has caused the FCC to allocate too little of the radio spectrum for unlicensed uses, such as wireless access to the Internet. However, the agency has allocated additional spectrum for unlicensed uses several times since 1993 and is currently considering other allocations for such uses. The FCC is also looking at allowing more use of unlicensed low-power devices that can share parts of the spectrum primarily allocated for licensed uses without causing significant interference.

RELATED OPTION: 370-08

RELATED CBO PUBLICATION: *Where Do We Go from Here? The FCC Auctions and the Future of Radio Spectrum Management*, April 1997

**370-08—Mandatory****Restrict the FCC's Use of Auction Receipts to Cover Its Operating Costs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+32	+33	+10	0	0	+75	+75

Note: Proceeds from spectrum auctions are recorded in budget function 950 (undistributed offsetting receipts).

Under current law, the Federal Communications Commission (FCC) is required to award certain licenses to use the radio spectrum through competitive bidding. The agency is allowed to directly spend the proceeds from auctioning those licenses to cover costs related to implementing and operating the auction system. That authority, which will expire at the end of fiscal year 2007, gives the FCC wide latitude in deciding how much of its budget will be funded from auction proceeds. (The rest of the agency's budget is funded through annual appropriations, which are largely offset by income from fees that the FCC charges to regulated industries.)

In the past four years, the FCC spent an average of \$85 million per year from auction proceeds. That spending covered about 24 percent of the agency's total budget—up from 9 percent in 1996, the first year in which the FCC was authorized to spend auction receipts. A 2003 report by the FCC's Office of the Inspector General (OIG) suggested that the agency was overly reliant on auction proceeds to cover its general expenses. For example, those proceeds were used to fund 90 percent of the costs of developing and operating the Universal License System—which individually tracks all of the licenses that the FCC issues to nonfederal users of the radio spectrum—even though only about 5 percent of licensing transactions (new applications, renewals, and so forth) involve licenses that are subject to auction.

This option would limit the type and amount of expenses that the FCC could recover from auction proceeds in 2006 and 2007 and require the agency to make up any difference by reducing operating costs or increasing regulatory fees. The OIG report observed that the FCC did not have a consistent accounting method for attributing

costs to auctions, but it implied that such an analysis would probably lead to a smaller share of agency costs being defined as auction-related. This option assumes that legislation would be enacted to outline criteria for such allocations and to cap the portion of costs allocated to auctions at 15 percent. That percentage is roughly equal to the auction overhead rate (defined as the fraction of full-time-equivalent employees involved in auctions) that the FCC uses to allocate the cost of some centralized services to the auction program. Such a cap would increase the amount of auction receipts deposited in the Treasury by \$32 million in 2006 and \$33 million in 2007. (If the FCC's auction authority was extended after 2007, as discussed in option 370-07, and such a cap was included, net proceeds would be higher than those shown here or for that option.)

One rationale for limiting the FCC's cost recovery from auction proceeds involves the cost-effectiveness of the current practice. The FCC undoubtedly incurred costs in moving to a competitive-bidding system for assigning licenses, but the rapid increase in those costs—to almost one-quarter of the agency's total outlays—raises questions. It may be that spending decisions that can conceivably be supported by auction revenues receive less careful consideration than decisions that bear the scrutiny of appropriators or of companies paying regulatory fees. Another rationale for this option is that paying for FCC activities by charging fees (whether those fees ultimately fall on businesses that hold spectrum licenses or on their customers) would be more equitable than the current situation because the direct recipients of the agency's regulatory services would bear a larger share of the costs of those services.

An argument against limiting the percentage of the FCC's annual costs that can be underwritten by auction revenues is that auction activities have been costly. Another rationale is that current fees are not well aligned with users' demands on the agency and thus are not equi-

table. Moreover, the choice between funding telecommunications regulation through user fees or through general tax dollars may be a distinction without much difference because telecommunications providers and consumers make up a significant share of taxpayers.

RELATED OPTION: 370-07

RELATED CBO PUBLICATION: *Where Do We Go from Here? The FCC Auctions and the Future of Radio Spectrum Management*, April 1997



# 400

## Transportation

**B**udget function 400 covers programs that support a wide variety of transportation modes, including highways, public transit, aviation, railroads, and water transportation. Most of the funding is managed by the Department of Transportation and distributed as grants to state and local governments to help build transportation infrastructure. Funding for the Federal-Aid Highway program constitutes about half of the budgetary resources for function 400; other large programs include air traffic control and Coast Guard operations. Aeronautics research sponsored by the National Aeronautics and Space Administration also falls in this category. The most significant change to function 400 in recent years was the establishment in 2003 of the Transportation Security Administration, which is part of the Department of Homeland Security.

The Congressional Budget Office estimates that outlays for function 400 will total \$68.2 billion in 2005. Most outlays in the function are considered discretionary. The amounts of discretionary budget authority are much smaller, however, because many transportation programs are funded by contract authority (a mandatory form of budget authority) provided in authorizing legislation. Spending of that contract authority is controlled each year by obligation limitations set in appropriation bills.

Spending under the transportation function has more than doubled since the early 1990s, largely because of substantial growth in outlays for the Federal-Aid Highway program. However, the authorization law for most surface transportation programs expired at the end of fiscal year 2003, leaving funding levels for those programs nearly flat for the past two years (under short-term extensions of their authorizations).

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	15.2	19.7	23.4	26.6	23.6	25.3	11.6	7.4
Obligation Limitations	34.9	38.3	41.1	41.3	43.8	45.3	5.9	3.4
Outlays								
Discretionary	44.7	50.1	57.3	64.2	62.8	66.0	8.8	5.2
Mandatory	<u>2.1</u>	<u>4.3</u>	<u>4.6</u>	<u>2.9</u>	<u>1.8</u>	<u>2.2</u>	-3.3	19.2
Total	46.9	54.4	61.8	67.1	64.6	68.2	8.4	5.6

**400-01—Discretionary****Reduce Federal Subsidies for Amtrak**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-250	-250	-250	-250	-250	-1,250	-2,500
Outlays	-250	-250	-250	-250	-250	-1,250	-2,500

When the Congress established the National Railroad Passenger Corporation—commonly known as Amtrak—in 1970, it anticipated providing subsidies for only a limited time until the railroad became self-supporting. After more than a quarter century of federal subsidies, lawmakers in 1997 enacted the Amtrak Reform and Accountability Act, which directed the railroad to take a more businesslike approach to operations so that it would not need federal subsidies after December 2002. For several years after that law was enacted, Amtrak reported to the Congress that it was on a “glide path” toward achieving operational self-sufficiency by the deadline. In the spring of 2002, however, it announced that it could not meet the deadline and that the goal of self-sufficiency was—and always had been—unrealistic. Amtrak has continued to receive federal subsidies, although the authorization for them expired at the end of 2002. (Citing the lack of an authorization, the President’s 2006 budget proposes to eliminate funding for the railroad.)

This option would reduce federal subsidies for Amtrak by the amount currently needed to support train operations on the routes that lose the most money. According to data from Amtrak’s Route Profitability System, the five trains

that lost the most money have accounted for losses of about \$250 million annually in recent years. Cutting that amount from Amtrak’s subsidies each year would save more than \$1.2 billion over the 2006-2010 period.

Proponents of this option generally favor having Amtrak act more like a business. They argue that it should cut service on routes that attract so few riders that trains operate at a large loss and should focus instead on routes for which demand is greater. If passenger revenues were not sufficient to cover the costs of operating a train but states valued the service, they could provide additional subsidies. Otherwise, travelers could use buses, airplanes, or cars to reach their destinations.

Opponents of this option generally regard Amtrak as a public service that should be available on a nationwide basis without regard to cost. They contend that passengers on lightly traveled routes have few transportation alternatives and that Amtrak is vital to the survival of small communities along those routes. Moreover, they say, improving service throughout the system could attract more passengers and make rail transportation more viable economically.

400

RELATED OPTIONS: 400-02, 400-03, 400-06, and 400-07

RELATED CBO PUBLICATIONS: *The Past and Future of U.S. Passenger Rail Service*, September 2003; and *A Financial Analysis of H.R. 2329, the High-Speed Rail Investment Act of 2001*, September 2001

**400-02—Discretionary****Eliminate the Next Generation High-Speed Rail Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-20	-21	-21	-21	-22	-105	-220
Outlays	-3	-5	-9	-15	-21	-52	-162

The Next Generation High-Speed Rail Technology Demonstration Program, established by the Swift Rail Development Act of 1994, funds research intended to facilitate high-speed passenger rail transportation in the United States. (High-speed rail is defined as a system in which trains travel faster than 125 miles per hour.) The program's research focuses on designing and testing various technologies, such as signal and control systems to help railways carry a mix of high-speed passenger, commuter, and freight trains while minimizing the risk of collisions; high-speed nonelectric locomotives; barriers and warning systems to make grade crossings safe for faster trains; and improvements to tracks and other infrastructure that would permit shared use by heavy freight trains and high-speed passenger trains. The program also funds efforts to plan corridors for high-speed rail.

This option would terminate funding for the Next Generation program, reducing federal outlays by \$52 million over the 2006-2010 period. (The President's 2006 budget does not request any funding for the program.)

The Next Generation program was launched at a time of optimism about the prospects for U.S. high-speed passenger rail service. In the past decade, however, several high-speed rail initiatives have faltered because financial support for the economically risky ventures has not materialized. Although several states are proceeding with passenger rail projects, their focus has shifted from high-speed rail to more modest "higher-speed" rail (in which trains travel at 79 to 110 miles per hour) and to methods for reducing trip times without increasing trains' top speeds.

The primary rationale for ending the Next Generation program is that such a shift in focus has altered research needs. Incremental improvements in travel times can be gained, for example, from investments in existing passenger rail systems that make infrastructure and rolling stock (train cars and engines) more reliable and service more frequent. A second rationale is that some countries that rely on rail for passenger transportation continue to conduct research on high-speed technologies. If that knowledge is ever needed in the United States, importing it may be more cost-effective than developing it domestically.

Several arguments exist for retaining the Next Generation program. Some components of the current program—such as research into diesel-powered higher-speed trains and research to make grade crossings safer—could provide benefits for states' incremental higher-speed rail projects. (Diesel is likely to be the most cost-effective power source for passenger trains outside the Northeast Corridor, which are likely to continue to operate for the foreseeable future on nonelectrified tracks owned and used by freight railroads rather than on their own tracks.) Another area of research with potential payoffs for both commuter and intercity passenger rail service would be how most efficiently to accommodate multiple users with differing needs. In addition, because several states are interested in developing higher-speed passenger rail service, a program coordinated at the federal level could avoid duplication of effort and increase effectiveness, especially if states and regional rail authorities actively participated in it.

RELATED OPTIONS: 400-1 and 400-03

RELATED CBO PUBLICATION: *The Past and Future of U.S. Passenger Rail Service*, September 2003

**400-03****Impose a User Fee to Help Fund the Federal Railroad Administration's Rail-Safety Activities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	0	+45	+92	+94	+96	+326	+834

Note: This fee could be classified as a discretionary offsetting collection or a mandatory offsetting receipt, depending on the specific language of the legislation establishing the fee.

The Federal Railroad Administration (FRA) conducts a variety of activities to protect railroad employees and the public by ensuring the safe operation of passenger and freight trains. It issues standards, procedures, and regulations; administers drug testing of railroad employees after accidents and at random times; provides technical training to railroad workers; and manages highway grade-crossing projects. In addition, the FRA's field safety inspectors are responsible for enforcing federal safety regulations and standards.

This option would impose user fees on railroads to partially offset the costs of the FRA's rail-safety activities. Receipts from those fees would total \$326 million over the next five years.

The main rationale for such user fees is that they would relieve federal taxpayers of some of the burden of funding the FRA's rail-safety activities. Such fees have existed before. The Omnibus Budget Reconciliation Act of 1990 required railroads to pay fees to cover the administrative and safety-enforcement costs of carrying out the FRA's mandated safety activities. Those fees expired in 1995.

An argument against reinstating user fees is that the general public is the main beneficiary of the FRA's rail-safety activities. Moreover, charging for the cost of regulating safety might divert funds from railroads' efforts to improve safety themselves.

400

RELATED OPTIONS: 300-01, 300-02, 300-03, 370-03, 400-01, 400-02, 400-08, 400-09, and 400-10



**400-04—Discretionary and Mandatory****Eliminate the “New Starts” Transit Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,204	-1,207	-1,211	-1,214	-1,218	-6,055	-12,200
Outlays	-202	-609	-888	-1,105	-1,286	-4,090	-11,365

Note: Budget authority includes mandatory contract authority. That contract authority is subject to obligation limitations set in appropriation acts; therefore, all outlays are considered discretionary. Beginning in 2010, estimates of outlays exceed projected budget authority because baseline practices for obligation limitations differ from those for contract authority.

Under the “New Starts” program, the Department of Transportation provides funding to build new rail and other “fixed-guideway” systems and to extend existing systems. As defined by the program, fixed-guideway systems are ones that employ a separate right-of-way or rail line for the exclusive use of mass transportation. For 2005, the program received appropriations of \$1.4 billion.

This option would eliminate the New Starts program, saving \$202 million in 2006 and \$4.1 billion over the next five years. The budgetary treatment of the program is complex. Part of its budget authority is provided in authorization acts as contract authority, which is a mandatory form of budget authority. The spending of contract authority is subject to obligation limitations, which are contained in appropriation acts. Therefore, the resulting outlays are categorized as discretionary. The rest of the program’s budget authority is provided in appropriation acts and is considered discretionary. Under this option, discretionary budget authority, contract authority, and obligation limitations for the New Starts program would all be reduced.

One rationale for ending the program is that new rail transit systems tend to provide less value per dollar spent

than bus systems do. Bus systems require much less capital, and they are more flexible in their ability to adjust schedules and routes to meet changing needs. Moreover, supporters of eliminating the program contend that letting the federal government dictate how communities should spend federal aid for transit is inappropriate and inefficient because local officials know their needs and priorities better than federal officials do. In addition, even without the New Starts program, state and local governments could still use federal aid distributed by formula grants for new rail projects. In 2004, the federal government provided \$3.8 billion in formula funding for a wide variety of transit projects.

An argument in favor of the New Starts program is that it seeks to identify the most promising rail transit projects from a long list of candidates. Supporters of rail transit contend that building additional roads does not solve the problems of urban congestion and pollution but only leads to greater decentralization and sprawl. New rail transit systems, in contrast, can help channel future development into corridors where public transportation is available, as companies and residential developers locate where they can attract employees by offering easy and reliable access to the workplace.

**400-05—Discretionary and Mandatory****Reduce Federal Aid for Highways**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-13,720	-13,939	-14,199	-14,458	-14,719	-71,035	-148,775
Outlays	-3,704	-9,526	-12,020	-13,060	-13,845	-52,156	-127,814

Note: Budget authority includes mandatory contract authority. That contract authority is subject to obligation limitations set in appropriation acts; therefore, all outlays are considered discretionary.

The Federal-Aid Highway Program provides grants to states for highways and other surface transportation projects. When the Congress last reauthorized the program in 1998, it substantially increased highway funding from the levels provided in the previous authorization period. Funding for the Federal-Aid Highway Program is provided in the form of contract authority, a type of mandatory budget authority. However, most spending from the program is controlled by annual limits on obligations set in appropriation acts. Over the 1992-1997 period, those obligation limitations averaged \$17 billion per year; over the 1998-2003 period, they averaged \$28 billion.

This option would reduce spending for highways by lowering the obligation limitation for the Federal-Aid Highway Program in 2006 to \$21 billion—the level set in 1997, adjusted for inflation. That cut would decrease budgetary resources for the program by almost 40 percent annually over the next 10 years. This option would also reduce contract authority for the program by a commensurate amount each year. Those changes would lower outlays by \$3.7 billion in 2006 and \$52.2 billion through 2010. (In the budget, revenues from the federal gasoline tax are credited to the Highway Trust Fund to finance highway programs; this option would have no effect on gasoline tax rates.)

Besides reducing federal spending, another rationale for this option is that it would shift more of the cost of building and maintaining highways to state and local governments. Some highway analysts argue that decisions about highway spending can be made more effectively at the state and local level—where most of the benefits accrue—than at the federal level. Moreover, federal highway spending can displace spending by state and local governments and, in some cases, by the private sector. The Government Accountability Office recently found that the existence of federal grants has tended to cause state and local governments to reduce their own spending on highways and shift those funds to other purposes. Further, federal funding allocations are not always directed toward the uses with the greatest net benefits.

An argument against this option is that the nation may need additional highway capacity to meet the demand caused by growing levels of economic activity. Many state and local governments have encountered budgetary pressures in recent years—exacerbated by the growing costs of such programs as Medicaid—and may not be able to provide more spending for highways. In addition, some analysts argue that the federal government has a responsibility to pay for maintaining an adequate highway system to facilitate interstate commerce and to ensure certain standards for the safety and quality of roads throughout the country.

RELATED CBO PUBLICATIONS: *The Economic Effects of Federal Spending on Infrastructure and Other Investments*, June 1998; and *Innovative Financing of Highways: An Analysis of Proposals*, January 1998

**400-06—Discretionary and Mandatory****Eliminate the Essential Air Service Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-103	-104	-105	-106	-107	-525	-1,075
Outlays	-82	-104	-105	-106	-107	-504	-1,054

The Essential Air Service program was created by the Airline Deregulation Act of 1978 to continue air service to communities that had received federally mandated service before deregulation. The program provides subsidies to air carriers serving small communities that meet certain criteria (such as being at least 70 miles from a large or medium-sized hub airport, except in Alaska and Hawaii). Those subsidies support air service to about 130 U.S. communities, including about 30 in Alaska, for which separate rules apply. The number of passengers served annually has fluctuated in recent years, as has the subsidy per passenger, which has ranged from about \$5 to \$500. The Congress has directed that such subsidies not exceed \$200 per passenger unless the community is more than 210 miles from the nearest large or medium-sized hub airport.

This option would eliminate the Essential Air Service program, reducing outlays by \$82 million in 2006 and

\$504 million over five years. (The President's 2006 budget proposes to restructure the program.)

The rationale for this option is the high cost per passenger of providing subsidized air transportation through the Essential Air Service program. The program was intended to be transitional, giving communities and airlines time to adjust to deregulation, more than a quarter of a century ago. If states or communities derive benefits from air service to small communities, they could provide the subsidies themselves.

Supporters of the current program argue that it prevents the isolation of rural communities that would not otherwise receive air service. They maintain that because the availability of airline transportation is an important ingredient in the economic development of small communities, some towns might lose a sizable portion of their economic base without it.

RELATED OPTIONS: 400-01, 400-07, 400-09, and 400-10

**400-07—Discretionary and Mandatory****Eliminate Grants to Large and Medium-Sized Hub Airports**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,440	-1,480	-1,480	-1,480	-1,480	-7,360	-14,760
Outlays	-245	-856	-1,190	-1,343	-1,419	-5,053	-12,451

Note: Budget authority is mandatory. Outlays are discretionary.

Under the Airport Improvement Program (AIP), the Federal Aviation Administration provides grants to airports to expand runways, improve safety and security, and make other capital investments. Between 1982 and 2004, about 40 percent of the program's funding went to large and medium-sized hub airports—the 70 or so airports that together account for nearly 90 percent of passenger boardings.

This option would eliminate the AIP's funding for large and medium-sized hub airports but would continue grants to smaller airports at levels consistent with those of 2004. In that year, smaller airports received about 60 percent of the \$3.4 billion made available, or about \$2 billion. Retaining only that part of the program would reduce federal outlays by \$245 million in 2006 and nearly \$5.1 billion over the 2006-2010 period.

Funding for the AIP is subject to distinctive budgetary treatment. The program's budget authority is provided in authorization acts as contract authority, which is a mandatory form of budget authority. The spending of contract authority is subject to obligation limitations, which

are contained in appropriation acts. Therefore, the resulting outlays are categorized as discretionary.

The main argument for this option is that federal grants simply substitute for funds that larger airports could raise from private sources. Because those airports serve many passengers, they have generally been able to finance investments through bond issues as well as through passenger facility charges and other user fees. Smaller airports may have more difficulty raising funds for capital improvements, although some have been successful in tapping the same sources of funding as their larger counterparts. By eliminating grants to larger airports, this option would focus federal spending on airports that appear to have the fewest alternative sources of funding.

An argument against ending federal grants to large and medium-sized airports is that the grants could allow the Federal Aviation Administration to retain greater control over those airports by imposing conditions of aid. Such conditions could help ensure that the airports continued to make investment and operating decisions that would promote a safe and efficient aviation system.

400

RELATED OPTIONS: 400-01, 400-06, and 400-09

RELATED CBO PUBLICATION: *Financing Small Commercial-Service Airports: Federal Policies and Options*, April 1999

**400-08****Increase Fees for Certificates and Registrations Issued by the Federal Aviation Administration**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+5	+5	+5	+5	+5	+25	+54

Note: The fees could be classified as discretionary offsetting collections or as mandatory offsetting receipts, depending on the specific language of the legislation establishing them.

The Federal Aviation Administration (FAA) runs a large regulatory program to ensure safe air travel. It oversees and regulates the registration of aircraft, the licensing of pilots, the issuance of medical certificates, and other, similar activities. The FAA issues most licenses and certificates free of charge or at prices well below its costs. For example, the current fee to register an aircraft is \$5, but the FAA's cost to provide that service is closer to \$30. Pilots' certificates are issued free of charge, although the FAA estimates the cost of issuing them at \$10 to \$15 apiece.

This option would increase or impose fees to cover the costs of the FAA's regulatory services. That change could increase receipts by \$25 million over the 2006-2010 period. Net receipts would be somewhat smaller if the FAA needed additional resources to establish and administer the fees.

Under the Drug Enforcement Assistance Act of 1988, the FAA is authorized to impose several registration fees as long as they do not exceed the agency's costs of providing the services. For general aviation, that law allows fees of up to \$25 for aircraft registration and up to \$12 for pilots' certificates (plus adjustments for inflation). Setting higher fees would require additional legislation.

The primary rationale for this option is that it would recover the FAA's costs of issuing certificates and licenses while charging users relatively modest amounts—especially compared with the total cost of owning an airplane. The charges would be analogous to the fees that people pay to register automobiles or get drivers' licenses.

A drawback of this option is that higher regulatory fees might impose a burden on some aircraft owners and operators. That effect could be lessened by setting registration fees according to the size or value of an aircraft rather than on the basis of the FAA's costs.

**400**

RELATED OPTIONS: 300-01, 300-02, 300-03, 370-03, 400-03, 400-09, and 400-10

**400-09****Establish Cost-Based Fees for Air Traffic Control Services**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+2,000	+2,000	+2,000	+2,000	+2,000	+10,000	+20,000

Note: The fees could be classified as discretionary offsetting collections or as mandatory offsetting receipts, depending on the specific language of the legislation establishing them.

The Federal Aviation Administration (FAA) operates the nation's air traffic control (ATC) system, which serves commercial air carriers, the military, and smaller users, such as air taxis and operators of private corporate and recreational aircraft. Traffic controllers in airport towers, terminal radar approach control facilities (TRACONs), and air route traffic control centers (ARTCCs) help guide aircraft safely as they taxi to the runway, take off, fly through designated airspace, land, and taxi to the airport gate. The ATC system also includes flight service stations that provide weather data and other information useful to operators of small aircraft.

This option would charge fees for air traffic control services that reflect the FAA's marginal costs of providing the services. The marginal costs of a flight equal the costs of every ATC service (or contact) provided for that flight. For example, a commercial flight from New York to San Francisco entails contacts with two airport towers, two TRACONs, and seven ARTCCs. Under this option, the airline would pay the sum of the marginal costs of those contacts. An FAA study estimated that such costs for all airlines operating in the United States total about \$2 billion per year.

Fees based on marginal costs would affect various types of airline operations differently. Carriers mainly using hub-and-spoke networks would probably face higher fees than those providing nonstop origin-to-destination flights because of differences in the number of contacts with towers, TRACONs, and ARTCCs.

The advantage of this option is that charging fees for marginal costs would encourage efficient use of the ATC system. Noncommercial operators might reduce their use of ATC services, freeing controllers for other tasks and increasing the system's overall capacity. By analyzing the pattern of revenues from user fees, FAA planners could better decide on the amount and location of additional investments in the ATC system, which would make it more efficient.

The disadvantage of this option is that it would raise the cost of ATC services to users, which could weaken the financial condition of some commercial air carriers. The airlines might be able to pass most of the cost increase on to their customers, but that would be likely to reduce the demand for air travel.

RELATED OPTIONS: 300-01, 300-02, 300-03, 370-03, 400-03, 400-06, 400-08, and 400-10

RELATED CBO PUBLICATION: *Paying for Highways, Airways, and Waterways: How Can Users Be Charged?* May 1992

**400-10—Discretionary and Mandatory****Increase Fees for Aviation Security**

(Millions of dollars)						Total	
	2006	2007	2008	2009	2010	2006-2010	2006-2015
Change in Receipts	+3,000	+3,000	+3,000	+3,000	+3,000	+15,000	+30,000

The terrorist attacks of September 11, 2001, led to increased security measures at the nation's transportation facilities. One of the most sweeping changes resulted from the Aviation and Transportation Security Act of 2001, which made the federal government, rather than airlines and airports, responsible for screening airline passengers, carry-on luggage, and checked baggage. The new standards for screening have raised federal costs by requiring a larger number of screeners with higher qualifications, thus necessitating higher compensation.

To help pay for increased security, the law authorized airlines to charge passengers a fee of \$2.50 each time they board a plane, capped at \$5 for a one-way trip. (The President's 2006 budget proposes to raise those amounts to \$5.50 and \$8, respectively.) The 2001 law also authorized fees on the airlines themselves as well as funding to reimburse airport operators, service providers, and airlines for their additional costs for security enhancements. The Congressional Budget Office expects that the Transportation Security Administration will collect about \$2.4 billion from the fees in 2006—less than half of the estimated \$5.4 billion increase in federal costs that year resulting from the law.

This option would increase user fees so that they fully covered the costs to the federal government of the added security measures. Doing that would boost collections (and thus reduce net spending) by \$3 billion in 2006 and

\$15 billion through 2010. Under standard budgetary treatment, such collections would be classified as revenues, but because the Aviation and Transportation Security Act requires that revenues from the existing fees be recorded as offsets to federal spending, this option would treat the additional fees the same way.

The arguments both for and against fully funding federal aviation-security measures through user fees rest on the principle that the beneficiaries of a publicly provided service should pay for it. The difference lies in who is seen as benefiting from those measures. The argument for this option is that the primary beneficiaries of greater transportation security are the users of the system. Security is a cost of airline transportation, in the same way that fuel and labor costs are. The current situation, in which those costs are covered partly by taxpayers in general and partly by users of the aviation system, provides a subsidy to air transportation.

Conversely, the argument against higher user fees is that the public in general—not just air travelers—benefits from improved airport security. To the extent that greater security reduces the risk of terrorist attacks, the entire population is better off. That argument suggests that the federal government should fund the enhanced transportation-security measures without collecting additional funds directly from the airline industry or its customers.





# 450

## Community and Regional Development

**B**udget function 450 covers federal programs that promote the economic viability of communities, encourage rural development, and assist in the nation's preparation for and response to natural and man-made disasters. The function includes spending for flood insurance, homeland security grants for state and local governments' first responders, the Community Development Block Grant program, disaster relief, credit assistance to help develop rural communities, and federal support for certain programs to assist Native Americans.

Spending for community and regional development was nearly flat from 1995 through 1998, with only modest

growth in 1999 and 2000. In response to the September 11, 2001, terrorist attacks, the Congress significantly increased funding in this function for recovery efforts and grants to state and local first responders. Over \$10 billion has been appropriated for such grants since 2003. Outlays for function 450 are expected to total \$20.7 billion in 2005, an increase of about 75 percent since 2001. Near the start of this fiscal year, various disaster relief programs within the function received appropriations of \$8.5 billion in response to three major hurricanes (\$2 billion of that amount was provided at the end of fiscal year 2004). Outlays from that funding are likely to occur over several years.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	12.2	14.3	22.7	16.4	17.4	22.8	9.3	30.6
Outlays								
Discretionary	11.4	12.4	14.1	19.5	15.6	20.8	8.2	32.7
Mandatory	-0.8	-0.6	-1.2	-0.6	0.2	*	n.a.	n.a.
Total	10.6	11.8	13.0	18.9	15.8	20.7	10.4	31.2

Note: \* = between -\$50 million and zero; n.a. = not applicable (because some years have negative values).

**450-01—Discretionary****Drop Wealthier Communities from the Community Development Block Grant Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-837	-850	-864	-882	-897	-4,330	-9,064
Outlays	-17	-285	-641	-769	-824	-2,536	-7,095

The Community Development Block Grant (CDBG) program provides annual grants to communities to help them aid low- and moderate-income households, eliminate slums and blight, or meet emergency needs by rehabilitating housing, improving infrastructure, and carrying out economic development activities. Part of the program—referred to as the entitlement component—makes grants directly to cities and urban counties. (The program also allocates funds to states, which distribute them to smaller and more rural communities—called nonentitlement areas—typically through a competitive process.) Funds from the entitlement component may also be used to repay bonds that are issued by local governments and guaranteed by the federal government under the Section 108 program. For 2005, the CDBG program received an appropriation of \$4.1 billion, including \$2.9 billion for entitlement communities.

Under current law, the CDBG entitlement program is open to all urban counties, principal cities of metropolitan areas, and cities with a population of at least 50,000. The program allocates funds according to a formula based on population, the number of residents with income below the poverty level, the number of housing units with more than one person per room, the number of housing units built before 1940, and the extent to which population growth since 1960 is less than the average for all metropolitan cities. The formula does not require that a certain percentage of residents have income below the poverty level, nor does it exclude communities with high average income. An analysis in the President's 2004 budget showed that under that formula, population and other data from the 2000 census will shift funding

from poorer to wealthier communities, as measured by average poverty rates.

This option would focus CDBG entitlement grants on needier areas and reduce funding accordingly. Several different changes to the current formula could yield similar results. One simple approach would be to exclude communities whose per capita income exceeded the national average by more than a certain percentage. For example, restricting the grants to communities whose per capita income was less than 112 percent of the national average would reduce entitlement funds by 26 percent, in part by eliminating grants to New York City and Los Angeles. To illustrate the general approach, this option would make a slightly smaller cut—20 percent of entitlement funding—which would save \$2.5 billion over five years. (By comparison, the President's 2006 budget proposes to consolidate the CDBG program into a new economic and community development program to be administered by the Department of Commerce, in part to target federal funds toward needier areas.)

The main argument for narrowing eligibility for entitlement grants is that if the CDBG program can be justified at all—and some people contend that using federal funds for local development is inappropriate—its primary rationale is redistribution. In that case, redirecting money to wealthier communities serves no pressing interest.

The main argument against this option is that dropping wealthier communities from the CDBG program would reduce efforts to aid households in pockets of poverty within those communities, unless local governments reallocated their own funds to offset the lost grants.

**450-02—Discretionary****Convert the Rural Community Advancement Program to State Revolving Funds**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-12	-24	-38	-53	-67	-194	-4,517
Outlays	-1	-4	-12	-22	-33	-72	-2,372

The Department of Agriculture's Rural Community Advancement Program (RCAP) helps rural communities by providing loans, loan guarantees, and grants for water, waste-disposal, and waste-management projects; for community facilities; and for various activities to promote economic development. The program received appropriations of roughly \$755 million in 2005 for grants and for the budgetary cost of its loans and loan guarantees. (That cost is defined under credit reform as the present value of interest rate subsidies and expected defaults on the loans and guarantees.) The President's 2006 budget proposes to reduce funding for the program to \$522 million.

RCAP funds are generally allocated among states on the basis of their rural populations and their number of rural families with income below the poverty level. Within each state's allocation, the Department of Agriculture awards funds on a competitive basis to eligible applicants, including state and local agencies, nonprofit organizations, and (in the case of loan guarantees for business and industry) for-profit companies. The terms of a recipient's assistance depend on the purpose of the aid and, in some instances, on economic conditions in the recipient's area. For example, aid for water and waste-disposal projects can take the form of loans with interest rates ranging from 4.5 percent to market rates depending on the area's median household income. Areas that are particularly needy may receive grants or a mix of grants and loans.

This option would reduce future federal spending by providing money to capitalize state revolving funds for rural development and then ending federal assistance under RCAP. The amount of federal savings would depend on the level and timing of the contribution to capitalize the

revolving funds. Under one illustrative approach, the federal government would provide funding of \$755 million annually for five years to capitalize the funds, then cut off assistance in 2011. That approach would yield modest savings (\$72 million) over five years but more-significant savings (\$2.4 billion) through 2015. However, that level of capitalization would not by itself support the volume of loans and grants that RCAP now provides. Accordingly, the Congress could allow the revolving funds to use their capital as collateral with which to leverage additional financing from the private sector—as the state revolving funds established under the Clean Water Act and the Safe Drinking Water Act have been allowed to do.

The rationale for cutting off RCAP funding is that the federal government should not bear continuing responsibility for local development; rather, programs that benefit localities, whether urban or rural, should be funded at the state or local level. The rationale for the specific approach taken in this option is that a few years of federal funding to capitalize the revolving funds would provide a reasonable transition to the new policy.

One argument against converting RCAP to revolving funds is that states might change their types of aid (from grants to loans and from low-interest loans to high-interest loans) to avoid depleting the funds and to recoup the costs of any leveraged financing. Such a change could price the aid out of reach of needier communities. In addition, the estimated federal savings might not materialize: for example, the Congress has appropriated additional grants to the state funds for wastewater treatment systems after expiration of the original authorization for those grants.

**450-03—Discretionary****Eliminate Region-Specific Development Agencies**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-141	-143	-145	-149	-151	-729	-1,527
Outlays	-31	-75	-107	-128	-140	-481	-1,254

The federal government provides annual funding to three regional development agencies: the Appalachian Regional Commission (ARC), the Denali Commission, and the Delta Regional Authority. The ARC, established in 1965, conducts activities that promote economic growth in the Appalachian counties of 13 states, stretching from southern New York to northern Mississippi. Modeled after the ARC, the Denali Commission, which was created in 1998, covers remote areas in Alaska. Similarly, the Delta Regional Authority, established in 2000, covers 240 counties and parishes near the Mississippi River in eight states, stretching from southern Illinois to the Louisiana coast. For 2005, the Congress appropriated \$65 million for the ARC, \$68 million for the Denali Commission, and \$6 million for the Delta Regional Authority. (The President's 2006 budget proposes cutting the Denali Commission's appropriation to \$3 million.)

This option would discontinue federal funding for the Appalachian, Denali, and Delta regional development agencies. That change would reduce discretionary outlays by \$31 million in 2006 and \$481 million over five years.

The three agencies provide programs that are intended, among other things, to create jobs, improve rural education and health care, develop utilities and other infrastructure, and provide job training. Few studies have addressed the effectiveness of such programs. A 1996 report by the General Accounting Office (now the Government

Accountability Office) reviewed the available research and found one study showing that counties aided by ARC programs grew significantly faster, according to various socioeconomic measures, than otherwise similar non-ARC counties. However, a strong link could not be made between the activities of the ARC and the counties' growth.

An advantage of ending federal funding for the three agencies is that it would shift more responsibility for supporting local or regional development to the states and localities whose citizens would benefit from that development. Another rationale for this option is that all parts of the country have needy areas; the Appalachian region, rural Alaska, and the Mississippi Delta should have no special claim to federal dollars. In that view, any federal development aid they do receive should come from nationwide programs, such as those of the Economic Development Administration, rather than from federal programs that focus on specific regions.

The main arguments against this option are that the federal government has a legitimate role to play in redistributing funds among states to support development in the neediest areas and that cutting federal funding would reduce local progress in education, health care, and job creation. Another argument is that Appalachia, rural Alaska, and the Mississippi Delta merit special attention because of their size, physical isolation, and severe poverty.

**450-04—Discretionary****Eliminate the Neighborhood Reinvestment Corporation**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-116	-118	-120	-122	-124	-600	-1,257
Outlays	-116	-118	-120	-122	-124	-600	-1,257

The Neighborhood Reinvestment Corporation (NRC) is a public, nonprofit organization charged with revitalizing distressed neighborhoods. The NRC oversees a network of locally initiated and operated groups called NeighborWorks organizations (NWOs), which engage in a variety of housing, neighborhood revitalization, and community-building activities. The corporation provides technical and financial aid to start new NWOs; it also monitors and assists current ones. The NeighborWorks network includes over 220 member organizations operating in more than 2,500 communities nationwide. For 2005, the NRC received \$114 million in appropriations.

This option would eliminate the Neighborhood Reinvestment Corporation, saving \$116 million in 2006 and \$600 million over five years.

With its appropriated funds, plus a few million dollars from fees and other sources, the NRC provides grants, conducts training programs and educational forums, and produces publications in support of NeighborWorks organizations. The bulk of its grant money goes to NWOs, which use the funds to purchase, construct, and rehabilitate properties; capitalize their revolving loan funds; develop new programs; and cover their operating costs. NWOs' revolving loan funds make mortgage and home improvement loans to individuals as well as loans to owners of mixed-use properties who provide long-term rental housing for low- and moderate-income people. In addition, the NRC awards grants to Neighborhood Housing Services of America, which provides a secondary market for the loans made by NWOs.

One rationale for eliminating the Neighborhood Reinvestment Corporation is that the federal government should not fund programs whose benefits are local rather than national. In addition, the NeighborWorks approach duplicates the efforts of other federal programs—particularly those of the Department of Housing and Urban Development—that also rehabilitate low-income housing and promote home ownership and community development. Moreover, the NRC is a relatively minor source of funding for NeighborWorks organizations. In 2003, its grants accounted for less than 20 percent of NWOs' funding from government sources and less than 5 percent of their total funding. Larger shares came from private lenders, foundations, corporations, and the Department of Housing and Urban Development.

An argument against this option is that the large number of federal programs that exist to assist local development is evidence of widespread support for a federal role—particularly in areas where state and local governments may lack adequate resources of their own. Furthermore, NWOs address problems in whole neighborhoods rather than individual properties. And with their nonhousing activities (such as community-organization building, neighborhood cleanup and beautification, and leadership development), they provide economic and social benefits that other federal programs do not. Finally, the NRC may be particularly valuable because it has flexibility in making grants—which allows it to fund worthwhile efforts that do not fit within the narrow criteria of larger federal grantors—and because it provides the NWOs with needed training, program evaluation, and technical assistance.

**450-05—Discretionary****Eliminate the Community Development Financial Institutions Fund**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-52	-53	-54	-55	-56	-270	-566
Outlays	-5	-34	-50	-54	-55	-198	-488

The Community Development Financial Institutions (CDFI) Fund was created in 1994 to expand the availability of credit, investment capital, and financial services in distressed communities. Administered by the Treasury Department, the fund provides equity investments, grants, loans, and technical assistance to CDFIs, which include community development banks, credit unions, loan funds, venture capital funds, and microenterprise funds. In turn, those institutions provide a range of financial services—such as mortgage financing for first-time home buyers, loans and investments for new or expanding small businesses, and credit counseling—in markets that are underserved by traditional institutions. The CDFI Fund also provides incentive grants to traditional banks and thrifts to invest in CDFIs and to increase loans and services to distressed communities. In addition, the fund administers the New Markets Tax Credit (NMTC) program begun in 2002 to provide federal tax credits for qualified investments in “community development entities.” The CDFI Fund received appropriations of \$56 million for 2005.

This option would eliminate the CDFI Fund, reducing discretionary outlays by a total of \$198 million through 2010. That estimate of savings takes into account the small amount of additional spending that would be required by other agencies to oversee the fund’s existing loan portfolio and administer the NMTC program.

One rationale for doing away with the CDFI Fund is that local development should be financed at the state or local level, not by the federal government, since its benefits are not national in scope. Another argument is that the fund is redundant because many other federal programs and agencies—including the Empowerment Zones/Enterprise Communities Program, housing loan programs of the Rural Housing Service, the Community Development Block Grant program, the Neighborhood Reinvestment Corporation, and the Economic Development Administration—support home ownership and local economic development. Those programs and agencies received total funding of \$4.7 billion for 2005. (The President’s 2006 budget proposes consolidating the CDFI Fund into a new economic and community development program to be administered by the Department of Commerce.) Furthermore, assistance to CDFIs may be inefficient because it encourages loans that would otherwise not pass market tests for creditworthiness.

The primary argument against eliminating the CDFI Fund is that the federal government has a legitimate role in assisting needy communities, some of which lack access to traditional sources of credit. By helping existing CDFIs and stimulating the creation of others, the fund may provide an effective mechanism for leveraging private-sector investment with a relatively small federal contribution.

RELATED OPTIONS: 450-01, 450-04, and 450-06

**450-06—Discretionary**

**Eliminate Grant Funding for Empowerment Zones**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-23	-23	-23	-25	-25	-119	-249
Outlays	0	-7	-18	-21	-23	-69	-195

The Omnibus Budget Reconciliation Act of 1993 authorized a 10-year program under which businesses would receive tax incentives—in the form of wage and tax credits, accelerated depreciation, and tax-exempt financing—to move to or expand in nine economically distressed communities designated “empowerment zones.” To receive the designation, communities had to meet certain eligibility criteria and compete for selection on the basis of their strategic plans for implementing the program. When the law was enacted, the Congress provided \$100 million in block grants for each urban empowerment zone and \$40 million for each rural zone to support a broad range of economic and social development activities. The law also authorized the designation of 95 “enterprise communities” that were eligible for grants of \$3 million each.

Since 1993, the Congress has authorized two additional rounds for designating empowerment zones; it has also authorized the designation of 40 “renewal communities,” which are subject to a slightly different set of benefits. However, the program has increasingly emphasized tax incentives rather than grants. Only empowerment zones created in 1998 continue to receive grant funding. Neither Round III empowerment zones nor renewal communities ever received grants. In 2005, funding for grants to empowerment zones totaled \$23 million, although the President had requested nothing.

This option would eliminate grant funding for empowerment zones and enterprise communities while leaving the

tax incentives for those areas in place. That change would save a total of \$69 million over five years.

The main arguments for this option are that tax breaks and other incentives are more effective than grants in promoting economic revival and that local development should be funded at the state or local level, not by the federal government, since its benefits are not national in scope. Furthermore, funds for social services and community benefits are available from a number of other government programs, including the Community Development Block Grant program and various regional commissions and authorities. (The President’s 2006 budget proposes to consolidate the Empowerment Zones/Enterprise Communities Program into a new economic and community development program to be administered by the Department of Commerce.)

An argument against this option is that tax incentives alone are of limited effectiveness without related funding for publicity and technical assistance to local entrepreneurs. For example, the Government Accountability Office surveyed businesses operating in the nine original empowerment zones and found that they did not take advantage of many of the tax benefits available to them in tax year 1997 and that many did not know about some of those benefits. Finally, many communities have issued bonds and developed strategic plans expecting that multi-year grant funding would be available.

RELATED OPTIONS: 450-01, 450-03, 450-04, and 450-05

**450-07—Mandatory****Phase Out the Flood Insurance Subsidy on Pre-FIRM Structures Other Than Primary Residences**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+14	+41	+55	+56	+56	+222	+513

The National Flood Insurance Program charges two different sets of premiums to insure buildings. One set applies to structures built either before 1975 or before the completion of a community's official flood insurance rate map (FIRM). Those structures are known as pre-FIRM buildings. The other set of premiums applies to post-FIRM buildings. Post-FIRM premiums are intended to be actuarially sound (that is, to cover the costs of all insured losses over the long term). They are based on a building's elevation relative to the flood level that is thought to have a 1 percent chance of being equaled or exceeded each year in that location. Pre-FIRM rates, by contrast, are heavily subsidized, on average, and do not take into account a building's elevation.

The Federal Emergency Management Agency (FEMA), which administers the flood insurance program, estimates that about 19 percent of coverage is provided at pre-FIRM rates. Those rates are available only for the first \$35,000 of coverage for a one- to four-family dwelling and for the first \$100,000 of coverage for a larger residential, nonresidential, or small-business building. Various levels of additional coverage are available at actuarially sound rates. The program also offers insurance for buildings' contents. As with the insurance for structures, policyholders in pre-FIRM buildings pay lower rates for the first tier of that coverage. FEMA estimates that the first-tier premiums for both buildings and contents equal 35 percent to 40 percent of the actuarial value of the insurance, implying subsidies of 60 percent to 65 percent. (Those figures are averages; the size of the subsidy for any particular building depends heavily on its elevation.)

This option would phase out the subsidy on all insured structures other than primary residences—in other words, on second and vacation homes, rental properties, and nonresidential buildings. That change would increase federal receipts by \$14 million in 2006 and \$222 million over the 2006-2010 period. Those estimates ac-

count for the likelihood that some current policyholders would drop their coverage. Flood insurance is mandatory only for properties that are located in special flood-hazard areas and that carry mortgages from federally insured lenders; and compliance with the requirement is far from complete. Thus, the Congressional Budget Office assumes that this option would reduce participation by both voluntary purchasers and property owners for whom the insurance was mandatory.

One argument for this option is that the subsidies in the flood insurance program have outlived their original justification as a temporary measure to encourage participation among property owners who were not previously aware of the magnitude of the flood risks they faced. According to that view, phasing out the subsidies would make pre-FIRM policyholders pay more of their fair share for insurance protection. A second rationale is that phasing out subsidies would give those policyholders incentives to relocate or take preventive measures. Keeping the subsidies for primary residences can be justified as focusing the subsidies on structures whose owners might face the greatest hardship in paying actuarial rates.

At least four arguments against phasing out subsidies for flood insurance can be made. First, charging full actuarial rates for properties built before FEMA documented the extent of local flood hazards could be considered unfair. Second, ending subsidies for rental properties might cause owners to pass on the increased costs to renters. Third, lower rates of participation in the program could lead to greater spending on federal disaster grants and loans, thus eroding some of the projected savings. Finally, the accuracy of the maps that FEMA uses to estimate the average long-term subsidy could be challenged on the grounds that premiums now roughly equal the average losses incurred to date for most pre-FIRM properties (except a few that flood repeatedly).



**450-08—Discretionary****Restrict First-Responder Grants to Larger, At-Risk Communities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-630	-640	-652	-663	-675	-3,260	-6,826
Outlays	-292	-489	-321	-644	-656	-2,403	-5,831

The Department of Homeland Security (DHS) issues grants to local governments to help police, firefighters, and other first responders prepare for terrorist attacks—by, for example, receiving biohazard training, acquiring special equipment (such as chemical suits), and providing additional physical security for critical infrastructure. For 2005, the Congress appropriated about \$4 billion for those grants, which are administered by DHS’s Office for State and Local Government Coordination and Preparedness. (The President’s 2006 budget proposes reducing that funding by \$420 million.) Currently, the grants are broadly available to communities of all sizes (through their state governments); indeed, most of the funds are distributed using a formula that guarantees that no state will receive less than 0.75 percent of the money. That approach may not fully reflect the relative attractiveness of communities as terrorist targets or the relative human and economic losses from an attack.

This option would reduce the funding to DHS for first-responder grants by 20 percent—or about \$650 million annually—in order to limit the funding that would otherwise be available to small, low-risk communities. (The base for that 20 percent reduction would exclude about \$900 million in grants that are specifically aimed at high-density, high-threat urban areas.) In addition, this option would alter the formula directing how first-responder grants are allocated so that support to large communities would not be affected. The revised formula could base eligibility not only on a community’s population but also on whether it had significant national monuments or activities that were critical to the U.S. economy or to the provision of government services.

Proponents of changing the allocation formula argue that many grants now go to communities with small and dis-

persed populations, little critical economic activity, or few attractive targets for terrorists. Those communities may be less likely to be attacked and, if they were, would incur relatively small losses. Supporters of altering the formula also point out that not all the money currently available has been spent: as of September 31, 2004, more than \$5 billion in prior years’ funding had not yet been disbursed. And according to some observers, the dollars that were spent yielded little increase in national security, either because much of the spending did not benefit emergency preparedness or because it simply replaced other sources of funding for ongoing preparedness efforts. Legislation introduced in the previous Congress called for prioritizing grants to first responders on the basis of relative risk.

Opponents of changing the current allocation note that DHS already provides funds for other security programs (such as those at airports, seaports, and other transportation centers) that selectively benefit communities where risks of attack and losses may be greater. In addition, federal regulatory programs and private businesses are working to help protect attractive targets in those at-risk communities. Thus, opponents of this option argue, continuing to issue first-responder grants on the basis of geography may help restore balance in the allocation of funding. Moreover, terrorism is only one of many risks that communities face. Preparations nominally intended to deal with terrorist attacks may help mitigate the costs of crime, fires, storms, floods, or earthquakes—threats that exist everywhere. Advocates of that view support legislation that would broaden the uses for DHS’s first-responder grants to include preparations for all types of disasters.



# 500

## Education, Training, Employment, and Social Services

**B**udget function 500 primarily covers spending by the Departments of Education, Labor, and Health and Human Services for programs that directly provide—or assist states and localities in providing—services to individuals. Activities in this function include making developmental services available to children in low-income families, helping fund programs for elementary and secondary school students, making grants and loans to postsecondary students, and funding job-training and employment services for people of all ages.

The Congressional Budget Office estimates that outlays for function 500 will total \$92.5 billion in 2005. Discretionary outlays make up almost \$80 billion of that total. Largely fueled by the rapid growth in funding for elemen-

tary and secondary education, function 500 has experienced sizable increases in discretionary outlays, with total spending climbing by more than 60 percent since 2000. In recent years, education spending has made up about 70 percent of the discretionary outlays in this function. Much of the rest covers training and employment services as well as a variety of social service programs.

Mandatory spending in function 500 consists primarily of subsidy costs for higher education loans, funding for the Social Services Block Grant program, and funding for rehabilitation services and disability research. Mandatory spending varies greatly from year to year because of changes in loan volume, interest rates, and other factors that affect the student loan programs.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	44.4	61.3	71.3	75.1	78.1	79.6	15.2	1.8
Outlays								
Discretionary	48.9	54.3	62.7	71.2	75.2	78.7	11.3	4.7
Mandatory	<u>4.8</u>	<u>2.9</u>	<u>7.8</u>	<u>11.3</u>	<u>12.8</u>	<u>13.7</u>	27.6	7.5
Total	53.8	57.1	70.5	82.6	87.9	92.5	13.1	5.1

**500-01—Discretionary****Reduce Funding to School Districts for Impact Aid**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-129	-131	-133	-136	-138	-668	-1,398
Outlays	-114	-120	-128	-134	-136	-632	-1,352

The Impact Aid program, authorized under title VIII of the Elementary and Secondary Education Act, provides money to school districts that are affected by activities of the federal government. Most of the program's funds are used to make basic support payments to districts for so-called federally connected students (such as those living on Indian land or military bases). Impact Aid funds are also used for construction grants to districts where a significant number of students are federally connected and for assistance to districts in areas where the federal government owns a significant portion of the property tax base, thus depriving those districts of a source of revenue.

In 2005, approximately 1,300 local educational agencies (LEAs) will receive basic support payments from the Impact Aid program. For a school district to be eligible for those payments, a minimum of 3 percent—or at least 400—of its schoolchildren must be associated with activities of the federal government. The amount of basic support payments a school district receives is based on a formula that considers the district's population of "Type A" and "Type B" students. Type A students are those living on Indian land as well as students living on federal land who have a parent that either is employed on federal land within the school district, is a member of the armed forces, or is employed by a foreign government (working at an embassy, for example). Type B students are those

who reside in federally subsidized low-rent housing as well as those not living on federal property who have a parent who is employed by either the armed forces or a foreign government. Type B students also include those who live on federal property but whose parents are not employed on federal property within the school district and those who live with a parent who is employed on federal land within the state containing the LEA; however, districts do not receive payments for such students unless they have 10 percent—or at least 1,000—enrolled.

This option would focus Impact Aid on the school districts that are most strongly affected by federal activities by basing support payments solely on the districts' enrollment of Type A students. Eliminating support for Type B students would reduce federal outlays by \$114 million in 2006 and by \$632 million over five years.

A rationale for this option is that it is appropriate to restrict Impact Aid payments to cover only students whose presence puts the greatest burden on school districts. An argument against the option is that eliminating payments for other types of students associated with activities of the federal government could significantly harm certain districts—for example, those in which large numbers of military families live off-base but shop at military exchanges, which do not collect local sales taxes.

**500-02—Discretionary****Eliminate State Grants for Safe and Drug-Free Schools and Communities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-444	-451	-459	-468	-476	-2,298	-4,810
Outlays	-9	-267	-404	-455	-464	-1,598	-4,045

Grants to the states under the Safe and Drug-Free Schools and Communities Act (SDFSCA) fund programs to discourage violence and the use of illegal substances—such as alcohol, cigarettes, and drugs—among young people in and around schools. States receive SDFSCA funding on the basis of their school-age population and number of poor children. In 2005, that funding totaled \$437 million.

States distribute SDFSCA funds to school districts in the form of grants that must be used according to certain guidelines. Although the SDFSCA program stipulates that 93 percent of the funds states receive must go toward activities that address violence and drug abuse in schools, it offers little guidance about what constitutes an effective use of those funds.

In the President's 2006 budget, the Office of Management and Budget assessed the SDFSCA program and recommended that the state grants portion be eliminated. This option would eliminate payments to states under the SDFSCA, saving \$9 million in 2006 and a total of about \$1.6 billion through 2010.

Proponents of eliminating SDFSCA funding argue that the activities supported by the program do not appear to be effective. Several recent reports concluded that those activities have shown little success in reducing the incidence of violence and drug abuse in schools. Furthermore, although violence and drug abuse in general are pressing societal issues, they are problems that rarely occur on school grounds. Despite the occasional well-publicized incident, studies show that schools are among the safest places in the country, on average, and that drug use occurs infrequently on school property. In addition, rates of violent injury on school grounds have not changed significantly since the SDFSCA was enacted in 1986.

An argument against this option is that prevention efforts such as those funded by the SDFSCA may serve a proactive function by raising people's awareness of the problems of drug abuse and violence. If such efforts were eliminated, drug use and violence might accelerate and lead to even more costly interventions on the part of school systems and communities.

**500-03—Discretionary****Fund the Federal Goal of Paying 40 Percent of the Added Cost of Educating a Disabled Child**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+13,315	+13,769	+14,254	+14,739	+15,216	+71,293	+119,147
Outlays	+4,720	+11,253	+13,737	+14,339	+14,821	+58,870	+105,607

The Individuals with Disabilities Education Act (IDEA) authorizes the federal government to make grants to states to provide special education and related services to students with disabilities. In exchange for receiving that federal funding, states are required to provide a “free appropriate public education” designed to meet the needs of eligible students. Every state participates in the program. During the 2002-2003 school year, an estimated 6.6 million children received IDEA-covered services at an average federal cost of about \$1,340 per student.

For more than two decades, the authorization for this program (which was originally made through the Education for All Handicapped Children Act) has been set to provide each state with a maximum grant of 40 percent of the national average per-pupil expenditure (APPE) for every disabled child it educates.<sup>1</sup> The program has never been funded at a level sufficient to meet that goal. If the program had been funded at the maximum level in 2002, states would have received a payment of \$3,135 per disabled child based on an APPE of \$7,837 in that year. Even though funding for the program has more than doubled since 1999, its appropriation for 2005 of \$10.6 billion represents grants that will provide only about 18 percent of the estimated national APPE.

This option would fully fund the original federal goal of 40 percent with adjustments for 2007 and beyond. Doing so would require an additional \$13.3 billion in bud-

get authority in 2006 and a total of \$71.3 billion over the 2006-2010 period. Outlays would increase by \$4.7 billion in 2006 and a total of \$58.9 billion through 2010. Under this option, the appropriation for IDEA grants to states in 2006 would be more than twice the level in the Congressional Budget Office’s baseline for that year and would be adjusted annually to reflect estimated changes in the national APPE and in the numbers of children ages 3 to 21 and children of those ages below the poverty line.

Supporters of this option argue that the original federal goal represents a commitment made to the states and should be kept. In their view, school systems are obligated to provide all children with a free appropriate education—which, in the case of children with disabilities, often requires costly equipment and individualized professional attention. Proponents of additional federal support contend that the funds are needed to ensure that school districts can meet those obligations.

Opponents of this option believe that educating children, including disabled children, is a responsibility of state and local governments and that the federal government’s involvement should be minimal. They reject the claim that the authorization level represents a federal commitment, viewing that level instead as a ceiling for appropriations. Moreover, critics argue that certain problems with how the current system operates—such as paperwork burdens on school systems and incorrect identification of disabilities (such as learning disabilities) that are more difficult to diagnose—will not be solved by simply increasing federal funding.

1. Beginning in 2007, the rate of 40 percent of the APPE will be adjusted not by the population of disabled children, but by the change in states’ overall numbers of children ages 3 to 21 and children ages 3 to 21 living in poverty.

**500-04—Discretionary****Increase Funding for the Education of Disadvantaged Children**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+9,806	+11,852	+12,062	+12,272	+12,506	+58,499	+123,947
Outlays	+4,776	+10,008	+11,703	+12,130	+12,367	+50,985	+115,996

Title I-A of the Elementary and Secondary Education Act of 1965 authorizes grants to local school districts to fund supplementary educational services for disadvantaged and low-achieving children. The Improving America's Schools Act of 1994 added accountability measures to the Title I-A program that were significantly strengthened by the No Child Left Behind Act (NCLBA) of 2001. Those measures establish annual goals for educational improvement and impose sanctions when the goals are not met. Although the sanctions are intended to help schools improve their performance, the consequence is to increasingly restrict how schools can use their grant funds.

The accountability measures in the NCLBA require that schools that start farthest from the ultimate goal that all children be proficient in reading and math make the greatest annual progress if they are to avoid sanctions, because the annual goals are structured in a way that all schools must reach the final goal by the 2013-2014 school year. Included among those schools that have started the farthest behind are those with large concentrations of disadvantaged children.

The NCLBA authorized Title I-A grants that began at \$13.5 billion for 2002 and increase steadily to \$25 billion for 2007. However, those grants have been funded below authorized levels. For example, the 2005 funding level

was \$12.7 billion, compared with the authorized level of \$20.5 billion. This option would boost funding for Title I-A up to its authorized level (\$22.8 billion in 2006) and thereby increase federal outlays by \$4.8 billion in 2006 and by \$51 billion through 2010.

A rationale for the funding increase is that for disadvantaged children to catch up to their more advantaged peers will require improvements in educational performance that are unprecedented. To close the gap, schools with high concentrations of disadvantaged children will probably have to dramatically increase both the quality and intensity of the supplemental educational services they provide. Those improvements will require very large increases in resources.

An argument against the funding increase is that experience with earlier reform plans shows that simply providing more resources may not solve the problem of closing the achievement gap between economically disadvantaged children and their better-off peers. Across schools, the link between the level of resources and the level of academic achievement varies from study to study. Academic achievement may be associated with qualities—such as school leadership and excellent teaching—that cannot be improved by simply providing more resources.

**500-05—Discretionary****Eliminate the Even Start Program and Redirect Some Funds to Other Education Programs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-114	-116	-118	-120	-123	-592	-1,238
Outlays	-3	-96	-114	-118	-120	-451	-1,085

The Even Start family literacy program provides educational and related services to parents who have not finished high school and to their young children. Those services include basic academic instruction and help with parenting skills for the parents and early childhood education for their children, along with supplementary services such as child care and transportation. Under the program, the Department of Education makes grants to states to provide assistance through eligible entities (a local education agency in collaboration with a community-based or other nonprofit organization). During the 2003-2004 school year, the program supported 1,243 entities serving 50,000 families with federal funding that averaged about \$5,000 per family. The most recent national evaluation of the program found that roughly one-third of funding supported adult and parenting education and associated support services and another one-third supported early childhood education. The remainder paid for case management, recruiting, evaluation, administration, and other activities. For 2005, federal funding for the program was \$225 million.

This option would eliminate grants to states under the Even Start program (which the President's 2006 budget would also do) and redirect half of those funds to other federal early childhood education programs. That change would save \$3 million in outlays in 2006 and a total of \$451 million over five years.

An argument for this option is that the most recent national evaluation of Even Start did not produce evidence that the program's approach of involving parents in the

education of their children is effective. That evaluation included a study that tracked 18 local grantees that randomly assigned 20 new families to an Even Start program providing the full range of services and 10 families to a control group (those families were not allowed to participate in the Even Start program for one year but were free to seek other educational and social programs for which they qualified). Although both groups made gains on literacy and many other measures, the parents and children in the Even Start program did not perform better than the parents and children in the control group. The national evaluation also found that maintaining families' participation in the program and use of its full range of services—which are at the core of the program's philosophy—was a continuing problem. Families in the Even Start program during the 2000-2001 school year used only a fraction of the services available to them. Also, about half of the families who joined Even Start between the 1997-1998 school year and the 2000-2001 school year left the program within 10 months; and, by that time, fewer than one in five families had met their educational goals under the program.

An argument against this option is that other studies have shown that children who participate in programs providing intensive high-quality services make larger cognitive gains while in the program and have better educational outcomes years after leaving the program than those who do not. In addition, research has repeatedly shown an association between family background, including education level and income, and the educational achievement of children. So although direct evidence is not available, it



seems plausible that children whose parents have low literacy or little education are more likely to be educationally successful if they receive early childhood instruction themselves and if their parents receive educational services and instruction to help their children learn. Also,

those parents may be more motivated to participate in basic education programs for adults and improve their own job prospects if one of the purposes of such programs is to support their children's educational development.

RELATED OPTIONS: 500-03 and 500-04

**500-06—Mandatory** (An update reflecting CBO's March 2005 baseline is available from within the electronic version of this document on CBO's web site.)

## Eliminate the 9.5 Percent Guaranteed Yield on Certain Student Loans

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-205	-215	-215	-220	-225	-1,080	-2,280
Outlays	-145	-195	-195	-195	-200	-930	-1,995

For guaranteed student loans, the federal government ensures that lenders will receive no less than a specific yield. That minimum yield, which is recalculated each year for most guaranteed student loans, was 3.37 percent for the 2004-2005 school year on loans in repayment. For student loans made from proceeds of tax-exempt bonds issued between October 1980 and October 1993, however, the government's guaranteed minimum yield is 9.5 percent. That higher yield on 9.5 percent loans is an added cost to the government.

Although loans financed by newly issued tax-exempt bonds have not received the 9.5 percent guaranteed yield for more than a decade, the outstanding volume of loans receiving that guaranteed yield has increased. At the end of 2004, the outstanding volume of those loans was \$17 billion, whereas the original volume of tax-exempt financing associated with that guarantee was about \$9 billion.

Lenders have used three methods to slow the decline and even increase the volume of loans that receive the 9.5 percent guaranteed yield.<sup>1</sup> First, after paying principal and interest to bondholders, lenders can reinvest, or recycle, any remaining amounts earned from the loans to make or purchase new loans that, under the law, also receive the 9.5 percent guaranteed yield. Second, lenders can issue a new bond, called a refunding bond, to repay the original tax-exempt bond, and the student loans that the new bond finances will continue to receive the 9.5 percent yield. Furthermore, the refunding bond can have a later payoff date than the original bond so recycling can be extended. Third, a lender can issue a taxable bond to pur-

chase the loans financed by the pre-1993 tax-exempt bond or the refunding bond, and the 9.5 percent loans that the original bonds financed will continue to receive that yield. In addition, the proceeds from the purchase can be used to make additional 9.5 percent loans. That method of transferring loans from tax-exempt to taxable bonds allows lenders to significantly increase the volume of 9.5 percent loans they hold.

Public Law 108-409, which took effect October 30, 2004, prohibits lenders from using refunding and transferring as methods to increase the volume of student loans receiving the 9.5 percent guaranteed yield, but it allows lenders to continue to recycle repayments of existing 9.5 percent loans into new 9.5 percent loans. Those new restrictions are in effect through December 2005. The President's 2006 budget proposes making those restrictions permanent. This option would do the same, and it would eliminate the recycling of repayments into new 9.5 percent loans. Although lenders holding existing 9.5 percent loans would continue to receive that guaranteed yield, they would not be able to maintain or increase the volume of such loans. The yield on all new loans would be the same as on current loans not financed with pre-1993 tax-exempt financing. That change would reduce federal outlays by \$145 million in 2006 and by \$930 million through 2010.<sup>2</sup>

Proponents of this option contend that the 9.5 percent guaranteed yield, which was chosen at a time of high inflation and high interest rates, is now far more than lenders are normally paid for making loans to students. The current formula for calculating the guaranteed yield is intended to provide lenders with income sufficient to cover

1. Government Accountability Office, *Federal Family Education Loan Program: Statutory and Regulatory Changes Could Avert Billions in Unnecessary Federal Subsidy Payments*, GAO-04-1070 (September 2004).

2. In addition, this proposal would reduce federal outlays by \$670 million in 2005 because of the impact of the restrictions on currently outstanding loans.

their financing, servicing, and administrative costs and to give them a reasonable return on their equity investment in those loans.

Opponents of this option point out that it would reduce the government guaranteed yield on some new student loans and, consequently, make lenders less likely to provide additional benefits to borrowers. Those benefits,

which lenders pay for by using some of the higher yield they receive on 9.5 percent loans, may include reduced interest rates for borrowers who make a certain number of on-time payments and the rebate of some or all of their loan origination fee at the time the borrower begins repaying the loan. Providing those benefits helps lenders reduce their income from tax-exempt bonds and thus stay below limits specified in the Internal Revenue Code.

RELATED OPTION: 500-09

**500-07—Mandatory****Eliminate Subsidized Loans to Graduate Students**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-840	-835	-830	-830	-835	-4,170	-8,555
Outlays	-570	-775	-770	-770	-775	-3,660	-7,725

Federal student loan programs allow students and their parents to borrow funds to pay for students' post-secondary education. Those programs offer subsidized loans to students with proven financial need and unsubsidized loans to students regardless of need. Two programs provide both types of loans: the Federal Family Education Loan Program, in which loans made by private lenders are guaranteed by the federal government; and the William D. Ford Federal Direct Loan Program, in which the government makes loans through schools. Borrowers benefit because the interest rates that they are charged are lower than the rates that most of them could secure from alternative sources. Borrowers who receive subsidized loans benefit further because the federal government forgives interest on those loans while students are in school and for six months afterward.

This option would end new subsidized loans to graduate students in 2005. Under the assumption that those students would then take out unsubsidized loans instead, this option would reduce federal outlays by \$570 million in 2006 and by \$3.7 billion over the 2006-2010 period. (Under the Federal Credit Reform Act of 1990, the federal budget records all the costs and collections associated with a new loan on a present-value basis in the year in which the loan is obligated.)

A rationale for restricting subsidized loans to undergraduate students is that it would focus student aid funding on what some people believe is the federal government's primary role in higher education—to make a college education available to all high school graduates. According to that rationale, graduate students have already benefited from higher education. An argument against such a shift in funding is that supporting graduate students is an equally important role of the federal government because those students are most likely to make scientific, technological, and other advances that will benefit society as a whole.

Under this option, graduate students who lost access to subsidized loans could take out unsubsidized federal loans for the same amount and still benefit from below-market interest rates. Nevertheless, graduate students often amass large student loan debts because of the number of years of schooling required for their degrees. Without the benefit of interest forgiveness while they were enrolled in school, their debt would be substantially larger when they entered the repayment period because the interest on the amounts they had borrowed over the years would be added to their loan balance. However, the federal student loan programs have several options for making repayment manageable for students who have high loan balances or difficult financial circumstances.

500

RELATED OPTION: 500-08

RELATED CBO PUBLICATION: *Private and Public Contributions to Financing College Education*, January 2004

**500-08—Mandatory****Raise Interest Rates on Federal Student Loans**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-185	-290	-345	-345	-345	-1,510	-3,360
Outlays	-115	-225	-290	-305	-310	-1,245	-2,895

Under the Federal Family Education Loan (FFEL) Program and the William D. Ford Federal Direct Loan Program, students may borrow money for postsecondary education—from lenders and from the government, respectively—at below-market interest rates. The rate that students are charged on loans from those programs during the repayment period equals the interest rate that the government pays on 91-day Treasury bills plus 2.3 percentage points (with the total rate not to exceed 8.25 percent). For the 2004-2005 school year, that rate totals 3.37 percent. Beginning in July 2006, students' interest rate will be fixed at 6.8 percent.

Lenders that participate in the FFEL program usually receive a higher interest rate on federal loans than the rate students pay, with the federal government making up the difference. Lenders receive a rate equal to either the student rate or the interest rate on commercial paper issued by financial institutions plus 2.34 percentage points, whichever is higher. Even if their rate is below market interest rates, lenders are willing to make loans through the FFEL program because the government guarantees repayment.

This option would raise the rate students pay on federal loans from both programs by calculating that rate using

the formula for lenders in the FFEL program. The rate for students would still be capped at 8.25 percent, however, and the government would continue to make an additional payment to lenders when the lender-rate formula exceeded that cap. The change to the formula would boost students' interest rate by an average of about 0.26 percentage points on loans originated before the planned interest rate change in July 2006 and by 0.14 percentage points on those originated afterward. This option would reduce federal outlays by \$115 million in 2006 and by a total of roughly \$1.2 billion over five years.

A rationale for this option is that the higher interest rate would still be lower than the rates available to most students on loans from alternative sources. Furthermore, federally guaranteed student loans have flexible repayment options, and many lenders offer additional benefits not available elsewhere, such as reduced interest rates to borrowers who make a certain number of on-time payments. A potential drawback of this option is that even a small increase in that interest rate would boost the already high costs that many students face for postsecondary education, which could discourage some students from continuing their studies.

RELATED OPTION: 500-07

RELATED CBO PUBLICATIONS: *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees*, August 2004; and *Private and Public Contributions to Financing College Education*, January 2004

**500-09—Mandatory** (An update reflecting CBO's March 2005 baseline is available from within the electronic version of this document on CBO's web site.)

## Eliminate the Floor on Lenders' Yield from Federally Guaranteed Student Loans

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-1,390	-1,855	-1,990	-2,115	-2,220	-9,570	-22,180
Outlays	-820	-1,510	-1,725	-1,840	-1,940	-7,835	-18,900

Under the Federal Family Education Loan (FFEL) Program, which guarantees loans made by lenders to eligible students, borrowers pay lenders an interest rate (called the student rate) that is determined once a year according to a formula set in law. The interest rate that lenders receive is based on a target rate that is calculated quarterly using another legislated formula. If that calculated rate is greater than the student rate, the federal government pays lenders an additional amount in that quarter. If that rate is less than the student rate, the government does not make any additional payments. In effect, the student rate is a floor below which a lender's return cannot fall.

This option would eliminate the floor on the interest rate that lenders receive. If the calculated interest rate exceeded the student rate, the government would pay lenders as it does now. But if the calculated rate was less than the student rate, lenders would be required to rebate the difference to the government. That change would reduce federal outlays for the FFEL program by \$820 million next year and by a total of \$7.8 billion over the 2006-2010 period. The President's 2006 budget proposes

an alternative method of reducing payments to lenders: each year, lenders would rebate to the government 0.25 percent of the outstanding volume of FFEL loans they held (excluding consolidation loans).

An argument for this option is that the lender-rate formula is designed to approximate a fair market return to lenders. From that perspective, lenders now earn an above-market return during quarters when the calculated interest rate is below the student rate. Moreover, compared with other ways of lowering lenders' returns, this option might be preferable to many lenders because it would continue to closely tie their interest income to their interest expenses.

An argument against this option is that the lender-rate formula has been adjusted downward several times in the past decade, which has squeezed the profit that lenders can make from participating in the FFEL program. Further reductions might induce some lenders to leave the program.

500

RELATED OPTION: 500-06

RELATED CBO PUBLICATIONS: *Estimating the Value of Subsidies for Federal Loans and Loan Guarantees*, August 2004; and *How CBO Analyzes the Sources of Lenders' Interest Income on Guaranteed Student Loans*, June 2004

**500-10—Discretionary****Eliminate Administrative Fees Paid to Schools in the Campus-Based Student Aid and Pell Grant Programs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-144	-146	-149	-151	-154	-744	-1,557
Outlays	-17	-140	-146	-149	-152	-604	-1,404

In several federal student aid programs, the government pays schools to administer the programs, distribute the funds, or both. One type of program, campus-based aid, includes the Federal Supplemental Educational Opportunity Grant Program, the Federal Perkins Loan Program, and the Federal Work-Study Program. The government distributes funds for those programs to institutions, which in turn award grants, loans, and jobs to qualified students. Under a statutory formula, institutions are allowed to use up to 5 percent of those program funds for administrative costs. In another program, the Federal Pell Grant Program, schools also distribute federal funds, but eligibility is determined by federal law rather than by the institutions. The law provides for a federal payment of \$5 per Pell grant to reimburse schools for some of their costs of administering that program.

Budget authority would be reduced by \$117 million in 2006 if schools were not allowed to use federal funds from the campus-based aid programs to pay administrative costs. It would be reduced by another \$27 million if

the \$5 payment per grant to schools in the Pell Grant program was eliminated. Together, those changes would save a total of \$604 million over the 2006-2010 period. The President's 2006 budget proposes to stop disbursements of new Perkins loans and, consequently, the payment of related administrative fees to schools.

Arguments can be made both for eliminating those administrative payments and for retaining them. On the one hand, schools benefit significantly from participating in federal student aid programs even without the payments because the aid makes attendance at those schools more affordable. In 2005, students at participating institutions will receive an estimated \$15 billion in funds under the Pell Grant and campus-based aid programs. On the other hand, institutions incur costs to administer the programs. If the federal government did not pay those expenses, schools might simply pass along the costs to students in the form of higher tuition or lower institutional student aid.

**500-11—Discretionary****Eliminate the Leveraging Educational Assistance Partnership Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-67	-68	-69	-70	-71	-345	-722
Outlays	-13	-67	-68	-69	-70	-288	-660

The Leveraging Educational Assistance Partnership (LEAP) program helps states provide financially needy postsecondary students with grants and work-study assistance while they attend academic institutions or vocational schools. States must match federal funds at least dollar for dollar and also meet maintenance-of-effort criteria (minimum funding levels based on funding in previous years). Unless excluded by state law, all public and private nonprofit postsecondary institutions in a state are eligible to participate in the LEAP program.

This option, which was also included in the President's 2006 budget, would eliminate the LEAP program, reducing federal outlays by \$288 million over five years. The extent to which financial assistance to students declined would depend on the responses of the states, some of

which would probably make up at least part of the lost federal funds.

A rationale for this option is that the LEAP program is no longer needed to encourage states to provide more student aid. When the program was first authorized in 1972 (as the State Student Incentive Grant Program), only 28 states had student grant programs; now, all but two states have need-based student grant programs. Moreover, states currently fund the program far in excess of the level to which federal matching funds apply.

An argument against eliminating the LEAP program is that not all states would increase their student aid appropriations to make up for the lost federal funds and some might even reduce them. In that case, some of the students who received less aid might not be able to enroll in college or might have to attend a less expensive school.



**500-12—Discretionary****Reduce Funding for the Arts and Humanities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-340	-365	-405	-445	-480	-2,035	-5,060
Outlays	-255	-330	-385	-425	-465	-1,860	-4,815

The federal government subsidizes various activities related to the arts and humanities. In 2005, combined funding for several programs totaled nearly \$1.5 billion; it comprised federal appropriations for the Smithsonian Institution (\$615 million), the Corporation for Public Broadcasting (\$467 million), the National Endowment for the Humanities (\$138 million), the National Endowment for the Arts (\$122 million), the National Gallery of Art (\$102 million), and the John F. Kennedy Center for the Performing Arts (\$33 million).

Cutting funding for those programs by 20 percent of their 2005 appropriations and holding spending at that nominal level would reduce federal outlays by \$255 million in 2006 and by \$1.9 billion over the 2006-2010 period relative to the current funding level after adjusting for inflation. The actual effect on arts and humanities activities would depend in large part on the extent to which other funding sources—states, localities, individuals, firms, and foundations—changed their contributions.

Some proponents of reducing or eliminating funding for the arts and humanities argue that support of such activities is not an appropriate role for the federal government. Other advocates of cuts suggest that the expenditures are particularly unacceptable when programs addressing central federal concerns are not being funded fully. Some federal grants for the arts and humanities already require nonfederal matching contributions, and many museums charge or suggest that patrons pay an entrance fee. Those practices could be expanded to accommodate a reduction in federal funding.

However, critics of cuts in funding contend that alternative sources would be unlikely to fully offset the drop in federal subsidies. Subsidized projects and organizations in rural or low-income areas might find it especially difficult to garner increased private backing or sponsorship. Thus, a decline in government support, opponents argue, would reduce activities that preserve and advance the nation's culture and that introduce the arts and humanities to people who might not otherwise have access to them.

**500-13—Discretionary****Eliminate the Senior Community Service Employment Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-443	-450	-458	-467	-475	-2,293	-4,799
Outlays	-80	-435	-451	-459	-468	-1,894	-4,363

The Senior Community Service Employment Program (SCSEP) funds part-time jobs for people ages 55 and older who have low income and poor employment prospects. To participate in the program in 2004, a person had to have annual income of less than \$11,638—or 125 percent of the federal poverty level for someone living alone. SCSEP grants are awarded to nonprofit organizations, the Forest Service, and state agencies. Those organizations and agencies pay participants to work in part-time community service jobs, up to a maximum of 1,300 hours per year.

In 2004, approximately 100,000 people participated in the SCSEP, working in schools, hospitals, and senior citizens' centers and on beautification and conservation projects. Participants are paid the federal or state minimum wage or the local prevailing wage for similar employment, whichever is higher. They are also offered annual physical examinations, training, personal and job-related counsel-

ing, and assistance to move into unsubsidized jobs when they complete their projects.

This option would eliminate the SCSEP, saving \$80 million in outlays in 2006 and \$1.9 billion through 2010. An argument in favor of this option is that the costs of providing the services now supplied by SCSEP participants could be borne by the organizations that benefit from their work; under current law, those organizations usually must bear just 10 percent of such costs. Shifting those costs would increase the likelihood that only the most highly valued services would be provided. An argument against this option is that eliminating the SCSEP, which is the major federal jobs program aimed at low-income older workers, could cause hardship for some people. In general, older workers are less likely than younger workers to be unemployed, but those who are unemployed take longer to find work.

**500-14—Discretionary****Eliminate Funding for the National and Community Service Act**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-560	-575	-605	-620	-640	-3,000	-6,480
Outlays	-135	-325	-425	-490	-525	-1,895	-4,950

The National and Community Service Act authorizes funds for the AmeriCorps Grants Program, the National Civilian Community Corps (NCCC), Learn and Serve America, and the Points of Light Foundation; AmeriCorps receives the majority of the total appropriations. Students and other volunteers participating in those community service programs provide assistance in the areas of education, public safety, the environment, and health care, among others. State and local governments and private enterprises contribute additional funds to AmeriCorps to carry out service projects that, in many cases, build on existing federal, state, and local programs. AmeriCorps and NCCC provide participants with an educational allowance, a stipend for living expenses, and, if needed, health insurance and child care. Learn and Serve America participants generally do not receive stipends or educational awards. The Points of Light Foundation is a nonprofit organization that promotes volunteer activities.

Eliminating federal contributions for programs funded under the National and Community Service Act would save \$135 million in outlays in 2006 and \$1.9 billion

through 2010 relative to current appropriations adjusted for inflation. (The estimates include costs associated with terminating the programs.) Alternatively, some of the savings from eliminating the programs could be redirected to the Federal Pell Grant Program, which more closely targets assistance to low-income students.

One argument for eliminating the programs is that community service should be voluntary rather than an activity for which a person is paid. An additional justification for this option is based on the view that the main goal of federal aid to students should be to provide access to postsecondary education for people with low income. Because participation in the programs is not based on family income or assets, funds do not necessarily go to the poorest students.

A major rationale for maintaining the programs is that they provide opportunities for participants to engage in national service, which can promote a sense of idealism among young people. In addition, the participants provide valuable services to their communities.



## Health

**B**udget function 550 includes spending for health care services (which represents almost 90 percent of spending in the function), health-related research and training (10 percent), and consumer and occupational safety (about 1 percent). Spending for both health care services and health research and training has grown at an average rate of more than 10 percent a year since 1999, and spending for consumer and occupational health and safety has grown by about 6 percent a year, on average.

The largest component of spending for health care services is the federal/state Medicaid program, which funds health services for some women, children, and elderly people in low-income families, as well as people with disabilities. (The biggest federal health program, Medicare, has its own budget function, 570.) Federal spending for Medicaid has grown at an average annual rate of slightly more than 10 percent since 1999. The Congressional Budget Office projects that federal Medicaid spending

will total \$186 billion in 2005 and will grow at an average annual rate of slightly more than 7 percent from 2005 through 2015.

Other mandatory programs in function 550 pay for health care services for certain children in low-income families and for federal civilian or military retirees. Most of the discretionary spending for health care services is disbursed by the Centers for Disease Control and Prevention, the Health Resources and Services Administration (HRSA), the Indian Health Service, and the Substance Abuse and Mental Health Services Administration.

Spending for health research and training mainly funds the National Institutes of Health (NIH) and HRSA programs that provide grants or loans to health professionals. Funding for the NIH grew by 3 percent in 2004 and by 2 percent in 2005, after doubling between 1998 and 2003.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority <sup>a</sup> (Discretionary)	33.8	38.9	45.8	49.4	51.7	54.3	11.2	5.1
Outlays								
Discretionary	30.0	33.2	39.4	44.2	47.9	51.3	12.4	7.1
Mandatory	<u>124.5</u>	<u>139.1</u>	<u>157.1</u>	<u>175.3</u>	<u>192.4</u>	<u>204.3</u>	11.5	6.2
Total	154.5	172.3	196.5	219.6	240.3	255.6	11.7	6.4

a. Budget authority is artificially low in 2000 because \$8.8 billion in funding was shifted to become an advance appropriation for 2001.

**550-01—Mandatory****Equalize Federal Matching Rates for Administrative Functions in Medicaid**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,000	-1,210	-1,540	-1,640	-1,750	-7,140	-17,730

The federal government pays a portion of the costs that states incur to administer their Medicaid programs. The basic federal matching rate is 50 percent for most administrative activities. However, in some cases, the federal subsidy is higher. For example, the federal government pays 75 percent of the cost of employing skilled medical professionals for Medicaid administration, 75 percent of the cost of utilization review (the process of determining the appropriateness and medical necessity of various health care services), 90 percent of the cost of developing systems to manage claims and information, and 75 percent of the cost of operating such systems.

This option would set the federal matching rate for all Medicaid administrative costs at 50 percent. That change would save \$1.0 billion in 2006 and \$7.1 billion over five years.

Enhanced matching rates were designed to encourage states to develop and support particular administrative

activities that the federal government considers important for the Medicaid program. Once those administrative systems are operational, however, there may be less reason to continue the higher subsidy, providing a rationale for this option. Moreover, because states pay, on average, about 43 percent of the cost of health care for Medicaid beneficiaries, they have a substantial incentive to maintain efficient information systems and employ skilled professionals.

A potential drawback of this option is that a reduced federal subsidy might cause states to cut back on some beneficial activities, with adverse consequences for program management. For example, states might hire fewer nurses to conduct utilization reviews and oversee care in nursing homes, or they might make fewer improvements to their information-management systems. However, states could allocate appropriate funding for high-priority administrative activities from other federal Medicaid funds or from state sources.

**550-02—Mandatory****Restrict the Allocation of Common Administrative Costs to Medicaid**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-280	-320	-390	-390	-390	-1,770	-3,720

The federal government's three major public assistance programs—Temporary Assistance for Needy Families (TANF), Food Stamps, and Medicaid—have certain administrative tasks in common. For instance, during the enrollment process, each program requires that potential recipients provide information about their family's income, assets, and demographic characteristics. Before the 1996 welfare reform law, which replaced Aid to Families with Dependent Children (AFDC) and some related programs with the TANF block-grant program, all three programs reimbursed states for 50 percent of most administrative costs. As a matter of convenience, states usually charged the full amount of those common administrative costs to AFDC.

The TANF block grants are calculated on the basis of past federal welfare spending, including what the states received as reimbursement for administrative costs. Thus, whereas states had previously paid the common administrative costs of their AFDC, Medicaid, and Food Stamp programs from AFDC funds, those amounts are now included in their TANF block grants. However, the Department of Health and Human Services now requires each state to charge Medicaid's share of common administrative costs to the federal Medicaid program, even if that amount is already implicitly included in the state's TANF block grant. In effect, many states are being paid

twice for at least a portion of Medicaid's share of common administrative costs.

For any state that receives such a double payment, this option would limit the federal reimbursement for administrative costs for Medicaid to the amount not included in the state's TANF block grant. Federal outlays would decline by \$280 million in 2006 and by almost \$1.8 billion through 2010. Overall, the reduction in Medicaid funding would equal about one-third of the common costs of administering the Medicaid, AFDC, and Food Stamp programs that were charged to AFDC in 1996—the base period used to determine the amount of the TANF block grant. (A similar adjustment has already been made in the amount that the federal government pays the states to administer the Food Stamp program.) The President's 2005 budget included a comparable proposal to reduce the federal reimbursement for Medicaid's administrative costs by \$300 million to reflect the share assumed in the TANF block grant.

A rationale for this option is that it would eliminate the current implicit double payment to states. Reducing federal reimbursement, however, could hamper states' outreach activities to enroll additional eligible children in Medicaid and the State Children's Health Insurance Program. Such action could also prompt states to restrict eligibility or services for those two programs.

**550-03—Mandatory****Reduce Spending for Medicaid's Administrative Costs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-600	-710	-830	-960	-1,130	-4,230	-12,860

The federal government currently reimburses states for about 50 percent of the cost of managing their Medicaid programs. Under this option, the federal government would cap the per-enrollee amount that it pays each state for Medicaid administration. The cap would grow by 5 percent annually from a base-year amount that represented the per-enrollee administrative costs for which each state claimed matching payments in 2004. (An alternative strategy for reducing Medicaid's administrative costs is described in option 550-02.) In his 2006 budget, the President proposed placing caps on federal funding for each state's administrative costs rather than placing caps on per-enrollee spending.

A rationale for this option is that such a change would result in savings totaling \$600 million in 2006 and

\$4.2 billion through 2010. (Limiting federal payments for administrative costs to a 5 percent growth rate would produce substantial savings because the actual growth rate of those costs is projected to be about 7 percent in 2005 and ensuing years.) Another rationale for implementing the option is that it would give states a stronger incentive to improve the efficiency with which they manage their Medicaid programs.

An argument against this option is that, faced with fewer administrative resources, states might cut back on some activities that could improve the functioning of their Medicaid programs. For example, they might reduce funding for efforts to combat waste, fraud, and abuse.

RELATED OPTIONS: 550-01 and 550-02



**550-04—Mandatory** (Corrected as of March 24, 2005)**Increase the Flat Rebate Paid by Drug Manufacturers for Medicaid Prescription Drugs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-640	-560	-600	-670	-750	-3,220	-8,320

Spending by the Medicaid program for prescription drugs increased at an average inflation-adjusted rate of 16 percent annually between 1997 and 2002, with the federal share of that spending reaching \$13.5 billion in 2002. With the introduction in 2006 of the Medicare drug benefit—which will transfer coverage of prescription drugs for beneficiaries with dual eligibility from the Medicaid program to Medicare—Medicaid spending for prescription drugs is expected to fall substantially. The lower level of spending, however, will still be subject to upward pressures similar to those affecting overall prescription drug spending, which is projected to continue to grow, albeit more slowly than in recent years.

The amount that Medicaid pays for a particular drug depends on two published prices: the average wholesale price (AWP), a list price published by the manufacturer; and the average manufacturer's price (AMP), which is the average price that the manufacturer actually receives for drugs distributed to retail pharmacies and mail-order establishments. For brand-name drugs, state Medicaid agencies typically pay the AWP minus a percentage (ranging from 5 percent to 15 percent, depending on the state) plus a dispensing fee. A portion of that spending is recouped by both the federal government and the state government through a rebate paid by the manufacturer to Medicaid.

For brand-name drugs, the rebate is equal to the maximum of a fixed, or flat, percentage of the AMP—15.1 percent currently—and the difference between the AMP and the “best price” at which the manufacturer sells the drug to any purchaser. An additional rebate applies if the AMP grows faster than inflation. (Makers of generic

drugs must rebate 11 percent of the AMP to the state Medicaid agency.) Overall, Medicaid receives an average rebate from manufacturers of slightly more than 20 percent under the current pricing scheme (not including the additional rebate tied to price inflation).

This option would boost the flat rebate from 15.1 percent to 20 percent. The Congressional Budget Office estimates that this change would increase the average Medicaid rebate (relative to the AMP) to 23 percent, reducing mandatory federal spending by \$0.6 billion in 2006 and by \$3.2 billion through 2010.

Beyond reducing Medicaid spending for prescription drugs, this option could result in some private purchasers paying less for certain drugs. While many manufacturers offer large discounts to private purchasers, the best-price provision can make it relatively difficult for them to offer discounts beyond the flat rebate because any such discount is automatically made available to Medicaid as well. By increasing the flat rebate, however, more room would be created for manufacturers to offer discounts that do not trigger the best-price provision. Thus, some purchasers who now receive a discount at or near the current flat rebate for a particular drug might see a benefit.

A potential drawback of this option is that pharmaceutical firms, faced with reduced revenues, might invest less money in research and development of new drugs. In particular, a policy that reduced Medicaid payments for prescription drugs might discourage the development of new drugs in certain drug classes whose use is heavily concentrated in the Medicaid population.

**550-05—Mandatory****Expand Medicaid Eligibility to Low-Income Parents**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	+2,270	+3,130	+4,240	+4,600	+4,940	+19,180	+50,380

In low-income families, children are much more likely than adults to qualify for public health insurance. As a result of the Medicaid expansions of the mid-1980s and the enactment of the State Children's Health Insurance Program (SCHIP) in 1997, the great majority of children in families with income below 200 percent of the federal poverty level are now eligible for either Medicaid or SCHIP. For parents, however, states generally limit Medicaid eligibility to those with income substantially below the federal poverty level (\$15,670 for a family of three in 2004). Several states have expanded eligibility for public coverage to parents at higher income levels.

Under this option, states would be required to expand Medicaid eligibility to parents with income below the federal poverty level. That new requirement, which would provide coverage to 1.5 million low-income adults and children in 2006, would increase federal outlays by about \$2.3 billion in that year and by about \$19 billion over five years.

The main rationale for this option is to expand health insurance coverage. In 2002, more than one-third of low-income parents were uninsured. Among parents who would be newly eligible under this option, participation rates would probably be similar to rates among their children who are currently eligible for Medicaid or SCHIP. Among children currently eligible for Medicaid but not enrolled, participation might increase as newly eligible parents signed up for the same insurance coverage.

A potential drawback of this option is that expanded eligibility could result in some parents with private insurance dropping that coverage to obtain public insurance. Moreover, employers of lower-income individuals might be less inclined to offer health insurance because the perceived demand would be lessened by the availability of the new alternative coverage. Also, the increased amounts that states would be required to spend under this option could lead some states to cut back on optional health care services that they would otherwise have provided.

**550-06—Mandatory****Increase Allowable Copayments for Some Medicaid Services**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-90	-270	-410	-530	-670	-1,970	-7,730

Although states are allowed a great deal of discretion in designing their Medicaid programs, federal rules have traditionally limited cost-sharing requirements for beneficiaries. For instance, copayments for most adults cannot exceed \$3 for goods and services such as prescription drugs, visits to physicians, and outpatient hospital visits. For children under 18, pregnant women, and the institutionalized, copayments are not permitted. Copayments are also not allowed for some services such as family planning or emergency care. Even for populations and services for which copayments are permitted under federal law, not all states impose them, and providers are required by law to serve patients who are unable to make the copayment.

This option would raise the federal limits on allowable copayments in Medicaid—from \$3 for adults and zero for children to \$5 and \$3, respectively. The higher copayments would apply to outpatient hospital visits, prescription drugs, nonemergency visits to emergency rooms, and visits to physicians and dentists. They would not apply to services for which copayments are currently disallowed. The Congressional Budget Office estimates that imple-

menting this option would reduce federal outlays by \$90 million in 2006 and \$2 billion over five years.

An argument in favor of this option is that increased copayments would encourage a more cost-conscious use of services by beneficiaries, reducing the number of unnecessary medical services provided. Furthermore, the current copayment limits have not changed since the 1980s and thus have declined, in real (inflation-adjusted) terms, since then.

A potential drawback is that a reduction in the use of appropriate health care services could also result. For instance, previous research has shown that poorer individuals facing higher copayments displayed worse health on some measures. In another example, the introduction of copayments for prescription drugs in several state Medicaid programs was found to lead to many beneficiaries' going without their medications. A further argument against the option is that such small copayments often go uncollected by providers for various reasons, which effectively lowers their reimbursement rates.

**550-07—Mandatory****Convert Medicaid Payments for Acute Care Services into a Block Grant**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-3,670	-5,720	-11,190	-16,960	-23,160	-60,700	-292,130

The Medicaid program funds coverage for two broadly different types of health care: acute care (including services such as inpatient hospital stays and visits to physicians' offices, and products such as prescription drugs) and long-term care (services such as nursing home care and home- and community-based assistance). The program is financed jointly by the states and the federal government, with the federal government's share determined as a percentage of overall Medicaid spending. That percentage, referred to as the federal matching rate, can range from a floor of 50 percent to a ceiling of 83 percent, depending on a state's per capita income. (The matching rate averages 57 percent nationwide.) Although the federal match helps states provide health coverage to disadvantaged populations, it may also encourage higher spending by subsidizing each additional dollar spent on Medicaid. The federal share of Medicaid outlays in 2005 is estimated to be \$110.6 billion for acute care and \$51.3 billion for long-term care.

This option would convert the federal share of Medicaid payments for acute care services into a block grant, as 1996 legislation did with funding for welfare programs. (Long-term care would continue to be financed using the matching rate.) Each state's block grant would equal its 2004 federal Medicaid payment for acute care, indexed to the increase in input prices faced by providers of medical care. (An "input" is a factor used in the production of medical care, such as professional labor, office space, and so on.) That change in financing would reduce federal outlays by \$3.7 billion in 2006 and by \$61 billion over five years. The change generates savings because federal Medicaid payments are projected under current law to grow faster than the price index. (Alternatively, block grants could be indexed both to input price increases and

to the change in each state's population. In that case, savings would be \$2.3 billion in 2006 and would grow at a slower rate thereafter, totaling \$44 billion over five years.) In exchange for slower growth in payments, states would be given more flexibility in how they could use the funds to meet the needs of their low-income and uninsured populations.

The President's 2004 budget proposed a budget-neutral Medicaid block grant, which differed in some respects from this option. Under that plan, states could choose either to operate under current Medicaid rules or to receive separate block grants for acute care and long-term care. Those grants would include funds for both Medicaid and the State Children's Health Insurance Program and would allow significantly more flexibility in the way the programs were administered. The President's 2006 budget is less specific than the 2004 budget on the subject of Medicaid financing and proposals for block grants, but it embraces the same principles for reforming Medicaid: additional flexibility for states and no additional costs for the federal government.

A rationale for this option is that funding acute care with a block grant rather than with federal matching payments would strengthen states' incentive to spend money cost-effectively by eliminating the subsidy for each additional dollar spent on health care. As proposed in the President's 2004 budget, block grants also would be coupled with increased discretion for states to design and administer their programs. For example, states could modify the generosity of their benefit package and make corresponding adjustments in the number of people covered. In addition, block grants would eliminate states' latitude to use funding strategies designed to maximize federal assistance.

An argument against this option is that converting acute care payments to a block grant would reduce the total amount of federal support for Medicaid, which could increase fiscal pressure on the states. Also, ending federal matching payments could provide an incentive for states to scale back Medicaid spending. Unless states were willing to pay more themselves or were able to find ways to provide more cost-effective care, access to health services for lower-income people might be reduced. Another ar-

gument against the option is that distinguishing between acute and long-term care for the purposes of financing could be difficult administratively. For example, in order to facilitate their recovery, former hospital patients often require services after an inpatient stay that resemble long-term care. Finally, greater state discretion creates the potential for increased disparity across states in eligibility requirements and benefit packages.

RELATED OPTION: 550-08

**550-08—Mandatory****Convert Medicaid Disproportionate Share Hospital Payments into a Block Grant**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+120	+20	-40	-60	-200	-160	-3,390
Outlays	+100	0	-50	-60	-170	-180	-2,700

Hospitals that serve a disproportionately large share of low-income patients may receive higher payments from Medicaid than other hospitals do. States have some discretion in determining not only which hospitals receive those so-called disproportionate share hospital (DSH) payments but also the size of those payments—if the hospitals meet certain federal criteria. During the late 1980s and early 1990s, many states engaged in funding transfers using the DSH program to obtain increased federal Medicaid funding without raising their net spending on DSH hospitals—effectively boosting the federal matching rate above that specified in law.

To combat that practice, lawmakers enacted a series of restrictions on Medicaid DSH payments during the 1990s that included setting fixed ceilings on DSH payments to each state. The Medicare Modernization Act of 2003 raised those ceilings by \$1.2 billion in 2004 and by smaller amounts in later years. The Congressional Budget Office projects that under current law, federal outlays for Medicaid DSH payments, which totaled \$8.7 billion in 2004, will rise to \$9.8 billion in 2010.

This option would convert the current Medicaid DSH program into a block grant to the states. The grant could be reduced below current-law levels or its future growth limited to a slower rate than that at which Medicaid DSH payments would increase under current law, or both. In exchange for less funding, states could be given greater flexibility to use the funds to meet the needs of their low-income and uninsured populations in more cost-effective ways.

As an illustration of how this option could be structured, the block grant for each state in 2006 could equal 90 percent of the state's Medicaid DSH allotment for 2005. In subsequent years, the block grant could be indexed to the increase in the consumer price index for all urban consumers minus 1 percentage point. In that case, outlay savings from this option would total \$180 million through 2010. The option would increase costs at first because states do not currently spend all of their allotted money as a result of the criteria and conditions that must be met—conditions that would be removed under this option.

In addition to budgetary savings, a rationale for a block grant is that the increased latitude provided to the states could result in DSH funds' being more appropriately and equitably targeted to facilities and providers that serve low-income populations. For example, states would have greater flexibility to use those funds to support outpatient clinics and other nonhospital providers that treat Medicaid beneficiaries and low-income patients.

State governments, however, might not increase their contributions to make up for the reduction in federal subsidies. As a result, hospitals (and health care providers in general) could receive less in combined federal and state Medicaid subsidies and might not be able to serve as many low-income patients. Another potential drawback is that giving states more flexibility to allocate DSH payments could alter the distribution and amount of assistance among hospitals, possibly resulting in some hospitals' receiving less public funding than they do now. Moreover, states may already have enough flexibility under current rules to allocate DSH payments to achieve the maximum benefit.

**550-09-Mandatory****Require States to Comply with New Rules About Medicaid's Upper Payment Limit by 2006**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-840	-600	-340	0	0	-1,780	-1,780

Until 2001, Medicaid could not pay more for hospital and nursing home services than the Medicare program did. That ceiling, known as the upper payment limit (UPL), applied to total payments for services provided both by private facilities and those operated by local governments. Because Medicaid's payment rates are typically lower than Medicare's, many states were able to generate additional federal matching funds by inflating their payment rates for services provided at local government facilities. The states then would recover the inflated portion of those payments from the facilities. That process effectively increased federal payments to states without raising the states' Medicaid expenditures, permitting the additional federal funds to be used for any purpose.

To limit states' ability to generate enhanced payments, the Department of Health and Human Services issued regulations in 2001 that created separate UPLs for private facilities and those operated by local governments. However, those regulations—required by the Benefits Improvement and Protection Act of 2000—were designed to take full effect at different times for different states.

States that used the enhanced-funding mechanism the longest were allowed a transition period that stretches to September 30, 2008; the transition period of other states lasts only until the end of state fiscal year 2005. (States that sought to enhance their funding on or after October 1, 1999, are already subject to the new rules.)

This option would require that all states fully comply with the UPL regulations beginning in 2006. That requirement would reduce federal outlays by \$840 million in 2006 and \$1.8 billion through 2010.

A rationale for this option is that eliminating the extended transition period would treat all states the same, which is more equitable than allowing some states to continue, in effect, to obtain a higher federal matching rate than that specified in law. An argument against this option is that the extended transition period permits states with the longest history of relying on enhanced payments more time to adjust their budgets to the smaller federal payments resulting from the new regulations.

**550-10—Mandatory****End the Redistribution of Unused Federal Funds from the State Children's Health Insurance Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-20	-20	-70	-100	-140	-350	-1,140

The State Children's Health Insurance Program (SCHIP) provides health care coverage to certain uninsured low-income children whose annual family income is too high for them to qualify for Medicaid. Depending on the per capita income in a given state, the federal government reimburses between 65 percent and 85 percent of the state's total SCHIP spending (compared with reimbursement of between 50 percent and 83 percent of total Medicaid spending). A state may provide coverage through SCHIP by expanding its Medicaid program, setting up a separate program, or combining the two approaches. When SCHIP was established in 1997, the Congress appropriated approximately \$4.3 billion annually for 1998 through 2001, \$3.2 billion annually for 2002 through 2004, \$4.1 billion annually for 2005 through 2006, and \$5.0 billion for 2007. Consistent with statutory guidelines, the Congressional Budget Office's (CBO's) baseline assumes that \$5.0 billion will continue to be appropriated in each year after 2007.

Each state receives an annual allotment from the total appropriations on the basis of factors such as the number of low-income children living in the state and the average annual wages of health care workers in the state. States have three years to spend their allotments. At the end of the third year, the Secretary of Health and Human Services reallocates any unused funds to states that have spent their entire allotments. Those redistributed funds generally are available for one additional year. The first such redistribution of unused funds took place in 2001, when about \$700 million that originally was allocated in 1998 was redistributed to 12 states. The redistribution of 1999 allotments totaled \$1.6 billion.

This option would leave the basic SCHIP program intact but would end future redistributions of unspent funds. If implemented, such action would save \$20 million in federal outlays in 2006 and \$350 million over five years. CBO's estimate assumes that states will partly offset shortfalls in SCHIP funding with higher spending in Medicaid. Compared with the amount of funds redistributed in prior years, redistributions over the next several years are expected to be relatively small because more states are likely to use all of their available funds. The states' relatively slow rate of spending in the first few years of the program may have resulted from delays in setting up such a large new program.

A rationale for this option is that recovering unspent funds from SCHIP would produce budgetary savings for the federal government with little disruption to most states' plans for providing health insurance to children from low-income families. Because states cannot know the amount of federal funds that would be redistributed to them in advance, they probably do not depend on such funding for planning and implementing their children's health insurance programs each year.

An argument against this option is that ending the redistribution of unspent SCHIP funds could reduce the financing flexibility of states that might count on those additional funds to provide health insurance to low-income children. As a result, those states might not be as ambitious about creating and maintaining their programs as they otherwise would be, or they might spend more Medicaid funds to cover children. Also, ending the redistribution could take away a useful spending cushion for states that use all of their allotments under the program.



**550-11—Mandatory****Adjust Funding for the State Children's Health Insurance Program for Increases in Health Care Spending and Population Growth**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	0	0	+30	+130	+220	+380	+3,780

Enacted as part of the Balanced Budget Act of 1997, the State Children's Health Insurance Program (SCHIP) provides health care coverage for certain uninsured children from low-income families. States administer the program through their Medicaid programs, a separate program, or a combination of both. The program, which began operation in 1998, is authorized through 2007. Consistent with statutory guidelines, the Congressional Budget Office's (CBO's) estimates assume that funding for the program in later years will continue at the 2007 level. That assumed funding for SCHIP does not take into account the rising cost of medical care or the increasing size of the population of children.

This spending option would index SCHIP funding after 2007 to the growth rates in health spending and in the number of children. CBO assumes, on the basis of the most recent projections of national health expenditures from the Centers for Medicare and Medicaid Services (CMS), that per capita health expenditures will grow by 6.3 percent annually after 2007. In CBO's estimation, this proposal would increase SCHIP spending by \$30 million in 2008 and by a total of \$380 million through 2010.

An argument for this option is that without such a funding increase, many states will be unable to maintain their level of benefits and coverage beyond 2007. To stay within budget, states either will have to reduce the level of benefits they provide to recipients, restrict the number of low-income children deemed eligible for aid, or some combination of the two. Those outcomes would not be consistent with the statutory objectives of the program.

An argument against this option is that, so far, there has been little need to increase funding to maintain coverage rates. States have been slow to spend their current allotments of SCHIP funds, and CBO estimates that states will still have about \$5.0 billion in unspent funds at the end of 2007. Moreover, some states have used unspent SCHIP funds to expand coverage to low-income adults under section 1115 of the Social Security Act, which allows the Secretary of Health and Human Services to waive many of the statutory requirements of Medicaid and SCHIP in cases of experimental, pilot, or demonstration projects that promote program objectives. As of January 2004, the Department of Health and Human Services has approved 14 SCHIP waivers from states. To adjust SCHIP funding for inflation in medical costs, therefore, states could draw upon funds used to cover adults without increasing overall program funding.

**550-12—Mandatory****Create a Voucher Program to Expand Health Insurance Coverage**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	+2,660	+4,240	+5,240	+5,560	+5,630	+23,330	+53,000

Approximately 20 million people in the United States lacked health insurance throughout 2002, and over 40 million were uninsured on a typical day that year. Fewer than a fourth of those who were uninsured for the entire year had access to health care coverage through an employer, even though more than half were in families with at least one working adult. To extend coverage to the uninsured, policymakers have proposed various options, including the following: offering direct subsidies or tax inducements to individuals who purchase coverage or to firms who offer it to their employees; expanding Medicaid and the State Children's Health Insurance Program (SCHIP); reforming rules that regulate private insurance; and requiring employers to offer coverage.

One proposal would create a voucher that uninsured people could use to help purchase coverage in the individual health insurance market. The option considered here would pay up to \$1,000 per year for an individual and up to \$2,750 for a family to defray the cost of insurance premiums in the individual health insurance market. The voucher would pay no more than 70 percent of the premium, would be fully available only to people with income below 200 percent of the federal poverty level (the value of the voucher would be phased out for people with income between 200 percent and 250 percent of the poverty level), and would not be subject to taxation as income. It also would not be available to individuals who were offered insurance through their employer when the employer paid at least 50 percent of the premium. Individuals could not simultaneously receive the subsidy and be enrolled in Medicare, Medicaid, or SCHIP.

Implementing that voucher program would cost nearly \$2.7 billion in 2006 and \$23 billion over five years, the Congressional Budget Office (CBO) estimates. Following an initial start-up period, roughly 1.3 million otherwise uninsured individuals would be likely to enroll in the program in each year. About 75 percent of the total

amount of the subsidy would go to people who otherwise (without the subsidy) would have already had insurance coverage via the individual market. Also, CBO estimates, fewer than 100,000 individuals who would have been insured through Medicaid would purchase private coverage, and several hundred thousand would switch from their employer-provided coverage to less expensive coverage (given the new subsidy) in the individual market.

Finally, approximately 200,000 people would be likely to lose insurance coverage under this option as some small employers elected not to offer insurance because of the new subsidies. As health insurance in the individual market became less expensive with the government subsidy, some firms, in CBO's estimation, would opt to provide their employees with higher cash wages rather than offer health insurance. Although such a change might benefit a firm's employees on average, some previously insured employees could face higher premiums in the individual market (perhaps because of adverse health conditions) and might forgo insurance coverage altogether. Those higher cash wages would result in increased revenues from income and payroll taxes over the 2006-2015 period of more than \$1 billion (not included in the table).

A rationale for implementing this option is that extending health insurance coverage to more people could have beneficial consequences. A lack of health insurance is linked to reduced access to regular, timely health care services, poorer health outcomes, and increased strain on providers such as public hospitals and emergency rooms. Moreover, subsidies for the purchase of insurance in the individual market would work toward balancing the favorable tax treatment currently accorded only to employer-provided health insurance: under current law, employers' contributions to their employees' health insurance premiums are deductible as a business expense but are not taxable as income to employees.

A potential drawback of this voucher option is that most of the funds would go to eligible people who otherwise would have had insurance coverage even without the subsidy, and therefore the option would not advance the main purpose of the program. In addition, although the option would expand health insurance coverage overall, it could reduce coverage rates for a small number of workers

whose employers dropped their coverage because of the new subsidy. Further, the option probably would not increase coverage a great deal for people who cannot access work-based insurance and are charged very high premiums in the individual market because of preexisting or chronic medical conditions.

RELATED CBO PUBLICATION: *How Many People Lack Health Insurance and For How Long?* May 2003

**550-13—Discretionary and Mandatory****Adopt a Voucher Plan for the Federal Employees Health Benefits Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Discretionary Spending <sup>a</sup>							
Budget authority	-400	-900	-1,400	-1,900	-2,500	-7,100	-29,500
Outlays	-400	-900	-1,400	-1,900	-2,500	-7,100	-29,500
Change in Mandatory Spending							
Budget authority	-300	-800	-1,300	-1,800	-2,300	-6,500	-27,900
Outlays	-300	-800	-1,300	-1,800	-2,300	-6,500	-27,900

Note: Estimates do not include savings realized by the Postal Service.

a. Savings measured from the 2005 funding level adjusted for premium increases and changes in employment.

The Federal Employees Health Benefits (FEHB) program provides health insurance coverage to 4.1 million federal workers and annuitants, as well as to their 4.3 million dependents and survivors, at an expected cost to the government of almost \$25 billion in 2006. Policyholders are required to pay at least 25 percent of the premium of whatever plan they choose. (Premium payments are deducted from pretax income, as they are for workers in the private sector.) That cost-sharing structure encourages federal employees to switch from higher-cost to lower-cost plans to blunt the effects of rising premiums; it also intensifies competitive pressures on all participating plans to hold down premiums. Overall, the federal government's share of premiums for employees and annuitants (including for family coverage) is 72 percent of the weighted average premium of all plans. (The share is higher for Postal Service employees under that agency's collective bargaining agreement.)

This option would offer a flat voucher for the FEHB program that would cover the first \$3,370 of premiums for individual employees or retirees or the first \$7,680 for family coverage. Those amounts, which are based on the government's average expected contribution in 2005, would increase annually at the rate of inflation rather than at the average weighted rate of change for premiums in the FEHB program. Indexing vouchers to inflation rather than to the growth of premiums would produce budgetary savings because the Congressional Budget Office expects FEHB premiums to grow three times as fast

as inflation under current law. That change could reduce discretionary spending (because of lower payments for current employees and their dependents) by \$400 million in 2006 and a total of \$7.1 billion over five years. It would also reduce mandatory spending (because of lower payments for retirees) by \$300 million in 2006 and \$6.5 billion over five years.

An advantage of this option is that removing the current cost-sharing requirement would strengthen price competition among health plans in the FEHB program. For plans costing more than the amount of the voucher, enrollees would be faced with paying the full amount of premiums above the level of the voucher rather than a percentage, as currently required. Moreover, insurers would have greater incentive to offer more-efficient and lower-cost plans to attract participants, because enrollees would pay nothing for plans costing the same as or less than the amount of the voucher.

This option would have several drawbacks, however. First, if premiums continued to rise as expected, participants would pay an ever-increasing amount—possibly equaling more than an additional \$1,680 per worker (or about 45 percent of their premiums) in 2010 and more in later years. Second, large private-sector companies currently provide better health benefits for employees (although not for retirees) than the government does, which makes it harder for the government to attract highly qual-

ified workers. That discrepancy would increase under this option. Third, in the case of current federal retirees and long-time workers, this option would cut benefits that have already been earned. Finally, it could strengthen

existing incentives for plans to structure benefits so as to disproportionately attract people with lower-than-average health care costs. That “adverse selection” could destabilize other health care plans.

RELATED OPTION: 550-14

RELATED CBO PUBLICATIONS: *The President's Proposal to Accrue Retirement Costs for Federal Employees*, June 2002; and *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998

**550-14—Mandatory****Base Federal Retirees' Health Benefits on Length of Service**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays <sup>a</sup>	-130	-210	-300	-400	-520	-1,560	-6,330

a. Estimates do not include savings realized for Postal Service retirees.

Federal retirees are generally allowed to continue receiving benefits from the Federal Employees Health Benefits (FEHB) program if they have participated in the program during their last five years of service and are eligible to receive an immediate annuity. More than 80 percent of new retirees elect to continue health benefits. For those over age 65, FEHB benefits are coordinated with Medicare benefits; the FEHB program pays amounts not covered by Medicare (but no more than what it would have paid in the absence of Medicare).

Participants in the FEHB program and the government share the cost of premiums. The cost-sharing provision sets the government's share for all enrollees at 72 percent of the weighted average premium of all participating plans (up to a cap of 75 percent of the premium for any individual plan). In 2006, the government expects to pay \$7.8 billion in premiums for 1.4 million nonpostal retirees plus their dependents and survivors.

This option would reduce health benefits for retirees who had relatively short federal careers, although it would preserve their right to participate in the FEHB program. For new retirees only, the government's share of premium costs would be cut by 2 percentage points for every year of service less than 30. In the case of a retiree with 20 years of service, for example, the government's contribution would decline from 72 percent of the weighted average premium to 52 percent. That change would reduce mandatory spending by \$130 million in 2006 and by almost \$1.6 billion over five years (excluding savings realized for Postal Service retirees).

About 60 percent of the roughly 60,000 new nonpostal retirees who continue in the FEHB program each year

have less than 30 years of service. The average new retiree affected by this option would pay about 50 percent of his or her premium rather than 30 percent, an annual increase of approximately \$1,500 in 2006. (Annuitants tend to enroll in more-expensive plans than employees do; thus, they pay a greater share of their average premiums.)

A rationale for this option is that it could make the government's mix of compensation fairer and more efficient by improving the link between length of service and deferred compensation. It would also help bring federal benefits closer to those of private companies. Federal retirees' health benefits are significantly better than those offered by most large private firms, which have been aggressively paring or eliminating retirement health benefits for newly hired workers in recent years. According to a 2001 survey by Watson Wyatt, a benefits consulting firm, most of the roughly 40 percent of medium and large U.S. employers that still provide medical benefits to retirees have tightened eligibility rules for new workers, typically requiring 10 or more years of service to qualify.

A disadvantage of this option is that it would mean a substantial cut in promised benefits, particularly for retirees with shorter federal careers, such as the roughly 25 percent of new retirees with less than 20 years of service. The option could also have unintentional and perhaps adverse effects on the composition of the federal workforce. For example, it might encourage some employees with short federal careers to delay retirement and induce others to accelerate their retirement plans to avoid the new rules. In the latter case, the government could have difficulty replacing a sizable number of workers at one time.

RELATED OPTION: 550-13

RELATED CBO PUBLICATIONS: *The President's Proposal to Accrue Retirement Costs for Federal Employees*, June 2002; and *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998

**550-15—Discretionary****Reduce Subsidies for the Education of Health Professionals**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-300	-305	-311	-317	-323	-1,555	-3,270
Outlays	-272	-291	-300	-305	-311	-1,480	-3,133

In 2005, lawmakers provided about \$300 million to the Health Resources and Services Administration within the Department of Health and Human Services to subsidize institutions that educate physicians and other health care professionals. Those subsidies, which title VII of the Public Health Services Act authorizes, primarily take the form of grants and contracts to schools and hospitals. Several programs offer federal grants to medical schools, teaching hospitals, and other training centers to develop, expand, or improve graduate medical education in primary care specialties and related health fields and to encourage health care professionals to practice in underserved areas. A few programs provide funding directly to individuals for their education in the health care professions. This option would eliminate those subsidies, saving \$272 million in outlays next year and \$1.5 billion over five years.

An argument in favor of this option is that federal subsidies are unnecessary because market forces provide sufficient incentives for people to seek training and jobs in health care. Over the past several decades, the number of physicians—a key group targeted by the subsidies—has increased rapidly. In 2000, for example, the United States

had 288 physicians in all fields for every 100,000 people, compared with just 142 in 1960.

The President's 2005 budget proposes to reduce the funding for two title VII Programs (Scholarships for Disadvantaged Students together with Health Professions Workforce Information and Analysis) and eliminate funding for most other title VII programs that subsidize the education of health professionals. In its assessment of the programs, the Office of Management and Budget noted that while the programs are well managed, they do not have a clear purpose in the authorizing legislation. Furthermore, a 1997 report by the General Accounting Office (now the Government Accountability Office) found that the effectiveness of the programs had not been demonstrated, partly because of a lack of appropriate data and clear program objectives.

However, market incentives by themselves may not be strong enough to achieve an optimal number of health care professionals. For instance, third-party reimbursement rates for primary care specialties may not encourage enough physicians to enter those fields or to provide such care in underserved areas.

**550-16—Mandatory****Finance the Food Safety and Inspection Service Through User Fees**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-357	-779	-847	-877	-908	-3,769	-8,811

The Food Safety and Inspection Service (FSIS), an agency within the Department of Agriculture (USDA), regulates the safety and proper labeling of most domestic and imported meat and poultry sold for human consumption in the United States. It also ensures the safety of certain egg products. The FSIS employs more than 7,000 inspection personnel, one or more of whom must be present at all times when a meat or poultry slaughtering plant is operating. In addition to sampling and testing meat and poultry products, inspectors monitor processing plants daily for adherence to federal standards (for instance, those governing sanitary conditions, ingredient levels, and packaging). Recently, the FSIS has also been charged with protecting the nation's meat and poultry supply from bioterrorism. The agency gets most of its funding through annual appropriations, which totaled \$817 million in 2005. However, when plants operate during holidays or overtime shifts, the meat-packing industry pays the government for FSIS inspectors through user fees.

This option would finance all federal meat and poultry inspection activities (not just those that occur during hol-

idays or overtime shifts) with user fees paid by meat and poultry slaughtering and processing firms. Implementing such a change would reduce federal outlays by \$357 million in 2006 and by a total of \$3.8 billion over five years. The President's 2006 budget recommends an increase in the collection of user fees but not to the extent considered in this option.

An argument in favor of this option is that users of government services should pay for those services. Federal inspections benefit both producers and consumers of meat and poultry products because they prevent diseased animals from being sold as food. But the meat and poultry industries benefit in other ways as well: for example, they can advertise that their products have been inspected by the USDA, which may enhance the quality of those products in the eyes of consumers.

An argument against implementing this option is that the current system of public financing benefits society at large, primarily by preventing the spread of disease from infected livestock to other sources of food and water.



**550-17—Mandatory****Accelerate the Availability of Generic Drugs by Changing the 180-Day Exclusivity Provision**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1	-21	-35	-50	-62	-169	-400

Many top-selling brand-name drugs are protected by multiple patents, which can cover the substance, use, or formulation of the drug as approved by the Food and Drug Administration (FDA). Under provisions of the 1984 Hatch-Waxman Act, manufacturers of generic drugs can challenge patents on brand-name drugs. If a manufacturer can show that a patent is invalid or that it would not be infringed upon by its generic version, then the manufacturer can obtain FDA approval and market its generic version before the patent on the brand-name drug expires.

Manufacturers of generic drugs apply to the FDA for approval to produce a biologically equivalent version of a brand-name drug by filing an abbreviated new-drug application. Upon filing, they must inform the FDA and subsequently notify the manufacturer of the brand-name drug of any patents they intend to challenge. If the manufacturer that is challenging the patent is not sued by the brand-name manufacturer within 45 days or wins in court, it may be eligible for 180 days of market “exclusivity.” During that six-month period, the FDA cannot approve the application of a subsequent manufacturer to produce a generic version of the same drug.

The first manufacturer to apply to produce a generic version has some flexibility regarding when to start selling its drug and, thus, when the 180-day exclusivity period begins. Under certain circumstances, the manufacturer can “park,” or delay the start of, that period, preventing subsequent applicants from obtaining FDA approval for their generic version of the drug. A 2002 Federal Trade Commission study reported that in some cases, manufacturers of brand-name drugs and the first generic manufacturer to apply to produce a generic version agreed to postpone the marketing of a generic drug, which may have effectively “parked” the period of exclusivity. The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 helped to reduce the extent of that practice by creating conditions under which the first ap-

plicant for a generic equivalent must forfeit its 180-day exclusivity period.

Under one of the forfeiture conditions, if the first applicant does not market its generic version within 75 days of a final court decision that all challenged patents are invalid or not infringed upon, then the applicant must relinquish its exclusivity period. The forfeiture condition applies even if a subsequent applicant is the first to obtain a final court decision of noninfringement on all challenged patents. In that case, a subsequent applicant may get to market faster because of that forfeiture condition, which “pushes” the first applicant to market its generic version (or to give up the exclusivity period). However, one way the exclusivity period may still be “parked” is if the manufacturer of the brand-name drug does not sue a subsequent applicant on at least one of the challenged patents. The absence of a lawsuit—which could mean that the manufacturer of the brand-name drug does not intend to defend its patent against infringement by the subsequent applicant—would not be sufficient to potentially trigger the forfeiture of the exclusivity period by the first generic applicant.

This option would change current law by adding to existing forfeiture conditions the absence of a lawsuit within 45 days by the manufacturer of the brand-name drug against an applicant that challenges a patent. That change could speed up the availability of lower-priced generic drugs in certain cases, such as when a subsequent applicant has built a stronger case against a challenged patent than the first applicant did and, as a result, is not sued by the manufacturer of the brand-name drug.

CBO estimates that this option will reduce direct federal spending for drugs primarily under Medicare, Medicaid, the Federal Employees Health Benefits program, and the Department of Defense by \$1 million in 2006 and \$169 million over five years. It also would lower the cost that

nongovernmental purchasers paid for drugs, which in turn would reduce premiums for employer-sponsored health insurance and prescription-drug spending by individuals. As a result of that reduction in premiums, more of employees' compensation would take the form of taxable income, thus increasing tax revenues by less than \$500,000 in 2006 and by \$63 million through 2010 (not included in the table).

A potential drawback of this option is that drug manufacturers' incentive to invest in the development of new drugs could weaken if sales of brand-name drugs fell. That effect would probably be small, however, because any decrease in profits would occur toward the end of a drug's market life and thus manufacturers would strongly discount it when originally deciding whether to invest in research and development.

## Medicare

**B**udget function 570 comprises spending for Medicare, the federal health insurance program for elderly and some disabled people. Medicare currently consists of two parts. Hospital Insurance (Part A) pays health care providers for inpatient care that beneficiaries receive at hospitals; it also pays for care at skilled nursing facilities, some home health care, and hospice services. Supplementary Medical Insurance (Part B) pays for physicians' services, outpatient services at hospitals, home health care, and other services.

Medicare will undergo a major expansion of benefits in 2006, when the program to pay for outpatient prescrip-

tion drugs under a new Part D will begin. In the following several years, Medicare enrollment will expand substantially as significant numbers of baby boomers become eligible because of disability or because they reach age 65.

Total Medicare spending has been growing at an average annual rate of about 8 percent in recent years. The Congressional Budget Office estimates that gross Medicare outlays will total \$329 billion in 2005, including discretionary outlays of \$4 billion for the program's administrative expenses. Premium income of about \$38 billion, paid mostly by participants in Part B, will offset part of that spending.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	3.0	3.3	3.8	3.8	3.9	4.0	6.5	4.3
Outlays								
Discretionary	3.0	3.3	3.2	3.7	4.0	4.0	7.6	-0.3
Mandatory	194.1	214.1	227.7	245.7	265.0	287.2	8.1	8.4
Total	197.1	217.4	230.9	249.4	269.1	291.2	8.1	8.2

**570-01—Mandatory****Raise the Eligibility Age for Medicare**

Although the normal retirement age (NRA) for Social Security is scheduled to gradually increase until it reaches 67 for people who were born in 1960 or later, the eligibility age for Medicare will remain at 65 (people can qualify for coverage earlier if they are disabled or have end-stage renal disease). Because the two programs affect the same population, some people have argued that the age requirements should be identical.

This option comprises two alternatives for raising the eligibility age for Medicare. Each alternative assumes that the eligibility age will not be increased until 2015, so people who are currently nearing retirement would not be affected. The first alternative would increase the eligibility age by two months every year beginning in 2015 until it reached 67 in 2026, where it would stay indefinitely. Although the increases under that alternative are consistent with increases currently scheduled for the Social Security NRA, the Medicare eligibility age would remain below the Social Security NRA until 2026 (because the NRA increases started sooner). The second alternative would increase the eligibility age by two months every year beginning in 2015 until it reached 70 in 2044, at which point it would stabilize. That alternative is analogous to the option for raising the Social Security NRA (see option 650-05), but it would be phased in more slowly and would not raise the eligibility age above 70.

By 2075, the reduction in net Medicare spending would be about 0.2 percent of gross domestic product under the first alternative and about 0.8 percent of GDP under the second. Spending would fall by less than enrollment if the eligibility age for Medicare rose to 67 or 70, however, for two reasons. First, people who are 65 or 66 are typically the least costly enrollees because they are younger and tend to be in better health than older enrollees. Sec-

ond, they might be able to postpone some medical care until they became eligible for the program.

The reduced spending for Medicare would be partially offset by higher spending under Medicaid and the Federal Employees Health Benefits program—both of which would pick up part of the health care costs of those beneficiaries whose eligibility for Medicare had been delayed. Spending under the military's TRICARE For Life program would decline, however, because eligibility for that program is limited to people who are enrolled in Medicare.

The primary rationale for this option is to restrain the growth of Medicare spending to ease long-term budgetary pressures. Life expectancy has risen since the Medicare program began in 1965, and the life expectancy of 65-year-olds is expected to continue increasing. Therefore, on average, people will spend a longer time covered by Medicare, which will raise the program's costs. In addition, raising the Medicare eligibility age will reinforce incentives created by increases in the Social Security NRA for people to delay retirement. Disability among the elderly has declined over time, and jobs are generally less physically demanding, suggesting that a larger fraction of the population may be capable of working past age 65. Many who do so could have access to employment-based insurance.

An argument against this option is that many workers retire before age 65. For those early retirees, raising the Medicare eligibility age would lengthen the time they might be at risk of having no health insurance. Furthermore, raising the eligibility age for Medicare would shift costs that are now paid by Medicare to individuals and to employers who continued to offer health insurance to retirees. Those higher costs might lead more employers to reduce or eliminate health benefits for retirees.

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RELATED OPTION: 650-05

RELATED CBO PUBLICATIONS: *The Long-Term Budget Outlook*, December 2003; and *Budget Options*, March 2003, Chapter 4

**570-02—Mandatory** (An update reflecting CBO's March 2005 baseline is available from within the electronic version of this document on CBO's web site.)

## Set the Benchmark for Private Plans in Medicare Equal to Local Per Capita Fee-for-Service Spending

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,345	-2,015	-2,355	-2,688	-2,906	-11,289	-28,714

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) established the Medicare Advantage program to replace Medicare+Choice as the vehicle by which private health plans participate in Medicare. The MMA retained the basic structure of the Medicare+Choice payment system for 2004 and 2005 but modified it to increase the rates offered to those private plans. A new payment system will be implemented in 2006, and the associated new payment rates will be called benchmarks.

Under the Medicare+Choice program, the payment rate offered to private health plans in each U.S. county was the greatest of three amounts: a minimum (floor) rate; a blend of a local (county-level) rate and the national rate; and a minimum increase (usually 2 percent) from the previous year's rate. That mechanism resulted in payment rates that greatly exceeded average per capita spending in Medicare's fee-for-service (FFS) sector in some areas and payment rates that were lower than FFS spending in other areas.

Among other changes, the MMA modified the payment system by raising payment rates that were below the per capita FFS level to that level. However, the MMA did not reduce payment rates in areas where those rates were higher than the FFS level.

This option would set the benchmark in each county equal to local per capita Medicare fee-for-service spending. That change would reduce Medicare spending by about \$1.3 billion in 2006 and \$11.3 billion over five years. (Those estimates were completed before the final rule for the Medicare Advantage program was issued and are subject to revision based on information in that rule.)

An argument in favor of this option is that the Medicare program should be neutral as to whether beneficiaries decide to enroll in private plans or remain in the fee-for-service sector. The payment system that will be implemented in 2006, like the current payment system, will give an advantage to private plans because they will be able to operate in areas where their costs exceed FFS spending levels and, if their costs are less than the benchmark, provide additional benefits to attract enrollees. Under that system, Medicare will continue to pay more for enrollees in private plans than it would have paid if they had remained in the FFS sector. Setting the benchmark equal to per capita FFS spending in each county would encourage private plans to operate only in areas where they could provide Medicare services at a lower cost than the FFS sector, without encouraging them to operate in areas where they could not.

An argument against this option is that access to private health plans—and to the additional benefits that many of those plans offer—should not be limited to beneficiaries who live in geographic areas where plans can provide Medicare services less expensively than the FFS sector does. According to that view, setting benchmarks higher than per capita FFS spending in many areas is justified because it encourages plans to enter markets that they otherwise would not serve. Another contention is that private plans should not be expected to provide Medicare services in all markets at a cost that is less than per capita FFS spending because Medicare may be able to use its market power to set FFS payment rates at levels below those that are determined through private-market forces. Moreover, below-market payments to health care providers may result in a less-efficient allocation of resources than would be achieved if more beneficiaries were enrolled in private plans that paid providers at rates determined in the market.

RELATED OPTION: 570-03

RELATED CBO PUBLICATION: *CBO's Analysis of Regional Preferred Provider Organizations Under the Medicare Modernization Act*, October 2004

**570-03—Mandatory** (An update reflecting CBO's March 2005 baseline is available from within the electronic version of this document on CBO's web site.)

## Remove Medicare's Payments for Indirect Medical Education from the Benchmarks for Private Plans

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-326	-426	-428	-440	-463	-2,083	-5,082

The Medicare program makes two types of payments to teaching hospitals to account for the higher costs they incur relative to other hospitals for treating Medicare patients. First, payments for the direct costs of graduate medical education (GME) are intended to compensate teaching hospitals for Medicare's share of residents' salaries and benefits, teaching costs, and institutional overhead. Second, payments for the indirect costs of GME are designed to account for the fact that teaching hospitals tend to have greater expenses than other hospitals do for a variety of reasons. (For instance, teaching hospitals typically offer more technically sophisticated services and treat patients with more complex conditions than other hospitals do.) Medicare makes direct and indirect GME payments to hospitals for the inpatient stays of all Medicare beneficiaries, including those who are enrolled in private health plans that participate in the Medicare Advantage program.

In the Medicare Advantage program, the payment rate to private health plans in 2004 for each U.S. county was the greatest of four amounts: a minimum (floor) rate; a blend of a local (county-level) rate and the national rate; a minimum increase from the previous year's rate; and the county's per capita fee-for-service (FFS) spending. Payments for indirect GME are included in the estimate of per capita FFS spending even though the Medicare program makes indirect GME payments directly to teaching hospitals for the inpatient stays of Medicare Advantage enrollees. As a result, the Medicare program is paying twice for indirect GME in counties in which the Medi-

care Advantage rate is equal to per capita FFS spending—first, as an allowance for indirect GME payments in the Medicare Advantage rate, and second, as a payment to teaching hospitals. Those double payments for indirect GME will continue in the future, although the payment system will be modified and the payment rates will be called benchmarks beginning in 2006 (see option 570-02).

This option would remove payments for indirect GME from the benchmarks for private plans, leaving the payment to teaching hospitals as the only compensation for indirect GME. Making that change would reduce Medicare outlays by \$326 million in 2006 and by \$2.1 billion through 2010.

A rationale for this option is that there is no basis for making double payments for indirect GME for Medicare Advantage enrollees. Doing so results in unnecessary Medicare expenditures and gives private health plans an unfair advantage over the FFS sector.

A potential drawback of this option is that eliminating the double payment for indirect GME would reduce the revenue that private health plans earned from Medicare, which could lead some plans to reduce the generosity of their benefit packages or to withdraw from the program. Plan withdrawals could reduce the number of Medicare beneficiaries with access to private health plans and the additional benefits they provide.

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RELATED OPTION: 570-02

**570-04—Mandatory****Reduce Medicare's Direct Payments for Medical Education**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-800	-900	-900	-1,000	-1,000	-4,600	-9,800

Medicare pays hospitals for the inpatient stays of its beneficiaries through the prospective payment system. Under that system, hospitals with teaching programs receive additional amounts for costs associated with graduate medical education (GME). One component of the education-related payment is called direct GME, which covers a portion of a hospital's costs for residents' compensation and institutional overhead. Payments are made on the basis of a hospital's 1984 cost per resident (indexed for changes in consumer prices) and Medicare's share of inpatient days. Direct GME payments for physician residents, received by about one-fifth of U.S. hospitals, totaled \$2.2 billion in 2004. (Option 570-05 covers Medicare's indirect payments for medical education.)

Under this option, hospitals' direct GME payments would be set at 120 percent of the national average salary paid to residents in 1987 and updated annually for changes in consumer prices. In effect, this option would reduce teaching and overhead payments while continuing to pay residents' compensation. It would also maintain the current practice of reducing payments for residents who have exceeded their initial period of residency (such a resident is treated as one-half of a full-time-equivalent resident).

The savings from this option would total about \$800 million in 2006 and \$4.6 billion over five years. Unlike the current system in which GME payments vary considerably by hospital, this option would pay each hospital

the same amount for the same type of resident. (Although variations in payment per resident have been reduced since 2001, considerable differences remain.)

An argument in favor of this option is that market incentives appear sufficient to entice young people to enter medicine, so a reduction in the federal subsidy for medical education seems warranted. Because hospitals benefit from the services that residents provide, it is reasonable that they should shoulder more of the costs of residents' training. While residents would bear more of the cost of their education if hospitals responded by cutting residents' salaries or benefits, such action could be justified on the grounds that the training residents received would ultimately enable them to earn higher future incomes.

An argument against this option is that if hospitals lowered residents' compensation, the costs of longer residencies—in terms of forgone income from private practice—could deter some residents from obtaining specialty training. As a result, more residents might choose primary care. That outcome might leave some individual residents worse off (although the Council on Graduate Medical Education and other groups argue in favor of a relative increase in the number of primary care practitioners). Another consideration is that reducing the federal subsidy for medical education could lead some hospitals to cut the resources devoted to training, possibly compromising the quality of their education programs.

RELATED OPTIONS: 550-15, 570-05, 570-06, and 570-07

RELATED CBO PUBLICATION: *Medicare and Graduate Medical Education*, September 1995

**570-05—Mandatory****Reduce Medicare's Payments for the Indirect Costs of Patient Care Related to Hospitals' Teaching Programs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-2,900	-3,200	-3,500	-3,700	-3,900	-17,200	-40,700

Under Medicare's prospective payment system for inpatient medical services, hospitals with teaching programs receive additional funds for costs related to graduate medical education (GME). One part of the additional payment to teaching hospitals covers the cost of indirect medical education (IME), or those costs attributable to neither residents' compensation nor other direct costs of running a teaching program. Examples of IME expenses are the added demands placed on staff as a result of teaching activities and the greater number of tests and procedures ordered by residents. IME payments also compensate for the higher proportion of severely ill patients treated at teaching hospitals. (Option 570-04 discusses direct GME payments.)

The IME adjustment provides teaching hospitals with about 5.5 percent more in payments for inpatient services for every increase of 0.1 in the ratio of full-time residents to the number of beds. This option would lower the IME

adjustment to 2.7 percent—an amount that the Medicare Payment Advisory Commission has estimated would more closely represent indirect costs—saving \$2.9 billion in 2006 and \$17.2 billion through 2010.

An argument in favor of this option is that it would bring payments into line with actual teaching costs, thus reducing the federal subsidy without unduly affecting teaching activity. It also would remove an incentive for hospitals to have a higher number of residents than is necessary.

Possible drawbacks of this option are that a lower teaching adjustment could prompt teaching programs to train fewer residents or devote less time and resources to beneficial educational activities. Also, because some centers use a portion of the additional payments they receive to fund charitable care, reducing those payments could lead to diminished care for some severely ill patients.

RELATED OPTIONS: 550-15, 570-04, 570-06, and 570-07

RELATED CBO PUBLICATION: *Medicare and Graduate Medical Education*, September 1995



**570-06—Mandatory****Equalize Medicare’s Capital-Related Payments for Teaching and Nonteaching Hospitals**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-400	-500	-500	-500	-500	-2,400	-5,300

Under the prospective payment system for inpatient hospital services, Medicare pays hospitals an amount for each patient who is discharged that is intended to compensate hospitals for capital-related costs such as depreciation, interest, rent, and other expenses related to property. Hospitals with teaching programs receive additional capital-related payments that are made on the basis of “teaching intensity,” which is measured as the ratio of residents to the average daily number of hospitalized patients. An increase of 0.1 in that ratio raises a hospital’s capital-related payment by 2.8 percent.

This option would eliminate those extra payments to teaching hospitals. Doing so would save the Medicare program about \$400 million in 2006 and \$2.4 billion over five years.

One argument in favor of this option is that paying teaching hospitals more than nonteaching hospitals for treating otherwise similar patients may promote ineffi-

cient practices at teaching centers. In addition, Medicare’s payment adjustments for teaching intensity may distort the market for residency training by artificially increasing the value (or decreasing the cost) of residents to hospitals. According to that argument, if residents’ training raised the costs of patient care for a hospital, the hospital should bear those costs in order to encourage an efficient amount of training. Finally, although residents would bear more of the cost of education if hospitals responded by cutting their salaries or benefits, their training would still enable them to eventually earn a high income.

A possible drawback of this option is that it could prompt teaching programs to train fewer residents or to devote less time and resources to beneficial educational activities. Also, since some centers use a portion of their additional payments to fund charity care, reducing those payments could lead to diminished care for some seriously ill patients.

RELATED OPTIONS: 550-15, 570-04, 570-05, and 570-07

RELATED CBO PUBLICATION: *Medicare and Graduate Medical Education*, September 1995

**570-07—Mandatory****Convert Medicare's Payments for Graduate Medical Education into a Block Grant and Slow Their Growth**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-600	-600	-700	-700	-700	-3,300	-7,300

Three types of Medicare payments to teaching hospitals are tied to the size or intensity of a hospital's residency program: direct graduate medical education (GME) payments (see option 570-04); indirect medical education adjustments for operating costs related to inpatient care (see option 570-05); and indirect medical education adjustments for capital expenses (see option 570-06). Moreover, in addition to receiving GME payments for patients who use traditional fee-for-service Medicare, teaching hospitals currently receive payments for participants in Medicare Advantage health plans. Several factors determine the total GME payment a hospital receives, including the number of Medicare patients treated and discharged and numerical factors used annually to update payments. The Congressional Budget Office expects GME payments to grow at an average rate of 2 percent a year between 2006 and 2015 under current law.

This option would replace the current payment system with a consolidated block grant to fund all GME activities at teaching hospitals. Under the present system, a hospital receives GME payments on the basis of formulas set forth in regulations, and Medicare's total GME spending is the resulting sum of what it owes each hospital. This option assumes that the switch to a block-grant program will occur in 2006 and that the amount of the grant

will be based on spending in 2004, with future increases tied to changes in the consumer price index for all urban consumers minus 1 percentage point. Compared with projected spending under current law, federal outlays would decline by \$600 million in 2006 under this option and by \$3.3 billion over five years.

One advantage of establishing a block grant for the various types of GME payments is that it would allow lawmakers to better monitor the level of funding for medical education. In addition, a reduction in the Medicare subsidy would reduce teaching hospitals' incentives to increase the number of residents in order to boost the payments they receive. The reduced subsidy could also help encourage centers with large teaching programs to adopt more-efficient practices.

A potential drawback of this option is that teaching hospitals might decide as a result of the reduced Medicare subsidy to train fewer residents or to devote less time and resources to beneficial educational activities. Also, since some centers use a portion of the education-related payments they receive to fund charity care, reducing those payments could lead to diminished care for some seriously ill patients.

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RELATED OPTIONS: 550-15, 570-04, 570-05, and 570-06

RELATED CBO PUBLICATION: *Medicare and Graduate Medical Education*, September 1995

**570-08—Mandatory****Convert Medicare's Disproportionate Share Hospital Payments into a Block Grant**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,200	-1,600	-2,100	-2,500	-3,100	-10,500	-35,500

Hospitals that serve a disproportionately large number of low-income patients can receive higher payment rates under Medicare than other hospitals do. The Medicare disproportionate share hospital (DSH) adjustment was introduced in 1986 to account for what were assumed to be the higher costs of treating Medicare patients in such hospitals. The DSH adjustment has also come to be seen as a way to protect low-income patients' access to care by providing financial support to hospitals that serve a large share of people from low-income populations. Between 1992 and 1997, annual outlays for Medicare DSH payments rose from \$2.2 billion to \$4.5 billion. Restrictions established by the Balanced Budget Act of 1997 caused those outlays to decline for a few years, but they resumed growing in 2000. In 2003, the Medicare Modernization Act further boosted DSH payments to rural and small urban hospitals by adjusting the payment formulas. As a result, Medicare DSH payments totaled \$7.9 billion in 2004.

This option would convert DSH payments into a block grant to the states. In 2006, each state's grant would be 10 percent less than the estimated sum of Medicare DSH payments made to hospitals in that state in 2005. In subsequent years, the block grant would be indexed to the

change in the consumer price index for all urban consumers minus 1 percentage point. In return for the lower Medicare DSH payments, states would have flexibility in how they used their DSH funds. Those changes would decrease Medicare outlays by \$1.2 billion in 2006 and by \$10.5 billion over five years. (The estimated savings include the lower payment updates that plans participating in the Medicare Advantage program would receive.)

An argument in favor of this option is that the added flexibility provided to states under this option could result in DSH funds' being targeted more appropriately and equitably to facilities and providers that serve low-income populations. For example, rather than going solely to hospitals, such funds might also be used to support outpatient clinics that treat low-income patients.

An argument against this option is that the net reduction in federal payments to hospitals, unless made up for by states with their own funds, would result in some hospitals' receiving less public funding than they do now. That drop in funding could reduce the number of low-income patients they served and the quality of care they were able to provide.

RELATED OPTION: 550-08

**570-09—Mandatory****Reduce the Update Factor for Hospital Inpatient Operating Costs Under Medicare**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	0	0	-1,200	-2,400	-3,800	-7,400	-55,000

Medicare compensates hospitals for operating costs tied to providing inpatient services to Medicare beneficiaries under the prospective payment system (PPS). Payments are determined on a per-case basis, according to preset rates that vary with a patient's diagnosis and the characteristics of the hospital. Medicare adjusts those payment rates each year using an update factor that is determined in part by the projected rise in the hospital market-basket index (MBI), which reflects increases in hospitals' costs per case or their unit costs.

Under current law, hospitals that submit quality performance data to the Department of Health and Human Services (DHHS) will receive the full MBI update. The data are reported as a checklist of 10 quality measures that govern the treatment of three medical conditions: heart attack, heart failure, and pneumonia. (Types of quality measures include questions such as "Was a beta-blocker prescribed when the patient was discharged?" or "Had the patient received a pneumococcal vaccination?") By contrast, hospitals that do not submit the information will receive the MBI minus 0.4 percentage points. That reduction will apply for the year in which the hospital does not submit the information and will not be taken into account in subsequent years. (The Congressional Budget Office projects that nearly all hospitals will submit the required data and receive the full update.) Begin-

ning in 2008, the update factor will be the full MBI regardless of the submission of quality performance data.

This option would reduce the Medicare PPS update factor to the annual change in the MBI minus 1 percentage point. That rate would take effect in 2008 and continue through at least 2015. Savings from that reduction would total \$1.2 billion in 2008 and \$55 billion through 2015.

Supporters of this option reason that granting the full MBI update factor will more than compensate hospitals for their average growth in operating costs. To the extent that the MBI is intended to approximate how much providers' costs would rise if the quantity, quality, and mix of inputs they use to provide care remained constant, the MBI would generally overstate cost inflation because of productivity improvements (such as the tendency of providers to adopt cost-saving technological advances in response to the fixed payments established under the PPS).

Critics of this option contend that Medicare's payments for inpatient services should not be reduced without a careful evaluation of the adequacy of payments for other hospital services (such as outpatient care). Since about one-half of all hospitals are expected to have negative overall Medicare profit margins in 2004, further reductions in the update factor could cause considerable hardship for those hospitals.

**570-10—Mandatory****Reduce Medicare's Payments for Hospital Inpatient Capital-Related Costs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-400	-500	-500	-500	-500	-2,400	-5,500

In 1992, Medicare changed its method of paying hospitals for capital expenses associated with providing inpatient services; specifically, it switched from a cost-based reimbursement system to a prospective payment system (PPS). Under the revised system, hospitals receive a predetermined amount for every Medicare patient treated at their facility to cover capital-related costs. (Those costs include depreciation, insurance, interest, taxes, and similar expenses for the maintenance of buildings and the purchase and upkeep of equipment.) The prospective payment system for capital-related costs applies to over 5,000 participating hospitals that are also reimbursed by Medicare for operating costs under the PPS. A hospital's prospective rate is adjusted to reflect its case mix of patients and other characteristics, such as whether the hospital is new, where it is located, and so forth.

Analyses by the Centers for Medicare and Medicaid Services (CMS), which administers the Medicare program, suggest that the prospective rates for capital payments set in 1992 were too high. Those rates were based on 1989 data projected to 1992; but in actuality, capital costs grew more slowly than expected during those years. Moreover, the level of capital costs per case that was used to set rates in 1989 was probably higher than would be optimal in an efficient market because of incentives created by the Medicare payments. Factors such as changes in capital prices, the mix of patients treated at a given hospital, and

the “intensity” (technological complexity) of hospital services contributed to the inflated estimates, which the Medicare Payment Advisory Commission and CMS calculated at between 15 percent and 28 percent, with an average of about 22 percent. Consequently, the Balanced Budget Act of 1997 reduced by 17.8 percent the federal rate for capital payments made to hospitals for patient discharges occurring between 1998 and 2002.

This option would further reduce the prospective payment rate for hospitals' capital-related costs by 5 percentage points—bringing the total reduction to about 22 percent from the initial level. That change would lower Medicare outlays by \$400 million in 2006 and \$2.4 billion over five years.

A rationale for this option is that Medicare's payments for capital costs represent a small share—about 5 percent—of hospitals' total revenues. Most hospitals would probably be able to adjust to the reductions by lowering their capital costs or by partially covering those expenses through other sources of revenue.

An argument against this option is that hospitals in poor financial condition could have difficulty absorbing the reductions. As a result, the quality of the care that they offered could decline, and they might provide fewer services to people without health insurance.

**570-11—Mandatory** (An update reflecting CBO's March 2005 baseline is available from within the electronic version of this document on CBO's web site.)

## Change the Payment System for Physicians in Medicare

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	+2,080	+5,440	+9,110	+13,000	+15,730	+45,360	+139,680

Each year, the Centers for Medicare and Medicaid Services sets fees for physicians' services using the "sustainable growth rate" (SGR) mechanism; the fees are then published in the physician fee schedule. The SGR mechanism establishes both yearly and cumulative expenditure targets for Medicare's combined spending for physicians' services and those services furnished "incident to" (in connection with) a physician visit (for instance, diagnostic laboratory services or physician-administered drugs). Those targets are updated to reflect inflation, overall economic growth, the increase in the number of Medicare enrollees in the fee-for-service sector, and any changes in Medicare outlays that stem from new laws and regulations. If cumulative spending exceeds the cumulative target, as it currently does, the SGR mechanism is designed to reduce payment rates each year so that cumulative spending and the cumulative target eventually converge.

By the end of 2002, spending for physicians' services had exceeded the cumulative target by an estimated \$17 billion. Thus, in 2003, physicians were scheduled to receive a negative 4.4 percent update, after having seen a drop in fees of 5.4 percent in 2002. The Congress responded to that imminent reduction by allowing the Administration to boost the cumulative target, thereby producing a 1.6 percent increase in payment rates for physicians' services for 2003. If the SGR method had been allowed to operate, it would have reduced payment rates again in 2004. However, the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA) replaced that scheduled reduction in rates with increases of 1.5 percent in both 2004 and 2005. Under current law, those off-schedule updates will not significantly affect projected to-

tal spending over the next 10 years because, after 2005, the SGR method will again be used to restrain payment rates. Thus, payment rates will be reduced under the SGR method in 2006 and 2007 and will be held below the projected rate of inflation through at least 2014.

The Medicare Payment Advisory Commission (MedPAC) recently recommended that the 2005 update to payment rates for physicians' services be set equal to the change in input prices minus an adjustment for increased productivity. The option considered here would permanently change the mechanism used for updating Medicare's physicians' fees to input prices minus a productivity adjustment. The Congressional Budget Office estimates that adopting such updates will increase Medicare spending by about \$2.1 billion in 2006 and by about \$45 billion over five years. Alternatively, physician fees could be frozen at their 2005 level. That alternative would increase Medicare spending by about \$25 billion over five years.

As an argument in support of this option, the American Medical Association contends that the future fee reductions scheduled to occur under the SGR mechanism will jeopardize Medicare beneficiaries' access to physicians' services. (MedPAC has not identified current problems with Medicare beneficiaries' access to physician care but concludes that changing the physician payment system, as detailed in this budget option, will help maintain access.) Another argument in favor of these changes is that it is unfair to single out just one type of provider—in this case, physicians—when imposing global spending restrictions such as those required by the SGR.

An argument against this option is that increasing fees paid to physicians would add to the already substantial long-term costs of the Medicare program and to the broader budgetary pressures posed by the aging of the baby-boom generation. Over the long term, higher spending by Medicare for physicians' services would

boost federal spending, requiring cuts elsewhere in the budget, higher taxes, or more federal borrowing. In addition, raising fees would increase both beneficiaries' cost-sharing obligations and the premiums they pay for Part B of Medicare (which covers physicians' services and outpatient hospital care).

RELATED CBO PUBLICATION: *Medicare's Physician Fee Schedule* (testimony by Douglas Holtz-Eakin, Director, before the Subcommittee on Health of the House Committee on Energy and Commerce), May 5, 2004

**570-12—Mandatory****Eliminate the “Doughnut Hole” in Medicare’s Drug Benefit Design**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	0	+16,560	+28,950	+33,600	+39,180	+118,290	+426,560

The standard drug benefit under Medicare Part D will have an annual deductible, an initial range of coverage in which beneficiaries will pay 25 percent of their covered drug costs, and a catastrophic threshold above which beneficiaries will pay about 5 percent of their covered drug costs. In the gap between the end of the initial coverage range and the catastrophic threshold, beneficiaries will generally be liable for all of their drug costs. In 2006, that gap—commonly called the “doughnut hole”—will run from \$2,250 in drug spending up to \$5,100 for enrollees with no supplemental drug coverage. (At that point, Medicare will have covered \$1,500 in drug costs for such enrollees, and they will have incurred \$3,600 in out-of-pocket drug costs, which is the catastrophic threshold for 2006.)

The gap is effectively larger for enrollees with private supplemental drug coverage because of the drug benefit’s “true out-of-pocket” provision, which specifies that costs covered by such supplemental policies do not count toward reaching the catastrophic threshold. Moreover, the gap will grow in dollar terms over time because the benefit’s parameters are indexed to average drug costs for Medicare enrollees. Many enrollees with low income and few assets will receive additional federal subsidies to cover most of their drug costs in the doughnut hole, but the Congressional Budget Office estimates that roughly one-third of Part D enrollees will have drug spending that exceeds the standard benefit’s initial coverage range in any given year.

This option would completely eliminate the doughnut hole in the standard benefit, starting in 2007, by extending the benefit’s initial 25 percent coinsurance rate up to the point at which the catastrophic threshold is reached. As a result, enrollees in 2007 would face 25 percent coinsurance for all drug costs between the deductible (which is now projected to be \$285) and \$15,545—at which point they would have incurred \$4,100 in out-of-pocket drug costs and would reach the currently pro-

jected catastrophic threshold for that year. (Because the true out-of-pocket provision would continue to apply, beneficiaries with private supplemental drug coverage would still have to incur higher total drug costs before reaching the catastrophic threshold.)

In CBO’s estimation, this option would increase federal outlays by \$16.6 billion in 2007 and by \$118.3 billion through 2010. That estimate assumes that beneficiaries’ premiums would continue to cover 25.5 percent of the costs of providing the basic benefit. Because those costs would increase, CBO estimates that under the option, beneficiaries’ average monthly premiums will rise to \$57 in 2007 and to \$125 in 2015. By contrast, CBO projects that under current law, beneficiaries’ monthly premiums will average \$38 in 2007 and \$72 in 2015. CBO’s cost estimate also reflects the fact that an increase in the cost of providing the basic drug benefit to all enrollees will be partially offset by reduced costs for providing the additional drug subsidies for low-income enrollees to cover the smaller cost-sharing liabilities that remain.

Proponents of this option argue that it will reduce cost-sharing burdens on the large number of beneficiaries who are projected to exceed the current benefit’s initial coverage limit. Overall, CBO estimates, the average liability per enrollee will fall by about 30 percent (from \$1,540 to \$1,070) in 2007 under this option. Providing this additional coverage would also reduce the share of total spending that exceeds the catastrophic threshold, so it would lessen the penalty for having supplemental coverage that stems from tying catastrophic coverage to true out-of-pocket costs. (The estimates presented here assume that the subsidy payments from Medicare for employers’ drug plans are increased commensurately—so that the average subsidies that employers received in that system would be comparable to the net Medicare subsidies that would be generated if those retirees enrolled in Part D and their former employers wrapped their drug coverage around the basic Medicare benefit.)



One argument against this option is that a substantial portion of the additional federal costs would go to displace spending that would probably have been covered by third parties, such as employers. Also, beneficiaries might object to the fact that the increased premiums would delay their break-even point—that is, the point at which the benefits they receive exceed their premium payments.

(CBO did not assume a reduction in enrollment as a result.) Alternatively, the insurance design of the standard Part D benefit could be improved at a lower federal cost by first increasing the deductible and then raising the co-insurance rate before extending that coverage across the doughnut hole.

RELATED CBO PUBLICATION: *A Detailed Description of CBO's Cost Estimate for the Medicare Prescription Drug Benefit*, July 2004

**570-13—Mandatory****Increase Medicare's Premium for Supplementary Medical Insurance to 30 Percent of Benefit Costs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-4,650	-6,440	-6,890	-7,450	-8,070	-33,500	-84,770

Medicare provides health insurance coverage for physicians' services and hospital outpatient services through its Supplementary Medical Insurance (SMI) program, or Medicare Part B. Monthly premiums paid by enrollees partially fund SMI benefits; general federal revenues fund the remainder. Initially, the SMI premium was supposed to cover 50 percent of program costs. But that share declined between 1975 and 1983, eventually reaching less than 25 percent. The drop occurred because the per capita cost of the SMI program rose faster than the Social Security cost-of-living adjustment (COLA), and by law, the annual percentage increase in the premium during that period could not exceed the COLA. The Balanced Budget Act of 1997 permanently set the SMI premiums to cover 25 percent of program costs.

This option would set the SMI premium equal to 30 percent of the cost of Part B benefits, beginning in 2006. Such an increase would save \$4.7 billion in 2006 and \$33.5 billion over five years and would raise the 2006 premium for enrollees to \$95.70 per month instead of \$79.80. The estimated savings assume a continuation of the current hold-harmless provisions, which ensure that no Medicare enrollee's monthly net Social Security benefit will fall because the dollar amount of the Social Security COLA is smaller than the dollar increase in the

SMI premium. (SMI premiums are deducted from Social Security checks for most enrollees.) The hold-harmless provisions would apply to more enrollees in 2006 because of the initial increase in premiums from 25 percent to 30 percent of program costs.

A main rationale in favor of this option is that it would reduce Medicare's costs amid the broader budgetary pressures posed in part by the aging of the baby-boom generation. Even so, the public subsidy to Medicare's Part B beneficiaries would remain at a high level of 70 percent. Moreover, the option might not affect enrollees with income below 120 percent of the federal poverty line and few assets because they are eligible to have Medicaid pay their Medicare premiums.

An argument against this option is that low-income enrollees who are not eligible for Medicaid could find the higher premiums burdensome. Some might feel compelled to drop SMI coverage altogether or to seek sources of free or reduced-cost care, which could increase demands on local governments. In addition, because states would have to pay part of the higher premium costs for those Medicare enrollees who also receive Medicaid benefits, state expenditures would probably rise.

**570-14—Mandatory****Apply a “Hold-Harmless” Provision to Increases in Medicare’s Part D Premium**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	0	+10	+30	+40	+70	+150	+870

Many people enrolled in Medicare Part B (Supplementary Medical Insurance, or SMI) have their premium payments automatically deducted from their Social Security benefit checks. The Medicare Part B premium is set to cover about 25 percent of program costs. However, each year, Social Security payments are subject to a cost-of-living adjustment, or COLA. Under current law, the dollar amount of any increase in the Part B premium is limited by the dollar amount of the COLA for Social Security benefits. Under this “hold-harmless” provision, if the calculated premium increase is greater than the dollar increase in the Social Security benefit, the premium is reduced to the amount needed to ensure that there is no reduction in the dollar amount of the net Social Security payment.

This option would apply a similar hold-harmless provision to the combined premium increases for Medicare Part B and Part D (Medicare’s new prescription drug benefit), beginning in 2007. (The option would not affect the initial reduction in the net Social Security benefit that will occur when enrollees first sign up for Part D in 2006.) Because Part D premiums will vary across beneficiaries (depending on the particular plan chosen), the hold-harmless calculations described here are based on the average premium for Part D plans. In other words, the average beneficiary’s net Social Security payment could not fall from year to year. If beneficiaries were en-

rolled in a plan with a sufficiently higher premium increase than that of the average Part D plan, however, they could see reductions in their net Social Security payment.

Expanding the current hold-harmless provision to include the Part D premium would increase Medicare spending by \$10 million in 2007 and by \$150 million between 2006 and 2010. The number of Medicare beneficiaries subject to both the current and proposed hold-harmless provisions would vary considerably over time, primarily because of significant year-to-year fluctuations in the rates of increase of the Part B and Part D premiums.

A rationale for this option is that it would limit the extent to which the rising cost of prescription drugs reduced the amount of income available to the elderly for spending on other goods and services. It would especially protect the net Social Security benefit of beneficiaries with relatively low lifetime wages (and thus low Social Security benefits) because the dollar amounts of their COLAs would be relatively small.

An argument against this option is that, by insulating beneficiaries from the full impact of sharing in increased premiums for the drug benefit, the policy might reduce pressures to curb growth in Medicare drug spending.

**570-15—Mandatory****Restructure Medicare's Cost-Sharing Requirements**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-4,750	-6,790	-6,950	-7,530	-8,300	-34,320	-87,460

In the fee-for-service Medicare program—consisting of Part A (Hospital Insurance) and Part B (Supplementary Medical Insurance)—beneficiaries' cost sharing varies significantly depending on the type of service provided. For example, enrollees who are hospitalized in 2005 must pay a Part A deductible of \$912 for each "spell" of illness they incur and are subject to daily copayments for extended hospital stays or skilled nursing care. Meanwhile, the 2005 deductible for outpatient services covered under Medicare Part B is \$110. Beyond that deductible, beneficiaries generally pay 20 percent of allowable costs for most Part B services, but cost sharing can be significantly higher for outpatient hospital care. At the same time, certain Medicare services, such as home health visits and laboratory tests, require no cost sharing. As a result of those variations, beneficiaries are not given consistent incentives to weigh relative costs when choosing among treatment options. Moreover, if Medicare patients incur extremely high medical costs, they can face significant cost-sharing expenses, because the program does not cap those expenses.

This option would replace the current complicated mix of cost-sharing provisions with a single combined deductible covering all services in Parts A and B of Medicare, a uniform coinsurance rate of 20 percent for amounts above that deductible (including inpatient expenses), and an annual cap on each beneficiary's total cost-sharing liabilities. Specifically, the combined deductible would be \$500 in 2006, and the cap on total cost sharing would be \$4,500; in later years, those amounts would grow at the same rate as per capita Medicare costs.

If this option took effect on January 1, 2006, federal outlays would be reduced by \$4.7 billion in that year and by \$34.3 billion over five years. Those estimates assume that the new Medicare cost-sharing rules will be mandatory for all enrollees (that is, beneficiaries will not be allowed to choose between the new cost-sharing provisions and current-law requirements).

One argument in favor of this option is that it would provide greater protection against catastrophic costs while reducing Medicare's coverage of more predictable expenses. Capping beneficiaries' out-of-pocket expenses would especially help people who develop serious illnesses, require extended care, or undergo repeated hospitalizations but lack supplemental coverage for their cost sharing. This option would also increase incentives for enrollees to use medical services prudently. By design, deductibles and coinsurance rates are mechanisms for exposing beneficiaries to some of the financial consequences of their health care treatments, aimed at ensuring that the benefits of those treatments exceed their costs. While this option's combined deductible would be lower than the Part A deductible, the vast majority of Medicare enrollees are not hospitalized in a given year; thus, most people without supplemental coverage would face the full cost for a larger proportion of the Part B services that they used. The uniform coinsurance rate across services would also encourage enrollees to compare the costs of different treatment options in a more consistent way. In addition, the resulting reductions in costs for Medicare's Part B program would translate into lower premiums for all enrollees.

An argument against this option is that it would increase cost-sharing liabilities for most Medicare enrollees. Specifically, those liabilities would increase modestly in 2006 for about 79 percent of enrollees (by about \$650 on average) and would stay the same for another 14 percent. (For the remaining 7 percent of enrollees, cost-sharing liabilities would fall by an average of about \$4,950.) Beneficiaries who are hospitalized only once in a year would generally face higher costs because of the coinsurance that would apply to that care; however, most Medicare benefi-

ciaries would be insulated from those direct effects because they have supplemental coverage. Nevertheless, some would see the effects in the form of higher premiums for supplemental policies. In addition, the option would make beneficiaries responsible for paying coinsurance on certain services—such as home health care—that are not currently subject to cost sharing. That requirement would increase administrative costs for some types of health care providers and could discourage enrollees from seeking cost-effective care in some cases.

RELATED OPTIONS: 570-16 and 570-17

**570-16—Mandatory****Restrict Medigap Coverage of Medicare's Cost Sharing**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-2,100	-3,150	-3,290	-3,490	-3,740	-15,770	-39,260

Cost-sharing requirements in Medicare's fee-for-service sector can be substantial, so most beneficiaries obtain supplemental coverage from some source (including the Medicaid program or their former employer). About 30 percent of fee-for-service enrollees buy individual insurance—or medigap—policies that are designed to cover all or most of the cost sharing that Medicare requires. On average, medigap policyholders use at least 25 percent more services than Medicare beneficiaries who have no supplemental coverage and about 10 percent more services than beneficiaries who have supplemental coverage from a former employer (which tends to reduce but not eliminate their cost-sharing liabilities). Because beneficiaries are liable for only a portion of the costs of those additional services, it is taxpayers (through Medicare) and not medigap insurers or the policyholders themselves who bear most of the resulting costs.

Federal costs for Medicare could be reduced if medigap plans were restructured so that policyholders faced some cost sharing for Medicare services but still had a limit on their out-of-pocket costs. This option would bar medigap policies from paying any of the first \$500 of an enrollee's cost-sharing liabilities for calendar year 2006 and would limit coverage to 50 percent of the next \$4,000 in Medicare cost sharing. (All further cost sharing would be covered by the medigap policy, so enrollees could not pay more than \$2,500 in cost sharing that year.) If those dollar limits were indexed to growth in average Medicare costs for later years, savings would total \$2.1 billion in 2006 and \$15.8 billion over five years. Those estimates assume that all current and future medigap policies will be required to meet the new standards. (Two similar designs for medigap policies were authorized by the Medicare Modernization Act of 2003, but enrollment in them will be optional.)

An argument in favor of this option is that most Medicare enrollees who had medigap policies would be better

off financially as a result. Because insurers that offer medigap plans must compete against each other for business, they would most likely reduce premiums to reflect the lower costs of providing the new policies. Indeed, most medigap policyholders would have smaller annual expenses under this option because their medigap premiums would decline to a greater extent than their cost-sharing liabilities would increase. (Part of the reason is that premiums for medigap policies are generally somewhat higher than the average cost-sharing liabilities that the policies cover, because of the administrative and other costs that medigap insurers incur. But the primary reason is that most of those liabilities are generated by a minority of policyholders.) Greater exposure to Medicare's cost sharing could even lead some medigap policyholders to forgo treatments that would yield them few or no net health benefits. Indirectly, the decline in Medicare's costs would also cause that program's monthly premiums (which cover about 25 percent of costs for Medicare Part B) to fall, so other Medicare beneficiaries would also be better off.

An argument against this option is that Medigap policyholders would face more uncertainty about their out-of-pocket costs. For that reason, some policyholders might object to being barred from purchasing coverage for all of their cost sharing, even if they would be better off financially in most years under this option. (Most medigap policyholders buy optional coverage for the Part B deductible, while high-deductible medigap policies have attracted only limited enrollment despite their substantially lower premiums.) Moreover, in any given year, about a quarter of medigap policyholders would incur higher total costs under this option than they would under the current system, and those with costly chronic conditions might be worse off year after year. Finally, the decline in use of services by medigap policyholders (which would generate the federal savings under this option) might adversely affect their health in some cases.

**570-17—Mandatory****Combine Changes to Medicare's Cost Sharing with Medigap Restrictions**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-7,120	-10,380	-10,690	-11,480	-12,490	-52,170	-131,480

The savings from redesigning Medicare's cost-sharing requirements (see option 570-15) could be increased by limiting medigap coverage at the same time (see option 570-16). That is, the savings that would result from instituting both changes simultaneously would exceed the sum of the savings derived from implementing each option in isolation. That synergy arises because medigap policyholders would not be insulated from the changes in Medicare's cost-sharing requirements if their medigap plans were also restructured.

Under this option, medigap plans would be prohibited from covering any of the new \$500 combined deductible that would be required by Medicare in 2006 (described in option 570-15) and could cover only 50 percent of the program's remaining cost-sharing requirements. Such a medigap policy would correspond to the one described in option 570-16, with coverage limited to 50 percent of the next \$4,000 in Medicare cost sharing (thus capping out-of-pocket expenses at \$2,500 in 2006). Under this combined option, the point at which the medigap policy's cap on out-of-pocket costs was reached would also be the point at which the Medicare program's new cap was reached. Between the deductible and the catastrophic cap, policyholders would face a uniform coinsurance rate of 10 percent for all services. If those various dollar limits

were indexed to growth in per capita costs for the Medicare program, this option would save \$7.1 billion in 2006 and \$52.2 billion over five years. Those estimates assume that participation in Medicare's new cost-sharing requirements will be mandatory and that all medigap policies will be required to follow the new standards.

An argument in favor of this option is that it would appreciably strengthen incentives for more prudent use of medical services by raising the initial threshold of health care costs that most Medicare beneficiaries faced and by ensuring that beneficiaries generally paid at least a portion of all subsequent costs (up to the out-of-pocket limit). As a result, the five-year savings from this option would be \$2.1 billion more than the sum of savings achieved from options 570-15 and 570-16.

An argument against this option is that even with the new catastrophic cap, which would protect Medicare enrollees against substantial out-of-pocket expenses, some enrollees would object to any policy that denied them access to full supplemental coverage for their cost sharing. Furthermore, in any given year, a significant number of enrollees would see their combined payments for premiums and cost sharing rise as Medicare's average subsidies were reduced and medigap plans were restructured.

**570-18—Mandatory****Reduce Medicare's Payments for Home Health Care**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-240	-680	-1,240	-1,900	-2,210	-6,270	-21,300

In 2004, Medicare paid about \$11 billion for home health care services (which include skilled nursing care, physical and speech therapy, and home health-aide services for beneficiaries deemed to be homebound). Medicare spending on home health services grew rapidly in the late 1980s and early 1990s, when home health agencies were reimbursed separately for each home health visit, but it fell sharply after new payment systems were implemented under the Balanced Budget Act of 1997. Home health agencies currently receive a single payment from Medicare for providing all covered services to an individual beneficiary for a 60-day period (known as a home health episode). The Centers for Medicare and Medicaid Services sets the payment rates for different types of episodes prospectively, meaning that payment rates are set in advance to reflect the expected costs of each episode and are not determined by the costs that home health agencies actually incur. In calendar year 2005, payments per episode—ignoring geographic adjustments—will range from \$1,192 to \$6,366. Under current law, the base payment rate per episode is typically indexed to annual changes in input costs (such as wages for home health aides).

Among freestanding home health agencies, the aggregate Medicare margin—the excess of Medicare payments over providers' costs expressed as a percentage of payments—was high in 2001, at about 16 percent. (The aggregate Medicare margin was lower for hospital-based agencies, though still positive; the Medicare Payment Advisory Commission, or MedPAC, views the difference in margins as probably attributable to differences in accounting practices or in the efficiency of producing services.) De-

spite several modifications to the payment system for home health agencies in recent years, aggregate Medicare margins for freestanding agencies actually increased, to an estimated 17 percent in 2004. The continuing high margins appear to be the result of reductions in home health agencies' costs in response to the incentives created by the new prospective payment system.

This option would freeze the base payment for each home health episode at its calendar year 2005 level (\$2,264) through 2009, with the goal of gradually narrowing the gap between payments and costs. The change proposed in this option would reduce federal outlays by \$240 million in 2006 and by \$6.3 billion over five years. A rationale for this option is that if average per-episode costs for home health agencies grew at the rate of inflation, the freeze in the base payment would still leave average payments at least 10 percent above agencies' average costs for 2009 and beyond. That difference would provide a margin for agencies that have slightly higher than average costs or that experience faster cost growth.

A drawback of this option is that it could reduce access to home health services for Medicare beneficiaries. Home health agencies that had substantially higher costs than average and that were not able to reduce their operating expenses sufficiently would cease participating in the program. As a result, some beneficiaries might have difficulty obtaining home health services. Also, although MedPAC has not thus far identified quality problems under the new payment system, lower payment rates could lead home health agencies to reduce the level or quality of the services they provide.

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RELATED OPTIONS: 570-19 and 570-20



**570-19—Mandatory****Impose a Copayment Requirement on Home Health Episodes Covered by Medicare**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,470	-2,260	-2,470	-2,680	-2,930	-11,800	-31,480

Medicare's spending for home health care dropped during the late 1990s following passage of the Balanced Budget Act of 1997, which introduced a prospective payment system (PPS) for home health services. But the Congressional Budget Office projects that the use of home health services, and the resulting costs to the Medicare program, will grow rapidly over the next 10 years. One reason for the projected rapid growth is that Medicare beneficiaries are not currently required to pay any of the cost of home health services covered by the program.

This option would charge beneficiaries a copayment amounting to 10 percent of the total cost of each home health "episode"—a 60-day period of services—covered by Medicare, starting on January 1, 2006. That change would yield net federal savings of \$1.5 billion in 2006 and \$11.8 billion over five years.

An argument in favor of this option is that it would directly offset a portion of Medicare's home health outlays and encourage beneficiaries to be cost-conscious in their use of home health services. The use of services would also decrease, most likely among the approximately 14 percent of beneficiaries with fee-for-service Medicare only

(those who are not enrolled in Medicaid or a health maintenance organization, or who have supplemental insurance, such as medigap or "wraparound" retiree coverage).

An argument against this option is that it would increase the risk of significant out-of-pocket costs for the 14 percent of Medicare enrollees with only fee-for-service coverage and would probably reduce their use of services. Those enrollees tend to have lower income than do beneficiaries with private supplemental insurance. (Among the majority of enrollees who have supplemental insurance, little or no drop in use would be expected, assuming their supplemental policies were expanded to cover the home health copayment proposed in this option.) Also, the 27 percent of enrollees with individually purchased medigap policies would probably face higher premiums, and the costs of employer-sponsored medigap policies and the Medicaid program could also rise (again assuming that supplemental policies covered the proposed home-health copayment). Finally, this option would result in increased Medicaid outlays for home health care. (The federal share of increased Medicaid outlays is included in the estimated change in outlays.)

**570-20—Mandatory****Impose Cost Sharing for the First 20 Days of a Skilled Nursing Facility Stay Under Medicare**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,060	-1,580	-1,680	-1,790	-1,880	-7,990	-19,190

For enrollees who have been hospitalized and need continuing skilled nursing care or rehabilitative services on a daily basis, Medicare currently covers up to 100 days of care in a skilled nursing facility (SNF). The average SNF stay covered by Medicare lasts about 20 days, and more than half of Medicare's SNF payments are for the first 20 days of such a stay. The first 20 days of SNF care are free to the beneficiary, but the next 80 days require a copayment that is projected to be \$118 per day in 2006. That copayment is set at one-eighth of Medicare's deductible for each hospital inpatient "spell," and thus the copayment grows over time along with increases in average daily hospital costs. Total payments to SNFs under Part A of Medicare are projected to average about \$375 per day in 2006, so the \$118 copayment corresponds to an average coinsurance rate of more than 30 percent. The Congressional Budget Office projects that total Medicare spending for SNF services provided under Part A will rise from \$17.6 billion in 2006 to \$26.3 billion in 2015.

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This option would impose a copayment for the first 20 days of care in a skilled nursing facility equal to 5 percent of the inpatient deductible, which would be \$47.20 per day in 2006. The maximum additional liability for a beneficiary would thus equal the inpatient deductible (projected by CBO to be \$944 in 2006) and would rise at the same rate over time. CBO estimates that imposing this copayment will reduce federal outlays by \$1.1 billion in 2006 and by \$8.0 billion over five years.

The effect of this option on the use of SNF services and beneficiaries' out-of-pocket payments would depend on whether participants had supplemental coverage for their Medicare cost sharing. Most individual medigap policies

include full coverage of current SNF copayments, so beneficiaries with such policies would be insulated from the direct impact of the higher copayments but could expect to see the additional costs reflected in their medigap premiums. This option would not affect Medicare beneficiaries who received full Medicaid benefits or those considered Qualified Medicare Beneficiaries, because their Medicare cost sharing would be paid by Medicaid. CBO's cost estimate reflects the additional federal Medicaid spending that will occur under the option as a result. (State Medicaid programs will also pay correspondingly more.)

Overall, 2 percent to 3 percent of all Medicare beneficiaries would incur higher out-of-pocket costs under this option in any given year, CBO estimates. For those beneficiaries, the lack of cost sharing for the first 20 days of SNF care under current law probably encourages additional use of those services. An advantage of imposing a copayment, therefore, would be that those beneficiaries would have to balance the costs and benefits of receiving care in a skilled nursing facility.

One argument against this option is that enrollees who use SNF care would already have been liable for the inpatient deductible as a result of their initial hospital admission. The added copayment could lead some beneficiaries to forgo services that would help avoid further complications from surgery or improve their health in other ways. Some beneficiaries might choose instead to receive similar services as a home health care benefit, which currently has no cost sharing. (The resulting added payments for home health services are reflected in CBO's estimate of net program savings for this option.)

**570-21—Mandatory****Impose A Deductible and Coinsurance Amounts for Clinical Laboratory Services Under Medicare**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-800	-1,200	-1,200	-1,300	-1,400	-5,900	-14,500

Medicare currently pays 100 percent of approved fees for laboratory services provided to enrollees. Medicare's payment is set by a fee schedule, and providers must accept that fee as full payment for the service. For most other services provided under Medicare's Supplementary Medical Insurance (SMI) program, beneficiaries are subject to both a \$100 deductible and a coinsurance rate of 20 percent.

This option would impose the SMI program's usual deductible and coinsurance requirements on laboratory services, beginning January 1, 2006. The change would yield federal savings of \$800 million in 2006 and \$5.9 billion over five years.

A rationale for this option is that, besides reducing costs to Medicare, such a change would make cost-sharing requirements under the SMI program more uniform and

therefore easier to understand. Moreover, although decisions about the appropriateness of tests are generally left to physicians (whose judgments do not appear to depend on enrollees' cost-sharing liabilities), some enrollees might be less likely to request or undergo laboratory tests of little expected benefit if they had to pay part of the costs themselves.

An argument against this option is that only a small portion of the expected savings would stem from more prudent use of laboratory services; the rest would reflect the transfer to enrollees of costs now borne by Medicare. Moreover, the billing costs of some providers, such as independent laboratories, would be higher under this option because those providers would have to bill both Medicare and enrollees to collect their full fees. (Currently, they have no need to bill enrollees directly for clinical laboratory services.)



# 600

## Income Security

**B**udget function 600 covers income-security programs that provide cash or in-kind benefits to individuals. Some of those benefits (such as food stamps, Supplemental Security Income, Temporary Assistance for Needy Families, and the earned income tax credit) are means-tested, whereas others (such as unemployment compensation and civil service retirement and disability payments) do not depend on a person's income or assets.

Retirement and disability programs represent the largest portion of spending on income security, accounting for about one-third of the mandatory spending in function 600. Unemployment compensation has made up nearly 20 percent of the mandatory spending in the function in recent years, compared with about 10 percent in the mid- to late 1990s. Food and nutrition assistance (including

the Food Stamp program) is the next largest component of mandatory spending, making up close to 15 percent in recent years. Of discretionary spending in the income security function, housing assistance accounts for about 70 percent.

The Congressional Budget Office estimates that outlays for function 600 will total \$346 billion in 2005, including about \$54 billion in discretionary outlays. Since 2000, spending for the function has grown at an average rate of about 7 percent annually. That growth reflects the countercyclical nature of some income-security programs—in particular, unemployment compensation and food stamps—and legislation that enhanced refundable tax credits (which are recorded as outlays).

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority <sup>a</sup> (Discretionary)	31.6	39.7	42.7	44.3	45.2	45.8	9.4	1.2
Outlays								
Discretionary	41.4	44.0	48.0	51.0	52.3	53.9	6.0	3.1
Mandatory	<u>212.1</u>	<u>225.6</u>	<u>264.5</u>	<u>283.4</u>	<u>280.6</u>	<u>292.1</u>	7.2	4.1
Total	253.6	269.6	312.5	334.4	332.8	346.0	7.0	4.0

a. Budget authority is artificially low in 2000 because \$4.2 billion in funding for the housing certificate fund that ordinarily would have been provided in 2000 was appropriated as an advance appropriation for 2001.

**600-01—Mandatory****Increase the Federal Insurance Premium on Private Pension Plans**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts							
Budget authority	+110	+90	+210	+190	+160	+760	+1,430
Outlays	+110	+90	+210	+190	+160	+760	+1,430

The Pension Benefit Guaranty Corporation (PBGC) is a federal agency that insures participants in private defined-benefit pension plans against the loss of certain benefits if their plan is terminated without sufficient assets. Private employers are not required to provide a pension for their workers. If they do, however, they must follow rules specified in the Employee Retirement Income Security Act (ERISA) for most major aspects of the plan's operation (including minimum standards for participation, accrual of benefits, vesting, and funding). Employers who sponsor a defined-benefit plan—one that promises specified monthly benefits in retirement rather than one that simply provides contributions to workers' retirement accounts—also must pay an insurance premium to the PBGC.

PBGC's insurance premium for single-employer plans consists of two parts: a fixed annual payment of \$19 for each participant (worker or retiree) in the plan; and, for underfunded plans, a variable payment equal to \$9 for each \$1,000 by which the plan is underfunded. In 2004, revenue from the fixed portion of the premium totaled about \$650 million, and revenue from the variable portion totaled about \$450 million. About 35 million people were in single-employer plans covered by the PBGC.

If a plan is terminated with insufficient assets to pay promised benefits, PBGC takes over both the assets and liabilities (up to an annual per-participant limit) of the plan. It uses the assets of the terminated plans along with insurance premiums from ongoing plans to make monthly annuity payments to qualified retirees and their survivors. After building up a surplus during the late 1990s, the PBGC's financial position has deteriorated markedly in the past few years. At the end of 2004, the PBGC reported a deficit of about \$23 billion—indicating that its assets were about \$23 billion less than the present value of benefits it owed to workers and retirees in terminated underfunded plans and in underfunded plans whose termination PBGC viewed as “probable.”

This option would increase the variable portion of PBGC's annual premium from \$9 to \$15 per \$1,000 of underfunding. Doing so would increase federal receipts by \$110 million in 2006 and by \$760 million over five years. The average variable premium per participant in underfunded plans would rise under this option from \$46 to \$77 in 2006. The President has proposed in his 2006 budget a number of changes involving the PBGC and private pensions more generally, including raising PBGC's fixed annual premium from \$19 to \$30 (and indexing it to wage growth), altering funding rules for defined-benefit pension plans, and improving disclosure of plans' funding status.

PBGC's financial operations to date have resulted in its premium income and other assets being insufficient to cover its accumulated claims. On the basis of that experience, some analysts argue that increasing the price of insurance is warranted to more accurately represent the risk posed to the agency by underfunded plans. This option also would reduce PBGC's future financial shortfall without increasing insurance premiums for well-funded plans. Moreover, by raising the cost of maintaining an underfunded plan, this option would provide an added incentive to employers to more fully fund their pensions.

A disadvantage of this option is that the premium increase would not necessarily be well-targeted to plans that eventually will be taken over by PBGC because it would be based only on the amount of underfunding in a plan and not on the probability that the plan will be terminated. In addition, raising the insurance premium for underfunded plans would not directly improve their underlying financial condition. A more direct way of increasing plan funding (and also of reducing future claims against PBGC) would be to tighten rules in ERISA that relate to the required funding of pensions by their sponsors. Finally, for financially weak employers, higher premiums would contribute to financial pressures that could lead to the PBGC's takeover of their plan.

**600-02—Mandatory****Modify the Formula Used to Set Federal Pensions**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-50	-160	-260	-365	-470	-1,305	-5,170

The government's major retirement plans for civilian employees, the Federal Employees Retirement System (FERS) and the Civil Service Retirement System (CSRS), provide initial benefits that are based on average salary during an employee's three consecutive highest-earning years. In 2006, outlays for pension benefits under the two programs are projected to total \$57 billion.

This option would use a five-year average instead of a three-year average to compute benefits for workers who retire under FERS and CSRS after September 30, 2005. As a result, initial pensions would be about 3 percent to 4 percent smaller for most new civilian retirees, saving the federal government \$50 million in 2006 and a total of \$1.3 billion over five years. The average new CSRS retiree would receive \$1,400 less in 2006 and \$7,300 less over five years than under current law. By comparison, the average new FERS retiree would receive just \$450 less in 2006 and \$2,300 less over five years, because FERS pays a smaller defined benefit than CSRS does.

One argument for this option is that switching to a five-year average would align federal practices with those in the private sector, which commonly uses five-year averages to calculate a worker's base pension. The change in formula would also encourage some federal employees (who generally receive higher salaries the longer they stay on the job) to work more years in order to boost their pensions. That incentive could help the government retain experienced personnel.

A disadvantage of this option is that cutting pension benefits would reduce the attractiveness of the government's civilian compensation package. Although FERS benefits, which include Social Security and the 401(k)-like Thrift Savings Plan, would remain more generous than the benefits offered by large private firms, the same would not be true for CSRS benefits, which do not include Social Security and the Thrift Savings Plan. In addition, this option would increase the disparity between the two retirement systems because FERS benefits are already more generous than those provided under CSRS.

RELATED OPTIONS: 600-03, 600-04, and Revenue Option 40

RELATED CBO PUBLICATIONS: *Measuring Differences Between Federal and Private Pay*, November 2002; *The President's Proposal to Accrue Retirement Costs for Federal Employees*, June 2002; *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998; and *Comparing Federal Salaries with Those in the Private Sector*, July 1997

**600-03—Mandatory****Limit Cost-of-Living Adjustments for Federal Pensions**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-210	-530	-870	-1,230	-1,620	-4,460	-19,430

Pensions paid to former federal workers under the Civil Service Retirement System (CSRS) are subject to annual cost-of-living adjustments (COLAs) that provide complete protection against inflation. Pensions paid under the newer Federal Employees Retirement System (FERS) are fully protected only when the rate of inflation is less than 2 percent a year. If inflation is between 2 percent and 3 percent, FERS annuitants receive a COLA of 2 percent. If inflation exceeds 3 percent, their COLA is the rate of inflation minus 1 percentage point. COLAs are paid at the beginning of the calendar year; people who have not been on the retirement rolls for the entire year receive a prorated adjustment.

This option would hold all cost-of-living adjustments for federal retirees below the rate of inflation. If annual COLAs were half a percentage point below the rate of inflation for CSRS annuitants and a full percentage point below the rate of inflation for FERS annuitants (as now occurs in FERS when inflation is higher than 3 percent), mandatory outlays would be \$210 million lower in 2006 and \$4.5 billion lower over the 2006-2010 period. The two different cuts to COLAs would produce roughly comparable reductions in the growth of total retirement benefits for the two types of annuitants because FERS enrollees are also covered by Social Security. On average, a CSRS retiree would receive \$2,100 less over five years than under current law, and a FERS retiree would receive \$1,300 less. (As an alternative approach, lawmakers could limit COLAs only for the FERS plan, which is more generous than CSRS when benefits from Social Security and the Thrift Savings Plan, which CSRS retirees do not receive, are factored in.)

A rationale for limiting COLAs is that federal pension plans offer greater inflation protection than most private pension plans do. In fact, COLAs are becoming scarce in the private sector. According to a 2001 survey, fewer than 15 percent of private-sector plans gave annuitants formal annual COLAs; another 25 percent made cost-of-living adjustments on an ad hoc basis. More than 60 percent of plans had made no adjustments during the previous 10 years. In addition, many analysts believe that the inflation index used to set COLAs overstates increases in the cost of living (see option 650-01). Moreover, even with reduced COLAs, many federal annuitants would still fare better than other retirees because they are covered by the comprehensive Federal Employees Health Benefits program.

Various arguments against limiting COLAs can be made. Cutting any retirement benefit could hurt both retirees and the government's ability to recruit a highly qualified workforce. Further, when workers accept employment with the federal government, they count on the benefits promised. Federal employees may be accepting salaries below private-sector rates for comparable jobs in part because of better retirement provisions (in essence, paying for their more-generous retirement benefits by accepting lower wages during their working years). This option would hurt those retirees—CSRS annuitants—who are most dependent on their pensions and would renege on an understanding that those who stayed with CSRS rather than switching to FERS would retain their full protection against inflation.

RELATED OPTIONS: 600-02, 600-04, 650-01, and Revenue Option 40

RELATED CBO PUBLICATIONS: *Measuring Differences Between Federal and Private Pay*, November 2002; *The President's Proposal to Accrue Retirement Costs for Federal Employees*, June 2002; *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998; and *Comparing Federal Salaries with Those in the Private Sector*, July 1997



**600-04—Discretionary****Restructure the Government's Matching Contributions to the Thrift Savings Plan**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-445	-475	-515	-550	-595	-2,580	-6,235
Outlays	-445	-475	-515	-550	-595	-2,580	-6,235

Today, most federal workers covered by the Federal Employees Retirement System (FERS) can direct up to 15 percent of their salary to the Thrift Savings Plan (TSP), which is similar to a 401(k) plan. (That limit will increase in 2006.) Federal agencies match the first 3 percent of workers' voluntary contributions to the TSP dollar for dollar and match the next 2 percent of contributions at 50 cents on the dollar. (Employees can set aside another 10 percent of pay but get no matching contributions.) In addition, federal agencies automatically contribute an amount equal to 1 percent of a FERS employee's salary to the TSP. Thus, although those employees can save up to 15 percent of their earnings in the TSP, they receive the maximum government match by contributing just 5 percent. (Federal workers covered by the Civil Service Retirement System, the older federal plan, can generally contribute 10 percent of their salary to the TSP, but they receive no government match.)

This option would restructure the TSP contribution schedule so that the government made the full 5 percent match only when employees contributed 10 percent of their salary. Specifically, federal agencies would match voluntary contributions ranging from 1 percent to 6 percent of earnings at 50 cents on the dollar (for a maximum match of 3 percent) and contributions ranging from 7 percent to 10 percent at 25 cents per dollar (for a maximum match of another 1 percent). In addition, agencies would continue to automatically contribute an amount equal to 1 percent of employees' earnings. That restructuring would save \$445 million in 2006 and \$2.6 billion over the 2006-2010 period.

A justification for changing the government's matching schedule is that it would bring federal practices more in line with those of defined-contribution plans in the private sector, which usually provide lower matches and no automatic contributions. For example, according to the Bureau of Labor Statistics, the most prevalent practice among medium-sized and large private firms is to match employees' contributions up to 6 percent of pay at 50 cents on the dollar. This option would also give some federal FERS employees, especially those now contributing 5 percent of their earnings, an incentive to set aside more in the TSP and thus have more savings available when they retire. Furthermore, restructuring matching contributions might reduce the disparity between the government's two major retirement systems. In most cases, the benefits that an employee receives under FERS—which include Social Security and the TSP—are higher and cost the government more than do the benefits that the same employee would receive under the Civil Service Retirement System.

This option would have several drawbacks, however. First, a lower government match on smaller contributions could reduce the incentive of some workers to participate in the TSP or to contribute at their current rates. Second, the government would save money at the expense of the types of employees who are least likely to contribute a higher percentage of their earnings to the TSP—such as young workers and others with relatively low pay. Third, changing the TSP could be considered unfair because one factor that affected many people's decision to accept employment with the government or to switch from the Civil Service Retirement System to FERS was their assumption that TSP benefits would remain the same.

RELATED OPTIONS: 600-02, 600-03, and Revenue Option 40

RELATED CBO PUBLICATIONS: *Measuring Differences Between Federal and Private Pay*, November 2002; *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998; and *Comparing Federal Salaries with Those in the Private Sector*, July 1997

**600-05—Mandatory****Reduce Benefits Under the Federal Employees' Compensation Act**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays							
From reducing benefits at retirement	-15	-29	-30	-30	-31	-135	-300
From eliminating augmented benefits	-7	-14	-14	-14	-15	-65	-140

The Federal Employees' Compensation Act (FECA) program provides workers' compensation coverage to federal civilian employees. The program, which is administered by the Department of Labor, offers wage-replacement, medical, and vocational-rehabilitation benefits in the event of work-related injury or occupational disease. Federal employees who are injured on the job receive two-thirds of their lost pay if they have no dependents or "augmented benefits," equal to 75 percent of their lost pay, if they have at least one dependent. Those benefits continue throughout a worker's retirement years, even though FECA benefits substantially exceed a worker's retirement benefits in most instances. Roughly 168,000 FECA claims were filed in 2003; of those, 59,000 federal employees received long-term replacement benefits (averaging about \$32,000) for a job-related injury, disease, or death. About three-fourths of those beneficiaries received augmented benefits. More than 40 percent of the beneficiaries were at least 55 years old.

This option would reduce FECA benefits in one of two ways. The first approach would give beneficiaries age 55 or older a separate FECA "annuity" equal to two-thirds of the benefit level they would have received under current law. That change would save \$15 million in 2006 and \$135 million through 2010. The second approach would eliminate the additional benefits given to injured federal employees with at least one dependent. That change would save \$7 million in 2006 and \$65 million through 2010. (The President's 2006 budget contains similar proposals.) The two approaches are not mutually exclusive; however, the effects of implementing both of them would be less than the sum of the individual effects.

A rationale for the first approach is that under the current benefit schedule, FECA provides a windfall for permanently disabled employees who would otherwise be retired, indefinitely paying them benefits that are higher than those of their retirement plans. (By comparison, federal workers who retire under the Civil Service Retirement System at age 55 with 30 years of service receive

benefits equal to 56 percent of their salary.) Moreover, permanently disabled employees who are under the Federal Employees Retirement System can cash out the defined-contribution portion of their retirement plans in addition to receiving FECA benefits. The higher benefits may encourage some employees to claim to be disabled in order to raise their retirement income. Giving injured retirement-age employees a separate FECA annuity equal to two-thirds of the current benefit level would better align the incentives to retire or return to work with those faced by noninjured employees and thus reduce the incentive to feign disability.

A drawback of that approach, however, is that it would break a promise of compensation for workplace injuries established by FECA in 1916. Moreover, injured workers who reach retirement age may have higher living expenses than their noninjured counterparts and thus need higher compensation. Further, reducing coverage would be unfair to employees who would have continued working past retirement age. (Fewer than 2 percent of federal civilian workers remain on the job after age 65, however.) Finally, the program's extensive review process helps to minimize false claims.

The rationale for eliminating augmented FECA benefits for employees with dependents is that such benefits are out of line with those of other workers' compensation systems. Only six state systems authorize additional benefits for employees with at least one dependent, and those benefits are much smaller—about \$5 to \$10 per week in five states and \$25 per week in the sixth, compared with 8.33 percent of the worker's previous salary in the case of FECA, or about \$80 per week for an employee making \$50,000 per year. Moreover, salaries and other employee benefits do not increase for workers with dependents.

An argument against eliminating augmented benefits is that they are necessary to compensate for any additional child care needs that result from an employee's injury.

**600-06—Mandatory****End the Trade Adjustment Assistance Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-950	-975	-970	-940	-960	-4,795	-9,905
Outlays	-430	-840	-955	-970	-965	-4,160	-9,220

The Trade Adjustment Assistance (TAA) program offers income-replacement benefits, training, and related services to workers who lose a job as a result of import competition or a shift of production to another country. To obtain assistance, affected workers must first petition the Secretary of Labor for certification and then meet other eligibility requirements. Cash benefits are available to certified workers who receive training but only after they have exhausted their unemployment insurance benefits. Legislation enacted in 2002 expanded eligibility for the program and provided displaced workers with a refundable tax credit of 65 percent of their health insurance premiums.

Ending the TAA program by issuing no new certifications in 2006 and thereafter would reduce federal outlays by about \$430 million in 2006 and by \$4.2 billion through 2010. Affected workers would still be able to apply for benefits under the Workforce Investment Act of 1998 (WIA), which authorizes a broad range of employment

and training services for displaced workers regardless of the cause of their job loss.

A rationale for this option is that such a change would ensure that federal programs offered uniform assistance to workers who were permanently displaced as a result of changing economic conditions. Because WIA provides cash benefits only under limited circumstances and does not provide a subsidy for health insurance premiums, workers who lose a job because of foreign competition or as a result of a shift in production to another country now are treated more generously than workers who are displaced for other reasons.

An argument against this option is that eliminating TAA benefits could cause economic hardship for some of the long-term unemployed who otherwise would have received such benefits. Another way of securing more equal treatment for displaced workers, regardless of the reason for the job loss, would be to expand benefits for displaced workers not currently eligible for the TAA program.

**600-07—Discretionary****Increase Payments by Tenants in Federally Assisted Housing**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-417	-857	-1,319	-1,805	-2,316	-6,714	-19,239
Outlays	-167	-681	-1,134	-1,611	-2,111	-5,704	-18,101

Most low-income tenants who receive federal rental assistance are aided through the Housing Choice Voucher (HCV) program, the low-rent Public Housing program, or project-based assistance programs (which designate privately owned government-subsidized units for low-income tenants). Administered by the Department of Housing and Urban Development (HUD), those programs usually require that a tenant pay 30 percent of his or her monthly gross household income (after certain adjustments) in rent; the federal government subsidizes the difference between that amount and the maximum allowable rent. In 2004, the Congressional Budget Office estimates, the average federal expenditure for all of HUD's rental housing programs combined was roughly \$6,900 per assisted household. That amount includes both housing subsidies and fees paid to agencies that administer the programs.

This option would increase tenants' rent contributions over a five-year period from 30 percent of adjusted gross

income to 35 percent. Savings in outlays would total \$167 million in 2006 and \$5.7 billion over five years, including \$2.8 billion for the HCV program, \$1.4 billion for the Public Housing program, and \$1.5 billion for project-based assistance programs.

The effect of this option on tenants could be cushioned by encouraging states to make up some or all of the decreased federal support. States currently contribute no funds to federal rental assistance programs even though such programs generate substantial local benefits, including improved quality of the housing stock and increased general welfare of assisted tenants.

However, some states might not increase their spending to compensate for the reduction in federal assistance. As a result, housing costs could increase for some current recipients of aid. For those with the very lowest income, even a modest increase in rent could be difficult to manage.

RELATED OPTION: 600-08

**600-08—Discretionary****Reduce Rent Subsidies for Certain One-Person Households**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-62	-122	-180	-237	-292	-894	-3,146
Outlays	-25	-86	-145	-203	-259	-718	-2,814

Recipients of federal housing assistance typically live either in subsidized-housing projects or in rental units of their own choosing found on the open market. Financial support for the second type of assistance usually comes in the form of vouchers—specifically, the Housing Choice Voucher (HCV) program. Administered by the Department of Housing and Urban Development, the HCV program pays the difference between a tenant's contribution (usually 30 percent of his or her monthly adjusted gross income) and rent (which is determined by local rental levels).

Both the local payment standard and the federal subsidy vary according to the type of unit in which a given tenant lives. Generally, an individual in a one-person household may choose an apartment with up to one bedroom. Recipients in larger households may rent larger units.

This option would link the rent subsidy for new applicants from one-person households to the cost of an efficiency apartment rather than a one-bedroom unit. (The change would also apply to any single person currently receiving assistance who moves to another subsidized unit.) The option would save \$25 million in federal outlays next year and \$718 million through 2010.

A rationale for this option is that an efficiency unit should provide adequate space for someone living alone. A potential drawback is that renters in some areas might have difficulty finding an efficiency apartment and, under the new rule, might have to spend a higher percentage of their income for a one-bedroom unit.

RELATED OPTION: 600-07

**600-09—Mandatory****Eliminate Small Food Stamp Benefits**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-90	-95	-95	-100	-100	-480	-1,025

Under the Food Stamp program, applicants must meet eligibility requirements to receive a monthly benefit. In general, among other conditions, household income must be at or below 130 percent of the federal poverty line, and countable assets must be less than \$2,000.

Once program eligibility has been determined, the benefit amount is calculated. A household is expected to contribute 30 percent of its net income (gross income minus deductions for certain expenses) toward food expenditures. The Department of Agriculture has calculated the monthly cost of a “Thrifty Food Plan” for households of various sizes. The food stamp benefit equals the amount by which the monthly cost of the Thrifty Food Plan exceeds 30 percent of a given household’s net monthly income. For one- and two-person households, a minimum

benefit exists: if the calculated benefit is less than \$10, the food stamp benefit is set at \$10.

This option would eliminate food stamp benefits for those households with a calculated benefit of less than \$10 a month. Savings from the change would total \$90 million in 2006 and \$480 million over five years.

A rationale for this option is that it would reserve food stamp benefits for those recipients with the greatest calculated need. An argument against this option is that eliminating food stamps for households that currently are eligible for benefits of less than \$10 a month might discourage those households from applying for the program if their financial situation worsened, thus lessening the extent to which the program achieved its goal of aiding low-income households.

**600-10—Mandatory****Target the Subsidy for Certain Meals in Child Nutrition Programs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-125	-750	-800	-855	-620	-3,150	-6,690
Outlays	-105	-660	-790	-845	-655	-3,055	-6,565

The School Lunch Program and the School Breakfast Program provide funds that enable participating schools to offer subsidized meals to students. In general, participating schools offer free meals to students whose household income is at or below 130 percent of the federal poverty line, reduced-price meals to students whose household income is above 130 percent but at or below 185 percent of the federal poverty line, and full-price meals to students whose household income is above 185 percent of the poverty line.

The subsidy rate per meal does not vary with the cost that a given school incurs as a result of providing the lunch or breakfast—it depends solely on the household income of the student receiving the meal. For the 2004–2005 school year, the federal cash subsidies total \$2.24 per free lunch and \$1.23 per free breakfast served; \$1.84 per reduced-price lunch and \$0.93 per reduced-price breakfast served; and \$0.21 per full-price lunch and \$0.23 per full-price breakfast served. (Schools in Alaska and Hawaii and those with large numbers of participating free- and reduced-price-meal students get an additional subsidy.) Although each school sets the prices it charges students for re-

duced-price and full-price meals, the reduced-price lunch cannot cost more than \$0.40 and the reduced-price breakfast cannot cost more than \$0.30.

This option would eliminate the breakfast and lunch subsidy for full-price meals for students whose household income is above 350 percent of the poverty line, beginning in July 2006. At the same time, it would increase the subsidy for reduced-price meals (both breakfast and lunch) by \$0.20. Those changes would yield net savings of \$105 million in 2006 and more than \$3 billion over five years.

A rationale for this option is that there is no clear justification for subsidizing meals for students who are not from low-income households. A argument against this option is that if a participating school has been using funds from the full-price subsidy to offset the overall costs of administering its breakfast and lunch programs, it might decide to raise meal prices for students from higher-income households, or it might drop out of the program altogether. The latter outcome would mean that students eligible for free or reduced-price meals would no longer receive them.

**600-11—Mandatory****Reduce the Exclusion for Unearned Income Under the Supplemental Security Income Program**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-110	-135	-150	-155	-155	-705	-1,510

The federal Supplemental Security Income (SSI) program provides monthly cash payments—based on uniform eligibility rules nationwide—to low-income elderly and disabled people. In addition, many states provide supplemental payments. Because SSI is a means-tested program, recipients' non-SSI income can reduce their SSI benefits, subject to certain exclusions. For unearned income (most of which is Social Security benefits), \$20 a month is excluded from the benefit calculation; above that amount, SSI benefits are reduced dollar for dollar. To encourage SSI recipients to work, the program allows a larger exclusion for earned income.

This option would reduce the exclusion for unearned income from \$20 a month to \$15. The reduction would

save \$110 million in outlays in 2006 and \$705 million over five years.

A rationale for this option is that a program designed to ensure a minimum standard of living for its recipients does not need to provide a higher standard for those people who happen to have unearned income. An argument against the option is that reducing the monthly exclusion by \$5 would decrease by as much as \$60 a year the income of the roughly 2.8 million low-income people (approximately 40 percent of all federal SSI recipients) who otherwise would benefit to a greater extent from the exclusion in 2006.

RELATED OPTION: 600-12



**600-12—Mandatory****Create a Sliding Scale for Children's SSI Benefits Based on the Number of Recipients in a Family**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	0	-65	-145	-155	-160	-525	-1,410

The federal Supplemental Security Income (SSI) program makes cash payments to low-income elderly and disabled people on the basis of uniform, nationwide eligibility rules. In addition, many states provide supplemental payments to program recipients. In 2004, children received approximately \$6 billion, or about one-sixth, of total benefits.

Unlike other means-tested benefits, SSI payments for each additional child do not decline as the number of SSI recipients in a family increases. For instance, in 2005, a family with one child who qualifies for SSI benefits can expect to receive up to \$579 a month if the family's income (excluding SSI benefits) is under the cap for the maximum benefit. If the family has other eligible children, it can receive another \$579 a month for each additional child. (A child's benefit is based on the presence of a severe disability and on the family's income and resources. Neither the type of disability nor participation by other family members in the SSI program is considered.)

This option would create a sliding scale for SSI disability benefits so that a family would get incrementally fewer benefits per child as the number of children in that family who qualified for SSI increased. Recommended by the National Commission on Childhood Disability in 1995, the sliding scale used in this option would keep the maximum benefit for one child at the level currently allowed by law. However, benefits for each additional child in the same family would be correspondingly reduced. If the sliding scale was applied in 2005, the first child in a fam-

ily qualifying for the maximum benefit would continue to receive \$579 a month. But the second child would get \$362, and the third would receive \$309. Benefits would continue to decrease for additional children in the same family. As with current SSI benefits, the sliding scale would be adjusted each year to reflect changes in the consumer price index.

This option assumes that such a change will not be carried out until 2007 because the administering agency, the Social Security Administration, does not maintain data on multiple SSI recipients in an individual family. Consequently, implementing the sliding scale would require significant effort on the agency's part. The Congressional Budget Office estimates that savings from this option will total \$65 million in 2007 and \$525 million between 2007 and 2010.

Proponents of a sliding scale argue that the resulting reductions in benefits would reflect economies of scale that generally affect the cost of living for families with more than one child. Moreover, the high medical costs that disabled children often incur, which would not be subject to economies of scale, would continue to be covered because SSI participants are generally eligible for Medicaid.

An argument against this option is that children with disabilities sometimes have unique needs (such as housing modifications and specialized equipment) that may not be covered by Medicaid. With reduced SSI benefits, some families might be unable to meet those needs.

**600-13—Mandatory****Remove the Ceiling on the Collection of Overpayments from Supplemental Security Income**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-70	-80	-85	-90	-100	-425	-920

The federal Supplemental Security Income (SSI) program makes monthly cash payments to low-income elderly and disabled people. The Social Security Administration (SSA), which administers the program, sometimes pays recipients more than it later determines they were entitled to. According to a report issued by the General Accounting Office (now the Government Accountability Office), the complexity of the rules governing the SSI program is a primary reason for the overpayments.<sup>1</sup>

After discovering an overpayment, the SSA can reduce the recipient's subsequent monthly benefit to recover the excess amount. Under current rules, however, the maximum that the SSA can deduct from a recipient's monthly payment is the lesser of two amounts: the recipient's entire monthly SSI benefit or 10 percent of the recipient's total monthly income (minus certain exclusions). Thus, the SSA can deduct no more than 10 percent of the monthly SSI benefit of a recipient with no other income source. Moreover, the Commissioner of Social Security can lower the recovery rate or waive collection of an overpayment altogether if it is determined that doing so would support the purposes of the program.

This option would remove the ceiling on the amount of overpayments that the SSA could recover from monthly SSI payments while retaining the commissioner's discretionary authority to reduce or waive the required amount. The Congressional Budget Office estimates that removing the 10 percent ceiling will increase the amount collected—and thereby reduce net outlays for benefits—by \$70 million in 2006 and by \$425 million over the 2006-2010 period. (CBO also estimates that removing the ceiling will increase administrative costs by about \$20 million to \$25 million each year; those costs are subject to appropriations and are not included in the amounts shown in the table.)

An argument for this option is that removing the ceiling would improve the federal government's ability to recover money paid to recipients erroneously. Moreover, retention of the commissioner's discretionary authority would lessen the chances that such action would result in undue hardship for SSI recipients.

An argument against this option is that SSI recipients generally have low income and few, if any, financial assets. For recipients with no other income, even a 10 percent reduction in SSI payments could be difficult to manage. The current ceiling allows affected recipients to pay the amount owed in small increments, thereby limiting the extent to which it would be necessary for them to reduce current consumption.

1. General Accounting Office, *Supplemental Security Income: Progress Made in Detecting and Recovering Overpayments, But Management Attention Should Continue*, GAO-02-849 (September 16, 2002), p. 19.

**600-14–Mandatory****Increase Funding for Child Care**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	+337	+422	+509	+599	+692	+2,560	+7,515
Outlays	+243	+378	+476	+568	+660	+2,325	+7,102

The Child Care and Development Block Grant, which provides money to states to subsidize the child care expenses of low-income families, is funded through a combination of discretionary appropriations and a capped entitlement. Created in 1990, the program was subsequently modified and reauthorized through 2002 as part of the Personal Responsibility and Work Opportunities Reconciliation Act of 1996. Since then, the capped entitlement—which included annual increases through 2002 under the 1996 law—has been held at its 2002 level of \$2.7 billion per year and has not been adjusted for inflation.

This option would increase the 2006 authorization for the entitlement portion of the block grant to adjust for inflation since 2002 and would index that amount thereafter. Doing so would boost federal spending by \$243 million in 2006 and by \$2.3 billion through 2010.

This option would provide additional funding to restore low-income mothers' access to subsidized child care to the level awardable in 2002 and maintain that level. Access to subsidized child care, in turn, would increase work incentives for some low-income mothers, making it easier for them not only to enter the job market but also to stay employed. Increased participation in paid child care also might improve children's well-being, potentially decreasing behavioral problems while increasing school readiness and social skills.

An argument against this option is that many low-income mothers have access to informal, or unpaid, care (from a relative, for example). In those cases, increases in child care subsidies might simply result in those mothers' shifting from unpaid to paid care. Furthermore, there is little evidence on the effects on children of recurring informal (as opposed to paid) care.



## Social Security

**S**pending for Social Security, the federal government's biggest program, appears in budget function 650. Social Security consists of two parts: Old-Age and Survivors Insurance (OASI) paid benefits to 40 million people as of December 2004, and Disability Insurance (DI) provided benefits to another 8 million. In 2004, benefits under those two parts totaled \$411 billion and \$76 billion, respectively. Other mandatory outlays for Social Security—chiefly a transfer to the Railroad Retirement program—added \$4 billion. Discretionary outlays, mainly for the program's administrative costs, totaled \$4 billion last year.

OASI benefits, which have grown at an average annual rate of about 4 percent over the past few years, go mostly to retired workers and their spouses and to elderly widows. Although some younger people—chiefly the children of deceased workers—qualify for OASI, 95 percent of OASI dollars go to people age 62 or older. DI recipients are mainly people in their 50s and early 60s. DI outlays have more than doubled over the past decade, fueled partly by the aging of the baby-boom generation, a phenomenon that will continue to bolster the growth of DI spending during the next decade. Under current law, outlays for Social Security benefits will rise more rapidly in coming years as the baby boomers begin to qualify for Social Security retirement benefits.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	3.2	3.4	3.5	3.8	4.1	4.4	6.6	7.2
Outlays								
Discretionary	3.4	3.6	3.9	4.2	4.0	4.3	4.4	8.4
Mandatory	<u>406.0</u>	<u>429.4</u>	<u>452.1</u>	<u>470.5</u>	<u>491.5</u>	<u>516.5</u>	4.9	5.1
Total	409.4	433.0	456.0	474.7	495.5	520.9	4.9	5.1

**650-01—Mandatory****Reduce Cost-of-Living Adjustments in Social Security**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,200	-2,800	-4,500	-6,300	-8,200	-23,000	-93,400

Each year, the Social Security Administration (SSA) adjusts recipients' monthly Social Security benefits as specified by law. The 2.7 percent cost-of-living adjustment (COLA) that went into effect in January 2005 was based on the increase in the consumer price index for urban wage earners and clerical workers (CPI-W) between the third quarters of 2003 and 2004. The SSA raises the basic level of benefits to correspond with the percentage increase in the CPI-W beginning when workers become eligible for benefits—which, for retired workers, is age 62.

One way of slowing the growth in total outlays for Social Security would be to reduce the annual COLA. This option would set the COLA equal to the increase in the CPI-W minus 0.3 percentage points, beginning in January 2006. That change would reduce federal outlays by \$1.2 billion in 2006 and \$23 billion over five years, the Congressional Budget Office estimates. By 2050, such action would have reduced Social Security outlays by 4.1 percent, from 6.4 percent of gross domestic product to 6.1 percent. Most of that reduction (in percentage terms) would be achieved by 2030.

Several other options to reduce Social Security outlays—such as raising the normal retirement age (see option 650-05) and constraining the increase in initial benefits (see option 650-06)—would affect only future beneficiaries. By contrast, this option would reduce benefits received by current beneficiaries so that the current generation and future generations would more evenly share in the reductions. Also, unlike other options that would permanently reduce the rate of growth of Social Security outlays, this option would reduce the rate of growth in outlays during a phase-in period only. Thereafter, the level of outlays would be lower than under current law,

but the rate of growth would be the same as under current law.

A rationale for this option is that if—as many analysts assert—the CPI-W overstates increases in the cost of living, then decreasing the COLA by an appropriate amount would reduce federal outlays while ensuring that benefits did not fall any lower in real (inflation-adjusted) terms than they were when the recipients became eligible for the program. Devising a “true” cost-of-living index is problematic, however, and collecting and compiling data for such an index is difficult. For instance, when the price of one good increases faster than prices in general, consumers buy less of that good and purchase other goods instead. On the basis of research from the Bureau of Labor Statistics (BLS), CBO estimates that, because of that “substitution effect,” the annual increase in the CPI-W is about 0.3 percentage points too high. (Although the CPI is computed monthly, the BLS is able to adjust the index for changing spending patterns only every two years.)

A potential drawback of this option is that Social Security beneficiaries may face prices that grow faster than prices do for the population as a whole. For example, beneficiaries are likely to spend more than younger people on medical care, the price of which generally increases faster than the overall price level. BLS research also supports that idea. A preliminary CPI for the elderly (CPI-E) aims to track inflation for the population ages 62 and older. From 1983 through October 2004, the CPI-E grew an average of 0.4 percentage points faster than the CPI-W. The difference was attributable mostly to costs for medical care, which rose 2.7 percentage points faster than the CPI-W.

Another potential drawback of this option is that a reduction in the COLA would generally have a larger effect on the oldest beneficiaries and on those who initially became eligible for Social Security on the basis of a disability. For example, if benefits were adjusted by 0.3 percentage points less than the increase in the CPI-W every year, beneficiaries would face about a 4 percent reduction in

benefits at age 75 compared with what they could have received under current law; at age 95, they would face about a 9 percent reduction. To protect vulnerable populations, lawmakers might choose to reduce the COLA only for those beneficiaries whose income or benefits were above specified levels. Doing so, however, would reduce the option's potential savings.

RELATED OPTIONS: 600-03, 650-05, and 650-06

**650-02—Mandatory****Lengthen the Computation Period for Social Security Benefits by Three Years**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-50	-200	-600	-1,200	-2,050	-4,100	-34,000

As required by law, the Social Security Administration calculates retirement benefits on the basis of a worker's wage history, using the average indexed monthly earnings, or AIME. The present formula computes the AIME on the basis of the beneficiary's highest 35 years of earnings over his or her lifetime.

This option would gradually lengthen the AIME computation period to 38 years of earnings for people turning 62 in 2008 and beyond. The extended averaging period would generally reduce benefits by requiring that additional years of lower earnings be factored in to the benefit computation.

The Congressional Budget Office estimates that this option will reduce federal outlays by \$50 million in 2006 and \$4.1 billion through 2010. By 2050, enacting such reforms would have reduced Social Security outlays by 2.0 percent, from 6.4 percent of gross domestic product to 6.2 percent.

One argument in favor of an expanded computation period is that because people are now living longer, stretching the computation period would encourage them to re-

main in the labor force longer as well. (That would extend the amount of time that workers would pay into the Social Security system.) Extending the averaging period would also reduce the advantage currently enjoyed by some workers who postpone entering the labor force. (For instance, workers who delay entering the workforce in order to pursue advanced education generally can count on higher annual wages than their counterparts who entered the labor force at a younger age but obtained jobs with lower annual wages.) Because many years of low or no earnings can now be ignored in calculating the AIME, the former group experiences little or no loss of benefits for any additional years spent not working and thus not paying Social Security taxes.

An argument against this option is that some beneficiaries retire early because of circumstances out of their control, such as poor health or job loss. Therefore, this option could adversely affect those recipients who are least able to continue working. Other workers who would be disproportionately affected include those who did not work for significant periods of time, such as parents who interrupted a career to raise children or workers who experienced long periods of unemployment.



**650-03—Mandatory****Eliminate Social Security Benefits for Children of Early Retirees**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-50	-200	-450	-750	-1,050	-2,500	-9,500

Social Security provides benefits not just to retirees but to their dependents as well. The unmarried children of retired workers, for instance, qualify for Social Security benefits under the following circumstances: if they are under age 18, if they are 18 and still in high school, or if they become disabled before age 22. A child's benefit is equal to one-half of the parent's basic benefit, subject to a dollar limit on the total amount receivable by a given family.

This option would completely eliminate benefits for children of retirees who have not yet reached the normal retirement age (NRA), beginning with those retirees who will reach age 62 in January 2006. In the Congressional Budget Office's estimation, this option would reduce federal outlays by \$50 million in 2006 and \$2.5 billion over five years.

An advantage of this option is that it would encourage some would-be early retirees to remain in the labor force longer. At present, benefits for retired workers and their spouses are reduced if retirement occurs before the normal retirement age; children's benefits, however, are not reduced. An additional consideration is that younger workers are more likely than their older counterparts to have children under age 18. Thus, workers who have not yet reached the NRA currently have an incentive to retire while their offspring are still eligible for benefits. However, that incentive is quite small for families in which spouses are also entitled to dependents' benefits. Because of the limit on total family benefits, any increase that is

attributable to a family's eligible children in such cases cannot exceed 38 percent of the amount on which a worker's benefits are based.

A potential disadvantage of this option is that for workers whose retirement was not voluntary—because of poor health, for example—this loss of family income could result in financial hardship. Moreover, because spouses under age 62 receive benefits only if their children under age 16 also receive benefits, eliminating children's benefits for families of early retirees would result in a total loss of benefits for spouses in those families. In such cases, the loss of income would generally be significant.

A modified approach to this option would apply the same actuarial reduction to children's benefits that was applied to workers' benefits. Thus, the child of a worker who retired three years before the normal retirement age would receive a maximum of 40 percent of the parent's basic benefit, instead of the 50 percent that is currently allowed. Under this variation, children's benefits would be reduced by, at most, 30 percent. The total reduction in outlays would, depending on the year considered, represent a quarter to a half of the savings that would occur if benefits were totally eliminated for children of early retirees. Such an approach, while having a smaller effect on federal outlays, would protect workers with young children from experiencing large losses in benefits. Some workers would still have an incentive to retire early, however.

**650-04—Mandatory****Reduce the Spousal Benefit in Social Security to 33 Percent**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-25	-75	-200	-400	-750	-1,450	-14,100

Under current Social Security law, the husband or wife of a worker is entitled to a spousal benefit that is equal to 50 percent of the worker's benefit—if that amount is higher than the spouse's own earned benefit. In such cases, a couple's combined benefit would be 150 percent of the higher earner's benefit. Otherwise, the couple's benefit would be between 150 percent and 200 percent of the higher earner's benefit. The 200 percent applies only if both spouses earn the same benefit. Upon the death of either spouse, the survivor's benefit is generally set equal to 100 percent of the higher earner's benefit.

This option would reduce the spousal benefit to 33 percent of the higher-earning spouse's benefit for workers eligible in 2006 or later. Such an approach, the Congressional Budget Office estimates, would reduce federal outlays by \$25 million in 2006 and \$1.5 billion over five years. In future years, those savings would decline as a portion of total Social Security benefits with the continued narrowing of the gap between the earnings of male and female workers. Even so, by 2050, implementing this change would have reduced Social Security outlays by 4.6 percent, from 6.4 percent of gross domestic product to 6.1 percent.

A rationale for implementing this option is that it would strengthen the connection between taxes paid and benefits received. When the current rules for the spousal benefit were established, households in which only the husband worked were considered typical. The spousal benefit was designed to ensure adequate benefits for such couples. However, those rules weaken the link between Social Security taxes paid and benefits received. Relative to Social Security taxes paid, a one-earner couple currently receives substantially higher benefits than either a single worker with the same earnings history or a two-earner married couple.

Reducing the couple's benefit has been proposed in combination with an increase in the survivor's benefit (see option 650-07). Implementing the two changes together would effectively transfer income from couples to survivors. With the death of a spouse, the survivor faces not only a reduction in Social Security benefits but, potentially, the loss of pension and wage income as well. As a result, widows and widowers are more likely than married couples to be poor. In 2000, 4.5 percent of married people over the age of 65 were poor, compared with 15.8 percent of widows and widowers in the same age group.<sup>1</sup>

Moreover, although it is not true that "two can live as cheaply as one," larger households benefit from economies of scale. (For example, the cost of a house suitable for two people is usually less than twice the cost of two smaller houses.) Consequently, a two-person household can achieve the same standard of living as two single-person households at less cost. The Census Bureau's poverty measures, created many years ago, imply that the cost of living for a two-person elderly household is only 26 percent higher than that for a one-person elderly household. If that is correct, a 33 percent spousal benefit would more accurately account for the cost of supporting a two-person household.

However, the economies of household size are difficult to compute and may be lower than the estimate used by the Census Bureau. A 1995 National Research Council panel estimated that costs for a two-person household are about 60 percent higher than those for a one-person household.<sup>2</sup> That estimate would support retaining the current 50 percent spousal benefit.

1. Social Security Administration, *Income of the Population 55 or Older, 2000* (February 2002), Table 8.1.
2. National Research Council, *Measuring Poverty: A New Approach* (Washington, D.C.: National Academy Press, 1995), pp. 58-60.

**650-05—Mandatory****Raise the Retirement Age in Social Security**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-50	-200	-550	-1,250	-3,000	-5,050	-72,600

Under current law, the age at which workers become eligible for full retirement benefits—known as the normal retirement age, or NRA—varies, depending on the individual's year of birth. For workers born before 1938, the NRA is 65. For workers born in subsequent years, the eligibility age increases in two-month increments until it reaches 66 for workers born in 1943. For workers born between 1944 and 1954, the NRA remains at 66 but rises again in two-month increments until it reaches 67 for workers born in 1960 or later. Workers can still receive benefits at age 62, but the benefit they receive at that age will represent a smaller share of what they could have qualified for if they had waited until the normal retirement age to claim benefits.<sup>1</sup>

This option would increase the NRA by accelerating the transition to age 67 and then further increasing the NRA to keep up with projected increases in life expectancy. Under the option, the NRA of workers born in 1949 would be 67. Thereafter, the retirement age would increase by two months a year until it reached 70 for workers born in 1967. After that, it would increase by one month every other year. As under current law, workers would still be able to begin receiving reduced benefits at age 62, but the amount of the reductions would be larger. For most purposes, this approach to constraining the growth in benefits is equivalent to reducing earnings-replacement rates. (See option 650-06 for a more direct

method of reducing those rates.) However, the benefits of workers who qualify for disability insurance would not be reduced under this approach.

In the Congressional Budget Office's estimation, this option would reduce federal outlays by \$50 million in 2006 and \$5.1 billion over five years. By 2050, such action would have reduced Social Security outlays by 12 percent, from 6.4 percent of gross domestic product to 5.6 percent.

Debate about the level of Social Security benefits often focuses on how much beneficiaries will receive on a monthly basis rather than on how much they will receive over their lifetime. But people who turn 65 today will, on average, live to collect Social Security benefits significantly longer than did retirees in the past, and life expectancy is projected to continue to increase in the future. For example, over the next 25 years, the Social Security trustees project that life expectancy at age 62 will increase from 18.3 years to 20.0 years. Therefore, a commitment to provide retired workers with a certain monthly benefit at age 62 in 2030 is more costly than that same commitment made to today's recipients.<sup>2</sup> Linking the normal retirement age to future increases in life expectancy is one way of dealing with that source of the program's rising costs.

1. See [www.ssa.gov/OACT/ProgData/nra.html](http://www.ssa.gov/OACT/ProgData/nra.html) for a table of NRAs by birth year and a detailed explanation of the effect of the age at which benefits are claimed on benefit levels.

2. See Congressional Budget Office, *Measuring Changes to Social Security Benefits*, Long-Range Fiscal Policy Brief No. 11 (December 2003).

An argument against this option is that it would create a somewhat stronger incentive for older workers nearing retirement to apply for disability benefits in order to receive a higher monthly benefit amount. For instance, under current law, workers who retired at age 62 in 2029 would receive 70 percent of their primary insurance amount (PIA), but if they qualified for disability benefits, they would receive 100 percent. Under this option, workers

who retired at 62 in 2029 would receive only 55 percent of their PIA but would still receive 100 percent if they qualified for disability benefits. To avoid that added incentive to apply for disability benefits, policymakers could narrow that difference by also reducing scheduled disability benefits—for example, by setting the benefits for disabled workers at the level they would have received upon retiring at age 65.

RELATED OPTIONS: 570-01, 650-01, and 650-06

**650-06—Mandatory****Constrain the Increase in Initial Social Security Benefits**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-25	-300	-1,000	-2,350	-4,575	-8,250	-103,600

Retired and disabled workers' Social Security benefits are determined on the basis of their average level of earnings over their working lifetime—referred to as their average indexed monthly earnings, or AIME—with past earnings adjusted to compensate for inflation and the real (inflation-adjusted) growth of wages over time. Once the AIME is determined, a formula is used to calculate the worker's primary insurance amount (PIA), which, after some adjustments (to account for early or delayed retirement, for example), becomes the monthly Social Security benefit amount.

To convert the AIME to the PIA, the Social Security Administration applies a formula in which the PIA replaces a larger proportion of preretirement earnings for people with lower average earnings than it does for those with higher earnings.<sup>1</sup> The thresholds used in the formula are indexed to the average annual earnings of the labor force as a whole. Because the AIME and the PIA thresholds are both indexed to wages, average benefits grow at about the same rate as do average wages.

Workers who had average earnings throughout their career and retired at age 65 in 2004 were eligible for an annual benefit of about \$13,000, which replaced 45 percent of their previous annual earnings. In the future, workers with average earnings who retire at age 65 are scheduled to receive benefits that replace a smaller percentage of their past earnings. The scheduled increase in the normal retirement age from 65 to 67 will be responsible for most of that change in the earnings-replacement rate. However, even with the reduction in the replacement rate, the real value of initial benefits will rise in the future as a result of the wage-indexing adjustments made in calculating benefits.

1. The following formula is used for workers who reach age 62 in 2005: PIA equals 90 percent of the first \$627 of the AIME, plus 32 percent of the AIME between \$627 and \$3,779, plus 15 percent of the AIME over \$3,779.

This option would change the way the Social Security Administration calculates benefits so that the real value of initial benefits would no longer rise over time. Specifically, beginning in 2006 (for beneficiaries born in 1944), it would link growth in initial benefits to growth in the consumer price index rather than to growth in the average wage index. Doing so would reduce federal outlays by \$25 million in 2006 and \$8.2 billion over five years, the Congressional Budget Office estimates. By 2050, it would have reduced Social Security outlays by 31 percent, from 6.4 percent of gross domestic product to 4.4 percent.

Under this option, the reduction in benefits relative to those scheduled to be paid under current law would be larger for each successive future cohort of beneficiaries, with the size of the reduction determined by real wage growth in future years. For example, with real wage growth of 1.2 percent per year (approximately the rate assumed in CBO's long-term Social Security projections), workers eligible for benefits in 2030 would receive 25 percent less than they would have under the current rules; those eligible in 2050 would receive 41 percent less.

An advantage of this option is that it would reduce Social Security outlays in a way that preserved the purchasing power of average Social Security benefits. In real terms, future beneficiaries would receive not only the same annual benefit as do current beneficiaries but also higher total lifetime benefits, as average longevity increased.<sup>2</sup> In addition, the reduction relative to current law would be greatest for beneficiaries in the distant future, who would have had higher real wages and thus a greater ability to save for retirement.

2. See Congressional Budget Office, *Measuring Changes to Social Security Benefits*, Long-Range Fiscal Policy Brief No. 11 (December 2003).

Under this option, gains in purchasing power resulting from the growth of productivity in the economy would result in higher Social Security payroll taxes but would no longer result in higher benefits. As long as average real wages continued to rise, the average earnings-replacement

rate would fall for beneficiaries. For the cohort born in the 1980s, who will retire around 2050, the median replacement rate would be 24 percent, compared with 41 percent under current law.

RELATED OPTIONS: 650-01 and 650-05

**650-07—Mandatory****Increase the Survivor Benefit in Social Security**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	+16,400	+22,500	+23,400	+24,300	+25,200	+111,800	+253,400

Under laws currently governing the Social Security program, a surviving spouse is eligible for between one-half and two-thirds of the total Social Security benefit that would have been paid to the couple if the deceased spouse were still alive.

If the lower-earning spouse qualified for a worker benefit that was less than half of the benefit earned by the higher-earning spouse, the couple's total benefit would be 150 percent of the higher earner's benefit. Upon the death of either spouse, the benefit would generally be reduced to 100 percent of the higher earner's benefit—that is, the survivor's benefit would be equal to 67 percent of the couple's benefit. If the lower earner's benefit was greater than 50 percent of the higher earner's, the couple's total benefit would simply be the sum of the two benefit amounts. Upon the death of either spouse, however, the survivor's benefit would be equal to the greater of the two individual benefits. In that case, the survivor's benefit would be less than 67 percent of the couple's benefit and could be as low as 50 percent.

Under this option, the benefit of a surviving spouse would amount to at least 75 percent of the couple's benefit. The Congressional Budget Office estimates that, if implemented, the change would increase federal outlays by \$16 billion in 2006 and \$112 billion over five years. By 2050, the option would have increased Social Security outlays by 3.5 percent, from 6.4 percent of gross domestic product to 6.6 percent.

Widows and widowers are more likely than married couples to be poor. In 2000, for example, 4.5 percent of married people over age 65 were poor, compared with 15.8 percent of widows and widowers in the same age group.<sup>1</sup>

Increasing the survivor's benefit has been proposed in combination with a reduction in the couple's benefit (see option 650-04). Implementing the two changes together would effectively transfer income from couples to survivors.

A rationale for this proposal is that it would make the Social Security program more equitable. While single-earner couples benefit greatly from the spousal benefit, two-earner couples may not benefit at all. The largest beneficiaries of this proposal would be the surviving spouses of two-earner couples who had relatively equal benefit levels. Under this option, those survivors' benefits would increase by 50 percent. Survivors of single-earner couples—who gain the most from the spousal benefit—would benefit less. Their benefit would increase from 67 percent to 75 percent of the couple's benefit.

An argument against this option is that it would not target those beneficiaries who were most in need. (For instance, even survivors with relatively high Social Security benefits or with high income from other sources would benefit.) However, the option could be limited to certain beneficiaries to help reduce costs. For example, in 2001, the President's Commission to Strengthen Social Security proposed that a surviving spouse receive 75 percent of the couple's benefit, but if that amount was greater than the individual benefit earned by the average worker, it would be reduced to the average benefit level. Such a proposal would reduce the cost of this option by almost 90 percent.

1. Social Security Administration, *Income of the Population 55 or Older, 2000* (February 2002), Table 8.1.

**650-08—Mandatory****Increase Social Security Benefits for Workers with Low Earnings Over a Long Working Lifetime**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	+300	+1,550	+3,600	+5,700	+8,250	+19,400	+109,000

Social Security benefits are generally calculated on the basis of a worker's average wages over the course of his or her career. Under the standard formula, benefits are the same regardless of whether recipients had low lifetime earnings because they were out of the workforce for many years or because they consistently received low earnings over many years of work. Recognizing that workers with consistently low annual earnings are more likely to be in financial need, the Congress established a second formula—the “special minimum benefit”—in Social Security in 1972.<sup>1</sup>

Under that provision, participants receive the higher of the standard benefit or the special minimum benefit. Unlike the standard formula, in which average benefits grow with average wages, the special minimum formula is indexed to prices. As a result, the gap between the two formulas shrinks continually. Each year, fewer people gain from the minimum benefit; those who do, gain less. The special minimum is projected to provide no benefit to workers who become eligible in 2013 and later.<sup>2</sup>

This option, which was an element of Plan 2 of the President's Commission to Strengthen Social Security, would replace the special minimum benefit with an enhancement for participants who worked many years but had

low average wages. The provision would apply to workers who become eligible to claim benefits in 2006 and later. All benefits would be based on the standard formula, but benefits for some workers would be multiplied by an additional factor. For example, the benefit for workers who worked full time for 30 years but never earned more than minimum wage would be increased by 40 percent.

This option would increase the standard benefit for workers with more than 20 years of work to their credit but whose average indexed monthly earnings were below those of workers who earned twice the minimum wage for 35 years of full-time work. The effect of the option would be greater for those beneficiaries with more years of work and for those with lower average indexed monthly earnings.

In the Congressional Budget Office's estimation, this option would increase federal outlays by \$300 million in 2006 and \$19.4 billion over five years. These figures include savings in the federal share of the Supplemental Security Income and Medicaid programs. By 2050, the option would have increased Social Security outlays by 3.1 percent, from 6.4 percent of gross domestic product to 6.6 percent.

While this option would help those workers whom the special minimum benefit was also designed to assist—workers with a history of consistently low annual earnings—a drawback to the enhanced benefit is that it would not distinguish between those who had low annual earnings because they earned low hourly wages and those who had higher hourly wages but elected to work for only part of the year.

1. See Kelly A. Olsen and Don Hoffmeyer, “Social Security's Special Minimum Benefit,” *Social Security Bulletin*, vol. 64, no. 2 (2001/2002), pp. 1-15.
2. See Social Security Administration, Office of the Chief Actuary, “Projected Demise of the Special Minimum PIA,” Actuarial Note Number 143 (October 2000), available at [www.ssa.gov/OACT/NOTES/note143.html](http://www.ssa.gov/OACT/NOTES/note143.html).



# 700

## Veterans Benefits and Services

**B**udget function 700 covers programs that offer benefits to military veterans. Those programs, most of which are run by the Department of Veterans Affairs (VA), provide health care; disability compensation; pensions; life insurance; housing loans; and education, training, and rehabilitation benefits. The Congressional Budget Office estimates that outlays for function 700 will total about \$68.6 billion in 2005, including discretionary outlays of about \$30.2 billion.

In recent years, the Congress has expanded health and education benefits for veterans, and spending on those programs has increased accordingly. Outlays for medical care, which are subject to appropriation, rose from roughly \$19 billion in 2000 to almost \$28 billion in 2004, an increase of more than 45 percent over those four

years. Similarly, spending on education, training, and rehabilitation benefits—all of which are mandatory programs—almost doubled during that period, from \$1.4 billion to \$2.7 billion, primarily because of higher caseloads and legislated increases in the amounts of education benefits.

Spending on disability compensation, a mandatory program, has also grown significantly in recent years—from \$19.2 billion in 2000 (adjusted to reflect 12 monthly payments) to \$26.3 billion in 2004, a rise of nearly 40 percent. That growth results primarily from increased caseloads, stemming from a push by VA to reduce the backlog of pending cases and from the addition of newly compensable diseases.

**Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)**

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	20.9	22.5	24.0	26.6	29.2	30.8	8.7	5.5
Outlays								
Discretionary	20.8	22.4	24.1	25.7	28.6	30.2	8.3	5.5
Mandatory	<u>26.3</u>	<u>22.6</u>	<u>26.9</u>	<u>31.3</u>	<u>31.2</u>	<u>38.4</u>	4.3	23.1
Total	47.1	45.0	51.0	57.0	59.8	68.6	6.2	14.7

**700-01—Mandatory****Narrow the Eligibility for Veterans' Disability Compensation to Include Only Veterans with High-Rated Disabilities**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-76	-138	-183	-256	-320	-973	-3,608
Outlays	-73	-133	-177	-250	-315	-948	-3,559

Approximately 2.6 million veterans who have service-connected disabilities receive disability compensation benefits from the Department of Veterans Affairs (VA). The amount of compensation is based on a rating of an individual's impairment that is intended to reflect the resulting reduction, on average, in earnings capacity. Veterans' disability ratings range from zero to 100 percent (the most severe). Veterans who are unable to maintain gainful employment and who have ratings of at least 60 percent are eligible to be paid at the 100 percent disability rate. Veterans who have disabilities rated 30 percent or higher and who have dependent spouses, children, or parents are paid special allowances because of their dependents.

The Congressional Budget Office expects at least 45,000 more veterans with disability ratings below 30 percent to begin receiving compensation of \$70 to \$200 per month each year over the 2006-2015 period. This option would, for all future cases, narrow the eligibility for compensation to include only veterans with disability ratings of 30 percent or higher. That change would reduce federal outlays by \$948 million over the 2006-2010 period.

By not awarding new compensation to veterans with disability ratings below 30 percent, VA could concentrate spending on the most impaired veterans. Furthermore, the need for compensating the least impaired veterans may be lessening. Performance in civilian jobs depends less now on physical labor than it did when the disability ratings were originally determined in 1924, and improved reconstructive techniques are now available. Thus, physical impairments rated below 30 percent may not substantively reduce veterans' earnings. Examples of low-rated impairments include conditions such as mild arthritis, moderately flat feet, or amputation of part of a finger—conditions that would not preclude working in many occupations today.

However, veterans' compensation could be viewed as career or lifetime indemnity payments that the federal government owes to people who were disabled to any degree while serving in the armed forces. Moreover, some disabled veterans might find it difficult to increase their working hours or otherwise make up for the loss of expected compensation payments.

RELATED OPTIONS: 700-02 and 700-04

**700-02—Mandatory****Narrow the Eligibility for Veterans' Disability Compensation to Veterans Whose Disabilities Are Related to Their Military Duties**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-17	-53	-86	-116	-143	-415	-1,548
Outlays	-17	-48	-83	-113	-140	-403	-1,522

Veterans are eligible for disability compensation if they either receive or aggravate disabilities (excluding those resulting from willful misconduct) while in active-duty service. Veterans need not be performing military duties when those disabilities are incurred or made worse for the Department of Veterans Affairs (VA) to consider them service-connected; for example, disabilities incurred while military personnel are on leave qualify. The federal government also gives dependency and indemnity compensation awards to survivors when compensable disabilities cause or are related to a veteran's death.

According to data collected by VA, about 290,000 veterans received a total of approximately \$1.1 billion in compensation payments in 2004 for disabilities that, according to the Government Accountability Office, are generally neither caused nor aggravated by military service. The diseases linked to those disabilities (excluding diabetes mellitus, which VA has since determined to be service-connected for certain veterans) are:

- Osteoarthritis,
- Chronic obstructive pulmonary disease (including chronic bronchitis and pulmonary emphysema),

- Arteriosclerotic heart disease,
- Crohn's disease,
- Hemorrhoids,
- Uterine fibroids, and
- Multiple sclerosis.

Ending new compensation benefits for veterans with only those seven diseases would save \$17 million in outlays in 2006 and \$403 million over the 2006-2010 period. Eliminating new compensation benefits for veterans whose compensable disabilities are also unrelated to military service would create significantly larger savings.

An argument in support of this option is that benefits should only be paid to veterans whose disabilities are directly related to their military service. An argument against this option is that veterans' compensation benefits are payments that the federal government owes to veterans who became disabled in any way during their service in the armed forces.

RELATED OPTIONS: 700-01 and 700-04

**700-03—Mandatory****Increase Beneficiaries' Cost Sharing for Care at Nursing Facilities Operated by the Department of Veterans Affairs**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-244	-252	-254	-262	-271	-1,283	-2,767

Veterans may receive long-term care in nursing homes operated by the Department of Veterans Affairs (VA), depending on the availability of resources. That care is rationed primarily on the basis of the nature of a disability and a veteran's income. Under certain conditions, a veteran may receive care at VA's expense in state-operated or privately run nursing facilities.

VA can charge copayments to veterans with no compensable service-connected disabilities and high enough income when they receive more than 21 days of care in VA-run nursing homes. In 2005, VA may collect up to \$5 million from providing such extended-care services, including nursing home care, the Congressional Budget Office estimates. Under current law, those collections are treated as offsets to discretionary spending that is subject to annual appropriation. CBO assumes in its baseline that those receipts are appropriated each year. According to the Government Accountability Office, state-operated nursing facilities for veterans and community long-term care facilities that treat veterans charge copayments that offset a larger share of their operating expenses than VA does. Those facilities recover as much as 43 percent through copayments. (Estate-recovery programs are another way that facilities offset costs.)

This option would authorize VA to revise its cost-sharing policies to recover more of the costs of providing care in VA nursing facilities. The department would be required

to collect a minimum of 10 percent of the cost of providing nursing home care, but it could determine what type of copayments to charge and who would pay them. For example, it could apply the copayment to a broader category of veterans or require veterans who make copayments to pay more. Recovering 10 percent of VA's operating costs would save \$244 million in 2006 and about \$1.3 billion over five years. Achieving those savings would require depositing the receipts in the Treasury rather than allowing VA to spend them.

One justification for this option is that veterans in VA nursing facilities are getting a more generous benefit than similar veterans in non-VA facilities. Recovering more of the expense at VA facilities would make that benefit more equitable among veterans and across different sites of care.

However, beneficiaries in nursing facilities might be less able to make copayments than beneficiaries receiving other types of care. In addition, a policy allowing VA to charge veterans with service-connected disabilities would be inconsistent with the standard reflected by other medical benefits that those veterans received. In implementing this option, VA could continue to exempt those veterans, but it would have to charge high-income veterans without service-connected disabilities even more to achieve the 10 percent recovery level.

**700-04—Mandatory****Reduce Veterans' Disability Compensation to Account for Social Security Disability Insurance Payments**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-1,451	-1,505	-1,556	-1,610	-1,669	-7,792	-17,114

Approximately 2.6 million veterans—about 1.7 million of whom are under age 65—receive compensation from the Department of Veterans Affairs (VA) for disabilities associated with their military service. The amount of compensation is based on a rating of an impairment's average effect on a person's earning ability. Additional allowances are paid to veterans whose disabilities are rated 30 percent or higher and who have dependent spouses, children, or parents.

Veterans with disabilities may also qualify for cash payments from other sources, including workers' compensation; means-tested programs such as Supplemental Security Income; private disability insurance; and, for veterans under 65, Social Security's Disability Insurance (DI) program. An estimated 120,000 veterans who receive disability compensation from VA also receive DI payments from the Social Security Administration. When Social Security beneficiaries are eligible for disability benefits from multiple sources, ceilings usually limit their combined disability benefits from public sources to 80 percent of their average earnings before they were disabled. Those DI payments—after any reduction, if applicable—are adjusted periodically for changes in the cost of living and the average wage level nationwide. Veterans' compensation payments for disabilities, however, are not included

and do not apply toward the limit, nor do means-tested benefits and certain benefits based on public employment.

This option would limit veterans' disability compensation for individuals receiving both that compensation and DI payments. Under the option, disability compensation would be reduced by the amount of the DI benefit. Applying that change to both current and future recipients of veterans' compensation would affect an estimated 126,000 recipients in 2006, saving almost \$1.5 billion that year and an estimated \$7.8 billion over the 2006-2010 period. Applying that change only to veterans who were newly awarded compensation payments or DI payments would affect an estimated 2,500 recipients in 2006, saving \$30 million in outlays that year and an estimated \$850 million over the 2006-2010 period.

This option would eliminate duplicate payment of public compensation for a single disability. However, opponents view this option as subjecting veterans' disability benefits to a form of means-testing (they are currently considered an entitlement). Moreover, to the extent that this option applied to current recipients of DI benefits, some disabled veterans would see their income drop.

RELATED OPTIONS: 700-01 and 700-02



# 800

## General Government

**B**udget function 800 includes a collection of legislative and executive branch programs that support the general responsibilities—the “nuts and bolts”—of running the federal government. Those programs fit broadly into three categories: revenue collection and financial management, general administration and personnel operations, and certain grant assistance to state and local governments. The Internal Revenue Service accounts for the largest component of spending in function 800. Other large accounts include payments for claims and judgments, the General Services Administration’s Federal

Buildings Fund, and salaries and expenses for Congressional offices.

Mandatory outlays for function 800 grew from about \$1 billion in 2000 to almost \$6 billion in 2004. Most of that increase resulted from \$5 billion that the Congress provided in both 2003 and 2004 for temporary fiscal assistance to states. Such assistance has not been provided for 2005. Recent increases in discretionary outlays stem primarily from the more than \$2 billion appropriated for election-reform grants during the 2003-2004 period.

### Federal Spending, Fiscal Years 2000 to 2005 (Billions of dollars)

	2000	2001	2002	2003	2004	Estimate 2005	Average Annual Rate of Growth (Percent)	
							2000-2004	2004-2005
Budget Authority (Discretionary)	11.9	14.1	15.1	17.1	16.9	16.2	9.1	-4.3
Outlays								
Discretionary	11.9	12.6	14.2	15.3	16.2	16.9	7.9	4.5
Mandatory	<u>1.0</u>	<u>1.6</u>	<u>2.7</u>	<u>7.8</u>	<u>5.7</u>	<u>0.9</u>	52.9	-83.4
Total	13.0	14.3	16.9	23.1	21.8	17.8	13.9	-18.3

**800-01—Discretionary****Eliminate General Fiscal Assistance to the District of Columbia**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-154	-157	-160	-163	-166	-800	-1,675
Outlays	-154	-157	-160	-163	-166	-800	-1,675

The Constitution gives the Congress responsibility for overseeing the District of Columbia—a task that the Congress largely delegated to the city’s government under the Home Rule Act of 1974. However, the Congress reviews and approves the District’s proposed annual budgets and appropriates money to the city each year. Under the National Capital Revitalization and Self-Government Improvement Act of 1997, the federal government reduced the annual payment of general assistance to the District. In exchange, it agreed to fund the operations of the District’s criminal justice, court, and correctional systems; assumed responsibility for paying off more than \$5 billion in unfunded liabilities that the city owed to several pension plans; and provided special borrowing authority to the city. In 2005, federal assistance for those activities under the Revitalization Act makes up about 5 percent of the District’s budget.

This option would eliminate fiscal assistance to the District that was not related to the specific obligations that the federal government assumed in the 1997 Revitalization Act. Such general assistance totals \$152 million in 2005, including \$40 million for school improvement, \$26 million for tuition assistance to city residents, \$15 million for emergency-planning and security costs, \$6 million for libraries, and \$5 million for improvements to foster care programs. Ending such assistance would reduce federal outlays by \$154 million in 2006 and \$800 million over the 2006-2010 period.

The rationale for this option is that the federal government already relieved the District government of the cost of a substantial, and increasing, portion of its budget: criminal justice, Medicaid, and pensions. The proposed trade-off for assuming responsibility for those functions was ending other assistance, including the annual federal payment. Eliminating general assistance would be consis-

tent with that policy. Moreover, it might give the District greater incentive to improve the delivery of services. Critics of the city’s government contend that money is not the problem; with a budget of more than \$8 billion in 2005, they say, the District has the resources to provide a full range of services to its residents.

One argument against this option is that the District still has major problems with its public schools, roads, and other essential services, which suggest a need for continuing financial assistance. In addition, eliminating federal funding for the city’s tuition assistance program—which enables District residents to pay in-state tuition rates at public colleges nationwide or to receive up to \$2,500 a year in financial aid at historically black colleges and universities—might undermine efforts to make the District more attractive to middle-class families. Further, in recent years, some federal assistance has been earmarked for charter schools and tuition vouchers, which has allowed the Congress to test those education approaches at the local level.

Another argument against ending general federal assistance is that the District of Columbia has few alternative sources of revenue. The Congress prevents the District from imposing commuter taxes on nonresidents who work in the city and benefit from its services, as many other cities do. (Two out of every three dollars earned in the District are earned by nonresidents.) In addition, more than 40 percent of city property—including property owned by the federal government or foreign nations—is exempt from local taxes. The District is also prevented from taxing income earned by Fannie Mae, a government-sponsored enterprise based in the city, as part of a general prohibition on state and local taxation of the income of government-sponsored enterprises.



**800-02—Mandatory****Require the IRS to Deposit Fees for Its Services in the Treasury as Miscellaneous Receipts**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Outlays	-91	-93	-95	-96	-98	-473	-989

The 1996 appropriation act for the Department of the Treasury and various agencies authorized the Internal Revenue Service (IRS) to establish or increase fees for some services that it provides. The IRS has used that authority mainly to charge taxpayers a fee for entering into payment plans with the agency. Under the 1996 law, the IRS can retain and spend the receipts collected from such fees, up to an annual limit of \$119 million. In 2004, it collected \$83 million in fee receipts and spent \$63 million.

This option would require the IRS to deposit all of its fee receipts in the Treasury as miscellaneous receipts, eliminating the agency's ability to spend them. That change would reduce the IRS's direct spending by \$91 million in 2006 and \$473 million through 2010 (assuming that the removal of spending authority did not substantially reduce the amount that the IRS collected in fees). However, those savings would be lost if the agency's annual appropriations—which total about \$10 billion for 2005—were increased to make up for the lost fee receipts.

One rationale for this option is that processing payment plans with taxpayers is an administrative function directly related to the IRS's mission—getting citizens to pay the taxes they owe—and thus is a function for which the agency already receives appropriations. Another rationale is that the IRS does not directly use the receipts it collects from fees on installment agreements to pay for processing those agreements. Moreover, the current spending authority may give the agency an incentive to unnecessarily encourage taxpayers to pay their taxes in installments, or to seek new and unnecessary fees.

One argument against this option is that continuing to allow the IRS to generate and use fee receipts may help ensure that the federal government's main revenue collector has sufficient funding to fulfill its mission. A decrease of roughly \$100 million in annual funding might negatively affect revenue collection. In addition, eliminating the spending authority could reduce the IRS's incentive to allow installment payments or its ability to provide for them, thus hurting taxpayers who would benefit from such arrangements.

**800-03—Mandatory****Eliminate the Presidential Election Campaign Fund**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-55	-55	-55	-55	-55	-275	-550
Outlays	0	-32	-198	-10	0	-240	-527

The Presidential Election Campaign Fund provides for public funding of Presidential elections. It is financed exclusively by voluntary contributions from U.S. taxpayers, who can choose to earmark \$3 (\$6 on joint returns) of their annual federal income taxes for the fund. That money is used to provide matching funds for candidates in Presidential primaries, grants to sponsor political parties' Presidential nominating conventions, grants for the general-election campaigns of major party nominees, and partial funding for qualified minor and new-party candidates in the general election. All recipients of public funds must agree not only to abide by limits on contributions and spending but also to comply with a Federal Election Commission audit and to make any necessary repayments to the Treasury.

This option would eliminate the fund and stop the flow of public money to Presidential candidates and political parties. Savings from the option would not appear until 2007, during the next Presidential election campaign. Total savings through 2010 would amount to \$240 million.

The Congress devised the funding program in the early 1970s to correct problems that were thought to exist in the Presidential electoral process, such as the disproportionate influence (or appearance of influence) of wealthy contributors; the demands of fund-raising, which prevented some candidates from adequately presenting their views to the public; and the rising cost of Presidential campaigns, which effectively disqualified candidates who did not have access to large sums of money.

Supporters of eliminating the Presidential Election Campaign Fund argue that public funding has done little to reduce the time or effort that candidates spend raising money from private sources. Moreover, they say, candidates have found numerous indirect means of circumventing the limits on spending, such as having political parties or special-interest groups pay for "issue advertisements." Supporters of this option also dispute the need to give public funding either to major parties and candidates, which are already well financed, or to minor parties and candidates, which have little chance of success. Finally, the proportion of taxpayers who choose to earmark part of their taxes for the fund has declined steadily over the past three decades to less than 12 percent, suggesting that the program has little public support.

Opponents of this option contend that public financing of Presidential elections limits the influence of special interests and wealthy contributors and allows poorly funded candidates to influence the national debate. They also argue that the money given to minor-party candidates (a small share of the total) allows such candidates to bring public attention to issues that might otherwise be ignored. Furthermore, opponents of eliminating the fund argue that taxpayer participation could be improved if the program's history and rationale—and the fact that participation does not increase a person's tax liability—were better publicized.

**800-04—Discretionary****Eliminate Federal Antidrug Advertising**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-122	-124	-126	-128	-131	-631	-1,320
Outlays	-110	-124	-126	-128	-130	-618	-1,307

The Office of National Drug Control Policy (ONDCP) runs a program to test print and broadcast advertising, purchase media time, and evaluate the effects of national media campaigns to discourage the use of illegal drugs among young people. The agency is required to solicit donations from nonfederal sources to pay part of the costs of the program. In addition, the program received appropriations of \$120 million for last year.

This option would eliminate ONDCP's antidrug media program, saving \$110 million in outlays in 2006 and \$618 million over the 2006-2010 period.

Supporters of this option argue that there is no solid evidence that media campaigns are effective in either preventing or reducing the use of illegal drugs. In an assessment of the program included in the President's 2005 budget, the Office of Management and Budget concluded that the effectiveness of antidrug advertising had

not been demonstrated by independent, long-term evaluation. Some analysts claim that media ads do not reduce drug use by young people as effectively as treatment or interdiction does. Furthermore, because nonprofit organizations, such as the Partnership for a Drug-Free America, already conduct educational programs about the dangers of drug use, ONDCP's campaign may duplicate private or local efforts.

Opponents of eliminating the program argue that educating young people about the hazards of illegal drug use is a national responsibility. Some point to the "Just Say No" campaign begun by former First Lady Nancy Reagan in the 1980s as an example of the successful use of the national media to raise young people's awareness of the dangers of drugs. They also argue that the cost to the nation of drug abuse is so high that it is worthwhile to maintain a program that reduces drug use even slightly.



# 920

## Allowances

**T**he President's budget and the Congressional budget resolution sometimes include amounts in function 920 to reflect proposals that are not clearly specified or that would affect multiple budget functions. Because the Congress actually appropriates money for specific pur-

poses, there are no budget authority or outlay totals for function 920 in historical data. In this volume, function 920 includes options that cut across programs and agencies and that affect multiple budget functions.

**920-01—Discretionary****Raise the Threshold for Coverage Under the Davis-Bacon Act**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-200	-200	-205	-210	-210	-1,025	-2,130
Outlays	-60	-150	-215	-255	-275	-955	-2,450

Since 1935, the Davis-Bacon Act has required that no less than “prevailing wages” be paid for all federally funded or federally assisted construction projects with contracts that total \$2,000 or more. The Department of Labor measures prevailing wages in a specific locality on the basis of the wages and benefits earned by at least 50 percent of workers in a particular type of job or on the basis of the average wages and benefits paid to workers for that type of job. Those procedures, as well as the classifications of workers who receive prevailing wages, sometimes favor union wage rates.

In recent years, proposals have been made that would raise the threshold for determining which projects are covered by the Davis-Bacon Act. This option would increase the threshold from \$2,000 to \$1 million. That change would save \$60 million in discretionary outlays in 2006 and \$955 million through 2010—provided that federal agencies’ appropriations were lowered to reflect the anticipated reduction in costs. (The higher threshold also would save less than \$5 million in mandatory spend-

ing in 2006 and about \$25 million over five years.) In addition, it would reduce the administrative burden on both firms and the government by restricting coverage to the largest contracts.

One rationale for raising the threshold is that it has remained the same for seven decades and raising it would allow the federal government to spend less on construction. Moreover, this option could increase the opportunities for employment that federal projects might offer less-skilled workers.

An argument against such a change is that it could lower the earnings of some construction workers. In addition, raising the threshold might jeopardize the quality of federally funded or federally assisted construction projects. The contention is that since firms are required to pay at least the prevailing local wage, firms covered by the Davis-Bacon Act are more likely to hire able workers, resulting in more timely completion of projects and fewer defects in the finished product.

**920-02—Mandatory****Impose a Fee on the Investment Portfolios of Government-Sponsored Enterprises**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Receipts	+1,624	+1,656	+1,739	+1,826	+1,917	+8,762	+19,885

Government-sponsored enterprises (GSEs), private financial institutions chartered by the federal government, are intended to increase the availability of credit for specific purposes, such as housing and agriculture. They fulfill that role by raising funds in the capital markets on the strength of an implied federal guarantee and then lending (or otherwise conveying) monies to retail lenders. Investors who buy debt securities issued by the GSEs infer that those securities are federally guaranteed because of various provisions in the GSEs' charters—such as provisions that exempt the enterprises from state and local income taxes, render their securities eligible to serve as collateral for federal and other public deposits, and authorize the Secretary of the Treasury to purchase those securities. That implicit federal guarantee, for which the government collects no fee, lowers the cost of borrowing for the GSEs and conveys a subsidy that gives the enterprises a competitive advantage in financial markets. Studies by the Congressional Budget Office and others have concluded that the GSEs receive substantial subsidies, a significant portion of which is not passed on to borrowers.

Four GSEs—Fannie Mae, Freddie Mac, Farmer Mac, and the Federal Home Loan Bank System—have used their special borrowing status to acquire and hold large portfolios of securities. Those investments consist mostly of mortgage-backed securities but also include other asset-backed securities, mortgages, corporate bonds, and mortgage revenue bonds. The investment portfolios of the four enterprises total about \$2 trillion, or about 75 percent of their combined assets, according to current reports. The GSEs earn profits from the difference in the yields they receive on their investments and the yields they pay on their subsidized debt issues. Those profits owe much to the federal guarantee.

This option would impose a fee of 10 basis points (10 cents per \$100 of investments) on the GSEs' average daily investment portfolios. That fee would increase federal receipts by \$1.6 billion in 2006 and \$8.8 billion over five years. Proceeds from the fee would equal less than 20 percent of the total federal subsidy estimated to be retained by equity investors and other stakeholders of three housing GSEs (Fannie Mae, Freddie Mac, and the Federal Home Loan Banks).

A justification for imposing a fee on the GSEs' investment portfolios is that it would promote competition in financial markets and recover some of the federal subsidy retained by those enterprises without reducing their capacity to achieve their public mission. For example, the fee would not restrict the authority of the housing GSEs to guarantee mortgage-backed securities or prevent them from purchasing those securities, nor would it hamper the ability of the Home Loan Banks to make advances to member banks. Because the fee would be a small fraction of the estimated subsidy retained by GSEs and their stakeholders, the GSEs might absorb it through lower profits and leave mortgage interest rates unchanged.

A disadvantage of imposing a portfolio fee is that investors might interpret it as a strengthening of the implicit federal guarantee, which could further weaken market discipline. Critics of this option might also argue that mortgage rates would rise in response to the fees because either the GSEs do not receive a government subsidy or they pass most of it on to targeted borrowers and hence should not be subject to a fee. Moreover, opponents might also contend that the fee would reduce the GSEs' incentive to buy mortgage-backed securities during periods of financial stress, when the gap between interest rates on most securities and Treasury rates tends to widen.

RELATED OPTION: 370-02

RELATED CBO PUBLICATION: *Letter to the Honorable Richard C. Shelby regarding updated estimates of the subsidies to the housing GSEs*, April 8, 2004; *Testimony on Regulation of the Housing Government-Sponsored Enterprises*, October 23, 2003; *Effects of Repealing Fannie Mae's and Freddie Mac's SEC Exemptions*, May 2003; and *Federal Subsidies and the Housing GSEs*, May 2001

**920-03—Discretionary****Eliminate Cargo Preference**

(Millions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Spending							
Budget authority	-356	-466	-581	-592	-603	-2,598	-5,798
Outlays	-299	-434	-549	-581	-596	-2,458	-5,633

The Cargo Preference Act of 1904 and other laws require that ships registered in the United States be used to carry certain government-owned or government-financed cargo that is shipped internationally. Traditional justifications for that “cargo preference” include maintaining the economic viability of the nation’s maritime industry and bolstering national security by ensuring that U.S.-flag vessels and U.S. crews are available during wartime.

Eliminating cargo preference would reduce federal transportation costs by allowing the government to ship its cargo at the lowest available rates. That change would save \$299 million in outlays in 2006 and a total of almost \$2.5 billion through 2010.

Two federal agencies, the Department of Defense (DoD) and the Department of Agriculture (USDA), account for most of the gross tonnage shipped under cargo-preference laws. The preference applies to nearly all of DoD’s freight and three-quarters of USDA’s shipments of food aid, as well as to shipments associated with programs of the Agency for International Development and the Export-Import Bank. Roughly 70 percent of the savings from eliminating cargo preference would come from defense discretionary spending, with the rest coming from non-defense discretionary spending.

One rationale for this option is that cargo preference represents a subsidy of private vessels by taxpayers, which

helps a handful of ship operators preserve their market share and market power. Another rationale is that cargo preference puts the U.S. government at a competitive disadvantage in selling surplus agricultural commodities abroad because it must pay higher costs to transport them.

A key argument against this option is that although DoD has invested in its own sealift fleet to transport military equipment and has contracted with foreign-flag ships when necessary, the department considers cargo preference an essential part of its sealift policy. Indeed, in deployments for the war in Iraq, DoD has made heavy use of U.S.-flag ships and has relied extensively on U.S. civilian mariners to crew its reserve ships. Another argument against this option is that cargo preference is necessary to offset federal requirements that raise labor costs and regulatory burdens and thus put the nation’s maritime industry at a competitive disadvantage. (Under federal law, U.S.-flag ships must be crewed by U.S. mariners and, in general, must be built by U.S. shipyards.) Without guaranteed business from cargo preference, many U.S.-flag vessels might leave the fleet—by reflagging in a foreign country to save money or by decommissioning altogether. In addition, U.S. ship operators and shipbuilders might default on loans guaranteed by the government. (The estimated savings shown above do not reflect the possibility of such defaults.)



CHAPTER

**3**

# Revenue Options



**Revenue Option 1 (Corrected and updated as of March 20, 2006)****Raise Marginal Tax Rates for Individuals**

(Billions of dollars)	2007	2008	2009	2010	2011	Total	
						2007-2011	2007-2016
Change in Revenues							
Raise All Tax Rates on Ordinary Income by 1 Percentage Point	+21.0	+29.9	+30.4	+30.7	+43.9	+155.9	+420.0
Raise All Ordinary Tax Rates and AMT Rates by 1 Percentage Point	+33.2	+49.3	+52.4	+55.5	+60.2	+250.6	+602.2
Raise All Ordinary Tax Rates, AMT Rates, and Dividend and Capital Gains Rates by 1 Percentage Point	+33.6	+51.6	+55.3	+56.9	+61.6	+259.0	+617.3
Raise the Top Two Ordinary Tax Rates by 1 Percentage Point	+4.4	+6.3	+6.5	+6.8	+8.7	+32.7	+92.3

Source: Joint Committee on Taxation.

Under current law, individuals face six statutory tax rates on taxable income earned between tax years 2005 and 2010: 10 percent, 15 percent, 25 percent, 28 percent, 33 percent, and 35 percent. After 2010, the schedule of rates reverts to the five brackets (15 percent, 28 percent, 31 percent, 36 percent, and 39.6 percent) that were in effect before the Economic Growth and Tax Relief Reconciliation Act of 2001 was enacted. This option would provide several alternatives for raising statutory tax rates under the individual income tax:

- Raise all tax rates on ordinary income by 1 percentage point.
- Raise all ordinary tax rates and the rates of the alternative minimum tax (AMT) by 1 percentage point.

- Raise all ordinary tax rates and the AMT rates by 1 percentage point, and raise the separate rates on dividends and capital gains by 1 percentage point.
- Raise the top two ordinary tax rates by 1 percentage point.

The increase in revenues under this option would depend on whether the rate hike applied to all rates or only to rates on dividends and capital gains or those for the AMT.

An individual's taxable income may be taxed at different rates (see the table on the next page). For example, in 2005, a single person with taxable income of \$30,000 would pay a rate of tax of 10 percent on the first \$7,300 of income, 15 percent on the next \$22,400, and 28 percent on the last \$300. The starting points for the brackets would be indexed for inflation beyond 2005.

Starting Point for Each Rate Bracket (2005 dollars)		Statutory Tax Rates on Ordinary Taxable Income (Percent)	
Single Filers	Married Filers	2005-2010	After 2010
0	0	10	15
7,300	14,600	15	15
29,700	59,400	25	28
71,950	119,950	28	31
150,150	182,800	33	36
326,450	326,450	35	39.6

But not all income that goes to individuals is taxed at those rates. Income from long-term capital gains (gains on assets that are held for more than one year) is subject to lower rates under a separate schedule; the same applies to dividend income through 2008. And taxpayers subject to the AMT face statutory tax rates of 26 percent and 28 percent.

*Boosting all statutory tax rates on ordinary income by 1 percentage point* would increase revenues by about \$155.9 billion from 2007 to 2011. Under that option, for example, the top rate of 35 percent in 2010 would rise to 36 percent, and the top rate of 39.6 percent during the 2011-2014 period would increase to 40.6 percent. The AMT's rates (26 percent and 28 percent) would remain the same as under current law.

Another alternative would be to *raise each of the regular tax rates and also the AMT's rates by 1 percentage point*, which could increase revenues during the 2007-2011 period by \$250.6 billion. The change from year to year in the estimate of additional revenues under this approach is less affected by the number of taxpayers subject to the AMT than is the change under the previous alternative. That is because taxpayers who face the alternative tax are also subject to the increase in statutory tax rates. If *in addition to raising the AMT's rates, policymakers pushed up the separate tax rates on capital gains and dividends by 1 percentage point*, the government would collect \$259.0 billion in additional revenues from 2007 to 2011.

Raising only some of the statutory tax rates would be another alternative. For example, *boosting only the top two marginal rates* would raise \$32.7 billion over the 2007-2011 period. Since most of the taxpayers facing the top two rates on the ordinary rate schedule are not subject to the alternative minimum tax, the AMT would not limit the impact of the rise in regular tax rates.

These estimates incorporate the assumption that taxpayers will respond to the higher tax rates by changing their behavior—chiefly, by shifting income from taxable to nontaxable or tax-deferred forms. (Such a shift might involve substituting tax-exempt bonds for other investments or exchanging tax-free fringe benefits for compensation in cash.) But the estimates do not incorporate potential alterations in how much people work or save in response to the change in statutory tax rates. How the various alternatives might affect the overall economy is uncertain; estimates of their impact would depend on the methods and assumptions used in such an analysis.

Increases in tax rates have some administrative advantages over other types of tax hikes because they require relatively minor changes in the current system of tax collection. But rate increases have drawbacks as well. Higher tax rates reduce incentives to work and save. They also encourage taxpayers to shift income from taxable to nontaxable forms and to increase spending on items that are tax-deductible, such as home mortgage interest and charitable contributions. In those ways, higher tax rates cause economic resources to be allocated less efficiently than they might be.

RELATED OPTIONS: Revenue Options 4, 7, and 8

RELATED CBO PUBLICATIONS: *Effective Federal Tax Rates Under Current Law, 2001 to 2014*, August 2004; *Macroeconomic Analysis of a 10 Percent Cut in Income Tax Rates*, Technical Paper 2004-07, May 2004; *The Alternative Minimum Tax*, Revenue and Tax Policy Brief, April 2004; and *How CBO Analyzed the Macroeconomic Effects of the President's Budget*, July 2003

## Revenue Option 2

### Permanently Extend EGTRRA's Provisions for Tax Brackets and Married Filers

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues <sup>a</sup>	0	0	0	0	0	0	-604.1

Source: Joint Committee on Taxation.

a. Includes outlay effects.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) changed the individual income tax system in a number of ways, including reducing tax rates across the board and providing relief from the marriage penalty. EGTRRA created a new 10 percent tax bracket; in addition, the 28 percent rate was reduced to 25 percent, the 31 percent rate to 28 percent, the 36 percent rate to 33, and the 39.6 percent rate to 35 percent. The law also reduced taxes for married couples who file a joint return by increasing the standard deduction, the size of the 15 percent tax bracket (the amount of income subject to that tax rate), and the phaseout range of the earned income tax credit.

EGTRRA's provisions for tax rates and marriage penalty relief are scheduled to expire in 2010; this option would permanently extend them. (The President's budget for 2006 includes similar proposals.) The option would not lower revenues over the 2006-2010 period but would reduce them from 2011 through 2015 by \$604.1 billion.

Permanently lowering tax rates would increase economic efficiency by lessening distortions that arise from the tax system. High tax rates distort people's economic decisions: they encourage taxpayers to shift income from taxable to nontaxable forms (such as substituting tax-exempt bonds for other investments or tax-free fringe benefits for cash compensation) and to increase spending on tax-deductible items, such as home mortgage interest and charitable contributions.

Lower tax rates could also encourage people to work and save. However, the rates' ultimate effect on economic output would depend on whether countervailing changes were made elsewhere in the budget. Financing the tax cuts through increased deficits would reduce national saving and might offset the positive effects of lower tax rates

on the number of hours worked in the economy and on private saving.

Equity, or fairness, is another criterion in assessing tax policy. Evaluations of the fairness of raising statutory income tax rates may differ, depending on the metric used to measure fairness. Because a large share of the increased revenues from the rate hikes would come from taxpayers with the highest income, some observers might argue that the rate increases were progressive. But the across-the-board nature of the rate increases leads to a similar percentage rise in the taxes paid by all other income groups. That outcome implies that each income group will continue to pay about the same share of the total income tax burden as it does under current law, a result that some observers would contend was proportional.

Fairness would also be an issue regarding extending the provisions in EGTRRA that offer relief from the marriage penalty. Many married couples who file a joint return have larger tax liabilities than they would have if they were allowed to file as individuals or as heads of households (single taxpayers with dependents). At the same time, many other married couples pay lower taxes than they would pay if they filed as single taxpayers. Whether a couple incurs a marriage penalty or receives a marriage bonus depends on the relative income of the two spouses: penalties generally occur when spouses have similar income, and bonuses occur when only one spouse works or when spouses have substantially different earnings. On the one hand, permanently extending EGTRRA's marriage relief provisions would reduce marriage penalties and increase equity by treating some married couples on a par with their single counterparts. On the other hand, extending those provisions would not only reduce marriage penalties but also increase marriage bonuses. The latter outcome would effectively penalize unmarried taxpayers relative to their married counterparts.

Many analysts have observed that the marriage penalty affects couples' decisions about whether to marry and how much to work. Reducing the extent of the penalty would weaken any deterrent effect on marriage and, if the changes in EGTRRA were made permanent, simplify families' financial planning. In addition, because this option would lower the marginal tax rate (the rate that ap-

plies to a taxpayer's last dollar of income) for many couples, it might help reduce the adverse impact of taxes on incentives to work. Research has shown that how much a secondary earner works—in a two-earner couple, the spouse with the lower income—is particularly sensitive to tax rates.

RELATED OPTION: Revenue Option 7

### Revenue Option 3

## Permanently Extend the 5 Percent and 15 Percent Tax Rates for Capital Gains and Dividends

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	0	0	-2.6	-12.5	-7.0	-22.1	-159.7

Source: Joint Committee on Taxation.

The Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) reduced the special tax rates that apply to most capital gains. For gains that had been taxed at 20 percent, the law lowered the rate to 15 percent; for gains that had been taxed at either 8 percent or 10 percent, JGTRRA reduced the rate to 5 percent. Which rate applies depends on the income of the individual who realizes the gain. The 15 percent rate on gains is used by people whose income puts them in the top four tax brackets for ordinary income (25 percent, 28 percent, 33 percent, or 35 percent). The 5 percent rate applies to people whose income puts them in the two lowest brackets (10 percent or 15 percent). In a major innovation, JGTRRA extended the 5 percent and 15 percent rates to dividends from domestic and qualifying foreign corporations, thus reducing the tax rates on such dividends from the rates on ordinary income to those on capital gains. Under the law, the rates are effective from 2003 through 2008. In 2008, the 5 percent tax rate is scheduled to drop to zero.

This option would permanently extend the 5 percent and 15 percent rates on gains and dividends. It would reduce revenues by \$22.1 billion for the 2006-2010 period and \$159.7 billion for 2006 through 2015. The reduction in revenues over the 10-year period is much more than double the drop during the first five years because the option would not change tax rates under current law until January 1, 2009. The President, in his 2006 budget, proposes to permanently extend the zero and 15 percent rates of 2008.

The lower tax rates on capital gains and dividends reduce the extra tax burden that under current law is carried by equity invested in C corporations—that is, corporations subject to the corporate income tax. C corporations may be either large or small businesses. Small businesses can avoid the corporate income tax by organizing as S corporations, partnerships, sole proprietorships, or limited lia-

bility companies. The return on the equity invested in C corporations is corporate profits. The extra burden on that equity arises because corporate profits are generally taxed twice: they are subject to the corporate income tax (typically 35 percent) and can then be taxed again when they are received by individuals. The profits that remain after the firm pays the corporate income tax are either distributed as dividends or retained and reinvested by the corporation. Because reinvested earnings presumably increase the corporation's value (by about the amount invested), they also raise the value of the firm's stock. When individuals sell that stock, they pay capital gains tax on the reinvested earnings. Thus, the return on equity invested in C corporations is generally taxed once as corporate profits and a second time as dividends or capital gains. By reducing tax rates on the latter types of income, JGTRRA lessens but does not eliminate the extra tax burden.

Those extra taxes on corporate profits distort investment. They lead to a shift of some investment from C corporations to other business forms and to owner-occupied housing. They also encourage C corporations to finance more of their investments by selling bonds rather than stock and by retaining earnings (rather than paying dividends). Those distortions interfere with the allocation of investment to the use with the highest economic return. Consequently, they reduce economic efficiency and leave most people less well off.

JGTRRA mitigated those distortions by reducing the extra tax burden—but only for a short interval. Because the lower rates expire at the end of 2008, investments made after that time will not benefit from them at all, and many investments made between 2003 and 2008 will benefit only partially because some of their returns will be earned after 2008. Hence, many of the gains in efficiency that could result from the effects of the lower rates on the

allocation of investment will not be realized unless JGTRRA's provisions are perceived to be permanent.

Other options for reducing the extra tax burden on corporate equity have been widely discussed. One alternative would exempt from taxation at the individual level dividends and capital gains paid from profits that had been fully taxed at the corporate level (see Revenue Option 24). Another approach would apply the same treatment to interest earnings and tax the income of C corporations at the same rate as income earned by other businesses.

Compared with those options, the reduced rates that JGTRRA provides are less complete and less targeted but simpler. JGTRRA's lower rates remove less of the extra burden from the return on corporate equity than those alternatives would and also apply more broadly, because they are not limited to dividends and gains from fully taxed corporate profits. Corporations, like individuals, receive extra deductions and credits for certain investments; therefore, the return on those investments is less burdened under current law than is the return on fully taxed profits. Furthermore, people realize capital gains from investments in unincorporated businesses and individually

owned property, and neither of those kinds of investment is subject to the corporate profits tax. Imprecisely targeting its lower rates, as JGTRRA does, reduces their effectiveness because it fails to lessen the burden on fully taxed corporate earnings relative to all other investment returns. Complete and targeted leveling of the tax burden, however, would be more complicated to administer, and policymakers in the United States have never tried it. Targeting could be improved with little additional complication, though, by limiting the lower capital gains tax rates to gains on shares of C corporations.

The extent to which the extra tax burden on dividends distorts decisions about investment is uncertain. Some analysts believe that the distortion is minimal; they believe that taxes on dividends mainly affect share prices. If that was the case, reducing the extra burden on dividends would increase stockholders' return on their investment but encourage little more equity investment by corporations. Other observers argue that the tax burden on dividends does reduce such investment. Most analysts agree, however, that the extra burden on retained earnings distorts investment choices.

RELATED OPTION: Revenue Option 24



## Revenue Option 4

### Return Tax Rates to Their Level in 2002 or Freeze Rates at Their Current Level

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues							
Return rates and brackets to their level in 2002	+22.4	+32.2	+31.7	+33.8	+35.5	+155.6	-151.5
Permanently extend current tax rates	0	0	0	0	0	0	-566.6

Source: Joint Committee on Taxation.

Before 2001, the federal individual income tax had five brackets, under which income was taxed at 15 percent, 28 percent, 31 percent, 36 percent, or 39.6 percent. The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) created a 10 percent bracket beginning in 2001; for 2001 to 2006, other provisions lowered the top four tax rates in three stages—to 25 percent, 28 percent, 33 percent, and 35 percent. (The 15 percent rate was not changed.) The Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) accelerated the lowering of those rates, and the Working Family Tax Relief Act of 2004 changed the indexation of the 10 percent bracket. All brackets are indexed for inflation throughout the 2005-2010 period. As with other provisions of EGTRRA and JGTRRA, the tax rates revert to their pre-2001 level after the laws expire on December 31, 2010.

This option has two variants: it would either reinstate the tax rates established by EGTRRA at their level in 2002 or freeze the rates at their current level. Both variants would retain indexing of the rates as specified under current law.

For 2002, the individual income tax brackets included the new 10 percent rate and rates for the higher tiers (27 percent, 30 percent, 35 percent, and 38.6 percent) that were each 1 percentage point lower than the rates in effect before 2001. Returning rates to their 2002 level would increase revenues by \$22.4 billion in 2006 and \$155.6 billion over the 2006-2010 period. The current rates for

the five brackets are 10 percent, 25 percent, 28 percent, 33 percent, and 35 percent. Moving permanently to those rates would not affect revenues over the 2006-2010 period because the rates are current law (under EGTRRA). However, EGTRRA expires on December 31, 2010; thus, this option would reduce revenues over the 2006-2015 period by \$566.6 billion.

All U.S. taxpayers saw their rates fall in 2001, and this option would maintain those cuts. However, under the first variant (make the 2002 rates permanent), individuals who had some income that was currently taxed in the 25 percent bracket would see their taxes rise over the 2006-2010 period. This variant would provide additional revenues but would raise marginal tax rates (the rate that applies to a taxpayer's last dollar of income). Higher marginal rates could discourage work and investment relative to the cuts scheduled in current law and thus constrain the level of U.S. economic activity.

An advantage of both variants is that by making some of EGTRRA's and JGTRRA's cuts permanent, they would simplify planning for the future. The scheduled expiration of the two laws' provisions after 2010 creates uncertainty among taxpayers about whether the Congress will change the law over the next few years. Some of that uncertainty could be mitigated by freezing tax rates at specified levels.

RELATED OPTION: Revenue Option 1

**Revenue Option 5****Accelerate the Repeal of the Personal Exemption Phaseout and the Limit on Itemized Deductions**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	-2.4	-5.0	-3.8	-2.7	-1.5	-15.4	-123.5

Source: Joint Committee on Taxation.

To compute their taxable income, individuals subtract from their adjusted gross income (AGI) the amount of their personal exemptions and either the standard deduction or their itemized deductions. However, for high-income taxpayers, the tax code lessens the value of both personal exemptions and itemized deductions by gradually reducing how much of them those taxpayers can subtract when their AGI rises above specified income thresholds. The two phaseouts were enacted temporarily as part of the Omnibus Budget Reconciliation Act of 1990 and made permanent by the Omnibus Budget Reconciliation Act of 1993. Now, over the next several years, the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) is gradually eliminating them. In 2006 and 2007, the impact of the phaseouts will be reduced by one-third; in 2008 and 2009, it will be reduced by two-thirds; and in 2010, the provisions will be repealed. However, under current law, the phaseouts are slated to return, in their pre-EGTRRA form, in 2011. The President, in his 2006 budget, has proposed the permanent repeal of the phaseouts.

This option would make the repeal permanent in 2006. Revenues under this option would fall by \$2.4 billion in 2006 and \$15.4 billion during the 2006-2010 period.

Phasing out the personal exemption reduces the exemption's value by 2 percent for each \$2,500 of AGI above the income threshold. For 2005, the thresholds are \$145,950 for single filers and \$218,950 for married couples filing a joint return. Thus, single taxpayers whose AGI was \$170,950 (\$25,000 above the threshold) would lose 20 percent of the value of their personal exemption.

In 2005, the value of personal exemptions phases out completely for single filers whose AGI is above \$268,450 and joint filers whose AGI is above \$341,450.

The limit on itemized deductions reduces them by 3 percent of the amount of AGI above a specific income threshold—\$145,950 in 2005—which applies to all taxpayers. Thus, a taxpayer whose AGI was \$245,950 would see his or her itemized deductions drop by \$3,000, or 3 percent of the \$100,000 in AGI above the threshold. Under current law, itemized deductions cannot be reduced by more than 80 percent.

Repealing the phaseouts of personal exemptions and itemized deductions would make the tax system less complex. Each phaseout provision requires taxpayers to perform numerous calculations to determine whether it applies to them and, if it does, to determine how the phaseout affects their taxable income. Repealing the provisions would increase economic efficiency by lowering marginal tax rates—the rate applied to the last dollar of income. (Currently, both provisions increase marginal tax rates over the portion of the income range that they affect and may thus reduce incentives to work and save.)

Because the tax system is progressive (rates rise with a taxpayer's income), exemptions and deductions are of greater value to higher-income taxpayers than to lower-income taxpayers. The current limits on itemized deductions and personal exemptions constrain that effect, increasing the progressivity of the tax system. Repealing the limits would therefore lessen that progressivity.

## Revenue Option 6

### Replace Multiple Tax Rates on Long-Term Capital Gains with a Deduction of 42 Percent

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.5	+3.1	+1.9	-3.7	+5.8	+7.6	-2.7

Source: Joint Committee on Taxation.

A taxpayer who sells an asset whose value has increased since it was purchased realizes a capital gain, which is generally subject to taxation. The gains realized on assets that are held for more than a year are taxed at lower rates than the rates that apply to ordinary income. Which capital gains tax rate applies to a gain depends on the year in which the gain is realized, the type of asset sold, how long it was held, and the taxpayer's other income—a level of complexity that requires taxpayers to make numerous calculations to figure their tax.

This option would simplify that process by allowing taxpayers to deduct from their taxable income 42 percent of their net realizations of long-term capital gains—whether or not they itemized their other deductions. Taxpayers who were subject to the alternative minimum tax (AMT) would adjust for that tax's lower rate structure by treating 34 percent of the deduction as income taxable under the AMT. Under this option, a taxpayer's actual rate on capital gains would be 58 percent of his or her marginal rate on ordinary income (the rate on the last dollar of income). In 2006, for example, someone in the 25 percent bracket for ordinary income would face a rate of 14.5 percent on gains. Someone in the 35 percent bracket would face a rate of 20.3 percent. The option, which was designed to be revenue neutral over the 2006-2015 period (under the assumption that it would be enacted at the end of 2005 and become effective January 1, 2006), would reduce revenues during those 10 years by a total of \$2.7 billion. Because tax rates on capital gains under current law are lower through 2008 than in later years and because tax rates change abruptly at the outset of 2009 and 2011, the option would increase revenues by \$7.6 billion in the first five years of the period through an irregular sequence.

Taxpayers face a variety of tax rates on capital gains. For example, a taxpayer who is in an individual income tax

bracket of 25 percent or above and who sells stock owned for more than a year will pay 15 percent in taxes on the realized gain from now through 2008. Starting in 2009, he or she will pay 20 percent—unless the stock was purchased in 2001 or later and was held for at least five years. In that case, the applicable rate will be 18 percent. (An exception is original issues of stock of certain start-up businesses that are held for more than five years. Gains from those assets are taxed at an effective rate of 14 percent.) Taxpayers in the 10 percent or 15 percent brackets of the individual income tax face lower rates on gains until they realize enough to push their income past the 15 percent bracket.

Gains on many other assets are taxed at the same rate as gains on stocks, but there are exceptions. Ordinary income tax rates up to a maximum of 25 percent apply to some gains on depreciated real estate, and gains from the sale of gold, works of art, or other collectibles are taxed at ordinary rates of up to 28 percent. Taxpayers who are subject to the AMT face different rates on gains from the sale of collectibles and of original stock issues of certain start-up businesses.

The variety of rates forces taxpayers with long-term gains to make many calculations to determine their tax. On their 2004 returns, taxpayers with gains from most sales of assets or with qualifying dividends must figure their tax by completing a worksheet of 19 lines. If a taxpayer has a gain on a collectible or on depreciated real estate, he or she must instead complete a worksheet of 37 lines. Beginning in 2009, the forms will become even more complicated because different rates will be applied to certain gains on assets held for more than five years.

The main advantage of this option is that it would substantially lessen the burden of complying with the capital gains tax by reducing to two or three the number of lines

that a taxpayer had to navigate at the end of Schedule D. In fact, that amount of extra calculation is the same as the amount required between 1942 and 1986, when the tax code excluded a portion of gains from taxpayers' adjusted gross income. The deduction under this option would be calculated much like the earlier exclusion was figured. Unlike the exclusion, however, it would not understate the income of taxpayers who had gains when eligibility for tax credits and other advantages intended for lower-income taxpayers was determined.

The main disadvantage of this option is that it would overturn several provisions of the tax code that some ob-

servers believe may improve economic efficiency (the allocation of resources to the use with the highest economic return), increase the equity of the tax system, or promote economic growth. In particular, separate capital gains rates would be eliminated for assets that were held for more than five years, issued by a start-up business, or classified as collectibles. Furthermore, all deductions for depreciation would be recaptured at ordinary tax rates instead of some benefiting from rates that were capped at 25 percent. Care is warranted, therefore, in weighing the advantages of those provisions against the benefits of simplification.

RELATED OPTIONS: Revenue Options 3, 8, and 12

RELATED CBO PUBLICATION: *Capital Gains Taxes and Federal Revenues*, October 2002

## Revenue Option 7

### Permanently Extend the Individual Income Tax Provisions of EGTRRA and JGTRRA

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues <sup>a</sup>	-11.5	-29.5	-37.2	-53.5	-56.3	-188.0	-1,507.9

Source: Joint Committee on Taxation.

a. Includes outlay effects.

The Congress has recently enacted three laws that substantially alter the individual income tax system: the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), and the Working Families Tax Relief Act of 2004 (WFTRA). EGTRRA reduced tax rates, created a new 10 percent tax bracket, increased the value of the child tax credit, provided relief from the marriage penalty and the alternative minimum tax (AMT), and made many smaller changes to the tax code. Originally, the main provisions of EGTRRA were scheduled to gradually phase in between 2001 and 2010; the entire law was slated to “sunset,” or expire, in 2011. JGTRRA accelerated the phasing in of EGTRRA’s rate reductions, marriage penalty relief, and larger child tax credit. It also further lessened the burden of the AMT and cut the tax rate on income in the form of capital gains and certain dividends. JGTRRA’s speedup of the phased-in provisions is effective only for 2003 through 2005; after that, the provisions revert to the schedule established in EGTRRA. The lower rates on dividends and capital gains are in effect through 2008. WFTRA extended several of the provisions that had been accelerated under JGTRRA—specifically, the increased child tax credit, marriage penalty and AMT relief, and the 10 percent tax bracket—for various lengths of time.

This option would permanently extend the individual income tax provisions of both EGTRRA and JGTRRA. (A similar proposal has been advanced by the President as part of his 2006 budget.) Provisions that JGTRRA had accelerated would remain at their fully phased-in levels after 2005, and the remaining provisions of EGTRRA that are set to expire in 2011 would instead continue at the levels specified for 2010. The tax rates on dividends and capital gains would also be permanently extended.

The option would reduce revenues by \$11.5 billion in 2006 and \$188 billion over the 2006-2010 period.

In terms of the efficiency of the economy, the EGTRRA and JGTRRA provisions differ in their effects, but on balance, the benefits from lower marginal tax rates would probably be the most important. High tax rates distort people’s economic decisions, encouraging taxpayers to shift income from taxable to nontaxable forms (for example, substituting tax-exempt bonds for other investments or tax-free fringe benefits for cash compensation). They also motivate people to increase spending on tax-deductible items such as home mortgage interest and charitable contributions. Lower tax rates reduce those distortions and allow investment to be allocated to the use with the highest economic return, thus leaving people better off.

Lower tax rates could also encourage people to work and save. However, the rates’ ultimate effect on economic output would depend on whether countervailing changes were made elsewhere in the budget. Financing the tax cuts through increased deficits would reduce national saving and might offset the positive effects of lower tax rates on the number of hours worked in the economy and on private saving.

Permanently extending the two laws’ individual income tax provisions would have mixed effects on the complexity of the tax system, whose simplification has been deemed a worthwhile objective. Some of the laws’ provisions, such as relief from the alternative minimum tax, would simplify the tax code for some taxpayers. Other provisions, such as the one creating individual retirement accounts for education savings, would complicate it. The existing schedule for phasing in and phasing out the various provisions undoubtedly makes financial planning

more difficult for many taxpayers. Making the provisions permanent would eliminate some of that uncertainty.

Equity, or fairness, is a key consideration in assessing tax policy, although evaluations of the fairness of permanently extending EGTRRA and JGTRRA might differ, depending on the metric used to measure fairness. If EGTRRA and JGTRRA were permanently extended, the

nation's highest-income taxpayers would receive a large share of the overall tax reduction that the two laws would provide. But the share of the tax cut that each income group received would not be that different from the share of the overall income tax burden that they currently shoulder. As a result, permanently extending EGTRRA and JGTRRA would not much alter the shares of all income taxes now paid by the various income groups.

RELATED OPTIONS: Revenue Options 2, 4, 5, and 41

## Revenue Option 8

### Provide Relief from the Individual Alternative Minimum Tax

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues							
Index exemption amounts and brackets for inflation after 2006	-11.3	-30.9	-37.9	-46.3	-55.6	-182.0	-376.0
Allow some preferences	-18.4	-49.2	-59.1	-71.2	-83.9	-281.8	-529.2
Repeal the AMT	-21.9	-57.2	-66.2	-78.4	-91.5	-315.2	-582.5

Source: Joint Committee on Taxation.

Under current law, the individual alternative minimum tax (AMT), as its name implies, is an alternate method of computing federal income tax liability. A minimum tax was initially enacted in 1969 amid concerns that taxpayers with substantial income used tax preferences aggressively to reduce their tax liability to very low levels—in some cases, to zero. The Tax Reform Act of 1986 largely established the present form of the AMT; policymakers have modified it several times since that law was enacted.

To compute liability under the AMT, a taxpayer must add back several items to taxable income that are not regularly included in it, such as the deduction for state and local taxes, personal exemptions, and the standard deduction. Such adjustments also include tax preferences that only taxpayers with complex financial circumstances generally use—for example, the deduction for some intangible costs associated with drilling for oil and gas. Under the AMT, the total of those adjustments is replaced with an exemption—in tax year 2005, \$40,250 for single taxpayers and \$58,000 for married taxpayers filing a joint return—that phases out at higher levels of income. Taxpayers subtract the exemption from their income to arrive at their alternative minimum taxable income (AMTI). AMTI is taxed at two rates: 26 percent on the first \$175,000 and 28 percent on the remainder. Taxpayers must pay the higher of their liability under the AMT or under the individual income tax. Additionally, they may not take certain tax credits if the credit will make their individual income tax liability lower than their AMT liability.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA), and the Working Families Tax Relief Act of 2004 (WFTRA) have temporarily increased the amounts of the AMT's exemption. Before EGTRRA, the exemption was \$33,750 for single filers and \$45,000 for joint filers. Under EGTRRA, those amounts increased to \$35,750 and \$49,000 for 2001 and 2002. JGTRRA increased the exemption further—to \$40,250 and \$58,000 for 2003 and 2004—and WFTRA extended that increase through 2005. In 2006, the exemption reverts to its pre-EGTRRA levels.

Unlike the schedule of tax brackets and exemptions for the individual income tax, the brackets and exemptions for the AMT are not indexed for inflation. As a result, growth of nominal income subjects more and more taxpayers to the alternative tax. For a given level of nominal income, a taxpayer's liability under the individual income tax will decline over time as the value of the standard deduction and personal exemptions increases with inflation. Moreover, the size of the lower tax brackets increases, so more income is taxed at lower rates. However, because liability under the AMT remains unchanged despite inflation, with time it will exceed liability under the individual income tax over a larger and larger portion of the income range.

Policymakers could choose one of several ways to modify the AMT and so provide some relief from its burden. One option would be to make permanent the relief provided by JGTRRA and index the AMT exemption and brackets for inflation after 2006. Under that alternative,

20 million taxpayers would move from the AMT back to the individual income tax in 2010 (the peak year), and revenues for the 2006-2010 period would fall by \$182.0 billion. Another option would be to allow AMT-affected taxpayers to take the standard deduction, personal exemptions, and the deduction for state and local taxes—which would reduce the tax's rolls by 24 million in 2010 and cut revenues by \$281.8 billion over the five-year period. A third approach would be to eliminate the AMT altogether. That option would shift 27 million taxpayers back to the individual income tax in 2010 at a cost in revenues of \$315.2 billion over five years.

A primary benefit of all three of those alternatives would be simplification. Taxpayers who are now subject to the AMT or who are close to being affected by it must calculate their taxes twice. As the number of those taxpayers rises sharply, the overall complexity of the tax system will increase. Many of those taxpayers will be in the AMT's ranks not because they are sheltering a large amount of income but because they have many dependents or high state and local taxes. These options would simplify the tax system by reducing the number of taxpayers subject to the AMT. The first two alternatives would provide relief to taxpayers with simple returns but maintain the goal of preventing high-income taxpayers from using tax shelters to avoid income taxes. The third option, complete elimination, would reduce complexity the most.

Changing the tax code to provide some relief from the AMT could help preserve the intent of legislators who

may not have anticipated the impact that an unindexed AMT would have on certain features of the tax system. For example, if the AMT is not modified, it will begin to limit the value of the standard deduction and personal exemption under the regular income tax. Those basic components will, by themselves, cause some taxpayers beyond those that policymakers originally intended to become subject to the AMT.

These options raise issues of fairness because this approach to tax simplification would primarily benefit higher-income taxpayers. A further consideration involves the effects of tax rates on incentives to work and save. Relief from the AMT would change the marginal tax rate (the tax rate on the last dollar of income) faced by taxpayers who are currently subject to the alternative tax. Some taxpayers would see their marginal rates increase under these options, which would tend to discourage people from working and saving, and others would see their rates decrease. On balance, more taxpayers would see a decrease in their marginal rate, which would tend to encourage them to work and save more. Relief from the AMT might further affect those incentives by reducing some taxpayers' tax burdens: a smaller tax liability would allow a person to achieve the same level of after-tax income with less income before taxes and so to some extent would discourage him or her from working more. How changes designed to restrict the reach of the AMT would, on balance, affect incentives to work and save is not clear; the impact would depend on taxpayers' relative sensitivity to those incentives.

RELATED OPTION: Revenue Option 7

RELATED CBO PUBLICATION: *The Alternative Minimum Tax*, April 2004



## Revenue Option 9

### Limit the Tax Benefit of Itemized Deductions to 15 Percent

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+29.3	+59.3	+60.5	+62.5	+64.7	+276.3	+966.1

Source: Joint Committee on Taxation.

Under current law, taxpayers may reduce their taxable income by the amount of their itemized deductions, which include state and local income and property taxes, interest payments on home mortgages, contributions to charity, employee business expenses, moving expenses, casualty and theft losses, and medical and dental expenses. Taxpayers benefit from itemizing if their deductions exceed the amount of the standard deduction. The tax code limits some itemized deductions (such as the one for medical expenses) to the amount in excess of a percentage of a taxpayer's adjusted gross income. In addition, a provision of the income tax law reduces all itemized deductions for high-income taxpayers. (However, under the Economic Growth and Tax Relief Reconciliation Act, or EGTRRA, that provision is scheduled to phase out between 2006 and 2010. It will revert to its original form in 2011 with EGTRRA's expiration.)

The benefit that taxpayers gain from itemizing deductions, like the benefit for all deductions, increases with people's marginal tax bracket (the bracket that applies to the last dollar earned). For example, \$10,000 in itemized deductions reduces taxes by \$1,500 for a taxpayer in the 15 percent bracket and by \$3,500 for a taxpayer in the 35 percent bracket. Most taxpayers, however, do not itemize deductions. Of the one-third who do, about half are in tax brackets above 15 percent. This option would limit the tax benefit for those higher-bracket taxpayers to 15 percent of their itemized deductions. It would increase revenues by about \$29.3 billion in 2006 and \$276.3 billion over five years.

An advantage of reducing the benefit derived from itemizing deductions is that such an approach would lessen the incentive to spend more money on activities that are treated favorably for tax purposes than might be optimal for the most efficient allocation of society's resources. That incentive arises because the ability to deduct the costs of such activities—for example, contributions to a charity or interest on a mortgage for owner-occupied housing—effectively reduces the activity's after-tax price. The option's potential benefits for efficiency might be diminished, however, by the incentive that the option would also provide to convert itemized deductions into reductions in income. For example, taxpayers might liquidate some of their assets to repay mortgage loans, thus reducing both their income (from the assets) and their mortgage payments. Or they might choose to donate time or services to charities rather than cash.

The option would also alter relative tax burdens. Reducing the benefit that itemized deductions provide would raise average tax rates for many middle- and upper-income taxpayers. At the same time, individuals who incurred high levels of deductible expenses would bear larger tax burdens relative to those of people who had fewer such deductions. That outcome would go against the original rationale for making some of the items deductible, which was to help defray costs of an involuntary nature—such as casualty losses or business expenses—that reduced a taxpayer's ability to pay federal taxes.

**Revenue Option 10****Limit the Mortgage Principal on Which Interest Can Be Deducted to \$500,000**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+2.7	+3.0	+3.4	+3.8	+4.3	+17.2	+47.9

Source: Joint Committee on Taxation.

Historically, the tax code has treated investing in home ownership more favorably than it has treated other investments. One advantage is that the return from investing in one's own home is received as housing "services," which are not taxed; by comparison, the cash returns paid on most other direct investments (such as stocks, bonds, or an unincorporated business) must be included in taxable income. In other words, money invested in a home earns a tax-free return, whereas the return from money invested in most other assets is subject to tax.

A second advantage to home ownership is that home mortgage interest may be deducted from taxable income. With most other investments, when an investor borrows additional funds to complement his or her equity investment, the interest on that borrowing is deductible only up to the amount of taxable return that the project earns. Allowing the deduction of mortgage interest on one's home when the return on the home is not taxed effectively subsidizes, by the amount of the tax savings, the cost of borrowing against one's home.

Current law limits deductions of the interest on large mortgages. Taxpayers may deduct interest on up to \$1 million of debt that they have incurred to buy, build, or improve first or second homes. They may also deduct interest on up to \$100,000 of other loans that they have secured with a home (for example, a home-equity loan), regardless of the loan's purpose.

This option would reduce the amount of principal eligible for the mortgage interest deduction from \$1 million to \$500,000. In 2006, that cut would trim deductions for 700,000 taxpayers with large mortgages and increase revenues by \$2.7 billion. In 2010, it would pare deductions for 1.3 million large-mortgage taxpayers and increase revenues by \$4.3 billion. Taxpayers subject to the limit would account for less than 1 percent of all homeowners and about 3 percent of new buyers. The number of peo-

ple affected would be greatest in high-cost areas, such as Honolulu, Los Angeles, New York City, and San Francisco.

Owners who had enough other wealth to reduce their mortgage debt to the \$500,000 limit could avoid paying additional taxes and so retain their tax advantage at its current level. Experience in Great Britain, Canada, and Australia—countries that allow little or no deduction for mortgage interest—suggests that many affected owners could reduce their mortgage borrowing to the option's lower limit.

The deduction for mortgage interest contributes to the incentive to become a homeowner for people who need to borrow to buy a home and who benefit from itemizing their deductions. The deduction also encourages people to purchase larger homes than they would otherwise have bought. Increasing home ownership, advocates say, contributes to social and political stability by strengthening people's stake in their communities and governments. In addition, home ownership may bolster neighborhoods because it makes moving more difficult and motivates people to maintain their homes. Individuals typically will not consider those benefits to the community when deciding whether to rent or own, so a subsidy to promote home ownership may tilt people's decisions in the direction of the community's interest.

Limiting the deductibility of interest to the amount on loans of \$500,000 would still leave the purchasers of more expensive homes with a sizable incentive to become homeowners: at a mortgage rate of 6 percent, they could deduct up to \$30,000 of interest. Most people with the financial means to buy a home that costs more than \$500,000 are likely to conclude that that incentive, along with the remaining tax advantages and other benefits of ownership, is a sufficient reason to make the purchase. (Indeed, Canadians, who have no such incentive, achieve

about the same rate of home ownership as do people in the United States.)

Lessening the inducement to borrow for home purchases could direct more savings to investments in business enterprises whose returns were taxable and, in some cases, to investments in education and training. About 35 percent of net private investment since 1980 has gone into owner-occupied housing. Consequently, less investment in owner-occupied housing, even just within the market for larger homes, could noticeably boost investment in other sectors and increase the nation's productivity.

An abrupt lowering of the amount of interest that could be deducted might have adverse effects that could be ameliorated by phasing in this option. A sudden drop would reduce home values, mortgage lending, and home building at the top end of the housing market. By contrast, gradually reducing the limit would allow more time for all of the market's participants to adjust. In growing areas, prices would eventually return to more typical levels as rising incomes and population brought back the demand for larger homes. In areas without growth, the cuts in prices could be long-lasting. If price reductions persisted, current owners who had to sell to move elsewhere

would be hurt, but new buyers in the area would be helped.

The administration of the existing limits on mortgage interest deductions or of the limit under this option could be simplified by directly capping the amount of interest that could be deducted. With that approach, homeowners would not need to distinguish between the amounts they borrowed that were used to buy, build, or improve a first or second home versus the money they borrowed for other purposes. The Internal Revenue Service could enforce such a limit simply by comparing the deductions that taxpayers claimed with the amount of mortgage interest reported by their lender (or lenders). Limiting the deduction of mortgage interest would, however, shift more of the burden of changes in interest rates onto home buyers and away from the government. For example, if the interest deduction was limited to \$30,000—the amount that a homeowner with a loan of \$500,000 and an interest rate of 6 percent could deduct in the first year—and interest rates rose to, say, 12 percent, a person taking out a new \$500,000 mortgage would pay \$60,000 in interest but still only deduct \$30,000 from taxable income.

RELATED OPTIONS: Revenue Options 9, 11, and 12

## Revenue Option 11

### Limit Deductions of State and Local Taxes to the Amount Exceeding 2 Percent of Adjusted Gross Income

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+2.9	+11.5	+11.6	+11.6	+12.0	+49.6	+170.2

Source: Joint Committee on Taxation.

In determining their taxable income, taxpayers may either claim a standard deduction or itemize certain expenses and deduct them from their adjusted gross income (AGI). Such expenses include state and local taxes on income, real estate, and personal property. The Working Families Tax Relief Act of 2004 (WFTRA) changed the treatment of state and local sales taxes, which previously were not deductible. Under WFTRA, taxpayers now have the option, in 2004 and 2005, of deducting either their state and local sales taxes or their state and local income taxes.

For taxpayers who itemize, those deductions are essentially a federal subsidy for state and local tax payments. As such, the deductions indirectly help support increased spending by state and local governments at the expense of other uses of federal revenues. This option would establish a floor for deductions of state and local tax payments, limiting them to the amount in excess of 2 percent of a taxpayer's AGI.

One of the arguments made for allowing taxpayers to deduct state and local tax payments is that the practice helps lessen the effect of differences in taxes among the states. This option would continue some of that mitigating effect and increase federal revenues by about \$49.6 billion over the 2006-2010 period. An alternative approach would be to prohibit deductions for payments above a fixed ceiling, which might also be a percentage of AGI. A ceiling of 6.05 percent of AGI, for example, would increase revenues by about the same amount. However, a floor and a ceiling would have very different effects on the incentive that the current deduction now provides for state and local governments' spending. A floor would re-

duce that incentive by very little, whereas a ceiling would reduce it to a substantial degree.

As a way to assist state and local governments, the deductibility of state and local taxes has several disadvantages. First, it benefits only taxpayers who itemize their expenses and not people who claim the standard deduction. Second, because the value of an additional dollar of deductions increases with the marginal tax rate (the rate on the last dollar earned), the deductions are worth more to taxpayers in higher income tax brackets than to those in lower brackets. Third, deductibility favors wealthier communities, which have more residents who itemize than lower-income communities have. Because deductibility benefits only people who itemize and wealthier communities have a greater proportion of such taxpayers, public spending in those localities receives a bigger federal subsidy. Fourth, deductibility may deter states and localities from financing services with nondeductible user fees, thereby discouraging more-efficient pricing of some services.

One argument against restricting deductibility is based on equity. A taxpayer with a large liability for state and local taxes is less able to pay federal taxes than a taxpayer with the same total income and a smaller state and local tax bill. In some localities, however, a taxpayer who pays higher state and local taxes may also benefit from more publicly provided services, such as recreational facilities. That equity-based argument presumes that taxpayers do not benefit from spending by state and local governments, yet much of that spending is for goods and services that are consumed by all taxpayers. In effect, such collectively consumed goods are analogous to private consumption, the costs of which are not deductible.

## Revenue Option 12

### Limit Deductions for Charitable Giving to the Amount Exceeding 2 Percent of Adjusted Gross Income

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+6.4	+16.5	+17.8	+19.2	+20.6	+80.5	+208.9

Source: Joint Committee on Taxation.

Current law allows taxpayers who itemize to deduct the value of contributions they make to qualifying charitable organizations up to a maximum of 50 percent of their adjusted gross income (AGI) in any year. The deduction thus lowers the after-tax cost of donating and so provides an incentive to contribute to charitable enterprises. In 2001, \$139 billion in charitable contributions was claimed on 39.4 million tax returns.

This option would limit the deduction for such contributions but retain a tax incentive for donating by allowing taxpayers to deduct only contributions that exceed 2 percent of their AGI. That approach would increase revenues by about \$6.4 billion in 2006 and about \$80.5 billion over the 2006-2010 period.

An argument for this option could be made on the basis of efficiency—that is, as a way to improve the allocation of society's resources. Some types of "goods" in a society are collectively consumed (an example is national defense); others (such as apples) are privately consumed. Because collectively consumed goods tend not to be provided in the private market, they are often supplied by nonprofit organizations, and the deduction for charitable contributions provides an incentive to taxpayers to sup-

port those organizations. But the deduction may provide too much encouragement—in which case nonprofit organizations will be supported to a greater extent than is desirable for the sake of efficiency. If itemizers who donate less than 2 percent of their income to such organizations tend to receive too much of an incentive for such gifts, then this option could reduce contributions to a more efficient level.

Under this option, however, total charitable giving would decline. The option would remove the incentive to donate for people whose contributions did not exceed the 2-percent-of-AGI threshold, and many of those taxpayers would reduce their contributions. People whose contributions exceeded the threshold would still have an incentive to give but would have slightly lower after-tax income (because of the smaller deduction), which could lead them to reduce their contributions by a small percentage. (That percentage reduction would probably be smaller than the drop for people whose contributions did not exceed the threshold.) In addition, establishing a floor of 2 percent for contributions would encourage taxpayers who planned to make gifts over several years to lump them together in one tax year to qualify for the deduction.

RELATED CBO PUBLICATIONS: *The Estate Tax and Charitable Giving*, July 2004; and *Effects of Allowing Nonitemizers to Deduct Charitable Contributions*, December 2002

**Revenue Option 13****Eliminate the Exclusion for Employer-Sponsored Dependent Care and the Child and Dependent Care Credit**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.7	+2.7	+2.6	+2.6	+2.5	+11.1	+23.0

Source: Joint Committee on Taxation.

The tax system provides two types of assistance for working taxpayers who incur expenses for child and other dependent care: a tax exclusion (the amount of the expenses are “excluded” from the income paid to an employee for the purpose of calculating taxable income) or a tax credit, which is available only to people who do not use the employment-based exclusion. Eliminating both subsidies would increase revenues by \$0.7 billion in 2006 and \$11.1 billion from 2006 through 2010.

To receive the tax exclusion, a taxpayer’s employer must either provide child or dependent care directly or establish a qualified plan for offering it. As much as \$5,000 in child and dependent care expenses may be excluded from the taxable wages of employees. The maximum amount of the exclusion is limited to a taxpayer’s earnings or, in the case of married taxpayers, the wages of the lower-earning spouse.

Taxpayers who do not receive employment-based subsidies may claim a nonrefundable credit against their income tax. The credit is limited to expenses of \$3,000 for one dependent and \$6,000 for two or more dependents. As with the exclusion, the total amount of qualifying expenses may not exceed the earnings of the taxpayer or, in the case of a couple, those of the lower-earning spouse. The rate of the credit per dollar of qualifying expenses starts at 35 percent for taxpayers whose adjusted gross income (AGI) is \$15,000 or less; it phases down to 20 percent for taxpayers whose AGI is \$43,000 or more. For most taxpayers, the applicable credit rate is 20 percent, which results in a maximum credit of \$600 for one dependent and \$1,200 for two or more dependents. The current parameters of the child and dependent care credit were established in the Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA). If EGTRRA “sunsets” (expires) as scheduled in 2011, both the amount

of allowable expenses and the rate structure of the credit will revert to their lower, pre-EGTRRA levels.

Even though the credit and the exclusion subsidize the same activities, they provide significantly different benefits. For example, a high-income taxpayer with one child may receive an income tax reduction of up to \$1,750 under the employment-based exclusion but only \$600 under the credit. In addition, the exclusion reduces payroll taxes; the credit provides no such benefit.

A fairer tax system could be one positive outcome of this option. Both subsidies offer a benefit that is unavailable to taxpayers who have no children or other dependents or who stay at home to provide care. Taxpayers who are alike in other respects therefore face unequal tax burdens depending on whether or not they have dependents and on how they care for them. A tax system without subsidies for child and dependent care would treat all taxpayers similarly and would be less complex (because it would simplify taxpayers’ calculations of their tax).

Yet eliminating the exclusion might be inappropriate if dependent care was considered to be part of the cost of employment. The tax code permits some other employment-related expenses to be excluded from a person’s income. Moreover, research has shown that how much the secondary earner in a couple works—that is, the spouse with the lower of the two incomes—is particularly sensitive to tax rates. Both the exclusion and the credit lower the cost of working for taxpayers who care for dependents. Presumably, a secondary worker who stopped working would care for the dependents rather than pay someone else to do it. Consequently, eliminating those subsidies might lessen the labor force participation of those spouses.

**Revenue Option 14****Include Employer-Paid Life Insurance in Taxable Income**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+1.2	+2.0	+2.1	+2.2	+2.2	+9.7	+22.4

Source: Joint Committee on Taxation.

Many workers receive part of their compensation in the form of noncash employer-paid benefits that are not subject to either income or payroll taxes. For example, current law excludes from taxable income the premiums that employers pay for employees' group term life insurance, although it limits the amount that can be excluded to the cost of premiums for the first \$50,000 of insurance. (Self-employed people cannot exclude their premiums.) Of the noncash benefits that offer their recipients a tax advantage relative to compensation in cash, employer-paid life insurance is the third most expensive (after health insurance and pensions) in terms of diminished federal revenues. If premiums for employer-paid life insurance were included in employees' taxable income, as would occur under this option, individual income tax revenues would rise by \$5.7 billion from 2006 through 2010, and payroll tax revenues would increase by \$4 billion.

Excluding life insurance premiums from taxation has ramifications for both the efficiency and equity of the tax system. Like the tax exclusions for other employment-based noncash benefits, the exclusion for life insurance premiums creates an incentive that could induce people to purchase more life insurance than they would have bought if they had had to pay the full cost of it themselves. Furthermore, excluding premiums from taxation allows workers whose employers purchase life insurance

for them to pay less tax than workers who have the same total compensation but must purchase such insurance on their own.

Those factors, which argue in favor of this option, are reinforced by the relative ease with which the option could be implemented. The value of employer-paid life insurance, unlike the value of some other noncash benefits, can be accurately measured. As a result, employers could report the insurance premiums they paid for each employee on the employee's W-2 form and compute withholding in the same way as is done for wages. Indeed, employers already withhold taxes on the life insurance premiums they pay that fund death benefits above the \$50,000 limit.

Yet a tax incentive to purchase life insurance might be called for in certain circumstances. One such case might be if people bought too little life insurance because they systematically underestimated the potential financial hardship that their death might bring to their families. But even if too little life insurance was purchased in the absence of the tax exclusion for premiums, a more efficient way of encouraging people to buy insurance might be to extend the favorable tax treatment to all purchasers and avoid favoring only people whose insurance was provided by their employers.

**Revenue Option 15****Limit the Tax Exclusion of Employer-Paid Health Insurance Premiums**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+17.5	+30.3	+38.8	+48.6	+59.9	+195.1	+705.9

Source: Joint Committee on Taxation.

Employer-paid health insurance premiums, though part of many employees' total compensation, are exempt from payroll tax under FICA (the Federal Insurance Contributions Act) and from the individual income tax. For 2004, that exclusion from taxation will reduce revenues by a total of about \$145 billion. In addition to the exclusion of premiums paid by their employer, current law offers employees another tax advantage: spending from employer-sponsored flexible spending accounts (FSAs) and health savings accounts (HSAs) is also tax-exempt.

This option would limit the exclusion from taxation of both that income and of employer-paid health insurance premiums. Specifically, it would treat as taxable income for employees any contributions that employers or employees made for health insurance and health care costs (through accounts such as FSAs) that together exceeded \$720 a month for family coverage and \$310 a month for individual coverage. (The one exception would be individuals' contributions to HSAs, which would not be affected. HSAs may be used for health expenses but not insurance premiums.) The two ceilings, which are based on average premiums paid by employers in 2004, would not be indexed for inflation.

Over the 2006-2010 period, the option would increase income tax and payroll tax revenues by \$195.1 billion. Including employers' contributions for health care coverage in the Social Security wage base, however, would also increase future outlays for Social Security benefits over the long run.

A major advantage of eliminating the tax preference that encourages health insurance coverage above the ceilings is that such a change could make the markets for health insurance and health care more efficient. The two markets are closely linked. Current tax law provides incentives for health insurance plans to cover routine expenses in addition to large, unexpected costs, because those routine charges are subsidized only if they are paid through the insurance plan. That factor can drive up health care costs. Under this option, employees and their employers would have an incentive to economize, which could reduce upward pressure on health care prices and encourage the use of cost-effective types of medical care.

The option would have other benefits as well. It would reduce the incentive that firms have to offer special health care packages for top executives. In addition, it would create a more level playing field between employer-provided and other forms of health insurance, which might lead to a greater range of choices in the market for individual health insurance coverage. (The President's budget request for 2006 includes a provision that addresses that same issue, but rather than limiting tax benefits to employer-paid health insurance premiums, it would extend tax benefits to the purchase of health insurance by individuals.) If, as a result, health insurance was less likely to be tied to employment, the rates of coverage among people who were out of work or between jobs might be improved. Furthermore, since the ceilings would not be indexed to inflation, the benefits noted here would increase over time, as the tax exclusion effectively phased out. (The Congress has already limited the tax exclusion for employer-paid group term life insurance in a similar way.)



The option would, however, have some drawbacks. The fixed dollar limits would have disparate effects on employers. For example, the additional costs would be greatest for areas where health care was more expensive and for firms that offered generous health benefits. Limiting the subsidy for employer-paid insurance premiums would probably result in employees directly paying a larger share

of the premiums, which might induce some workers to forgo health insurance. Alternatively, the option might lead some firms to discontinue offering health insurance coverage. (However, firms that chose that course would pay higher wages or offer other benefits—in order to stay competitive in the labor market.)

RELATED CBO PUBLICATIONS: *How Many People Lack Health Insurance and For How Long?* (paper and brief), May 2003; and *Tax Treatment of Employment-Based Health Insurance* (testimony by Rosemary D. Marcuss, Assistant Director for Tax Analysis, before the Senate Finance Committee), April 1994

**Revenue Option 16****Include Investment Income from Life Insurance and Annuities in Taxable Income**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+10.9	+22.1	+22.7	+23.3	+23.9	+102.9	+244.1

Source: Joint Committee on Taxation.

Life insurance policies and annuities often combine features of both insurance and tax-favored savings accounts. (An annuity is a contract with an insurance company under which a person pays a single premium, or a series of premiums, and the company provides a series of fixed or variable payments to that person at some future time, usually during retirement.) The investment income from the money paid into life insurance policies and annuities, sometimes called inside buildup, is not taxed until it is paid out to the policyholder. If that accumulation is left to the policyholder's estate or used to finance life insurance (in the case, for example, of whole-life policies), it can escape taxation entirely. The tax treatment of inside buildup is similar to the treatment of capital gains.

Under this option, life insurance companies would inform policyholders annually—just as mutual funds do now—of the investment income that had been realized on their account, and people would include those amounts in their taxable income for that year. With that change, disbursements from life insurance policies and benefits from annuities would no longer be taxable when they were paid. The tax treatment of investment income under this option would match the treatment of income from a bank account, taxable bond, or mutual fund. Making such investment income taxable as it was realized would increase revenues by \$10.9 billion in 2006 and a total of \$102.9 billion from 2006 through 2010. By comparison, tax on the investment income from annuities

purchased as part of a qualified pension plan or qualified individual retirement account would still be deferred until benefits were paid.

By taxing the investment income from life insurance policies, this option would eliminate a tax incentive to buy life insurance, which might or might not be a useful plan. Encouraging purchases of life insurance would be useful if people systematically underestimated the financial hardship that their death would impose on spouses and families. That lack of foresight could cause them to buy too little life insurance or, similarly, too little annuity insurance to protect themselves against outliving their assets. Little evidence exists about how successful the current tax treatment is in reducing underinsurance.

A drawback of using tax-deferred savings as an incentive to purchase life insurance is that it provides no inducement to purchase term life insurance (because term insurance has no savings component). Under the assumption that some incentive to purchase insurance would, indeed, be a useful tool, an alternative approach might be to directly encourage people to purchase life insurance by giving them a tax credit for their insurance premiums or by allowing them to take a partial deduction for the premiums. (Annuities already receive favorable tax treatment through special provisions for pensions and retirement savings.)

RELATED OPTION: Revenue Option 14

**Revenue Option 17****Include in Adjusted Gross Income All Income Earned Abroad by U.S. Citizens**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.9	+4.1	+4.3	+4.5	+4.7	+18.5	+46.1

Source: Joint Committee on Taxation.

U.S. citizens who live abroad are required to file a tax return but may exclude from taxation some of the income they earn overseas—in 2005, up to \$80,000 for single filers and as much as \$160,000 for qualifying married couples. That tax exclusion, along with one for foreign housing and the usual personal exemptions and deductions, means that Americans residing abroad and earning close to \$100,000 may not incur any U.S. tax liability, even if they pay no taxes to the country in which they reside. Moreover, U.S. citizens with foreign-earned income above the exclusion amount receive a credit for taxes that they pay to foreign governments. The credit may eliminate tax liability on that income under the U.S. tax system.

This option would retain the credit for taxes paid to foreign governments but would require U.S. citizens who resided overseas to include in their adjusted gross income all of the income they earned abroad. Thus, under the option, Americans living in foreign countries that had tax rates higher than those in the United States would generally not owe U.S. tax on their earned income, whereas those living in relatively low-tax countries could have some U.S. tax liability. The option would increase revenues by \$0.9 billion in 2006 and \$18.5 billion over the 2006-2010 period.

Proponents and opponents of this option differ on issues of equity and efficiency. Proponents argue that U.S. citizens should pay U.S. taxes under this country's tax system because they still receive the benefits of citizenship, even as foreign residents. Supporters of the option also maintain that U.S. citizens with similar income should incur similar tax liabilities, regardless of where those citizens live, and they note the unfair advantage gained by individuals who move to low-tax foreign countries to escape U.S. taxation yet retain their American citizenship. Proponents also point out that the existing provision could be viewed as a subsidy to corporations that employ U.S. citizens abroad—because the corporations can pay those employees less than they would pay them in the United States to earn the same after-tax income. Moreover, eliminating the exclusion for foreign-earned income would lessen the complexity of the tax code.

By contrast, opponents of this option note that U.S. citizens who live in other countries do not receive the same services that U.S. residents receive from their government. They also argue that the exclusion of foreign-earned income makes it easier for U.S. multinational firms to find American employees who are willing to live and work abroad.

**Revenue Option 18****Include Social Security Benefits in Calculating the Phaseout of the Earned Income Tax Credit**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues <sup>a</sup>	*	+0.2	+0.2	+0.2	+0.2	+0.8	+2.0

Source: Joint Committee on Taxation.

Note: \* = added revenues of less than \$50 million.

a. Includes outlay savings.

Under current law, the earned income tax credit (EITC) phases out as the larger of a taxpayer's earned income or adjusted gross income (AGI) exceeds a certain threshold. The tax code, however, excludes most income from government transfer programs (such as Social Security) from a person's AGI. Consequently, low-income families that receive sizable transfer payments can claim the EITC with the same total income that will reduce or deny the credit to otherwise comparable families who include all of their income in their AGI. The tax code already requires some Social Security benefits to be counted as income: up to 85 percent of any benefits received by single taxpayers with income above \$25,000 or by joint filers with income above \$32,000 must be included in AGI. This option would require taxpayers to include all Social Security benefits in a modified AGI that would be used for phasing out the EITC. The change would increase federal revenues and decrease outlays for the credit by \$800 million over the 2006-2010 period.

One argument in support of this option is that if it was implemented, it would make the EITC fairer. Counting all Social Security benefits in calculating the credit's phaseout would give the same EITC to low-income taxpayers who receive such benefits and claim the credit as that given to otherwise comparable taxpayers whose income is derived entirely from sources that are fully included in their AGI. In addition, because the Internal Revenue Service (IRS) already receives information on taxpayers' Social Security benefits, the administration of

this option would require only minor procedural changes.

But under this option, some income from transfers would still be excluded from the modified AGI. Hence, the option would not completely resolve the problem that families with the same total income might receive different credits. The IRS currently does not collect information on most forms of taxpayers' transfer income other than Social Security benefits. As a result, requiring taxpayers to count all such income would substantially expand the information reported to the IRS, markedly increasing both taxpayers' costs of compliance (for example, time spent filling out forms) and the IRS's administrative costs. Furthermore, because most transfer income that is not included in a taxpayer's AGI is from means-tested programs (which tie an individual's eligibility for benefits to a test of need based on income and assets), counting all transfers in phasing out the EITC would offset, at least in part, the goal of providing support to low-income recipients.

Another consideration is that counting Social Security benefits in phasing out the EITC would increase the costs of compliance for Social Security recipients who claimed the credit. Moreover, it would further complicate the already complex form such taxpayers must complete. Those outcomes would run counter to recent efforts to simplify the procedures for claiming the earned income tax credit.

## Revenue Option 19

### Substitute a Tax Credit for the Exclusion of Interest Income on State and Local Debt

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.3	+0.6	+0.9	+1.4	+1.7	+4.9	+18.6

Source: Joint Committee on Taxation.

The tax code allows owners of state and local bonds to exclude the interest they earn on that debt from their gross income and thus from income taxation. As a result, state and local governments pay lower rates of interest on such bonds than would be paid on bonds of comparable risk whose interest was taxable. The revenues that the federal government forgoes each year exceed \$32 billion and effectively pay a portion of the costs that state and local governments incur when they borrow.

This option would replace the exclusion of interest income from new issues of state and local debt with a tax credit that, unlike most credits, would be included in taxpayers' adjusted gross income. Under the option, a bondholder would receive a taxable interest payment from the state or local government that issued the bond plus a federal tax credit that would give the bondholder an after-tax return that was comparable to the return provided by a tax-exempt bond. The option would retain restrictions (such as those on arbitrage earnings) that now apply to the issuance of tax-exempt bonds by state and local governments. It would increase revenues by \$0.3 billion in 2006 and \$4.9 billion over the 2006-2010 period.

Switching to a tax credit rather than continuing to exclude the interest paid on state and local debt from the gross income of bond purchasers would have several positive features. It could reduce the borrowing costs of state and local governments by a percentage similar to the re-

duction that the tax exclusion now provides but with a smaller reduction in federal revenues. (The drop in revenues would be smaller because switching to a credit would eliminate gains that bondholders in higher tax brackets receive that exceed the investment return necessary to induce them to buy the bonds.) Another argument for switching to a tax credit is that its size could be varied to allow the Congress to adjust the extent of the federal subsidy—on the basis of its perceived benefit to the public—for different categories of state and local government borrowing. However, substituting a tax credit for the exclusion would keep the federal subsidy akin to an entitlement; that is, it would not automatically be subject to annual Congressional scrutiny.

Another effect of switching to a tax credit is that it might raise the interest rate that state and local governments pay to borrow. For example, it would lower the bonds' after-tax returns for people who are subject to higher marginal tax rates and thus lead them to buy fewer bonds. (The marginal rate is the rate on the last dollar of income.) If that drop in demand for bonds was not offset by increased demand from other investors, the cost of state and local governments' borrowing would be reduced by a smaller percentage than it currently is, and interest rates on state and local debt would rise. Paying higher rates for borrowing could lead state and local governments in turn to reduce their spending on capital facilities.

RELATED CBO PUBLICATION: *Tax-Credit Bonds and the Federal Cost of Financing Public Expenditures*, July 2004

**Revenue Option 20****Tax Social Security and Railroad Retirement Benefits Like Private Pensions**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+9.0	+22.1	+23.3	+24.1	+25.1	+103.6	+279.2

Source: Joint Committee on Taxation.

Under current law, most benefits from the Social Security and Railroad Retirement programs are treated preferentially—that is, they are not subject to taxation. Recipients pay tax only if the sum of their adjusted gross income, their nontaxable interest income, and one-half of their Social Security and Tier I Railroad Retirement benefits exceeds a fixed threshold. If that total is more than \$25,000 for a single taxpayer or \$32,000 for a couple filing jointly, up to 50 percent of the benefits are taxed. Above a second set of thresholds—\$34,000 for single and \$44,000 for joint filers—as much as 85 percent of the benefits are taxed. Together, those levels constitute a three-tiered structure for taxing benefits.

Distributions from private pension plans are taxable unless those payments represent the recovery of an employee's after-tax contributions, or "basis." Each year, a certain percentage of a recipient's distribution is deemed to be nontaxable basis recovery. That percentage, which is determined in the first year in which distributions begin, is based on the cumulative amount of after-tax contributions and the recipient's life expectancy. Once the individual has recovered his or her entire basis tax-free, all subsequent distributions are fully taxed.

A basis exists for Social Security and Railroad Retirement recipients as well, because employees pay 50 percent of the payroll taxes that support those programs out of their after-tax income. (A basis also exists for self-employed people, who pay 100 percent of payroll taxes but who can deduct only half of those payments on their income tax

returns.) This option would tax all Social Security and Railroad Retirement benefits in excess of that basis, which could be recovered in the same manner as that applied to private pensions. Under such an approach, the percentage of benefits subject to tax would exceed 85 percent for the overwhelming majority of recipients, and revenues would increase by \$103.6 billion between 2006 and 2010.

This option would make the tax system more equitable in at least two ways. First, it would eliminate the preferential treatment that the tax code now accords to Social Security benefits but not to private pension benefits—both the slight preference given to higher-income taxpayers and the much larger preference accorded to low- and middle-income taxpayers. Second, it would treat elderly taxpayers in the same way that nonelderly taxpayers with comparable income are treated. In addition, the option would make preparing tax returns for elderly people substantially simpler.

Set against the option's seemingly positive features, however, are several drawbacks. One is that more elderly people would have to file tax returns than now file under current law. In addition, retirees might feel that an increase in taxes on benefits violates the implicit promises of the Social Security and Railroad Retirement programs. Furthermore, calculating the percentage of each recipient's benefits that is to be excluded from taxation would impose an additional burden on the Social Security Administration.

## Revenue Option 21

### End the Preferential Treatment of Dividends Paid on Stock Held in Employee Stock Ownership Plans

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.5	+1.0	+1.1	+1.1	+1.2	+4.9	+12.6

Source: Joint Committee on Taxation.

Employee stock ownership plans (ESOPs) are a form of retirement plan that provides more tax advantages than do other qualified plans. Employers' contributions to ESOPs are typically in the form of company stock, and employers can deduct such contributions, like those made to other qualified retirement plans, from their firms' taxable income. But employers with ESOPs have an additional tax advantage relative to those without such arrangements in that they may also deduct the dividends paid on stock held in an ESOP if:

- The dividends are paid directly to the ESOP's participants;
- The dividends are paid to the plan itself but distributed to the participants within 90 days of the end of the plan year;
- The dividends are paid to the plan but reinvested in additional company stock; or
- The dividends are paid to the plan and used by it to repay loans with which the stock was originally purchased.

Another advantage associated with ESOPs is that the tax on capital gains from the sale of the sponsoring company's stock to such a plan can be deferred, under certain circumstances. Among the conditions that must be met are the following:

- The stock cannot be publicly traded;
- The sponsoring company must be a subchapter C corporation (that is, subject to the corporate income tax); and
- The proceeds of the sale must be invested in the stock of another U.S. company.

Eliminating the tax advantages that are now accorded to ESOPs—which in effect would render them indistinguishable from other qualified retirement plans—would increase revenues by \$4.9 billion between 2006 and 2010.

ESOPs were designed to encourage a corporation and its shareholders to contribute or sell stock to the company's employees. A rationale for retaining the tax advantages of ESOPs is that employees' ownership of stock directly links their financial interests to their productivity. That is, greater productivity translates into higher profits for the company and thereby increases the value of the employees' stock. To the extent that the incentive of stock ownership works as intended, ESOPs help promote increased productivity among workers.

Several arguments, however, can be mustered against the preferential tax treatment of ESOPs. First, it results in similar dividend payments having different tax consequences for different companies, and the rationale for such disparate treatment—namely, a link between employees' ownership of their company's stock and their productivity—has not been clearly established. Second, it hinders the diversification of employees' retirement portfolios because the assets of an ESOP, by design, consist primarily of shares of the employer's stock. If the price of the company's stock dropped, employees' wealth in retirement might be substantially less than if they had been permitted to diversify their investments—as participants in a typical 401(k) retirement plan can. A third argument against retaining the preferential tax treatment accorded to ESOPs is that the plans have occasionally been used for purposes for which they were not intended. (For example, they can be used to ward off hostile takeovers by placing large numbers of shares in friendly hands.)

**Revenue Option 22****Disallow Further Deductible Contributions to Traditional IRAs, But Allow Contributions of \$5,000 to Roth IRAs Regardless of Income**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+2.5	+5.5	+5.9	+5.1	+3.5	+22.5	+23.4

Source: Joint Committee on Taxation.

Under current law, most employed individuals and their spouses may contribute up to \$4,000 annually (more, if they are age 50 or older) to either a traditional individual retirement account (IRA) or a Roth IRA. The limits are scheduled to increase to \$5,000 by 2008 and then drop to \$2,000 in 2011. If neither the contributor nor the contributor's spouse is covered by an employer's pension plan or if their combined income is below certain thresholds, their contributions to traditional IRAs may be deducted from their gross income—and thus are not taxed when they are made. When those contributions are withdrawn, however, they and any earnings on them are fully taxable. (Because people benefit from the tax advantages of traditional IRAs at the front end of the process—namely, when the contributions are made—such plans are sometimes called front-loaded.)

In contrast, contributions to Roth IRAs (which are limited to taxpayers whose income falls below certain thresholds) are never deductible—but neither are withdrawals from those accounts taxable. (Because the tax advantages of Roth IRAs are realized at the back end of the process—when the funds are withdrawn—such plans are sometimes referred to as back-loaded.) Owners of traditional IRAs whose income is below \$100,000 can convert their traditional account to the Roth format but must pay tax on the converted amount.

This option (which is similar to the proposal for retirement savings accounts in the President's budget request for 2006) would disallow any further contributions to traditional IRAs, remove the income restrictions on contributions to Roth IRAs, immediately (and permanently) increase the limit on contributions to Roth accounts to \$5,000, and begin indexing that limit for inflation. The income restrictions on conversions to Roth accounts would also be removed, and people who converted their traditional IRAs during the first year that the option was

in effect would be allowed to spread their resulting tax liability over four years. The option would increase revenues by \$22.5 billion between 2006 and 2010 but only by \$0.9 billion between 2011 and 2015.

The increase in revenues in the early years in which the option was in effect would come from the taxes paid on conversions and the immediate loss of tax deductions by people who currently contribute to traditional IRAs. However, that increase would be temporary. Most conversions of traditional IRAs would occur in the first possible year following the option's implementation because taxes on the accounts' contributions could be prorated over the next four years. After that, revenues from that source would drop sharply. Furthermore, the value of not permitting tax deductions for contributions to IRAs would plunge beginning in 2011, when the limits on contributions revert to \$2,000. That scheduled reduction in the limit on contributions, combined with the loss in revenues from no longer taxing withdrawals, would result in reduced revenues after the eighth year—which is why the 10-year increase in revenues (\$23.4 billion) is virtually the same as the gain over the first five years (\$22.5 billion). Over a longer time horizon, the loss of taxable withdrawals would dominate any gain from disallowing deductions, and the option's cumulative effect on revenues would be negative.

A rationale for this option is that it could boost private saving, for at least two reasons. First, it would accelerate increases in the limits on contributions to tax-favored accounts and maintain them at a higher level than the limits that apply under current law. Second, it would channel all contributions into back-loaded plans, which provide greater tax advantages—and hence more of an incentive to save—than do front-loaded plans that receive the same level of contributions (because taxes must still be paid out of a front-loaded plan's assets but not out



of those of a back-loaded plan). In addition, the option would simplify people's decisions about saving by eliminating the need to choose among different types of savings plans.

Yet whether tax incentives truly increase private saving is uncertain, particularly among individuals who might save as much as \$5,000 per year. Moreover, some observers believe that an immediate tax deduction is more likely to stimulate saving than the prospect of tax-free withdrawals in the future. A further advantage of retaining the current approach to IRAs is that people whose tax rate was likely to drop after they retired would be better off with a front-loaded plan. This option would deny them the opportunity to use one.

Eliminating the income thresholds that govern participation in back-loaded accounts and converting IRAs from front-loaded to back-loaded plans could have several benefits. One gain from such a policy is that it would lessen the complexity of the tax code, which in turn might reduce taxpayers' errors and also help allocate resources more efficiently (by improving people's understanding of the tax consequences of their decisions). A rationale for retaining the income thresholds, however, is their ability to limit the tax benefits realized by high-income people, who would probably save as much even without the incentive of such benefits.

**Revenue Option 23****Consolidate Tax Credits and Tax Deductions for Education Expenses**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	*	-0.1	-0.1	*	**	-0.2	-3.9

Source: Joint Committee on Taxation.

Note: \* = reduced revenues of less than \$50 million; \*\* = added revenues of less than \$50 million.

Over the past several years, the federal government's support of postsecondary education through the tax system has grown in magnitude and complexity. Today, taxpayers benefit from the following credits and deductions:

- The nonrefundable Hope credit, which provides a maximum benefit of \$1,500 for qualifying tuition and fees. The credit is offered on a per-student basis and can be used by the taxpayer, the taxpayer's spouse, and dependents. (The student's expenses that are claimed under the credit must apply to the first two years of a postsecondary degree or certificate program, and the student must be enrolled at least half-time.)
- The nonrefundable Lifetime Learning credit, which has a maximum benefit of \$2,000 for qualifying tuition and fees (that is, a subsidy rate of 20 percent for each dollar of qualifying expenses up to a maximum of \$10,000). Each tax filer may take only one Lifetime Learning credit per year. Like the Hope credit, the Lifetime Learning credit applies to the taxpayer, the taxpayer's spouse, and dependents. But unlike the Hope credit, it can be used for postsecondary education beyond the first two years and not just by those who are attending school half-time or more.
- A deduction of \$4,000 for qualifying postsecondary education expenses, which is available to taxpayers whose adjusted gross income (AGI) does not exceed certain thresholds (\$65,000 for single filers and \$130,000 for married couples filing jointly). A deduction of \$2,000 is available for single filers whose AGI does not exceed \$80,000 and joint filers whose AGI is less than \$160,000. (The deduction is set to expire after 2005.)
- A maximum deduction of \$2,500 for interest paid on student loans.

Qualification for those credits and deductions is limited by a number of factors in addition to those already noted. Each of the benefits phases out as a taxpayer's income rises above a certain point, but the beginning of the phaseout range for the credits is lower than that for the education deduction. A taxpayer cannot take both that deduction (up to \$4,000) and a tax credit. People who claim the deduction for the most part are those who are not eligible for a credit because of the income phaseout (the deduction phases out at a higher level of income). However, the benefit that people receive from tax credits is generally (but not always) larger than that for the deduction.

This option, which is similar to one of the President's budgetary proposals for 2005, would combine the benefits provided for higher education into two tax credits.<sup>1</sup> Thus, it would amend the Hope and Lifetime Learning credits and eliminate the higher education and student loan interest deductions. However, it would include student loan interest of up to \$2,500 as a qualifying tuition expense under the Lifetime Learning credit and allow that expense to be claimed by each student rather than by each tax filer. In addition, the option would raise the starting point of the phaseout range for both tax credits to \$50,000 for single filers and \$100,000 for joint filers. Once that point was reached, every dollar of the credit would be reduced by 5 percent of the difference between the taxpayer's modified AGI and the phaseout's starting point.<sup>2</sup> So for a single filer who qualified for a \$2,000 Lifetime Learning credit, the credit would be fully phased out at an AGI of \$90,000. After 2006, the phaseout

1. Department of the Treasury, *General Explanations of the Administration's Fiscal Year 2005 Revenue Proposals* (2004), pp. 93-94.

2. For most people, modified AGI is the same as AGI. Modified AGI begins with AGI as the base and then includes certain tax exclusions and deductions.

ranges would be indexed for inflation. The option would reduce revenues by \$0.2 billion over the 2006-2010 period.

An advantage of this option is that it would simplify the tax preferences provided for higher education. On average, taxpayers would benefit more under the option than under current law, although some taxpayers would benefit less. Under current law, taxpayers receive a credit of 20 percent for qualifying education expenses. For taxpayers

whose marginal rates were greater than 20 percent (the marginal rate is the rate of tax on the last dollar of income), substituting the Lifetime Learning credit for the education deduction or the deduction for interest on student loans, as this option would do, could result in lower benefits. For example, under current law, someone with a marginal tax rate of 25 percent who was paying \$1,000 in student loan interest would receive a benefit of \$250. Under this option, which would substitute the credit for the deduction, the benefit would be \$200 (or \$50 less).

RELATED PUBLICATION: *Private and Public Contributions to Financing College Education*, January 2004

## Revenue Option 24

### Integrate Corporate and Individual Income Taxes Using the Dividend Exclusion Method

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	-3.0	-3.4	-5.1	-16.9	-16.3	-44.7	-266.0

Source: Joint Committee on Taxation.

Income generated by the activities of corporations is taxed in varying ways, depending on the type of corporation and the form in which the income is paid out. Some of the income of corporations is taxed twice—first, as profits (under the corporate income tax) and second, as dividends and capital gains on corporate stock (under the individual income tax). At the same time, income in the form of interest on corporate bonds and the profits of Subchapter S corporations is not subject to the corporate tax but only to the individual income tax. Conversely, some corporate earnings are subject to taxation primarily under the corporate income tax but have little or no tax imposed under the individual income tax—because taxes on capital gains on stock can be deferred until the gains are realized (when the stock is sold). Because investors face different effective tax rates depending on the organizational form of the business in which they are investing, the corporate and individual income taxes are said to be nonintegrated.

That lack of integration reduces economic efficiency (the relationship between total resources used and the social benefits they generate) in a number of ways. It distorts the choice that business owners make between organizing and maintaining a business enterprise as either a C corporation (basically, a firm that is subject to the corporate tax) or an S corporation or noncorporate form, such as a partnership or proprietorship (neither of which faces the corporate tax). It also distorts the choice that corporations make between borrowing and issuing stock to finance investment (because interest, unlike dividends, is deducted from the corporation's income and thereby reduces its taxes). Further, it distorts the corporation's choice between paying dividends and reinvesting earnings (because reinvested earnings increase the value of the corporation's stock, the gain from which is taxed only when the stock is sold, if ever). Finally, the additional levy raises the overall taxation of income from capital, which dis-

torts the choice that people make between saving and consuming. The costs to economic efficiency from those distortions are significant, with the loss in society's well-being estimated to equal about one-quarter to three-quarters of a percent of the value of households' consumption.

Policymakers could integrate the two income taxes in a variety of ways. They could subject all corporate earnings to the individual income tax (the way the earnings of an S corporation are treated); they could exclude stock dividends and capital gains from individual taxation; they could allow corporations to deduct dividends from their corporate taxable income; or they could subject all business income to a tax at the firm level and impose no tax on the income at the individual level. However, integration cannot be achieved simply by eliminating the corporate tax—that is, without any other changes to the tax system. Significant efficiency costs would persist because without the corporate tax, stockholders would defer (and in some cases avoid altogether) paying tax on corporate earnings that are not distributed as dividends.

As part of the President's 2004 budget, the Administration proposed to integrate the two income tax systems by changing the treatment of some dividends and capital gains. Under that proposal, individual taxpayers could exclude from their taxable income dividends and capital gains that had already been taxed as profits at the corporate level—provided those dividends and gains resulted from earnings that the corporation received after the proposal had been enacted into law. Instead of adopting the Administration's approach, policymakers in 2003 (in the Jobs and Growth Tax Relief Reconciliation Act, or JGTRRA) lowered the rate of tax on dividends and capital gains. Those lower rates expire at the end of 2008. (See Revenue Option 3 for the costs associated with extending those provisions.)

This option would permanently substitute the President's 2004 proposal for the rate reductions enacted in JGTRRA, thus returning to their pre-2003 levels the statutory tax rates on dividends and capital gains that have not been taxed at the corporate level. The option would reduce revenues by \$3.0 billion in 2006 and \$44.7 billion over the 2006-2010 period. The change would be permanent, whereas the current rates on dividends and capital gains that it would replace are temporary. (The cost of the option would be different if those rates were assumed to be permanent.)

The option's principal advantage is that it will more completely and consistently integrate the corporate and individual income taxes. The reduced tax rates on dividends and capital gains that currently apply still subject some corporate profits to additional taxation under the individual income tax. Moreover, the lower rate on gains that was enacted in JGTRRA applies to capital gains not only on corporate stock but also on other assets. The effect of that broad scope is to worsen other distortions in the tax code—a defect that would not arise under this option. Furthermore, because JGTRRA's rate reductions are

scheduled to expire after 2008, much of the potential gain in efficiency that integration could bring by reallocating capital might not be realized under current law.

The main disadvantage of the option is its complexity. In order to limit the amount of forgone revenues, not all dividends and gains would be eligible for the exclusion—only those that resulted from earnings subsequent to the option's enactment into law. That limitation would require firms to maintain accounts and inform stockholders of the amounts of dividends and gains that they could exclude from their income—bookkeeping responsibilities that could turn out to be burdensome. In addition, the gains in efficiency that would result from this option would be less than those typically expected from integration because the option is not budget neutral. Finally, although the lower rates enacted in 2003 represented an incomplete integration of the two taxes, they substantially decreased the tax differentials that give rise to the distortions associated with the two levies' lack of integration. Hence, simply making the rates permanently lower would achieve many of the efficiency gains that full integration could bring but with much less complexity.

## Revenue Option 25

### Set the Corporate Tax Rate at 35 Percent for All Corporations

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+2.4	+4.9	+5.0	+5.0	+5.0	+22.3	+49.5

Source: Joint Committee on Taxation.

Under current law, so-called C corporations pay taxes on their income according to a progressive schedule of four statutory marginal tax rates: 15 percent, 25 percent, 34 percent, and 35 percent. (The marginal rate is the percentage of an extra dollar of taxable income that a corporation must pay in taxes.) This option would tax all corporate taxable income at the single statutory rate of 35 percent, raising \$2.4 billion in revenues in 2006 and a total of \$22.3 billion from 2006 through 2010.

The tax code's current structure applies different rates to different portions of a firm's income. Corporate taxable income below \$50,000 is subject to the 15 percent rate; the system taxes income from \$50,000 to \$75,000 at 25 percent and income from \$75,000 to \$10 million at 34 percent. Taxable income in excess of \$10 million is subject to the top rate of 35 percent. In addition to those explicit rates, corporate taxable income between \$100,000 and \$335,000 faces a further tax of 5 percent; an additional 3 percent tax is levied on income between \$15 million and \$18.3 million. Those additional taxes effectively phase out the benefit of the progressive structure for corporations with income above certain amounts. For example, a firm with taxable income of \$18.3 million or more pays an average tax of 35 percent—despite the lower rates it pays on the first \$10 million. Thus, this option would not affect the taxes that those firms pay.

Nor would it affect firms that operate as an S corporation or as a limited liability company (LLC). Owners of such enterprises pay tax on their total business income but at the rates of the individual income tax.

The government taxes the earnings of C corporations once at the corporate level and then again at the individual level if the firms distribute their earnings to shareholders. The progressive rate schedule for the corporate income tax was designed in part to lessen the effect of

that “double taxation,” thus encouraging entrepreneurship and providing some tax relief to businesses with small and moderate levels of profit. Of the approximately 1 million corporations that have positive corporate tax liabilities each year, all but a few thousand benefit from the schedule's reduced rates. (However, because those firms earn only about 20 percent of all corporate taxable income, the effect on revenues of the reduced rates is not that great.)

An argument supporting this option is that many of the corporations that benefit from the current rate structure are not small or medium-sized firms, which goes against the original rationale for the rates' progressivity. For example, under current law, large corporations can reduce their taxable income for certain years by sheltering some of it or by controlling when they earn income and incur expenses. The current system also allows individuals to shelter income by retaining earnings (rather than paying them out as dividends) in a small corporation. (That benefit does not apply to owners of personal services corporations, such as physicians, attorneys, and consultants, whose firms are taxed at a flat rate of 35 percent.)

Another argument against maintaining the current progressive rate structure for corporate taxation is that it favors firms that may have relatively low profits because they are inefficient. Except in the case of new or small firms, low profits may imply a small return on a firm's capital investment.

A disadvantage of this option is that it might have some repercussions on how firms raised capital. Replacing the current rate structure with the single rate of 35 percent would make debt financing more attractive than equity financing for firms that were benefiting from the lower rates.

## Revenue Option 26

### Repeal the “Lower of Cost or Market” Inventory Valuation Method

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.3	+0.7	+0.7	+0.7	+0.5	+2.9	+3.7

Source: Joint Committee on Taxation.

Firms that use the first-in, first-out approach to identifying inventory receive a tax advantage under current law because they can employ the “lower of cost or market” (LCM) method of inventory valuation. That method allows firms to deduct from their taxable income unrealized year-end losses on items in their inventory that have declined in value. (The losses are unrealized because the items have not actually been sold.) For items that have increased in value, firms may defer taxes on unrealized gains until the year in which the items are sold. Similarly, goods in a firm’s inventory that cannot be sold at normal prices because of damage, imperfections, or similar problems qualify for the subnormal goods method of inventory valuation. That approach allows firms to immediately deduct the loss in value, even if in later years the firm may sell those goods and realize a profit on them.

This option would repeal, over a three-year period, the LCM and subnormal goods methods of inventory valuation and require all firms to value their inventories according to their cost. (Under the cost valuation method, firms generally must include in taxable income both the gains and losses from any changes in the value of their inventories when the goods are sold.) The option would increase revenues by \$0.3 billion in 2006 and a total of \$2.9 billion from 2006 through 2010.

Inventory valuation is an integral component of determining a firm’s taxable profits, which, in accounting terms, are the difference between the firm’s receipts and the cost of the goods it has sold. Most firms with inventories are required to use the accrual method of accounting. Under that approach, they calculate the cost of the goods they have sold by adding the value of their inventory at the beginning of the year to the cost of goods they purchased or produced during the year and then subtracting from that total the value of their inventory at the end of the year. In valuing their inventory, firms currently may use either the LCM method or the cost method; they can

use the subnormal goods method regardless of which inventory valuation approach they choose.

The rationale for this option rests on the tax advantage that the LCM method provides. Under that approach to inventory valuation, the firm compares the market value of each item in its inventory with the item’s cost and then uses the lower of the two amounts as the item’s value. A firm’s inventory will have a lower value under the LCM method than under the cost method if the market value of any item in the inventory is less than its cost. But the reverse is not true—because under the LCM method, inventory items that have appreciated in value over the year are pegged at their original cost. Using the resulting lower value for a firm’s year-end inventory increases the portion of a firm’s costs that are tax deductible in that year and thus lowers its taxable profits. By contrast, under the cost method of inventory valuation, gains and losses from changes in the value of a firm’s inventory are included in taxable income only when the goods are sold.

For firms that experience both gains and losses from their inventories, the LCM method provides a tax advantage over the cost method of inventory valuation by treating gains and losses asymmetrically—firms can recognize losses without counting comparable gains. As a result, a firm may claim a deduction for certain losses in the value of its inventory even if, overall, the inventory’s value has increased. The LCM method has two other features that may offer unwarranted advantages to the taxpayers that use it. First, once a firm has reduced the value of its inventory, current law does not require it to record an increase if market values subsequently rise. Second, market values under the LCM method are based on the replacement cost of inventory items, not on their resale value. Thus, the method allows a firm to reduce the value of items in its inventory if the items’ replacement cost has declined—even though the firm may still be able to sell the inventory at a profit.

Firms that incur losses in the value of their inventory without gains to offset them would see a disadvantage in repealing the LCM method of inventory valuation. For those businesses, the method provides a “cushion” during economic downturns or in periods of uncertainty created

by shifts in markets. A firm with inventories that have dropped in value has incurred an economic loss. If that loss was deferred (not accounted for) until the inventory was subsequently sold, analysts could argue that the taxpayer was overtaxed.



## Revenue Option 27

### Tax Large Credit Unions the Way Other Thrift Institutions Are Taxed

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.8	+1.3	+1.4	+1.5	+1.5	+6.5	+15.2

Source: Joint Committee on Taxation.

Credit unions are nonprofit institutions that provide their members with financial services—for example, they accept deposits and make loans. Originally, they were designed to be cooperatives whose members shared a common bond (in most cases, the same employer or the same occupation). Partly as a consequence of that distinction, federal income tax law treats credit unions more favorably than competing thrift institutions, such as savings and loans and mutual savings banks, by not taxing credit unions' retained earnings. (Retained earnings are the portion of net income that firms or institutions reserve rather than pay out in dividends.) This option would tax the retained earnings of large credit unions—those with more than \$10 million in assets—similarly to the way that the retained earnings of other thrift institutions are taxed. However, it would permit small credit unions (less than \$10 million in assets) to retain their tax-exempt status. The option would increase revenues by \$0.8 billion in 2006 and a total of \$6.5 billion from 2006 through 2010.

Initially, the retained earnings of credit unions, savings and loans, and mutual savings banks were all tax-exempt. In 1951, however, the Congress eliminated the exemptions for savings and loans and mutual savings banks on the grounds that those institutions are similar to profit-seeking corporations. Since that time, large credit unions have come to resemble other thrifts. Beginning in 1982, credit union regulators have allowed credit unions to extend their services (subject to some restrictions) to members of organizations other than the ones for which they were founded. In addition, most credit unions allow members and their families to participate even after a member has left the sponsoring organization.

That relaxation of restrictions has contributed to growth in the membership of credit unions, from about 5 million in 1950 to more than 80 million today. Large credit

unions, like taxable thrifts, now serve the general public and provide many of the services offered by savings and loans and mutual savings banks. A significant number of credit unions offer mortgages and car loans, access to automatic tellers, credit cards, individual retirement accounts, and discount brokerage services. They also resemble thrift institutions in that they retain some earnings.

One argument for taxing those retained earnings of large credit unions comparably with the way earnings of other large thrift institutions are taxed is to improve efficiency. Taxing similar institutions in a similar manner promotes competition and induces them to provide services at the lowest cost. With their current tax advantage, credit unions can use their retained earnings to expand and thus displace the services of other thrift institutions—even though the latter may provide those services more efficiently.

Yet many credit unions are more like cooperatives than like their larger counterparts, which suggests that their retained earnings should be treated like those of other cooperatives. Like those institutions, most small credit unions have members with a single common bond or association. And in some cases, their organizations are rudimentary; volunteers from the membership may manage and staff the credit union, and the level of services may not be comparable with what other thrifts offer.

Allowing small credit unions to retain their tax exemption for retained earnings would affect about 3 percent of all assets in the credit union industry and about half of all credit unions. However, a difficulty encountered in taxing the assets of large credit unions but allowing the assets of small ones to remain tax-exempt is that the \$10 million threshold for identifying a “large” credit union could be viewed as arbitrary.

**Revenue Option 28****Repeal the Expensing of Exploration and Development Costs for Extractive Industries**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+3.6	+4.9	+4.0	+2.9	+1.7	+17.1	+19.3

Source: Joint Committee on Taxation.

Through various tax incentives, the current tax system treats extractive industries (producers of oil, gas, and minerals) more favorably than most other industries. One incentive designed to encourage firms to explore for and develop certain types of oil, gas, and hard minerals allows producers to “expense” some of their exploration and development costs (deduct them from their taxable income when they are incurred) rather than capitalize them (deduct them over time as the resulting income is generated). Replacing the expensing of those costs with the standard capitalization approach would increase revenues by \$3.6 billion in 2006 and a total of \$17.1 billion from 2006 through 2010. (The option incorporates the assumption that firms could still expense some of their costs, specifically those from unproductive wells and mines.)

Immediately deducting costs contrasts with the tax treatment that other industries face, wherein costs are deducted more slowly, according to prescribed rates of depreciation or depletion. The Tax Reform Act of 1986 established uniform capitalization rules that require certain direct and indirect costs related to property to be either deducted when the property is sold or recovered over several years as depreciation. (In both cases, the deduction of the costs from taxable income is postponed.) However, so-called intangible costs related to drilling and development (for example, the maintaining of a fund of working capital) and costs for mine development and exploration are exempt from those rules. Thus, the expensing of such costs provides an incentive for extractive industries that other industries do not have.

Costs for exploration and development that extractive firms can expense include costs for excavating mines,

drilling wells, and prospecting for hard minerals—but not for oil and gas. Current law allows independent oil and gas producers and noncorporate mineral producers to fully expense their costs. However, for “integrated” oil and gas producers (companies involved in substantial re-tailing or refining activities) and corporate mineral producers, it limits expensing to 70 percent of costs. Firms subject to the 70 percent limit must deduct the remaining 30 percent of their costs over 60 months.

The rationale for expensing the costs of exploration and development has shifted from its original focus. When the incentive was put in place, its advocates argued that such costs were ordinary operating expenses. Today, those who would justify continuing the incentive emphasize the status of oil and gas as “strategic minerals” that are essential to national energy security. But expensing works in several ways to distort how society’s resources are allocated. First, it causes resources to be used for drilling and mining that might be employed more productively elsewhere in the economy. Second, expensing may influence the way resources are allocated within the extractive industries. Firms may decide what to produce not on the basis of factors related to economic productivity but on the basis of the magnitude of the advantage that expensing provides—for example, the difference between the immediate deduction and the deduction over time, which reflects the true useful life of the capital. Such decisions may also rest on whether the producer must pay the alternative minimum tax—because in that case, expensing is limited. Third, expensing encourages producers to extract more resources now—which in the short run might make the United States less dependent on imported oil than it is at present but in the long run could mean that it would extract less and have to rely more on foreign producers.

## Revenue Option 29

### Repeal the Tax Credit Against Motor Fuel Excise Taxes Now Given to Alcohol Fuels

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+1.4	+1.4	+1.5	+1.5	+1.5	+7.3	+7.6

Source: Joint Committee on Taxation.

Motor fuels are subject to excise taxes, but the tax code provides a credit against such taxes for fuels that are blends of gasoline and alcohol. This option would repeal that credit, increasing revenues by \$1.4 billion in 2006 and \$7.3 billion over the 2006-2010 period. Those estimates include reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.

The tax credit applies only to blends that use alcohol fuels produced from renewable sources—for example, ethanol, the primary fuel of that kind, which is made chiefly from corn. Producers of ethanol that is used as a fuel (its other uses, such as in cleaning products or solvent-based paints, are far less significant) are eligible for an excise tax credit of as much as 51 cents per gallon. The amount of the credit depends on the percentage of alcohol in the fuel. For instance, the credit for gasohol, which is 90 percent gasoline and 10 percent ethanol, is 5.1 cents per gallon. Policymakers first enacted a reduction in the taxation of ethanol-based fuels in the 1970s; as originally formulated, the law directly reduced the fuels' tax rate. The reduction was changed in 2004 to an equivalent tax credit, which is scheduled to expire at the end of calendar year 2010.

Proponents of eliminating the tax credit make several points. They argue that the costs to the government of increasing the use of ethanol outweigh the benefits and that the credit draws resources into the production of ethanol that might be better used elsewhere. They also contend that the credit amounts to an unnecessary transfer from taxpayers to the corporations that produce ethanol and, to some extent, to U.S. farmers (through higher prices for

corn). Moreover, some proponents argue that subsidies are not needed when environmental regulations serve to increase demand.

Supporters of retaining the tax credit argue that it helps reduce demand for imported oil and provides environmental benefits by encouraging the use of renewable fuels that cause less air pollution when they are burned. Ethanol, however, currently displaces only about 1 percent of the United States' oil imports and therefore provides little protection from price shocks in the world's oil markets. Moreover, some proponents of eliminating the credit dispute the environmental benefits of using ethanol and argue that regulation is a better means of achieving environmental goals.

The benefits that advocates claim for ethanol come from its high oxygen content and its renewability. Oxygenated fuels, relative to fossil fuels, have the potential to add less carbon dioxide to the atmosphere, and indeed, the use of oxygenated gasoline during the winter as part of the Environmental Protection Agency's Oxy-Fuels program has reduced carbon monoxide emissions and helped improve air quality in some so-called carbon monoxide nonattainment areas. But whether the use of oxygenated fuels has improved overall air quality is unclear. Moreover, the production of ethanol currently requires substantial amounts of fossil fuels, and the fact that ethanol is a renewable fuel may be of little value to the environment. In sum, ethanol provides little more energy than must be used to create it and only a small reduction in carbon dioxide emissions at its current levels of use and efficiencies of production.

RELATED OPTIONS: 270-01, 270-03, and 270-05; Revenue Options 28 and 48

RELATED CBO PUBLICATIONS: *Fuel Economy Standards Versus a Gasoline Tax*, March 2004; and *Reducing Gasoline Consumption: Three Policy Options*, November 2002

**Revenue Option 30****Tax the Income Earned by Public Electric Power Utilities**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.5	+0.7	+0.8	+0.8	+0.8	+3.6	8.1

Source: Joint Committee on Taxation.

The income that local governments earn from any public utility, including electric power facilities, is exempt from federal income tax. By contrast, the income of investor-owned utilities is taxable. Taxing the income of public facilities for generating, transmitting, and distributing electricity would increase revenues by \$0.5 billion in 2006 and a total of \$3.6 billion from 2006 through 2010.

In the past, local monopolies provided electricity, in part to take advantage of cost-saving economies of scale. Some of those utilities were public facilities, which had developed for a variety of reasons. For example, public facilities offered a feasible alternative in geographic areas where the low density of the population caused the cost of power per customer to be high and private producers were reluctant to enter a market in which the potential for profit appeared inadequate. Public utilities also developed in areas where citizens, worrying that a private provider might exploit its position as a monopoly, wanted to ensure that electricity would be available to all residential consumers at a reasonable cost. Now, however, states are in varying stages of deregulating electric power generation, in part because improved technologies have lessened the importance of economies of scale and in part because electric service is almost universal in this country, even in areas with few people.

The major argument for this option is its recognition that the changes that have occurred in the electricity market cast doubt on the benefits that society now receives from the public sector's involvement in providing electricity. The private sector already supplies approximately 75 percent of the nation's electric power. The competition that the industry's restructuring is bringing, say advocates of this option, will protect consumers from monopolistic pricing by private firms—although California's experience in 2000 and 2001 suggests that some degree of continued governmental oversight of the market will still be needed. Other beneficial outcomes of ending the favorable tax treatment of publicly owned electric power facilities might be a further boost to competition, the consumption of an economically efficient amount of public power, and the preservation of the corporate tax base.

One argument for continuing the exemption of public utilities' income has been that it keeps the price of power low and thus reduces the amount that lower-income people pay for electricity. But treating public facilities' income more favorably than that of other utilities is an inefficient way of accomplishing that objective. The federal government helps lower-income groups more directly with programs such as the Low Income Home Energy Assistance Program of grants to the states.

Taxing the income of public electric utilities might adversely affect consumers in some communities who rely on such facilities for their power. The tax would cause the price of publicly provided electricity to rise, and public utilities that found themselves uncompetitive might have to shut down some facilities that were inefficient. If those facilities were being financed with debt that had not yet

been retired, state and local taxpayers could be left with significant costs. Further complicating a change such as the one described in this option are the numerous legal and practical issues that would have to be resolved if the federal government taxed income earned from what might be termed business enterprises of state and local governments.

RELATED OPTIONS: Revenue Options 27 and 33

RELATED CBO PUBLICATION: *Causes and Lessons of the California Electricity Crisis*, September 2001

**Revenue Option 31****Repeal Tax-Free Conversions of Large C Corporations to S Corporations**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	*	*	*	*	+0.1	+0.1	+1.8

Source: Joint Committee on Taxation.

Note: \* = added revenues of less than \$50 million.

For tax purposes, the predominant forms of business enterprise are C corporations, S corporations, partnerships, and sole proprietorships. Each structure has different implications for the tax liability of the entity and its owners and for the owners' legal liability. Businesses whose stock trades publicly are usually C corporations, although many small, privately owned businesses are also structured in that way. The income of a C corporation faces a two-tiered tax. The firm incurs a tax liability at the corporate level on its net income and capital gains. When it distributes its after-tax profits in the form of dividends to shareholders, a second tax liability—this time for shareholders—is incurred on those dividends. The owners of C corporations are not legally liable for the actions of the corporation.

Businesses such as partnerships, sole proprietorships, and S corporations are set up in a so-called flow-through structure. Income and expenses pass through the business to the shareholders (in the case of an S corporation) or to the partners or proprietors (in the case of partnerships and sole proprietorships), and the income is generally free from corporate income taxes. But shareholders, partners, and proprietors pay tax—at their own income tax rates—on all income that their businesses generate, even if that income is reinvested in the firm.

One difference between S corporations and the other two kinds of flow-through firms is legal liability. Owners of S corporations—unlike sole proprietors or partners in limited or general partnerships—have limited liability. Yet they face many restrictions: for example, S corporations may have no more than 100 owners, and they may not have C corporations as shareholders.

Until recently, S corporations were the only vehicle that offered owners both limited liability and a form of tax

treatment that placed the income and losses from their businesses under the personal income tax. In 1988, the Internal Revenue Service ruled that limited liability companies (LLCs), which are defined under state law, could be treated as partnerships for federal tax purposes (though with some restrictions). Over time, the distinction between S corporations and partnerships has blurred.

Because the income of C corporations faces a two-tiered corporate tax and the income of S corporations and partnerships is taxed only once, under current law, a C corporation may reduce the tax liability on some of its income by electing to be treated as an S corporation or by converting to a partnership. But the tax code provides an incentive to choose the S corporation structure. Converting to an S corporation is tax-free in many circumstances. By contrast, converting to a partnership is taxable; it requires the corporation to “recognize” (include in its taxable income) any built-in gain on its assets and requires the shareholders to recognize any such gain in their corporate stock. Under section 1374 of the Internal Revenue Code, if a C corporation converts to an S corporation, the appreciation of the firm's assets while it was a C corporation is not subject to corporate income tax—unless the assets are sold within 10 years of the conversion. Thus, current law allows a C corporation to avoid the two-tiered corporate tax by converting tax-free to an S corporation.

This option would repeal tax-free conversions for C corporations whose value was greater than \$5 million at the time of the conversion. That is, when a C corporation with a value of more than \$5 million converted to an S corporation, the corporation and its shareholders would immediately recognize the gain in their appreciated assets. Taxing such conversions would increase income tax revenues by less than \$50 million in 2006 and \$0.1 billion over the 2006-2010 period.

A major advantage of this option is that repealing tax-free conversions by C corporations would treat economically similar conversions—from two-tiered corporate tax systems to single-tiered systems—in the same way. That equalization would, in turn, allow society's resources to be more efficiently allocated by making tax considerations less important in decisions about the legal form that a firm might take. However, people who think that

S corporations resemble corporations more closely than they do partnerships may consider it beneficial to preserve the current differential tax treatment. According to that viewpoint, current law merely allows a C corporation (providing it meets the legal requirements) to choose a different corporate form—that of an S corporation—and change its filing status without having to pay tax.

## Revenue Option 32

### Apply the Limited Depreciation Schedule to All Business-Use Sport Utility Vehicles and Automobiles

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.1	+0.1	+0.2	+0.2	+0.1	+0.7	+1.1

Source: Joint Committee on Taxation.

Taxpayers are generally allowed to recover the cost of depreciable business property under the tax code's modified accelerated cost-recovery system (MACRS). They may also, under certain circumstances, expense rather than depreciate the first \$100,000 of the cost of depreciable property—that is, deduct it from taxable income in the year in which the property is placed in service rather than in scheduled increments over time. (After 2007, however, the amount that can be expensed in that way will be reduced to \$25,000.)

The tax code provides a different treatment for recovering the costs of vehicles with a loaded gross vehicle weight (GVW) of less than 6,000 pounds. Deductions for depreciation of such vehicles are generally subject to a schedule of limits: as of tax year 2001, \$3,060 in the first tax year, \$4,900 in the second, \$2,950 in the third, and \$1,775 in each additional year. (Those amounts are indexed for inflation as measured by the consumer price index for automobiles.) Because of those limits, the cost of acquiring an automobile for business use does not typically qualify for the full tax-favored treatment of depreciation and expensing.

The limits on depreciation, however, do not apply to vehicles with a loaded GVW of more than 6,000 pounds—a category that includes most sport utility vehicles (SUVs) and light trucks. As a result, the cost of those vehicles can be written off at a much faster rate than the cost of lighter vehicles. The American Jobs Creation Act of 2004, however, limited to no more than \$25,000 the amount that a firm can expense for any SUV or light truck weighing less than 14,000 pounds that meets certain minor criteria—an amount substantially smaller than the \$100,000 limit that applies to other property. Yet even with that limitation, the tax advantages of buying such a vehicle are sizable compared with the purchase of lighter passenger vehicles, since firms cannot expense

the cost of those vehicles and can only claim annual depreciation up to the limits described earlier. For example, the buyer of a \$45,000 SUV weighing between 6,000 pounds and 14,000 pounds and used entirely for business purposes may expense \$25,000 in the first year and deduct an additional \$20,000 on the basis of the five-year MACRS schedule. (The schedule would allow a deduction of an additional \$4,000 in the first tax year, \$6,400 in the second, \$3,840 in the third, \$2,300 in the fourth and fifth, and the remaining \$1,160 in the sixth.) With that differential treatment, the tax code provides an incentive for business car buyers to purchase SUVs or similarly heavy vehicles (that is, with a loaded GVW of more than 6,000 pounds) when they might otherwise have purchased smaller automobiles.

This option would apply the limited depreciation schedule to all business-use SUVs and automobiles regardless of weight but would not change the tax treatment of other types of vehicles with a loaded GVW of more than 6,000 pounds. The option would increase revenues by \$0.1 billion in 2006 and \$0.7 billion over the 2006-2010 period.

The option would have several advantages. It would increase economic efficiency (the relationship between total resources used and the social benefits they generate) by eliminating the tax incentive for businesses and self-employed individuals to purchase SUVs instead of smaller vehicles. Moreover, because heavy SUVs tend to emit more pollutants and have lower gas mileage than lighter vehicles, this option would also reduce pollution and the consumption of fossil fuels.

A disadvantage of the option would be its denial of the tax-favored treatment of expensing to firms that legitimately require SUVs to conduct their business. Ideally, the option would allow expensing only of those legiti-



mate business purchases, but the law cannot be targeted that precisely. Another argument against the option is that it will not eliminate the incentive for businesses and self-employed individuals to purchase other vehicles with

loaded GVWs exceeding 6,000 pounds—even though a smaller vehicle that produced less pollution might be an acceptable alternative in those cases as well.

RELATED OPTIONS: Revenue Options 50, 51, and 53

**Revenue Option 33****Eliminate Private-Activity Tax-Exempt Bonds**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.2	+0.6	+1.1	+1.7	+2.2	+5.8	+23.9

Source: Joint Committee on Taxation.

Tax law permits state and local governments to issue bonds whose interest income is exempt from federal taxation—which allows those bonds to bear lower rates of interest than taxable bonds bear. (The bondholder is compensated for the lower interest rate by not paying federal tax on the interest income.) For the most part, the bonds' proceeds finance public projects, such as schools, highways, and water and sewer systems. But state and local governments also issue tax-exempt securities known as private-activity bonds, whose proceeds are used by non-governmental entities to finance quasi-public facilities and private-sector projects that include mortgages for rental housing and single-family homes; facilities such as airports, docks, wharves, mass transit, and solid waste disposal plants; small manufacturing facilities and agricultural land and property for first-time farmers; student loans; and facilities for nonprofit institutions, such as hospitals and universities. This option would eliminate the tax exemption for all new issues of private-activity bonds, increasing revenues by about \$5.8 billion over the 2006-2010 period.

The Congress has restricted tax-exempt financing for private purposes on several occasions, beginning in 1968. In the Tax Reform Act of 1986, legislators made the interest earned on newly issued private-activity bonds taxable by including it in the base for the alternative minimum tax. In addition, they limited the volume of new bonds for exempt facilities, small manufacturing facilities, student loans, and housing and redevelopment that could be issued by all governmental units within a state. That cap on the volume of all new bond issues within a state has been raised over time; in 2002, it was indexed for inflation. (At that time, the annual volume that the law allowed was the greater of \$75 per resident or \$225 mil-

lion.) Bonds for some private activities are exempt from the limits; they include bonds for airports, ports, and solid waste disposal facilities that meet requirements for government ownership, as well as certain bonds for nonprofit 501(c)(3) organizations (primarily hospitals and educational institutions).

Eliminating the tax exemption for new private-activity bonds would force the projects that would otherwise be financed with such bonds to compete for funding at the rate prevailing in private markets. Altering the projects' financing in that way would redirect savings to more valuable uses and allocate resources more efficiently. Although some private-purpose bonds may subsidize activities that merit federal support, tax-exempt financing is not the most efficient way to provide such help. The reduction in federal revenues that occurs with such financing exceeds the drop in the borrower's interest costs. If, instead, the government provided a direct subsidy, it could eliminate the additional loss of revenue. Other drawbacks to tax-exempt financing are that access to the subsidy such financing provides is open-ended and, unlike explicit appropriations, it does not receive automatic scrutiny by policymakers in the annual budget process.

Rather than eliminating the tax exemption for private-activity bonds, policymakers could reduce their volume. An alternative option would return the cap on bond issues to its former level of \$50 per resident or \$150 million and would end indexing of the cap. That approach would allow the real (inflation-adjusted) value of private-activity bonds to decline slowly as the price increased. Over the 2006-2010 period, this option would increase revenues by about \$0.6 billion.

## Revenue Option 34

### Repeal the Low-Income Housing Credit

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.5	+0.8	+0.8	+0.9	+0.9	+3.9	+8.9

Source: Joint Committee on Taxation.

The low-income housing credit (LIHC) subsidizes the construction, substantial rehabilitation, or purchase of buildings that are used to provide low-income rental housing. Qualifying individuals and corporations receive tax credits over a 10-year period that can be worth as much as 70 percent of a building's construction or rehabilitation costs or 30 percent of its purchase price. The majority of qualifying projects thus far have been new construction.

To qualify for the LIHC, the owners of a project must fulfill several requirements. They must set aside a certain number of units for low-income renters—specifically, at least 20 percent of a building's rental units for families whose income is below 50 percent of the median income in the area or 40 percent of its units for families whose income is below 60 percent of the median. In addition, rents are restricted. The set-aside requirements and the restrictions on rents apply for at least 15 years. Yet unlike most tax provisions, the LIHC is not necessarily available once those requirements have been met. The credit is limited (by statute) and allocated by state housing authorities.

This option would repeal the tax credit for new projects (the credit would continue to be provided for previously approved projects that still had time to run on their 10-year periods). It would increase revenues by \$0.5 billion in 2006 and \$3.9 billion from 2006 through 2010.

An argument for eliminating the LIHC is that in most places, housing vouchers could assist the same number of

people at a lower cost. Low-income tenants can use such vouchers to pay for all or part of the rent for the housing of their choice as long as the dwelling meets minimum standards for habitability. In most instances, housing vouchers are more likely than tax credits to have the desired effect because the existing stock of buildings can usually provide adequate housing more affordably than either new construction or buildings that have been substantially rehabilitated. Extra overhead costs (such as those for additional paperwork and approvals) also make some housing that is subsidized by the LIHC more expensive to produce and rent.

Another reason for repealing the credit is that it does not by itself always fulfill the purpose that it was designed to serve. In general, households with the lowest income do not rent units whose construction or rehabilitation has been supported by the LIHC unless the households or the project receive additional subsidies. Rather, the credit tends to benefit lower-middle-income people whose income typically is too high to allow them to qualify for voucher and public housing programs.

An argument for retaining the credit is that in some neighborhoods, existing housing that meets minimum standards for habitability at affordable rents is scarce. Furthermore, the money spent to build new housing and rehabilitate existing dwellings may help revitalize neighborhoods. In contrast, similar expenditures on housing vouchers are unlikely to have a noticeable impact—because the vouchers' impact is more likely to be diluted among a number of neighborhoods.

**Revenue Option 35****Permanently Extend 50 Percent Partial Expensing Under JGTRRA and Increased Limits Under Section 179 of the Internal Revenue Code**

(Billions of dollars)	2006 <sup>a</sup>	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	-103.4	-59.0	-52.5	-45.1	-36.6	-296.6	-427.1

Source: Joint Committee on Taxation.

- a. Includes \$38.7 billion that would result from retroactive application of the option to January 1, 2005. Thus, the 2006 estimate incorporates the assumption that the option will be enacted too late to affect receipts in 2005.

The tax code allows corporations to deduct from their income the yearly loss in value they incur over time in their equipment and property. That depreciation, which is usually calculated as a percentage of the purchase price, is deducted over the life of the investment. However, for some qualifying property (generally equipment but not structures), the Jobs and Growth Tax Relief Reconciliation Act of 2003 (JGTRRA) allows firms to deduct an additional amount for depreciation—50 percent of the investment’s adjusted basis (generally, the investment’s original cost)—in the first year after its purchase. (That type of deduction is known as partial expensing.) The provision in JGTRRA applies primarily to investment in equipment: for the most part, the additional depreciation can be taken only if the property’s recovery period (over which the firm depreciates the equipment and so recovers its investment) is 20 years or less, and the recovery period for structures is usually much longer. (The law makes some exceptions—specifically, for investments by water utilities, qualifying property improved by a leaseholder, and some computer software.) The JGTRRA provision replaced one in the Job Creation and Worker Assistance Act of 2002 (JCWAA), which offered an additional depreciation deduction of 30 percent on some investments in the first year after they were purchased. However, the 50 percent deduction under JGTRRA expired at the be-

ginning of 2005. Generally, property acquired on or after January 1, 2005, is not eligible for those benefits.

Recent legislation has also provided a tax advantage to encourage investment by smaller firms. (Those laws affect provisions in section 179 of the Internal Revenue Code, which covers expensing of equipment by small businesses.) JGTRRA and the American Jobs Creation Act of 2004 (AJCA) allow the owners of some businesses to immediately deduct (“expense”) an additional amount of the cost of the property they place in service before 2008. Owners can now expense the first \$100,000 of such costs under section 179—which constitutes an increase of \$75,000 compared with prior law. JGTRRA and AJCA also increased the threshold for phasing out that benefit, boosting it to \$400,000 in investment costs (the previous threshold was \$200,000). Those laws index both the expensing and the phaseout amounts to inflation for years after 2003. The President’s budget for 2006 proposes to permanently extend the additional expensing and the higher thresholds.

This option would permanently extend both JGTRRA’s provision for 50 percent partial expensing for all firms and the increased section 179 expensing for small businesses. It would reduce revenues by \$103.4 billion in 2006 and \$296.6 billion over the 2006-2010 period.

One advantage of this option, which lowers the tax burden on income from capital, is its capacity to spur businesses to invest in equipment. That investment could in turn lead to greater innovation and economic growth. But the option would also exacerbate certain economic distortions that existed before JGTRRA or JCWAA were enacted. The combination of depreciation rates and asset lifetimes made the top effective tax rates on firms' invest-

ment in equipment lower than the rates on investment in structures. That disparity encouraged firms to invest more in equipment and less in structures than they might have without the tax incentive. The partial expensing provisions increase that distortion and so keep society's resources from being allocated to their most productive uses.

RELATED OPTION: Revenue Option 36

**Revenue Option 36****Extend the Period for Recovering the Cost of Equipment Purchases**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+2.8	+8.6	+12.5	+13.7	+15.0	+52.6	+98.3

Source: Joint Committee on Taxation.

When a firm calculates its taxable income, tax law allows it to deduct many of the expenses that it incurs to produce the goods and services it sells. One of the expenses that firms deduct from their income is depreciation—the drop that occurs in the value of its productive assets over time. To calculate taxable income accurately, deductions for depreciation should reflect an asset's actual economic decline—that is, economic depreciation, which takes inflation over the lifetime of the asset into account. However, rates of depreciation are established in the tax code, and depreciation deductions are not indexed for inflation. As a result, the real (inflation-adjusted) value of the depreciation allowed by tax law depends on the rate of inflation.

The Tax Reform Act of 1986 is the major source of the current rates of depreciation for tax purposes, which were set to approximate economic depreciation with inflation of 5 percent. Yet in the Congressional Budget Office's estimation, the inflation applicable to economic depreciation during the coming decade will be just above 2 percent. That estimated decline of 3 percent means that tax depreciation is accelerated relative to economic depreciation—which results in the understatement of firms' taxable income. All other things being equal, depreciation deductions for equipment contribute more to that understatement than do deductions for structures because the service lives of equipment (the time over which depreciation deductions can be taken) are shorter than the service lives of structures and as a result, changes in inflation affect depreciation deductions for equipment more strongly than they affect deductions for structures. In addition, policymakers since 1986 have extended the useful lifetimes of some kinds of structures for calculating depreciation.

The incentive that the tax code provides—the greater effect on a firm's taxable income (and eventually on its ef-

fective tax rate) of depreciation for equipment than for structures—encourages firms to invest in equipment instead of allowing economic returns to guide their investment spending. To equalize the effective tax rates on different types of investment and lessen the tax code's dampening effect on investment in structures, this option would lengthen the lifetime of equipment for tax purposes. Property that currently had a lifetime of three, five, seven, 10, 15, or 20 years would instead shift, for tax purposes, to a lifetime of four, eight, 11, 20, 30, or 39 years, respectively. Under the assumptions that inflation would be just over 2 percent and a 5 percent discount rate would be used (to adjust for the change in the worth of a dollar over time), the effective tax rate on equipment, for all firms on average, would be about 35 percent, and the rate on structures would be 34.7 percent—which is very close to the top corporate statutory income tax rate of 35 percent. The option would increase revenues by \$2.8 billion in 2006 and \$52.6 billion over the 2006-2010 period.

Those average tax rates are quite sensitive to inflation. If inflation was lower by half a percentage point, the rates would be 33.7 percent for equipment and about 34 percent for structures. Conversely, if inflation was higher by half a percentage point, the rates for equipment and structures would be 36.5 percent and 35.3 percent, respectively. If, therefore, inflation differed from expectations, new distortions would emerge over the long run between investment in equipment and structures.

One advantage of this option is that it would bring the effective tax rate on investment in equipment close to the effective rate on structures. That relative parity would lessen the distortion (in the form of a tax incentive) that now affects firms' choices between investing in equipment and investing in structures, thereby increasing economic efficiency.

However, the option would also discourage firms from investing in equipment relative to the incentive that the tax code recently provided by increasing the tax burden on income flowing from a business's investment in capital in the form of equipment. Both the Job Creation and Worker Assistance Act of 2002 and the Jobs and Growth

Tax Relief Reconciliation Act of 2003, to stimulate the economy, gave firms temporary tax advantages for investing in equipment. The option would thus be inconsistent with recent legislation that lowered the after-tax cost of such investment.

RELATED OPTION: Revenue Option 35

**Revenue Option 37****Expand the Medicare Payroll Tax to Include All State and Local Government Employees**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.7	+0.9	+0.8	+0.7	+0.7	+3.8	+5.5

Source: Joint Committee on Taxation.

Certain groups of employees of state and local governments do not pay the Medicare payroll tax, which under current law is 2.9 percent of earnings. (Half of the tax is paid by the employee and half by the employer.) Almost all private-sector workers pay the tax, and employees of the federal government have paid it since 1983, as required by the Tax Equity and Fiscal Responsibility Act of 1982. The Consolidated Omnibus Budget Reconciliation Act of 1985 mandated that state and local employees who began work after March 31, 1986, pay the Medicare payroll tax, but it did not make the tax mandatory for people hired before that date. Under the Omnibus Budget Reconciliation Act of 1990, the tax's reach was broadened to include all state and local government employees who were not covered by a retirement plan through their current employer.

This option would impose the Medicare tax on all state and local government employees who do not now pay it and increase revenues by \$0.7 billion in 2006 and a total of \$3.8 billion from 2006 through 2010. The annual gain in receipts under the option would gradually decline as employees who were hired before April 1986 left the payrolls of state and local governments. Although this option could result in significant outlays over the long run (because of the increase in the number of Medicare bene-

ficiaries), its short-run costs would be relatively small, because few people would qualify for Medicare benefits in the near term solely as a result of this tax change. (To collect Medicare benefits, workers must generally pay the tax for 10 years and reach age 65—or become disabled. They could also qualify as the spouse of an insured worker.)

Requiring all state and local government employees to pay Medicare payroll taxes could be justified on the grounds of fairness. Only one in 10 employees of state and local governments do not currently pay the Medicare tax through their employers; nevertheless, most of those workers will receive Medicare benefits under current law because they either had other, covered jobs in the past or will receive coverage through their spouse's employment. Thus, the broader coverage that this option would institute would lessen the inequity of those employees' receiving high levels of benefits in relation to the payroll taxes they had paid. Of course, expanding Medicare's coverage to include all state and local government employees would increase the federal government's obligation for future benefits under the program and could affect the finances of some state and local governments with large numbers of workers who were not currently covered by Medicare.



## Revenue Option 38

### Calculate Taxable Wages in the Same Way for Both Self-Employed People and Employees

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues							
On-budget	+0.2	+0.3	+0.3	+0.3	+0.3	+1.4	+3.0
Off-budget	+0.1	+0.1	+0.1	+0.1	+0.1	+0.5	+1.4

Source: Joint Committee on Taxation.

Social Security and Medicare levies come in two forms: the Federal Insurance Contribution Act (FICA) tax paid on wages and the Self-Employment Contribution Act (SECA) tax paid on income from self-employment. Under FICA, employees and employers each pay a Social Security tax of 6.2 percent on wages up to a taxable maximum (\$90,000 in 2005) and a Medicare tax of 1.45 percent on all wages. Until 1983, the tax rate levied on income from self-employment (the SECA rate) was lower than the combined employer and employee rate under FICA. As part of the Social Security Amendments of 1983, the Congress increased the effective tax rates under SECA starting in 1984. The report of the conference committee said that the law was “designed to achieve parity between employees and the self-employed” beginning in 1990.

In fact, the current method for calculating SECA taxes allows a self-employed taxpayer to pay less tax than a worker with the same nominal income who is not self-employed. Under current law, self-employed people calculate their tax on an income base that comprises their total compensation less 7.65 percent; for other workers, the tax is calculated on total compensation without a percentage deduction. For example, an employee who earns \$50,000 pays \$3,825 in FICA taxes, which are calculated on a taxable base of \$50,000, and his or her employer also pays \$3,825 in FICA taxes. Because the employer’s contribution amounts to additional compensation, the employee is implicitly earning \$53,825 and paying \$7,650 in employment taxes. An otherwise identical worker who is self-employed and earning the same \$53,825 pays SECA taxes equal to only \$7,605, or \$95 less (\$53,825 less 7.65 percent times the SECA rate). The difference arises because comparability requires that the 7.65 per-

cent adjustment be applied to a base of \$50,000, not \$53,825.

The current-law method of calculating the taxable base for self-employed workers creates a second disparity for workers who earn more than Social Security’s taxable maximum. Among people with earnings above the maximum, workers who are self-employed pay the same amount of Social Security tax that employees pay—the tax on \$90,000—but they pay less Medicare tax. For example, an employee who earns \$100,000 and his or her employer each pay the maximum amount of Social Security taxes (\$5,580) as well as \$1,450 in Medicare taxes. The employee’s total compensation is thus \$107,030, and the total FICA tax is \$14,060. The taxable base for that person’s self-employed sibling who earns \$107,030 is \$98,842.21 (total compensation of \$107,030 minus 7.65 percent). The self-employed sibling pays the same maximum Social Security tax but only \$2,866.43 in Medicare taxes—or \$33.57 less.

Indeed, high-income self-employed taxpayers may pay as much as 6.3 percent less in Medicare taxes under SECA than employees with similar total compensation pay under FICA. That difference has existed since 1991, when the Congress first set a taxable maximum for Medicare that was higher than the taxable maximum for Social Security. This option would eliminate the difference between the way wages subject to the payroll tax are calculated for self-employed people and the way they are determined for employees. Changing the calculation of SECA taxes would increase on-budget revenues by \$1.4 billion from 2006 to 2010. (That estimate includes reductions in income taxes because a portion of the additional SECA taxes are tax deductible.) Off-budget SECA receipts, which are credited to the Social Security trust

funds, would increase by \$0.5 billion over that period. The option would require a slight change in Schedule SE (the income tax form for reporting self-employment income).

This option would help make the tax system more equitable by ensuring that individuals who received the same

compensation paid the same amount of payroll tax. One drawback to the option, however, would be the complexity it would introduce into the structuring of the FICA tax. The Social Security tax would need different taxable maximums for workers and self-employed people, and different methods of calculation would have to be used to determine the taxes for the two groups.

## Revenue Option 39

### Increase the Upper Limit for Earnings Subject to the Social Security Payroll Tax

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues							
Tax 92 percent of earnings	+19.6	+51.3	+54.0	+57.2	+60.5	+242.6	+581.1
Tax 91 percent of earnings	+17.5	+45.8	+48.1	+50.9	+53.7	+216.0	+515.6
Tax 90 percent of earnings	+14.8	+38.8	+40.6	+42.9	+45.2	+182.3	+433.4

Source: Joint Committee on Taxation.

Social Security—which is composed of the Old-Age, Survivors, and Disability Insurance (OASDI) programs—is financed by a payroll tax on employees, employers, and self-employed people. Only earnings up to a specified maximum are taxed, although that amount automatically increases each year. (In 2005, the maximum amount of earnings taxed under Social Security is \$90,000.) This option would increase the earnings subject to the payroll tax under three scenarios: tax 92 percent, 91 percent, or 90 percent of earnings (with maximum amounts subject to tax of \$190,000, \$170,000, or \$150,000, respectively). After the boost in the percentage of earnings covered, the maximum limit would be indexed thereafter, as it is under the present system; also, the percentage of covered wages, as under the current system, would then decline. Under the first scenario of 92 percent coverage, the option would generate \$19.6 billion in receipts in 2006 and a total of about \$242.6 billion from 2006 through 2010; under the second scenario of 91 percent coverage, \$17.5 billion in receipts in 2006 and a total of about \$216 billion from 2006 through 2010; and under the third scenario of 90 percent coverage, \$14.8 billion in receipts in 2006 and a total of about \$182.3 billion from 2006 through 2010. However, some of those revenues would be offset by the additional retirement benefits that Social Security would pay to people with income above the current law's maximum taxable amount. All of those revenue estimates include effects on individual income taxes that result from assumed changes in the taxable and nontaxable components of labor compensation.

When Social Security began in 1937, about 92 percent of the earnings from jobs covered by the program were below the maximum taxable amount. That percentage gradually declined over time because the maximum was raised only occasionally, when the Congress enacted specific increases to it. In the 1977 amendments to the Social Security Act, the Congress boosted the percentage of covered earnings subject to the tax to 90 percent by 1982; it also provided for automatic increases in the ceiling each year thereafter to equal the growth in average wages. Despite that indexing, the fraction of earnings that is taxable has slipped over the past decade as a result of faster-than-average growth in the earnings of the highest-paid workers. In 2003, the portion of earnings from employment covered by OASDI that fell below the maximum was approximately 86 percent.

Subjecting a larger percentage of earnings to the payroll tax would lessen the tax's regressivity. Because people who have income above the ceiling do not pay the tax on all of their earnings, they pay a lower share of their total income in payroll taxes than do people whose total earnings fall below the maximum. Making more earnings taxable would raise payroll taxes for high-income earners—and move the tax toward proportionality. Although that change could also lead to higher Social Security payments for people with earnings above the prior maximum, the additional benefits would be small relative to the additional taxes those earners would have to pay.

A drawback of this option is that raising the earnings cap could weaken the link between the taxes that workers pay into the system and the benefits that they receive, an important aspect of the Social Security system since its inception. Additionally, this option would reduce the rewards of working for people whose earnings are above the

maximum now, because those earnings would become subject to the payroll tax. As a result, such workers would have an incentive to work less or to take more compensation in the form of fringe benefits that would not be subject to payroll taxes.

RELATED CBO PUBLICATIONS: *The Outlook for Social Security*, June 2004; *The Long-Term Budget Outlook*, December 2003; and *Social Security: A Primer*, September 2001

**Revenue Option 40****Increase Federal Employees' Contributions to Pension Plans**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.3	+0.6	+0.8	+0.9	+0.9	+3.4	+8.3

Source: Congressional Budget Office.

Most government workers covered by the Civil Service Retirement System (CSRS), the older of the two major federal civilian retirement plans, are required to contribute 7 percent of their salary to their retirement fund for a defined-benefit pension (one in which the level of benefits is set by formula and is not affected by the amount an employee contributes). CSRS workers pay no Social Security taxes, however. Employees covered by the other major civilian plan, the Federal Employees Retirement System (FERS), must generally contribute at least 0.8 percent of their pay toward a defined-benefit plan and pay 6.2 percent in Social Security taxes.

This option would increase the contributions that most federal civilian workers would have to make to their defined-benefit retirement plan. Those contributions would increase by 0.25 percentage points (relative to current levels) in calendar year 2006, 0.4 percentage points in calendar year 2007, and 0.5 percentage points starting in calendar year 2008. (Those increases would match the ones that the Balanced Budget Act of 1997 temporarily imposed through 2002.) Adopting those changes for civilian employees would boost revenues by \$0.3 billion in 2006 and \$3.4 billion through 2010 (assuming that agencies' contributions for employees remained the same, as was the case under the Balanced Budget Act).

The main rationale for requiring federal workers to pay more for their retirement plans is that it would make the government's costs for civilian pension benefits more like those of private-sector employers but would still maintain a high level of salary replacement once people retired. Compared with some options (such as option 600-03) that would cut the benefits paid to current retirees, requiring employees to make larger contributions would have the advantage of giving workers more time to adjust to the change in compensation. Most employees' take-home pay would not decline if the higher contributions were offset by the across-the-board wage increases that federal workers usually receive in January. (Employees could also maintain their take-home pay by reducing their contributions to the federal Thrift Savings Plan, which is similar to a 401(k) plan.)

One argument against the changes in this option is that they would be roughly equivalent to a 0.5 percent pay cut for most federal civilian employees and would diminish the government's compensation package relative to that of the private sector. (Private firms seldom require employees to contribute to defined-benefit pension plans.) Those factors would weaken the government's ability to attract new personnel and might force federal agencies to either increase cash compensation for their employees or settle for having a less skilled workforce.

RELATED OPTIONS: 600-02, 600-03, and 600-04

RELATED CBO PUBLICATIONS: *Measuring Differences Between Federal and Private Pay*, November 2002; *The President's Proposal to Accrue Retirement Costs for Federal Employees*, June 2002; *Comparing Federal Employee Benefits with Those in the Private Sector*, August 1998; and *Comparing Federal Salaries with Those in the Private Sector*, July 1997

**Revenue Option 41****Extend or Freeze the Estate and Gift Tax Provisions of the Economic Growth and Tax Relief Reconciliation Act of 2001**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues							
Option 1	0	+6.7	+7.7	+8.4	+18.0	+40.8	-7.0
Option 2	-8.8	-5.1	-4.9	-5.1	+2.9	-21.0	-123.0
Option 3	-31.8	-30.2	-31.7	-33.4	-27.0	-154.1	-415.3
Option 4	-1.1	-1.5	-1.9	-1.7	-2.4	-8.6	-270.7

Source: Joint Committee on Taxation.

When a person dies, an estate tax is imposed on the value of the assets that are transferred at death, and a gift tax is paid on the value of taxable gifts made during the decedent's lifetime. Only the portion of the estate that exceeds an exempt amount (\$1.5 million in 2005 and increasing thereafter until 2011) is subject to the estate tax. Likewise, only taxable gifts that exceed the lifetime exemption (\$1 million in 2002 and thereafter) are subject to the gift tax. Gifts and bequests between spouses and charitable bequests are exempt from taxation.

The Economic Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA) phases out and ultimately repeals estate taxes. (It does the same for generation-skipping transfer taxes, which are designed to prevent estates from escaping some estate taxation by transferring assets—as gifts during the decedent's life or as bequests—to individuals more than one generation younger than the transferor.) In addition, EGTRRA retains but reduces the gift tax.

The phasing out of the taxes primarily takes the form of increases in the amount of the estate that is exempt from taxation and reductions in the estate and gift taxes' top marginal rates. EGTRRA sets the amount of the exemption under the estate tax at \$1.5 million for 2005, with scheduled increases to \$2 million in 2006 and \$3.5 million in 2009. The law also reduces the estate tax's top marginal rate (the rate paid on the last dollar taxed) to 47 percent for 2005; it provides for additional declines of 1 percentage point annually through 2007. At that point, the maximum rate under EGTRRA will stabilize at 45 percent from 2007 through 2009. (In 2002, the amount of the gift tax exemption rose permanently to \$1 million.)

In 2010, EGTRRA is slated to repeal estate and generation-skipping transfer taxes and cut the top rate on taxable gifts to equal the top rate in the individual income tax, currently legislated to be 35 percent. All of EGTRRA's provisions are now scheduled to expire on December 31, 2010. Thus, in 2011, the estate and gift tax will return to its unified pre-EGTRRA form, with a top marginal rate for that year of 55 percent. In addition, the amount of an estate and taxable gifts that is exempt from taxation will drop to \$1 million.

EGTRRA's provisions also address state death taxes. In 2005, the law fully repeals the credit for state death taxes and replaces it with a deduction for death taxes paid to any state or the District of Columbia. In 2011, when EGTRRA expires, the deduction for state death taxes is again replaced by a credit.

EGTRRA has substantially reduced the number of estates that are subject to the estate tax compared with the number affected under earlier law. For example, before EGTRRA, about 30,400 estates would have been subject to the tax in 2005; now, analysts expect that about 16,700 will be affected. Similarly, under prior law, about 38,100 estates would have been subject to the tax in 2010, compared with none under EGTRRA.

Estate planning under EGTRRA has become significantly more complicated: people now face not only the traditional uncertainty about when they will die and what the ultimate size of their estate will be but also the complexity of legislated phaseouts and repeals and the ultimate reinstatement of the estate and gift tax. EGTRRA has also complicated the transfer of wealth to heirs during

one's lifetime through the strategic use of gifts (called *inter vivos* gifting), which is a significant part of many taxpayers' estate planning.

Several options could be designed to modify the scheduled phaseouts and eventual repeal of the estate tax (and generation-skipping transfer taxes). They range from freezing EGTRRA's provisions as they stand in particular years (options 1 and 2) to accelerating the repeal of estate taxes (options 3 and 4).

- Option 1 would retain the estate and gift taxes but permanently freeze the exemption and top marginal rate at their levels in 2005—for an estate exemption of \$1.5 million, a taxable gift exemption of \$1 million, and a top marginal rate of 47 percent. In 2005 as well, the state death tax credit would be fully phased out and treated as a deduction. This option would increase revenues by \$40.8 billion over the 2006-2010 period. Receipts would rise in 2007 and several subsequent years but would drop after 2011, when EGTRRA's provisions would have expired. Approximately 18,800 estates would be required to pay some federal estate tax in 2009 under this option, compared with approximately 12,300 under EGTRRA.
- Option 2 would retain the unified estate and gift tax but permanently set the exemption at \$3.5 million and the top tax rate at 50 percent, starting in 2005. It would also phase out the state death tax credit fully in 2005 and treat state death tax payments as a deduction. Under the option, approximately 4,600 estates would be required to file federal estate and gift tax returns in 2006, compared with approximately 15,700 under EGTRRA. The option would trim revenues by \$21.0 billion over the 2006-2010 period.
- Option 3 would permanently repeal the estate tax in 2005. It would retain the gift tax, with an exemption of \$1 million, and set the top gift tax rate to equal the top individual income tax rate. As is the case under EGTRRA, the option would allow each estate to increase, or "step up," the basis of the assets being transferred by as much as \$1.3 million. In addition, a spouse would be allowed to step up the basis of inherited assets by another \$3 million. Over the period from 2006 through 2010, the option would reduce revenues by \$154.1 billion.

Those elements of the option that relate to asset basis affect the calculation of capital gains (or losses)—and any applicable taxes—when the inherited assets are eventually sold. A capital gain or loss on an asset is measured by the proceeds received from its sale minus the taxpayer's basis in the property. A taxpayer's basis generally represents his or her investment in an asset. "Carryover basis" on inherited property means that the basis of an asset in the hands of the heir is the same as it was in the hands of the decedent. "Stepped-up basis," for estate tax purposes, means that the basis of the property passing from a decedent's estate is generally the fair market value on the date of the decedent's death or on the alternate valuation date, as specified by law.

- Option 4 would make the repeal of EGTRRA's estate tax provisions permanent in 2010 and permanently freeze its gift tax provisions according to the law's specifications for that year. The option would reduce revenues by \$8.6 billion over the 2006-2010 period.

A major advantage of all of these options is that by providing more certainty about future estate and gift tax law, they would simplify estate planning. Another potential benefit would be the options' exemption of smaller estates (or in the case of options 3 and 4, all estates) from the filing of estate tax returns, which would reduce the filing burden of those taxpayers. Under the options, smaller estates would also be less likely to incur estate tax liability, which would reduce the likelihood of small businesses having to liquidate to pay estate taxes.

Yet the first two options, which would retain the estate and gift taxes, could hurt small businesses. Under those options, federal estate tax returns would still have to be filed for some estates, and some would still incur estate tax liability.

Opponents of repealing the estate tax support the progressivity of estate and gift taxes and believe that such taxes lessen the concentration of wealth in the United States. A further drawback of repeal is that it could reduce charitable giving because it would eliminate the tax deduction for charitable bequests and thus an incentive that encourages individuals to make bequests. Additional arguments against repeal are, first, that the negative impact of the estate tax on small estates and closely held businesses (for example, family-owned firms) could be largely avoided by increasing the amount of the estate that was exempt from taxation (rather than repealing the

tax); and second, that even before EGTRRA, very few businesses were forced to liquidate to pay estate taxes. Another consideration is that the options for repeal do not eliminate the filing burden because many estates will still need to file returns and pay estate tax under state law.

Analysts hold a variety of views on how estate and gift taxes affect savings, the accumulation of capital, and economic growth. Research in those areas is inconclusive.

RELATED CBO PUBLICATION: *The Estate Tax and Charitable Giving*, July 2004



**Revenue Option 42****Eliminate the Gift Tax Annual Exclusion for Life Insurance Premiums**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.1	+0.1	+0.1	+0.1	+0.2	+0.6	+1.7

Source: Joint Committee on Taxation.

The tax code includes a gift tax that is levied on transfers of wealth during a taxpayer's lifetime and an estate tax that is imposed on such transfers when a person dies. Credits and exemptions are built into the system; for example, under current law, a donor may exclude from taxation \$11,000 annually in gifts to a recipient. (The exclusion increases by \$1,000 for every 10 percent rise in the consumer price index.) As a result, most transfers of wealth are not taxed, and typically, an estate tax filing occurs in fewer than 2 percent of deaths.

The proceeds from life insurance policies are frequently part of an estate, and over the years, the tax code has treated them in different ways. By 1942, all proceeds from policies that the decedent owned or paid premiums on were taxable. But legislation enacted in 1954 dropped the "premiums paid" test, which led to the current system in which only policies owned by the decedent are included in the base on which the estate tax is figured.

That approach offers an assured tax benefit to the insured taxpayer during his or her lifetime if the policy provides whole-life rather than term insurance. (Term insurance offers insurance benefits only for a specific period. Whole-life insurance, as its name implies, is not bounded by a specific term, and its proceeds are assumed to be transferred at death.) Payouts on life insurance policies are not counted as transferred wealth when the policy's owner is not the decedent. (The U.S. tax code and regulations of the Internal Revenue Service define the owner of

a life insurance policy.) Thus, an important element of estate tax planning during a wealthy taxpayer's lifetime is to make the payments on life insurance policies, with the intended heirs as the beneficiaries, directly or through trust arrangements. Funding provided by a taxpayer that is used to pay premiums on a life insurance policy is not taxed as a gift as long as it totals less than the annual amount that the law allows to be excluded (in 2005, \$11,000).

This option would eliminate that exclusion and require that money used to pay premiums on whole-life policies be subject to the provisions of the gift tax. It would increase revenues by about \$0.6 billion between 2006 and 2010.

An advantage of this option is that it could help in allocating resources more productively. If the gift tax exclusion could no longer be applied to the payment of life insurance premiums, people would have less of an incentive to create trust arrangements whose sole purpose was to lower their estate tax liability. But the option also has a prominent disadvantage: it could raise the cost of transferring wealth in cases in which assets were not liquid. For example, the option would make it more costly for the owner of a closely held business (typically, a small business or farm with only one or a few owners) to acquire life insurance to "prepay" the estate tax. That aspect of estate planning is designed to keep heirs from having to sell the business to pay the tax.

RELATED OPTION: Revenue Option 43

**Revenue Option 43****Eliminate Nonbusiness Valuation Discounts Under the Estate Tax**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.5	+0.5	+0.5	+0.5	+0.4	+2.4	+6.0

Source: Joint Committee on Taxation.

Current law imposes a gift tax on transfers of wealth during a taxpayer's lifetime and an estate tax on such transfers at death (see Revenue Option 42 for more details). Some taxpayers cut their estate and gift tax liabilities by transferring marketable securities, such as stocks and bonds, to holding companies, which then issue shares (claims to the securities) to the taxpayers' intended heirs. In many instances, when the estate tax is calculated, those shares are assessed not at their full value but at a discount. That accounting practice is commonly applied to minority holdings (basically, those representing less than a 50 percent interest) in businesses that are not publicly traded.

The practice of discounting derives from the estate tax system's goal of taxing only the value that buyers and sellers might place on a business's assets. It can be justified on the grounds that a buyer who purchased a minority share in an ongoing business operation would generally pay less than the market value for it because the shareholder or shareholders who had a majority share could adversely affect the long-term value of the minority owner's portion. (For example, majority owners of a company who are also its officers can make decisions that increase their income at the expense of minority owners' income.)

Discounting nonbusiness assets, however, is difficult to defend on the same basis. As that approach is applied in

nonbusiness situations, a taxpayer typically contributes marketable assets (such as cash, foreign currency, publicly traded securities, real property, annuities, or non-income-producing property including art or collectibles) to a family limited partnership or limited liability company. Simultaneously, the taxpayer gives or bequeaths minority interests in that holding company to his or her intended heirs. The taxpayer then claims discounts on those gifts following the guidelines generally agreed upon for transferring business assets. In short, the taxpayer claims a reduced value for the marketable asset simply because it was placed in a holding company before being given or bequeathed.

Under this option, the practice of valuation discounts would be limited to the assets of active businesses, a change that would boost revenues by \$2.4 billion over the 2006-2010 period. For holdings in a nonbusiness entity, their value would be determined as a proportional share of the fair market value of the entity's net worth (provided that its net worth included assets that were readily marketable when given or bequeathed). If the entity was part of an active business, the portion of its net worth that was held in marketable securities and used as working capital would be subject to the usual business valuation practices.

RELATED OPTION: Revenue Option 42

## Revenue Option 44

### Eliminate the Source Rules Exception for Inventory Sales

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+1.9	+4.9	+5.0	+5.1	+5.2	+22.1	+49.6

Source: Joint Committee on Taxation.

U.S. multinational corporations generally pay U.S. tax on their worldwide income, including the income they earn from operations of their branches or subsidiaries in other nations. Foreign nations also tax the income from those operations, and the U.S. tax code allows multinational firms to take a limited credit for that foreign income tax. The credit is applied against the U.S. taxes that the firms would have owed on that income, but it cannot exceed what the firms would have owed if the income had been earned in the United States. If a corporation pays more foreign tax on its foreign income than it would have paid on otherwise identical domestic income, it accrues what the tax code calls excess foreign tax credits.

In contrast to income generated by operations abroad, the income that corporations earn from products that are sold abroad but produced domestically results almost entirely from value created or added in the United States. Hence, the income that U.S. firms receive from exports typically is not taxed by foreign nations. But the tax code's "title passage" rule specifies that the source of a gain on the sale of a firm's inventory is the place to which the legal title to the inventory "passes." If a firm exports its inventory abroad, the title passage rule allocates the income from those sales in a way that, in effect, sources half of it to the jurisdiction in which the sale takes place and half to the place of manufacture. In practice, that means that if the firm's inventory is manufactured in the United States and sold abroad, half the income from the sale is still treated as though it were foreign in source—even though the firm may have no branch or subsidiary located in the place of sale and the foreign jurisdiction does not tax the income.

The upshot of the title passage rule is that a firm can classify more of its income from exports as foreign in source than could be justified solely on the basis of where the underlying economic activity occurred. A multinational

firm with excess foreign tax credits can then use those credits to offset U.S. taxes on that foreign income. As a result, about half of the export income received by companies with such credits is effectively exempted from U.S. tax, and the income allocation rules essentially give U.S. multinational corporations an incentive to produce goods domestically for sale by their overseas subsidiaries.

This option would replace the title passage rule with one that apportioned income for the purpose of taxation on the basis of where a firm's economic activity actually occurred. The change would increase revenues by \$1.9 billion in 2006 and \$22.1 billion over the 2006-2010 period.

Export incentives, such as those embodied in the title passage rule, do not boost overall levels of domestic investment and employment, nor do they affect the trade balance. They increase profits—and thus investment and employment—in industries that sell substantial amounts of their products abroad. But the U.S. dollar appreciates as a consequence, making foreign goods cheaper and thereby reducing profits, investment, and employment for U.S. firms that compete with imports. Export incentives, therefore, distort the allocation of resources by misaligning the prices of goods relative to their production costs, regardless of where those goods were produced.

Foreign tax credits granted under U.S. tax law were intended to prevent businesses' income from being taxed both domestically and abroad. But the title passage rule allows income from exports that is not usually subject to foreign tax to be exempted from U.S. taxes as well—which means that the income escapes business taxation altogether. Hence, allowing multinational corporations to use foreign tax credits to offset the U.S. taxes they would otherwise owe on export income may be an inappropriate use of such credits.

Among the disadvantages of eliminating the title passage rule are a perceived need, cited by some observers, to provide U.S. corporations with an advantage over foreign corporations that operate in the same markets. But U.S. corporations without excess foreign tax credits receive no

advantage. Thus, the rule gives U.S. multinational exporters a competitive advantage over U.S. exporters that conduct all of their business operations domestically (and it gives U.S. multinational exporters that have excess foreign tax credits an advantage over those that do not).

RELATED CBO PUBLICATION: *Causes and Consequences of the Trade Deficit: An Overview*, March 2000

## Revenue Option 45

### Make Foreign Subnational Taxes Deductible Rather than Creditable

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+3.0	+6.7	+6.9	+7.2	+7.5	+31.3	+73.3

Source: Joint Committee on Taxation.

Under current law, U.S.-owned corporations may deduct state and local income taxes from their taxable income. However, they receive tax credits—a more favorable tax treatment in this instance than deductions—for income taxes that they pay to foreign governments, including foreign subnational governments such as foreign states, cities, and provinces. The credits are applied against the U.S. taxes that the firms would have owed on that income; they cannot exceed what the firms would have owed if the income had been earned in the United States. This option would treat income tax payments to foreign subnational governments the way that payments to domestic state and local governments are treated. That change would increase tax revenues by \$3.0 billion in 2006 and \$31.3 billion over the 2006-2010 period.

Specifically, this option would continue to allow corporations to receive a limited credit for foreign taxes provided that those taxes exceeded a fixed percentage of either the corporations' foreign-source income or their foreign income taxes. That percentage would be set to reflect the overall ratio of state and local taxes to federal income taxes within the United States. Taxes for which credits were denied would be deducted from a corporation's foreign-source gross income to yield its foreign-source taxable income. The option could be structured to either

defer to or override existing tax treaties that call for other kinds of tax treatment.

An advantage of this option would be its potential to level the playing field between domestic and foreign investment by slightly reducing the incentive that U.S.-based multinational corporations now have to invest more abroad than at home. That incentive arises particularly in countries where the overall foreign income tax on a foreign investment is less than the combined U.S. federal, state, and local taxes on a domestic investment. In turn, treating foreign and domestic investment similarly in the tax code would allocate capital more efficiently worldwide.

In some respects, however, removing the creditability of income taxes paid to foreign subnational governments would have drawbacks. The option would make U.S. corporations operating in a foreign country less competitive with other foreign companies operating there and would probably lead some firms to repatriate less income from prior overseas investments to avoid paying the additional U.S. tax. Furthermore, if foreign countries implemented similar rules for taxing income that their corporations earned in the United States, those firms might curtail their U.S. investments, and the amount of capital flowing into the United States might decline.

RELATED CBO PUBLICATION: *Causes and Consequences of the Trade Deficit: An Overview*, March 2000

**Revenue Option 46****Increase the Excise Tax on Cigarettes by 50 Cents per Pack**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+6.7	+6.6	+6.7	+6.7	+6.7	+33.4	+66.8

Source: Joint Committee on Taxation.

Taxes on certain goods and services can influence consumers' choices and lead people to purchase less of the taxed items than they might otherwise have bought. That taxation generally results in a less efficient allocation of society's resources—unless some of the costs associated with the taxed items are not reflected in their price. This option would increase the federal excise tax on cigarettes by 50 cents per pack. It would generate \$6.7 billion in additional revenues in 2006 and a total of \$33.4 billion in revenues from 2006 to 2010. Those estimates include reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.

Tobacco is one such product that creates “external costs” for society that are not covered in its pretax price—for example, higher costs for health insurance (to cover the medical expenses linked to smoking) and the damaging effects of cigarette smoke on the health of nonsmokers. Taxes on tobacco increase prices and can result in consumers' paying more of the external costs of smoking. In addition, higher taxes have also been shown to reduce the consumption of tobacco. Researchers estimate that each 10 percent increase in the price of cigarettes is likely to lead to a decline in consumption of 2.5 percent to 5 percent, with probably a larger drop for teenagers.

Tobacco is taxed by both the federal government and the states. Currently, the federal excise tax on cigarettes is 39 cents per pack; other tobacco products are subject to similar levies. Federal tobacco taxes raised about \$7.9 billion in 2003, or about 0.4 percent of total federal revenues. In recent years, state excise taxes have increased from an average of 42 cents per pack in 2000 to an average of about 60 cents per pack in 2004. In addition, settlements reached between states' attorneys general and major to-

bacco manufacturers require payments of fees equal to an excise tax of about 50 cents per pack. Those taxes and quasi-taxes raise the price of a pack of cigarettes by \$1.49.

No consensus exists about the magnitude of the external costs of smoking, which makes it difficult to determine the appropriate level of tobacco taxes. Some analysts estimate that the external costs of smoking are significantly less than the taxes and settlement fees now levied on tobacco. Others maintain that the external costs are greater and that taxes should be boosted even more. Technical issues cloud the debate; for example, the effect of second-hand smoke on people's health is uncertain. Much of the controversy centers on what to include in figuring external costs—such as whether to consider tobacco's effects on the health of smokers' families or the savings in spending on health care and pensions that result from smokers' shorter lives. Nevertheless, an increase in excise taxes on cigarettes may be desirable, regardless of the size of the external costs, if consumers underestimate the harm done by smoking or the addictive power of nicotine. Teenagers in particular may not be capable of evaluating the long-term effects of beginning to smoke.

Arguing against taxes on tobacco is their regressivity. Such taxes take up a greater percentage of the earnings of low-income families than of middle- and upper-income families because lower-income people are more likely than other income groups to smoke and because expenditures on cigarettes by people who smoke do not rise appreciably with income. Moreover, some observers would argue against the option on the grounds that paying higher prices for cigarettes does not make people smoke less.

RELATED CBO PUBLICATION: *The Proposed Tobacco Settlement: Issues from a Federal Perspective*, April 1998 (The proposal discussed in that publication does not reflect the final settlement.)

**Revenue Option 47****Increase All Alcoholic Beverage Taxes to \$16 per Proof Gallon**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+4.5	+5.5	+5.6	+5.7	+5.7	+27.0	+56.9

Source: Joint Committee on Taxation.

In levying the federal excise tax per ounce of ethyl alcohol, current law treats alcoholic beverages in different ways. Taxes remain much lower on beer and wine than on distilled spirits, and they are figured on different liquid measures. Distilled spirits are measured in proof gallons, a standard measure of a liquid's alcohol content; the current rate of \$13.50 per proof gallon translates into a tax of about 21 cents per ounce of alcohol. Beer, however, is measured by the barrel, and the current rate of \$18 per barrel reflects a tax of about 10 cents per ounce of alcohol (assuming an alcohol content for beer of 4.5 percent). The current levy on wine is \$1.07 per gallon—or about 8 cents per ounce of alcohol (assuming an average alcohol content of 11 percent). In 2003, the federal government collected approximately \$8.5 billion in revenues from excise taxes on distilled spirits, beer, and wine.

This option would standardize the base on which the federal excise tax is levied and use the proof gallon as the measure for all alcoholic beverages. It would also increase the tax to \$16 per proof gallon, boosting revenues by about \$4.5 billion in 2006 and a total of almost \$27 billion between 2006 and 2010. (Those estimates include reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.) A tax of \$16 per proof gallon comes to about 25 cents per ounce of ethyl alcohol. This option would thus raise the tax on a 750-milliliter bottle of distilled spirits from about \$2.14 to \$2.54, the tax on a six-pack of beer from about 33 cents to 81 cents, and the tax on a 750-milliliter bottle of table wine from about 21 cents to 70 cents.

The consumption of alcohol creates costs to society that are not reflected in the pretax price of alcoholic beverages.

Examples of those “external costs” include expenditures related to health care that are covered by the public, losses in productivity that are borne by others besides the alcohol consumer, and the loss of lives and property in alcohol-related accidents and crimes. Calculating such costs is difficult; however, a study reported by the National Institute on Alcohol Abuse and Alcoholism estimated that the external economic costs of alcohol abuse exceeded \$100 billion in 1998—an amount far greater than the revenues from current taxes on alcoholic beverages.

Research has consistently shown that higher prices lead to less consumption and less abuse of alcohol, even among heavy drinkers. Increasing the price of alcoholic beverages by boosting excise taxes would reduce the external costs of alcohol use and make consumers of those beverages pay a larger share of those costs. Moreover, increasing excise taxes to reduce consumption may be desirable, regardless of the effect on external costs, if consumers are unaware of or underestimate the extent of alcohol's addictive qualities and the harm they do themselves by drinking.

Yet taxes on alcoholic beverages have their downside as well. They are regressive; that is, they take up a greater percentage of income for low-income families than for middle- and upper-income families. In addition, taxes on alcohol fall not only on problem drinkers but also on drinkers who impose no costs on society and are thus unduly penalized. A further consideration is that taxes may reduce consumption by some light drinkers whose intake of alcohol might produce beneficial health effects.

**Revenue Option 48****Increase Excise Taxes on Motor Fuel by 12 Cents per Gallon**

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+16.7	+16.8	+17.0	+17.3	+17.7	+85.5	+181.6

Source: Joint Committee on Taxation.

Federal taxes on motor fuel are credited to the Highway Trust Fund, which is used to finance highway construction and maintenance. Currently, taxes of 18.4 cents and 24.4 cents are levied on each gallon of gasoline and diesel fuel, respectively. This option would raise those taxes by 12 cents per gallon, increasing revenues by about \$16.7 billion in 2006 and \$85.5 billion over the 2006-2010 period. (Those estimates include reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.) The total federal tax on gasoline under this option would be 30.4 cents per gallon.

The rationale for the option is based on economic efficiency (the allocation of society's resources to their most productive use). Imposing new or higher taxes on petroleum would improve efficiency to the extent that those taxes reflected the external costs imposed by the use of petroleum. (External costs are costs to society that are not covered in a good's or service's pretax price.) For example, making petroleum more expensive would encourage people to drive less and purchase more-fuel-efficient cars and trucks, which could lessen the costs that pollution and congestion impose. Less consumption of motor fuel

would also reduce carbon dioxide emissions and could therefore help moderate the effects of human activity on the global climate.

Current tax levels, however, may already be adequate to increase the price of fuel to its full socially appropriate cost. In that case, raising the price further, under some analysts' calculations, might create economic distortions (such as fuel consumption that was inefficiently low in terms of society's well-being). In addition, increasing tax rates on motor fuels raises some issues of fairness. Higher rates that are "passed through" by the trucking industry as higher prices for consumers would impose a disproportionate cost on rural households; yet the costs associated with vehicle emissions and congestion are greatest in densely populated areas, primarily the Northeast and coastal California. Moreover, some researchers argue, taxes on gasoline and other petroleum products are regressive—that is, they take up a greater percentage of the income of lower-income families than of middle- and upper-income households. Other researchers, however, find that the effects of such taxes are proportionate.

RELATED OPTIONS: 270-05 and Revenue Option 29

RELATED CBO PUBLICATIONS: *Fuel Economy Standards Versus a Gasoline Tax*, March 2004; and *Reducing Gasoline Consumption: Three Policy Options*, November 2002



## Revenue Option 49

### Eliminate the Federal Communications Excise Tax

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	-4.0	-5.6	-5.9	-6.3	-6.6	-28.4	-67.0

Source: Joint Committee on Taxation.

The federal communications excise tax is levied on the charges for selected forms of communication, primarily long distance and local telephone services. Policymakers initially enacted the tax in 1898, when telephone service was a “luxury” good, in order to raise revenues during the Spanish-American War. Over the next century, the tax was repealed and then reinstated; rates ranged from 1 percent to 10 percent. For the past two decades, the rate has remained at 3 percent. Today, telephone service has become nearly universal among U.S. households, and the telephone is no longer considered a luxury. This option would eliminate the federal communications excise tax, reducing revenues by \$4 billion in 2006 and \$28.4 billion over the 2006-2010 period. Those estimates include increases in income and payroll taxes that result from the lower amount of tax-deductible excise taxes.

The main rationale for eliminating the tax is that it has harmful effects on economic efficiency (the allocation of resources to their most productive use). Innovations in the communications industry have led to a range of untaxed services that are similar to the taxed services that are available. (Such innovations include the “bundling” of services—most commonly, of local telephone and long-distance services together with dial-up Internet access—as well as other forms of communication through the Internet. Typically, bundling results in a fixed monthly fee that includes a monthly charge for a certain number of minutes of a service.) The uneven application of the communications excise tax reduces efficiency by distorting consumers’ choices among the various kinds of goods,

leading buyers to make decisions that they might not have made in the absence of the tax. Those newer, untaxed products are a close enough substitute for more traditional telephone services that consumers’ behavior today may be distorted by the tax to an even greater extent than it was in the past, when those options were not available.

Another argument against retaining the tax is that it is regressive. In paying the tax, lower-income individuals use a larger percentage of their income than higher-income individuals use. Adding to the tax’s regressive nature is that the communications industry’s new untaxed alternatives are generally more available to affluent members of society. Moreover, difficulties have arisen in administering the tax because the changing technological environment and mechanisms for pricing have led to unresolved legal challenges to portions of the levy.

An argument in favor of retaining the tax is that it is difficult to evade—the telephone companies collect it—and thus it provides a significant and reliable source of federal revenues. Furthermore, some of its disadvantages could be better addressed by approaches other than the tax’s elimination. For example, extending the levy to cover similar services that are not now taxed or eliminating exemptions granted to such groups as nonprofit hospitals and educational institutions would be alternative ways to correct the distortions that the tax creates yet at the same time increase revenues and reduce the tax’s regressivity.

RELATED CBO PUBLICATIONS: *Does the Residential Broadband Market Need Fixing?* December 2003; and *Economic Issues in Taxing Internet and Mail-Order Sales*, October 2003

## Revenue Option 50

### Impose a Tax on Sulfur Dioxide Emissions

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+0.4	+0.5	+0.5	+0.5	+0.4	+2.3	+4.2

Source: Joint Committee on Taxation.

Under the Clean Air Act, the Environmental Protection Agency (EPA) sets national standards for ambient air quality that are designed to protect the public's health and welfare. EPA defines acceptable levels for six "criteria" air pollutants: sulfur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), ozone, particulate matter, carbon monoxide (CO), and lead. Along with emissions from natural sources, emissions of air pollutants from stationary sources (such as industrial facilities and commercial operations) and mobile sources (automobiles, trains, and airplanes) contribute to the ambient levels of those criteria substances.

Sulfur dioxide belongs to the family of sulfur oxide gases formed during the burning of fuel that contains sulfur (mainly coal and oil) and during the smelting of metal and other industrial processes. Exposure to high concentrations of SO<sub>2</sub> may aggravate respiratory illnesses and cardiovascular disease. In addition, SO<sub>2</sub> and NO<sub>x</sub> emissions are considered the main cause of acid rain, which EPA believes degrades surface waters, damages forests and crops, and accelerates corrosion of buildings.

The Clean Air Act Amendments of 1990 adopted a program to control acid rain, which introduced a market-based system of emission allowances to reduce SO<sub>2</sub> emissions. An emission allowance is a limited authorization to emit a ton of SO<sub>2</sub>. EPA allots allowances to affected electric utilities on the basis of both the utilities' past fuel use and statutory limits on emissions. Once the allowances are allotted, the law requires that annual SO<sub>2</sub> emissions not exceed the number of allowances held by each utility plant. Firms may trade allowances, bank them for future use, or purchase them through periodic auctions that

EPA holds. Firms with relatively low costs for abating pollution have an economic incentive to reduce their emissions and sell their surplus allowances to firms that have relatively high abatement costs.

This option would tax emissions of SO<sub>2</sub> from stationary sources of combustion that are not already covered under the acid rain program. (Such sources include industrial boilers and electric utilities serving generators that produce less than 25 megawatts of power.) The rate of the tax would be based on the average cost of an additional reduction in SO<sub>2</sub> emissions by those sources. That approach would result in a tax of \$200 per ton of SO<sub>2</sub>, which would both encourage further reductions in pollution and increase revenues by about \$2.3 billion over the 2006-2010 period. (The estimate includes reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.) Major sources of pollutants, under the 1990 amendments to the Clean Air Act, currently pay user fees to cover the costs of a program that provides operating permits (stating which air pollutants a source is allowed to emit). Basing the tax described in this option on the terms granted in the permits would minimize the Internal Revenue Service's costs of administration.

In general, taxes on emissions can help lessen pollution in a cost-effective (least-cost) manner. The tax described in this option would lead to reductions in SO<sub>2</sub> emissions by encouraging firms with abatement costs that are less than the tax to cut their emissions and, at the same time, allowing firms with abatement costs that exceed the tax to continue emitting pollutants and pay the levy.

Opponents of this kind of tax, however, argue that it would impose a large burden on affected firms. Businesses covered under this option would not only pay a tax on their emissions of SO<sub>2</sub> but in most cases would also incur some costs for abatement (such as the cost of scrub-

bers and other equipment to reduce emitted pollutants). By contrast, regulatory approaches that mandated reductions in emissions would not require firms to pay that kind of levy on their allowed emissions.

RELATED OPTION: Revenue Option 51

RELATED CBO PUBLICATIONS: *An Evaluation of Cap-and-Trade Programs for Reducing U.S. Carbon Emissions*, June 2001; and *Factors Affecting the Relative Success of EPA's NO<sub>x</sub> Cap-and-Trade Program*, June 1998

## Revenue Option 51

### Impose a Tax on Nitrogen Oxide Emissions

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+3.0	+4.3	+4.1	+4.0	+3.9	+19.3	+37.6

Source: Joint Committee on Taxation.

Nitrogen oxides (NO<sub>x</sub>) usually enter the air as the result of high-temperature combustion processes such as those found in automobiles and power plants. Emissions of NO<sub>x</sub> play an important role in the atmospheric reactions that generate ground-level ozone (smog) and acid rain. Moreover, the Environmental Protection Agency (EPA) believes that NO<sub>x</sub> can irritate the lungs and lower a person's resistance to respiratory infections such as influenza. Nitrogen oxides and pollutants formed from them can be transported over long distances, so problems associated with NO<sub>x</sub> are not confined to the areas where they are emitted.

The Clean Air Act requires states to implement programs to reduce ground-level ozone. Because of the transportability of NO<sub>x</sub> and ozone, the law requires upwind states to establish programs that will help downwind states meet statutory standards. In 1998, EPA promulgated the Ozone Transport Rule (commonly referred to as the NO<sub>x</sub> Sip call), which required 22 eastern states and the District of Columbia to revise their programs so as to reduce NO<sub>x</sub> emissions beyond the levels previously mandated under the Clean Air Act. (The rule was subsequently revised to cover all or part of 21 states.) The rule did not mandate specific methods but instead gave each affected state a target for NO<sub>x</sub> emissions.

In addition, EPA established the Federal NO<sub>x</sub> Budget Trading Program, a cap-and-trade arrangement for emissions allowances. Under the program, sources of emissions are issued a specific number of allowances that entitle them to emit a limited amount of NO<sub>x</sub> each year. Firms are required to hold an allowance for each ton of NO<sub>x</sub> that they emit and are free to buy and sell allowances. Large electricity-generating units and industrial

boilers may participate in the program provided that the state in which they are located approves.

Another way to help control NO<sub>x</sub> would be to tax emissions from stationary sources in states not covered by the NO<sub>x</sub> Sip call. Such a tax would apply to industrial facilities and commercial operations, including electricity-generating units and industrial boilers as well as other sources; it could provide significant revenues and encourage further reductions in pollution below the level that current regulations require. Controlling NO<sub>x</sub> from stationary sources costs between \$500 and \$10,000 per ton of emissions abated. Imposing a tax of \$1,500 per ton of emissions would encourage stationary sources that could reduce NO<sub>x</sub> at a cost below that amount to do so. Facilities with abatement costs that were higher than the tax could continue to pollute and pay the levy. A tax of \$1,500 per ton would boost revenues by \$3.0 billion in 2006 and \$19.3 billion over the 2006-2010 period. Those estimates include reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.

Proponents of taxing pollution argue that such levies discourage activities that impose costs on society and could help reduce air pollution in a cost-effective (least-cost) manner. However, opponents of that kind of tax contend that it would impose a large burden on affected firms. Companies that this option would cover would not only pay a tax on their emissions of NO<sub>x</sub> but in most cases would also incur costs for abatement (such as the cost of scrubbers and other equipment to reduce emitted pollutants). By contrast, regulatory approaches that simply mandated reductions in emissions would not require firms to pay such a tax.

RELATED OPTION: Revenue Option 50

RELATED CBO PUBLICATION: *Factors Affecting the Relative Success of EPA's NO<sub>x</sub> Cap-and-Trade Program*, June 1998

## Revenue Option 52

### Reinstate the Superfund Taxes

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+1.1	+1.7	+1.7	+1.7	+1.8	+8.0	+17.7

Source: Joint Committee on Taxation.

Since 1981, the Superfund program of the Environmental Protection Agency (EPA) has been charged with cleaning up the nation's most hazardous waste sites. Most Superfund cleanups are paid for by the parties that are held liable for contamination at individual sites. In many cases, however, the liable parties cannot be identified, no longer exist, or are unwilling or unable to undertake the job. In such cases, EPA pays for the cleanup and, where possible, tries to recover the costs through subsequent enforcement actions.

Money to pay for those EPA-led cleanups and other costs of the Superfund program comes from an annual appropriation. Traditionally, the Congress has designated two sources of funds in the appropriation: the general fund and balances in the Superfund trust fund (formally, the Hazardous Substance Superfund). Revenues credited to the trust fund have come primarily from taxes on petroleum and various industrial chemicals and from a corporate environmental income tax. However, authorization for the taxes expired in December 1995, and beginning in 1997, the fund's balance steadily declined. By the end of 2003, it was essentially zero.

As the fund's balance dropped, reliance increased on the general fund as a source of the program's appropriated money. Through 1999, the annual contribution from the general fund never exceeded \$250 million; from 2000 to 2003, it was roughly \$600 million to \$700 million. Starting in 2004, EPA's appropriation allows the program to be financed entirely from the general fund, drawing from the trust fund only "such sums as are available." The trust fund will remain a minor source of money unless it receives a new or renewed stream of revenues. One option would be to reinstate the excise taxes on petroleum and chemicals and the corporate environmental income tax. Doing so would yield revenues of \$1.1 billion in 2006 and \$8.0 billion over the 2006-2010 period. (Those estimates include reductions in income and payroll taxes that

result from the higher amount of tax-deductible excise taxes.)

Proponents of reauthorizing the taxes argue that they are consistent with the "polluter-pays" principle. Specifically, proponents maintain that petroleum products and various chemical feedstocks and derivatives are common sources of contamination at Superfund sites and thus it is fair that producers and users of such substances, as well as corporations more broadly, foot much of the bill for the site cleanup program. Some advocates of renewed taxation also argue that EPA needs a stable source of funding for Superfund, for two reasons: to maintain multiyear cleanup efforts at the largest sites and to continue to provide a credible threat that the agency will clean up sites and recover the costs of that work from liable parties who do not undertake cleanups themselves.

Some people who oppose reinstating the taxes argue that the Superfund program should not be given dedicated funding until the Congress reforms the program's liability system and clarifies its future mission. Other opponents criticize the taxes themselves. First, they argue, taxing all firms in an industry or all corporations above a certain size, regardless of their individual past or present waste-disposal practices, does not embody the polluter-pays principle and has none of the desirable properties related to efficiency and equity that are commonly associated with it. Such taxes provide no incentive to firms to handle waste carefully or, better yet, avoid creating it in the first place. Moreover, the burden of paying such taxes tends to fall on the firms' (current) customers, through higher prices, rather than on (past) stockholders or managers. Second, opponents of reinstating the taxes point to research showing that the costs to administer and comply with such levies are high, compared with the relatively small amounts of revenues that were collected. Tax opponents also note that Superfund spending has always been subject to annual appropriations and that dedicated taxes are therefore no guarantee of stable funding.

## Revenue Option 53

### Impose an “Upstream” Tax on Carbon Emissions

(Billions of dollars)	2006	2007	2008	2009	2010	Total	
						2006-2010	2006-2015
Change in Revenues	+11	+18	+19	+20	+21	+89	+208

Source: Joint Committee on Taxation.

Scientists have identified carbon dioxide, which is emitted during the combustion of fossil fuels (oil, natural gas, and coal) as a key greenhouse gas that can affect the Earth's climate, but people disagree about whether anything should be done to reduce those emissions. One general area of consensus is that if steps are taken to reduce them, the approaches used should achieve the reductions at the lowest possible cost. Imposing a tax on carbon emissions would be one method of accomplishing that and would be relatively simple to administer. (Establishing a trading program for rights to emit carbon would be another such method.) Such a tax would reduce emissions and increase revenues by about \$89 billion over the 2006-2010 period. The estimate includes reductions in income and payroll taxes that result from the higher amount of tax-deductible excise taxes.

A tax on carbon emissions would entail the fewest economic distortions if it was administered “upstream,” where carbon enters the economy (that is, when fossil fuels are imported or produced domestically), rather than “downstream,” where carbon actually enters the atmosphere (when fossil fuels are burned). Under an upstream levy, producers and importers of fossil fuels would be taxed on the basis of the carbon emissions that were released when their fuel was burned. The tax would lead to higher prices for those fuels and for goods and services that required a great deal of carbon-intensive energy (for example, from coal) to produce. Those higher prices in turn would give the United States' entire economy an incentive to reduce carbon emissions.

Ideally, the rate of the tax (measured in dollars per ton) would reflect the damages avoided by emitting one less ton of carbon today. The benefits of reducing carbon emissions, however, are uncertain. Assessing those benefits involves determining the relationship between carbon emissions and the change—and rate of change—in temperature in different parts of the globe, as well as concom-

itant changes in other aspects of the climate, such as rainfall, severity of storms, and sea levels. It also requires evaluating the impact of changes in regional climates on natural and human systems—such as property loss and effects on species and human health—and calculating the pecuniary value of those effects (both those that may be damaging and those that may be beneficial).

The process of estimating and imputing measurable values to impacts on the climate is further complicated by the fact that benefits and costs will arise at widely different points in time. The benefits from avoiding climate change would probably come in the distant future—some researchers estimate that most of the benefits will occur after 2100. Yet the cost of policies enacted to avoid damages would be incurred beginning today. Traditionally, analysts apply a discount rate to the value of benefits that occur in the future, thus placing more weight on current costs than on future benefits. But how to discount the future benefits that society would reap from avoiding climate change is a controversial question. Some analysts argue that the discounting method should reflect the “opportunity cost” of funds that are dedicated to climate change—that is, the return that dollars invested in alternative investments might yield. Other analysts maintain that such a method would place too little value on the benefits received by future generations. They argue that considerations of equity necessitate choosing a lower discount rate than that implied by the observed opportunity cost of funds.

Given the difficulties in determining the benefits of reducing carbon emissions, any estimate of an “optimal” tax should be viewed as only a rough approximation. Nevertheless, most proponents of imposing a tax agree that starting off with a modest levy and increasing it over time would be the best approach because it would give the economy time to adjust to using less fossil fuel and allow for flexibility in policymaking. One of the most com-

prehensive attempts to determine the size of a tax on carbon emissions that would strike a balance between current costs and future benefits was undertaken by researchers at Yale. They suggested a worldwide tax that would begin at roughly \$12 per ton in 2005 and rise to \$17 per ton in 2015.<sup>1</sup> The tax would be levied on carbon emissions worldwide, whereas the tax in this option would apply only to emissions produced by facilities in the United States. Although a worldwide tax would in-

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1. Specifically, William D. Nordhaus and Joseph Boyer, in *Warming the World* (Cambridge, Mass.: MIT Press, 2000, p. 133), suggested that an optimal world tax on carbon, measured in 1990 U.S. dollars, would begin in 2005 at \$9.15 and increase to \$12.73 by 2015. An inflation index based on a GDP (gross domestic product) deflator was used to convert those amounts to the current-dollar figures that appear above.

duce low-cost reductions of emissions around the globe, a domestic tax would be borne primarily by U.S. citizens. At the same time, the benefits of any reduction in emissions would be distributed worldwide, with benefits likely to be greatest in developing countries.

The desirability of a carbon tax remains controversial. Some opponents of such a tax contend that it would impose a large burden on the economy and produce uncertain benefits. Other opponents argue for a different approach to reducing carbon emissions. They maintain that establishing a fixed limit, or cap, on emissions would be better than instituting a tax because a limit would provide more certainty about how much carbon emissions were actually reduced.

RELATED OPTIONS: Revenue Options 48, 50, and 51

RELATED CBO PUBLICATIONS: *Uncertainty in Analyzing Climate Change: Policy Implications*, January 2005; *Shifting the Cost Burden of a Carbon Cap-and-Trade Program*, July 2003; *The Economics of Climate Change: A Primer*, April 2003; *An Evaluation of Cap-and-Trade Programs for Reducing U.S. Carbon Emissions*, June 2001; and *Who Gains and Who Pays Under Carbon-Allowance Trading?* June 2000





## Contributors to This Volume

**A**ll divisions of the Congressional Budget Office (CBO) contributed to this report, which was coordinated by Arlene Holen. The Budget Analysis Division, under the supervision of Robert Sunshine and Peter Fontaine, prepared the spending estimates that appear throughout the volume. The staff of the Joint Committee on Taxation prepared most of the revenue estimates. Sandy Davis wrote Chapter 1. Many other people at CBO helped prepare the options:

### Chapter 2

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