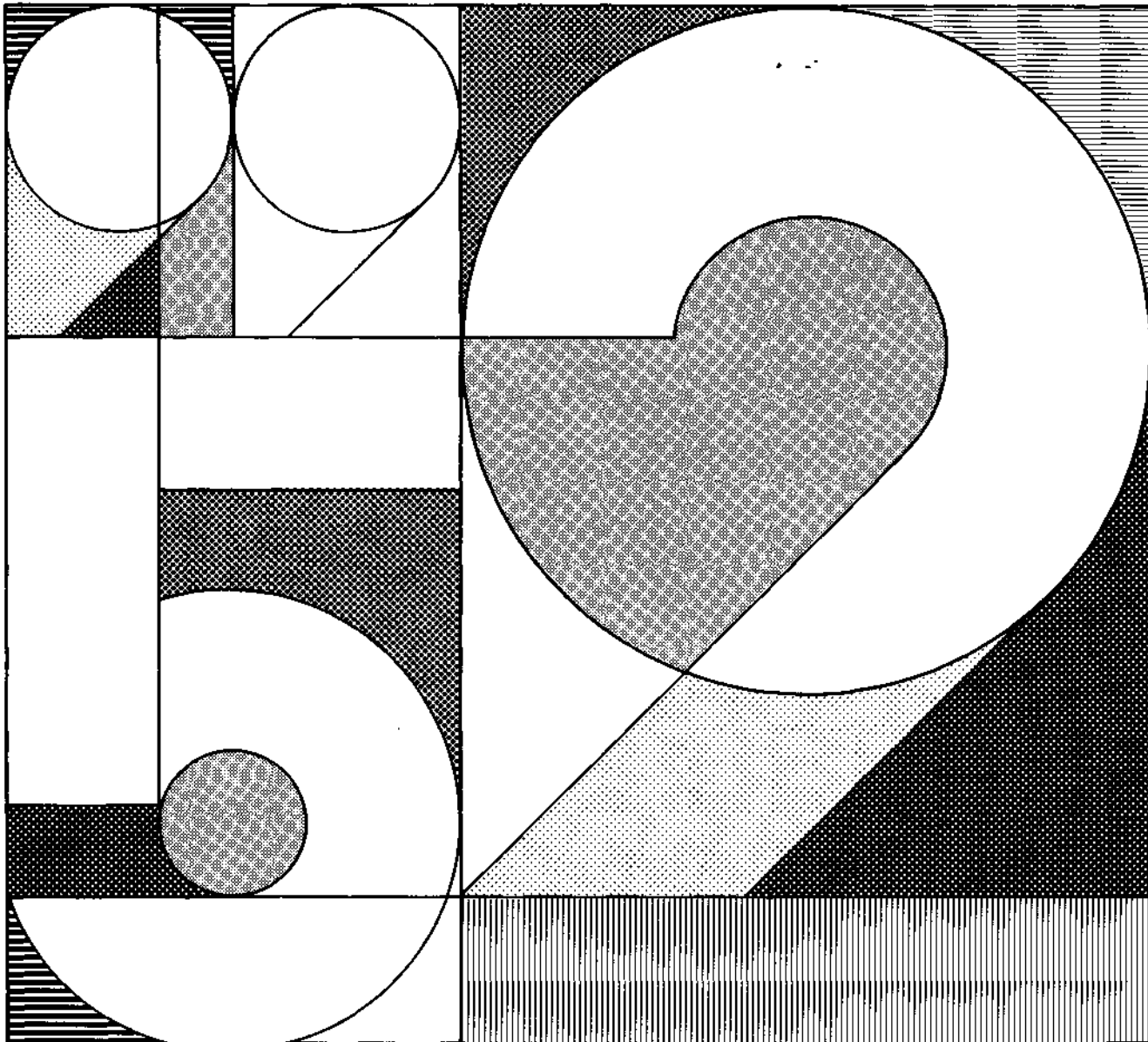




Reducing the Deficit: Spending and Revenue Options

***A Report to the
Senate and House Committees
on the Budget — Part II***

As Required by Public Law 93-344



Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE FEB 1989		2. REPORT TYPE		3. DATES COVERED 00-00-1989 to 00-00-1989	
4. TITLE AND SUBTITLE Reducing the Deficit: Spending and Revenue Options. A Report to the Senate and House Committees on the Budget - Part II				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Congressional Budget Office ,Ford House Office Building, 4th Floor ,Second and D Streets, SW ,Washington,DC,20515-6925				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 422	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

February 1989

CBO REPORT ON REDUCING THE DEFICIT

In *Reducing the Deficit: Spending and Revenue Options*, the Congressional Budget Office compiles in one volume dozens of specific options for increasing federal revenues or reducing spending in a wide variety of federal programs, and calculates the deficit reduction achieved annually and cumulatively for a five-year period for each option. The report is intended as a resource for the Congress as it develops the fiscal year 1990 budget resolution, which by law may not yield an estimated deficit exceeding \$100 billion. Currently, CBO's baseline deficit estimate for 1990 is \$146 billion.

This edition of *Reducing the Deficit*, Volume II of CBO's annual report to the Congress, is the tenth such compendium furnished to the House and Senate Budget Committees. It contains 122 alternatives to current spending policies in the major budget categories of national defense, entitlements, agriculture, nondefense discretionary programs, and the federal work force. It also includes 27 alternatives for revenue policy. Each option gives a brief description of the current policy, the proposed change, and the possible consequences, along with the estimated savings or revenues to be generated. Savings in each spending category are calculated from the CBO baseline, except for national defense options, which are calculated as savings from the Reagan Administration's 1990 budget proposals for national defense programs. The economic assumptions underlying the analysis are the same as those in Volume I of CBO's annual report, *The Economic and Budget Outlook: Fiscal Years 1990-1994*, where they are described in detail.

Options included in *Reducing the Deficit* are not CBO recommendations, as is often reported. The material presented here is intended to be informational, an aid to the Congress as it proceeds with the federal budgeting process. Most of the options included in the analysis have been considered by the Congress at some time in the recent past. Many other worthy options for reducing the deficit may have been omitted because of constraints of time or space, not because they lack merit. To make the report more accessible, an appendix and an index have been included. The appendix lists the options under the budget functions that would be affected. The index cross-lists the options by subject using key words.

Reducing the Deficit is an agencywide effort, and questions regarding the various aspects of the analysis can be directed to CBO's Congressional liaison office, the Office of Intergovernmental Relations, at (202) 226-2600. For additional copies of the report, please call the Publications Office at 226-2809.



CONGRESSIONAL
BUDGET OFFICE

Second and D Streets, S.W.

Washington, D.C. 20515

**REDUCING THE DEFICIT:
SPENDING AND REVENUE OPTIONS**

**The Congress of the United States
Congressional Budget Office**

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

NOTES

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

The notation "n.a." in tables means "not available."

Details in the text and tables of this report may not add to totals because of rounding.

PREFACE

The Congressional Budget Office (CBO) is required by section 202(f) of the Congressional Budget Act of 1974 to submit an annual report on budgetary options to the Senate and House Committees on the Budget. This year, the report is in two parts, with this report constituting Part II. Part I is entitled *The Economic and Budget Outlook: Fiscal Years 1990-1994*.

Chapter I of this report provides general background information on trends in federal spending, revenues, and the deficit. Formula approaches for reducing the deficit are also discussed. The next several chapters present specific options in each of the major spending areas, and the last chapter reviews specific revenue options. For each option, an attempt is made to present both sides of the case as fairly as possible. CBO does not endorse the options included, nor does exclusion imply any recommendation. This report concludes with an appendix and an index. The appendix lists the options under the budget functions that would be affected. The index groups the options by subject (key words) for those who want to turn to only a few program areas. Readers' comments are welcome on these or other aspects of the report.

All divisions of the Congressional Budget Office contributed to this report, which was prepared under the supervision of Robert W. Hartman. George Iden wrote Chapter I. Chapters II through VII were coordinated by John D. Mayer, Wilhelmina A. Leigh, Roger Hitchner, Elliot Schwartz, Earl Armbrust, and Jon Hakken, respectively. Budget authority and outlay estimates were coordinated by Charles E. Seagrave, Robert A. Sunshine, Michael A. Miller, and William P. Myers. Paul N. Van de Water prepared the estimates of formula-type budget options in Chapter I. Revenue estimates were prepared by the Joint Committee on Taxation and were reviewed by the Tax Analysis Division of CBO under the supervision of Rosemary D. Marcuss.

Paul L. Houts supervised the editing and production of the report, assisted by Nancy H. Brooks. Major portions were edited by Francis S. Pierce and Sherry Snyder. Sherry Snyder also compiled the index with help from Mark Desautels. The authors owe special thanks to Mary V. Braxton, Jill Bury, Gwen Coleman, Margaret Cromartie, Antoinette V. Foxx, Patricia K. Joy, Angela Z. McCollough, Ronald Moore, and Rhonda Wright, who typed the many drafts. Kathryn Quattrone prepared the report for publication.

James L. Blum
Acting Director

February 1989

CONTENTS

I	REDUCING THE DEFICIT: AN OVERVIEW	1
II	NATIONAL DEFENSE	21
	DEF-01 Cancel Procurement of the F-15	23
	DEF-02 Cancel the Trident Refit Program	25
	DEF-03 Cancel the Binary Munitions Program	27
	DEF-04 Terminate Early the Phoenix Missile Program	29
	DEF-05 Cancel the Army Helicopter Improvement Program	31
	DEF-06 Terminate Early the SSN-688 Submarine Program	33
	DEF-07 Cancel Procurement of Rail MX	35
	DEF-08 Cancel Procurement of the V-22 Aircraft	37
	DEF-09 Slow Procurement of the C-17 Aircraft	39
	DEF-10 Slow Procurement of the F-16 Aircraft	41
	DEF-11 Slow Procurement of DDG-51 Guided-Missile Destroyers	43
	DEF-12 Restructure the Army's Forward Area Air Defense Program	45

-
- DEF-13 Delay Production of the Stealth
Bomber Until 1993 47
 - DEF-14 Delay New Program Starts
One Year 49
 - DEF-15 Increase the Use of
Multiyear Contracting 51
 - DEF-16 Limit Funding for Supporting
Procurement 53
 - DEF-17 Slow the Funding for the
National Aerospace Plane 55
 - DEF-18 Slow the Growth in the Strategic
Defense Initiative 57
 - DEF-19 Reduce Funding for Operation
and Maintenance 59
 - DEF-20 Close or Realign Selected
Military Bases 61
 - DEF-21 Reduce the DoD Civilian
Acquisition Work Force 64
 - DEF-22 Urge Allies to Pay More of the
Cost of U.S. Forces Stationed
Overseas 66
 - DEF-23 Reduce the Number of Active-Duty
Personnel Because of the
INF Treaty 69
 - DEF-24 Reduce the Number of Deployable
Aircraft Carriers to Thirteen 71
 - DEF-25 Reduce the Tactical Air Force
by Three Wings 74
 - DEF-26 Eliminate Three Army
Light Divisions 76

- DEF-27 Reduce Enlisted End Strength in Light
of Projected Growth in Seniority 78
- DEF-28 Limit Military Pay Raise 80
- DEF-29 Restrict Reserve Retirement
Benefits 83
- DEF-30 Increase Cost-Sharing for
Military Health Care 86
- DEF-31 Enact DoD's Proposed Changes
in the New GI Bill 88

III**ENTITLEMENTS****91**

- ENT-01 Reduce Subsidies for
Stafford Loans 93
- ENT-02 Eliminate Federal Matching
in Medicaid for Medicare's
Premiums 97
- ENT-03 Rebase PPS Payments to
Hospitals Under Medicare 99
- ENT-04 Reduce Medicare's Payments for
the Indirect Costs of Patient Care
that Are Related to Hospitals'
Teaching Programs 103
- ENT-05 Reduce Medicare's Direct Payments
for Medical Education 105
- ENT-06 Reduce Reimbursements for Capital
Expenditures Under Medicare 107
- ENT-07 Adopt a Fee Schedule for Reimbursing
Physicians Under Medicare 110

-
- ENT-08 Reduce Geographic Variation
in Payment Rates for
Physicians' Services 113
- ENT-09 Include Hospital-Based Physicians'
Services in Hospitals'
Prospective Payments 115
- ENT-10 Continue the Transition to Prospective
Rates for Facility Costs in Hospitals'
Outpatient Departments 117
- ENT-11 Increase Medicare's Premium for
Physicians' Services 119
- ENT-12 Tax a Portion of Medicare Benefits 121
- ENT-13 Increase Medicare's Deductible for
Physicians' Services 123
- ENT-14 Collect 20 Percent Coinsurance on
Clinical Laboratory Services
Under Medicare 125
- ENT-15 Tax Employer-Paid Health
Insurance 127
- ENT-16 Increase the States' Share of
AFDC, Medicaid, and
Food Stamp Benefit Costs 130
- ENT-17 Reduce the Matching Rate for
Administrative Costs in AFDC,
Medicaid, and Food Stamps 133
- ENT-18 Require a Two-Week Waiting
Period for Unemployment
Insurance Benefits 136
- ENT-19 End or Scale Back Trade
Adjustment Assistance 138

-
- ENT-20 Reduce the Subsidy for
Nonpoor Children in Child
Nutrition Programs 140
- ENT-21 Count Energy Assistance as
Income in AFDC, SSI, and
Food Stamps 142
- ENT-22 Eliminate the \$50 Child-Support
Payment to AFDC Families 144
- ENT-23 Reduce the Federal Matching
Rate for Child Support
Enforcement Costs 146
- ENT-24 Restrict Cost-of-Living Adjustments
in Non-Means-Tested
Benefit Programs 147
- ENT-25 Reduce the Replacement Rate Within
Each Bracket of the Social Security
Benefit Formula 152
- ENT-26 Eliminate Social Security Benefits
for Children of Retirees
Aged 62-64 154
- ENT-27 Lengthen the Social Security
Benefit Computation Period
by Three Years 155
- ENT-28 End Certain Veterans' Compensation
Payments for Those with
Low-Rated Disabilities 157
- ENT-29 Extend and Raise the Loan Fee
for Veterans Administration
Guaranteed Housing Loans 159

IV	AGRICULTURAL PROGRAMS	161
	AGR-01 Reduce Deficiency Payments by Lowering Target Prices	163
	AGR-02 Charge an Insurance Premium for Target Price Protection	166
	AGR-03 Replace Deficiency Payments with Declining Direct Payments	168
	AGR-04 Raise Domestic Commodity Prices by Increasing Unpaid Acreage Reduction Programs	170
	AGR-05 Establish a 2 Percent Origination Fee for CCC Nonrecourse Loans	172
	AGR-06 Restrict Eligibility for Price Support Program Benefits and Reduce the Payment Limitation	173
	AGR-07 Eliminate the Export Enhancement Program	175
	AGR-08 Eliminate the Targeted Export Assistance Program	177
	AGR-09 Cut Dairy Price Support Program Costs by Requiring Producer Contributions	179
	AGR-10 Reduce the Crop Insurance Subsidy	181
	AGR-11 Reduce the Direct Lending Authority of the Farmers Home Administration for Farm Ownership and Operating Loans	183

V	NONDEFENSE DISCRETIONARY SPENDING	185
	NDD-01 Reduce Security Assistance	186
	NDD-02 End the Export-Import Bank Direct Loan Program	188
	NDD-03 Eliminate "Cargo Preference" and Related Subsidies to U.S.-Flag Vessels	190
	NDD-04 Cancel the NASA International Space Station Program	192
	NDD-05 Postpone Major New Spacecraft Development Projects in a Major NASA Space Science and Applications Program Area	194
	NDD-06 Cancel or Defer the Superconducting Super Collider	196
	NDD-07 Reduce Subsidies Provided by the Rural Electrification Administration	198
	NDD-08 Reform Debt Repayment Policy for Power Marketing Administrations	200
	NDD-09 Change Revenue-Sharing Formula from a Gross to a Net Receipt Basis for Commercial Activities on Federal Lands	202
	NDD-10 Improve Pricing for Commercial and Recreational Uses of Public Lands	204
	NDD-11 Increase the Harbor Maintenance Tax	210

- NDD-12 Eliminate Federal Support for
Local Wastewater Treatment
Plant Construction 211**
- NDD-13 Require a Special Assessment
on Deposits of Commercial
Banks 213**
- NDD-14 Include Foreign Deposits of
U.S. Banks in the FDIC
Insurance Base 215**
- NDD-15 Discontinue Postal Subsidies for
Not-For-Profit Organizations 217**
- NDD-16 Scale Back the Rural Housing
Loan Program 219**
- NDD-17 Scale Back the Rural Rental Housing
Assistance Program 222**
- NDD-18 End SBA Loans and
Loan Guarantees 224**
- NDD-19 Improve Pricing of Licenses to Use
Electromagnetic Spectrum 226**
- NDD-20 Eliminate Further Clean Coal
Technology Program Funding 228**
- NDD-21 Reduce Federal Aid for
Mass Transit 230**
- NDD-22 End Support for Aviation
Development 232**
- NDD-23 Impose User Fees on the
Inland Waterway System 235**
- NDD-24 Establish User Fees for Certain
Coast Guard Services 237**

-
- NDD-25 Reduce New Spending Authority for Highways to the Level of Highway Tax Collections 239**
- NDD-26 Allow Oil and Gas Leasing in the Arctic National Wildlife Refuge 241**
- NDD-27 End Funding of the Economic Development Administration 243**
- NDD-28 Eliminate or Restrict Community Development Block Grants 245**
- NDD-29 Reduce Untargeted Funding for Elementary and Secondary Education 248**
- NDD-30 Eliminate Federal Funding for Campus-Based Student Aid 250**
- NDD-31 Reduce Pell Grant Funding and Increase Targeting 252**
- NDD-32 Eliminate or Reduce Funding for Arts and Humanities 254**
- NDD-33 Reduce Funding for Research Supported by the National Institutes of Health 256**
- NDD-34 Eliminate Subsidies for the Education of Health Professionals 258**
- NDD-35 Modify the Fee Structure for Local and State Agencies that Administer Federal Housing Programs 260**
- NDD-36 Shift Housing Assistance from New Construction to Vouchers 262**

- NDD-37 Reduce Federal Expenditures for Low-Income Rental Assistance Programs 264
- NDD-38 Reduce Funding of New Housing Assistance Commitments 266
- NDD-39 Eliminate or Scale Back Low-Income Home Energy Assistance 268
- NDD-40 Close Inefficient or Underused Units in Veterans Administration Hospitals 270
- NDD-41 End Funding for the Legal Services Corporation 272
- NDD-42 Modify the Davis-Bacon Act by Raising the Contract Threshold and Allowing Unrestricted Use of Helpers 274
- NDD-43 Modify the Service Contract Act by Eliminating the Successorship Provision 276

VI FEDERAL WORK FORCE 279

- FWF-01 Limit Pay Adjustments for Federal Civilian Employees 281
- FWF-02 Reduce Federal Employee Retirement Benefits 284
- FWF-03 Restrict Cost-of-Living Adjustments for Federal Retirees Under Age 62 289
- FWF-04 Curtail the Indirect Retirement Subsidy to the U.S. Postal Service 292

FWF-05 Modify the Way Hospitals
Are Paid Under the Federal
Employees Health Benefits
Program 296

FWF-06 Trim the Size of the Federal
Civilian Work Force 299

FWF-07 Reduce Agency Spending in
Anticipation of More
Contracting Out 302

FWF-08 Reduce Expenses for Federal
Nondefense Travel 304

VII **REVENUES** **307**

REV-01 Raise Marginal Tax Rates for
Individuals and Corporations 309

REV-02 Amend or Repeal Indexing of
Income Tax Schedules 313

REV-03 Increase the Alternative
Minimum Tax 315

REV-04 Disallow Net Interest Deductions
on Indebtedness Exceeding
50 Percent of the Basis of
Tangible Assets 318

REV-05 Limit Mortgage Interest
Deductions 321

REV-06 Tax 30 Percent of Capital Gains
from Home Sales 324

REV-07 Decrease Limits on Contributions
to Qualified Pension and
Profit-Sharing Plans 326

-
- REV-08 Impose a 5 Percent Tax on
Investment Income of Pensions
and IRAs 329
- REV-09 Tax Capital Gains at Death 331
- REV-10 Decrease the Exemption for Estate
and Gift Taxes 333
- REV-11 Phase Out the Child- and
Dependent-Care Credit 335
- REV-12 Tax the Income-Replacement
Portion of Workers' Compensation
and Black Lung Benefits 337
- REV-13 Tax Nonretirement Fringe
Benefits 339
- REV-14 Increase Taxation of Social
Security and Railroad
Retirement Benefits 343
- REV-15 Expand Social Security
Coverage 347
- REV-16 Repeal the Medicare
Taxable Maximum 350
- REV-17 Index the Unemployment Insurance
Taxable Wage Base 351
- REV-18 Reduce Tax Credits for
Rehabilitation of Older
Buildings 353
- REV-19 Tax Credit Unions Like Other
Thrift Institutions 355
- REV-20 Repeal Tax Preferences for
Extractive Industries 357

REV-21	Further Restrict Deductions for Business Meals and Entertainment	361
REV-22	Eliminate Private-Purpose Tax-Exempt Bonds	362
REV-23	Eliminate or Restrict Deductibility of State and Local Taxes	365
REV-24	Impose a Value-Added or National Sales Tax	367
REV-25	Increase Energy Taxes	371
REV-26	Increase Excise Taxes	377
REV-27	Repeal the Automatic Aviation-Related Excise Tax Rate Reduction	380
APPENDIX	Spending and Taxation Options by Budget Function	383
INDEX		393
TABLES		
1.	CBO Baseline Budget Projections for Fiscal Years 1989 Through 1994	4
2.	Illustrative Formula-Type Budget Options	15
3.	Illustrative One-Year Budgetary Freeze	16
4.	Target Prices Under CBO Baseline Assumptions and Under 5 Percent Annual Reductions	164

5.	Sample Calculation of a Value-Added Tax Base, 1986	368

FIGURES

1.	Baseline Revenues and Outlays	6
2.	Revenues by Source as Shares of GNP	7
3.	Outlays by Category as Shares of GNP	9
4.	Publicly Held Federal Debt	10

CHAPTER I

REDUCING THE DEFICIT:

AN OVERVIEW

The Congressional Budget Office (CBO) projects that, under current budgetary policies, the federal budget deficit will be \$155 billion in fiscal year 1989 and \$141 billion in 1990. Thereafter, the projected deficit declines by only about \$5 billion per year, and is still \$129 billion in 1993. Under the targets mandated by the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 (Public Law 100-119), the deficit target is \$100 billion in 1990, \$64 billion in 1991, \$28 billion in 1992, and declines to zero in 1993. Thus, despite sustained legislative efforts in recent years, the gap between the deficit under current policies and the legislated budget targets is formidable. Moreover, because of the need to spur lagging national saving and investment, many people argue that a budget surplus is needed in the longer run.

During the 1980s, the federal government has run up large deficits, unprecedented in peacetime since the depression of the 1930s. The federal debt has increased from 26.6 percent of the gross national product (GNP) at the beginning of the decade to 42.9 percent in 1988. This fiscal policy has contributed to declines in net national saving for the 1980s and to large trade deficits with their associated accumulation of foreign debt.

This chapter summarizes the overall economic and budget outlook, reviews recent budgetary trends, and discusses broad approaches to deficit reduction. The remainder of the volume catalogues specific spending and revenue options for reducing the deficit.

THE ECONOMIC AND BUDGET OUTLOOK

The budget outlook is critically affected by the economic outlook. In particular, more rapid economic growth implies more tax revenues and a lower deficit. Moreover, because interest on the federal debt has

become such a large component of the budget, the course of interest rates has major implications for the deficit.

In CBO's view, since the economy is already operating near its potential, further rapid growth cannot be counted on to close the fiscal deficit. The long economic expansion has reached the point that labor and capital resources are being used at or near potential; a significantly higher use of resources could cause a substantial acceleration of inflation. In addition, with resources almost fully used, inflation and interest rates are unlikely to decline sharply.

CBO's short-term economic forecast shows slower economic growth in 1989 and 1990 compared with 1988. In the forecast period, growth is expected to be near the trend rate of expansion for the economy--about $2\frac{1}{2}$ percent a year--and unemployment is expected to remain near its current level of about $5\frac{1}{2}$ percent. Inflation is expected to increase moderately in 1989 compared with 1988, and to continue at about the same rate in 1990. The Consumer Price Index (CPI-W) increases 4.9 percent both in 1989 and in 1990.

Interest rates, which went up during much of 1988, are expected to remain relatively high in 1989 and then ease in 1990. In particular, the three-month Treasury bill rate is forecast to average 7.9 percent this year and 7.1 percent next year, while the ten-year government bond rate averages 9.3 percent in 1989 and 9.0 percent in 1990.

Beyond 1990, CBO's economic assumptions are not a forecast of future conditions but are projections based on past trends. To adjust for average cyclical performance in the past, the projections show economic growth slightly below the trend rate. CBO's projection method assumes, in effect, that a period of slow growth will occur sometime during the projection period. Real GNP grows at an average annual rate of approximately 2.2 percent in 1991 through 1994, and the civilian unemployment rate remains close to current levels at about $5\frac{1}{2}$ percent. The growth of the GNP deflator is projected to remain constant at an annual rate of about 4 percent, close to the post-World War II average but somewhat above the $3\frac{1}{2}$ percent rate in 1988. The inflation rate, measured by the Consumer Price Index (CPI-W), is somewhat higher at about $4\frac{1}{2}$ percent. The three-month Treasury bill rate

declines gradually until it reaches 5.9 percent in 1994—a level consistent with the average of real short-term rates since the policy of flexible exchange rates was adopted in 1973. Similarly, the ten-year government bond rate drifts down until it reaches 7.4 percent, reflecting the average spread between short- and long-term rates since 1973.

The budget baseline assumes that revenues, offsetting receipts, and entitlement spending are projected according to current laws. An exception is made for excise taxes dedicated to trust funds that are scheduled to expire during the projection period. In the baseline, these excise taxes are extended. Defense and nondefense discretionary appropriations are assumed to be held constant in real terms. The deficit reductions shown in this report are generally calculated against the CBO baseline. The major exception to this rule is for savings in the defense budget, which are measured against the Reagan Administration's budget request.

Based on the short-run economic forecast for 1989 and 1990 and a continuation of current budgetary policies, CBO's baseline projection for the federal deficit is \$155 billion in fiscal year 1989—unchanged from 1988—and \$141 billion in 1990. CBO's baseline projections for federal revenues, outlays, and the deficit are shown in Table 1. These projections and the economic assumptions on which they are based are detailed in Volume I of CBO's annual report, *The Economic and Budget Outlook: Fiscal Years 1990-1994*.

On the basis of CBO's economic projections for the period after 1990, the deficit declines at a slower rate than from 1989 to 1990. In 1994, the deficit is still \$122 billion—not much of a decline, although relative to GNP the deficit falls from 3.0 percent in 1989 to 1.7 percent in 1994. Over the 1989-1994 period, receipts grow at about the same rate as nominal GNP, while outlays grow at a slightly slower pace.

The projection for the total deficit is the result of a large and growing surplus in the Social Security trust funds, and a large and growing deficit in the remainder of the budget, termed the "on-budget" accounts. The off-budget or Social Security surplus increases from \$39 billion in 1988 to \$117 billion in 1994. The on-budget deficit, after increasing from \$170 billion in 1987 to \$194 billion in 1988, is projected

TABLE 1. CBO BASELINE BUDGET PROJECTIONS FOR FISCAL YEARS 1989 THROUGH 1994

Category	1988	1989	Projections				
	Actual	Base	1990	1991	1992	1993	1994
In Billions of Dollars							
Revenues							
Individual income	401	433	481	520	558	596	636
Corporate income	94	103	112	120	125	129	136
Social insurance	334	365	391	417	441	468	497
Other	<u>80</u>	<u>81</u>	<u>84</u>	<u>84</u>	<u>85</u>	<u>87</u>	<u>89</u>
Total	909	983	1,069	1,140	1,209	1,280	1,359
Outlays							
National defense	290	296	305	317	329	342	356
Nondefense discretionary spending	176	190	206	210	219	225	233
Entitlements and other mandatory spending	501	543	580	628	668	714	764
Net interest	152	169	182	192	198	203	206
Offsetting receipts	<u>-55</u>	<u>-60</u>	<u>-64</u>	<u>-67</u>	<u>-71</u>	<u>-75</u>	<u>-79</u>
Total	1,064	1,138	1,209	1,280	1,344	1,410	1,480
Deficit	155	155	141	140	135	129	122
As a Percentage of GNP							
Revenues							
Individual income	8.4	8.4	8.8	8.9	9.0	9.0	9.1
Corporate income	2.0	2.0	2.1	2.1	2.0	2.0	1.9
Social insurance	7.0	7.1	7.2	7.2	7.1	7.1	7.1
Other	<u>1.6</u>	<u>1.7</u>	<u>1.5</u>	<u>1.4</u>	<u>1.4</u>	<u>1.4</u>	<u>1.3</u>
Total	19.0	19.2	19.6	19.6	19.5	19.5	19.4
Outlays							
National defense	6.1	5.8	5.6	5.5	5.3	5.2	5.1
Nondefense discretionary spending	3.7	3.7	3.8	3.6	3.5	3.4	3.3
Entitlements and other mandatory spending	10.5	10.6	10.6	10.8	10.8	10.9	10.9
Net interest	3.2	3.3	3.3	3.3	3.2	3.1	2.9
Offsetting receipts	<u>-1.1</u>	<u>-1.2</u>	<u>-1.2</u>	<u>-1.2</u>	<u>-1.2</u>	<u>-1.1</u>	<u>-1.1</u>
Total	22.3	22.2	22.2	22.0	21.7	21.4	21.1
Deficit	3.2	3.0	2.6	2.4	2.2	2.0	1.7

SOURCE: Congressional Budget Office.

NOTE: Totals include Social Security revenues and outlays, which are off-budget.

to rise to approximately \$239 billion by 1994.¹ An increasing portion of the Social Security surplus, however, results from interest income earned on the growing trust fund balances, which are invested in government securities. These interest payments are an intragovernmental transaction that contributes equally to the Social Security surplus and the on-budget deficit. If one ignores these intragovernmental payments, the non-Social Security deficit declines slightly, and the Social Security surplus rises less rapidly.

TAXES, SPENDING, AND THE DEFICIT-- SOME HISTORICAL PERSPECTIVES

Over the past two decades, federal budget outlays rose considerably more than receipts--leading to large deficits in the 1980s. Although in recent years substantial progress has been made in restraining the growth in outlays and in shrinking the deficit, the deficit remains relatively large, about 3 percent of GNP. Under current budgetary policies, the deficit would tend to decline only gradually through 1994.

Revenues

During the 1960s and 1970s, federal government revenues absorbed a roughly constant share of the gross national product (see Figure 1). Although the revenue-to-GNP ratio varied from year to year, it averaged 18.3 percent for both decades. Revenues grew rapidly in the 1979-1981 period, however, as inflation pushed taxpayers into higher personal income tax brackets. But after reaching 20.1 percent in 1981, the ratio of revenues to GNP declined to the mid-18 percent range in the wake of the Economic Recovery Tax Act of 1981. Subsequent tax increases caused the revenue share to rise to 19.0 percent in 1988 and to stabilize at about 19½ percent of GNP by 1990 in CBO's baseline projections.

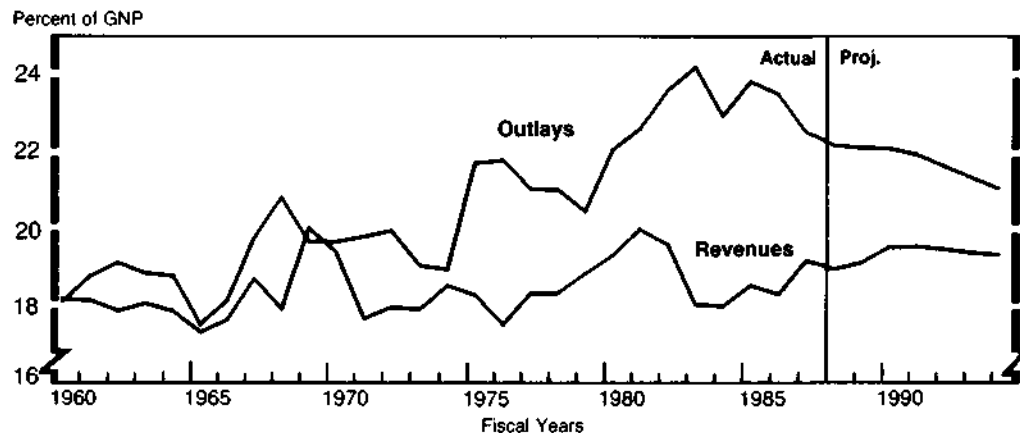
1. In analyzing the effects of the federal budget on the economy, economists generally focus on the total or unified deficit. The total deficit is the appropriate measure for gauging the impact of the budget on aggregate demand, on credit market conditions, and on longer-run national saving. Legislation passed in 1983 provided for a massive buildup in the Social Security trust funds through approximately 2020.

The relatively constant share of taxes in GNP masks several significant trends in the composition of receipts. Income taxes for corporations and excise taxes have been lower shares of GNP during the 1980s than during the 1970s or the 1960s (see Figure 2). By contrast, payroll taxes as a percentage of GNP have increased substantially and steadily during the 1960s, 1970s, and 1980s. Receipts from the personal income tax have remained about the same share of GNP. Individual income taxes now constitute approximately 44.0 percent of total receipts; social insurance taxes, 37.1 percent; and corporate income taxes, 10.5 percent.

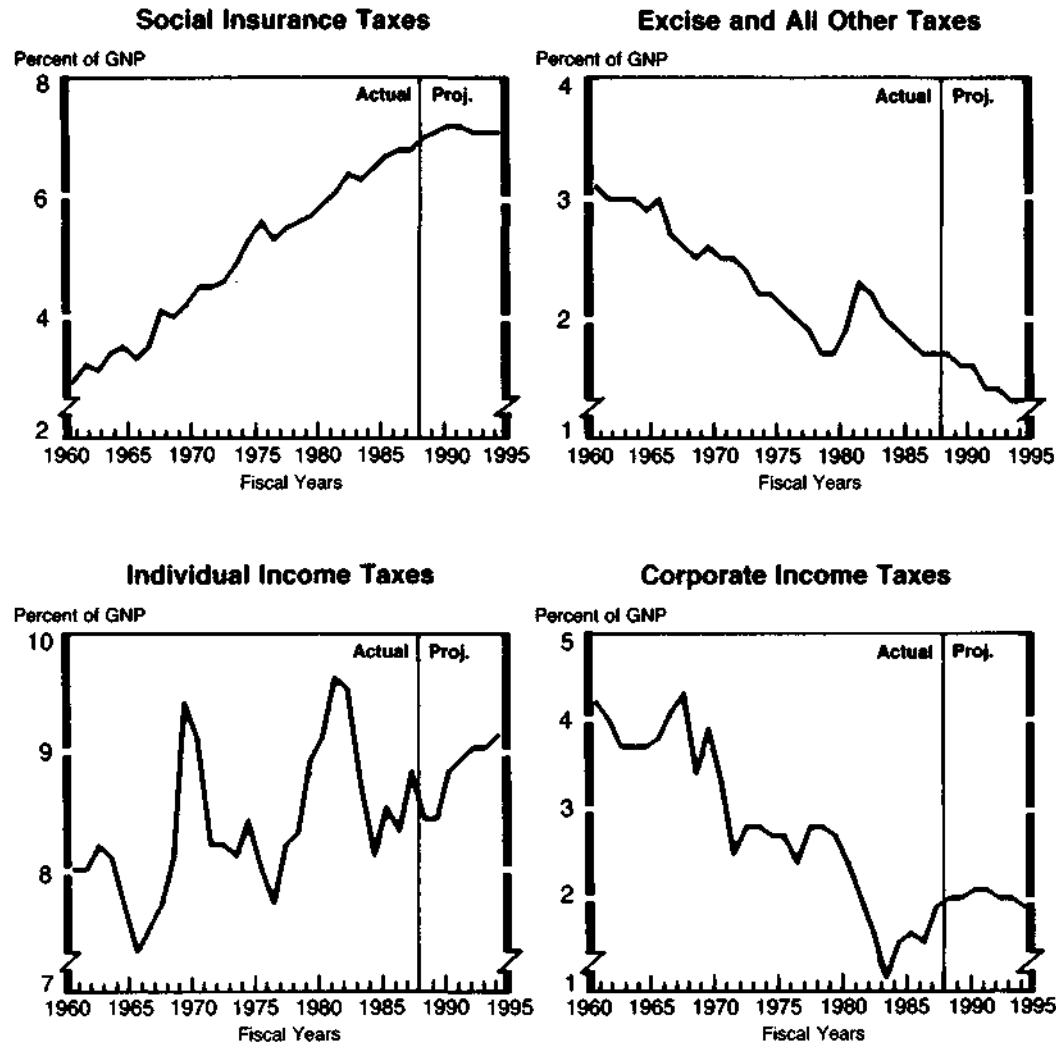
Outlays

While revenues now absorb only a slightly larger share of GNP than in the 1960s, outlays are considerably greater. They moved upward during the 1960s, 1970s, and the first half of the 1980s, when they reached a peak of 24.3 percent of GNP in 1983. After 1983, the ratio of outlays to GNP declined, and in 1988 it reached 22.3 percent.

Figure 1. Baseline Revenues and Outlays



SOURCES: Congressional Budget Office; Office of Management and Budget; Department of Commerce, Bureau of Economic Analysis.

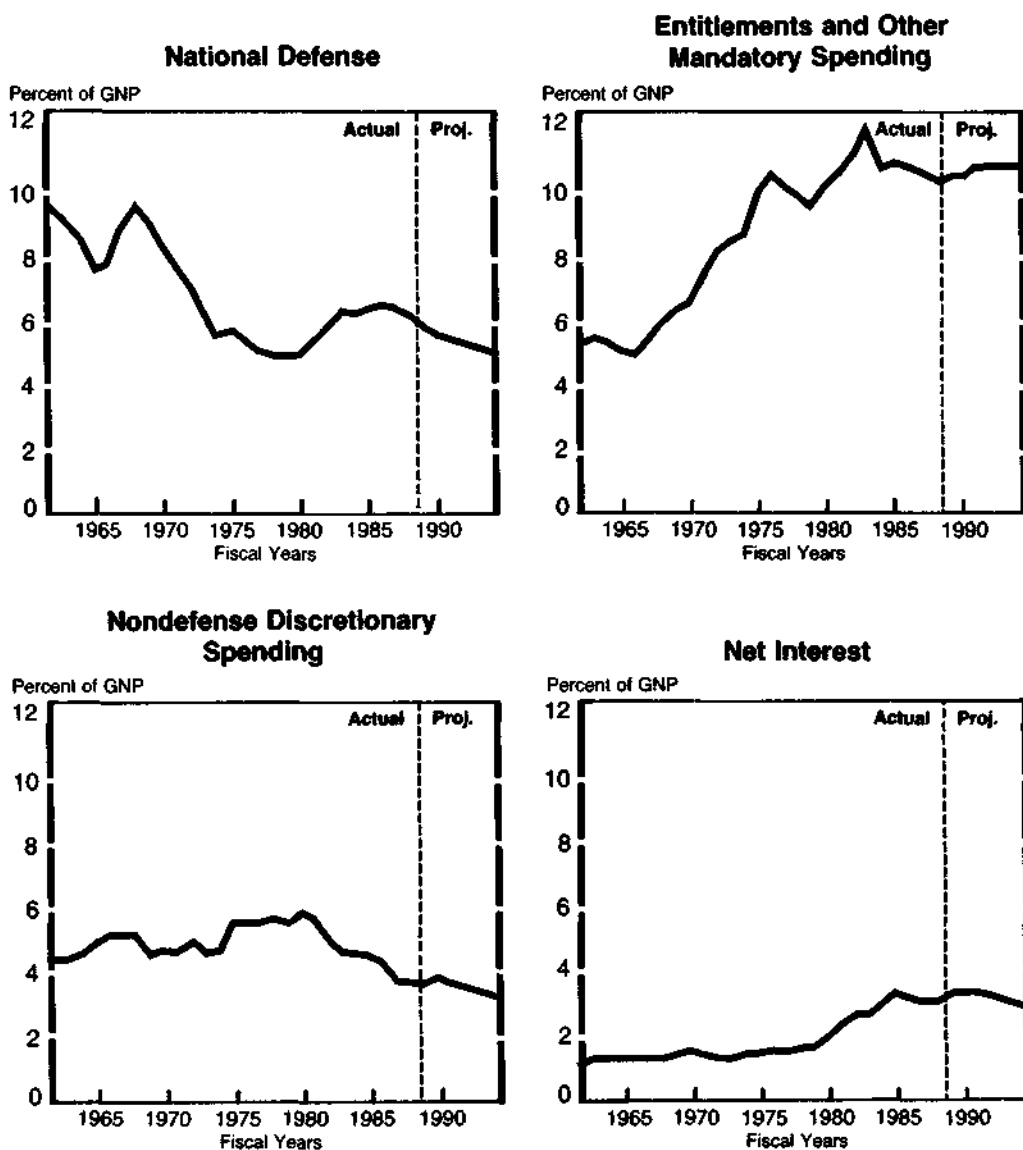
Figure 2. Revenues by Source as Shares of GNP

SOURCES: Congressional Budget Office; Office of Management and Budget; Department of Commerce, Bureau of Economic Analysis.

The rise in overall spending since the mid-1970s is attributable to the increases in outlays for interest, entitlements, and defense. Net interest payments as a share of GNP rose by more than a percentage point during the 1980s (see Figure 3). In addition, entitlement spending continued to increase during the 1970s and early 1980s. However, the long rise in entitlement spending as a share of GNP peaked with the recession of 1982-1983, and has since leveled off. Defense spending in the 1980s recovered some of the decline it experienced as the country withdrew from the Vietnam War during the early 1970s. Growth in defense spending peaked after the mid-1980s, however, and, in real terms (after adjusting for inflation), defense spending was essentially unchanged in 1988. Even though defense now represents a smaller share of GNP than during the 1960s and early 1970s, the absolute level of real defense spending remains relatively high, equaling or surpassing typical levels of the past 25 years. The nondefense discretionary programs, which have borne the brunt of budgetary restraint in the 1980s, declined from almost 6 percent of GNP at the start of the 1980s to about 3½ percent currently.

The largest category of outlays--entitlements and other mandatory spending--now accounts for about 47.7 percent of the total. Within that category, Social Security makes up about 20.3 percent of the budget. Other major categories include defense spending (about 26.0 percent of outlays), nondefense discretionary programs (16.7 percent), and net interest (14.9 percent).

Under current budgetary policies, federal spending as a share of GNP is projected to fall from 22½ percent in 1988 to approximately 21 percent in 1994. This decline is a direct result of CBO's baseline methodology, which provides for no real growth in defense and non-defense discretionary appropriations. Defense spending falls to 5.1 percent of GNP by 1994--still somewhat above the proportion before the buildup began in the late 1970s, but approximately the same as in 1980. Nondefense discretionary spending falls to 3.3 percent of GNP by 1994--roughly one-half of its share in 1980. Entitlement spending, which reached a maximum of 12 percent of GNP in 1983, remains at about 11 percent of GNP under current policies. Net interest costs continue at about 3 percent of GNP.

Figure 3. Outlays by Category as Shares of GNP

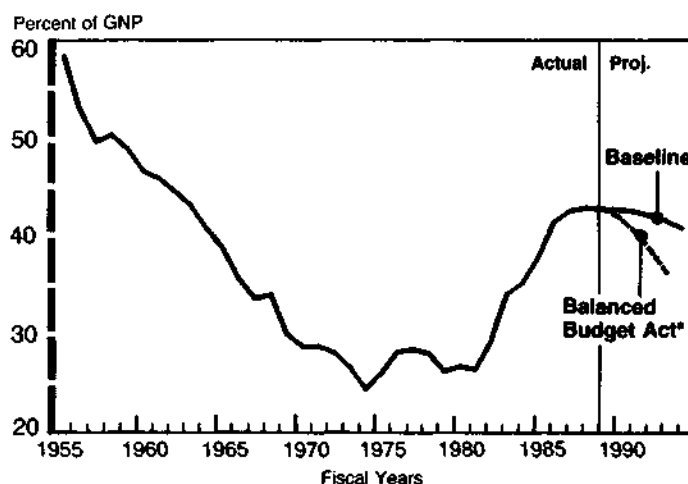
SOURCES: Congressional Budget Office; Office of Management and Budget; Department of Commerce, Bureau of Economic Analysis.

The Deficit

As shown in Figure 1, the federal deficit--outlays less receipts--has been much higher during the 1980s than during the 1960-1979 period. For instance, in the 1970s, the deficit as a percentage of GNP averaged about 2 percent. The deficit peaked in 1983 at about 6 percent of GNP, and has since declined to approximately 3 percent of GNP in 1988. The federal debt declined slowly relative to GNP during the first half of the post-World War II period, but has risen markedly during the 1980s (see Figure 4). The federal debt ratio, after reaching almost 43 percent of GNP in 1988, falls slightly below 41 percent in 1994 under CBO's baseline.

Figure 4.
Publicly Held
Federal Debt

SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.



* These projections assume full implementation of whatever deficit reductions are needed to achieve the budget targets for 1990 through 1993 set forth in the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987.

ECONOMIC CONSEQUENCES OF LARGE DEFICITS

What have been the consequences of the large budget deficits during the 1980s? The primary reason why economists worry about the budget deficit is that a structural or noncyclical deficit tends to restrict national saving and investment, reducing economic growth and the growth of living standards for later generations. Most economists argue that deficits also raise interest rates, increase the trade deficit, and increase the likelihood of severe swings in financial markets.

Because the private saving rate has recently declined to extremely low levels by historical standards, the drain on national savings from the budget deficit has been especially serious. Net private saving fell in the 1952-1979 period from 8.7 percent of net national product (NNP) to 6.4 percent thus far in the 1980s. Most analyses of private saving suggest that no significant improvement is likely soon. At the same time, use of saving by the public sector--the federal deficit minus state and local government surpluses--has increased from 0.7 percent of NNP in the 1952-1979 period to 2.9 percent thus far in the 1980s. During the 1980s, overall net national saving as a share of NNP has averaged only 3.7 percent, compared with 8.0 percent in the 1952-1979 period. Net domestic investment has also declined to 5.2 percent of NNP in the 1980s, compared with 7.6 percent in the 1952-1979 period. The discrepancy between the rate of saving available and that of investment has been made up by a net inflow of foreign capital, averaging 1.8 percent of NNP during the 1980s.²

ESTABLISHING A DEFICIT PATH

Economists and financial market analysts generally agree on the fundamental need to establish a clear downward trend for the deficit so that net national saving will increase. In terms of economic growth, economists believe that it is generally better to cut spending than to raise tax rates. There is little empirical evidence, however, to show that it makes a major difference, especially in the short run.

2. For an analysis of the effects of longer-run fiscal policy on economic growth, see Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1990-1994* (January 1989), Chapter III.

Qualitatively, it does matter for economic growth which taxes are raised or which spending is reduced. For instance, in general an increase in marginal income tax rates is more damaging to efficiency and growth than most methods of broadening the tax base. In fact, many tax experts argue that because the current tax system taxes different types of income at different rates, it distorts the allocation of resources. Broadening the tax base further along the lines of the Tax Reform Act of 1986, through such additional measures as reducing the interest deduction on home mortgages and lines of credit secured by homes, might lead to a more efficient allocation of resources.³ In addition, some public investments provide high rates of return to the economy and would not be undertaken without federal funding. For example, although not all federal research and development, infrastructure, or training and health programs provide benefits commensurate with their costs, some of them make a contribution to economic growth as great as private investments that are forgone because of financing the deficit.⁴

A budget plan that convincingly provides for a substantially lower path for deficits could yield a bonus by decreasing the cost of government borrowing and thus further reducing the deficit. Economists do not agree on just how much budget deficits affect interest rates, but most would agree that reducing the deficit would have a beneficial effect on interest rates.⁵ It is particularly difficult to quantify the effect of a specific budget plan because the effect depends on expectations and on complicated responses by other countries and foreign investors, which few estimates have been able to adequately take into account. The mere expectation of deficit reduction may lead financial markets to incorporate its effects by lowering interest rates, leaving little or no room for further effects on interest rates when the deficit is

3. See Charles E. McLure, Jr., "Demographic Shark in the Fiscal Water," in Herbert Stein, ed., *Tax Policy in the Twenty-First Century* (New York: John Wiley & Sons, 1988); also see Lans Bovenberg, "Tax Policy and National Saving in the U.S.: A Survey," International Monetary Fund, Staff Working Paper No. 88-110 (December 1988).
4. See, for instance, David A. Aschauer, "Is Public Expenditure Productive?" Federal Reserve Bank of Chicago (July 1988); and two recent reports by the Congressional Budget Office: *New Directions for the Nation's Public Works* (September 1988), and *Using Federal R&D to Promote Commercial Innovation* (April 1988).
5. See the CBO report to the National Economic Commission, "Economic Effects of Deficit Reduction in Commercial Econometric Models," and also the CBO Staff Working Papers, "Deficits and Interest Rates: Theoretical Issues and Simulation Results" (January 1989), and "Deficits and Interest Rates: Theoretical Issues and Empirical Evidence" (January 1989).

reduced. Moreover, how interest rates respond may depend heavily on the reactions of foreign interest rates, which are difficult to predict.

The CBO medium-term economic projections incorporate a substantial drop in interest rates. These projections are based on historical trends rather than on particular policies. Most analysts believe that the large federal deficit, coupled with low private saving, raises interest rates. Because the rules used to project interest rates simply reflect historical averages, the levels of interest rates in the projection period are not forced to be consistent with any given deficit path. But if the federal deficit is not reduced below the baseline path, interest rates could be somewhat higher than the historical average. On the other hand, substantial progress toward reducing the federal deficit could mean somewhat lower interest rates.

Most of the budget plans currently being discussed call for reducing the federal deficit to zero by 1993. There is nothing sacred about zero, but attaining a zero deficit would be a marked improvement over the performance of the 1980s. A policy of budget surpluses after 1993 would further stimulate economic growth.⁶

FORMULA-BASED STRATEGIES FOR REDUCING THE DEFICIT

One of the choices in setting a strategy for deficit reduction is whether to adopt a set of broad rules or formulas, or to take a case-by-case approach. A small across-the-board cut or freeze would be appealing if society attached the same social value to the affected programs and if the priorities reflected in the existing budget actually reflected current priorities. The formula approach has certain obvious advantages. It can make a large impact on the deficit; it can be done quickly; and it spreads the burden over broad classes of individuals. Moreover, it also avoids time-consuming debate on specific programs.

6. For an analysis of how different fiscal policies could affect economic growth, see CBO, *The Economic and Budget Outlook: Fiscal Years 1989-1994* (January 1989), Chapter III.

The formula approach, however, also has its potential disadvantages. For example, if society values some of the affected programs more highly than others, or if the required cuts are large, proportional reductions in all programs may not be desirable. The formula approach can also have arbitrary and uneven effects on different groups. While formulas that reduce all programs by a fixed percentage or hold all programs constant appear to be even-handed, a fixed reduction in all spending can have greatly differing effects on different groups of individuals. For some, the cutback in benefits may be hardly noticed, but for others, it can have serious consequences. Thus, even if the cutbacks are completely across the board, inequities occur; and the longer the rule is in effect, the more important the inequities become.

Table 2 contains a sampling of options for formula reduction that have recently been put forward and shows for each the resulting savings from CBO's baseline projections. Many formula budget plans could be constructed from this table by selecting one option from each category and summing the annual budget savings. Table 3 provides an illustrative one-year budgetary freeze that would produce savings of \$24.6 billion in 1990 and \$56.0 billion in 1994.

One broad formula plan is the sequestration procedure found in the Reaffirmation Act. While the procedure was conceived as a way to broadly distribute the burden of deficit reduction, it reflects a specific set of spending priorities. For example, some programs, such as Social Security, are fully exempt from sequestration. Other programs, while not exempt, are subject to special rules that limit the amount of spending reduction. Specifically, Medicare and health programs for veterans and Native Americans may be reduced by no more than 2 percent. The first-year outlay reductions required by the deficit targets are divided evenly between defense and nondefense programs. The required outlay reductions for each of these two groups (after subtracting the savings from the special-rule programs) are achieved by cutting the resources in each category by a uniform percentage. For 1990, the deficit target is \$100 billion, and the deficit must be held below \$110 billion to avoid sequestration.

TABLE 2. ILLUSTRATIVE FORMULA-TYPE BUDGET OPTIONS
(By fiscal year, in billions of dollars)

	Deficit Reduction from CBO Baseline				
	1990	1991	1992	1993	1994
National Defense^a					
One-year program-level freeze and pay freeze	-5.9	-9.4	-11.0	-11.8	-12.6
Increase in program levels and pay by 2 percent a year	-3.0	-8.3	-14.4	-20.8	-27.8
No increase in program levels or pay	-5.9	-15.7	-27.0	-39.0	-51.7
Cost-of-Living Adjustments (COLAs)^b					
No COLAs for one year	-10.6	-14.6	-14.8	-14.8	-14.7
COLAs of 2 percent a year	-6.5	-15.1	-23.7	-31.8	-40.1
No COLAs for five years	-10.6	-25.1	-39.6	-53.7	-67.8
Nondefense Discretionary Spending					
One-year program-level freeze	-2.9	-4.9	-5.8	-6.2	-6.6
Increase in program levels by 2 percent a year	-1.5	-4.2	-5.8	-6.2	-6.6
No increase in program levels	-2.9	-8.0	-14.0	-20.3	-27.1
Medicare					
One-year freeze in reimbursement rates	-3.1	-3.8	-4.5	-5.1	-5.9
Increase in reimbursement rates by 2 percent a year	-1.9	-4.3	-7.5	-11.3	-15.9
Civilian Agency Pay^a					
One-year freeze in pay raises	-1.1	-1.7	-1.8	-1.9	-2.0
Increase in pay by 2 percent a year	-0.6	-1.5	-2.4	-3.4	-4.4
No pay raises	-1.1	-2.7	-4.4	-6.2	-8.1

SOURCE: Congressional Budget Office.

a. These calculations are net of offsets for employer payments to employee retirement funds.

b. These calculations exclude means-tested programs.

PROGRAMMATIC APPROACHES TO REDUCING THE DEFICIT

The alternative to a formula approach is to focus on the policy implications of various deficit reduction options. Public policy principles or themes may be useful in formulating an overall deficit reduction package. Most of the outlay reductions reviewed in this volume involve one or more of the following themes:

- o *Reduce Public Consumption.* Reduce the public sector's role by cutting back on federal activities. Give priority to public investments and cut back on public consumption.

TABLE 3. ILLUSTRATIVE ONE-YEAR BUDGETARY FREEZE
(Deficit reduction from CBO baseline, by fiscal year,
in billions of dollars)

	1990	1991	1992	1993	1994
CBO Baseline Deficit	141	140	135	129	122
Policy Changes					
One-year program-level and pay freeze for defense ^a	-5.9	-9.4	-11.0	-11.8	-12.6
One-year COLA freeze ^b	-10.6	-14.6	-14.8	-14.8	-14.7
One-year program-level freeze for nondefense discretionary programs	-2.9	-4.9	-5.8	-6.2	-6.6
One-year freeze in Medicare reimbursement rates	-3.1	-3.8	-4.5	-5.1	-5.9
One-year freeze in civilian agency pay raises ^a	-1.1	-1.7	-1.8	-1.9	-2.0
Subtotal for Policy Changes	-23.6	-34.4	-37.9	-39.8	-41.7
Debt Service Savings	-1.0	-3.7	-7.0	-10.6	-14.3
Total Changes	-24.6	-38.1	-44.9	-50.4	-56.0
Resulting Deficit	116	102	90	79	66

SOURCE: Congressional Budget Office.

a. These calculations are net of offsets for employer payments to employee retirement funds.

b. These calculations exclude means-tested programs.

- o *Reassign Responsibilities to State and Local Governments.* Cut federal support for social programs, leaving the responsibility to state and local governments.
- o *Distribute the Burden More Heavily Toward Those Who Can Pay.* For instance, tighten eligibility criteria for federal programs to include only the economically needy.

Most of the revenue options discussed in this volume fall into the following categories:

- o *Broaden the Income Tax Base.* Tax all forms of labor compensation and capital income on a more uniform basis. Eliminate the preferential treatment of income from certain activities.
- o *Increase Income Tax Rates.* Raise the rates for existing tax brackets or add another bracket for high-income taxpayers. Raise the minimum tax rate.
- o *Tighten Taxation on Transfers of Wealth.* For instance, lower the exemption for estate and gift taxes.
- o *Expand Coverage of Payroll Taxes.* Tax state and local government employees like private-sector employees.
- o *Increase Reliance on Consumption Taxes.* Raise existing excise taxes or adopt a new broad-based consumption tax such as a value-added tax.
- o *Increase the Use of User Fees.* Make the price of government services reflect their true costs.

CONSTRAINTS ON DEFICIT REDUCTION

Both the formula approach and the specific program approach to cutting outlays, or raising taxes, have constraints. These involve technical constraints, legal and moral constraints, and constraints

arising from income distribution, regional considerations, and the short-term macroeconomic effects of deficit reduction.

Technical Constraints. The planning period for government programs varies considerably, and for some programs is quite long. Building an aircraft carrier, for instance, takes many years; once the process is begun, it may be highly inefficient to cancel or delay construction. While it may be feasible to stretch out or delay procurement of some other weapons systems, doing so could raise the unit cost if efficiencies can be gained from large production runs.

Legal and Moral Constraints. Legal constraints occur because the government may have already contracted to purchase resources. In general, contracts can be broken, but breaking a legal contract usually involves penalties. Moral constraints occur because people plan their lives based on understandings--perhaps implied--about how the government, their employers, and other significant institutions will behave. In many instances, these understandings are implicit rather than contractual. But sudden changes can nonetheless violate moral understandings and obligations.

Constraints Arising from Income Distribution. Recent trends in income distribution and poverty also constrain decisions about where to cut budget outlays or increase taxes. In general, the distribution of personal income has become more unequal during the 1980s than it was in the earlier post-World War II period. Family income, in terms of real purchasing power and adjusted for family size, has increased slowly since the early 1970s, but some groups have fared better than others. For instance, income rose relatively rapidly for the elderly, but single mothers with children experienced only a slight growth in income. Families headed by people under age 25 and families with children and no full-time, full-year workers experienced substantial drops in real income between 1970 and 1986.⁷ The index measuring the percentage of families in poverty rose sharply in the early 1980s, reflecting in part the severe recession during that period. More recently, the poverty index has slowly drifted down, but it remains

7. See Congressional Budget Office, *Trends in Family Income: 1970-1986* (February 1986). Also, the earnings of young people have declined markedly when compared with those 10 or 15 years ago. See Marvin Koters and Murray N. Ross, *The Distribution of Earnings and Employment Opportunities: A Re-Examination of the Evidence*, American Enterprise Institute, AEI Occasional Paper (September 1987).

substantially above the level in 1979. Poverty rates are particularly high for single mothers with children.

Concerns about the distributional effects of budgetary actions are, therefore, particularly important. For example, the growth in average benefit levels for families with dependent children--the AFDC Program--has lagged behind the rate of inflation during the 1980s. Also, on the tax side, an increase in payroll taxes, or a selective increase in excise taxes--say, on gasoline or tobacco--could impose a disproportionate burden on lower-income groups.⁸

Regional Considerations. Many deficit reduction options assign a disproportionate burden to one region of the nation. An oil import fee, for example, will have greater adverse effects on regions that are heavy consumers of oil than on oil-producing regions. Options concerning farm programs, development of water projects, or tax preferences for extractive industries (primarily oil and gas) all have obvious regional implications.

Regional considerations may be particularly important where local economies are already distressed and where unemployment is relatively high. Although labor markets are generally quite strong and the aggregate unemployment rate has not been this low since 1974, unemployment--especially for disadvantaged groups--remains high in some regions of the country, particularly in the Southwest and Midwest. For instance, unemployment rates for black teenagers remain extremely high in the Midwest, while not nearly as high in the Northeast, where labor markets are especially tight.

Short-Term Macroeconomic Effects. Finally, sharp reductions in the budget deficit could temporarily weaken aggregate demand, causing economic growth to slow in the short term and unemployment to rise. Cutting the budget deficit makes room for shifting resources toward net exports and domestic investment, improving long-run prospects for the economy. But this shift could occur slowly enough so that, in the short run, sharp cuts in the deficit could slow the economy and perhaps tip it into recession. The risk of causing serious weakness in the economy would be mitigated or eliminated if the Federal Reserve

8. See Congressional Budget Office, *The Distributional Effects of an Increase in Selected Federal Excise Taxes*, Staff Working Paper (January 1987).

responded by easing monetary policy. The risks could also be reduced by spreading the deficit cuts over several years.

HOW TO USE THIS VOLUME

The remainder of the volume is divided into chapters on national defense, entitlements and other mandatory spending, agricultural price supports, nondefense discretionary programs, federal work force, and revenues. Each of the chapters analyzes a large number of specific options for reducing the deficit. Each option includes a short description of its pros and cons, and an estimate of the savings or revenue gains for each of the years 1990 through 1994, as well as a five-year total. Variations on any option may, of course, be constructed, with corresponding variations in savings.

Because there would be interactions among the options if many of them were enacted, the separate options cannot be added to a grand total. Their interactions could magnify or nullify their individual effects. In fact, some of the options are mutually exclusive. In addition, any reduction in outlays or increase in revenues will result in a lower public debt and therefore in lower net interest costs than would otherwise be the case. The estimates for the specific options do not include these savings on interest, although they would have to be taken into account in analyzing a complete budget plan. Moreover, a budget plan that significantly reduced the path of federal deficits could cause some easing of interest rates, thus lowering interest payments on the debt.

Finally, the Congressional Budget Office does not make substantive policy recommendations. Thus, the appearance of an item among the listed options should not be interpreted as a CBO endorsement. Similarly, the absence of an item should not be construed as CBO opposition to its enactment.

CHAPTER II

NATIONAL DEFENSE

This section presents 31 options to limit spending for national defense. The first 13 offer lower spending levels by reducing the funds for procurement of major weapons systems, such as the Rail MX missile, the C-17 cargo aircraft, the chemical binary munitions program, and the new DDG-51 guided-missile destroyer. Savings would be achieved by canceling systems, as in DEF-01 and DEF-05, or by slowing the rate of procurement as in DEF-09 and DEF-11.

Limits on spending in other investment programs are considered in options DEF-14 through DEF-18. The Reagan Administration has proposed spending large amounts over the next five years on programs such as the National Aerospace Plane (DEF-17) and the Strategic Defense Initiative (DEF-18). The options presented here would achieve savings by reducing the rate of growth in these programs.

Limiting further improvements in military readiness is discussed in DEF-19, while more efficient spending of government funds is addressed in DEF-20 and DEF-21. The possible effects of having U.S. allies bear more of the cost of stationing U.S. forces overseas is discussed in DEF-22.

Options for reducing the number of active-duty military forces are presented in DEF-23 through DEF-26. Some reductions could be achieved as a result of the Intermediate-range Nuclear Forces treaty, which actually eliminated a military mission (DEF-23). If additional military missions are not eliminated, then reductions such as having fewer deployable aircraft carriers (DEF-24) or fewer Army divisions (DEF-26) would probably diminish military capability.

Finally, DEF-27 through DEF-31 offer savings by making more effective use of military personnel (DEF-27) or by limiting the growth in their pay and benefits (DEF-28) and (DEF-29). DEF-30 considers increases in the charges for health care for military dependents, and DEF-31 discusses proposed changes in the GI Bill.

The estimates of savings for all options were made relative to the Reagan Administration's proposed budget for 1990, using CBO's current economic assumptions. Savings are discussed in terms of budget authority rather than outlays.

DEF-01 CANCEL PROCUREMENT OF THE F-15

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,700	1,600	1,700	1,500	700	7,200
Outlays	170	820	1,240	1,410	1,420	5,060

The F-15 is the Air Force's premier fighter, capable of operating during day or night and in inclement weather. Its long-range radar and medium-range missile enable the F-15 to attack enemy aircraft before those aircraft can detect and attack the F-15. The model currently being produced, the F-15E, also has the capacity to bomb targets. The Administration plans to purchase 36 F-15E aircraft in each year through 1993 and a total of 150 aircraft by 1994. Because of the plane's expense, however, the Air Force developed the less capable, but cheaper, F-16 to fulfill its total force requirements. (See DEF-10 for a description of the F-16 program.) The Air Force will have purchased about 1,850 F-16s by the end of 1989 and plans to acquire an additional 750 through 1994.

Canceling all further development and procurement of the F-15 could save nearly \$1.7 billion in budget authority in 1990 and about \$7.2 billion over the next five years. Although the Air Force argues that it has no plane currently in development that will replace the dual-role F-15E, two aircraft in development are planned to offer significant enhancements to the Air Force's capability to attack enemy aircraft and bomb targets. Enhancements in fighter capabilities would be provided by the Advanced Tactical Fighter (ATF), with deployment expected in the mid-1990s. It will replace older versions of the F-15. The Air Force plans also to buy a version of the Navy's A-12, a stealthy medium-range bomber that would presumably be better able to survive enemy defenses when attacking surface targets than is the F-15E. Even without additional F-15s, the Air Force should have enough aircraft to meet its current goal of 35 tactical fighter wings, assuming that the service does not change retirement plans for other tactical fighter aircraft.

Canceling the F-15 would, however, reduce U.S. inventories of tactical bombers in the near term, and lead to a further reduction in U.S. ability to deliver nuclear weapons. Furthermore, this option would decrease overall U.S. capacity to produce aircraft, a potential problem in a long war, and would reduce competition for new aircraft--only one aircraft manufacturer would be producing Air Force tactical fighter aircraft well into the 1990s. Finally, canceling the F-15E at this stage of the program would leave the Air Force with only one operational wing of F-15Es. These aircraft are quite different from earlier versions of the F-15--only about 20 percent of the parts are common with earlier versions--and have a much different mission. Thus, having only one wing of F-15Es would lead to problems in maintaining the aircraft, in training personnel, and in developing tactics.

Moreover, the savings shown above may not be realized even if further F-15 buys are halted. These savings assume that all acquisition costs for the F-15 in the five-year period could be forgone. The Air Force argues that some continued costs would be necessary for setting up a maintenance organization and for closing the production line. Terminating F-15 production could also lead to pressure for increased funding of future aircraft such as the A-12 or ATF. Finally, the Air Force is concerned that companies producing the F-15 or its components would, in the short term, allocate overhead costs now associated with the F-15 program to other aircraft programs, thus increasing their costs. Examples of programs that could be affected are the Navy's F/A-18 and AV-8 and engines for the F-16. The Air Force is unable to estimate either the actual cost impact of this re-allocation or its duration.

DEF-02 CANCEL THE TRIDENT REFIT PROGRAM

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	100	300	200	500	200	1,300
Outlays	20	120	200	250	330	920

NOTE: These savings are based on 1988 budget data. The Navy did not provide current data.

The U.S. Navy is currently developing and buying a new submarine-launched ballistic missile (SLBM), the Trident II, for deployment in Trident submarines. This missile will be deployed as original equipment in the ninth and subsequent Trident submarines. The Navy plans to refit the first eight Trident submarines, currently armed with Trident I SLBMs, to carry the Trident II. This option would cancel the plan to deploy the Trident II on these eight submarines.

The Navy's rationale for the refitting program is based on the better accuracy and larger payload of the Trident II. Whereas the Trident I has moderate accuracy and carries eight Mark IV warheads, the Trident II will be roughly twice as accurate and may carry either about twelve Mark IV warheads or about eight, more powerful Mark V warheads. The number of warheads carried on the Trident II may be affected by decisions concerning arms control as well as targeting. The improved accuracy of the Trident II missile and the alternative of employing larger warheads would greatly enhance U.S. capability to destroy enemy targets, such as Soviet silos for intercontinental ballistic missiles (ICBMs) and command and control centers, both of which are hardened to withstand nuclear blasts.

But the plan to refit the first eight submarines is expensive. Canceling the refits could save about \$100 million in budget authority in 1990 and about \$1.3 billion over the next five years. This alternative would also reduce the procurement of the Trident II by about 180 missiles, saving about \$5 billion, although these savings would probably not be realized until the mid-to-late 1990s at the end of the Trident II procurement.

This option would preserve about 1,500 warheads capable of destroying softer targets instead of deploying about 1,900 new warheads with greater capability against hardened targets. Assuming that the United States deployed a fleet of 20 Trident submarines, this change would not significantly affect the ability of the entire U.S. ballistic missile force--including both land-based and submarine-based missiles--to destroy either small (500) or large sets (up to 2,000) of hardened enemy targets. This change, however, would decrease by about 10 percent the portion of a large set of hardened targets that could be destroyed by U.S. SLBMs alone. The SLBMs might have to attack these targets alone if U.S. land-based missiles were destroyed by a Soviet attack.

DEF-03 CANCEL THE BINARY MUNITIONS PROGRAM

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	90	150	180	260	280	960
Outlays	20	80	120	160	210	590

The United States manufactured no new chemical weapons during the period from 1969 to 1986. During this time, however, the services developed a chemical munition designed to replace the older existing arsenal of U.S. chemical munitions. These new munitions, referred to as binary munitions, contain two chambers, each of which holds a nontoxic chemical. It is only after the munition is fired from a cannon or dropped by an airplane that the two chemicals mix to form a toxic or debilitating chemical agent.

Although the binary munitions allegedly are much safer to store and transport than the older unitary munitions, the Congress refused to approve production funds for them for several years. When the Congress approved production in 1985, it did so only by the slimmest of margins and with the understanding that no munitions would be produced for several years. Indeed, the authorization for funds in 1987 included a stipulation that no artillery shells be assembled before October 1, 1987, and that no final assembly of the chemical bomb called "Bigeye" be undertaken before October 1, 1988. This alternative would cancel all programs for manufacturing binary munitions, saving \$90 million in 1990 and a total of nearly \$1 billion from 1990 through 1994.

The binary munitions program has experienced technical difficulties. In particular, the Bigeye bomb, designed to be delivered by Air Force and Navy aircraft, exploded prematurely during testing because of defective fuses. Although the services claim that all technical problems have been corrected, the program has fallen behind schedule. Because of these problems and delays, the Congress has preclud-

ed production of the Bigeye bomb until after it has completed its follow-on test and evaluation successfully.

Questions have been raised concerning the need for additional chemical munitions. These doubts have been heightened now that serious consideration is being given to a worldwide ban on chemical munitions. The Joint Chiefs of Staff have argued, however, that the very decision to produce these munitions has given new impetus to a negotiated ban on chemical weapons. If the United States chooses unilaterally to stop production, it could send the wrong signal to potential adversaries and reduce the chance of obtaining a meaningful ban. Moreover, according to the Department of Defense, the Soviet Union has the most extensive chemical warfare capability in the world. Advocates of U.S. chemical weapons production argue that, in the absence of a ban, the United States must have a modern stockpile of weapons to deter the Soviet Union and others from using theirs. They argue further that these newer weapons are safer to store and, if necessary, to use than the older weapons now in the U.S. stockpile.

DEF-04 TERMINATE EARLY THE PHOENIX MISSILE PROGRAM

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	380	330	280	0	0	990
Outlays	40	170	260	250	150	870

The Phoenix AIM-54C air-to-air missile is designed to be fired against enemy bombers from distances up to and perhaps exceeding 80 miles. Of all the air-to-air missiles currently procured by the Department of Defense, the Phoenix has the longest range and the highest unit cost, about \$1 million. Through fiscal year 1989, the Congress has authorized the production of about 2,100 Phoenix missiles. The Navy intends to produce the Phoenix well into the 1990s, when a new long-range missile now under development, the Advanced Air-to-Air Missile, will be deployed. This alternative would cancel all future Phoenix procurement, saving a total of \$380 million in 1990 and about \$1 billion over the next five years.

The Navy views the Phoenix--together with the F-14, the only Navy fighter aircraft that can carry and fire the Phoenix--as a critical part of the "layered" defense of aircraft carrier battle groups. Ships and their missiles form the close-in layers of defense. The primary mission of F-14 aircraft with Phoenix missiles is to destroy enemy bombers before they can come close enough to launch their payload of antiship cruise missiles. The Phoenix is uniquely qualified for this mission; other U.S. air-to-air missiles may not have the range necessary to engage enemy bombers before they release their cruise missiles. The Navy believes that this mission is important enough to justify the expense of the Phoenix system.

Terminating Phoenix production would adversely affect the Navy's anti-air capability. Relative to the Reagan Administration's plan, termination would reduce the Navy's inventory of Phoenix missiles by about 40 percent, even though this inventory is already short

of the Navy's objective. Although this reduction could be offset by increased procurement of other air-to-air missiles, none of them have the Phoenix's range. Also, increased procurement of other missiles would reduce the savings shown above. Terminating the Phoenix program would leave the Navy without an open production line for long-range, air-to-air missiles between now and the late 1990s.

The Phoenix weapon system, however, has been the subject of considerable debate. Many experts have criticized the cost of the missile, arguing that a less capable missile produced in larger quantities would result in higher overall effectiveness. Also, some critics have argued that the Phoenix's capabilities may be overstated because the missile's high cost has prevented the Navy from testing it in realistic operational environments. The Phoenix program's history of problems with production and quality control has also raised concerns.

DEF-05 CANCEL THE ARMY HELICOPTER IMPROVEMENT PROGRAM

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	300	330	360	350	340	1,680
Outlays	50	180	270	320	330	1,150

The Army Helicopter Improvement Program (AHIP) is intended to improve the capability of existing OH-58 scout helicopters through modification. The Army also plans to procure a new light helicopter (the LHX) in the mid-1990s to perform, among other things, the scout helicopter mission. Canceling this program and waiting instead for the new helicopter could save an estimated \$300 million in budget authority in 1990 and \$1.7 billion over the next five years.

The primary purpose of scout helicopters is to identify and designate targets for attack helicopters and artillery. The AHIP program would improve the ability of scout helicopters to identify and designate targets, particularly in the dark (by adding infrared sensors and laser range finders), and increase the operational capability of the helicopter in hot climates (by upgrading the engine and transmission and by adding a four-blade main rotor). The program would also improve the helicopter's survivability by mounting its sensors above the main rotor hub, enabling the helicopter to look for targets while hiding from enemy radars behind trees and hills.

Despite all of these improvements, which will cost more than \$6 million per helicopter, the upgraded version (designated the OH-58D) proved no better at finding or designating targets for attack helicopters than the unimproved version during operational tests completed in 1985. The upgraded version was better at locating targets for artillery, but the Army has already bought enough of the OH-58Ds for this mission. Because of the operational test results and greater budget constraints, the Army requested no additional funds for the AHIP program in the budget submitted to the Congress in January 1987. The

Congress, however, chose to continue the program, providing funds for 36 aircraft in 1988 pending certification by the Army that the OH-58D was the most cost-effective scout helicopter available. Funds for another 36 aircraft were appropriated for 1989.

This alternative would cancel the AHIP program starting in 1990. The Army could rely on older versions of the OH-58 until the new fleet of LHX helicopters is deployed in the late 1990s. A small portion of the savings from canceling the program might be devoted to minor "safety-of-flight" modifications to the remaining OH-58 helicopters.

**DEF-06 TERMINATE EARLY THE SSN-688
SUBMARINE PROGRAM**

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,520	0	0	0	0	1,520
Outlays	80	230	310	260	260	1,140

The Los Angeles-class nuclear-powered attack submarine (SSN-688) has been the Navy's premier attack submarine for the past decade. Its wartime missions include detecting and destroying enemy submarines and surface ships, protecting U.S. naval forces and shipping, and attacking land-based enemy targets with nuclear or conventional cruise missiles. The Navy's inventory now includes 40 SSN-688s, and an additional 21 have been authorized for construction but have not yet been delivered. Navy plans call for purchasing another two SSN-688s in 1990.

Production of the SSN-688 is scheduled to end with these two ships, as a new nuclear-powered attack submarine, the SSN-21, begins to enter production. The first SSN-21 was authorized in 1989, and the ship will probably enter the fleet in 1995. The performance specifications for the SSN-21 indicate that it will be quieter, faster, and able to dive deeper than the SSN-688. It also will carry more weapons than the SSN-688, and will have improved sensors for hunting enemy submarines.

This option would cancel the two SSN-688s proposed for 1990. Savings would total about \$1.5 billion. Assuming the SSN-21 submarine is produced as scheduled, this alternative should not significantly affect the Navy's goals for its submarine force. The Navy's stated goal for all types of nuclear-powered attack submarines is a force of 100 ships. Assuming that older submarines retire after 30 years of service life, CBO's projections show that the Navy will exceed that goal through the late 1990s. Indeed, the SSN-688s planned for

1990 could be canceled, and the force would still exceed 100 nuclear-powered attack submarines through 1997.

Terminating the SSN-688 program early, however, would leave the Congress heavily committed to the SSN-21 before the first one has been produced, tested, and deployed. If costs of the SSN-21 rise to unacceptable levels, or capability falls, the only choice would be to cancel the program and start a new one. Even if new weapons programs are successful, they are commonly delayed. If the SSN-21 program is delayed, then the Navy's submarine fleet, which would number about 100 submarines under current plans for the SSN-21, could have fewer than 100 submarines by the year 2000. This decrease might be significant if Soviet improvements in submarine technology continue at the current rate and their submarines become increasingly more difficult to detect. This trend in Soviet submarine capability could lead the Navy to request more attack submarines, not fewer.

DEF-07 CANCEL PROCUREMENT OF RAIL MX

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,220	2,150	1,440	860	90	5,760
Outlays	530	1,110	1,270	1,120	730	4,760

The Administration plans to deploy 50 MX missiles on special rail cars. During a crisis, these rail cars would disperse over wide areas, thereby enhancing the ability of the land-based leg of the triad of strategic forces to survive a Soviet attack. Former Secretary of Defense Carlucci has testified that, pending Congressional approval, the Administration will base a total of 100 MX missiles on rail cars--the 50 new missiles discussed in this option plus 50 existing missiles that would be moved from their current deployment in silos.

In peacetime, the Rail MX missiles would be garrisoned at several Air Force bases. The missiles would need about six hours to disperse over a sufficiently large area to achieve a high level of survivability. Few Rail MX missiles would survive if they had less time to disperse, both because their dispersal area would be limited and because the 10 warheads on each missile would be such a lucrative target for Soviet missiles to attack.

This option would cancel the Rail MX basing system and rely instead on the existing silo-based missile force, thus saving about \$1.2 billion in 1990 and a total of \$5.8 billion over the next five years. No missiles would be canceled through 1994 under this option. The United States would retain 1,000 silo-based missiles, with a total of 2,450 warheads, at least through the end of this century. Coupled with U.S. strategic bombers and submarines, this force would provide enough diversity and synergism to complicate Soviet attack plans and provide the United States with formidable retaliatory capability, which should contribute to deterrence. Furthermore, the Soviet Union would have to consider the possibility that the United States would launch its silo-based force before fully absorbing an attack,

especially in a situation where there was substantial warning of an impending attack. In a surprise attack--the case in which the silo-based missiles are most likely to be destroyed--Rail MX missiles would also likely be destroyed for reasons noted above.

On the other hand, there are important arguments in favor of a mobile missile like the Rail MX. The Soviet Union is deploying two mobile intercontinental ballistic missiles, one similar to the Rail MX. Maintaining symmetry of U.S. and Soviet strategic forces, which according to some experts contributes to deterrence, argues for deployment of either Rail MX or some other mobile missile. A second argument is that deterrence may be enhanced because of the large number of warheads that the Soviet Union would have to devote to attacking mobile missiles; such an allocation could reduce the Soviet Union's ability also to attack silo-based missiles and to conduct follow-on attacks. Finally, cancellation of Rail MX could weaken the hand of U.S. negotiators during arms control talks. The Reagan Administration has not requested funds for the other U.S. mobile missile program--the small, single-warhead missile known as Midgetman--because of its cost. If the Congress canceled Rail MX without providing some funds to preserve an alternative, the Soviet Union might have little incentive to negotiate limits on mobile missiles.

DEF-08 CANCEL PROCUREMENT OF THE V-22 AIRCRAFT

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,600	1,900	2,300	2,300	2,100	10,200
Outlays	240	840	1,360	1,790	2,020	6,250

The V-22, previously known as the JVX, is a new tilt-rotor aircraft being developed by the Department of the Navy for use by the Marine Corps, the Navy, and the Air Force. (A tilt-rotor aircraft has rotor blades that can be positioned vertically for taking off and landing, and horizontally for forward flight.) The aircraft is being designed to transport 24 people or about 5,700 pounds of equipment at cruising speeds of over 280 miles per hour. It has greater survivability than the helicopters it will replace, and its maximum range of 2,100 nautical miles should allow it to fly to Europe in the event of war, thus freeing large transport aircraft and amphibious ships to carry other cargo. Finally, the V-22 will have a greater capability to operate at night, an important factor for future military operations.

The V-22 aircraft is expected to perform different missions for each service. The Marine Corps has expressed the earliest and the largest need, having asked for 552 aircraft to be delivered beginning in the early 1990s. These aircraft would be used for combat assault--that is, transporting troops and equipment from an amphibious ship to a beachhead--a mission now being fulfilled by the aging CH-46 and CH-53 helicopters. In combination with the LCAC--the Navy's new ship-to-shore landing craft--the V-22 could increase the distance at which the amphibious ships could stand off from shore during an assault. This ability could decrease the ship's vulnerability to shore-based enemy missile attacks and increase the Marine Corps' chance of achieving a surprise assault. Air Force requirements call for 55 aircraft, down from 80 in last year's plan--to be delivered in the 1990s for use in special operations, while the Navy has indicated a need for only 50 aircraft to conduct search-and-rescue operations in combat.

Some analysts have expressed concern about the likely expense of the V-22, currently estimated to cost about \$30 million each. This unit cost could rise as the program reaches procurement, especially if total production quantities decrease. Concerns have also been raised about whether some enhancements in capability, such as the V-22's speed and range, are worth the additional expense, since other systems that must be used in the amphibious assault are slower and have a more limited range.

Canceling further development and procurement of the V-22 could save an estimated \$1.6 billion in budget authority in 1990 and a total of \$10.2 billion through 1994. The Marine Corps would need to continue to rely on the older and less capable CH-46 and CH-53 helicopters, while considering other helicopters and amphibious landing craft to perform combat assault missions in the future. Relying on these older helicopters might not cause substantial operational problems in the near term, however. According to the Marine Corps, helicopter service lives can be extended by continuing to replace parts that wear out. The relatively small needs of the other services probably could be met with other existing helicopters or small fixed-wing aircraft.

Terminating the V-22 also could reduce the number of aircraft models competing for Navy aircraft procurement funds. The Congress is already concerned about the number of Navy aircraft programs now funded at low procurement rates. Thus, if the Navy had to rely on existing aircraft in lieu of the V-22, these aircraft might be procured at more economic production rates, or at least their procurement might not be reduced below the currently planned rates.

Unless some alternative aircraft is procured in the future, this option could affect the Marine Corps' ability to perform its amphibious assault mission. Extending the service lives of the current fleet of helicopters for a long period would leave the Marine Corps without many of the improvements in capability that the V-22 should provide and could require costly modifications. Moreover, during peacetime, aircraft are destroyed in accidents. According to the Marine Corps, if the V-22 is canceled and no additional aircraft are purchased, the current medium-lift capacity--about 75 percent of a long-standing Navy goal--would decline to about 50 percent by the mid-to-late 1990s. Procuring some alternative aircraft would, of course, reduce or eliminate the savings shown above.

DEF-09 SLOW PROCUREMENT OF THE C-17 AIRCRAFT

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	0	0	1,200	2,000	1,600	4,800
Outlays	0	0	80	600	1,240	1,920

The C-17 aircraft program is designed to augment U.S. capability to rapidly transport forces overseas. The C-17 is a four-engine transport aircraft that can carry its maximum payload of 172,000 pounds of cargo for a distance of 2,400 nautical miles. The Air Force plans to purchase 210 C-17s between now and the year 2000. The first C-17 began to be assembled in August 1988; its first flight is planned for 1990. The first squadron of 12 C-17s is scheduled to be operational by September 1992.

The Congress authorized production of the first two C-17s in 1988 and four more in 1989. The 1990 Reagan budget request calls for six additional aircraft, with 10 to follow in 1991. The current planned production schedule calls for C-17 orders to increase to 20 in 1992 and to 29 in 1993 and 1994. This option would limit C-17 production to 12 per year in 1992 through 1994, saving \$4.8 billion over the five years, 1990 through 1994.

Slowing production would facilitate plans to test the C-17. The manufacturer of the C-17, McDonnell Douglas Corporation, has made a number of warranties with respect to the aircraft's performance. Should the C-17 fail to meet these standards, the manufacturer must remedy the defects at no cost to the government. In order to test the product, the first seven C-17s off the line will undergo a combined developmental and operational test period, ending in 1992. This option would allow the results of this test to be evaluated before committing the Congress to high-rate production.

Slowing deliveries of the C-17 would, however, extend the time necessary to remedy current deficiencies in the United States' ability

to move military cargo. For example, if the lower production rate of 12 a year were maintained throughout the life of the C-17 program, DoD's goal of being able to move 66 million ton-miles of cargo per day across intercontinental distances, a goal first identified in 1981, would not be met until the year 2007. Yet commanders-in-chief of combat theaters have expressed their need for improved ability to move cargo and have made the C-17 program one of their highest priorities. In contrast, under the Reagan Administration's plans, the goal would be met around the year 2000.

Moreover, although the lower production rates in this option would delay the actual expenditure, they could significantly increase the acquisition cost of the C-17 aircraft, perhaps by as much as 10 percent. Thus, the near-term budgetary savings this option offers would come at the expense of higher long-term costs, if the goal of procuring 210 C-17 aircraft is not changed.

DEF-10 SLOW PROCUREMENT OF THE F-16 AIRCRAFT

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	600	900	900	800	1,000	4,200
Outlays	40	290	570	710	750	2,360

The F-16 is the second of the two aircraft being procured by the Air Force for its tactical air forces (the other plane, the F-15, is discussed in DEF-01). The F-16 was developed in the late 1970s when the Air Force determined that the F-15 was too expensive to procure in large quantities. F-16s are about half the cost of F-15s but are smaller and somewhat less capable. The Air Force has already bought about 1,850 F-16s, and plans to buy 750 more over the next five years at an annual rate of 150. This alternative would reduce F-16 procurement to 72 per year, saving \$600 million in 1990 and a total of \$4.2 billion over the five-year period.

This option should bring future inventories of Air Force fighters more in line with the requirements associated with the anticipated 35-wing force. Previous procurement rates supported earlier Air Force plans to increase its force to 40 wings. The decision to limit the number of fighter wings to 35 has created an excess of inventory relative to aircraft requirements. This alternative would reduce the excess in 1994 from roughly 15 percent of the Air Force's fighter requirements to less than 10 percent. Thus, even under this alternative the Air Force would still have a surplus of several hundred planes in 1994.

Slowing the rate of procurement, however, effectively slows the modernization of the tactical air forces. Combined with planned reductions in the number of wings, this slowdown could prevent the Air Force from keeping pace with enhancements in Soviet tactical air capabilities. Also, the finding that the Air Force has more aircraft than it needs is based on Air Force planning factors used to justify the planned buildup to 40 wings and includes assumptions about factors such as retirement of aircraft and the number of planes required per

tactical air wing. If some of these assumptions change--for example, if the service decides to retire aircraft earlier than previously planned--overages could be replaced by shortfalls. Finally, the slower rate envisioned in this option would presumably make procurement less efficient and lead to a higher unit cost for the F-16.

DEF-11 SLOW PROCUREMENT OF DDG-51 GUIDED-MISSILE DESTROYERS

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,400	1,400	1,500	1,500	1,500	7,300
Outlays	70	290	590	840	1,100	2,890

The DDG-51 destroyers of the Arleigh Burke class would be used in a war to protect aircraft carrier battle groups and to attack land- and sea-based targets. The DDG-51s will incorporate the AEGIS combat system and other improvements in speed, weapons, and armor. The Navy states that the DDG-51s also will be more difficult for enemy forces to detect because of design features that reduce their visibility to radar, sonar, and infrared sensors. To date, the Congress has funded eight of the DDG-51s. The Navy's five-year shipbuilding plan calls for buying five ships per year for a total of 25 by 1994. This option would limit the Navy to three DDG-51s per year and a total of 15 over the next five years. Savings would be \$1.4 billion in 1990 and would total \$7.3 billion through 1994.

The Navy argues that DDG-51 destroyers should be purchased quickly because many destroyers are scheduled to be retired in the 1990s and because quick procurement is economical. The Navy also claims that DDG-51s should be bought at a rapid rate because the two shipyards building AEGIS vessels can accommodate as many as six ships per year, and that maintaining two shipyards at full capacity fosters efficient production and competition. Efficient production and competition generally lead to savings over the life of the program.

Reducing the number of destroyers procured through 1994 would exacerbate the shortfall of surface combat ships already anticipated for the 1990s. In 1988, the Defense Department reported to the Congress that if the Navy bought five DDG-51s per year, by the mid-1990s it would face a shortfall of at least 20 surface ships capable of attack-

ing enemy aircraft. Limiting authorization of DDG-51s to three a year would increase that shortfall.

Older, less capable ships could, however, be kept in service to compensate at least partially for reduced purchases of DDG-51 destroyers. And a slower rate of procurement would not necessarily result in a loss of competition or of the savings generally associated with competition. With three ships authorized per year, DDG-51 procurement would mirror the recently completed purchase of CG-47 AEGIS cruisers. In the CG-47 program, the Navy purchased three ships a year for six years, using two shipyards, and claimed to have achieved substantial savings through competition. It seems reasonable to expect similar results from a similarly structured DDG-51 program.

DEF-12 RESTRUCTURE THE ARMY'S FORWARD AREA AIR DEFENSE PROGRAM

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	380	330	350	370	350	1,780
Outlays	-10 ^a	140	260	310	340	1,040

a. Research and development appropriations spend at a faster rate than procurement. Outlay costs in 1990 for developing a missile described in this alternative exceed outlay savings associated with canceling ADATS and Chaparral in the same year.

Following the cancellation of the Sergeant York Division Air Defense Gun (DIVAD) in August 1985, the Army initiated a program to improve its ability to defend troops positioned well forward in the battle area against enemy aircraft, particularly helicopters. This Forward Area Air Defense (FAAD) program contains five elements designed to: (1) improve communications among air defense weapons and sensors; (2) purchase a new weapon to perform the mission of the canceled DIVAD; (3) develop and procure a system, commonly known as the pedestal-mounted Stinger, to provide air defense for the rear of the battle area; (4) develop and procure a system to attack enemy helicopters hiding behind hills, trees, or buildings (a non-line-of-sight system); and (5) improve the air defense capability of the Army's existing helicopters, tanks, and fighting vehicles. Reports indicate that the total cost of this five-part program could be as much as \$11 billion, about \$4 billion of which would be required through 1994.

This alternative considers a restructured FAAD program, with the emphasis shifted from sophisticated and expensive "dedicated" (that is, devoted to a single purpose) air defense weapons to programs designed to upgrade Army tanks, fighting vehicles, and helicopters with a capacity to provide protection from enemy aircraft. Since the principal threat to the Army's forward area comes from helicopters, the program would emphasize providing all Army weapons with some ability to destroy enemy helicopters. For example, each fighting vehicle would be equipped with missiles that could be used against either tanks or helicopters, Army helicopters would be equipped with

missiles capable of destroying enemy helicopters, and Army tanks would be provided ammunition with enhanced capability against hovering helicopters.

Because each Army tank and fighting vehicle would be capable of defending troops against enemy helicopters, dedicated air defense weapons should be needed primarily to counter fixed-wing aircraft. The Stinger missile system, currently in use by the Army, is designed to oppose fighter-bomber aircraft. A vehicle-mounted version of Stinger, which is being procured as part of the FAAD program, could replace the older Chaparral system currently in the field. Savings under this alternative would be about \$380 million in budget authority in 1990 and \$1.8 billion over the next five years. Savings reflect termination of the Air Defense Antitank System (ADATS) program, selected by the Army as the follow-on to the DIVAD program, and cancellation of any further purchases of Chaparral missiles and fire units, offset by the costs of developing a missile to provide the Army's fighting vehicles with an air defense capability.

This alternative might also offer increased capability, relative to the Army's plan, in at least one area. The ability to destroy helicopters is, in part, a function of the total number of weapons that are capable of intercepting helicopters at a specific range. By this measure, this option could eventually provide twice as much capability as the Army's plan.

On the other hand, this alternative requires that infantry and tank commanders assume greater responsibility for air defense, a situation that could adversely affect their ability to perform their mission of destroying tanks.

DEF-13 DELAY PRODUCTION OF THE STEALTH BOMBER UNTIL 1993

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

The annual budgetary impact of this option cannot be provided because the program is classified.

The B-2 bomber, also referred to as the Advanced Technology or "stealth" bomber, is the second bomber program in the Reagan Administration's plan to modernize its bomber force. (The B-1B bomber was the first.) The B-2 is designed to be nearly invisible to Soviet radars, and so should be better able to penetrate the airspace of the Soviet Union and deliver nuclear warheads. The Administration believes that penetrating bombers are needed to accomplish certain missions such as finding and destroying mobile targets, assessing damage caused by earlier nuclear attacks, and reconnoitering targets.

The B-2 program remains highly classified. Press reports, however, put the total program cost at about \$68 billion in current dollars, with initial deployment planned for the early 1990s. If these estimates are correct, the B-2 will be the most expensive strategic procurement program over the next five years.

This alternative would delay initial production of the B-2 bomber until 1993. Savings cannot be accurately assessed because cost and schedule data are classified. Based on press reports, however, a delay could save as much as \$20 billion to \$30 billion through 1994.

Delaying the B-2 program would allow more time for initial testing of the bomber before procurement. This might enable the B-2 program to avoid some of the problems that plagued its predecessor. The highly publicized problems of the B-1B bomber are attributed in part to the high level of concurrency, or overlap, in its development and production phases. Although some concurrency may speed up a program and so make it more efficient, unexpected problems, design changes, or delays become more costly to fix. The risks of encounter-

ing such problems are greater for systems based on advanced technology, such as the B-2 program.

The schedule and early history of the B-2 program suggest that concurrency could be a problem. The initial prototype B-2 was first displayed on November 22, 1988; its first flight is planned for early this year. The Air Force confirms that an initial production contract for the system has already been awarded, which indicates that concurrency exists in the B-2 program. The B-2 program may also be displaying early signs of the problems sometimes associated with concurrency. Press reports indicate schedule delays and increases in expected costs.

While minimizing concurrency and reducing near-term cost, this alternative would delay the availability of the B-2 aircraft until the late 1990s, three or four years later than under current plans. The B-1B program showed that fully fielded and fully operational systems are not synonymous. Nonetheless, this approach would probably mean that U.S. nuclear forces would benefit somewhat later from the stealth technology of the B-2 aircraft.

DEF-14 DELAY NEW PROGRAM STARTS ONE YEAR

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,200	800	1,200	1,400	1,800	6,400
Outlays	300	600	700	900	1,200	3,800

Since 1985, the combination of reduced funding for defense procurement, the initiation of many new major weapons systems, and the failure to cancel ineffective or low-priority programs has contributed to delays and higher costs for existing weapons programs. Delaying by one year the start of new research and development (R&D) programs, along with a one-year delay of programs scheduled for initial production in 1990 and 1991, could yield near-term savings and improve overall affordability for existing weapons systems.

This option identifies new R&D and production programs planned by the Department of Defense for 1990 and 1991. The Congress could choose to defer development or production of these new programs for a year to preserve the planned development and production rates of existing systems. Savings from deferring all these new program starts might be as much as \$1.2 billion in budget authority in 1990 and could total \$6.4 billion through 1994.

Production. Funding for defense procurement programs has decreased an average of 8 percent in real terms each year from 1985 through 1989. Although the DoD's request for procurement funding in 1990 is approximately 2 percent above the 1989 appropriated level in real terms, the Congress may not be able to appropriate the entire amount.

Despite the recent real reductions in procurement funding, the DoD has begun production of 25 major new weapons systems since 1985. Since few major weapons programs have been canceled during this period, budgetary reductions and funding for new programs have been accommodated by slowing--or stretching out--procurement of existing systems. The costs of such stretchouts have been significant.

For example, reducing procurement of the F-15 from the levels planned for 1983 through 1988 has increased the unit cost of the aircraft by 31.5 percent.

The Reagan Administration's budget for 1990 and 1991 contains a request for \$1.8 billion in procurement funding for 16 new production programs. By delaying initial production of these programs, savings could total \$4.9 billion over the next five years.

Research and Development. Since 1985, the real rate of growth of R&D has slowed dramatically. Research and development budget authority grew at an average annual rate of only 1 percent from 1985 through 1989 compared with an average annual rate of 13 percent from 1981 through 1985. R&D funds requested by DoD for 1990 are 5 percent higher in real terms than the R&D appropriations for 1989.

Despite slower growth, recent R&D funding has accommodated new major R&D programs since 1985. The Reagan Administration's budget request for 1990 and 1991 contains approximately \$1.5 billion for 12 major new R&D programs. Delaying the start of these new R&D programs could yield savings totaling \$1.5 billion over the next five years. Although the possible near-term savings from postponing these programs are modest, a delay could help make existing research programs more affordable. Moreover, since many programs that have been started since 1980 are now approaching the point where production should begin, a delay of new R&D programs could help to moderate future demands for scarce production funding.

Delaying new R&D and production programs may delay fielding of improvements in military capability. Such losses, however, may be somewhat offset by avoiding stretchouts of existing research and production programs. At the same time, a delay may provide an opportunity to resolve technical problems and reduce production risks for the new programs currently planned for 1990.

DEF-15 INCREASE THE USE OF MULTIYEAR CONTRACTING

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	-580	-40	400	630	710	1,120
Outlays	-50	-200	-150	90	340	30

In 1981, the Congress authorized the Department of Defense to make wider use of contracts to purchase weapons (Public Law 97-86). Multi-year contracting is a method of acquiring up to five years' requirements for weapons systems or subsystems under a contract that binds DoD to buy weapons for more than one year. By purchasing components and materials in large quantities early in a multiyear contract, the government can buy them more cheaply. The government can also achieve savings by avoiding the risk premiums and program adjustments that are characteristic of programs funded on an annual basis. Today, DoD usually buys weapons under contracts covering only one year and so does not realize the savings inherent in multiyear procurement.

Multiyear contracting for weapons has been endorsed by every major review of defense acquisition policy since 1981, including the Carlucci Initiatives, the Defense Acquisition Improvement Program, the President's Private Sector Survey on Cost Control (the Grace Commission), and the President's Commission on Defense Management (the Packard Commission). The use of multiyear contracts by DoD, however, has never exceeded a modest proportion of the defense procurement budget and in recent years has been declining. At their high point in 1985, multiyear contracts accounted for 12.3 percent of defense procurement funding. The level was reduced to 7.3 percent in 1989 despite encouragement from the Congress in the 1987 Defense Authorization Act to achieve a level of at least 10 percent. The DoD has proposed 13 new multiyear programs for 1990 and eight for 1991. According to DoD, a total of \$7.5 billion has been saved through multi-year procurement since 1982.

Based on savings achieved in past programs, additional multiyear programs could, over the next five years, save a total of \$1.1 billion. An additional cost of \$0.6 billion would be incurred in 1990 to pay for the large, up-front purchases that eventually result in economies. These new programs include the RC-12 aircraft, the SINGARS radio family, SOF modification radios, the Advanced Data Distribution System, night vision goggles, the T-45 aircraft, the MK-48 ADCAP torpedo, MHC coastal mine hunter ships, and the Tanker Transport Trainer System.

The multiyear programs proposed above could meet legislative criteria for approval contained in Public Law 97-86. In addition to achieving savings of at least 12 percent, these programs have a significant quantity of weapons planned for procurement in each of the next years, and appear to be fully funded during this period. They also have a stable design based on proven technology, and have completed engineering development and development testing.

Multiyear procurement is not without its drawbacks. Increasing the percentage of the procurement budget covered by multiyear contracts would reduce the flexibility of the DoD and the Congress to make large reductions in future defense budgets. This lack of flexibility could result in disproportionate reductions in other programs not covered by multiyear contracts. Alternatively, large budget reductions could force DoD to abrogate some multiyear contracts, which would involve substantial payments to contractors to cover termination costs.

DEF-16 LIMIT FUNDING FOR SUPPORTING PROCUREMENT

	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Savings from Reagan Administration's Request						
Budget Authority	970	1,580	2,570	3,630	3,790	12,540
Outlays	270	730	1,400	2,240	2,930	7,570
Savings from CBO Baseline						
Budget Authority	990	1,030	1,080	1,120	1,170	5,390
Outlays	270	580	830	970	1,060	3,710

While most debate on the defense budget centers on the major procurement programs for aircraft, missiles, combat vehicles, and ships, nearly one-fourth of the defense procurement budget buys other types of equipment such as trucks, communications equipment, and computers. Funds for that equipment are requested in the "Other Procurement" and "Procurement, Defense Agencies" accounts--collectively referred to here as supporting procurement. Many of the items purchased through these accounts, such as trucks and communications equipment, are as essential to military operations as are aircraft, tanks, and ships; other items, such as office computers, are needed for the administration and operation of the military departments and defense agencies but have no direct connection to combat operations.

In 1989, the Administration requested a total of \$19.2 billion for supporting procurement. The Congress appropriated \$18.7 billion, about the same as the 1988 appropriation. The 1990 defense budget request contains a total of \$19.4 billion for supporting procurement, an increase of 4 percent over the 1989 figure. This option would set the 1990 appropriation for supporting procurement at \$18.4 billion, a reduction of 5 percent from the request, and would maintain this level of funding, adjusted only for expected inflation, through 1994. Savings relative to the Administration's request would be \$1 billion in 1990 and would total \$12.5 billion through 1994. Savings relative to

the CBO baseline would be \$1 billion in 1990 and \$5.4 billion over the five-year period.

Reductions of this size undoubtedly would adversely affect military capability, but the exact effect would depend on where the cuts fell. If the reductions were concentrated on such items as communications equipment, combat support, and combat service support items--equipment needed in wartime--cuts of this magnitude could affect the ability to support forces in combat. On the other hand, if purchases of office equipment, training aids, and other items needed in peacetime were to bear the brunt of the cuts, administrative efficiency could suffer, as the services would be forced to continue using existing equipment and defer planned improvements.

DEF-17 SLOW THE FUNDING FOR THE NATIONAL AEROSPACE PLANE

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	120	190	170	130	90	700
Outlays	60	140	160	140	110	610

In January 1986, the Department of Defense initiated a joint effort with the National Aeronautics and Space Administration (NASA) to design and build a National Aerospace Plane (NASP) that can deliver civilian and military payloads into orbit. The NASP, or X-30 aircraft, is envisioned as an experimental hypersonic aerospace aircraft that will employ highly advanced propulsion, structures, and materials technologies. The first flight of the X-30 is planned for early 1994. The DoD and NASA have asked the Congress to provide \$427 million in 1990 for continued research and development and initial production of two X-30 aircraft. Last year, the DoD estimated that the NASP program would cost about \$3.6 billion. Independent estimates for the program range as high as \$17 billion.

The NASP is planned to be the technological base for the nation's next generation of space transport for both civilian and military missions. According to current plans, the aircraft will be capable of horizontal takeoffs and landings using conventional airfields. Using advanced technology, the X-30's engines--called "scramjets"--will enable it to cruise at high speed (4,000 to 6,000 miles per hour) in the earth's atmosphere, or to approach speeds that will allow it to orbit the earth. At an altitude of about 40 miles, small rocket engines in the aircraft will take over to propel the plane into orbit. The plane's speed and ability to operate both in space and in the earth's atmosphere may be its most important capabilities for various military missions.

The program planned for the NASP, however, appears overly optimistic by historical standards. Although the technologies involved are currently beyond the state of the art, the total time allowed be-

tween awarding contracts for the next phase and the first flight is only 40 months. This compares with 53 months required for analogous development of the B-1A bomber during the 1970s, and 69 months for the experimental XB-70 bomber built during the 1960s. Moreover, although both the B-1A and the XB-70 involved high technological risks for their times, the X-30 program appears to be a more ambitious program involving relatively more advanced technology. For example, although the scramjets being designed for the X-30 have been tested to seven times the speed of sound in a wind tunnel, their top speed and efficiency (which determine their relative advantage over rocket boosters) remain unknown.

Although DoD and NASA requested \$350 million for the X-30 in the 1989 budget, the Congress appropriated \$320 million. This alternative would further slow the growth in funding for the NASP. Specifically, it would limit funding to zero real growth in each year, 1990 through 1994. This approach would save an estimated \$120 million in 1990 and \$700 million through 1994.

The option would allow more time to resolve many technical issues such as the lack of adequate ground facilities to test structure and propulsion systems needed for hypersonic performance. It would also allow more time to develop basic missions for the NASP, particularly future defense missions, which have not been fully defined.

DEF-18 SLOW THE GROWTH IN THE STRATEGIC DEFENSE INITIATIVE

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,700	2,400	3,500	4,600	5,400	17,600
Outlays	880	1,840	2,800	3,840	4,770	14,130

On March 23, 1983, President Reagan called for the United States to render nuclear weapons "impotent and obsolete" by developing defenses that could destroy an enemy's nuclear weapons before they exploded on U.S. soil. The Department of Defense's research and development plan resulting from this mandate, known as the Strategic Defense Initiative (SDI), has invested about \$15.7 billion since 1984 to study applicable technologies and system concepts, ranging from space-based lasers and particle-beam weapons to antiballistic missiles. The DoD has approved several projects that will form the basis for initial SDI deployment, moving a portion of the program from the exploration of concepts to the more advanced phase of demonstration and validation of specific approaches. For 1990, the Administration has requested \$5.6 billion for the SDI program.

Supporters of the SDI program feel strategic defenses could improve the U.S. defense posture greatly. With strategic defenses, they argue, this country and its allies would be protected from nuclear attack and would not have to rely for protection on U.S. ability to counterattack and destroy Soviet targets. Some supporters feel that development of strategic defenses should proceed as quickly as technology advances allow, an approach that would demand substantial budgets. Others argue that only a particular aspect of SDI should proceed as fast as possible, such as tactical ballistic missile defense or terminal defense of intercontinental ballistic missiles.

Critics contend that SDI budgets should be limited and that the program should not proceed beyond the research stage without greater understanding of how strategic defenses would be integrated into the

overall U.S. defense posture. They worry, for example, that deployment of strategic defenses would require abrogation of the Anti-Ballistic Missile treaty, which might set back advances in arms control. Deployment of strategic defenses could also trigger a buildup of Soviet offensive nuclear forces designed to overwhelm U.S. defenses.

Meanwhile, there is a growing concern that SDI budgets will overwhelm other important research and development efforts. The Reagan Administration's plan calls for a steep rate of real growth in SDI funding--about 49 percent from 1989 to 1990 in real terms--compared with a real growth of 5 percent in the research, development, test, and evaluation (RDT&E) budget. Thus, the SDI program will consume a greatly increasing share of DoD research spending. In 1985, the first full year of the SDI program, it represented about 4 percent of the RDT&E budget. In 1990, the Administration request for SDI will constitute about 14 percent of the total RDT&E budget, growing to 24 percent by 1994.

Concerns about the scope of the program, and the rate at which funds for SDI have been growing could be partly addressed by slowing the rate of growth in spending during the next five years. The Congress has slowed the SDI program since 1985, reducing the Reagan Administration's request by an average of 27 percent each year. This option assumes that SDI funding grows in the 1990-1994 period at only 5 percent in real terms each year. Such a slowdown would save \$1.7 billion in budget authority in 1990 and a total of \$17.6 billion through 1994. Remaining funding should allow evaluation of the feasibility of new SDI technologies. The slowdown would also allow more time to develop this large program efficiently and to debate fully the technical and arms control issues involved in these efforts. Under this alternative, however, strategic defenses would be deployed much later than under the Reagan Administration's plan--a major drawback in the view of SDI supporters.

DEF-19 REDUCE FUNDING FOR OPERATION AND MAINTENANCE

	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Savings from Reagan Administration's Request						
Budget Authority	1,940	1,690	-690	-1,110	510	2,350
Outlays	1,230	1,600	-320	-980	190	1,720
Savings from CBO Baseline						
Budget Authority	0	0	0	0	0	0
Outlays	0	0	0	0	0	0

About 29 percent of 1989 defense appropriations supports the operation and maintenance (O&M) of existing plant and equipment. Part of this account pays for civilian workers. The rest of the account purchases goods and services for maintenance of existing equipment, training, fuel and spare parts, base operations, and many other things. Spending for these activities is commonly referred to as "readiness" spending, since it contributes directly to the day-to-day capability of the military forces.

Since 1982, O&M budget authority has increased about 16 percent in real terms. Although some of this growth was needed to support an increase in forces for both the Navy and the Air Force, much of it, according to the Department of Defense, was used to increase the readiness and training of existing forces. Current budget plans call for O&M budget authority to increase by about 3 percent in real terms in 1990. Presumably this higher funding stems from the cost of operating new equipment or of placing current forces at an even higher state of combat readiness and effectiveness, or both. Over the next five years, however, total O&M funding increases only slightly in real terms.

These increases in O&M funding could be appropriate if history is a guide. The total value of major defense weapons will increase during

the next few years. Over the last 10 years, O&M funding has correlated reasonably closely with the total value of weapons. If this relationship continues, demands for O&M funding could increase even though current defense plans will probably lower the rate of growth in the value of weapons.

On the other hand, substantial increases in O&M funding would not be needed if the services limited their O&M spending per weapon in the future to what they spend today. The Reagan Administration has reduced the force structure and slowed the modernization plans of a year ago. Thus, lower levels of O&M funding overall might allow DoD to maintain the current level of spending per weapon. Because DoD claims that current forces are at a high level of readiness, it may be reasonable to assume that the current level of spending per weapon is adequate.

Rather than being increased over the next five years as proposed by the Reagan Administration, O&M funding could be limited to zero real growth through 1994. This alternative would save \$1.9 billion in budget authority in 1990 and a total of \$2.4 billion over the next five years relative to the Reagan Administration's request. Compared with the CBO baseline, however, this option would offer no savings in any of the next five years.

Although this option would save money relative to the Reagan Administration's plans, some operating tempos might have to be slowed relative to those planned by the Administration, unless O&M efficiencies could be realized. CBO cannot specify in detail the effects of such a reduction because of the large number of O&M projects, each of which could be affected differently.

DEF-20 CLOSE OR REALIGN SELECTED MILITARY BASES

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

The annual budgetary impact of the option cannot be provided. The Department of Defense has not released the supporting data used to derive the estimates made by the Commission on Base Realignment and Closure.

The military services currently operate over 900 bases and facilities in the United States and its territories. Closing or consolidating some of those bases has often been proposed as a way to reduce the defense budget. In 1988, the Secretary of Defense established the Commission on Base Realignment and Closure to make recommendations on how to achieve a more efficient military base structure. Under the 1989 Defense Authorization Amendments and Base Closure and Realignment Act, the Secretary is authorized to close all military installations recommended by the commission unless the Congress passes a joint resolution to the contrary.

The Base Closure and Realignment Act contains several provisions that would facilitate closure or realignment of military bases. For example, in past attempts to close or consolidate bases, opponents of the closure have used the National Environmental Policy Act (NEPA) to delay the process. The new legislation limits the use of litigation to delay closure, but states that no closure or realignment may be completed until the provisions of NEPA have been met.

The act also contains an important mechanism to offset the costs of implementing the commission's recommendations by authorizing the Department of Defense to use revenues gained through sales of real estate and facilities to finance the costs of closure and realignment. In the past, the disposal and transfer of excess property and facilities have been managed by the General Services Administration, and receipts were returned to the government's general fund. Under

the act, such revenues will be deposited in a special account designated to offset the costs of closing or realigning bases.

The new legislation also minimizes political factors that have obstructed previous attempts to close or realign bases. By requiring the Secretary of Defense to close all or none of the recommended military installations, the legislation provides him with no latitude to alter the commission's recommendations. Similarly, the legislation constrains the Congress from making any adjustments.

Nonetheless, the Congress should review the commission's recommendations carefully for several reasons. In some cases, the proposed actions could cause significant economic disruptions in communities surrounding the bases. The commission did not analyze the potential local economic impact in detail, nor did they estimate non-DoD costs of federal economic assistance to affected communities.

Actual savings will be affected by the accuracy of the commission's projections concerning construction and base operations support costs at receiving bases, personnel replacement and involuntary separations, and revenues from property sales. These projections will be reviewed by CBO when data become available. The actual savings to be achieved--and hence the ultimate effect of the base closures and realignments on the federal deficit--will depend on future budget actions.

The closures and realignments also involve moving a number of military missions from one base to another and could thereby harm military effectiveness, if only temporarily. According to the commission and the Secretary of Defense, however, the proposed closures and realignments will not permanently harm capability. The actions would not eliminate any military units, but would relocate some. Thus, in the view of the commission and the Secretary, the annual savings that will eventually be realized from these actions would result in a more efficient military.

On January 5, 1989, the Secretary submitted to the Congress a list of 145 bases and installations proposed for closure or realignment by the commission. According to the commission's estimates, the recommended actions could eventually save \$693.6 million a year, after any one-time costs and savings have been realized. Using the Ad-

ministration's economic assumptions, the commission projects that closures will save a net present value of \$5.6 billion over the next 20 years. To offset the one-time costs, the Secretary requested \$1 billion (\$500 million in 1990 and in 1991)--more than the Commission's request for a minimum of \$300 million in 1990.

A CBO analysis of major base closures during the 1970s suggests that only under the most optimistic assumptions are the commission's savings estimates roughly consistent with past savings. CBO analyzed the closure of nine major bases using actual data on personnel at the bases along with current data on salaries and on the use of military and civilian personnel employed in base operations and support. Using alternative assumptions, CBO's estimates of average annual savings per base ranged from \$12.7 million to \$22.9 million (in 1989 dollars). The commission's corresponding estimate is \$23.1 million (this average excludes bases whose closure would not result in any savings). The Congress should exercise caution in considering the commission's estimate, however; at the time of publication, DoD had not yet submitted the data on which the estimates were based.

Authorization and implementation of the recommended base closures and realignments could result in a more efficient base support structure. Having fewer bases means that base operations and support costs would be lower in the long run. In order for such savings to contribute directly to reducing the deficit, however, the resulting reductions in defense personnel and base operations and support should be reflected in future budget requests for those appropriation accounts.

DEF-21 REDUCE THE DoD CIVILIAN ACQUISITION WORK FORCE

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	150	470	800	1,150	1,510	4,090
Outlays	150	460	790	1,140	1,500	4,040

Savings in Defense Budget

Budget Authority	170	520	890	1,280	1,680	4,550
Outlays	160	510	880	1,270	1,670	4,500

NOTE: Savings in the federal and Department of Defense budgets differ because of civilian retirement programs and other pay costs that are offset in the federal budget.

In 1986, the President's Blue Ribbon Commission on Defense Management (the Packard Commission) examined ways in which the defense acquisition process could be improved. The commission concluded that having too many acquisition personnel, burdened by too many laws, regulations, and layers of review, resulted in a cumbersome, inefficient process for weapons acquisition. The commission recommended that defense acquisition policy and oversight be consolidated, reporting chains be reduced, and duplicative functions and excessive regulations be eliminated. Following these measures, the commission stated, could substantially reduce the number of defense acquisition personnel.

According to the General Accounting Office, a total of about 485,000 military and civilian employees work for the military services' buying commands, although not all of them are involved directly in the acquisition process. Primary responsibility for managing a major weapons acquisition program rests with particular commands within the military departments—for example, the Naval Sea Systems Command (NAVSEA), the Air Force Systems Command (AFSC), and the Army Materiel Command (AMC). If a major reduction in force is possible, it will occur in these commands. It will also

mainly involve civilians; nine out of ten employees of the military acquisition agencies are civilians, not military officers.

Previous experience in consolidating functional components within DoD indicates that significant personnel savings could be achieved. Bringing together logistics support functions of the various services into the Defense Logistics Agency in 1961, for example, resulted in personnel reductions of 13 percent.

CBO has not performed a detailed analysis of personnel savings that could result from streamlining the acquisition process. Instead, CBO assumed for illustration that a 10 percent reduction in the number of civilian personnel who work for military acquisition agencies--a reduction of 48,500 people--could be achieved through reform measures like those recommended by the Packard Commission. The reduction of almost 10,000 people in each of the next five years would result in savings in budget authority of \$150 million in 1990 and about \$4.1 billion through 1994.

Such reductions would, of course, entail some risks. If the reductions were not accompanied by consolidations recommended by the Packard Commission, they could further slow the pace of procurement. Moreover, the reductions would come after the Congress and the Administration have levied new tasks on the procurement establishment, including seeking warranties on some new equipment, reviews of what programs could cost, and the like. Finally, as noted, the assumed reduction of 48,500 people serves to illustrate potential savings and is not based on a detailed analysis of workloads.

**DEF-22 URGE ALLIES TO PAY MORE OF THE COST
OF U.S. FORCES STATIONED OVERSEAS**

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	3,200	3,300	3,400	3,550	3,700	17,150
Outlays	2,550	3,200	3,350	3,500	3,650	16,300

In 1987, the United States spent 6.4 percent of its gross domestic product (GDP) on defense, compared with an average of 3.3 percent spent by U.S. allies in the North Atlantic Treaty Organization (NATO). Japan devoted 1 percent of its GDP to defense. In absolute terms, the costs of U.S. forces committed to NATO have been estimated at roughly 60 percent of the defense budget, or about \$170 billion in 1987--more than the total of \$157 billion provided by all the other NATO allies combined. The debate over the fairness of this sharing of the defense burden is complex and emotional and is not addressed here. Many Americans wonder why the United States needs to provide this degree of support for the defense effort, now that the once-devastated economies of U.S. allies are again strong. This option discusses one of the ways to reduce U.S. spending while increasing allied spending.

Several allies, particularly West Germany and Japan, currently provide support to U.S. forces based within their territories. This host-nation support takes the form of rent-free use of land and facilities, maintenance and construction of new facilities, or waiver of various taxes and user fees for which the U.S. military services would otherwise be liable. At the same time, other allies provide little or no support of this type. Still others, far from providing support, demand large sums for the right to base U.S. forces on their territory.

This option would urge countries with U.S. forces stationed within their borders to assume two elements of the costs of U.S. overseas bases. First, they would pay the salaries of indirect-hire foreign nationals employed on these bases. (Indirect hires are personnel hired

by foreign governments and contracted to the U.S. government to perform routine services on the bases.) Second, the host nation would pay all base operations support (BOS) costs—that is, the annual costs for administering the base, purchasing utilities and base-related services, maintaining noncombat equipment, and providing security and community services. Salaries of indirect-hire foreign nationals totaled approximately \$2 billion in the 1990 DoD budget, while BOS expenses abroad (some of which were already included in the \$2 billion cost of indirect hire personnel) were \$1.7 billion. If U.S. allies increased their spending to cover these costs, this option would save an estimated \$3.2 billion in budget authority in 1990 and a total of \$17.2 billion through 1994.

This option would modestly reduce the U.S. defense burden. If fully implemented, it would reduce the 1990 U.S. defense budget by slightly more than 1 percent and increase the allies' burden by roughly the same amount. But it would represent a visible contribution by the allies. Proponents of this option would view it as a way for the allies to match the United States' commitment to raising and equipping forces to send abroad to assist in defending the free world. Moreover, because most of the spending that would be borne by the allies under this option would be done in the host country, the economic benefits would be captured locally. The U.S. balance of payments would be improved modestly, and unpredictable fluctuations in U.S. defense budgetary requirements caused by changes in the international value of the dollar would be reduced.

The Congress by itself could not implement this option; rather, it would require negotiations with U.S. allies. Moreover, this proposal could create a number of problems. Allies vary considerably in their ability to pay. For prosperous countries such as West Germany and Japan, which already provide a great deal of support, the additional sums involved would be relatively insignificant. But for other allies with more limited resources, such as Turkey, assumption of these costs might come at the expense of support for their own military, leading to a deterioration in their own capability to support the alliance's goals. Other countries such as Greece or the Philippines might choose to close U.S. bases in their country rather than assume these additional financial burdens. Such a move might also weaken allied defenses.

Furthermore, if allies were required to pay for base operations support, there might be no guarantee that they would do so adequately, by U.S. standards. Allied nations might be unwilling to provide more support for U.S. bases than they do for those of their own forces. Furthermore, U.S. base commanders might be unwilling to accept the loss of control over operations that this transfer of fiscal responsibility could entail.

In light of these concerns, it is probably realistic to assume that only a small portion of the potential savings under this option would ever be realized. Indeed, a more feasible approach might be to devise a means for common funding of base-related costs, similar to the NATO Infrastructure Program. That program uses monies contributed by various NATO countries (including the United States) to pay for major improvements to overseas facilities such as airbases, command and communications centers, and transportation facilities. A base operating fund, to which nations would contribute according to their financial means, would help address the affordability issue. Having the allies commit to paying a share of U.S. basing costs might also guarantee continued U.S. control over the level of base support. Savings to the defense budget, however, would be lower under this approach.

DEF-23 REDUCE THE NUMBER OF ACTIVE-DUTY PERSONNEL BECAUSE OF THE INF TREATY

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Savings in Total Federal Budget						
Budget Authority	180	490	500	520	530	2,220
Outlays	110	350	380	390	400	1,630
Savings in Defense Budget						
Budget Authority	190	510	530	540	560	2,320
Outlays	180	500	520	540	560	2,290

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

The United States and the Soviet Union signed the Intermediate-range Nuclear Forces (INF) treaty in December 1987. Under the terms of this agreement, the Soviet Union must dispose of approximately 850 ground-launched ballistic missiles that are deployed and another 900 missiles that are in stockpiles. The United States must dismantle and destroy 859 of its ground-launched cruise missiles and Pershing ballistic missiles, 429 of which are deployed in Europe.

Almost 20,000 military personnel are associated with the U.S. intermediate-range nuclear forces. About half of these people are actually assigned to the missile units or directly support these forces, and the rest provide indirect support such as medical care, training, and administration. When the treaty is fully implemented, the INF mission will be eliminated and these people will no longer be needed. As a result, the Air Force plans to reduce the number of active-duty personnel by over 4,000 in 1991. This option would reduce further the total number of active-duty personnel by the other 15,000 people assigned to the INF mission. Reductions would occur evenly over the three years allowed in the treaty for eliminating the missiles. Savings

under this alternative would amount to \$180 million in 1990 and would total \$2.2 billion through 1994.

Reducing the number of active-duty personnel by an additional 15,000 should have no detrimental effect on current military capability not associated with INF. Because the INF treaty eliminates an entire mission, the people associated with this mission could be eliminated without affecting the many other military missions.

The military would argue, however, that its personnel levels should not be reduced, because there are many missions for which they could use additional people. The Army, for instance, could provide more firepower for the conventional ground forces by adding more artillery or rocket launchers to Army units, thus requiring additional people. This added conventional capability could be needed if deterrence was lost when the INF missiles were removed from Europe. Additional support forces also could be added, although the extent of their contribution to combat capability is difficult to measure.

Even if no combat or direct support capability was added to the current force, the military might argue that an additional reduction of 15,000 people is too severe. About half of those people provide indirect support for personnel involved directly with INF missiles. Because of the nature of indirect support--medical, training, and administration--these people could be used to support other military mission areas where the level of indirect support is judged inadequate.

DEF-24 REDUCE THE NUMBER OF DEPLOYABLE AIRCRAFT CARRIERS TO THIRTEEN

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	500	1,700	800	900	900	4,800
Outlays	340	1,250	870	750	760	3,970

Savings in Defense Budget

Budget Authority	500	1,700	800	900	900	4,800
Outlays	400	1,380	1,000	880	900	4,560

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

Increasing the number of deployable aircraft carriers from 13 in 1980 to 15 was one of the Reagan Administration's highest priorities. The Navy plans to continue to deploy 14 carriers in 1989 and increase the number to 15 deployable carriers in 1990 and beyond. This option would reduce the carrier force to 13 in 1990 by retiring older carriers early, and would keep the force constant at 13 through the late 1990s. Consistent with having fewer aircraft carriers and with current Navy policy, this option would reduce the number of active carrier air wings from 13 to 12. (A carrier air wing consists of 80 to 90 aircraft; the Navy maintains fewer active air wings than carriers because wings from the reserves would augment Navy capability in time of war.)

Specifically, this option would retire both of the two remaining World War II-era carriers--the Midway and the Coral Sea--in 1990. Another aircraft carrier, the Enterprise, would be retired in 1992. Coupled with the other additions and retirements already planned, the number of carriers would remain at 13 through the mid-1990s. The Enterprise was chosen for early retirement because its nuclear propulsion plant is unique. An upcoming overhaul, which includes refueling the ship's eight nuclear reactors, will require expensive, one-

of-a-kind parts and repairs. Forgoing the Enterprise's overhaul would alone save nearly \$1 billion, savings that are included in this option. Total savings under this alternative would be \$500 million in 1990 and \$4.8 billion through 1994. These savings reflect reduced operating and overhaul costs for carriers. There are no immediate savings in procurement because the Navy is currently short of ships to protect carriers and aircraft to fly from them.

The Navy's requirement for 15 aircraft carriers is driven in part by the service's controversial forward maritime strategy. This strategy posits that, during a conventional war with Warsaw Pact forces in Europe, aircraft carriers would attack forces around heavily defended areas near the Soviet Union's main naval bases at Murmansk on the Barents Sea and at Petropavlovsk on the Pacific Ocean. If successful, such attacks might cause the Soviet Union to withhold forces that could otherwise attack allied shipping in the Atlantic and Pacific oceans. Critics argue, however, that this strategy does not justify maintaining 15 carriers because even 15 carriers would not be able to carry out such attacks successfully. Other strategies, such as denying the Soviet Navy, especially its submarines, access to the Atlantic might offer greater protection for allied shipping and not require as many aircraft carriers.

The cost of sustaining 15 aircraft carriers might also argue against having such a large force. In 1985, CBO estimated that buying and maintaining the 600-ship Navy, which includes 15 aircraft carriers plus the ships and aircraft associated with them, would require annual real increases of between 3 percent and 5 percent in the total Navy budget through the mid-1990s. This growth has not materialized and seems unlikely for the near future. As a result, the Navy has not procured the number of aircraft needed to support 15 aircraft carriers, nor has it bought the number of modern ships it believes are needed to protect the carriers. Adherence to the goal of 15 carriers would severely strain Navy budgets.

The Navy counters that its goal of 15 carriers represents a minimum requirement. In support, the Navy states that the Joint Chiefs of Staff and the Commanders-in-Chief of the Unified Commands--those military officers entrusted with establishing war-fighting requirements--recommend a force of more than 20 carriers to carry out existing U.S. defense commitments with minimum risk. According to

this view, with 15 carriers the United States might not meet all of its defense commitments. Having just 13 carriers would, in the Navy's view, add to that risk. The Navy also maintains that 15 carriers are required to support current operations in peacetime. Current deployments often have five U.S. carriers overseas at one time. The Navy claims that it takes three carriers in the force to keep one carrier forward deployed.

DEF-25 REDUCE THE TACTICAL AIR FORCE BY THREE WINGS

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	500	1,000	700	700	700	3,600
Outlays	300	700	600	600	600	2,800

Savings in Defense Budget

Budget Authority	500	1,000	700	700	700	3,600
Outlays	400	800	700	700	700	3,300

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

In 1981, the Reagan Administration planned to increase the number of air wings in the Air Force's tactical force from 36 wings to 40 by 1986, and to 44 wings by the early 1990s. (A typical air wing consists of 72 combat aircraft with 28 backup aircraft for training and maintenance.) Because of the competing pressure to modernize the force, however, most of these increases were postponed. Indeed, the Administration has announced plans to reduce the tactical fighter force from its recently attained level of about 37 wings to 35 by 1992.

This alternative would reduce the tactical force to 32 tactical fighter wings by 1990. This would be the smallest number of wings in the Air Force since 1974, although these 32 wings would each be substantially more capable than those that existed in 1974. Savings under this alternative would be \$500 million in 1990 and would total \$3.6 billion through 1994. These savings include reductions only in operating costs. If aircraft procurement was reduced by approximately 300 planes to reflect this smaller force, savings would be much greater (see DEF-01 and DEF-10).

This approach seems consistent with past Air Force decisions made in the face of limited budgets. The Air Force has been willing to

accept risks inherent in reducing the size of its tactical air forces in order to minimize reductions in funds that buy modern aircraft and develop new planes. The Air Force is now developing a new aircraft--the Advanced Tactical Fighter (ATF)--to be fielded in the mid-1990s. The ATF is expected to be much more capable than current fighter aircraft, and more expensive. This option would make a larger share of a limited budget available for development of aircraft like the ATF and so would be consistent with the service's past priorities.

Past priorities may change, however, if the service faces the prospect of further reductions in the number of its tactical air wings. Further reductions in force size may not allow the United States to maintain the current balance between U.S. and Soviet tactical air forces, while simultaneously meeting other global commitments. And the Air Force has argued recently that 35 wings is the minimum acceptable number.

DEF-26 ELIMINATE THREE ARMY LIGHT DIVISIONS

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	400	1,200	2,200	2,800	2,900	9,500
Outlays	200	800	1,600	2,100	2,300	7,000

Savings in Defense Budget

Budget Authority	400	1,200	2,200	2,800	2,900	9,500
Outlays	300	1,000	2,000	2,700	2,900	8,900

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

The active portion of the U.S. Army consists of 18 divisions, 10 of which are generally regarded as "heavy"--that is, equipped with tanks and other armored vehicles. The 10 heavy divisions are primarily intended to defend Europe from armored attack. The other eight divisions, referred to as "light" divisions, are useful against less heavily armored forces and were designed to be dispatched quickly and transported easily to trouble spots around the world. They include one airborne division, one air assault division, one motorized division, one infantry division, and four light infantry divisions (LIDs).

The utility of the four light infantry divisions has been questioned in the Congress and elsewhere since their inception four years ago. The Administration justified the LIDs by emphasizing the need to respond to events anywhere in the world by rapidly dispatching U.S. forces. The need for as many as four LIDs comes into question, however, when recent history is examined. Between 1945 and 1978, 215 incidents required some sort of U.S. military action, but only about 5 percent of these required a force of division size or larger. Furthermore, it can be argued that existing units--including the Army's airborne and air assault divisions and three Marine Corps divisions--provide sufficient rapid response.

Other questions arise about the capability of the LIDs once they have been transported, presumably to a hostile location. With 870 jeeps, 135 motorcycles, and 41 utility helicopters for transportation, a light infantry division has limited mobility, and most of its 10,000 to 11,000 soldiers would have to move by foot. A LID also has limited firepower, particularly against an enemy with any kind of armored or lightly armored vehicles. Each division has only 44 long-range anti-armor missiles, 62 howitzers, and 29 armed helicopters; the most numerous antiarmor weapon in the LID--162 Dragon medium-range antitank missiles--has limited capability against modern tanks.

This alternative would eliminate three light divisions from the Army's active force structure. About 54,300 soldiers would be eliminated from the active Army, and the equipment programs peculiar to these divisions would be terminated. (This alternative assumes that people who support personnel directly associated with the divisions would also be eliminated.) Total savings realized from this option would be \$400 million in 1990 and \$9.5 billion over the five-year period.

Despite these savings and the shortcomings of the light infantry divisions, their elimination would reduce U.S. defense capability in certain situations. For example, during a major war in Europe, LIDs might be useful during combat in urban areas where armored vehicles cannot operate easily. LIDs might also be useful for defending areas such as airports or seaports if the enemy did not have armored capability. A proposal to eliminate LIDs might also encounter political opposition, because it would mean closing some military facilities that have recently been activated and refurbished.

DEF-27 REDUCE ENLISTED END STRENGTH IN LIGHT OF PROJECTED GROWTH IN SENIORITY

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	100	250	320	490	680	1,840
Outlays	80	180	230	360	490	1,340

Savings in Defense Budget

Budget Authority	110	260	330	510	710	1,920
Outlays	100	250	330	500	700	1,880

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

The period since military conscription was ended in 1973 has been marked by a gradual shift toward greater seniority in the active enlisted forces. This shift will probably continue into the 1990s, as large increases in the numbers of senior career personnel both add to personnel costs and improve the capabilities of the enlisted forces. Growth in seniority could add about \$90 million to personnel costs in 1990 and a total of \$1.1 billion over the five years, 1990 through 1994, relative to what costs would be if average experience did not increase. This total could rise to as much as \$2.2 billion if the percentages of personnel in the higher pay grades are allowed to increase. Improvements in the average productivity of enlisted personnel stemming from greater seniority could exceed 1 percent by 1994.

Although increased seniority raises average personnel costs, it can contribute to deficit reduction if the greater productivity of more experienced personnel is balanced by reductions in enlisted end strength (that is, the number of enlisted personnel employed at year's end). The Administration reduced end strength during 1988, but did not indicate that these cuts reflected adjustments for higher productivity. If the Reagan Administration's end-strength proposals still do not reflect such adjustments, then planned levels of capability could be

achieved with fewer enlisted personnel. Based on a conservative estimate of the extent to which productivity increases with experience in the military, reductions totaling roughly 35,000 enlisted personnel should be possible by 1994.

Savings to the federal government under this option would total \$100 million in budget authority in 1990 and more than \$1.8 billion over the next five years. In addition, the need for greater efficiency would force the services to examine more closely the productivity trade-offs among personnel at various levels of experience and to consider alternative uses of their senior personnel, who traditionally have been limited to supervisory roles.

But there are some risks. Evidence on the relationship between experience and productivity in the military is very limited, which raises questions about whether increases in productivity would be sufficient to offset the proposed decline in numbers of personnel and to avoid declines in overall force capability. In addition, the available productivity data are not entirely appropriate for application to an entire service, and the services' manpower systems may not be able to take full and prompt advantage of whatever productivity improvements come with greater average experience. The services' personnel plans also may already reflect some adjustments for greater seniority--that is, the services might argue that, without increased seniority, their strength requests would be larger.

Finally, this option would further decrease the ratio of first-term to career personnel in the enlisted force, which might be undesirable. Some critics of the volunteer military have seen increased reliance on a "professional" military as a major defect because it reduces the role of "citizen soldiers" who serve only for a short period.

DEF-28 LIMIT MILITARY PAY RAISE

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	1,800	2,500	2,550	2,650	2,700	12,200
Outlays	1,300	1,850	1,950	2,050	2,100	9,250

Savings in Defense Budget

Budget Authority	1,900	2,600	2,650	2,750	2,850	12,700
Outlays	1,800	2,550	2,650	2,750	2,850	12,600

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

During the 1980s, the formal mechanism for determining the annual military pay raise has largely been abandoned in favor of a series of proposals by the Administration and compromises in the Congress. The result has generally been an increase that is smaller than the average rise in private-sector pay. Notable exceptions came in 1981 and 1982, when two large raises made military pay roughly "comparable" with pay in the private sector. Since that time, the pay of military personnel relative to that of private-sector workers has fallen by at least 7 percent—a pattern that may continue in 1990. The Reagan Administration has recommended a military pay raise of 3.6 percent, but CBO forecasts that the average hourly earnings of non-farm workers will rise by 4.8 percent.

Modest reductions in relative pay might be justified by recent recruiting and retention experience. The percentages of enlisted recruits who have high school diplomas and of those who score above average on the military entrance test have remained high in recent years despite reductions in relative pay. In addition, high reenlistment rates have contributed to a lengthening of the intervals between promotions for enlisted personnel. These facts suggest that the competitive position of military pay may be sufficiently strong to permit

modest further reductions without seriously harming military capabilities or readiness.

This option illustrates one possibility for further limiting military pay. Forgoing a pay increase in 1990 would yield savings of \$12.7 billion in defense budget authority over the next five years, relative to budget authority under the Reagan Administration's proposed 3.6 percent raise. This estimate assumes that raises in subsequent years would be effective January 1, as the Reagan Administration has requested. Relative to the CBO baseline, which assumes annual raises on the October 1 date prescribed by law and a 4.1 percent raise in 1990, five-year savings would be \$18.4 billion. Another option, proposed with respect to federal civilian employees in FWF-01, would follow the Reagan Administration's plan of granting pay raises on January 1, but would limit those raises to two percentage points below the previous year's rate of inflation as measured by the Consumer Price Index ("CPI minus two"). Under the Reagan Administration's projections of inflation, the 1990 pay raise would be 1.5 percent, and five-year savings in defense budget authority would total \$19.5 billion.

Savings would be larger if they were measured relative to the costs of letting military pay rise at a rate comparable with private-sector pay, so that the relative earnings of military personnel did not erode. The Reagan Administration's proposed pay raises for 1991 and beyond would leave military pay levels virtually unchanged in real terms (under the Administration's inflation projections), whereas private-sector pay generally increases at more than the rate of inflation. Thus, the Administration's proposal would reduce the relative pay of military personnel by one-half percent to one percent a year.

The relative pay reductions considered in this option are not the modest cuts suggested by current recruiting and retention successes, and could have substantial effects. Not granting a raise in 1990 could reduce enlistments of "high-quality" youths--high school graduates with above average test scores--by about 5 percent. Reenlistment rates probably also would fall, which would increase enlistment requirements and thus further lower the quality of recruits. Even greater effects could be expected from "CPI minus two," which would mean roughly a 14 percent drop in the relative pay of military personnel through 1994. Recruit quality probably would not fall below the limits imposed by the Congress (at least 65 percent must be high

school graduates, and no more than 20 percent may be in test-score category IV), but quality would be lower than at any time since at least 1982.

Projections of the effects of holding military pay raises below those in the private sector are subject to some uncertainty. Manpower analysts do not completely understand why recruiting and retention have remained strong in recent years despite falling relative pay and an improving economy: today's service members may be less sensitive to these pressures than their predecessors; or the full effects of these changes still may not have been felt. If the latter is the case, the options considered here might seriously erode the quality and experience of the enlisted forces. Delayed effects would also mean that remedial action, such as another "catch-up" raise, would likely come too late to address adequately the emerging problems.

DEF-29 RESTRICT RESERVE RETIREMENT BENEFITS

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Savings in Total Federal Budget

Budget Authority	30	70	105	145	185	535
Outlays	0	0	0	0	0	0

Savings in Defense Budget

Budget Authority	30	70	105	145	185	535
Outlays	30	70	105	145	185	535

NOTE: Savings in the federal and Department of Defense budgets differ because of the effects of accrual accounting for military retirement and of other pay costs that are offset in the federal budget.

In 1986, after decades of discussion, the Congress modified the retirement system for active-duty military personnel. Active-duty personnel who complete 20 or more years of service are eligible to transfer to the retirement rolls; they remain legally subject to recall during national emergency and receive retirement benefits, called retired pay, based on length of service and average highest three years' pay. These benefits were restructured to encourage longer military careers, to provide adequate retired pay during old age, and to generate savings for the taxpayer. Changes in the retirement system for part-time reserve personnel were deferred, however, pending the report of the Sixth Quadrennial Review of Military Compensation. This report is currently awaiting release by the Department of Defense.

Unlike retired pay for active-duty personnel, which was first provided for veterans of the Civil War era, reserve retirement is a relatively new program dating only from 1948. Reservists are entitled to receive retired pay after 20 years of creditable service, of which at least the last eight must be served in a reserve component. Unlike active-duty personnel, who can receive retired pay immediately upon retirement, reservists must wait until age 60. Reservists' retired pay is calculated in a manner similar to that for active-duty retirees, on the basis of length of service and average highest three years' pay.

The United States is the only country that offers retirement benefits to reservists.

These benefits, however, are provided at considerable cost. In 1988, reservists received \$1.3 billion in retired pay. For fiscal year 1988, the Department of Defense Actuary calculated the accrual charge for reserve retired pay as 26.1 percent of reservists' total basic pay, or \$929 million. (The accrual charge represents dollars set aside now to pay the future retirement costs of today's reserves.) Changes in actuarial assumptions in 1988 lowered the accrual charge for fiscal year 1990 to \$486 million, 13.4 percent of reservists' basic pay.

To reduce these costs, this option would terminate the reserve retirement program for those entering the reserve components after the end of fiscal year 1989. Out of considerations of equity, CBO's estimates of the savings from termination assume full grandfathering of all current reservists under the present retirement system. No new reservists, however, including those who enter the reserves from active duty, would be eligible to accumulate benefits. Under this approach, savings in accrual charges for reserve retirement would grow steadily, as shown in the above table. Savings in total federal outlays, however, would not be realized for many years.

Terminating the reserve retirement system would chiefly affect the retention decisions of reserve officers rather than enlisted personnel. More than 80 percent of the 1988 benefits--over \$1 billion--was paid to retired officers, who constitute 74 percent of the population of reserve retirees. Enlisted retirees received only \$220 million in benefits, or 17 percent of the total, although enlisted personnel account for 86 percent of the reserve forces. In contrast, retired active-duty officers make up only 26 percent of the active-duty retiree population and received only 44 percent of the total benefits paid to that group.

Given this distribution of benefits, the reserve retirement program may contribute to high retention among officers but not among enlisted personnel. In general, however, the reserve components do not suffer from shortages of officers, and especially not senior officers. Personnel shortages have been concentrated in junior enlisted ranks, typically in pay grades E-3 and E-4, and thus are not alleviated to any appreciable extent by reserve retired pay. Accordingly, terminating

the reserve retirement program could be expected to generate savings without major adverse effects on the reserve components' ability to meet their personnel objectives.

Terminating the reserve retirement system, however, might entail some other adverse effects. Reserve retirement benefits appear to achieve their stated purpose of holding reservists for longer careers, since a larger fraction of reservists remain for more than 20 years of service than do active-duty personnel. In addition, the reserve retirement program serves to make the reservists' compensation package more comparable with that of active-duty personnel. This comparability may help to maintain a substantial reserve, which the Congress has strongly supported in the past.

DEF-30 INCREASE COST-SHARING FOR MILITARY HEALTH CARE

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	200	200	200	200	200	1,000
Outlays	160	190	200	200	200	950

Nonactive-duty beneficiaries of the military health care system pay little for care given by military physicians. As inpatients in military hospitals, dependents of active-duty and retired military personnel generally pay about \$8 a day, retired officers pay about \$4 a day, and retired enlisted personnel pay nothing. As outpatients in military clinics, dependents and retired personnel pay nothing. When care is not available in military facilities, the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) will help beneficiaries pay for civilian services, after they pay a deductible of \$50 a person or \$100 a family--an amount that has not changed since first set in 1966.

Because the charges are so low, beneficiaries may make greater use of health care services than necessary, thus contributing to overcrowding in outpatient clinics and increasing the costs of health care. This option would both curb excessive use and raise revenue by calling on beneficiaries to pay for a larger share of the costs of the care they received in the United States. All nonactive-duty inpatients would pay \$21 a day (10 percent of CHAMPUS's daily hospital charge). In military clinics in the United States, outpatients from senior enlisted families would pay \$5 a visit; outpatients from officers' families, \$10 a visit (outpatients overseas still would pay nothing). Dependents of junior enlisted personnel below pay grade E-5 and survivors of deceased personnel, the military's least well-off beneficiaries, would still pay nothing for visits to military physicians. Finally, to make up partly for the change in the Consumer Price Index since 1966, the CHAMPUS outpatient deductible would increase to \$150 a person or \$300 a family. Together, these changes could save the Department of

Defense about \$200 million a year over the next five years. This estimate does not include the cost of modifying existing automated information systems to collect the higher fees.

Since medical care is a key part of military compensation, military families would view increased charges as an erosion of benefits. Recruitment and especially retention could suffer, although the parallel trend in civilian medicine to wider cost-sharing might mitigate beneficiaries' dissatisfaction. Indeed, increased cost-sharing would bring the military health care system somewhat more in line with medical plans offered to civilian employees of the federal government. Nor should rising charges necessarily harm health, a potential concern, since evidence shows that people at ages and incomes typical of military beneficiaries seek needed care even when they have to share the costs.

**DEF-31 ENACT DoD'S PROPOSED CHANGES
IN THE NEW GI BILL**

Savings from Reagan Admin. Request	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority ^a						
(Current baseline)	-20	-60	-60	-60	-50	-250
(Accrual baseline)	160	130	150	170	180	790
Outlays	-20	-60	-60	-60	-50	-250 ^b

- a. To realize near-term savings from this option, all benefits under the new GI Bill would have to be funded on an accrual-accounting basis. Accrual accounting would require the Department of Veterans Affairs to reflect future obligations to beneficiaries of the new GI Bill in current budgets. Under current law, however, these obligations are funded through annual appropriations and do not appear in current budgets. As a result, compared with a current baseline without accrual accounting, this option increases budget authority in each year of the five-year period. To better reflect the option's long-run effects, savings are also shown relative to a baseline that assumes accrual accounting.
- b. Regardless of baseline, a decrease in total participants' contributions under this option causes total federal outlays to increase over the five-year period. Longer-term savings in payments to students, however, would greatly outweigh this relatively smaller near-term increase.

On June 1, 1987, President Reagan signed into law a permanent peacetime GI Bill, offering new recruits the opportunity to earn money for college in return for military service. The new GI Bill offers most new service members with a high school diploma a basic educational benefit of \$10,800 in return for forgoing \$1,200 in first-year pay. (Most recruits enlist for three or more years. Recruits signing a two-year contract earn a smaller basic benefit of \$9,000.) The military services also may offer supplemental benefits to qualified men and women who enlist, although the Army is the only service that has consistently chosen to do so. About 65 percent of all new recruits have elected to participate in the plan, attesting to its popularity.

If participants in the new GI Bill eventually use a high percentage of their benefits, however, the program could prove to be quite costly. Under current law, basic benefits are funded by the Department of Veterans Affairs (DVA) through annual appropriations. Because most GI Bill beneficiaries do not attend school immediately after entering service, obligations owed to them do not appear in current budgets,

but will have to be paid in the future. CBO projects that these costs could rise to \$392 million a year by 1994.

This alternative, first presented by the Administration in its budget for 1988 but not adopted by the Congress, seeks to reduce future costs to the government and promote longer terms of service among recruits by reducing basic GI Bill benefits for members enlisting for fewer than six years. The basic benefits under current law and under this option are as follows:

Length of Contract (In years)	Amount Under Current Law (In dollars)	Amount Under Alternative (In dollars)
Two	9,000	2,400
Three	10,800	4,800
Four	10,800	7,200
Five	10,800	9,600
Six	10,800	10,800

To reflect future training costs in current budgets, this alternative also proposes, as did the Administration, that funding for the basic benefit be changed from the current year-by-year appropriation basis to an accrual-accounting basis, similar to the Defense Department's funding of reserve and supplemental educational benefits. Under accrual accounting, the DVA would be required to set aside sufficient money in a trust fund each year to cover future benefit payments to all personnel entering service in that year. Thus, savings from reductions in GI Bill benefits would appear when the obligation is incurred, rather than when the benefits are paid in the future.

Under this proposal, savings relative to an accrual-accounting baseline would be \$160 million in 1990 and would total \$790 million over the five-year period. Additional savings might arise from a decrease in training and recruiting costs if the change in benefits promotes longer contracts. The proposed reductions in benefits would make the program less attractive, however, reducing participation to 50 percent, as estimated by CBO.

A disadvantage of this option is that it would reduce the effectiveness of the new GI Bill as a recruiting incentive for youths with above-average aptitude and a high school diploma. According to CBO estimates, the percentage of these recruits would fall to about 56 percent in 1989 (from about 60 percent in 1988) in the military services overall, but to about 52 percent (from about 58 percent in 1988) in the Army. The Army has relied more heavily on educational benefits as a recruiting tool than the other services. If the services elected to enlist more recruits lacking a high school diploma (who are less likely than graduate recruits to complete their initial tours) rather than relax aptitude standards, training and recruiting costs might rise. This effect might reduce the savings from this option.

CHAPTER III

ENTITLEMENTS

Entitlement programs provide benefits to all people or jurisdictions who are eligible to receive aid and who choose to participate. The level of spending in entitlement programs is largely determined, not by the annual appropriation process, but rather by the program rules that govern eligibility, extent of participation, benefit levels, and the cost of providing noncash benefits. But a variety of other factors that are beyond the control of the Congress also cause outlays for entitlements to rise or fall—for example, demographic shifts, changes in providers' practices, and rates of inflation. Spending is, therefore, only partly under the direct control of the Congress.

In recent years, the Congress has made changes in many of the entitlement programs, and this chapter includes 29 options for further changes. These options would either lower outlays for entitlements and other mandatory spending, or increase the revenues earmarked to pay for them. For example, ENT-02 through ENT-15 deal with health care programs, while ENT-24 through ENT-28 discuss alternatives for reducing net federal outlays for Social Security and other retirement and disability programs. Other options deal with programs such as Aid to Families with Dependent Children and Stafford Loans (formerly Guaranteed Student Loans).

Several of the options are substitutes for one another. Also, in some instances, the individual summaries describe more than one specific policy alternative. In general, the savings from the separate options—or from the variations within a single option—cannot be added together to arrive at a total.

All estimates of outlay savings and revenue gains from these options are calculated relative to CBO's baseline projections. The baseline projections are based on CBO's short-run economic forecast and longer-run projections as described in its recent report, *The Economic and Budget Outlook: Fiscal Years 1990-1994*. Baseline spending projections for entitlements and other mandatory spending programs re-

flect changes forecasted in several factors, such as caseloads and the average federal cost per beneficiary. The latter may change over time as a result, for example, of cost-of-living adjustments in benefit payments or increases in either the price of medical services or the intensity of their use.

ENT-01 REDUCE SUBSIDIES FOR STAFFORD LOANS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Require Students to Pay In-School Interest

Budget Authority	-45	100	340	550	740	1,700
Outlays	-15	80	280	480	680	1,500

**Raise Students' Interest Rates
After They Leave School**

Budget Authority	--	15	50	100	140	300
Outlays	--	10	40	85	110	250

**Reduce Lenders' Subsidies by
One-Half of a Percentage Point**

Budget Authority	20	60	80	100	110	370
Outlays	10	45	75	95	100	330

**Require a 30-Day Delay in Disbursing Loans
to New Borrowers**

Budget Authority	-5	25	180	210	210	620
Outlays	-5	15	170	210	210	600

**Reduce Federal Default Costs by Restructuring Federal
Reinsurance of Guarantee Agencies**

Budget Authority	210	280	290	290	290	1,350
Outlays	80	240	280	290	290	1,200

NOTE: The savings that would result from carrying out all five options jointly would not equal the sum of the separate estimates because of interactions among the options.

The Robert T. Stafford Student Loan Program (formerly the Guaranteed Student Loan Program) authorizes the federal government to guarantee loans for postsecondary students and to pay the interest while students are enrolled in school, providing lenders a rate of return that varies with market interest rates. Because students do not begin repayments on Stafford Loans until after they leave school, and

because they repay loans at fixed interest rates that are generally below market rates, they receive a substantial subsidy from the federal government.

In 1988, in-school interest payments (net of a 5 percent student-paid origination fee) accounted for about 40 percent of the cost of the Stafford Student Loan Program; special allowance payments to lenders accounted for 25 percent; default payments net of collections equaled about 30 percent; and other costs equaled 5 percent. In recent years, in-school interest payments have remained relatively stable; special allowance payments have fluctuated as interest rates changed; and default costs have grown substantially with the sharp increase in the number of borrowers who have entered the repayment periods on their loans.

Require Students to Pay In-School Interest or Raise Students' Interest Rates After They Leave School. Federal subsidies could be reduced by requiring students to repay larger amounts than they do under current law. Charging students interest on their loans while they are in school, but deferring actual payments until they leave school, would reduce federal outlays by \$1.5 billion between 1990 and 1994 (if the 5 percent student origination fee, which is used to offset federal interest subsidies, were eliminated at the same time; if it were not eliminated, savings would be \$3.4 billion).

Alternatively, raising students' interest rates after they leave school to the full amount of interest the government now pays to lenders, but continuing the in-school interest subsidy, would reduce federal spending by \$250 million during the 1990-1994 period and by more in future years. These estimates assume that only new borrowers would be affected.

The advantage of these measures is that they would not cause cash-flow problems for students while they are in school because students would be allowed to defer interest payments during that period. With the added costs generally occurring after graduation--when students would most likely be able to afford them--most students would still be able to continue their education. In addition, educational institutions might increase their own aid to offset some of the reductions in federal subsidies.

On the other hand, the larger repayments that would result from these changes might cause some students not to attend school or to choose lower-priced institutions. In addition, some lenders might drop out of the program because of somewhat increased servicing costs and more complex interest calculations, which would make it more difficult for some students to obtain loans.

Reduce Lenders' Subsidies. For new loans the federal government currently guarantees lenders an annual rate of return equal to 3.25 percentage points above the bond equivalent rate for 91-day Treasury bills. Each reduction of one-half of one percentage point in this yield for new loans while students are still in school would lower federal spending by a total of \$330 million during the next five years and by more in future years.

Because current federal payments while borrowers are in school are probably higher than lenders' costs during that period, reducing these payments would most likely not limit the availability of loans for most students. Moreover, reducing lenders' subsidies would lower federal expenditures without increasing students' costs. On the other hand, if this option made some loans unprofitable, lenders would stop providing these loans, making loans more difficult for some students to obtain.

Require a 30-Day Delay in Disbursing Loans to New Borrowers. Current law calls for loans to be disbursed (in whole or in part, depending on the length of the school term) to the postsecondary institution when the student enrolls. In recent years, however, an increasing number of borrowers appear to have been dropping out of school before or shortly after school begins; at this time, they often find that postsecondary institutions offer only partial refunds of the tuition and fees they have paid. Many of these borrowers are likely to default on their loans.

An alternative policy would be to delay disbursing loan funds for 30 days and require participating institutions to accept payment of tuition and fees at that time. Loans would be disbursed only to students who remain enrolled in good standing. This alternative could reduce federal costs by \$600 million over the 1990-1994 period. The federal government would save both the interest subsidies that would have been paid on these loans as well as the cost of any defaults that would have occurred.

On the other hand, when school starts, students often need money for expenses other than tuition and fees. Delaying loan disbursements could cause students a cash-flow problem in meeting these expenses. At the same time, postsecondary institutions want to get their funds at the time of enrollment. A delay in loan disbursements could cause planning--and even cash-flow--problems for some institutions, especially where a large proportion of their students could drop out within 30 days after school starts. More generally, views on this option depend on judgments of how the risk of students' dropping out should be shared among students, institutions, and the federal government.

Reduce Federal Default Costs by Restructuring Federal Reinsurance of Student Loan Guarantee Agencies. The federal government reinsures guarantee agencies on a sliding scale between 80 percent and 100 percent, with most guarantee agencies receiving close to 100 percent reinsurance. These agencies also collect from borrowers insurance premiums that are intended to cover default costs. Guarantee agencies use these premiums not only to pay initial default costs but to operate programs. Providing 100 percent federal reinsurance to all guarantee agencies and requiring states to turn over to the federal government the borrowers' insurance premiums would reduce federal outlays over the next five years by \$1.2 billion. Under this option, guarantee agencies would pay students' insurance premiums to the federal government, which eventually pays most program default costs.

The advantage of this approach is that it would link default insurance premiums to the federal government's default liability, while requiring states to support their student loan operations out of other funds. Most guarantee agencies seem to have enough funds to continue activities under this option. However, some agencies might drop out of the Stafford Loan Program if they could no longer cover their operating costs. For the few states that do not have virtually 100 percent reinsurance, this option would somewhat reduce the incentive for their guarantee agencies to work actively to prevent defaults.

ENT-02 ELIMINATE FEDERAL MATCHING IN MEDICAID FOR MEDICARE'S PREMIUMS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	760	900	1,050	1,150	1,250	5,100

States typically pay the premiums of Medicaid beneficiaries for Medicare Part B--Supplementary Medical Insurance (SMI) and Catastrophic Drug Insurance (CDI)--when the beneficiaries are eligible for both programs. To do so, the state pays the same SMI and CDI premiums as the beneficiary would have paid--an amount equal to about 25 percent of basic SMI benefits and 37 percent of new catastrophic and drug benefits. Basic benefits are those that were provided under the SMI program before passage of the Medicare Catastrophic Coverage Act of 1988. Catastrophic and drug benefits are those provided under the act. On average, states save more than 70 percent of what would otherwise be costs for their Medicaid programs. Moreover, because the states' contributions toward premiums are matched by federal funds, states save an even higher proportion of the costs of medical care for these Medicaid beneficiaries.

If state spending for SMI and CDI premiums were not matched with federal funds, about \$5.1 billion would be saved over the 1990-1994 period. Under this option, states would continue to receive federal matching funds for premiums paid on behalf of poor Medicare enrollees who are not otherwise eligible for Medicaid but whose Medicare premiums and copayments must now be paid by the states' Medicaid programs (because of the Medicare Catastrophic Coverage Act).

Nearly all states currently choose to pay the SMI and CDI premiums for their Medicaid beneficiaries who are also eligible for Medicare--about 88 percent of all aged and disabled Medicaid recipients. Even without federal matching funds, states would almost certainly continue to enroll those eligible for both Medicare and Medicaid. Otherwise, states would have to pay their share (net of federal Medicaid matching) of all the health care costs of these beneficiaries.

This option would reduce a substantial subsidy to states. That subsidy now effectively transfers a much higher proportion of one group's medical costs from the states to the federal government than is typical for Medicaid beneficiaries. On the other hand, if one or more states decided to quit paying the Medicare premiums, some of the federal savings would come from those elderly and disabled who chose to enroll in the Medicare program at their own expense (instead of receiving all their care through the Medicaid program). Moreover, because Medicaid's reimbursement rates are usually substantially lower than Medicare's, those who did not enroll in Medicare might face restricted access to physicians and other ambulatory services.

ENT-03 REBASE PPS PAYMENTS TO HOSPITALS UNDER MEDICARE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Immediately Reduce Rates to the 1983 Level Adjusted for Inflation and Other Factors						
Outlays	2,400	3,000	3,300	3,600	4,000	16,300
Gradually Reduce Rates to the 1983 Level Adjusted for Inflation and Other Factors Less 10 percent						
Outlays	3,100	4,700	6,100	7,700	9,500	31,100

In 1983, the Congress changed Medicare's system of paying for hospital inpatient services from a retrospective, cost-based reimbursement system to a prospective payment system (PPS). The main objectives of the PPS were to lower the growth of Medicare's payments to hospitals and encourage efficiency in the provision of hospital care, while not adversely affecting its quality. Specifying payment rates in advance and requiring hospitals to bear the loss if their costs are higher is one way to lower payments and encourage efficiency. In exchange, hospitals are allowed to keep the difference if their costs are lower than the payments. Hospitals--especially those with large losses--face strong financial incentives to provide care as efficiently as possible. Peer review organizations monitor the quality of care.

Setting the initial national rates (for 1984) required many complex decisions to be made. First, because the national rates were based on the average cost per case in 1981 (the most recently available data), and then inflated to represent later years, a number of assumptions were made about changes between 1981 and 1984. For example, when the rates were set, the increases in hospitals' input prices for 1983 and 1984 were not known. Second, the new system was required to pay hospitals the same aggregate amount in 1984 and 1985 as they would have received under the Tax Equity and Fiscal Responsibility

Act (TEFRA). Because total PPS outlays are determined primarily by two factors (payment rates that are subject to federal control and the mix of hospitals' cases that is not subject to federal control), this budget-neutrality requirement necessitated making an assumption about how much the case mix indexes of hospitals would rise as a result of "improved" coding practices. (Improved coding generally has meant that certain types of patients were coded into diagnosis-related groups (DRGs) with higher payment rates after the PPS was enacted compared with their coding before, causing total payments to rise. These increases were underestimated in the budget neutrality calculations. While the number of cases also affects total outlays, the PPS has apparently had little effect on this factor.) Finally, even if all the assumptions had been correct, it was recognized that the PPS rates for 1984 and 1985 would still reflect the inefficiencies that had developed under the previous retrospective cost reimbursement system.

The assumptions behind the initial PPS rates, however, proved to be wrong. During the first year of the PPS, hospitals received payments that were 17 percent higher, in aggregate, than their costs. About half of these profits resulted from payment rates that had been set too high because they were based on unaudited data and assumptions that proved incorrect. The other half resulted from more efficient provision of hospital services.

Between 1986 and 1989, the Congress, aware that PPS payments exceeded TEFRA levels, held increases in the PPS rates--known as the update factors--below the amount of inflation, as measured by the cost of hospitals' inputs. Despite this restraint, payments per case under the PPS are well above the 1983 level when adjusted for inflation and for real growth in the complexity of cases. Furthermore, even if payments were reduced to the level that would have prevailed in 1983 (adjusted for inflation and complexity), the Medicare program still would not share any of the hospitals' savings as they improved their efficiency.

The PPS rates could be rebased (in this instance, reduced) so that per case payments in 1990 would equal the 1983 per case payments adjusted to account for inflation and to allow for real increases in the complexity of cases. (Because technological advances can raise or lower costs, their net effect is unclear.) Specifically, if the 1983 per case payments had grown each year by the change in the Medicare

Hospital Market Basket Index plus two percentage points (to allow for increased complexity), payments in 1990 would be 6.5 percent lower. If rates were reduced 6.5 percent for fiscal year 1990, and if per case payments were increased by the change in the Market Basket Index plus the growth in complexity in future years, outlays would be reduced by \$16.3 billion during the 1990-1994 period.

The federal government might also share the savings from more efficient provision of hospital care, rather than allow hospitals to retain all the gains. For example, hospitals' per case payments could be set 10 percent lower than the 1983 levels adjusted for inflation and for real increases in the complexity of cases. If, in addition to an immediate 6.5 percent reduction, the 10 percent adjustment were phased in over a five-year period, outlays would be reduced by \$31.1 billion during the 1990-1994 period. As with the first option, this one would bring spending more in line with initial plans--not by recapturing past excess profits, but by lowering future payments. Although the full extent to which payments could be cut without lowering the quality of care is not known, some reduction below the levels that prevailed under cost-based reimbursement (adjusted for inflation and complexity) is possible, because hospitals initially responded to the PPS's incentives by providing services more efficiently.

Proponents of these options argue that hospitals have been overpaid under the PPS, that the greater efficiency they achieved initially has since been lost, and that the way to induce hospitals to be more efficient again is to reduce their payments. Specifically, they observe that hospitals cut their costs after enactment of the PPS, but then allowed their spending to rise much faster than inflation when they enjoyed large Medicare profits in the early years of the PPS. Proponents reason that hospitals, most of which are organized on a non-profit basis, generally spend what they receive. Therefore, the level of hospitals' expenditures is not a guide to what they should be paid. Moreover, while the possibility of losses is an incentive to cut spending, the promise of surpluses is not an equally strong incentive for efficiency. Hence, proponents argue that hospital payments must be lowered as originally intended in order to bring about efficiency.

Opponents argue that these options would cause financial difficulties for many hospitals and that their responses would reduce the quality of care for some beneficiaries. They note that the PPS profits

of hospitals have deteriorated, from over 17 percent in 1984 to close to zero in 1988. Lower payments would cause financial losses unless hospitals were able to cut their costs. Some hospitals might even be forced to close, thereby limiting the access to care for some beneficiaries. Moreover, opponents maintain that hospitals have made long-range commitments based on their expectations that the current rates would be adjusted for inflation in future years. In this case, even if aggregate payments are too high, large reductions could cause financial difficulty for some hospitals. Finally, opponents believe that quality is directly related to the level of spending for services and therefore they argue that reducing Medicare payments to hospitals would reduce the quality of care for beneficiaries.

**ENT-04 REDUCE MEDICARE'S PAYMENTS FOR THE
INDIRECT COSTS OF PATIENT CARE THAT
ARE RELATED TO HOSPITALS' TEACHING
PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Reduce Teaching Adjustment to 6 Percent						
Outlays	460	580	640	700	760	3,150
Reduce Teaching Adjustment to 4 Percent						
Outlays	1,030	1,290	1,420	1,550	1,690	7,000

The Social Security Amendments of 1983 established the current prospective payment system (PPS) under which Medicare reimburses hospitals for inpatient services provided to beneficiaries. Payment rates are set in advance for each of 473 diagnostic categories known as diagnosis-related groups (DRGs). By the end of fiscal year 1988, payments to hospitals generally were based on national rates, calculated separately for urban and rural areas.

Higher rates are paid to hospitals with teaching programs to cover their additional costs of caring for Medicare patients. The federal portion of payments to these hospitals is raised by approximately 7.7 percent for each 0.1 increase in the hospital's ratio of the number of full-time equivalent interns and residents to its number of beds. This adjustment was calculated both to compensate hospitals for their indirect teaching costs--such as the greater number of tests and procedures thought to be prescribed by interns and residents--and to cover higher costs caused by a variety of factors that are not otherwise accounted for in setting the PPS rates. These factors include severity of illness within DRGs, location in inner cities, and a more costly mix of staffing and facilities--all of which are associated with large teaching programs.

Estimates of the indirect teaching adjustment based on the cost data from the 1984-1987 period suggest that the teaching adjustment could be lowered to a value in the range of 3 percent to 7 percent, depending on which year's data was used and which of many possible estimating assumptions were chosen. If the teaching adjustment were lowered to 6 percent, outlays would fall by almost \$3.2 billion over the 1990-1994 period. Alternatively, if the teaching adjustment were lowered to 4 percent, outlays would fall by \$7.0 billion over the 1990-1994 period.

This option would better align payments with the actual costs incurred by teaching institutions; between 1981 and 1984, these costs fell relative to costs at nonteaching hospitals. On the other hand, this alternative would considerably reduce payments to teaching hospitals. If these hospitals now use some or all of the excess payments to fund activities such as charity care, the access to and quality of care could fall for some people.

Even if it were agreed that the indirect teaching adjustment should be lowered, the reductions in Medicare's payments could be either returned to hospitals in general by increasing payment rates, or removed from the PPS system as budget savings. The former approach would be consistent with the original financing of the indirect teaching adjustment, which lowered payment rates for all hospitals rather than increasing outlays. It would, however, do nothing to lower the federal budget deficit.

ENT-05 REDUCE MEDICARE'S DIRECT PAYMENTS FOR MEDICAL EDUCATION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	140	170	170	180	190	850

Medicare's prospective payment system does not include payments to hospitals for the direct costs they incur in providing graduate medical education (GME)—that is, residents' and teachers' salaries, administrative costs, classroom expenses, and the associated hospital overhead costs. Instead, these payments are made separately, but also prospectively, based on Medicare's share of the hospital's historical cost per resident. Medicare's GME payments, which are received by about one in six hospitals, represent approximately 2 percent of Medicare's payments for inpatient care, but cover nearly one-third of hospitals' total GME costs.

If the Congress were to reduce Medicare's total GME payments by 15 percent, the five-year savings would be about \$850 million. (This option would not change training programs for nursing and allied health professions.) Similar savings could be accomplished in several ways: reducing the per-resident payment for every hospital by 15 percent; capping each hospital's per-resident payment at the median; or eliminating per-resident payments to hospitals for graduates of foreign medical schools (FMGs).

Several arguments support reducing Medicare's payments for GME. Many observers argue that such subsidies are unwarranted since the United States is facing a projected aggregate surplus of physicians. Moreover, since physicians earn much higher incomes as a result of their GMEs, they might reasonably contribute more to these costs themselves. Advocates of a uniform 15 percent reduction in per-resident payments support it mainly on grounds of fairness to hospitals with varying patterns of expenditures. Proponents of a cap suggest that constraining payments only to hospitals with historically high per-resident costs would generally penalize the most inefficient

hospitals. Advocates of eliminating payments to FMGs favor discouraging their employment because of concerns about their quality as well as their contribution to projected surpluses of physicians.

Reducing Medicare's GME payments could have some drawbacks, however. Many hospitals have built their training programs based on expectations of Medicare's reimbursements for GME. Decreasing or eliminating them could force some programs to reduce the resources they commit to training, and a few of them might even close. This response could, in turn, reduce access to health care services in some communities.

**ENT-06 REDUCE REIMBURSEMENTS FOR CAPITAL
EXPENDITURES UNDER MEDICARE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Move Immediately to a Prospective Reimbursement System

Outlays	90	220	390	590	840	2,150

Extend the 15 Percent Reduction for Five Years

Outlays	690	870	970	1,070	1,200	4,800

**Extend the 15 Percent Reduction
and Move Slowly to a Prospective Reimbursement System**

Outlays	690	900	1,050	1,300	1,700	5,700

The Social Security Amendments of 1983 set up a prospective payment system (PPS) to reimburse hospitals for operating costs associated with treating Medicare beneficiaries in various diagnosis-related groups (DRGs). They did not, however, change the retrospective, cost-based method of reimbursing capital-related expenses such as interest, rent, and depreciation. Under the Reconciliation Act of 1987, cost-based reimbursements were reduced by 12 percent effective January 1988, and 15 percent in fiscal year 1989. In fiscal year 1990, after these legislated reductions expire, reimbursements for capital expenses will again equal hospitals' actual expenditures; these reimbursements will account for almost 10 percent of Medicare payments to hospitals, or roughly \$5.8 billion.

Two of the three options discussed here would introduce prospective payment for capital-related expenses, which the Congress has stated it intends to do. The first one would do so immediately, while the third would partially retain cost-based reimbursement during a five-year transition to a fully prospective system. Both the second and third options would extend the 15 percent reduction in the level of payments for capital expenses.

Move Immediately to a Prospective Reimbursement System. The current cost-based method of reimbursement for capital-related expenses could be replaced immediately by a prospective system under which capital expenses would be reimbursed by increasing the DRG rates to reflect the capital costs involved in treating each diagnosis. Once the PPS was expanded, the payment for each case would increase only to reflect inflation in hospitals' input prices. (The new index of input prices would reflect changes in the cost of capital goods, as well as changes in the prices of other inputs such as wages, food, and utilities.) Under the expanded PPS, Medicare outlays would be reduced by about \$2.1 billion during the 1990-1994 period. These savings would accrue because the increase in DRG payments from including capital costs is projected to be less than hospitals' actual expenditures for capital in future years.

Reimbursing capital expenses by increasing the current DRG rates would have several advantages. First, hospitals would have incentives to reduce their capital costs as well as their operating costs. For example, most interest costs are reimbursed under the current system, but a prospective one would encourage hospitals to delay projects when interest rates were high. In addition, this approach would avoid the current incentive to substitute capital for labor--the incentive that comes from combining prospective reimbursement for operating costs with cost reimbursement for capital expenses--even when that substitution would raise the hospital's total costs. Finally, prospective payment would make federal outlays for Medicare more predictable and controllable. For example, outlays could be controlled even if a hospital building boom occurred in the coming years.

The major drawback to this approach is that the capital expenditures of individual hospitals tend to be large and to occur infrequently. As a result, most hospitals have capital expenses that are much higher than average in some years and much lower in other years. In other words, an add-on based on the average level of capital costs per case in a base year would generally not match any particular hospital's current expenses.

Extend the 15 Percent Reduction for Five Years. The simplest method to reduce outlays for capital would be to extend the 15 percent reduction exactly as enacted for fiscal year 1989. This option would reduce Medicare outlays by \$4.8 billion during the 1990-1994 period.

The advantage of this option is that it would not require any major adjustments by hospitals; capital expenses have been reduced by varying amounts since fiscal year 1987. The disadvantage is that the incentive to overinvest in plant and equipment, created by cost-based reimbursement for capital expenses, would be preserved. Moreover, every hospital--no matter how frugal its investment decisions--would find that its payments from Medicare would fall short of its costs.

Extend the 15 Percent Reduction and Move Slowly to a Prospective Reimbursement System. Another approach would be to move gradually from the current cost-based system--with an extended 15 percent reduction--to a prospective one in which capital expenses were redefined. For example, during a five-year transition period, the reimbursement for capital costs could be based partially on actual costs less 15 percent, and partially on the prospective payment described in the first option less 15 percent. If the portion based on actual costs less 15 percent was set at 95 percent, 80 percent, 60 percent, 40 percent, and 20 percent in the successive years, \$5.7 billion would be saved in the 1990-1994 period.

Advocates of this approach argue that partially basing reimbursements on costs during a transition period would lessen financial stress for two large groups of hospitals: those with high capital costs and those planning large capital investments during the transition period. It would also reduce windfall gains for many others whose actual costs would be below Medicare's payments under the first option. Opponents counter that this approach would substantially reduce budgetary savings, compared with the immediate carrying out of a prospective system combined with a 15 percent reduction, and that some of the positive incentives of paying prospectively would be delayed.

ENT-07 ADOPT A FEE SCHEDULE FOR REIMBURSING PHYSICIANS UNDER MEDICARE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Fee Schedule with Rates Updated Annually by the MEI						
Outlays	800	880	1,150	1,420	1,790	6,040
Fee Schedule with Spending Cap Set by the MEI						
Outlays	800	1,750	3,100	5,070	7,350	18,070
Fee Schedule with Spending Cap Set by Growth in GNP						
Outlays	800	1,530	2,430	3,750	5,190	13,700

Medicare currently reimburses physicians under the Supplementary Medical Insurance (SMI) program for "reasonable" charges for all covered services. A reasonable charge for a given service is whichever is lowest: the physician's actual charge, the physician's customary charge for that service, or the prevailing charge for that service in the local community. This practice is known as the customary, prevailing, and reasonable (CPR) system.

Because of the automatic and inflationary link between physicians' actual charges and Medicare's payment rates in the next year, the CPR system has been criticized for contributing unnecessarily to cost increases. To weaken this link, since 1973, the allowed rate of increase in prevailing fees has been limited to the rate of increase in an economywide index of office expenses and earnings--the Medicare Economic Index (MEI). Since not all of physicians' customary charges are at the ceiling set by MEI-adjusted prevailing fees, however, and since increases in customary charges typically exceed MEI increases, payment rates have risen faster than the Medicare Economic Index.

Rates Updated Annually by the MEI. One alternative to the CPR system would be to establish a Medicare fee schedule for physicians'

and related services--with adjustment for local differences in costs. (See ENT-08 for an option that would modify geographic variation in Medicare's payment rates without establishing a fee schedule.) A fee schedule could perhaps be put in place by January 1, 1990, using the resource-based relative value scale (RVS) that the Health Care Financing Administration (HCFA) currently is developing. (HCFA's report on the RVS is due in mid-1989.)

The fee schedule that would be effective during 1990 could be set to permit no increase over 1989 in the total amounts allowed per enrollee (in the absence of behavioral changes). Increases in payment rates for 1991 and each year thereafter would be determined by the rate of increase in physicians' costs for the previous year (ending June 30), as measured by the MEI. Savings under this option would be \$800 million for fiscal year 1990. Savings would total more than \$6 billion through 1994, reducing net SMI outlays by about 2.5 percent. (This and later estimates assume that the copayment cap for 1990 would be adjusted to keep the share of enrollees affected at 7 percent.)

Under this option, Medicare's costs for physicians' services would increase at an average annual rate of 12.1 percent, compared with a projected increase of 12.5 percent under current law. Whether HCFA could develop an acceptable RVS in time to use it as a basis for a fee schedule as early as January 1990, however, is uncertain. Moreover, control of total costs in a fee-for-service payment system probably requires constraints on the volume of services as well as on fees. Without volume controls, some physicians might respond to constraints on fees by providing additional reimbursable--but unnecessary or only marginally useful--services.

Spending Cap Set by the MEI. Other countries have successfully contained increases in volume under fee-for-service systems by using a combination of two mechanisms: volume-related adjustments in payment rates to cap total spending for physicians' services, together with a systematic monitoring of profiles of practices to prevent individual physicians from making above-average increases in their billings at the expense of other physicians. Savings under the fee schedule discussed above would exceed \$18 billion over the five-year period if increases in average approved charges per enrollee were limited by increases in the MEI. In other words, payment rates for 1991 and later years would be reduced to offset increases for the previous year

in the average volume per enrollee. Under this approach, costs for physicians' services would increase by an average of 8.1 percent a year. Some increase in the average volume of services per enrollee might be desirable, however, to account for aging of the Medicare population and medical advances.

Spending Cap Set by Growth in GNP. Before triggering a downward adjustment in payment rates, average charges per SMI enrollee could be permitted to increase by the growth in the costs of physicians' practices plus an appropriate allowance for the effects on costs resulting from the aging of the Medicare population and from advances in technology. The appropriate allowances for these factors could be difficult to determine, however. Doing so would be especially difficult for medical advances, which might either increase or reduce the variety and costs of services that could benefit enrollees.

One option would be to allow total charges per SMI enrollee to increase each year according to the growth in nominal gross national product (GNP). In this way, SMI costs would no longer consume a growing share of the national product. Some increase in the volume of services per SMI enrollee would be permitted so long as payment rates increased less rapidly than GNP. Savings under this option would be nearly \$14 billion over the five-year projection period. Costs for physicians' services would increase by an average of 9.7 percent a year. The allowed growth in volume, however, could be greater or less than that warranted by aging and technological change.

Other Approaches. Alternate methods could reduce the undesirable incentives for increases in volume by basing reimbursements on more comprehensive packages of services--such as all services required by enrollees during a specified period of time (capitation). Before this kind of alternative could become the dominant payment method for physicians' services under Medicare, however, a number of issues about implementation and feasibility would need to be resolved. Establishing a fee schedule now need not prevent more fundamental changes in payment methods later, when acceptable alternative approaches are developed.

ENT-08 REDUCE GEOGRAPHIC VARIATION IN PAYMENT RATES FOR PHYSICIANS' SERVICES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Complete Adjustment for Cost Differences						
Outlays	510	380	480	600	750	2,720
Partial Adjustment for Cost Differences						
Outlays	670	490	620	770	980	3,530

Medicare's payment rates for physicians' services vary substantially with location. For example, payment for inserting a pacemaker varied in 1985 from \$835 to \$1,560 in the mid-Atlantic region alone. Savings could be realized under the current payment system (that is, without establishing a fee schedule as described in ENT-07) by limiting payment for each service to no more than, say, 120 percent of the prevailing national average rate, adjusted for geographic differences in costs. The adjustment for differences in costs could be complete or partial. A complete adjustment would vary rates to reflect geographic differences in physicians' office expenses and in incomes for groups of workers with similar levels of education as physicians, such as lawyers. A partial adjustment would vary rates to reflect only the 40 percent of revenues from practices that go to cover office expenses; Medicare's payment rates would not contribute to geographic differences in physicians' income net of expenses.

If this new payment ceiling--with a complete adjustment for cost differences--were established for 1990, savings would total \$510 million for that year and \$2.7 billion over the five-year projection period. If partial adjustment for cost differences were made, savings would be \$670 million in 1990, and \$3.5 billion over the projection period. For these estimates, adjustment for geographic differences in costs was made using a preliminary cost index developed by the Urban Institute, under contract to the Health Care Financing Administration.

Further, it was assumed that the copayment cap for 1990 would be adjusted to keep the share of enrollees affected at 7 percent.

In addition to reducing Medicare's costs, this option would reduce current disparities among localities in payment rates that do not appear to reflect differences in the costs of practicing medicine. Reducing the differential in rates between urban and rural areas might also help to induce more physicians to practice in rural areas. Further, the copayment costs of the enrollees would be lower on all services affected by the payment limits and for which their physicians accepted assignment (currently more than 75 percent of claims).

On unassigned claims, however, enrollees would be liable for higher out-of-pocket costs under this option. In addition, the Health Care Financing Administration has a mandate to develop a relative value scale and a geographic index of costs that could form the basis for a Medicare fee schedule. Thus, if the payment system itself is to be replaced in the near future, it might be premature to make changes to reduce geographic differences under the current payment system.

**ENT-09 INCLUDE HOSPITAL-BASED PHYSICIANS'
SERVICES IN HOSPITALS' PROSPECTIVE
PAYMENTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	210	300	400	530	690	2,130

Radiologists, anesthesiologists, and pathologists (RAPs) are supporting physicians who often have contractual arrangements with hospitals that grant them exclusive rights to provide services to hospitals and their inpatients. These contractual arrangements typically cover payment provisions for certain administrative services provided to the hospitals by RAPs, but not for their patient-related services. Instead, RAPs bill patients (or their insurers) directly, on a fee-for-service basis. Because hospitals select the RAPs who will provide services to their inpatients, however, hospitals are in a better position than either patients or insurers to negotiate with these hospital-based physicians.

Medicare could eliminate fee-for-service reimbursement for the inpatient services provided by RAPs. Instead, the hospitals' DRG (diagnosis-related group) payments under Part A of Medicare could be expanded to reflect the costs of all services provided by RAPs to hospital inpatients, with payments to RAPs constrained to grow at the same rate as DRG payments in future years. Outpatient services provided by RAPs would continue to be paid as under current law, including the fee schedules for radiology services that were put in place for 1989 under the Omnibus Budget Reconciliation Act of 1987.

Savings would be \$210 million in fiscal year 1990 if this change were carried out beginning January 1, 1990. Each DRG rate for 1989 would first be increased by the average cost to Medicare in 1989 for services provided by RAPs to patients in that DRG and then updated by an appropriate price index. Savings would total more than \$2 billion over the five-year projection period, reducing Medicare's net outlays for physicians' services by about 1 percent. These estimates as-

sume that shifting costs to the outpatient sector would be prevented for the most part by, for example, denying payment for related RAP services provided within seven days on either side of an inpatient stay. Further, it was assumed that the copayment cap for 1990 would be adjusted to keep the share of enrollees affected at 7 percent.

This option would give hospitals incentives they now lack to negotiate reasonable rates of pay for RAPs and to use their services efficiently. As a result, payments for the services provided by RAPs would be lower under this payment method than under the current system, thus reducing both Medicare's and patients' costs. In fact, co-insurance and the balance amounts on bills for which patients are currently liable under Part B of Medicare would be eliminated on inpatient services provided by RAPs. Consequently, out-of-pocket costs for patients would drop by a higher percentage than Medicare's costs.

Either RAPs or hospitals, however, would be worse off under this option. Total payments to RAPs for services to Medicare inpatients would fall, unless hospitals accepted the loss by paying RAPs more, on average, than the amount by which DRG rates were increased. The allocation of this reduction in receipts between RAPs and hospitals would vary by locality, depending on the extent of competition for the services of RAPs. The reduction in Medicare receipts that would occur under this option might also adversely affect access for Medicare enrollees in some isolated areas. But this effect would not be widespread because RAPs are among the most highly paid physician specialists.

**ENT-10 CONTINUE THE TRANSITION TO PROSPECTIVE
RATES FOR FACILITY COSTS IN HOSPITALS'
OUTPATIENT DEPARTMENTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	0	180	490	650	760	2,080

About \$5.5 billion--or 16 percent of total costs under the Supplementary Medical Insurance (SMI) program--were paid in 1988 for facility and ancillary costs in hospitals' outpatient departments. These operating costs include wages for nonphysician personnel, rent, and expenses for utilities, among other things.

The Omnibus Budget Reconciliation Act of 1986 changed Medicare's payment for facility costs associated with most surgical procedures in the outpatient departments of hospitals. Previously, hospitals were fully reimbursed for their costs. Under the act, they receive the lesser of costs or a blend of hospital-specific costs and a prospective rate based on the procedure performed. In 1987, a similar change was enacted for paying facility costs associated with outpatient radiology and diagnostic services. In both these areas, for 1990 and subsequent years, the blend will be 50 percent for each component. If, instead, the hospital-specific portion were phased out (with a transitional blend for 1991 of 25 percent of costs and 75 percent of the prospective rate), savings would be \$180 million for 1991 and \$2.1 billion over the five-year period. This estimate assumes that the copayment cap for 1990 would be adjusted to keep the share of enrollees affected at 7 percent.

In addition to reducing Medicare's costs, this option would give the outpatient departments of hospitals more incentive to provide care in a cost-effective manner by reducing the automatic passthrough of their costs to Medicare. Further, by paying hospitals' outpatient departments on the same basis as ambulatory surgical centers (ASCs) are currently paid, this option would reduce hospitals' greater incentive and ability to compete for patients through costly capital acquisitions. (ASCs provide outpatient surgery in facilities that are in-

dependent of hospitals. Use of these facilities by Medicare enrollees has been increasing rapidly in recent years.)

On the other hand, experience with partially prospective rates in outpatient departments is just beginning, and it is not currently known whether the 50/50 blended rate will be sufficient to ensure continued access for Medicare's enrollees. If, for example, patients at risk for complications are advised to receive treatment in hospitals' outpatient departments rather than ASCs because of the ready availability of advanced support systems there, then it might be appropriate to pay higher rates in hospitals than in ASCs. Retaining the hospital-specific costs as a portion of the payment rate until current experience has been examined would be one way to maintain higher rates for hospital outpatient departments with higher costs.

ENT-11 INCREASE MEDICARE'S PREMIUM FOR PHYSICIANS' SERVICES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Set Premium to Cover 25 Percent of Costs						
Outlays	430	1,100	1,970	2,920	4,110	10,530
Set Premium to Cover 30 Percent of Costs						
Outlays	2,140	3,590	4,770	6,060	7,640	24,200

Basic benefits under the Supplementary Medical Insurance (SMI) program (available to all those enrolled in Part B of Medicare) are partially funded by monthly premiums paid by enrollees, with the remainder paid from general revenues. (Basic benefits are those that were provided under the SMI program before passage of the Medicare Catastrophic Coverage Act.) The basic Part B premium for 1989 is \$27.90, with an additional \$4.00 payable monthly for new benefits under the Medicare Catastrophic Coverage Act.

Although the basic premium was initially intended to cover 50 percent of basic benefit costs, between 1972 and 1982 premium receipts covered a declining share of SMI costs--dropping from 50 percent to 25 percent--because basic premiums were tied to the rate of growth in Social Security benefits, which is based on the Consumer Price Index, rather than on the faster-rising per capita cost of SMI. If, however, the basic Part B premium were now increased to cover 50 percent of costs, enrollees liable for the maximum supplemental premium under the recently enacted Medicare Catastrophic Coverage Act would pay more in Medicare premiums than they could expect to receive in Part B benefits in 1990.

In 1982, basic premiums were set through 1985 (later extended through 1989) to cover 25 percent of the average basic benefits for an aged enrollee. Under current law, beginning in 1990 the basic premium calculation will again be limited to the rate of growth of Social

Security benefits, so that the share of basic benefits it finances will probably fall increasingly below 25 percent. (The monthly premium amount for catastrophic coverage is set in law through 1993. It will then be adjusted to cover 37 percent of the costs of new benefits provided under the Medicare Catastrophic Coverage Act.)

If the basic premium were set to continue to cover 25 percent of basic benefits for 1990 and for all years thereafter, instead of linking it to the rate of growth of Social Security benefits, federal savings would total \$430 million in fiscal year 1990 and \$10.5 billion over the five-year period. The estimated monthly premium would be \$30.60 on January 1, 1990, instead of the scheduled \$29.00. Net outlays for SMI would be reduced by about 4 percent over the five-year period. If the basic premium were increased to cover 30 percent of basic benefits from 1990 on, savings would be \$2.1 billion for 1990, and \$24.2 billion over the five-year period, reducing net outlays by about 10 percent. These estimates assume continuation of the current "hold harmless" provision, which assures that enrollees' monthly Social Security checks will not fall as a result of the combined effects of the cost-of-living adjustment and Part B premium increases.

Under this option, the increase in payments would be shared by all Part B enrollees, in contrast to proposals--such as increasing copayments--that would affect only the users of medical services, who may be financially pressed during their period of illness. Also, this option would not affect the poorest enrollees because of the hold harmless provision, and because poor enrollees are likely to be eligible for Medicaid, which usually pays the Part B premium on their behalf. (As of 1992, all poor enrollees will be eligible to have Medicaid pay their Medicare premium and copayment costs.)

Some low-income enrollees who are not eligible for Medicaid, however, could find the increased premium burdensome. A few might drop Part B coverage and either do without care or turn to sources of free or reduced-cost care, which could increase demands on local governments. In addition, the costs for states would increase for those Medicare enrollees eligible for Medicaid, since states would pay part of the higher premium costs for those enrollees. High-income enrollees might also object to further increases in the share of costs they must pay, given the increases already mandated under the Medicare Catastrophic Coverage Act.

ENT-12 TAX A PORTION OF MEDICARE BENEFITS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Without Income Threshold	1.1	3.7	4.2	4.8	5.4	19.0
With Income Threshold	0.5	1.8	2.1	2.5	2.9	9.8

Eligibility for Hospital Insurance (HI) benefits is based on working-year tax contributions, half of which are paid by employees from after-tax income and half by employers from pretax income. Hence, 50 percent of the insurance value of HI benefits might be treated as taxable income for all Medicare enrollees, reflecting the portion of contributions that was not originally subject to income tax. (In previous volumes of this report, the subsidy value of benefits under Part B of Medicare was also included in the amount subject to tax. With passage of the Medicare Catastrophic Coverage Act, however, the Part B subsidy value was substantially reduced for higher-income enrollees when new supplemental premiums are treated as a Part B premium.) This proposal is analogous to taxing part of Social Security benefits, which is already in effect for higher-income beneficiaries whose modified adjusted gross income plus half of Social Security benefits exceeds \$25,000 (for individuals) or \$32,000 (for couples).

If no income thresholds were used to limit the application of the Medicare tax, additional revenues would be \$1.1 billion in 1990 and \$19 billion over the five-year period. Alternatively, the current income thresholds for the tax on Social Security benefits could be used to limit the application of the tax on Medicare benefits; the portion of Medicare benefits described above would be added to modified adjusted gross income plus half of Social Security benefits to compare with the threshold. Taxing HI benefits would then yield additional revenues of \$0.5 billion in 1990 and \$9.8 billion through 1994.

A tax on HI benefits would reduce the federal deficit and strengthen the HI trust fund if the proceeds were placed there. If income

thresholds were used, low- and middle-income enrollees would not be liable for the tax. In fact, about 54 percent of enrolled tax units would be unaffected by this proposal even if no income thresholds were used. Further, since this option would use the mechanism already in place for taxing Social Security benefits, it would present no additional administrative difficulty.

Unlike the tax on Social Security benefits, this tax would be imposed on the insurance value of in-kind benefits rather than on dollar benefits actually received, thereby modifying current tax policy. (If the tax were imposed on actual benefits received, however, it would be directly related to enrollees' health care costs, reducing the insurance protection Medicare is intended to provide.)

Some might object to this option unless enrollees could alter their tax liability by renouncing all benefits under the HI program, an option that might be particularly important to enrollees for whom Medicare is a secondary payer to their employment-based coverage. For the approximately 10 percent of enrollees in the 28 percent and 33 percent tax brackets, the additional tax liability would be substantial--about \$300 in 1990 for individuals with taxable income above \$19,450, and \$600 for couples with taxable income above \$32,400. This option might be seen as particularly objectionable given the increase in premiums that high-income enrollees now face under the Medicare Catastrophic Coverage Act. As a result of imposing a new tax on high-income enrollees, this option would also increase the amounts collected as supplemental premiums under the act. Revenue increases from both sources are reflected in the table. About 14 percent of new revenues generated if income thresholds are not used (or \$2.7 billion) would represent additional supplemental premiums. With an income threshold, additional supplemental premium receipts would comprise about 9 percent of new revenues generated (or \$0.9 billion).

ENT-13 INCREASE MEDICARE'S DEDUCTIBLE FOR PHYSICIANS' SERVICES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Fixed \$200 Deductible						
Outlays	1,510	2,390	2,600	2,690	2,780	11,970
Indexed \$200 Deductible						
Outlays	1,510	2,670	3,370	4,040	4,790	16,380

Appreciable federal savings in Medicare's Supplementary Medical Insurance (SMI) program could be realized by increasing the deductible--that is, the amount that enrollees must pay for services each year before the government shares responsibility. The deductible is now \$75 a year. This deductible has been increased only twice since Medicare began in 1966, when it was set at \$50. Hence, the deductible has fallen, relative to average per capita benefits, from 70 percent in 1967 to less than 7 percent in 1988.

Increasing the SMI deductible to \$200 on January 1, 1990, would save \$1.5 billion in fiscal year 1990. This saving assumes that the SMI copayment cap currently set in law at \$1,370 for 1990 would be changed to \$1,480 to keep the proportion of enrollees affected at 7 percent. Savings would total nearly \$12 billion over the five-year period from 1990 through 1994, reducing net SMI outlays by about 5 percent. If the new deductible were indexed to the projected rate of growth in SMI charges per enrollee for 1991 and later years, savings would be \$16.4 billion over the five-year projection period.

An increase in the deductible amount would enhance the economic incentives for prudent consumption of medical care while spreading the burden of reduced federal outlays among most enrollees. Their out-of-pocket costs would rise by no more than \$125 each in 1990. Moreover, because a larger proportion of enrollees would not ex-

ceed the deductible (currently about 30 percent do not), administrative costs for processing claims would be reduced.

On the other hand, even relatively small increases in out-of-pocket costs could prove burdensome to low-income enrollees who do not receive Medicaid, which generally pays deductible amounts for dual Medicaid/Medicare beneficiaries. That added expense might, in turn, discourage some people from seeking needed care. Under the Medicare Catastrophic Coverage Act, however, by 1992 all enrollees with family incomes below the poverty level will be eligible to have Medicaid pay their copayment (and premium) costs under Medicare.

**ENT-14 COLLECT 20 PERCENT COINSURANCE ON
CLINICAL LABORATORY SERVICES UNDER
MEDICARE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	310	490	590	690	820	2,900

Medicare currently pays 100 percent of the approved fee for clinical 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. Beneficiaries pay coinsurance of 20 percent for most other services provided under Medicare's Supplementary Medical Insurance (SMI) program (as they did for clinical laboratory services before July 1984, when a fee schedule that reduced payment rates was implemented). Reimposing the coinsurance requirement for laboratory services could yield appreciable savings to Medicare. If coinsurance of 20 percent of laboratory fees were imposed beginning January 1, 1990, federal savings would be \$310 million in fiscal year 1990. Savings would total \$2.9 billion over the five-year period from 1990 to 1994, reducing net SMI outlays by about 1 percent. It was assumed that the copayment cap for 1990 would be adjusted to keep the share of enrollees affected at 7 percent.

In addition to reducing Medicare costs, this option would make cost-sharing requirements under the SMI program more uniform and therefore easier to understand. In addition, if they paid part of the costs, enrollees might be less likely to have laboratory tests that have little expected benefit.

On the other hand, cost-sharing probably would not affect enrollees' use of laboratory services substantially because decisions about what tests are appropriate are often left to physicians, whose decisions do not appear to depend on enrollees' cost-sharing. Hence, although a small part of the savings under this option might be the result of more prudent use of laboratory services, most of the expected savings would reflect the transfer to enrollees of costs now paid by

Medicare. Further, billing costs for some providers, such as independent laboratories, could be greatly increased because they would have to bill both Medicare and the enrollee to collect their full fee. Currently, they have no need to bill enrollees directly.

ENT-15 TAX EMPLOYER-PAID HEALTH INSURANCE

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Tax Some Employer-Paid Health Insurance						
Income Tax	3.1	5.6	7.5	10.0	13.4	39.6
Payroll Tax ^a	1.6	3.0	3.9	5.3	7.1	20.9
Total	4.7	8.6	11.4	15.3	20.5	60.5
Tax Employer-Paid Health Insurance, but Allow a Credit for Some Employer and Employee Contributions						
Income Tax	8.5	3.3	4.2	5.3	7.6	28.9
Payroll Tax ^a	10.3	16.7	18.2	19.8	22.1	87.1
Total	18.8	20.0	22.4	25.1	29.7	116.0

a. Net of reduced income tax revenues.

Employees do not pay taxes on income received in the form of employer-paid health care coverage. This exclusion will reduce 1990 income tax revenues and Social Security payroll tax revenues by a total of about \$46 billion.

Tax Some Employer-Paid Health Insurance. One proposal to limit the exclusion would be to treat as taxable income for employees any employer contributions (including those in cafeteria plans and flexible spending accounts) that exceed \$250 a month for family coverage and \$100 a month for individual coverage (in 1990 dollars), with these amounts indexed to reflect future increases in the general level of prices. This proposal, which would affect about 50 percent of individual tax filing units, would raise income tax revenues by about \$40 billion and payroll tax revenues by about \$21 billion over the 1990-1994 period. Including employer-paid health care coverage in the Social Security wage base, however, would lead to increased outlays on benefit payments that would offset most of the added payroll tax revenues from this option over the long run. This proposal would also raise the state income tax liabilities of individuals in those states with

tax bases linked to the federal tax base, unless those states took offsetting actions.

An advantage of this approach is that it would eliminate the tax incentive to purchase additional coverage beyond the ceiling. Without such coverage, there would be stronger incentives to economize in the medical marketplace, thereby reducing upward pressure on medical care prices. Over the long run, indexing the ceilings would limit their erosion by inflation. Finally, the Congress has already limited the exclusion for employer-paid group term life insurance in a similar way (see REV-13).

One disadvantage of limiting the tax subsidy is the difficulty of determining just when extensive coverage becomes excessive. Moreover, a uniform ceiling would have uneven effects, since a given employer's contribution purchases different levels of coverage depending on such factors as geographic location and the demographic characteristics of the firm's workforce. Finally, the indexing provision of this proposal would lead to declining subsidies for employer-paid health insurance over time, if health insurance costs continue to rise faster than the general level of prices. This effect is of concern to people who argue that these subsidies to private-sector benefits help avoid the need for public provision of similar benefits.

Tax Employer-Paid Health Insurance, but Allow a Credit for Some Employer and Employee Contributions. Another option would be to treat all employer-paid health insurance premiums as taxable but offer an individual income tax credit of 20 percent for health insurance premiums up to the amounts described above for family and individual coverage. The credits would be available to taxpayers regardless of whether the coverage was paid for or sponsored by an employer. At this credit percentage and with these premium ceilings, the proposal would increase income tax revenues by about \$29 billion and payroll tax revenues by about \$87 billion over the 1990-1994 period. As under the first option, however, increases in Social Security outlays would offset most of the added payroll tax revenues in the long run. This proposal would substantially raise the state income tax liabilities of individuals in states with tax bases linked to the federal tax base, unless these states took offsetting actions.

In addition to eliminating the tax incentive to purchase health insurance above the limits, as under the first option, this one would have the added advantage of making the subsidy available to all taxpayers having health insurance, without regard to their employment status. Moreover, the subsidy per dollar of the eligible health insurance coverage purchased would not be higher for taxpayers with higher incomes.

A drawback of this option is that the benefits of the tax credit would not be available to low-income individuals and families who have no liability under the federal personal income tax, unless the credit were made refundable. Such a refund, however, would substantially reduce the net revenue gain discussed above. Moreover, as with the first option, opponents of this one have several concerns: it would be difficult to determine at what level health insurance coverage becomes excessive, the effects would vary among geographic areas, and the subsidy for health insurance would be likely to decline over time.

ENT-16 INCREASE THE STATES' SHARE OF AFDC, MEDICAID, AND FOOD STAMP BENEFIT COSTS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Reduce the Floor on the AFDC and Medicaid Matching Rate to 45 Percent						
Budget Authority	2,550	2,750	3,000	3,300	3,550	15,150
Outlays	2,550	2,750	3,000	3,300	3,550	15,150
Require States to Pay a Portion of Food Stamp Benefits						
Budget Authority	630	670	700	740	770	3,500
Outlays	630	670	700	740	770	3,500

NOTE: The AFDC and the Food Stamp programs are in budget function 600; Medicaid is in function 550.

The federal government and the states jointly fund benefits in the Aid to Families with Dependent Children (AFDC) and Medicaid programs, whereas the federal government currently funds Food Stamp benefits with no state contribution. This option would lower federal costs for benefits in each of the programs, generating savings of \$3.2 billion in 1990 and \$18.7 billion over the next five years.

Reduce the Floor on the AFDC and Medicaid Matching Rates. The federal share of costs for both the AFDC and Medicaid programs varies with state per capita income, with high-income states paying a larger share of benefits than low-income states. By law, the federal share can be no less than 50 percent and no more than 83 percent. The 50 percent federal floor applies to 13 jurisdictions in fiscal year 1990: Alaska, California, Connecticut, Delaware, the District of Columbia, Illinois, Maryland, Massachusetts, Nevada, New Hampshire, New Jersey, New York, and Virginia. The current system of setting the federal matching rate, a sliding scale with a floor, requires low- and middle-income states to pay a greater share of AFDC benefits and Medicaid costs relative to income than it requires of high-income

states. If the floor were reduced to 45 percent, the federal contribution levels would be more directly related to state income.

Federal savings for the AFDC program would be \$0.6 billion in 1990 and \$3.2 billion over the 1990-1994 period; outlays would be reduced for Medicaid by \$1.9 billion in 1990 and \$12.0 billion over the five-year period. If the floor on the matching rate were instead reduced from 50 percent to 48 percent, the five-year savings from AFDC and Medicaid would be \$6.4 billion.

Seven of the 13 states affected by this proposal paid AFDC benefits in 1988 that were in the upper third when states were ranked by the size of benefits. Ten of the states cover the medically needy under their Medicaid program. Some argue that if the high-income states wish to set high AFDC benefit levels and offer more generous Medicaid programs, these states should pay a higher portion of the cost to reflect more accurately their greater tax capacity.

On the other hand, the high incomes and benefit levels in these states may in part reflect a higher cost of living in these states. Relatively large savings from this proposal would come from four states--California, Massachusetts, New Jersey, and New York--which would bear 87 percent of the new costs. If this proposal were adopted, the states affected would need to compensate for the lost revenue by reducing expenditures on AFDC and Medicaid, by lowering spending on other state services, or by raising taxes. If states chose to compensate by reducing AFDC and Medicaid expenditures, recipients of these programs would be adversely affected. If the states chose to raise taxes or reduce other spending, then the impact would probably fall on most state residents.

Require States to Pay a Portion of Food Stamp Benefits. The Food Stamp program offers coupons redeemable for food to families with low incomes and low levels of assets. These benefits are funded entirely by the federal government, but states pay one-half of most state and local administrative costs. This proposal would require the states to share a proportion of Food Stamp benefit costs. For illustration, the table shows federal savings when states pay 5 percent of those costs--\$0.6 billion in 1990 and \$3.5 billion over the 1990-1994 period.

Paying a share of benefits would increase the states' financial stake in the program. Currently, they are only penalized when their errors in determining benefits exceed a certain rate. In addition, states currently have little financial incentive to design employment and training programs that will successfully move able-bodied recipients off the Food Stamp program and into jobs. This proposal would provide such an incentive.

On the other hand, since benefits in the Food Stamp program are determined by the same rules nationwide, this proposal would be more difficult for low-income states to fund than for high-income states. The low-income states might respond by reducing spending in other areas. In addition, states might object to paying a share of the cost of benefits for a program in which they have no discretion to set either eligibility conditions or benefit levels.

**ENT-17 REDUCE THE MATCHING RATE FOR
ADMINISTRATIVE COSTS IN AFDC,
MEDICAID, AND FOOD STAMPS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Reduce Most Higher Matching Rates to 50 Percent						
Budget Authority	300	320	340	360	390	1,700
Outlays	300	320	340	360	390	1,700
Reduce Most Matching Rates to 45 Percent						
Budget Authority	680	730	770	810	870	3,850
Outlays	680	730	770	810	870	3,850

The Aid to Families with Dependent Children (AFDC) program provides cash assistance to low-income families with children in which one parent is absent or incapacitated, or to families in which the primary earner is unemployed. The Medicaid program provides medical assistance to low-income people who are aged, blind, or disabled recipients of Supplemental Security Income (SSI), current or recent recipients of AFDC, and certain other pregnant women and children. The Food Stamp program provides coupons redeemable for food to low-income households to enable them to buy a nutritionally adequate low-cost diet.

The federal government pays half of most administrative costs in all three programs; states or local governments pay the remaining share. Higher matching rates have been instituted for some types of expenses as an incentive for local administrators to undertake more of a particular administrative activity than they would if such expenses were matched at the overall rate. For example, enhanced matching rates are applied to the cost of developing computer systems that meet federal guidelines and for some antifraud activities in the Food Stamp and AFDC programs. In the Medicaid program, higher matching rates are also applied to the cost of running computer systems, as well as the cost of operating fraud and abuse units and other activities. In

addition, in the Food Stamp program, states that reduce errors resulting from overissuing benefits are rewarded with a slightly higher matching rate for all administrative expenses. In fiscal year 1987, about five states qualified for this enhanced matching rate. Finally, the Family Support Act of 1988 introduced enhanced matching rates for operating expenses and some administrative costs of the new Job Opportunities and Basic Skills Training (JOBS) Program.

The administrative activities matched at higher rates represent a relatively small proportion of all administrative costs in the Food Stamp and AFDC programs, but are a larger share of Medicaid administrative costs. In the Food Stamp and AFDC programs, much of the administrative activity consists of determining eligibility and benefit amounts. In the Medicaid program, however, determining eligibility is a relatively small share of administrative responsibility because it is done largely by the AFDC and SSI programs. Consequently, activities that are matched at higher rates—including automated claims processing costs, medical and health care utilization review, and the cost of establishing and operating a fraud control unit—constitute a much higher percentage of Medicaid administrative costs.

Reducing most of the higher matching rates to 50 percent in the three programs would decrease federal outlays by \$0.3 billion in 1990 and by \$1.7 billion over the 1990-1994 period. Because recent mandates in law make computerization important for administrative efficiency, and because many states have not yet computerized their administration of these programs, this option would not lower the higher matching rates for establishing computer systems in the Food Stamp and AFDC programs. In addition, the recently enacted enhanced matching rates for expenses associated with the JOBS program would also be left in place. The 50 percent rate would, however, apply to almost all administrative spending in the three programs.

Considerably greater savings would be generated if most of the matching rates were reduced to 45 percent, since 5 percent of almost all current administrative expenses would be shifted to the states. Federal outlays would fall by \$0.7 billion in 1990 and by \$3.9 billion over the five-year period, 1990 to 1994. The same exceptions as described above were assumed to apply to this option as well.

Reducing most higher matching rates to 50 percent might be appropriate because the need to provide special incentives for these activities no longer exists. This option would most affect the Medicaid program, for which states have already established computer systems and are currently operating fraud and abuse units. Reducing most matching rates to 45 percent would provide states with stronger incentives in all three programs to economize on program costs by reducing administrative inefficiencies, since the states would be liable for a greater share of the cost of such inefficiencies.

On the other hand, states might generally respond to this option by attempting to reduce their administrative expenses, which would run the risk of raising federal costs. Although federal matching payments for administrative costs would fall, expenditures for AFDC and Food Stamp benefits might increase if errors or fraud occurred more often. States already face penalties, however, if their errors in benefit payments are above a certain rate. States also might make less effort to eliminate waste and abuse in payments to providers under Medicaid, especially if the matching rates that apply to antifraud activities were cut. In addition, this proposal might harm recipients by encouraging states to slow the growth of benefits over time or to limit services provided under Medicaid in order to constrain state costs.

ENT-18 REQUIRE A TWO-WEEK WAITING PERIOD FOR UNEMPLOYMENT INSURANCE BENEFITS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	--	1,000	1,100	1,100	1,200	4,400

NOTE: These estimates assume that the change is not implemented until fiscal year 1991, to allow time for changes in state Unemployment Insurance laws.

Current federal law imposes no mandatory waiting period before jobless workers can receive Unemployment Insurance (UI) benefit payments, although the Omnibus Reconciliation Act of 1980 does require states to adopt a one-week waiting period on regular UI benefit payments or lose some federal benefits under the extended UI program. About three-quarters of the states now require a one-week waiting period for regular UI benefits, while the remainder generally have no waiting requirement.

If all jobless workers were required to wait two weeks before receiving UI benefits, program outlays would be reduced and beneficiaries in all states would be treated uniformly. Such a change would not affect the maximum length of time during which workers could collect benefits; for example, a person otherwise eligible for 26 weeks of benefits would retain that eligibility, but would receive payments for weeks 3 through 28 of joblessness. Benefits would be reduced, however, for those recipients not using the maximum number of covered weeks. If established in 1991 (to allow time for states to change their UI laws), this option would cut UI outlays by nearly 7 percent, or by about \$4.4 billion between then and 1994.

This option would reduce the incentive of workers to become unemployed and collect UI benefits by increasing the initial cost of joblessness; yet it would not greatly affect the program's ability to help the long-term unemployed. Restricting aid in this way might lower the number of workers who apply for assistance and would reduce the duration of benefits paid to many who do apply.

On the other hand, because this change would reduce the benefits provided to jobless workers who do not use all of their entitlement, it would diminish the income-support role of UI. Also, this change would impose additional federal restrictions on state UI programs, even though it is state UI taxes that finance regular UI benefits.

ENT-19 END OR SCALE BACK TRADE ADJUSTMENT ASSISTANCE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
End Trade Adjustment Assistance						
Budget Authority	250	270	270	260	250	1,300
Outlays	220	270	270	260	250	1,250
Eliminate Trade Adjustment Assistance Cash Benefits						
Budget Authority	170	190	190	180	170	900
Outlays	170	190	190	180	170	900

The Trade Adjustment Assistance (TAA) program offers income replacement benefits, training, and related services to workers unemployed because of import competition. To obtain assistance, jobless workers must first petition the Secretary of Labor for certification and then meet other eligibility requirements. Cash benefits are available to certified workers who are receiving training, but are available only after their Unemployment Insurance benefits are exhausted.

Eliminating all TAA benefits would reduce federal outlays by \$220 million in 1990 and by nearly \$1.3 billion during the 1990-1994 period. Affected workers could apply for benefits under Title III of the Job Training Partnership Act (JTPA), which authorizes a broad range of employment and training services for dislocated workers regardless of the cause of their job loss. Given that funding for Title III is limited, however, another alternative would be to eliminate only TAA cash benefits and shift the remaining TAA funds for training and related services to Title III. Savings under this option would total \$900 million between 1990 and 1994.

The rationale for these options is to secure more similar treatment under federal programs for all workers permanently displaced from their jobs because of economic shifts. Since Title III of JTPA only provides cash benefits under limited circumstances, workers who lose

jobs because of foreign competition are now treated more generously than many other dislocated workers.

Ending TAA cash benefits might, however, cause economic hardship for some of the long-term unemployed who are enrolled in training programs. In addition, TAA now compensates some of the workers adversely affected by government free trade policies, which many economists maintain improve the overall economy. Some argue, therefore, that eliminating TAA benefits could lessen political support for free trade.

**ENT-20 REDUCE THE SUBSIDY FOR NONPOOR
CHILDREN IN CHILD NUTRITION PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	390	420	450	480	510	2,250
Outlays	340	420	450	480	510	2,200

Federal child nutrition programs were developed to improve the health and well-being of children by providing them with nutritious meals. The programs provide cash and commodity assistance to schools, child-care centers, and family day-care homes that serve meals to children. Although most of the funds are targeted toward low-income children, some of the aid benefits middle- and upper-income children as well. For example, in the National School Lunch Program (the largest of the child nutrition programs), most schools receive \$1.46 in cash reimbursement for each meal served to children from households with incomes at or below 130 percent of the poverty line; a smaller subsidy of \$1.06 for each meal served to children from households with incomes between 130 percent and 185 percent of poverty; and a subsidy of 14 cents per meal for children with household incomes above 185 percent of poverty. Schools are also given approximately 12 cents' worth of commodities for each lunch served, regardless of the household income of the child. Comparable reimbursement structures are used in the School Breakfast Program and in the child-care center portion of the Child Care Feeding Program.

Eliminating the cash reimbursement for all meals served to children from households with incomes above 185 percent of the poverty line (about \$21,550 per year for a family of four in the 1988-1989 school year) would reduce federal expenditures by about \$0.3 billion in 1990, and by about \$2.2 billion during the 1990-1994 period. In these estimates, CBO assumes that the reductions in federal subsidies would lead some schools to discontinue the program for all students. The savings resulting from schools dropping out of the program are relatively small (\$120 million over five years), since the schools most

at risk of dropping out are those serving relatively few meals to children from families with incomes below 185 percent of poverty.

Although most of the federal funds are targeted toward low-income children, 53 percent of the school lunches served in fiscal year 1988 went to children whose household income was above 185 percent of the poverty line. These children are less in need of federal subsidies, and the targeting of this assistance would be improved by limiting it to those from households with the lowest incomes.

Such a change might result in lower participation among nonpoor children. Participation falls when prices are raised, and participating schools and centers would probably make up the loss in reimbursements by increasing the price charged to nonpoor children unless state and local governments provide additional support. Children who dropped out of the program could receive meals of lower quality, since the meals qualifying for reimbursement are nutritionally adequate, while those from alternative sources might not be. Moreover, if the decline in participation were substantial, low-income children could become the main recipients of the meals and thus would be identifiable as poor by their peers. Finally, if nonpoor children provided a large share of the total revenue for the meal program, lower participation by this group could cause some schools and child-care centers to drop out of the program, thereby denying federally subsidized meals to some low-income children.

**ENT-21 COUNT ENERGY ASSISTANCE AS INCOME
IN AFDC, SSI, AND FOOD STAMPS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	250	260	270	280	290	1,350
Outlays	250	260	270	280	290	1,350

The Low Income Home Energy Assistance Program (LIHEAP) provides more than \$1 billion each year to help pay the energy bills of over 6 million low-income families, many of whom also receive Aid to Families with Dependent Children (AFDC), Supplemental Security Income (SSI), or food stamps. LIHEAP funds are allocated to states for payment either to households or to energy suppliers on behalf of eligible households. At state option, households with members receiving AFDC or SSI are categorically eligible for LIHEAP aid.

Regardless of how it is paid, LIHEAP assistance is currently ignored in determining either eligibility or benefit levels in AFDC, SSI, and the Food Stamp program. This option would count LIHEAP payments as income in all three programs, but would limit the amount counted as income in AFDC to no more than the energy portion of the need standard and that in SSI to no more than 30 percent of the SSI benefit. (These limitations would mean that beneficiaries in all three programs would be affected about equally.) Households receiving benefits from more than one of these programs would be protected from having LIHEAP assistance counted as income more than once. The federal government would save roughly \$250 million in fiscal year 1990 and \$1.4 billion over the next five years, as some families would become ineligible for AFDC, SSI, or food stamps, while others would have their benefits reduced. Roughly 20 percent of the savings would be in AFDC, 20 percent in SSI, and 60 percent in food stamps.

Counting LIHEAP aid as income would recognize that assisted families are better off than their unassisted counterparts because part of their energy bills are paid by the government, leaving them more of their own income to meet other needs. In this sense, AFDC, SSI, and

food stamp families receive duplicate aid when LIHEAP payments are ignored in determining benefits.

On the other hand, federal law requires that states, in distributing LIHEAP funds, give preference to households with the highest energy costs. Assistance payments should thus serve primarily to meet extraordinary energy needs. Counting that aid as income would lower AFDC, SSI and Food Stamp benefits or remove families from the programs; it would thus markedly reduce any gains from the LIHEAP, particularly for those families facing large energy bills. (See NDD-39 for another budget reduction option that deals with LIHEAP.)

**ENT-22 ELIMINATE THE \$50 CHILD-SUPPORT
PAYMENT TO AFDC FAMILIES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	110	130	150	170	190	760
Outlays	110	130	150	170	190	760

The Child Support Enforcement (CSE) program collects child-support payments from absent parents on behalf of families receiving Aid to Families with Dependent Children (AFDC). These payments are used to offset federal and state costs for AFDC. Amounts up to the first \$50 in monthly child support collected, however, are paid to the AFDC family, with no effect on the level of AFDC benefits. In essence, this policy means that AFDC families for whom absent parents contribute child support get as much as \$50 more per month than otherwise identical families for whom such contributions are not made. (This policy is sometimes referred to as the child-support disregard in the AFDC program, since it is equivalent to not counting the first \$50 of child support as income in calculating AFDC benefits.)

Eliminating the \$50 child-support payment to AFDC families would save the federal government \$110 million in fiscal year 1990 and \$760 million over the next five years. Stopping such payments would also end the differential treatment of AFDC families that depends on whether the absent parent pays child support.

On the other hand, some absent parents--especially those living in different states from their children and those without steady employment--may not be affected by the requirement of the Family Support Act of 1988 that child-support payments be withheld from the pay of absent parents. These parents may thus still be encouraged by the disregard to provide some or additional support, because doing so would improve the well-being of their children. In addition, the child-support payment continues to provide incentives for custodial parents to make an effort to obtain support. If the payment were eliminated,

AFDC recipients would be no better off when absent parents pay child support, and would thus be less inclined to seek such payments.

**ENT-23 REDUCE THE FEDERAL MATCHING RATE
FOR CHILD SUPPORT ENFORCEMENT COSTS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	270	280	320	330	350	1,550
Outlays	270	280	320	330	350	1,550

Enacted in 1975, the Child Support Enforcement (CSE) program provides administrative tools and funding for states to improve the payment of child support by absent parents. Legislation enacted in 1988 strengthened child-support enforcement efforts by mandating that states use child-support guidelines in making awards and requiring the withholding of child-support payments from wages even in cases of payments not in arrears. The federal government helps states finance their CSE efforts by paying part of the costs--68 percent in fiscal year 1989 and 66 percent thereafter.

The federal government would save money if its share of CSE costs were reduced. Lowering the federal matching rate to 50 percent in 1990 and subsequent years would save about \$270 million in 1990 and \$1.5 billion over five years, although the amount of savings could be higher or lower depending on how states react to the change. This option would also encourage states to improve the efficiency of their CSE efforts, since they would pay a larger share of the costs of inefficiencies, and could thus lead to even lower program costs overall.

On the other hand, because states probably could not improve efficiency enough to offset fully the reduction in federal payments, they might cut CSE services, thereby reducing child-support collections on behalf of both welfare and nonwelfare families. While the lower CSE collections for AFDC families would decrease state revenues from that source, states still might be better off financially, since their share of collections can be less than 20 percent. Further, states receive only small financial benefits from child-support collections for non-AFDC families. They might, therefore, be even more likely to cut back on efforts for them, thereby lowering those children's living standards.

ENT-24 RESTRICT COST-OF-LIVING ADJUSTMENTS IN NON-MEANS-TESTED BENEFIT PROGRAMS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Eliminate COLAs for One Year						
Social Security/ Railroad Retirement	8,850	12,200	12,350	12,300	12,050	57,700
Other Non-Means- Tested Programs	2,350	3,150	3,300	3,400	3,550	15,750
Offsets in Means-Tested Programs and Medicare Premiums	-570	-790	-830	-870	-910	-3,950
Total	10,600	14,550	14,750	14,800	14,700	69,450
Limit COLAs to Two-Thirds of the CPI Increase for Five Years						
Social Security/ Railroad Retirement	2,900	7,050	11,250	15,550	20,000	56,700
Other Non-Means- Tested Programs	760	1,850	2,950	4,100	5,400	15,050
Offsets in Means-Tested Programs and Medicare Premiums	-80	-330	-650	-980	-1,350	-3,400
Total	3,550	8,550	13,550	18,700	24,050	68,350
Limit COLAs to the CPI Increase Minus Two Percentage Points for Five Years						
Social Security/ Railroad Retirement	3,600	8,800	14,250	19,950	25,800	72,350
Other Non-Means- Tested Programs	960	2,300	3,750	5,300	6,950	19,200
Offsets in Means-Tested Programs and Medicare Premiums	-100	-420	-810	-1,250	-1,700	-4,300
Total	4,450	10,650	17,150	24,000	31,000	87,300
Pay Full COLA on Benefits Below a Certain Level and 50 Percent of COLA on Benefits Exceeding That Level						
Social Security/ Railroad Retirement	980	2,350	3,650	5,000	6,250	18,250

NOTE: Curtailing COLAs could cause the means-tested benefits of some beneficiaries to increase and could limit some scheduled premium increases for the Supplementary Medical Insurance part of Medicare, as shown in the table. Old-Age, Survivors, and Disability Insurance (OASDI) is in budget function 650; Railroad Retirement, Civil Service Retirement, Military Retirement, Federal Employees Workers' Compensation, and retirement benefits for the Foreign Service are in budget function 600; Veterans' Compensation is in budget function 700; retirement benefits for the Public Health Service are in budget function 550; and retirement benefits for the Coast Guard are in budget function 400. The means-tested programs are in budget functions 600 (Supplemental Security Income and Food Stamps) and 550 (Medicaid). Medicare is in budget function 570.

Outlays for Social Security and other non-means-tested cash transfer programs whose benefits are indexed to the Consumer Price Index (CPI) are expected to total \$303 billion this year and to rise to \$408 billion by 1994 under current policies. Reducing the automatic cost-of-living adjustment (COLA) for these programs is commonly proposed as one way to slow the growth in entitlement spending. Four strategies for reducing COLAs and the savings in outlays resulting from each are shown in the preceding table. The programs in which COLAs would be reduced under the first three options are: Social Security Old-Age, Survivors, and Disability Insurance (OASDI); Railroad Retirement; Civil Service Retirement; Military Retirement; Federal Employees Workers' Compensation; Veterans' Compensation; and retirement benefits for the Foreign Service, the Public Health Service, and the Coast Guard. The fourth option would affect only Social Security and Railroad Retirement Tier I COLAs. Other options for achieving savings in Social Security are given in ENT-25, ENT-26, ENT-27, and REV-14.

COLA restrictions would achieve considerable savings by spreading the reduction over a large number of beneficiaries, in contrast to other budget options that would concentrate benefit reductions on smaller groups of recipients. By limiting these options to the non-means-tested cash benefit programs, many of the poorest beneficiaries of entitlements--for example, recipients of Supplemental Security Income--would be protected from losses of income. Moreover, because the benefit levels of those eligible when the COLA limitation was established would be permanently lowered, significant reductions in outlays would persist beyond the five-year projection period. The savings would eventually disappear as beneficiaries died or stopped receiving payments for other reasons, unless the COLA limitation was accompanied by a permanent reduction in the initial benefits of newly eligible workers as well (see ENT-25).

On the other hand, budget reduction strategies that institute less-than-complete price indexing would result in financial difficulties for some recipients, particularly if they were applied for an extended period. Although excluding means-tested benefit programs would limit the impact of COLA reductions for many low-income beneficiaries, numerous others could face substantial declines in their standards of living. COLA reductions also encounter opposition from those who fear that changes made to reduce budget deficits would

undermine the entire structure of retirement income policy. For example, private pension plans generally do not offer complete indexing; COLA restrictions in Social Security would further reduce beneficiaries' protection against inflation. Some people also believe that these programs should be altered only gradually and then only for programmatic reasons, because Social Security and other retirement programs represent long-term commitments both to current retirees and to today's workers. Thus, any changes in benefits should be announced well in advance to allow people to adjust their long-run plans.

If COLA limitations were adopted to restrict the growth in benefits for people after they retire, commensurate changes could be made in determining initial benefits for new recipients to avoid introducing disparities in benefit levels among different groups of retirees. This situation is particularly relevant for Social Security, where benefits for those individuals becoming eligible are based on an indexed benefit formula and on indexed earnings histories. For example, if prices rose by 4 percent in a year and the wage index used to compute benefits for newly eligible recipients increased by 5 percent, eliminating that year's COLA without any change in the calculation of initial benefits would result in benefits for new beneficiaries that were about 5 percent higher than for recent retirees; under current law, benefits would be only about 1 percent higher for the new retirees. To mitigate this problem and to achieve additional savings, efforts to slow the growth in benefits through COLA limitations might be extended to the formulas determining initial benefits (see ENT-25).

Several options that would restrict COLAs for current beneficiaries are examined below. The magnitude of the savings in each case--except the option to limit COLAs to two percentage points less than the CPI--is very sensitive to the assumed level of inflation in the years in which the COLAs would be reduced.

Eliminate COLAs for One Year. One option would be to eliminate COLAs in fiscal year 1990 for non-means-tested benefit programs, while allowing them to be paid in subsequent years, but with no provision for making up the lost adjustment. If this approach were taken, federal outlays would be reduced by about \$10.6 billion in 1990 and \$69.4 billion over five years, with Social Security and Railroad Retirement accounting for most of the total. These estimated

reductions would be larger or smaller if prices were to rise faster or slower than the 4.9 percent increase currently assumed for the fiscal year 1990 COLA.

Limit COLAs to Two-Thirds of the CPI Increase for Five Years. Under this approach, recipients would be compensated for only a certain proportion of inflation, such as two-thirds of the annual CPI increase. Under current CBO economic assumptions, applying this restriction for five years would save about \$3.6 billion next year and \$68.4 billion over the 1990-1994 period. As a result, benefits for people who received payments throughout the five-year period would be about 7 percent less in 1994 than they would have been under full price indexing. Both cumulative savings and reductions in real income would be greater in an environment of higher inflation and smaller under lower inflation. On the other hand, the effects of this option would grow over time, reducing the real income of beneficiaries at the same time that they are becoming less able because of age to supplement their income by working.

Limit COLAs to the CPI Increase Minus Two Percentage Points for Five Years. An approach similar to the proportionate COLA reduction would be to reduce the adjustment by a fixed number of percentage points--for example, set the adjustment at the CPI increase less two percentage points. In this case, however, both savings and effects on beneficiaries would be roughly the same regardless of the level of inflation--about \$87.3 billion over the next five years, if extended for the full period. This option would reduce real incomes by about the same percentage every year, regardless of the inflation rate, whereas the two-thirds-of-COLA approach would reduce the purchasing power of benefits most sharply when inflation was high during the five-year period. As in the last option, this approach would also reduce significantly the real incomes of beneficiaries over time, while their ability to supplement their incomes by working declines.

Pay Full COLA on Benefits Below a Certain Level and 50 Percent of COLA on Benefits Exceeding That Level. Another alternative would tie the COLA reductions to beneficiaries' payment levels. The example discussed here--based only on Social Security and Railroad Retirement Tier I benefits--would award the full COLA for benefits based on the first \$500 of a retiree's Primary Insurance Amount (PIA) and 50 percent of the COLA on benefits above this level; the \$500 threshold is

approximately equal to the 1989 poverty threshold for an elderly person and would be indexed to maintain its value over time.

This approach would save about \$1 billion in 1990 and \$18.2 billion over the 1990-1994 period. Also, because the full COLA would be paid to beneficiaries with low PIAs, this option would ensure that low-income recipients would not be adversely affected.

Several concerns are raised regarding this approach. First, benefit levels are not always good indicators of total income. Some families with high benefits have very little other income, while some with low benefits have substantial income from other sources. On the other hand, targeting the COLA restraint on the basis of total income could not be done on the basis of information currently available to the Social Security Administration (SSA). Indeed, carrying out the PIA-based option itself would involve considerable effort and would require a longer lead time than the other COLA options because the SSA would need to rewrite many computer programs. (The budgetary savings estimates shown above are based, however, on carrying out the proposal in time for the January 1990 COLA.) Second, if this proposal were extended to include other benefit programs, the different benefit structure in each program might require separate determinations of the appropriate benefit levels for paying the reduced COLA. Third, many people object to any changes in retirement programs that might be construed as introducing a means test for benefits, even if the "test" is limited only to the COLA.

Eliminating COLAs to recipients whose benefits are based on PIAs above a certain level is another option. Because this COLA reduction would affect the entire benefit of each recipient above the threshold, not just the portion above that level, both the savings and impacts on beneficiaries would be considerably greater. Yet another approach that would address some of the administrative problems of these options would involve taxing Social Security benefits. (See REV-14.)

**ENT-25 REDUCE THE REPLACEMENT RATE WITHIN
EACH BRACKET OF THE SOCIAL SECURITY
BENEFIT FORMULA**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	120	520	1,050	1,750	2,600	6,000

Under current law, the basic Social Security benefit is determined by a progressive formula that provides workers with 90 percent of their Average Indexed Monthly Earnings (AIME) up to the first bend point (which defines the first earnings bracket), plus 32 percent of the AIME in the second bracket, plus 15 percent of the AIME above the second bend point. One method of reducing initial Social Security benefits would be to lower these three rates by a uniform percentage.

Lowering the three rates in the benefit formula from 90, 32, and 15 to 85.5, 30.4, and 14.2, respectively, would achieve an essentially uniform 5 percent reduction in the benefits of newly eligible workers starting in 1990. Thus, a 62-year-old retiree who has always earned the average wage would receive initial benefits in 1990 of about 33 percent of pre-retirement earnings, compared with 35 percent if no change were made. The reduction in the replacement rates would save about \$6 billion from Social Security outlays over the 1990-1994 period and more in later years. This option could be coordinated with a cost-of-living adjustment option (see ENT-24) to ensure that benefits for both current and future beneficiaries would be reduced to a similar extent, thereby generating substantial budgetary savings while spreading the impact over essentially all beneficiaries.

Some people contend that it is not necessary to cut initial benefits or make any other reductions beyond those made by the Social Security Amendments of 1983, because the combined assets of the retirement and disability trust funds are expected to be sufficient to pay benefits for at least the next half century. One of the changes made by the 1983 amendments was to increase from 65 to 67 the age at which unreduced Social Security retirement benefits are first

available. The change is to be phased in between the years 2000 and 2022. As a consequence, initial benefits for most workers retiring in this period are likely to decrease anyway, relative to what would have been received had the full retirement age not been increased. For example, a worker who retires at age 62 in 2022 will receive 70 percent of the Primary Insurance Amount rather than 80 percent.

On the other hand, long-term projections of outlays and revenues should be treated with caution because they are enormously sensitive to the assumptions on which they are based. Reductions in initial benefits or other changes in Social Security benefits or taxes could be enacted as a precautionary measure.

An alternative method of reducing Social Security benefits would leave replacement rates unchanged but narrow the AIME brackets over which those rates apply, perhaps by reducing the pace at which the brackets are indexed for inflation. This alternative would exempt beneficiaries with the lowest AIMEs from the benefit cut, but would impose benefit reductions unevenly among recipients.

**ENT-26 ELIMINATE SOCIAL SECURITY BENEFITS
FOR CHILDREN OF RETIREES AGED 62-64**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	70	240	430	540	560	1,850

Unmarried children of retired workers are eligible for Social Security dependents' benefits as long as they are under age 18, or attend elementary or secondary schools and are under age 19, or 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 maximum amount receivable by any one family. If such benefits were eliminated for the children of retirees aged 62 through 64, beginning with retirees reaching age 62 in October 1989, the savings would total about \$1.8 billion over the next five years.

This option might encourage some retirees to stay in the labor force longer. At present, though benefits for retired workers and their spouses are actuarially reduced if retirement occurs before age 65, children's benefits are not. Further, the younger the workers are, the more likely they are to have children under age 18. Thus, workers under age 65 now have an incentive to retire while their children are still eligible for benefits. This incentive would be quite small, however, for families in which spouses are also entitled to dependents' benefits. For these families, the maximum family benefit limits the increase in total benefits attributable to eligible children, generally to no more than 38 percent of the worker's Primary Insurance Amount.

On the other hand, for families with workers whose retirement was not voluntary--because of poor health or unemployment, for example--the loss in family income might cause some hardship. Moreover, since 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 also result in the loss of spouses' entire benefits in some families. In such cases, the total loss of income could be significant.

ENT-27 LENGTHEN THE SOCIAL SECURITY BENEFIT COMPUTATION PERIOD BY THREE YEARS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Outlays	25	110	280	530	820	1,750

Social Security retirement benefits are based on the Average Indexed Monthly Earnings (AIME) of workers in employment covered by the system. At present, the number of years that must be included in the benefit computation formula is determined in part by the year in which the retiree reaches age 62. People who turn age 62 in 1989 must count 33 years; those becoming age 62 in 1990 must count 34 years; and those reaching age 62 in 1991 or later must count 35 years. Lengthening the averaging period even more would generally lower benefits, particularly for early retirees, by requiring more years of low earnings to be factored into the benefit computation. One option would continue to increase the AIME computation period until it reaches 38 years for people turning age 62 in 1994 or beyond. This proposal would save \$1.8 billion over the next five years and more in later years.

Proponents who favor a longer computation period argue that because people are now living longer and because the normal retirement age for the Social Security program will be raised beginning in the year 2000, more years should be used in calculating AIME. Doing so would lower Social Security outlays and could reduce incentives for early retirement. Also, lengthening the averaging period would reduce the advantage that workers who postpone entering the labor force have over those who get jobs at younger ages. Because many years of low or no earnings can be ignored in calculating AIME, the former group currently experiences little or no loss of benefits for their additional years spent not working and thus not paying Social Security taxes.

Because many beneficiaries elect early retirement for such reasons as poor health or unemployment, opponents of this proposal

argue that a longer computation period would reduce benefits for recipients who are least able to continue working. Other workers who would be disproportionately affected include those with significant periods outside the Social Security system, such as parents--usually women--who interrupted their careers to rear children, and workers who experienced long periods of unemployment or employment not covered by Social Security.

**ENT-28 END CERTAIN VETERANS' COMPENSATION
PAYMENTS FOR THOSE WITH LOW-RATED
DISABILITIES**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
End Certain Disability Benefits and Dependents' Allowances						
Budget Authority	1,650	1,750	1,800	1,900	1,950	9,050
Outlays	1,550	1,750	1,800	1,900	1,950	8,900
End Certain Disability Benefits Only						
Budget Authority	1,400	1,500	1,550	1,600	1,650	7,650
Outlays	1,300	1,450	1,550	1,600	1,650	7,550

Approximately 2.2 million veterans with service-connected disabilities receive veterans' disability compensation benefits. The amount of compensation is based on a rating of the individual's impairment and an average reduction in the ability to earn wages in civilian occupations. Veterans' disability ratings range from 0 percent to 100 percent and represent differences in functional limitations or severity of the impairment, whereby some veterans may also be categorized as "unemployable" if their rating is 60 percent to 90 percent and they have low earnings. Demonstrated loss of income is not, however, a requirement for eligibility for people with low disability ratings. Additional allowances are paid to veterans who have disabilities rated 30 percent or higher and who have dependent spouses, children, or parents.

Carrying out the following pair of measures would reduce federal outlays by about \$8.9 billion between 1990 and 1994. One measure would eliminate eligibility for cash benefits for veterans with disability ratings below 30 percent; these veterans would, however, retain their eligibility for medical care and other associated services. The other measure would end dependents' allowances for those with disability ratings below 60 percent. Adopting only the former measure could reduce federal outlays by about \$7.5 billion between 1990

and 1994. Currently, about 1.3 million veterans with disability ratings below 30 percent receive benefits of between \$63 and \$138 per month. About 420,000 veterans whose disability ratings are 30 percent, 40 percent, or 50 percent receive dependents' allowances averaging \$45 monthly.

Eliminating compensation benefits for those with disability allowances below 30 percent would target spending for disabled veterans toward the most impaired. Because performance on civilian jobs depends less on physical labor than when the disability levels were originally set, and because improved reconstructive and rehabilitative techniques are now available, physical impairments rated below 30 percent may not reduce veterans' earnings. Low-rated disabilities include conditions such as mild arthritis, moderately flat feet, or a partially amputated finger--conditions that would not affect the abilities of veterans to work in many occupations today.

Similarly, eliminating dependents' benefits for veterans with disability ratings of 30 percent to 50 percent would target compensation toward the families of those disabled veterans who are most impaired. In addition, the continuing increase in the proportion of households where both spouses work means that dependents' allowances for veterans with disability ratings below 60 percent may not be necessary to maintain adequate family incomes.

Veterans' compensation could be viewed, however, as career or lifetime indemnity payments owed to veterans disabled to any degree while serving in the armed forces. Some disabled veterans might find it difficult to increase their working hours or otherwise make up the loss in compensation payments. Moreover, removing dependents' allowances because a spouse may have income could be interpreted as an indirect means test on veterans' family income--a test that uses a poor proxy for this income. Finally, older beneficiaries who have retired from work may rely heavily on their compensation income, so that even a small reduction in payments could have a greater impact on them than on younger veterans.

**ENT-29 EXTEND AND RAISE THE LOAN FEE
FOR VETERANS ADMINISTRATION
GUARANTEED HOUSING LOANS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Raise Fee to 1.75 Percent						
Budget Authority	290	300	310	300	300	1,500
Outlays	290	300	310	300	300	1,500
Raise Fee to 3.8 Percent						
Budget Authority	600	580	580	530	480	2,750
Outlays	600	630	610	580	550	2,950

The Veterans Administration (VA) supports home ownership by veterans through the home loan guaranty program, which allows veterans to obtain mortgage credit from private lenders on more generous terms than usual, such as without a downpayment. In the event of foreclosure, the federal guarantee protects lenders against losses: for home loans of \$45,000 or less, the guarantee is worth up to 50 percent of the loan amount; for loans of between \$45,000 and \$56,250, the maximum guarantee is \$22,500; and, for loans over \$56,250, the maximum guarantee is the lesser of 40 percent of the mortgage amount or \$36,000. Direct loans from the VA may also be available to veterans or nonveterans who purchase foreclosed properties that the VA acquires when veterans default on guaranteed loans. Since 1984, a one-time loan fee equal to 1 percent of the mortgage amount has been required to help defray program costs, but the authority to charge the fee ends after 1989. In 1988, net federal outlays for the program were \$1.2 billion, an increase of more than 300 percent from \$382 million in 1987.

The fee of 1 percent charged for loans guaranteed under the program is appreciably below comparable charges for conventional loans, even allowing for the additional 1 percent loan-origination fee that the private lender is allowed to charge for such loans. Program

participants therefore receive a substantial subsidy. The VA estimates that, compared with the cost of private-sector housing finance, a VA-guaranteed loan will provide a subsidy equivalent on average to 6.6 percent of the loan amount in 1989; this proportion will rise to 6.8 percent by 1991. Another possible comparison is with the Federal Housing Administration's (FHA's) Section 203(b) program, which insures mortgage loans with low downpayments made by private lenders for one-to-four-family housing. This program also permits the private lender to charge a loan-origination fee equal to 1 percent of the original principal amount. In addition, the FHA charges a mortgage insurance premium that varies from 2.4 percent of the principal for a 15-year mortgage to 3.8 percent for a more typical 30-year mortgage. These premium rates reflect the fact that the FHA is exposed to greater financial risk under its Section 203(b) program than the VA is under its loan guaranty program, because the FHA program insures the entire loan principal (but requires a downpayment), whereas the VA program insures only part of the loan principal.

This option would reduce net federal outlays for the VA loan guaranty program by reducing the average subsidy associated with receipt of such a loan. Extending the loan fee and raising it to 1.75 percent would reduce the subsidy and make the VA program more like the FHA mortgage insurance program. If carried out from 1990, this option would reduce federal outlays by about \$1.5 billion over the next five years. Alternatively, extending the fee and raising it to 3.8 percent would reduce the subsidy further. If put into effect in 1990, this option would reduce federal outlays by about \$3.0 billion over the next five years and would eliminate the need for deficiency appropriations during this period.

Increasing the loan fee in this way would transfer the costs of loan defaults and foreclosures from the federal government to the program's new participants. Although participants would pay more, they would still pay less to obtain VA mortgages than they would pay in the conventional private market. On the other hand, the increased charges might discourage participation by some low-income potential home buyers targeted for housing assistance.

CHAPTER IV

AGRICULTURAL PROGRAMS

Spending on farm programs has fallen dramatically since its 1986 peak. Outlays for price and income support programs of the Commodity Credit Corporation (CCC), which account for the bulk of federal spending in agriculture, were \$12.3 billion in 1988, down from the record of \$25.7 billion in 1986 and \$22.3 in 1987. The CBO baseline projects CCC outlays of \$12.7 billion in 1989, \$9.8 billion in 1990, and \$10.5 billion in 1991. Outlays are then projected to decline, reaching \$6.3 billion by 1994.

Production shortfalls, stock reductions, and higher market prices caused by the 1988 drought have contributed to the drop in outlays over the near term. Relatively strong world demand, which helps keep prices of major government-aided crops above price support levels, and the declining target prices assumed in the CBO baseline lead to the reductions in spending in later years.

The dramatic reductions in federal outlays over the past few years lead some authorities to claim that farmers and farm programs have done their part for deficit reduction and that further cuts are unwarranted. Further, some would cite the severe effects of last summer's weather on some farmers and ranchers to argue that added reductions would cause yet more hardship.

In spite of these arguments, farm programs still find their way to the top of many people's lists of federal programs that can be reduced. Some proponents of further reductions base their cases on the apparent inequities of large subsidy payments received by relatively high-income farmers and farm businesses. Moreover, farmers have recently enjoyed record farm income. In 1988, a year of severe drought, cash farm income was buoyed by rising prices, sales of farmer-owned stocks of crops from earlier years, and government drought relief. Net cash income for 1988 is estimated at \$57 billion, just short of the 1987 record of \$57.1 billion.

Most of the CCC programs expire during 1990, and new legislation is expected. Before the end of 1990, progress may be made in the agricultural trade discussions taking place as part of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT). If successful, these negotiations would probably require changes in U.S. farm programs to reduce production and export subsidies and to increase access to U.S. markets.

Most of the budget reduction options in this chapter are marginal changes to current programs. The first nine affect outlays in the CCC programs. The last two involve changes in the federal crop insurance program and the farmer loan programs of the Farmers Home Administration. All outlay savings are estimated relative to CBO's current baseline projections. Some of the options affecting the CCC are substitutes for one another, so they cannot all be selected. For example, AGR-01 through AGR-03 affect deficiency payments and could not be adopted together. Also, savings from individual options often cannot be added to arrive at a total because of interactions that would occur among the various program changes.

The most significant change to current commodity programs is contained in AGR-03. In this option, deficiency payments are replaced with fixed and declining direct payments to CCC program participants. This option, which can only be briefly described in this volume, has implications beyond those discussed. Its basic effect would be to reduce the incentives contained in current programs to produce "surplus" crops. This alternative would provide income support to farmers in a way generally consistent with the U.S. position in the GATT talks.

In another significant shift from current policy, AGR-10 would phase out the subsidy to the federal crop insurance program. This program is subsidized at rates beyond those originally intended. A similar elimination of federal support has been proposed by the Administration several times in recent years.

AGR-01 REDUCE DEFICIENCY PAYMENTS BY LOWERING TARGET PRICES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	330	870	1,090	1,270	1,580	5,140
Outlays	330	870	1,090	1,270	1,580	5,140

The Food Security Act of 1985 allows the Secretary of Agriculture to make annual reductions in target prices. Target prices are used to calculate deficiency payments, which are the primary form of direct government payment to farmers. The annual reductions began with the 1988 crops of wheat and feed grains and the 1987 crops of cotton and rice. The minimum target price for wheat was \$4.38 per bushel for the 1986 and 1987 crops and is projected to fall to \$4.00 per bushel for the 1990 crop, the final year covered by this legislation. Over the same time period, the target price for corn would drop from \$3.03 to \$2.75 per bushel. The cotton target price was \$0.81 per pound for the 1987 crop and would fall to \$0.729 per pound by 1990. The decline for rice over the same period would be from \$11.90 to \$10.71 per hundred-weight. The Omnibus Budget Reconciliation Act of 1987 reduced target prices for the 1988 and 1989 crops by about 1.5 percent from levels specified in the 1985 act, but did not affect the 1990 crop levels. Table 4 shows the minimum target price levels set by current law through the 1990 crops, and the CBO baseline assumptions for the 1991 through 1994 crops. The CBO baseline assumes that target prices would continue to fall after 1990 at the same rate as they were allowed to fall between the 1989 and 1990 crops in the 1985 Food Security Act.

Budget savings could be achieved by reducing target prices faster than allowed in current law. The greater the rate of reduction, the greater would be the savings. One alternative, shown in Table 4, would be to reduce target prices by 5 percent a year starting with the 1990 crops. Outlay savings are estimated to be \$5.1 billion over the 1990-1994 period.

Those who favor a more rapid rate of reduction of target prices argue that it would increase the pace at which farmers begin to respond to market prices, rather than government program benefits, in making production decisions. Further reductions of target prices would be viewed by U.S. competitors and trading partners as more evidence of an intention to reduce the effects of domestic farm policies on world agricultural commodity trade.

Another argument for further reduction of target prices is provided by the recent relaxation of acreage reduction requirements for feed grains and wheat. In these crops, the 1988 drought, along with relatively high acreage reduction requirements during the 1986 and 1987 crop years, have helped bring commodity stocks, most of which are owned by the CCC or used as collateral for government loans,

TABLE 4. TARGET PRICES UNDER CBO BASELINE ASSUMPTIONS AND UNDER 5 PERCENT ANNUAL REDUCTIONS (By crop year)

	1989	1990	1991	1992	1993	1994
CBO Baseline						
Wheat ^a	4.10	4.00	3.85	3.70	3.56	3.42
Corn ^a	2.84	2.75	2.63	2.51	2.40	2.29
Cotton ^b	0.734	0.729	0.713	0.698	0.683	0.668
Rice ^c	10.80	10.71	10.48	10.25	10.02	9.80
5 Percent Annual Reductions						
Wheat ^a	4.10	3.89	3.70	3.52	3.34	3.17
Corn ^a	2.84	2.70	2.56	2.43	2.31	2.20
Cotton ^b	0.734	0.697	0.662	0.629	0.598	0.568
Rice ^c	10.80	10.26	9.75	9.26	8.80	8.36

SOURCE: Congressional Budget Office.

a. Dollars per bushel.

b. Dollars per pound.

c. Dollars per hundredweight.

under control. These stock reductions are leading to smaller acreage reduction requirements. Relaxing acreage reduction requirements while maintaining relatively high target prices only expands the size of the crop on which this high price protection is provided, and may lead to higher total deficiency payments even while target prices are gradually being reduced.

In part, deficiency payments compensate farmers for participating in supply control programs. Reducing acreage reduction requirements without changing target prices increases the rate of compensation. Some proponents of reduced target prices would tie the size of the reduction to the amount of land that must be taken out of production in order to participate in the program.

Lower target prices would reduce farm income by reducing direct government payments. Farm income would not fall by as much as the drop in government outlays because some farmers would choose not to participate in the commodity programs. Although these farmers would give up all of their government payments, they would not be required to idle part of their acreage and would generate income from their additional production.

Despite an improved outlook for agricultural markets, many farmers are still facing severe financial difficulties, in some cases worsened by the drought. Opponents of additional reductions in target prices argue that this option would further exacerbate these difficulties. Others, however, claim that targeting financial assistance directly to needy farmers might be more appropriate, and certainly would be more cost effective.

AGR-02 CHARGE AN INSURANCE PREMIUM FOR TARGET PRICE PROTECTION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	600	1,550	1,540	1,590	1,590	6,870
Outlays	600	1,550	1,540	1,590	1,590	6,870

One of the primary mechanisms of current agricultural policy is the deficiency payment. The deficiency payment is calculated as the difference between the target price (defined by law) and the greater of the market price or the loan rate (also defined by law) times the program yield (a historically based farm yield).

The deficiency payment has three main functions: to supplement farm income, to provide compensation for acreage reduction requirements, and to stabilize farm income. This third function is a form of insurance protection for farm income in the sense that it provides countercyclical benefits (payments increase when prices are low, and decrease when they are high).

One option for reducing farm program spending would be to charge farmers a direct monetary fee for the insurance protection. This fee would compensate the government for part or all of the cost. The fee could be structured in a number of different ways. For example, it could be low initially and increase over time so that the commodity programs would evolve into a self-financing insurance program. In that event, certain compensation functions of current commodity programs would presumably cease to exist--namely, supplementing farm income and compensating for reducing acreage. Alternatively, fees could be structured to favor one group of farmers such as beginning or poor farmers. Under this structure, the function of supplementing income would, by definition, continue to be relevant. Farmers could be paid to divert land from production if acreage reduction programs were needed. If participants in the commodity programs during the next five crop years were charged an annual fee

equal to 5 percent of the target prices in effect for the 1990 crops, outlays over the 1990-1994 period would fall by \$6.9 billion.

The insurance premium option would have several advantages. It might be perceived as more equitable than the current program, both because farmers would be seen as paying directly for a benefit received and because it could be targeted toward groups deemed to merit special assistance. To the extent that such a program evolved into a self-financing insurance program, many of the incentives to over-produce would be eliminated because market signals could be efficiently transmitted to farmers (via increases in the cost of coverage) and because government subsidies would be reduced or eliminated. Further, such a program would be consistent with the current U.S. position in the GATT negotiations. In addition, if this were to become a farm revenue insurance program offering combined price and yield protection, farmers would have more comprehensive protection from uncontrollable events (natural disasters, abrupt changes in economic or trade policy, and so forth) than is currently available to them.

The primary disadvantage of such a program, at least from the farmer's point of view, is that it would cause farm income to fall. Charging a fee to participate in the Commodity Credit Corporation programs is, in this respect, similar to reducing target prices by a similar amount. Establishing the fee program would entail additional administrative costs, particularly if the ultimate goal was to evolve into an insurance-oriented program.

AGR-03 REPLACE DEFICIENCY PAYMENTS WITH DECLINING DIRECT PAYMENTS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	130	300	250	190	150	1,020
Outlays	130	300	250	190	150	1,020

In recent years a great deal of the agricultural policy debate has been focused on forms of support that would not be based on the level of physical production--policies commonly referred to as decoupling. Aspects of decoupling are incorporated in current policies such as the 0-92 program (which pays participating farmers 92 percent of the deficiency payment, while not requiring them to produce anything other than a cover crop) and in the frozen program yield (the number of bushels per acre for which farmers receive benefits). The ultimate goal of decoupling programs is to reduce governmental influence on production decisions as well as to increase the responsiveness of farmers to market signals.

Decoupled programs could take a number of forms. One way of providing income support would be to make direct payments to producers based on their production histories. In such a program, payments would be made to participants irrespective of current market prices. Anyone now participating in the commodity programs could opt to participate in the new program. Price supports, as currently provided by the Commodity Credit Corporation's nonrecourse loans, would no longer exist. (A low-cost recourse loan might be considered to facilitate farmers' marketing decisions.) Similarly, acreage controls other than the Conservation Reserve would be phased out. Export programs could be maintained as a bargaining tool for negotiations to liberalize international trade. The actual payment rate would be expressed in terms of historical output and could be set at any level. The rates are assumed to be set in this option so that total annual payments are 4 percent less than annual direct payments projected in the

CBO baseline. This, of course, assures savings relative to the current baseline.

One advantage of a direct farm income support program would be that it would avoid the excess production and inequities among crop types characteristic of the current program. A second advantage of a decoupled program would be in moving U.S. farm policy toward conformity with this country's negotiating position in the General Agreement on Tariffs and Trade (GATT). The United States has called for complete liberalization of agricultural trade by a specified date, including eliminating all production subsidies that affect agricultural trade. Third, most studies indicate that movement toward a decoupled agricultural policy would bring relatively small but significant improvements in the performance of the overall U.S. economy because of more efficient use of resources now engaged in farming. Finally, such a program would increase the predictability of agricultural budget costs, facilitating the budget process.

Decoupling would not be without its disadvantages. Many farm groups have voiced hostility to a program they characterize as farm welfare. Critics of the equitability of current programs (in which larger producers receive a preponderance of the benefits) argue that a decoupling program would simply lock in the current distribution of benefits. Also, the impact that decoupling would have on agriculture is not clear. While decoupling might make more land available for production, and increase efficiency and output, it would probably cause resources to flow out of agriculture, leading to lower production and higher prices. Most analysts feel that aggregate farm income would fall under a decoupling program and that landowners could experience losses on the value of their property.

**AGR-04 RAISE DOMESTIC COMMODITY PRICES BY
INCREASING UNPAID ACREAGE REDUCTION
PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	900	2,110	1,770	1,410	1,150	7,340
Outlays	900	2,110	1,770	1,410	1,150	7,340

Participants in federal price and income support programs for wheat, feed grains, cotton, and rice are required to set aside some portion of the land they would normally plant to these crops. Acreage reduction requirements are imposed to restrict supply and thereby reduce government program costs by limiting excess stocks and raising market prices for those crops.

For the 1989 crop year, the acreage reduction requirement for wheat, corn, sorghum, and barley is 10 percent of base acres (base acreage is that normally devoted to each crop), and the requirement for cotton and rice is 25 percent. The CBO baseline assumes similar or lower levels of acreage reduction requirements in later years.

Raising the acreage reduction requirement in all these crops by five percentage points in each year beginning with the 1990 crops would reduce outlays by \$7.3 billion over the 1990-1994 period. It would reduce outlays because less production would be eligible for deficiency payments and other program benefits, prices would tend to rise (causing lower deficiency payment rates), and fewer producers would participate in the programs.

Proponents of raising the unpaid acreage reduction requirement argue that this increase would enable farmers to get a more "fair" price from the market, thereby reducing their dependence on direct government payments.

Those opposed to this approach point out that such a plan would make U.S. commodities less competitive in world markets and, as a result, U.S. agricultural exports would fall. In addition, increasing the acreage reduction requirement would adversely affect businesses serving agriculture--both upstream (chemical suppliers, implement dealers) and downstream (grain elevator operators, food manufacturers, livestock owners). Finally, those opposed to this approach argue that increasing the unpaid diversion would simply shift program costs from taxpayers to consumers.

**AGR-05 ESTABLISH A 2 PERCENT ORIGINATION
FEE FOR CCC NONRECOURSE LOANS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	180	180	160	160	150	830
Outlays	180	180	160	160	150	830

Participants in Commodity Credit Corporation (CCC) price and income support programs can receive loans using their crops as collateral. A producer may either repay the loan or forfeit the crop as full payment to the CCC at maturity of the loan. Cash repayment of a wheat, feed grain, or soybean loan includes the loan principal and the interest accruing during the term of the loan. Interest rates on CCC loans are based on the government's cost of borrowing, and are lower than would be available from private sources.

In the cotton and rice marketing loan programs, the cash repayment required to redeem the loan depends on market prices and can be considerably less than the principal value of the loan. No interest is charged when loans are repaid in these marketing loan programs.

Imposing a 2 percent origination fee on nonrecourse loans would recover some of the government's costs from users of the program. Such a relatively small fee would have small effects on market prices, and would save \$830 million over the 1990-1994 period.

Opponents of an origination fee argue that a major objective of the nonrecourse loan program is to support the incomes of farmers, and that charging a user fee for participation in an income support program is unreasonable. Moreover, the program benefits all producers, even those not participating in government programs, because it supports market prices (except in crops with marketing loans). Charging producers who participate in the loan program while ignoring those who receive the indirect benefits might be considered inequitable.

**AGR-06 RESTRICT ELIGIBILITY FOR PRICE SUPPORT
PROGRAM BENEFITS AND REDUCE THE
PAYMENT LIMITATION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	230	550	470	390	320	1,960
Outlays	230	550	470	390	320	1,960

Current law governing eligibility for benefits under price support programs constrains participants from receiving more than \$100,000 in Commodity Credit Corporation (CCC) deficiency payment benefits during any crop year--\$50,000 as an individual and \$25,000 each as a 50 percent shareholder in a maximum of two corporate entities, each of which is entitled to a maximum payment of \$50,000. This maximum can be achieved only by operators of relatively large farms who are actively engaged in farm operations and who have organized their farm businesses to maximize payments. These recently enacted rules are tighter than those previously in force, which did not effectively limit the number of corporate entities through which program participants could receive benefits.

Government costs could be reduced further by allowing each farm operator to receive payments as only one payment entity rather than a maximum of three. This option would also reduce the maximum direct payment per payment entity from \$50,000 to \$40,000 per year. The option would not change the types of payments that are subject to the payment limitation or those that are not. An alternative to reducing the \$50,000 payment limit would be to broaden the definition of those payments that are subject to the limitation. Restricting eligibility for program benefits and reducing the payment limitation would save nearly \$2 billion over the 1990-1994 period.

Proponents of this change argue that maximum payment levels are too high. If reductions in program spending are required, they should come from relatively large rather than relatively small

farming operations. They argue that reducing the limit on direct payments would reduce the influence that government payments have on the production decisions of large farmers and would cause them to be more responsive to market returns. Smaller farmers, who are likely to be more in need of government assistance, would continue to receive program benefits as before.

Opponents argue that this change would harm farm operations of relatively efficient size and that, until operating and price subsidies are reduced for producers in competing countries, increasing the exposure of the most efficient U.S. farmers to market forces would hurt longer-term prospects for the sector.

AGR-07 ELIMINATE THE EXPORT ENHANCEMENT PROGRAM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	320	450	460	370	370	1,970
Outlays	320	450	460	370	370	1,970

The U.S. Department of Agriculture subsidizes exports of agricultural commodities through the Export Enhancement Program (EEP). U.S. exporters participating in EEP negotiate directly with buyers in a targeted country, then submit bids to the U.S. Department of Agriculture for bonuses. The bids include the sale price tentatively agreed to with the buyer and the amount of the subsidy, or bonus, requested by the exporter. If the bids are accepted, the exporters receive their bonuses in the form of generic commodity certificates that can be used by the exporters to acquire government-owned commodities. The EEP subsidy is supposed to be based on two primary criteria: subsidized commodities from foreign competitors must be shown to be displacing U.S. products in a particular country; and sales under the program must add to (not substitute for) commercial sales in the targeted market.

Since its inception, over \$2 billion of EEP bonus payments have been made, mostly to assist wheat exports. The CBO baseline assumes that \$3.1 billion in additional subsidy payments will be made during the 1990-1994 period. Eliminating the EEP program would save nearly \$2 billion during this period.

Opponents of EEP question whether the program has conformed to its requirement of not displacing other sales in a market. Opponents also charge that it has depressed world commodity prices and increasingly has failed the targeting criteria (since most major U.S. markets now benefit from EEP sales). Opponents also point out that the two biggest recipients of subsidized grain sales under EEP are the Soviet Union and the Peoples Republic of China.

Those in favor of a continued EEP program argue that it has increased U.S. exports above the level they would otherwise have reached. In addition, one of the underlying motivations for the EEP has been to encourage competitors, particularly the European Community, to negotiate reduced subsidies in trade negotiations currently being conducted under the General Agreement on Tariffs and Trade (GATT). Some would argue that a unilateral elimination of the EEP would deprive U.S. negotiators of a useful bargaining chip in the GATT negotiations.

AGR-08 ELIMINATE THE TARGETED EXPORT ASSISTANCE PROGRAM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	130	240	325	325	325	1,345
Outlays	130	240	325	325	325	1,345

The Targeted Export Assistance (TEA) program was authorized under the 1985 Food Security Act to enable U.S. agricultural exporters to counter unfair trading practices abroad. TEA offers support by means of generic commodity certificates issued by the Commodity Credit Corporation of the Department of Agriculture. Payments are made to offset partially the costs of market-building and commodity promotion efforts undertaken by state-related, private nonprofit, and private profit-making firms. During fiscal years 1986 through 1988, 117 activities have received federal support totaling about \$330 million. TEA is aimed mainly at specialty crops such as fruits and nuts, but has also supported promotion of wine, plywood, tobacco, feed grains, meat, eggs, and several other agricultural products. The current CBO baseline assumes that \$325 million would be obligated annually for the program in the 1990-1994 period. Elimination of this program would save \$1.3 billion over the next five years.

Proponents of reducing TEA funding would argue that the assisted groups benefit directly from the market development activities and should bear the full cost. Activities promoting exports of nonagricultural goods do not receive similar support, and some question why agribusiness should be singled out for this type of federal aid.

Proponents of reduced funding also point to a recent report from the General Accounting Office that concluded that the administration of the TEA program has been lax. There are few controls over the use of resources provided under TEA. Moreover, the rationales for funding that are provided in requests for TEA resources have not been investigated, nor has the effectiveness of the program.

Opponents of funding cuts argue that the elimination of the TEA program would place U.S. exporters at a disadvantage in international markets. They claim that TEA has been responsible for increased exports of promoted products in target countries, and conclude that the program's elimination would result in lower levels of exports.

AGR-09 CUT DAIRY PRICE SUPPORT PROGRAM COSTS BY REQUIRING PRODUCER CONTRIBUTIONS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	380	290	280	270	250	1,470
Outlays	380	290	280	270	250	1,470

The incomes of dairy producers are protected and increased by the dairy price support program, in which the price of milk is supported by USDA purchases of storable dairy products. The incomes of dairy farmers are also supported by marketing orders, which set price minimums for milk going to various uses. The U.S. dairy industry is also protected from foreign competition by quotas on imports of dairy products.

Consumers pay for these income supports through somewhat higher milk and milk product prices than would exist without the program. Taxpayer costs are also substantial: net outlays are estimated to average \$1.7 billion per year over the 1981-1989 period and are projected to average \$0.6 billion during 1990 through 1994. Consumers are thought to benefit from these programs because milk and milk products are available at relatively stable prices throughout the year. Some also benefit from the free distribution of dairy products acquired by the USDA through its price support operations.

One method of reducing the costs of dairy programs would be to assess dairy farmers, who are the primary beneficiaries of the program, according to their production. Assessments have been levied on production in the past, with the most recent instance being a \$0.025 per hundredweight assessment, in effect through December 1988. If assessments were set in the \$0.15 to \$0.25 per hundredweight range, the industry would be paying for about half of the federal price support program costs, and outlay savings would total an estimated \$1.5 billion over the 1990-1994 period.

This method of reducing the costs of dairy programs would be straightforward and relatively easy to administer. Many dairy producers would favor this approach over further or more rapid reductions in federal price supports--an alternative way of cutting outlays--because consumer prices, and thus farmers' gross receipts, would largely be unaffected.

This option would reduce the net incomes of dairy farmers. Some opponents argue that provisions of the 1985 Food Security Act, particularly the annual reductions of the federal milk support price that are contingent on the level of surplus production acquired by the federal government, already place a significant burden on the industry and will work to achieve a reasonable balance between production and use. Also, this option would mean that the dairy industry would be paying part of the costs of disposing of surplus dairy production. Most of this so-called surplus is used in domestic food assistance programs. Some would argue that the taxpayer, not the dairy industry, should fund these assistance programs.

AGR-10 REDUCE THE CROP INSURANCE SUBSIDY

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Phase Out Premium Subsidies						
Budget Authority	10	70	130	200	300	710
Outlays	10	70	130	200	300	710
Phase Out Premium and Administrative Cost Subsidies						
Budget Authority	10	110	220	340	500	1,180
Outlays	10	100	200	320	480	1,110

The federal government offers all-risk crop insurance to farmers through the Federal Crop Insurance Corporation (FCIC). Estimates indicate that in 1988 policies were available on 50 crops in 3,018 counties. The insurance offers protection from natural phenomena (drought, flood, hail, and so forth) that result in poor yields.

FCIC insurance is not actuarially sound, meaning that premiums paid by farmers do not cover the cost of the insurance offered (indemnities plus administrative costs). Under the Crop Insurance Act of 1980, the government subsidizes this insurance by covering all administrative costs of the program and a portion (originally intended to be 25 percent) of the cost of indemnity payments. During the 1980s, administrative expenses have averaged \$142 million per year, or nearly 40 percent of the value of premiums paid by farmers. Over the 1981-1987 period, indemnities exceeded premiums by an average of 41 percent, meaning that a substantially greater subsidy is currently being provided than was originally intended. Phasing out the premium subsidy could be expected to save \$0.7 billion over the next five years. Phasing out both the premium and administrative subsidies could save \$1.2 billion over the same period.

Phasing out the subsidy for crop insurance would make participation less attractive. The program already suffers from relatively low enrollment: about 25 percent of potential acres were covered by the

program during 1987. Farmers choose not to participate for a variety of reasons. Some believe that the coverage they receive costs too much. Some have been discouraged from participating because they have come to expect government assistance when disaster hits. Phasing out the subsidy could mean the end of the program unless steps were taken to improve the value of the coverage received. In fact, some program and administrative changes are already under way to make the program more attractive. Participation would also rise if farmers were convinced that other forms of disaster assistance would not be forthcoming.

The most effective way to enhance participation would be to require crop insurance coverage by participants in Commodity Credit Corporation (CCC) price and income support programs. Current CCC programs for wheat, feed grains, cotton, and rice provide protection against low prices, but not low yields. Combining crop insurance with these commodity programs would provide relatively complete coverage against both price and production risks.

Phasing out the FCIC premium subsidy would improve the incentives for risk-bearing. To the extent that farmers are able to reduce their exposure to risk at the expense of taxpayers, they are less likely to invest in other mechanisms for controlling risk. Further, a more effective and broadly patronized crop insurance program would reduce the necessity for extending emergency disaster relief (though this potential saving is not included in the deficit reduction estimates).

The primary disadvantage of this option is that it would cause farm income to decline, since more would be paid for crop insurance. FCIC might also face higher expenditures for the data gathering and analysis needed to achieve an actuarially sound program.

**AGR-11 REDUCE THE DIRECT LENDING AUTHORITY
OF THE FARMERS HOME ADMINISTRATION
FOR FARM OWNERSHIP AND OPERATING
LOANS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	260	0	210	60	160	690
Outlays	250	240	210	185	155	1,040

The Farmers Home Administration (FmHA) has authority to make \$95 million in direct loans under the Farm Ownership Program and \$900 million under the Farm Operating Program in 1989. CBO projects total direct lending under these programs by the FmHA during the next five years at \$5.6 billion. Historically, the agency has used all of its direct lending authority for these programs. Reducing total direct lending authority by 25 percent a year would result in net savings of slightly more than \$1 billion over the next five years.

Savings from reductions in direct lending would, in the absence of changes to the guaranteed loan program, be partially offset by increased demand for guaranteed loans. To preclude a resulting increase in the cost of the guaranteed loan program, the amount authorized for it could be held to no more than \$1.2 billion per year, roughly the amount of loan guarantees committed in 1988.

Proponents of these policy changes would stress the budgetary savings and the reduced role of government in allocating credit.

Those opposed to reducing direct and guarantee lending authority would argue that it would leave the FmHA less able to fulfill its mission of providing financial services for young farmers and those with limited resources, many of whom receive subsidized interest rates under this program. A smaller program could be maintained, however, to satisfy the goal of providing credit to a specific group of farmers.



CHAPTER V

NONDEFENSE DISCRETIONARY

SPENDING

Federal activities in the nondefense discretionary (NDD) category include a broad range of programs that generally require annual appropriations. Accounting for just over 16 percent of annual federal outlays, these programs encompass development and maintenance of national infrastructure, energy development, natural resource management, educational and housing assistance, international aid, and research and development activities. Pay for federal workers in civilian agencies is included here; options for reducing costs associated with the government's civilian work force are discussed in the next chapter.

The 43 deficit reduction options presented here would affect, to varying degrees, all of these major program areas. While the motivations and mechanics of the options vary substantially, reflecting differences in the programs' goals and methods of approach, all of the deficit reduction themes discussed in Chapter I are represented in these reduction options. In many cases, program reductions are described in terms of complete elimination or cancellation. In other cases, the discussion focuses on arbitrary percentage reductions. In general, partial reductions of a greater or lesser degree than those presented in the program descriptions can be assumed to be roughly proportionate to the estimates given.

The options in this chapter generally are grouped by subject matter. Thus, for example, NDD-04 to NDD-06 address reductions in the level of federal commitment to space and science programs, NDD-07 to NDD-10 analyze reductions or changes in federal support and management of energy and natural resource initiatives, NDD-21 to NDD-25 would modify transportation programs, NDD-29 to NDD-31 focus on education programs, and NDD-35 to NDD-38 concentrate on housing assistance programs. The other options span the remaining areas of nondefense discretionary spending. As in previous years, no options are presented that rely on federal asset sales, although reforms in federal asset management programs are considered.

NDD-01 REDUCE SECURITY ASSISTANCE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	840	880	910	950	990	4,570
Outlays	400	670	760	850	900	3,580

Security assistance is composed of the Economic Support Fund, Foreign Military Sales financing, and related programs. Spending for these programs is based on strategic, political, or economic considerations. Recipients include countries in the Middle East and those with which the United States has agreements providing access to military bases and facilities.

Funding increased 280 percent in the period 1980 through 1985, but has declined in real terms every year since. The reductions have led to an increase in Congressional earmarking of appropriations to protect favored countries from cuts. The impact of the reductions has been cushioned by providing grants instead of new loans, refinancing outstanding high-interest loans at lower rates, and waiving the collection of some charges for foreign military sales. Adjusting for these enhancements, security assistance has experienced real growth of nearly 90 percent over the 10-year period 1980 through 1989.

Advocates of security assistance argue that it is an important foreign policy lever and that financing Foreign Military Sales serves U.S. interests in modernizing the military forces of friendly countries.

Critics argue that the benefits of these programs to the United States have been exaggerated. They also say that large military grants distort the budgets of recipients in favor of military spending, and encourage the procurement of expensive and sophisticated weapons systems. Other critics argue that the Economic Support Fund is focused on the short run, and that instead of easing the burden of economic change it is used to avoid making necessary reforms.

Because of the political element in these programs, it is often difficult to find an economic or military justification for a given level of funding. Obligations are made late in the fiscal year, often on the last day of availability. Some countries have large balances of funds uncommitted to specific projects or purchases, while others seem to be underfunded. If earmarks were eliminated, security assistance could be cut marginally without reducing its present effectiveness as a foreign policy tool. A 10 percent reduction in budget authority would reduce outlays by \$400 million in fiscal year 1990, and \$3.6 billion over the next five years.

**NDD-02 END THE EXPORT-IMPORT BANK
DIRECT LOAN PROGRAM**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	440	600	800	880	550	3,270
Outlays	110	210	270	260	250	1,100

The Export-Import Bank (Eximbank) is designed to increase U.S. exports by providing loans and loan guarantees to foreign purchasers of U.S. merchandise. The direct loan program offers subsidized interest rates, while the loan guarantee program encourages commercial banks to lend to foreign buyers by reducing the risk inherent in export financing. While the subsidy element in the direct loan program has been reduced as a result of international negotiations, it remains substantial. Eliminating the direct loan fund would save \$110 million in 1990 and \$1.1 billion over the five-year period.

Proponents of the Eximbank direct loan program base their position on three arguments. First, these loans offset subsidies provided by other countries to their exporters. Second, the loans stimulate U.S. exports and hence create jobs. Third, increased exports allow some high-technology industries to maintain high output rates and so achieve economies of scale.

Critics of Eximbank's direct loans consider these justifications overstated. Some of the subsidized exports face little if any subsidized competition--for example, when an exporting company has a monopoly in its submarket (as with the large, long-range passenger jet) or when foreign exporters of similar goods are not subsidized. Also, the evidence suggesting that these subsidies help to increase exports is scarce. Eximbank loans often merely substitute for conventional commercial financing, producing no net benefit to the nation but transferring income from taxpayers to domestic producers and foreign buyers. Finally, if Eximbank loans serve only to escalate subsidy

levels, they may be counterproductive: if other countries retaliate by subsidizing their exports, no country will be better off.

Ending the direct loan program might affect less developed countries and newly industrializing nations disproportionately: the direct loan program is involved with very few loans to Europe or Japan. High-technology and energy-related industries are also overrepresented in direct loan programs. To the extent that Eximbank really creates new demand, rather than substituting for conventional financing, these industries might suffer.

**NDD-03 ELIMINATE "CARGO PREFERENCE" AND
RELATED SUBSIDIES TO U.S.-FLAG VESSELS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	170	170	180	180	190	890
Outlays	390	400	390	380	370	1,900

The federal government provides both direct and indirect subsidies to the U.S.-flag merchant marine--that is, vessels built, owned, and operated by U.S. firms and engaged in international trade. The indirect subsidies arise from "cargo preference" laws that require all U.S. military cargo, 75 percent of U.S. agricultural aid, and one-half of all other government ocean freight to be carried by U.S.-flag vessels. Since the average cost of building and operating U.S. vessels is two to three times that of foreign ships, limiting government shipments to U.S.-flag vessels substantially increases federal shipping costs. Ending "cargo preference" requirements would lower government shipping outlays by over \$160 million in 1990 and by nearly \$900 million in the 1990-1994 period.

Direct federal subsidies are provided by the operating differential subsidy (ODS) and ocean freight differential subsidy (OFDS) programs. ODS compensates U.S. operators of U.S.-flag vessels in foreign commerce for the difference between the operating costs of a U.S.-flag ship with an American crew and the operating costs of the foreign-flag competition. The OFDS specifically funds the additional cost for the shipment of government agricultural commodities that results from the 75 percent cargo preference requirement for those commodities compared with the 50 percent requirement for other nonmilitary shipments. Ending both ODS and OFDS would reduce federal outlays by over \$270 million in 1990 and by nearly \$1.3 billion through 1994.

Proponents of cargo preference legislation argue that subsidizing the nation's shipbuilding and shipping industries maintains the infrastructure needed to construct military vessels during a major war, en-

sure a standby military sealift capability, and provides a secure supply line for civilian production during wartime. Opponents of cargo preference note that most of the ships benefiting from these subsidies are bulk cargo vessels of limited use to the military. A more cost-effective way to ensure adequate military shipping and shipbuilding capacity might be to purchase directly the kind of ships most useful to the military--liners and roll-on and roll-off vessels--and place those ships in the Ready Reserve.

NDD-04 CANCEL THE NASA INTERNATIONAL SPACE STATION PROGRAM

	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Savings from CBO Baseline						
Budget Authority	940	980	1,020	1,060	1,100	5,100
Outlays	390	800	940	1,030	1,070	4,230
Savings from Reagan Administration's Request						
Budget Authority	2,050	2,980	3,490	3,680	3,900	16,100
Outlays	860	2,110	2,950	3,440	3,710	13,000

The National Aeronautics and Space Administration (NASA) is set to begin construction of an international space station. The facility could cost the United States between \$14 billion and \$18 billion (in 1984 dollars) in research and development spending, up from NASA's initial estimate of \$8 billion, according to the National Research Council (NRC). The permanently manned station is to be operational some time in the mid-1990s. It will provide infrastructure to support scientific and commercial activity and a departure point for future manned and unmanned exploration of the solar system. In 1989, the Congress increased funding for the space station from \$420 million to \$900 million, but provided the incoming Administration with the option to cancel the program by stating its intention to do so by May 15, 1989. Over half of the 1989 appropriation, \$515 million, has been withheld until then in recognition of this prospect.

Canceling the current space station program without initiating an alternative could save as much as \$5.1 billion in budget authority in the 1990-1994 period, relative to the CBO baseline. The actual costs of proceeding with the space station program would be much greater than the amount in the CBO baseline, however. The NASA Authorization Bill for 1989 (Public Law 100-685) includes funding levels of \$2.1 billion for 1990 and \$2.9 billion for 1991. These levels would continue to increase through 1993. Therefore, canceling the space sta-

tion would save roughly \$16 billion in budget authority and \$13 billion in outlays relative to the Reagan Administration's request from 1990 through 1994. An alternative to cancellation would be a more modest program using shuttle spacelab flights, and intermittently tended and unmanned facilities rather than a permanently manned facility. These activities could be accommodated within the current baseline.

Advocates of canceling the space station program point out that many of the traditional objectives of U.S. space policy will not be served by the current program. No significant purpose of national security will be served, as the Department of Defense has expressed very limited interest in using the NASA station. Many civilian scientific goals could be met earlier and at a lower cost with a more modest program. Some scientists argue that the space station will absorb funds that would be better spent on space science and exploration, where the known returns are greater. Even though national prestige would be enhanced by having a space station, the current plan would create a permanently manned facility some 10 or more years after the launching of the Soviet space station in 1986. Arguments supporting cancellation of the space station are reinforced by the NRC's estimate that its direct cost will be between \$14 billion and \$18 billion (in 1984 dollars), together with an additional \$6 billion in associated transportation and other costs.

The arguments for the current space station program emphasize its possibilities, both known and unknown, and U.S. commitments to cooperating countries. Manned exploration of the solar system requires the type of long-duration flight provided by the current program. More modest alternatives do not. The prospects for materials research and, ultimately, manufacturing may be sufficient to justify continuing the program at some level. Advocates further contend that other significant uses for a space station will be discovered after it is operational. From the perspective of national security and foreign policy, if the United States were to cancel the current program it would renege on agreements recently signed with European nations and Canada, and a proposed agreement with Japan awaiting the approval of the Japanese parliament. Were the United States to withdraw from these agreements, its partners could choose to continue a space station effort of their own, or to increase cooperation with the Soviet Union.

**NDD-05 POSTPONE MAJOR NEW SPACECRAFT
DEVELOPMENT PROJECTS IN A MAJOR
NASA SPACE SCIENCE AND APPLICATIONS
PROGRAM AREA**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	70	160	220	310	340	1,100
Outlays	40	100	160	240	300	840

The National Aeronautics and Space Administration's space science and applications program is currently funded at a level of \$1.8 billion spread over eight program areas. The physics and astronomy, planetary exploration, and the Earth science and applications programs accounted for 85 percent of this funding in 1989. Each of these three program areas includes development funding to plan for and build new spacecraft, and operations funding to support the flights of existing spacecraft and analyze their data. If no new major spacecraft development was allowed in one of the three program areas after completing currently funded development projects, NASA could save \$840 million over the 1990-1994 period.

Postponing major new spacecraft starts in any of these areas would not prevent scientific work from continuing in the area concerned. The scientific knowledge gained by new missions in each area serves a public purpose, but may serve that purpose as well if provided at a later date. In the physics and astronomy area, the launch of two orbiting observatories in the next several years, in addition to existing ground facilities, will provide the interested scientific community with a continuous stream of new data, even if two additional planned observatories, the Advanced X-Ray Astrophysics Facility and the Space Infrared Telescope Facility, are postponed for the immediate future. A similar argument can be made for the Earth science and applications program, where multiple sources of new data will be available regardless of whether or not new spacecraft are developed and launched over the next five years. The planetary exploration

program will also continue to receive data flowing from current missions and those likely to be operating in the near future even if the proposed Comet Rendezvous Asteroid Flyby and Cassini missions are postponed. Making significant reductions in one space science program area, rather than smaller reductions across all space science program areas, would concentrate resources in the areas that were not cut. This reduction strategy would avoid the consequences of starting and stretching out many projects in many areas, which could mean achieving no near-term results in any particular area.

The cost of postponing new spacecraft development in a major program area would be incurred both immediately and in the long term. Immediately, U.S. prestige would suffer in the area where new development projects were forgone, and other countries would gain in the prestige accompanying this type of space science. Moreover, the cuts might discourage the entry of new scientific and engineering talent into the fields affected by the cuts, creating a long-term lag. These negative effects would be mitigated to the extent that the areas in which NASA chose to focus could benefit and advance more rapidly.

NDD-06 CANCEL OR DEFER THE SUPERCONDUCTING SUPER COLLIDER

	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Savings from CBO Baseline						
Budget Authority	100	110	110	120	120	570
Outlays	80	110	110	120	120	540
Savings from Reagan Administration's Request						
Budget Authority	250	390	490	450	460	2,040
Outlays	160	310	440	450	460	1,820

The Administration has proposed building the Superconducting Super Collider (SSC) at a total estimated cost of \$5.9 billion. At present, the Congress has not appropriated construction funds, although it has spent \$213 million on research. Consequently, canceling the SSC, or deferring it until an international consortium could be found to fund it, would save only \$540 million in outlays relative to the CBO baseline. Relative to the President's request, however, it would save about \$2 billion during the 1990-1994 period. (Savings estimates are net of nonfederal contributions, which are projected to total \$1.8 billion over the period.)

There are several reasons to oppose construction of the SSC at this juncture. First, the project would be costly to build and operate. During its construction, the SSC would absorb 13 percent of the funding for basic research in the physical sciences and might very well crowd out other basic science research. Second, there are less costly alternatives. The Europeans are discussing a less powerful collider of their own and have invited the United States to join. Participation in that project would cost the federal government less than \$1 billion, while permitting scientists to perform many of the same experiments. Third, as the recent discoveries in high-temperature superconductors have shown, spending on many "little science" projects may provide a

much larger return on investment, both in terms of knowledge and practical uses, than spending on a few large "glamorous" projects. Finally, the Department of Energy (DOE) has a history of substantial cost increases in accelerator construction: on average, accelerators cost roughly 50 percent more, in real terms, than they were projected to cost.

Proponents of the SSC argue that continued progress in high-energy physics depends on the SSC. The European alternative collider, they argue, depends on the development of superconducting magnets of unprecedented strength and on other yet-to-be achieved advances in accelerator technology. Even if the technical problems are solved, having no state-of-the-art accelerator in the United States might result in making the United States less attractive to the brightest physicists. On the other hand, DOE has still not had a single completely successful superconducting magnet test, and its magnet research program is far behind schedule. In addition, two new accelerators have been recently commissioned in the United States, giving U.S. high-energy physicists powerful tools with which to study new phenomena for years to come.

**NDD-07 REDUCE SUBSIDIES PROVIDED BY THE
RURAL ELECTRIFICATION ADMINISTRATION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	840	790	720	620	650	3,260
Outlays	50	220	460	680	880	2,290

The Rural Electrification Administration (REA) is an agency within the Department of Agriculture that provides financial assistance to rural electric and telephone cooperatives. In 1973, the Congress set up the Rural Electrification and Telephone Revolving Fund (RETRF) to provide direct loans to rural utility cooperatives at an interest rate of 5 percent, and to authorize the REA to fully guarantee loans made to cooperatives by other lenders. In 1988, the REA provided \$815 million in direct loans and \$775 million in loan guarantees. When the RETRF was created, the 5 percent rate on REA direct loans was about one percentage point below the then-prevailing long-term Treasury borrowing rate. Since then, however, the gap between the 5 percent rate paid by the cooperatives and the interest rate that the REA pays to finance the direct loans has widened. Although this interest rate differential has decreased since its widest margin of ten percentage points in 1984, the gap still remains at more than four percentage points today.

Because the fund's expenses have consistently exceeded its loan repayment receipts, it must rely on appropriations to the fund and on loans from the Federal Financing Bank (FFB) at a rate equal to the long-term Treasury rate plus one-eighth of 1 percent. The Treasury rate peaked at over 16 percent in 1984, and is projected at 9.4 percent in 1989, well above the 5 percent rate the REA charges. Mainly because of the interest rate subsidy provided to REA borrowers over the years, the federal government incurs large budgetary costs from REA lending activities each year. The Congress has appropriated about \$1.2 billion to the REA revolving fund over the last six years to cover some of these costs. Budgetary savings could result from lower levels

of REA lending set by the Congress, and an increase in the interest rate on REA direct loans.

Lowering REA lending levels would result in federal budgetary savings. If the Congress reduced the requirements for new REA direct and guaranteed loans to 50 percent of 1989 loan levels of \$861 million and \$933 million, respectively, REA outlays would fall by about \$44 million in 1990, and by about \$2 billion over the 1990-1994 period. If the REA targeted its direct loans toward those cooperatives most in need of federal financial assistance, the effect of reducing REA's lending levels would likely be small and could be more equitable.

Raising the interest rate for REA's direct loans to equal the Treasury rate would generate about \$300 million over the 1990-1994 period, and would make the fund less dependent on appropriations and additional borrowing from the FFB in the future. Taken together, increasing REA's interest rate to equal the Treasury rate and decreasing the levels of REA loan obligations by about 50 percent would reduce REA program outlays by about \$2.3 billion over the 1990-1994 period.

Opponents of maintaining REA subsidies at their current level argue that the REA has largely fulfilled its original goal of making electric and telephone service available in rural communities. Proponents of the current REA program argue, however, that many cooperatives still depend on the low-interest loans to expand and maintain viable electric services to rural communities. They claim that increasing the interest charges or reducing the amount of REA loans provided to these cooperatives would raise the utility bills of their customers, particularly affecting the more rural, less densely populated regions. Raising the REA interest rate might have little effect on most cooperatives' rates, however, as interest charges account for only a small percentage of the average ratepayer's bill. Furthermore, reducing the level of the REA's direct loan program could decrease federal subsidies to the financially sound cooperatives while still providing federal financing to cooperatives that truly need it.

NDD-08 REFORM DEBT REPAYMENT POLICY FOR POWER MARKETING ADMINISTRATIONS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	5	140	90	110	100	445
Outlays	5	350	290	280	270	1,195

Federal power marketing administrations (PMAs)--including the Alaska Power Administration, the Bonneville Power Administration, the Southeastern Power Administration, the Southwestern Power Administration, and the Western Area Power Administration--sell electricity at wholesale rates from hydroelectric generating plants owned and operated by the federal government. Capital investments for these dams and power and irrigation facilities are financed by federally appropriated funds, which must be repaid at interest rates ranging from 0 percent to 16.0 percent, averaging about 3 percent. Currently, the outstanding debt obligations of these agencies to the federal government total about \$13.6 billion.

By law, the PMAs must use income from electricity sales to cover all operating costs, and repay all federal investments within a "reasonable period," nominally 50 years, though not at a set rate or on a fixed timetable. Department of Energy policies currently allow the PMAs to determine their own schedules for repaying the principal portion of their outstanding debt. In some cases, the principal payments on the federal loans are being deferred until the end of asset lives. Since only interest costs are being paid on these loans, for which the Treasury is not receiving any regular repayments on the loan principal, the amount of deferred loan repayments increases the federal budget deficit.

Requiring the PMAs to repay all federal appropriations on fixed amortization schedules over project lifetimes would increase Treasury revenues and thus lower federal outlays by about \$1.2 billion over the 1990-1994 period. (Such receipts enter the budget as offsets to out-

lays.) The resulting increase in principal re-payments could increase electricity rates for wholesale customers in certain service areas.

Though the PMAs have promoted regional industrial bases by providing electricity to undeveloped areas, critics contend that the prices they charge for electricity do not reflect the actual cost of delivering power. They point out that the original development goal has been met, and that the below-market rates and unregulated repayment schedules represent an inequitable subsidy to certain regions--a cost borne by all taxpayers. Finally, they argue that requiring the power agencies to repay their federal debt obligations on amortized schedules would not disrupt local economic activity, since electricity prices in areas served by the power agencies would still remain below the national average. Proponents of the status quo counter that enforcing a strict debt repayment schedule could, for some industries--such as the aluminum industry in the Pacific Northwest--translate into higher product prices and lower market shares.

**NDD-09 CHANGE REVENUE-SHARING FORMULA FROM
A GROSS TO A NET RECEIPT BASIS FOR
COMMERCIAL ACTIVITIES ON
FEDERAL LANDS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	300	260	270	270	270	1,370
Outlays	220	270	270	270	270	1,300

The federal government owns over 700 million acres of public lands--nearly one-third of total U.S. land. These public lands contain a rich supply of renewable and nonrenewable natural resources, such as timber, forage for livestock, oil and natural gas, coal, and many non-fuel minerals. Private entities are allowed access to much of this land to develop the resources found there, and generally pay fees to the federal government based on the commercial returns from this activity. In many cases, the federal government allots a percentage of these receipts to the states and counties in which the resources are found, as compensation for lost tax revenues from the federal lands in their boundaries. It does this on a gross receipt basis before taking account of the federal government's program costs. Providing federal receipts-sharing on a gross rather than a net basis causes, in some cases, federal program costs to exceed the government's share of receipts and may encourage overuse of national resources.

The U.S. Forest Service allots 25 percent of its gross receipts from commercial activities in the national forests--including timber sales, grazing fees, and receipts from mining of "common variety" materials such as sand, gravel, limestone, and cement--to the respective states and localities. The Bureau of Land Management allots 4 percent of its timber receipts, about 12.5 percent of its grazing fees, 4 percent of its mining fees from common variety materials, and 50 percent of its onshore oil, gas, and other mineral receipts to the states. (On certain federal lands called the Oregon and California grant lands, gross fed-

eral receipts from all commercial activities, primarily timber sales, are shared with the states and counties on a 50/50 basis.)

Federal savings would be substantial if the Congress permitted these agencies to deduct their program costs from their gross receipts before making payments to states. The regional jurisdictions would continue to receive the same allotted percentage of net federal receipts and would accrue receipt shares totaling \$700 million in 1990. Certain federal costs would increase, however, under the federal Payment in Lieu of Taxes (PILT) program, established in 1976 to offset the effects of nontaxable federal lands on local governments' budgets. These PILT payments to the states are partially reduced by the amount of the revenue-sharing payments from federal agencies. Costs to the federal government under the PILT program would increase, therefore, if the option to share net rather than gross receipts was implemented. These costs have been netted out of the projected savings. Changing the revenue-sharing formula from a gross receipt basis to a net receipt basis would reduce net federal outlays by \$1.3 billion over the 1990-1994 period.

Deducting costs from federal receipts for commercial activities on public lands before making payments to local governments would likely reduce uneconomic commercial uses on these lands. On the other hand, many local areas that depend on the federal programs associated with these activities for jobs and federal revenue--particularly the federal timber sales programs--might be hurt economically. To help mitigate this hardship, the federal agencies could switch gradually to the net receipt basis over a period of several years and promote other uses of the public lands in these areas, such as tourism and recreation.

NDD-10 IMPROVE PRICING FOR COMMERCIAL AND RECREATIONAL USES OF PUBLIC LANDS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Hardrock Mining Claims						
Budget Authority	0	75	75	75	75	300
Outlays	0	75	75	75	75	300
Grazing Fees						
Budget Authority	30	30	30	30	30	150
Outlays	30	30	30	30	30	150
Below-Cost Timber Sales from National Forests						
Budget Authority	40	50	60	60	60	270
Outlays	30	45	60	60	60	255
Federal Water Sales						
Budget Authority	15	15	15	20	20	85
Outlays	15	15	15	20	20	85
Recreation Fees						
Budget Authority	140	150	160	160	170	780
Outlays	140	150	160	160	170	780

The federal government owns and manages over 700 million acres of land in the United States. Many of these lands have a wide range of multiple uses, including mining, grazing, lumbering, and a wide variety of recreational activities. For most commercial and some recreational uses, the government receives compensation in the form of fees, royalties, and bonuses. Increasingly it is argued that several of these compensation schemes fail to provide a fair return to the government and that underpricing may have led to overuse. Better pricing could increase federal receipts and limit commercial and recreational activity to more economically justified levels.

Hardrock Mining Claims. Private access to public domain lands for hardrock mining (for example, mining of gold, copper, and molybdenum) is controlled by the Bureau of Land Management (BLM). Under the Mining Law of 1872, a prospector who discovers a "valuable mineral deposit" and stakes a mining claim has the right to mine and sell public domain minerals without paying fees or royalties to the federal government. The only condition is an annual expenditure of \$100--a "diligence requirement"--to develop the claim. Moreover, under current patenting provisions, public hardrock mining lands are allowed to pass into private hands for a nominal fee of \$2.50 to \$5.00 an acre and, it is argued, without a thorough assessment of the alternative uses these lands may have.

The mining law could be amended to change the current diligence requirement from its 1872 level of \$100 to a yearly fee of \$1,000 (roughly the equivalent of \$100 in 1872) paid directly to the U.S. Treasury beginning two years after a claim is staked. The patenting provision could also be revoked to prevent a rush of patent applications, although this change might raise certain legal questions. These amendments would free public lands of inactive claims, and would raise an estimated \$75 million annually beginning in 1991, partially compensating the federal government for the value of the minerals extracted and the cost of reclaiming abandoned sites

Some opponents argue that any change in the current law that reduced the prospector's expected return would significantly decrease overall prospecting, including prospecting for strategic minerals that are important for national security. While a \$1,000 yearly fee would likely reduce prospecting and possibly some current mining, these effects might be somewhat offset by the clearing of inactive claims and the opening up of land formally closed to hardrock mining for fear of the patenting provision. As an alternative, production royalties have also been proposed as a way for the government to extract a fair share of the rents from mining on federal land. A royalty system would be administratively expensive, however, since the BLM would have to estimate ore content and processing costs for each of the approximately 150,000 active claims.

Grazing Fees. The Forest Service (FS) and the Bureau of Land Management administer livestock grazing on approximately 307 million acres of public rangelands. These lands can provide ranchers with over 21 million animal unit months (AUM) of grazing each year. A 1986 report from the Secretary of Agriculture and the Secretary of the Interior estimated the market value of forage in six western regions at between \$6.10 and \$11.10 per AUM (in 1988 dollars). The BLM and FS spend, on average, \$2.50 per AUM to manage these rangelands. In contrast, the fee formula established by the Congress has resulted in a permit fee of \$1.86 per AUM in 1989, representing a large subsidy for a relatively small group of ranchers.

The present fee formula could be adjusted by changing its base from the 1966 appraised forage value to the 1983 regional appraised forage value of private grazing lands (in 1988 dollars). This would increase the base of the permit fee formula from \$1.23 to an average of \$7.80 and raise \$30 million in additional receipts in 1990 and \$150 million over the 1990-1994 period. Fifty percent of all grazing fees currently go into the Range Betterment Fund. In estimating these savings, deposits to the Range Betterment Fund were capped at \$30 million a year, roughly three times the current funding level. This cap reflects an estimate of how much the fund could spend, at least over the next several years.

Opponents of increased fees argue that comparing private with public lands may overstate the value of public lands to the extent that they are in worse condition or have less favorable lease terms. In addition, they state that low fees may encourage permit holders to invest in range improvements and to practice good stewardship over the land by grazing only at the permitted levels. Increased fees, they argue, would cut ranchers' profit margins, and encourage them to break the grazing limits and forgo range improvements. But between 1979 and 1983, ranchers spent on average only \$0.16 per AUM per year for range improvements. Increased funding from the Range Betterment Fund would offset any decrease in private range improvements. Providing ranchers with longer-term leasing agreements might make it in their interest to minimize overgrazing, regardless of the fee level.

As an alternative to administratively set fees, grazing rights could be allocated through a competitive bidding process similar to the system used by the Bureau of Indian Affairs. The main disadvantages

of this approach may be high administrative costs and limited competition to the extent that in many cases only the owners of private lands adjacent to federal lease tracts would be willing to bid for grazing rights (current law requires permit holders to own a base property adjacent to the federal lease tracts).

Below-Cost Timber Sales from the National Forests. The Forest Service within the Department of Agriculture manages federal timber sales from 119 national forests in the National Forest System. Roughly 12.6 billion board feet of public timber sold under contract to private lumber companies was harvested in 1988 (or about 13 percent of total U.S. timber production), providing about \$1 billion in federal timber receipts. The FS spent approximately \$650 million on timber management, reforestation, timber road construction, and other timber program activities, resulting in net federal timber receipts of \$350 million.

In three of the nine regions in the National Forest System, however, annual cash receipts from federal timber sales consistently have not covered annual cash expenditures of the FS in that region. These so-called "below-cost" timber sale regions include the Rocky Mountain Region, the Northeastern Region, and the Intermountain Region. On average, over the past decade, cash expenditures in these regions have exceeded cash receipts by a ratio of three to one. (Annual timber program costs in these regions still exceed annual timber receipts even if FS expenditures for timber road construction are excluded.) The FS does not maintain the data to estimate the annual timber receipts and expenditures associated with individual timber sales; thus, it is hard to determine precisely the budgetary savings that could be achieved by phasing out all below-cost timber sales in the National Forest System. As an illustration of the potential savings, however, eliminating all future timber sales from the three regions mentioned above would reduce FS outlays by about \$40 million to \$120 million, including savings in the timber road budget. Timber receipts would be reduced by about \$5 million to \$60 million. Net savings in federal budget outlays over the 1990-1994 period would be about \$255 million.

Proponents of reducing below-cost timber sales argue that they not only add to the federal deficit, but lead to the overdepletion of federal timber resources through uneconomic timber harvests, to the economically unwarranted destruction of roadless forests valued by

many recreational visitors, and to government interference with private timber markets.

Opponents of such cuts argue that the FS timber program generates other benefits besides receipts to the federal government. Among these, it provides community stability to areas dependent on the federal timber industry for logging and other timber products-related jobs. But the risk of economic hardship from eliminating the federal timber program in these areas could be reduced by gradually lowering the level of below-cost timber sales, providing federal programs to teach new job skills, and encouraging greater development of other local industries such as tourism and recreational activities in the national forests.

Federal Water Sales. The Bureau of Reclamation (BOR) provides water resources from federal water projects for western industrial and agricultural uses, and also supplies municipal water systems. This water is made available through long-term contracts with water district commissions composed of individual users. The prices for water charged under these contracts are generally substantially lower than the economic value of the water; for many agricultural users, they rarely cover the federal costs associated with the water projects.

In recent years, the Congress has considered several reforms aimed at reducing the subsidy to agricultural users of federal water and increasing receipts to the federal government. Some proponents of the reforms have argued that the BOR should at least charge full cost for federal water used to produce agricultural commodities, such as rice, that are subject to price support programs. An additional reform would require that farms of more than 960 acres be charged full cost for federal irrigation water. (Current law does contain this requirement but is vague concerning the definition of a "farm" and is therefore often circumvented. BOR is required, however, to investigate possible abuses of the acreage limitation rule.) While these two reforms would only address a portion of the federal subsidy to water users, they are illustrative of the changes in the current system that could increase federal receipts from water sales. Taken together, the two proposals could lead to increased receipts of \$85 million over the 1990-1994 period.

Recreation Fees. All of the major federal landholding agencies allow recreational visitation and provide some level of visitor services. These recreational services range from maintaining rough hiking trails to operating fully developed recreational facilities such as campsites and marinas. While entrance and user fees are charged at some locations, these generally cover only a small portion of the direct (that is, related to visits) cost of providing recreational services. For example, in 1989 the National Park Service will spend an estimated \$180 million out of an operating budget of \$745 million on visitor services and will recover only \$56 million in fees. Requiring land management agencies to charge fees to cover the direct costs of recreational visits would shift the burden of those costs to the beneficiaries of the service and would result in improved pricing of public lands. Charging fees to cover the direct cost of recreation visits on National Park Service land would lower net federal costs by about \$140 million in 1990 and by \$780 million over five years.

Opponents of increased fees argue that the national parks and public lands play an integral role in U.S. history and heritage and that the social benefits of visits to the parks far exceed the government costs. They argue that visitation to public land should be encouraged, not discouraged by increasing fees. Opponents also worry that increased fees would discourage the elderly and poor from visiting the parks.

Proponents of increased fees argue that while taxpayers generally may be willing to pay for some of the costs of maintaining the public land, they should not have to bear costs such as police protection and visitor assistance that benefit only the users. Proponents also argue that overcrowding at many parks could be partially alleviated through appropriate fee structures. Finally, proponents point out that the average visitor to a national park is wealthier than the average American, and that visits by the poor and elderly could be encouraged by free access days or the cross-subsidization of urban parks. Cross-subsidization of some parks would be necessary in any case as a number of factors--including multiple access points, too few visitors, and deed restrictions--limit the economic and technical feasibility of charging fees at every facility.

NDD-11 INCREASE THE HARBOR MAINTENANCE TAX

	Annual Added Revenues (In millions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	200	300	300	300	400	1,500

NOTE: Estimates are net of reduced income and payroll tax revenues.

The Army Corps of Engineers now spends about \$600 million per year to maintain channel depths for more than 180 ports nationwide. In 1989 the government will recover about 40 percent of these expenses through a tax on the value of commercial cargo loaded or unloaded at ports not part of the Inland Waterway System. Raising the harbor maintenance tax from 0.04 percent to 0.12 percent of the cargo's value would lower the deficit by \$0.2 billion in 1990 and by \$1.5 billion over the five-year period from 1990 through 1994.

Two arguments have been made in favor of raising the harbor maintenance tax. First, the Corps' dredging activities provide a commercial service to an identifiable set of beneficiaries: shippers save money both through the lower unit costs of shipping on larger vessels and by being able to minimize inland transport costs. Second, the tax would have little effect on economic activity, for the tax would increase average port-use charges (which include, among other things, wharfage, dockage, and stevedoring) by less than 1 percent.

Opponents of this option note that, because the tax is the same at all ports, a higher tax would increase the extent to which the more efficient, low-cost ports (where operations and maintenance now cost less than one cent per ton of cargo handled) would be subsidizing the less efficient, high-cost ports (where O&M costs are hundreds of dollars per ton of cargo).

**NDD-12 ELIMINATE FEDERAL SUPPORT FOR
LOCAL WASTEWATER TREATMENT
PLANT CONSTRUCTION**

Savings from CBO Baseline	Annual Added Revenues (In millions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Budget Authority	2,050	2,100	2,200	2,300	2,400	11,050
Outlays	70	430	1,050	1,550	1,800	4,900

The Environmental Protection Agency (EPA) now offers local governments grants that cover 55 percent of the construction costs for wastewater treatment plants needed to meet the requirements of the Clean Water Act. Budget authority for the construction grants program is \$941 million for 1989. The EPA also provides "capitalization" grants, as authorized by the Water Quality Act of 1987, to support state revolving loan funds (SRFs). For each dollar in federal capitalization grants, a state contributes 20 cents to its SRF. States are required to use SRF monies primarily to provide localities with low-interest loans to pay for the construction of wastewater treatment facilities. Budget authority for capitalization grants is \$941 million for 1989. Under the 1987 act, capitalization grants will replace all funding for construction grants after 1990.

Under CBO baseline assumptions, federal support for the construction of local wastewater treatment facilities is projected to continue at the 1989 appropriated level of \$1.95 billion, adjusted for inflation. For 1992 and beyond, this sum is above the amount authorized in the Water Quality Act of 1987. If all funding was instead terminated after 1989, the federal government would save approximately \$70 million in 1990 and about \$5 billion through 1994.

Proponents of such cuts note that, from their inception, federal wastewater treatment grants were intended to be temporary. Proponents argue that ending these grants sooner than is called for by current law would have little effect on water pollution, for the grants have done little to stimulate aggregate wastewater treatment outlays,

and, in some cases, have encouraged inefficient decisions by state and local governments. In particular:

- o Studies indicate that state and local governments reduce their own wastewater treatment expenditures between 40 cents and 70 cents for every dollar that they receive from the federal government. Most of the federal grants have thus substituted for state and local spending, and not supplemented it.
- o The availability of federal grants has prompted some communities to wait until federal assistance was available (sometimes for more than 10 years), rather than promptly correcting known pollution problems--thus delaying compliance with the Clean Water Act.
- o Providing grants for construction, but not for operation and maintenance, has reduced incentives for localities to find less capital-intensive, and less costly, alternatives for controlling water pollution.

Arguments against such cuts are threefold. First, states and localities would find it more difficult to meet the CWA wastewater treatment deadlines without the funding levels called for by current law. Second, the capitalization grants may be more efficient than the construction grants, for states will have some ability to tailor the terms of loans from their SRFs to the particular circumstances of each recipient. Finally, the capitalization grants will create a permanent fund to assist with future wastewater control efforts at the state and local level; eliminating that fund would increase the financial burden that states and localities will bear in coping with future water pollution problems.

NDD-13 REQUIRE A SPECIAL ASSESSMENT ON DEPOSITS OF COMMERCIAL BANKS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Outlays	2,560	2,590	2,630	2,660	2,690	13,130

A combination of extraordinary economic developments and reduced government regulation has helped propel an unprecedented number of savings institutions and banks into insolvency. The government has, therefore, had to liquidate or assist in the merger of a record number of federally insured institutions. As a result, the liabilities of the Federal Savings and Loan Insurance Corporation (FSLIC), now greatly exceed its assets. The increased number of bank insolvencies during 1988 have also produced the first year-over-year decline in the reserves of the Federal Deposit Insurance Corporation (FDIC). In addition, a number of analysts foresee continued heavy demands being placed on the resources of the FDIC over the next few years.

At the end of 1987, the FDIC had \$18.3 billion in the insurance fund for assisting or closing failing banks. Because of the large caseload in 1988, these reserves have fallen to about \$15 billion. This decline in FDIC reserves, coupled with the threat of a continued high rate of insolvencies, may indicate that an increase in bank deposit insurance premiums is justified. Commercial banks now pay at the rate of one-twelfth of 1 percent on their average domestic deposit liabilities, less certain exclusions and deductions, for federal deposit insurance. The Congress established this rate during the 1930s without the benefit of a rigorous analysis. In fact, during periods of few insolvencies, the FDIC has refunded a portion of the banks' premiums.

Insurance premiums paid by commercial banks could be raised to equal the rate currently being paid by savings and loan associations. From 1950 until 1984, both thrifts and commercial banks paid one-twelfth of 1 percent on deposits for federal deposit insurance.

Because of the recent rash of insolvencies and the accompanying drain on the resources of the FSLIC since 1985, the thrifts have been paying an additional assessment equal to one-eighth of 1 percent on deposits, so that they now pay more than twice as much as do banks for essentially the same federal deposit insurance.

The thrift industry began in the 19th century because commercial banks did not take an active interest in serving small savers or making residential mortgages. When the Congress created the Federal Home Loan Bank System in the 1930s, it did so as a means of encouraging home ownership. During the 1980s, however, technological change coupled with the deregulation of financial markets have increased competition between thrifts and banks. Although thrifts and banks may have historically had significantly different sources and uses of funds, this is no longer the case. Many banks now aggressively court small depositors. Moreover, in 1987 savings institutions held less than a third of the mortgages outstanding for one- to four-family residences. (They did, however, hold a significant quantity of mortgages indirectly through mortgage-backed securities.) Because of the growing similarities between banks and thrifts, the government may not be justified in maintaining different charges for essentially the same deposit insurance.

The 1988 operating profits of solvent thrifts can be expected to be reduced by 15 percent because of the special assessment. Thus, the assessment places thrifts at a distinct competitive disadvantage to commercial banks. Moreover, if thrifts continue to pay substantially more for deposit insurance, an increasing number will attempt to abandon the FSLIC for the FDIC. Such a shift would further erode the resources available to the FSLIC.

Commercial banks would object to the imposition of a special assessment. Although part of the assessment would undoubtedly be borne by depositors--that is, interest rates on deposits would decline--it would almost certainly lower bank operating profits as well. Yet, these disadvantages would be offset by the replenishment of reserves at the FDIC and the improved financial performance of the thrifts. Since commercial banks are significant competitors of most thrifts, raising the assessment on banks should reduce the interest rates that they as well as thrifts pay depositors.

NDD-14 INCLUDE FOREIGN DEPOSITS OF U.S. BANKS IN THE FDIC INSURANCE BASE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Outlays	300	310	320	330	330	1,590

Under current law, the Federal Deposit Insurance Corporation (FDIC) annually assesses insured banks at the rate of one-twelfth of 1 percent on a bank's average domestic deposit liability, less certain exclusions and deductions. The FDIC, in turn, insures these deposits against default, up to \$100,000 per account. Deposits at foreign branches of insured banks are neither covered by the insurance nor charged premiums. Such foreign deposits amount to about 15 percent to 20 percent of total bank deposits. This proposal would amend current law to include deposits at foreign branches of insured banks, with respect to both insurance and premiums.

Proponents of this proposal argue that extending insurance coverage to foreign deposits of U.S. banks would make explicit a policy that now implies coverage of those deposits free of cost to the banks holding them. This implied coverage was stated by the Comptroller of the Currency, among others, who in the wake of the Continental Illinois Bank rescue said that the government would not allow big banks to fail. Since big banks hold over 80 percent of the foreign deposits of U.S. banks, these deposits are effectively insured de facto. Proponents also point out that big banks now pay a lower insurance premium on their total deposits (much of which are held in foreign branches) than do smaller banks, which rely exclusively on domestic deposits, thus giving big banks a competitive advantage. Opponents take the view that insuring such deposits would raise the exposure of the FDIC to a prohibitive level, since it would add new potential liabilities rather than simply recognize existing implied coverage. Moreover, they argue that increased premiums would reduce the overseas competitiveness of U.S. banks by increasing their costs.

The additional income that the FDIC would receive from assessments on these deposits is uncertain. The effective premium rate paid by insured banks may vary from year to year depending primarily on the rate of insured bank failures, which can affect allowed refunds. Also, deposits in foreign branches of U.S. banks have varied considerably over the past decade. Assuming, however, that foreign deposits grew at a rate comparable to that of recent years, and that this proposal would maintain the current statutory premium and be put into effect before January 1, 1990, FDIC collections under the proposal would increase by about \$300 million in fiscal year 1990. Beyond that, increased assessments could provide additional annual income to the FDIC of approximately \$1.3 billion through 1994, depending on the rate of growth of foreign deposits. In budgetary terms, these additional collections would reduce FDIC outlays in each year. The potential liability base could increase by about \$350 billion (the approximate size of foreign deposits). Because the FDIC operates through a trust fund that is self-financed and has a surplus cash balance, there would be no immediate effect on budget authority.

NDD-15 DISCONTINUE POSTAL SUBSIDIES FOR NOT-FOR-PROFIT ORGANIZATIONS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	340	360	370	390	400	1,860
Outlays	340	360	370	390	400	1,860

The Postal Reorganization Act of 1970, which replaced the old Post Office Department with the independent U.S. Postal Service, intended that the mail system operate as a largely self-sufficient enterprise with mail users paying the full costs of postal services. But certain bulk mailers--notably religious, educational, and other charitable organizations and state and national political committees--receive favored statutory treatment. These favored mailers pay reduced postage rates that, on average, cover only about 70 percent of the cost of services received. The taxpayer subsidizes the remaining cost through annual federal payments made by the Congress, referred to as revenue forgone appropriations. In 1988, the subsidy for not-for-profit bulk mailers totaled about \$400 million. Almost \$1.9 billion could be saved through 1994 if such payments were discontinued and the subsidized postage rates, effective October 1988, were increased accordingly. Subsidies supporting reduced rates for blind and otherwise handicapped persons, libraries, and others could be continued. (Option FWF-04 would raise costs for all mailers by eliminating the indirect retirement subsidy given the Postal Service.)

Increasing rates for preferred mailers would further the goal of requiring mail users to pay for the cost of services they receive. Proponents of eliminating the subsidy argue that allowing special rates for favored mailers encourages overuse of mail services. This overuse causes households, especially those with higher incomes, to receive more mail than they may want; the Philanthropic Advisory Service, a branch of the Better Business Bureau that monitors the activities of charitable organizations, reports frequent complaints from citizens who have received multiple solicitations for support from the same

not-for-profit groups. Further, the Advisory Service has found that, for some not-for-profit organizations, fund-raising costs consume a very high percentage of the contributions received from those campaigns. (President Reagan's 1990 budget proposes cutting revenue forgone appropriations, but takes another approach to subsidized rates for nonprofit mailers. Instead of ending preferred rates as current law requires, the Reagan Administration would keep them for religious and charitable organizations but shift their cost to other mailers through higher rates. Most other currently subsidized mailers would pay commercial rates.)

While acknowledging that discontinuing special rates could cause financial problems for some groups, critics of the subsidy argue that the federal government can no longer afford to support the mailing costs of groups already receiving substantial federal assistance. They point out that, in 1988, not-for-profit organizations received about \$4 billion in federal grants and that support in the form of tax deductions for charitable contributions cost the government, through lower tax revenues, an estimated \$13 billion. Moreover, subsidized postage represents an additional burden on those taxpayers who, before taxes, contributed more than \$75 billion to charitable organizations in 1987.

Opponents of this alternative argue that the subsidy promotes the flow of educational, cultural, charitable, and similar information. (Originally, it also reflected an effort to ease the transition from the old, heavily subsidized post office system to the new self-supporting Postal Service.) Eliminating such postage subsidies would also, critics of this option caution, cause rates for not-for-profit organizations to increase by an average of about 40 percent. (If the Congress reduces appropriations below required levels, the Postal Service is required to increase postage rates paid by favored mailers.) Such rate hikes could pose financial difficulties for some organizations, especially those that depend heavily on mail solicitation for fund raising.

NDD-16 SCALE BACK THE RURAL HOUSING LOAN PROGRAM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Reduce New Lending						
Budget Authority	660	660	250	490	650	2,700
Outlays	560	650	650	650	650	3,150
Increase Borrowers' Payments: Increase Interest Rate						
Budget Authority	95	180	260	340	430	1,300
Outlays	95	180	260	340	430	1,300
Increase Borrowers' Payments: Increase Percentage of Income to 28						
Budget Authority	40	75	110	150	190	570
Outlays	45	80	110	150	190	580
Increase Borrowers' Payments: Increase Percentage of Income to 35						
Budget Authority	80	150	210	280	360	1,100
Outlays	80	150	210	280	360	1,100

The Section 502 housing program, administered by the Farmers Home Administration (FmHA), provides mortgages to enable low-income borrowers to purchase homes by spending only 20 percent of their incomes on mortgage payments, property taxes, and insurance throughout the full mortgage term, usually 30 years. The FmHA's major cost for this program is the difference between the rates it pays for the funds it borrows to finance the program and the rates borrowers pay for FmHA mortgages—which can be as low as 1 percent. During 1988, more than 26,000 rural households in the continental United States with adjusted incomes averaging about \$13,600 purchased single-family homes with loans at reduced interest rates from the FmHA. Two broad approaches for reducing the costs of this program are described here.

Reduce New Lending. If new lending under the Section 502 program was halved, the number of new households that would receive the subsidies now provided to a small proportion of all eligible households would be reduced. Federal outlays would be about \$560 million lower in 1990 and \$3.2 billion lower over the 1990-1994 period. The present program, making sizable payments to relatively few households, may not be the best use of scarce federal resources. On the other hand, under this option, even fewer low-income rural households would become homeowners.

Increase Borrowers' Payments. The second major approach to scaling back the rural housing loan program would be to continue lending at the present volume but raise the costs to new borrowers, either by increasing the interest rates on mortgage loans (and requiring borrowers to pay the total cost) or by increasing the percentage of income paid toward the loans (but not increasing the rate at which the loan is written).

If new borrowers paid the FmHA's borrowing rate--currently about 10 percent--for Section 502 loans, the cost of this program would be reduced by \$95 million in 1990 and \$1.3 billion over the 1990-1994 period. Alternatively, if new FmHA borrowers paid greater percentages of their incomes for housing costs, federal outlays also would be cut. Savings of \$45 million in 1990 and \$580 million in the 1990-1994 period would result if borrowers paid 28 percent of income toward their mortgage loans. If borrowers paid 35 percent of income toward their mortgage loans, savings would be \$80 million in 1990 and \$1.1 billion in the 1990-1994 period.

An advantage of charging the government's borrowing rate of interest on these loans is that it would make the cost of homeownership for all borrowers in rural areas--those served by the Section 502 program and those with loans made by private financial institutions--more nearly equal. Thus, rather than subsidizing housing costs for households with low incomes, the program would ensure that there was no shortage of loans in rural areas. Increasing the percentage of income paid for FmHA loans to 28 percent would eliminate a disparity between the FmHA Section 502 program for rural homeowners and a comparable program sponsored by the Department of Housing and Urban Development in which urban borrowers currently pay 28 per-

cent of their incomes for housing costs and would continue some subsidy for low-income home buyers. Increasing the percentage of income paid for FmHA loans to 35 percent would cause assisted owners to pay the same for shelter as would assisted households under comparable proposals for rental assistance programs. Moreover, their payments would be almost sufficient to cover the government's borrowing costs.

On the other hand, increasing the mortgage interest rate or increasing the percentage of income that rural households would pay toward housing costs would shift the composition of borrowers away from households with the very lowest incomes. In addition, having higher housing costs relative to income might raise default rates among new program participants above the historical level of about 2.5 percent.

NDD-17 SCALE BACK THE RURAL RENTAL HOUSING ASSISTANCE PROGRAM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Stop Expansion						
Budget Authority	700	720	280	520	780	3,000
Outlays	60	380	560	640	670	2,300
Slow Expansion						
Budget Authority	55	110	170	230	290	860
Outlays	30	75	130	180	230	640
Increase Developers' Interest Rate to 5 Percent						
Budget Authority	20	40	60	75	95	290
Outlays	20	40	55	75	95	290

The Section 515 housing program, administered by the Farmers Home Administration (FmHA), provides low-interest 50-year mortgage loans to developers of multifamily rental projects in rural areas. These mortgages have interest credits that reduce the effective interest rates to 1 percent and, in turn, lower rental costs for Section 515 tenants, who are a small proportion of all the households in rural areas eligible for rental housing assistance.

Under current rules, assisted tenants contribute toward their housing expenses the greater of 30 percent of their adjusted incomes or the minimum project rent. The minimum project rent for each unit includes a proportionate share of the amortization costs of the 1 percent mortgage plus the project's operating expenses. The developer keeps the minimum rent, and the FmHA collects any payments above this minimum and treats them as additional interest payments to reduce the program's cost. The estimated average annual federal cost for each newly assisted household under the Section 515 program exceeds \$4,000. During 1988, new Section 515 loans valued at about \$555 million were made, sufficient to finance about 16,500 new rental units.

Stopping all new commitments under the Section 515 program would reduce federal outlays by \$ 2.3 billion over the 1990-1994 period. Slowing the expansion of this assistance would reduce federal costs by less but could allow for some increase in the number of households served. For instance, making only enough additional loans to keep the share of the eligible population served at its current level would reduce federal outlays by \$640 million between 1990 and 1994. Alternatively, increasing the interest rate on new loans to project developers--from about 1 percent to 5 percent, on average--would save \$290 million over this same period and more in subsequent years.

Another method to reduce federal outlays under the rural rental housing assistance program would be to increase the tenant rent payment to 35 percent of household income. Data are not available, however, to estimate the savings from this alternative.

Stopping or slowing expansion of the Section 515 program would cut the total program costs to the federal government. Increasing the payments required of tenants or the interest rates paid by developers, on the other hand, would reduce the deep subsidies currently provided to developers of rural rental projects and their tenants. Such deep subsidies raise equity issues because selected tenants are, in fact, no different from other eligible people who are not helped. On the other hand, halting or slowing the growth of new funding would probably lessen the supply of standard-quality low-income rental projects in rural areas.

NDD-18 END SBA LOANS AND LOAN GUARANTEES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
End All Credit Programs						
Budget Authority	0	0	5	115	160	280
Outlays	185	335	415	495	535	1,960
Keep Minority and Disaster Programs						
Budget Authority	0	0	5	115	160	280
Outlays	20	75	170	260	305	840

The Small Business Administration (SBA) provides both direct loans and loan guarantees to qualified small businesses. SBA's lending objectives are to promote business development generally, to aid economically disadvantaged groups, and to assist small businesses and homeowners in recovering from disasters. SBA outlays could be reduced by \$2 billion over the 1990-1994 period by eliminating all SBA loan and loan guarantee programs. An alternative to eliminating all SBA loans would be to retain only the loan programs that provide assistance to minorities and disaster victims. Continuation of these programs could be justified as aid to small concerns that are socially or economically disadvantaged because of factors beyond their control. Retaining these loan programs while eliminating all others could reduce SBA outlays by \$0.8 billion over the 1990-1994 period.

Under the loan guarantee program, the federal government guarantees 90 percent of the principal for business loans up to \$155,000 and between 70 percent and 85 percent for loans exceeding \$155,000. The interest rate on guaranteed loans is about two and one-half percentage points above the prime rate. In addition, there is a charge for the SBA guarantee equal to 2 percent of the amount guaranteed. In 1988, SBA guaranteed about 19,500 loans totaling nearly \$3 billion. The SBA share of the guaranteed loans was about \$2.5 billion. About

3,500 guaranteed loans totaling nearly \$0.5 billion defaulted and were subsequently purchased by SBA in 1988.

Under the direct loan program, SBA provides loans to businesses located in areas of high unemployment or low income, and to businesses owned by minorities, handicapped individuals, and Vietnam veterans or disabled veterans. SBA also provides direct loans to homeowners recovering from natural disasters. Direct loans generally do not exceed \$150,000, although certain disaster loans are as high as \$500,000. The interest rate on direct loans currently ranges from 3 percent to about 9 percent depending on the specific loan program. In 1988, SBA disbursed about 20,000 direct loans totaling nearly \$225 million to bring the total direct loan portfolio to nearly \$7.4 billion. About 10,200 direct loans totaling nearly \$525 million defaulted in 1988. The credit extended by SBA in both the direct and guaranteed programs is for a term of up to 25 years—significantly longer than would be available to small businesses in the absence of SBA assistance.

Proponents of SBA assistance argue that such aid is justified because small businesses generally create more jobs, improve technology more rapidly, and satisfy some markets more efficiently than do large firms. In addition, small concerns may need assistance in their struggle against inadequate information or discrimination.

Opponents note that the benefits derived from small business, to the extent that they exist, do not flow from all small concerns. Indeed, because SBA frequently funds businesses that have been rejected by conventional providers of finance, it is funding the firms least likely to create stable employment, improve technology, or enhance national productivity. Another consequence of SBA's lack of selectivity is the high default rate on its loans. Moreover, financial markets are now more efficient and less susceptible to the types of market failure that justified the SBA program when it first began.

NDD-19 IMPROVE PRICING OF LICENSES TO USE ELECTROMAGNETIC SPECTRUM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	250	250	0	0	0	500
Outlays	250	250	0	0	0	500

The Federal Communications Commission (FCC) has the responsibility of allocating licenses to use the electromagnetic or radio spectrum in accord with the public interest. Current FCC policy does not require private parties to pay for the right to exploit the spectrum (beyond an application fee) for any of its uses, including traditional radio and television broadcasting as well as new commercial areas such as cable television, satellite and microwave communications, and cellular telephone and paging services. Current policy also allocates large parts of the spectrum to specific types of uses to assure clear transmissions for different uses and users.

Technical advances have made possible a greater variety of spectrum uses than current policy permits, however. Auctioning licenses for unassigned portions of the radio spectrum could generate \$500 million over the 1990-1994 period, and would lead to more efficient use of this public resource if the FCC permitted the broadest technically feasible use of the unallocated spectrum. This estimate assumes that licenses would be auctioned on a local basis, although if they were auctioned on a national basis (that is, if a block of the spectrum was allocated to one successful bidder), the potential savings to the federal government could be much greater.

Until 1982, the FCC allocated the spectrum through a comparative administrative hearing process that weighed the relative merits of the contending applicants. In 1982, in response to criticisms that the hearing process was too long and too costly for the government and for society as a whole, the Congress permitted the FCC to experiment with the assignment of portions of the spectrum by lottery to all par-

ticipants capable of meeting minimum eligibility criteria. Currently, the FCC employs both comparative hearings and lotteries for allocating non-mass-media licenses.

Proponents of the auction mechanism argue that substituting an auction for the lottery and hearing methods of spectrum allocation would increase the efficiency of the process and benefit the economy as a whole. The auction mechanism would provide a fair-market-value measure of the license rights to the unassigned spectrum, and thus encourage its economically efficient use. According to proponents, an auction mechanism would also decrease the cost to the government of spectrum allocation and allow private-sector resources devoted to the application process to be more profitably applied elsewhere. As auction proposals do not include changes in licensee requirements, the FCC's role in guarding the public interest would not be compromised. A spectrum auction was proposed in the President Reagan's 1990 budget. His proposal would exclude mass media, amateur, and public safety frequencies from the auction process.

The principal argument of opponents is that an auction system would preclude small, less wealthy applicants--for example, local telephone cooperatives--from expanding their use of the spectrum. The financial strength of large firms is already a determining factor in the hearing process (given regulatory and legal expense), and also in the lottery process (given the secondary market for spectrum allocation created by that method of assignment). Opponents also argue that, as a revenue source, the auction system would not provide a stable, continuous inflow, since no additional spectrum beyond the current quantity is available for use. Some future revenues could be expected, however, if technological change created profitable uses for currently unused higher-energy parts of the spectrum. Finally, public-sector users such as police, fire, and other emergency providers have expressed concern that an auction, with its revenue-raising potential, could eventually decrease the proportion of the spectrum allocated to the public sector.

NDD-20 ELIMINATE FURTHER CLEAN COAL TECHNOLOGY PROGRAM FUNDING

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1984	
Budget Authority	575	540	770	800	840	3,525
Outlays	5	45	160	290	490	990

The Clean Coal Technology Program (CCTP) was created in 1984 to assist private industry--especially the electric utility sector--in developing commercial technologies that would use coal in environmentally sound ways. The technologies developed under the CCTP are intended primarily to reduce the emissions of sulfur dioxide (SO₂) and nitrogen oxides (NO_x) from coal combustion, which are suspected to cause acid rain. The Department of Energy (DOE) will spend nearly \$400 million to fund the "round one" projects, which were selected in August 1986. In September 1988, the DOE announced the preliminary selection of the second-round projects totaling roughly \$500 million. Completing these projects, but rescinding the \$575 advance appropriation for 1990 and eliminating future project funding, could save about \$1.0 billion in projected outlays over the 1990-1994 period.

Opponents of CCTP argue that the private sector is fully capable of sponsoring commercial research on combustion and pollution abatement equipment. For example, the Electric Power Research Institute (EPRI) directs a variety of projects involving clean coal technologies. In addition, several states concerned about the long-term outlook for their high-sulfur coal industries support research on coal cleaning, emission controls, and combustion technology. Federal CCTP support--currently limited to a maximum of 50 percent of project costs--may not be required to stimulate research on technologies with potentially high commercial appeal.

This argument is said to be particularly true for one set of CCTP activities--those involving repowering technologies. Repowering projects adapt advanced combustion technologies to older plants, thereby

increasing their efficiency, capacity, and expected lifetimes, while controlling emissions to very low levels. The potentially strong market for improved new plant technologies may provide enough incentives for their private development. To the extent that the demand for electricity grows and repowering technologies improve through private or state-sponsored research, utilities may increasingly turn to repowering existing coal-fired sources.

The commercial market for the second category of CCTP projects--improved retrofit equipment--will rely more heavily on the enactment of legislative acid rain controls. Installed solely for emission abatement, retrofit equipment is unnecessary under most current state regulations governing the SO₂ and NO_x emissions from older power plants. Uncertainty over the eventual form and extent of possible federal legislation reduces the private incentives for innovation; the second-round CCTP selections emphasized retrofit projects. If no acid rain controls are enacted, then these technologies may have little commercial prospect. If, on the other hand, controls are mandated, then the market for appropriate technologies will be known, reducing the justification for federal support.

Finally, although CCTP technologies (especially repowering) may marginally increase the amount of usable energy derived from coal use, the long-term CCTP policy is directed at expanding the use of coal. Given the concern over the possibility that continued coal use may contribute to long-term global warming, such a policy may run counter to proposed federal programs to reduce the emission of carbon dioxide from fossil fuel combustion.

Supporters of CCTP point to the important role that coal plays in national energy policy. In the absence of acid rain legislation, CCTP funding could hasten the deployment of cleaner technologies that will provide environmental benefits, and, if acid rain controls are mandated, could alleviate some of the adverse economic impacts on electric utilities, electric ratepayers, and coal miners. Federal support of the CCTP also demonstrates commitment to the Reagan-Mulroney accord of 1986, which requires that the U.S. devote public and private resources to alleviating pollution problems that cross boundaries.

NDD-21 REDUCE FEDERAL AID FOR MASS TRANSIT

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,540	1,620	1,690	1,760	1,830	8,430
Outlays	610	940	1,180	1,370	1,550	5,650

The federal government now provides about \$3.2 billion a year in capital and operating assistance to mass transit agencies. Federal assistance pays for up to 80 percent of the costs of assisted capital projects (and over 70 percent of all investment in transit systems), and up to half of operating deficits (and 16 percent of annual operations costs) for transit services. Outlay savings of \$610 million in 1990, and \$5.7 billion over the 1990 to 1994 period, could be obtained by reducing the federal match on capital grants to 50 percent, and eliminating operating assistance.

Supporters of such a reduction note that high federal shares in investment spending and operating aid have not improved the productivity or use of transit services. Despite modernization of transit systems, only 5 percent of journeys to or from work are made by mass transit. Transit agencies serve mainly downtown areas, while most of the growth in urban travel has been in the suburbs. Moreover, transit fleet productivity is low--less than 20 percent of seats are occupied, on average, and labor costs per mile of travel rose by 60 percent during the 1970s, when levels of overall assistance were highest. In the wastewater treatment program, reducing the federal share of investment to around 50 percent has improved investment choices; a reduced (50 percent) share in mass transit might have similar benefits. Ending operating aid could encourage local authorities to make better use of existing capital by improving services and by using more cost-effective smaller vehicles, as well as taking other steps to lower the costs of transit services.

Proponents of federal aid maintain that sudden changes in financial assistance could cause dislocations in services to the poor, the

young, the elderly, and the handicapped who are particularly dependent on public transportation. Others argue that an across-the-board cut would be inefficient, since it would continue to provide some funds for the cities of less than 1 million population that have few transit investment needs, while reducing aid for rehabilitating rail systems in older cities where investment lags demand. Better investments might follow, they argue, if federal assistance was targeted to the older rail cities.

NDD-22 END SUPPORT FOR AVIATION DEVELOPMENT

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1989	1990	1991	1992	1993	
Establish the FAA as a Private Corporation						
Budget Authority	4,100	4,300	4,500	4,700	4,900	22,500
Outlays	2,650	3,450	3,950	4,350	4,700	19,100
Eliminate Airport Grants-in-Aid						
Budget Authority	1,700	1,800	1,800	1,850	1,950	9,100
Outlays	233	564	1,215	1,400	1,550	4,950
Total						
Budget Authority	5,800	6,100	6,300	6,550	6,846	31,600
Outlays	2,900	4,000	5,150	5,750	6,250	24,050

Airline deregulation has improved the efficiency of air transportation and made it cheaper and more accessible. Much of the benefit arises from the development of airline hubs that allow large passenger interchanges between flights and that provide economies in the use of aircraft. Because of their peaking effects, hubs can make more flexible and, at the same time, more demanding use of aviation infrastructure and federal aviation services. But neither the air traffic control system nor the airport grants program can respond quickly to demands for new capacity at emerging hubs, or evaluate alternatives available to airlines such as development of supplementary hubs at other airports where capacity exists. Transferring management of air traffic control to private groups and ending subsidies for airport development would encourage aviation infrastructure development that would be more responsive to the demands of the newly competitive airlines.

Transferring management of the air traffic control system could yield the following benefits. First, private financing would require full recovery of costs from the system's users and beneficiaries and thus give managers incentives to minimize the costs of services and to charge costs to users responsible for them or capable of paying for

them. Second, physical capacity, investment, and the level of air traffic control operations would be more closely matched to the demands of the users and their willingness to finance them. A corporation, for example, could offer incentives to attract controllers to difficult-to-fill posts at very busy airports. Finally establishing and enforcing safety and consumer regulations would remain federal responsibilities, and thus be separated from the promotion and operation of the airway system.

Proponents of eliminating airport grants argue that most commercial airports have little trouble financing capital improvements from the fees paid for their services. In addition, little of the current grant program helps to eliminate airport congestion. Indeed, continuing grants could undermine the benefits of managing air traffic control capacity according to user demands if grants for airport expansion were not coordinated with increases in the capacity of the air traffic control system. The federal prohibition on airport head taxes could be eliminated so that airports could substitute their own financing for the federal funds withdrawn.

Supporters of the current arrangements point out that the benefits provided by the airport and airway system are nationwide in scope; therefore, a federal role in its funding and planning is required and appropriate. Further, since air traffic control services may be provided most efficiently by a single supplier, federal oversight of such a private monopoly, or perhaps its joint ownership by airlines and other users, might still be needed to protect the public interest. Supporters of the airport grant program argue that more assistance is needed to overcome airport congestion; rather than eliminate airport grants, they would raise aviation excise taxes to cover existing or increased spending, or continue subsidies from the Treasury for the operating costs of air traffic control while maintaining the airport grants program.

Cost savings under this option would stem from reduced federal spending on operations and investment; the estimates presented here make no allowance for any sale or transfer value of air traffic control assets. The estimates assume continuing federal responsibility for government airspace use, safety, and consumer regulation, and that excise taxes now paid into the Airport and Airway trust fund would be continued but would be paid into the general fund. These taxes were

originally general revenue taxes before being earmarked by the Airport and Airway Revenue Act of 1970. Moreover, federal spending on commercial and private aviation has consistently exceeded excise tax revenues in every year since 1971, when the trust fund was established; this has been made possible because of expenditures from the general fund, and the uncommitted balance in the trust fund is a direct result of these general fund expenditures. Allowing the taxes to revert to general revenues would provide some offset to the \$17 billion in general funds subsidy of commercial and private aviation over the past 18 years. If significant tax-exempt bonding was used in lieu of airport grants, the annual savings would be lower than those shown above.

NDD-23 IMPOSE USER FEES ON THE INLAND WATERWAY SYSTEM

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	330	340	360	370	390	1,800
Outlays	330	340	360	370	370	1,800

In 1989, the Corps of Engineers will spend about \$500 million on the nation's system of inland waterways. Expenditures for operation and maintenance (O&M) will total about \$300 million; new construction outlays will equal about \$200 million. Current law allows up to 50 percent of inland waterway construction to be funded by revenues from the Inland Waterways Fuel Tax, a tax on the fuel consumed by barges using most segments of the inland waterway system. During the 1990-1994 period, revenues from the tax will equal about 22 percent of federal outlays for inland waterway construction. All O&M expenditures, however, will be paid by taxpayers generally.

Imposing user fees that would recover the cost of O&M outlays for inland waterways would reduce the federal deficit by \$325 million in 1990 and \$1,775 billion during the 1990-1994 period. Proponents of this option cite the efficiency effects of user fees. First, shippers who benefit from federal navigation expenditures would press only for those projects where benefits would exceed the fees they would have to pay. Second, reducing subsidies to water transportation (the most heavily subsidized sector of the freight transportation industry) would improve the allocation of private resources, since choices among modes of freight transportation would be based more on the true resource cost to society than on the degree of federal subsidies provided to each mode. Finally, user fees would encourage the more efficient use of existing capacity, thus reducing the need for new construction to alleviate congestion.

The efficiency effects of user fees would depend in large measure on whether the fees were imposed on a systemwide or on a segment-specific basis. Since costs vary dramatically on the inland waterways,

systemwide fees would offer far weaker incentives for cost-effective O&M spending. In 1985, for example, O&M costs on the inland waterways ranged from \$0.47 per thousand ton-miles on segments of the Ohio River to about \$950 per thousand ton-miles on the Pearl River. A systemwide fee of \$1.61 per thousand ton-miles would recover all operation and maintenance outlays, but would do little to ration use of the system. Segment-specific fees, in contrast, could substantially change use of the waterways. A Department of Transportation study found that fees to recover even 50 percent of all federal outlays (both construction and O&M) would close 4 out of 12 waterway segments for lack of traffic. Moreover, such cost recovery would make congestion-related new construction unnecessary for 25 years.

Proponents of federal subsidies note, however, that some subsidies are provided not to benefit commercial shipping, but to promote regional economic development. Assessing user fees would limit this tool of regional economic development. Reducing inland waterway subsidies would also lower the income of barge operators and grain producers in some regions, but these losses would be small in the context of overall regional economies.

NDD-24 ESTABLISH USER FEES FOR CERTAIN COAST GUARD SERVICES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	680	710	740	780	810	3,700
Outlays	680	710	740	780	810	3,700

The Coast Guard provides numerous services to commercial and pleasure users of the nation's coastal waters and inland waterways. While much of the Coast Guard's budget can be attributed to activities performed in the general public interest, such as coastal defense, drug interdiction, and enforcement of other laws and treaties, significant costs are also incurred each year to provide services that directly benefit individuals or businesses. These programs account for nearly half of the agency's operating budget, or about \$860 million in 1988, and include aids to navigation, search-and-rescue, and marine safety. Currently, almost all of the costs to operate these programs are financed through annual appropriations from the general fund. An additional \$40 million to \$50 million a year is also appropriated for related capital expenditures on the marine safety and navigation programs. Much of these costs could be recovered by imposing fees that would save the federal government about \$0.7 billion in fiscal year 1990 and approximately \$3.7 billion over the 1990-1994 period.

The Coast Guard provides substantial, uncompensated benefits to civilian navigation, especially to the commercial shipping industry. Without navigational aids, such as buoys and other channel markings, commercial shipping in U.S. inland and coastal waters would be considerably more difficult, hazardous, and costly than it is now. The capital and operating costs of these aids could be recovered from the shipping industry, just as the costs of roads are recovered from highway users. The Coast Guard also conducts emergency search-and-rescue operations for lost or disabled vessels, the majority of which assist recreational boaters. The costs of search-and-rescue could be recovered from the beneficiaries.

User fees might, however, be difficult to collect from recreational boats. They would also increase costs for the fishing industry. (Coast Guard fees for fishing vessels could be phased in over a number of years to avoid imposing too sudden a financial burden on this industry.) Opponents of user financing for the Coast Guard's life-saving services see these as essential responsibilities similar to fire protection, safety, and other emergency services provided by state and local governments without charge to the user.

**NDD-25 REDUCE NEW SPENDING AUTHORITY
FOR HIGHWAYS TO THE LEVEL OF
HIGHWAY TAX COLLECTIONS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	1,200	800	1,000	1,200	1,500	5,700
Outlays	200	700	800	900	1,100	3,700

Between 1990 and 1994, it is estimated that \$70.9 billion will be paid into the highway account of the Highway Trust Fund from taxes on highway users. Over the same period, \$75.4 billion is projected to be spent on federal highway programs, under current policies. This spending includes those programs financed from the highway account as well as those financed from federal funds. Holding new spending authority to the level of tax revenues, by reducing budget authority and obligation ceilings, would save \$3.7 billion over the five years. Eventually it would mean that annual outlays and tax revenues would tend to converge.

Since 1957, the Highway Trust Fund highway account has collected \$191 billion from highway users and paid \$195 billion for highway development. In addition, \$3.2 billion has been spent on highways from federal funds, mostly in the 1980s. Had all federal spending been paid from earmarked excise taxes on highway users, the cash balance in the highway account, which has remained around \$10 billion throughout the 1980s, would have been drawn down to around \$1 billion because of the extra spending and the reduction in investment income. Nationally, the share of highway user excise taxes in financing highways has dropped from 73 percent at the beginning of the Interstate construction program to 65 percent now. In other words, federal, state, and local taxpayers have been financing an increasing share of highway spending, and the cash balance in the highway account reflects these subsidies from general taxpayers rather than unspent payments for the use of highways.

Proponents of matching spending with the level of dedicated highway excise tax revenues argue that efficiency in transportation would be enhanced if users paid for highways. Cuts in budget authority of \$5.7 billion below CBO baseline levels would match new spending authority and tax revenues over the 1990-1994 period. Lower obligation ceilings would delay outlays from existing unpaid authorizations of \$31 billion as well as those from current budget authority. Cuts could also be made in programs now outside obligation limits--about \$1.5 billion in 1990--or these programs could be included under new obligation ceilings. Alternatively, dedicated excise tax rates could be increased (see REV-25).

Given the commitment to complete the Interstate system by the early 1990s, reductions in spending would tend to fall mostly on rehabilitation programs. Opponents of cutting highway spending argue that more should be spent to keep highways in good condition, and that highway rehabilitation projects have high economic benefits. Reducing federal aid for rehabilitation might induce states to spend less on maintaining highways, or lead them to redirect spending away from the main routes of interstate commerce, thus undermining the national benefits from highway investments of the past 30 years.

NDD-26 ALLOW OIL AND GAS LEASING IN THE ARCTIC NATIONAL WILDLIFE REFUGE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1984	
Budget Authority	0	800	a	500	a	1,300
Outlays	0	800	a	500	a	1,300

a. Less than \$2.5 million.

The Arctic National Wildlife Refuge (ANWR) encompasses a section of Alaska's north slope that may contain commercially recoverable oil and gas reserves. Under current law, oil and gas leasing is prohibited on the refuge. Based on the results of a recent energy resource analysis and environmental impact study, the U.S. Department of the Interior (DOI) recommended that the coastal plain be opened for commercial exploration and leasing. Legislation to formalize the leasing prohibition as well as to permit leasing has been introduced in both houses of Congress. Opening ANWR to oil and gas leasing would raise \$1.3 billion in bonus bids and rentals over the 1990-1994 period, regardless of whether commercially recoverable reserves were found. This estimate assumes that the leasing revenues would be shared 50/50 between Alaska and the federal government, which is consistent with recent Congressional proposals.

Proponents of developing ANWR view the coastal plains as the most promising onshore prospect for oil and gas in the United States: the Department of the Interior has estimated that the geological structures may contain 4.8 billion to 29.4 billion barrels of oil, not all of which may be commercially recoverable. Proponents point to the imminent decline in production at Prudhoe Bay, the giant oil field near ANWR, as exacerbating the gradual downward trend in domestic production of oil and gas. Development, they argue, could offset the need to import crude oil, decreasing U.S. dependence on politically unstable sources and improving the balance of trade.

Proponents also dispute the claim that oil leasing and environmental protection are mutually exclusive. They claim the experience at Prudhoe Bay has shown that oil can be produced while protecting caribou and other wildlife. Finally, some proponents argue that some of the federal receipts could be used to mitigate the environmental impacts of development and/or acquire more federally protected lands.

Opponents of development argue that ANWR is the last part of the north slope of Alaska left undeveloped, representing a unique intact Arctic ecosystem, and that even major exploration without development would permanently change the wilderness characteristics of the refuge. Opponents also point out that DOI estimates only a 19 percent probability that any commercially recoverable oil will be found, and they contend that DOI data indicate that even a massive discovery at ANWR would not reverse the trend toward dependence on foreign sources of oil. Opponents argue that the country should focus on reducing long-term oil demand through conservation, and developing alternative, renewable sources of power.

NDD-27 END FUNDING OF THE ECONOMIC DEVELOPMENT ADMINISTRATION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	190	200	210	210	220	1,050
Outlays	20	80	140	180	200	620

The Economic Development Administration (EDA) provides grants to state and local governments for public works, technical assistance, and job programs, as well as loan guarantees and direct loans to firms for business development. In 1989, appropriations for EDA programs totaled about \$190 million. Disbanding the EDA would reduce federal spending for local economic development by \$20 million in 1990 and \$620 billion over the 1990-1994 period.

Some critics of this program contend that federal assistance should not be provided for activities whose benefits are primarily local and which, therefore, should be the responsibility of state and local governments. In addition, the program has been criticized for allowing federal dollars to be used for projects that would have been supported anyway, for substituting public for private credit, and for facilitating the relocation of businesses from one distressed area to another through competition among communities for federal funds. The EDA has also been criticized for its broad eligibility criteria, which allow areas containing 80 percent of the U.S. population to compete for benefits, and for providing aid with little proven effect compared with other programs having similar goals. Furthermore, because of the competitive nature of the program, local governments do not incorporate this type of aid into their budget plans; hence, eliminating future funding of it would not impose unexpected hardships on communities.

On the other hand, the reduction in aid associated with this option would curtail economic development activities in some financially distressed communities that might not be able to tap other resources. This could result in deterioration of infrastructure, loss of prospective

jobs, and decreases in local tax receipts in these areas. Eliminating this source of funds might have especially serious consequences for the most distressed communities, particularly in view of overall federal cutbacks in urban aid programs such as Community Development Block Grants and Urban Development Action Grants.

NDD-28 ELIMINATE OR RESTRICT COMMUNITY DEVELOPMENT BLOCK GRANTS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Terminate CDBG

Budget Authority	2,750	2,900	3,000	3,100	3,250	15,000
Outlays	110	1,250	2,450	2,900	3,050	9,750

Restrict Eligibility and Reduce Funding

Budget Authority	390	400	420	440	450	2,100
Outlays	15	170	340	410	430	1,350

The Community Development Block Grant (CDBG) program provides annual grants, by formula, to all metropolitan cities and urban counties under its entitlement component. The program also allocates funds to each state by formula. The latter funds typically are distributed through a competitive process among nonentitlement areas, which are generally units of local government under 50,000 in population that are not metropolitan cities or part of an urban county. The grants may be used for a wide range of community development activities, including rehabilitation of housing, improvement of infrastructure, and economic development.

For 1989, appropriations for the CDBG program amount to \$2.65 billion. Another \$0.35 billion is to be transferred to CDBG from unobligated balances in other programs administered by the Department of Housing and Urban Development. Of this total of \$3 billion, about \$2.1 billion is allocated to metropolitan cities and urban counties and \$0.9 billion to nonentitlement government units. Substantial federal savings could be realized either by terminating the CDBG program or by restricting eligibility for the entitlement component to exclude the least-needy communities while reducing funding levels. Least-needy communities could be defined, for example, using factors that measure relative economic well-being and fiscal capacity, such as per capita

income, number and percentage of families below the poverty level, and local tax revenues as a share of residents' total income.

Terminate CDBG. If the CDBG program was eliminated, federal outlay savings would amount to \$110 million in 1990 and a total of \$9.7 billion over the 1990-1994 period. Proponents of terminating the program contend that federal funds should be targeted to programs whose benefits are national in nature rather than to programs such as CDBG that generate primarily local benefits and should be funded by state and local governments. Moreover, to the extent that localities use CDBG funds to compete against each other to attract business, benefits are shifted away from localities to private firms.

A disadvantage of terminating the CDBG program would be that a number of activities financed by the program are not now generally undertaken by local governments--particularly the rehabilitation of low-income housing and, to some extent, economic development. Thus, eliminating this funding--the largest source of federal aid for many cities--would probably cause these types of activities to be curtailed in many areas and, in general, reduce resources benefiting low-income households. Furthermore, CDBG funding has presumably been figured into the budgets of entitlement recipients, so that ending that support could impose at least temporary stress on many governments, particularly in view of reductions in new funding of other federal aid programs such as housing assistance and Urban Development Action Grants.

Restrict Eligibility and Reduce Funding for Entitlement Component. If the entitlement component was cut 20 percent by eliminating funding for the least-needy communities, federal outlays could be reduced by \$15 million in 1990 and \$1.4 billion over the 1990-1994 period. Such a cutback would change the distribution between the entitlement and nonentitlement components from 70 percent-30 percent to 65 percent-35 percent. The entitlement component of the CDBG program now provides aid to all eligible communities, although jurisdictions with greater needs (as measured by factors such as population, poverty levels, and housing conditions) receive larger grants than other communities. Among nonentitlement communities, the typically competitive nature of the distribution process would presumably ensure the targeting of funds to the neediest areas.

Proponents argue that no pressing interest is served by supporting jurisdictions that have above-average ability to fund projects themselves. Eliminating funding for such communities rather than reducing grants across the board would ensure that the most distressed jurisdictions would retain the same level of aid. On the other hand, CDBG funds in general must be used to aid low- and moderate-income households, to eliminate slums and blight, or to meet emergency needs. Thus, a reduction in federal funds for affluent communities would probably curtail such activities in pockets of poverty in those areas, unless local governments would fully offset the cut.

NDD-29 REDUCE UNTARGETED FUNDING FOR ELEMENTARY AND SECONDARY EDUCATION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Eliminate Untargeted Portion of Vocational Education						
Budget Authority	420	440	460	480	500	2,300
Outlays	50	340	430	460	480	1,750
Eliminate Untargeted Funding and Redirect Half of the Savings to Compensatory Education						
Budget Authority	210	220	230	240	250	1,150
Outlays	25	170	220	230	240	880

Most federal aid for elementary and secondary education is targeted toward students with special needs. Federal funds for compensatory education (under Chapter 1 of the Elementary and Secondary Education Act of 1965), for example, are intended for low-achieving children in schools with many poor children. Federal funds are also provided to help educate handicapped children.

Substantial amounts of federal money, however, are provided with no federal requirement for targeting funds on students with special needs. An example is the portion of vocational education grants not targeted on specific groups of students. Ending funding for this portion of vocational education would reduce budget authority by about \$2.3 billion, while outlays would be reduced by about \$1.8 billion over the 1990-1994 period.

This option would generate substantial federal savings, but would have only a small effect on total spending for elementary and secondary education since the reduction would constitute considerably less than 1 percent of total local, state, and federal expenditures on education. Moreover, some of these funds currently support activities that districts would undertake even without them, so that eliminating them would probably have a smaller effect on these activities than the

level of federal funding might suggest. Using half of the savings to increase Chapter 1 spending would address substantial unmet need for additional compensatory education, especially at the secondary level where little is currently available.

On the other hand, these programs have purposes other than increasing services to students with special needs, and the reductions could pose hardships for some jurisdictions trying to improve the quality of their programs. For example, one goal of the program innovation portion of the vocational education program is to help districts alter their training programs as the skills needed for employment change. Because terminating federal funds would require districts to rely on state and local resources for these purposes, these goals might be less well met.

NDD-30 ELIMINATE FEDERAL FUNDING FOR CAMPUS-BASED STUDENT AID

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Eliminate Campus-Based Aid						
Budget Authority	1,300	1,350	1,400	1,450	1,500	6,950
Outlays	130	1,250	1,350	1,400	1,450	5,550
Eliminate Campus-Based Aid and Redirect Half the Savings to Pell Grants						
Budget Authority	640	670	700	730	750	3,500
Outlays	65	630	670	700	730	2,800

The federal government provides campus-based student aid through three programs: Supplemental Educational Opportunity Grants, Perkins Loans (formerly National Direct Student Loans), and Work-Study. Financial aid administrators at postsecondary institutions determine which eligible students receive aid. In 1989, the federal government provided \$1.3 billion of campus-based aid, which will go to an estimated 1.5 million students.

Eliminating federal funding of these programs would lower outlays by \$5.6 billion during the 1990-1994 period. Alternatively, half of the savings from eliminating these programs could be redirected to the Pell Grant Program, which provides grants for undergraduate students on the basis of family income and financial need and is much more closely targeted on low-income students. The extent of the reduction in total student aid would depend on the responses of postsecondary institutions, some of which would make up part or all of the lost federal funds.

Several arguments have been made for eliminating the campus-based programs. First, the primary reason for federal student aid is to provide access to postsecondary education for those with low incomes, but campus-based aid is not as closely targeted on low-income stu-

dents as other federal student aid is. Second, because campus-based aid is tied to specific institutions, it is not available to students who choose to attend other institutions. Third, substantial error rates have been found in campus-based awards, which exceeded need in over 20 percent of the cases sampled in academic year 1985-1986, the latest year for which data are available.

Eliminating campus-based aid would, however, do more than reduce the amount of student aid available. Because postsecondary institutions determine who gets campus-based aid (within federal law and regulations), eliminating such aid would also reduce their discretion in packaging student aid to address the special situations and unique financial needs of some students. Moreover, these programs disproportionately aid private (nonprofit) institutions (whose students get over 40 percent of this aid compared with 20 percent of Pell Grants), thereby making them more accessible to aided students.

Eliminating campus-based aid but redirecting half of the savings to the Pell Grant Program would mitigate the effects on lower-income students of less total aid. The Pell Grant Program is authorized to provide maximum awards of \$2,700 in academic year 1989-1990, but its appropriation only allows for a maximum award of \$2,300. If redirected funds from campus-based aid programs were available, much of the difference between the authorization and the appropriation levels of maximum Pell Grant awards could be reduced. In addition, Pell Grants allow students a wider choice of postsecondary institutions because they are not tied to specific institutions as campus-based aid is. On the other hand, this alternative to redirect funds to the Pell Grant Program would result in only half the reduction in the federal deficit that would be accomplished by eliminating all campus-based aid.

NDD-31 REDUCE PELL GRANT FUNDING AND INCREASE TARGETING

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	230	240	250	260	280	1,250
Outlays	45	230	250	260	270	1,050

The Pell Grant Program, which provides grants to undergraduate students, is the federal student aid program most focused on low-income students. Reducing federal funding for Pell Grants by 5 percent would lower federal outlays by about \$1 billion during the 1990-1994 period.

Funding appropriated for 1988 will support grants for an estimated 3.1 million students during the 1988-1989 school year. Grants will range between \$200 and \$2,200, averaging an estimated \$1,400 per student. About 45 percent of this aid will go to dependent students--virtually all of them from families with incomes below \$30,000, and over 60 percent of them from families with incomes below \$15,000. Students who are financially independent of their parents will receive the other 55 percent. Since 1987, however, Pell Grants have been somewhat less targeted on the needy because the Higher Education Amendments of 1986 expanded eligibility.

Savings in outlays could be achieved by simply cutting federal appropriations and using reduction formulas available under current law, or the cut could be combined with changes in the rules determining Pell Grant eligibility and awards. The number and types of students affected would depend on how the cuts were structured and on how institutions reacted to the reductions. If the program rules were not changed and the appropriation were reduced, the Secretary of Education could lower students' awards so that the estimated cost of the program would equal the appropriation. Although the Secretary has some discretion on the particular formula used to reduce grants, the grants of the neediest recipients are protected by law. Alterna-

tively, the Congress could change the eligibility rules while still protecting awards for needier students by, for example, eliminating small grants, eliminating the income offset for state and local taxes, or increasing the proportion of income that families would be expected to contribute to educational costs.

Changes such as these would probably not have a large impact on students' enrollment decisions because they would protect the grants of more needy students. Other types of federal aid, notably Stafford Loans, would also be available for some of the affected students. (The costs of these programs would then increase, but these indirect costs are not reflected in the estimated savings for this option.) In addition, some colleges and universities or states might increase their support for student aid, thereby partially offsetting reductions in federal funding.

On the other hand, the students who would lose grant aid under this savings option would generally have lower family incomes than many students who receive other types of federal student aid. Furthermore, because some colleges and universities would not provide more student aid, less assistance would be available in the aggregate.

NDD-32 ELIMINATE OR REDUCE FUNDING FOR ARTS AND HUMANITIES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Eliminate Funding						
Budget Authority	880	970	1,000	1,050	1,100	5,000
Outlays	620	890	980	1,050	1,100	4,600
Reduce Funding by 50 Percent						
Budget Authority	440	490	510	530	550	2,500
Outlays	310	450	490	520	540	2,300

The federal government subsidizes various arts and humanities activities. In 1989, federal funding for the Corporation for Public Broadcasting, the Smithsonian Institution, the National Gallery of Art, the National Endowment for the Arts, and the National Endowment for the Humanities totaled \$840 million.

Eliminating funding for these programs would reduce federal outlays by \$4.6 billion in the 1990-1994 period, while cutting funding in half would save \$2.3 billion during that period. The final effect of either option on arts and humanities activities would depend on the extent to which other funding sources--states, private individuals, firms, and foundations--increased their contributions and on whether admission fees were used to make up for reduced federal funding.

Opponents of federal funding for the arts and humanities say that it is not affordable in a time of fiscal stringency when federal programs addressing central federal concerns are not fully funded. Moreover, because many arts and humanities programs benefit predominantly higher-income people, higher admission fees could substitute for federal aid in many cases.

On the other hand, reducing or eliminating federal appropriations for the arts and humanities would probably result in fewer such proj-

ects because other funding sources would not be likely to offset fully the loss in federal subsidies, all the more so since tax reform has reduced taxpayers' deductions for charitable contributions. As a result, activities that preserve and advance our cultural heritage would be likely to decline.

**NDD-33 REDUCE FUNDING FOR RESEARCH
SUPPORTED BY THE NATIONAL
INSTITUTES OF HEALTH**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	370	390	410	420	440	2,050
Outlays	150	350	390	410	430	1,750

The federal government is expected to spend about \$7.1 billion for health research funded through the National Institutes of Health (NIH) in 1990. About 70 percent of the NIH research budget is awarded to universities and hospitals through research grants, contracts, and centers. The remainder is spent on research within the institutes and for administration. If funds for NIH research were reduced by 10 percent, the 1990-1994 outlay savings would total about \$1.7 billion.

The NIH could reduce research spending in several ways--for example, by reducing the number of grants awarded. Since funding of projects is based on a rating system, proposals with the highest ratings would continue to be supported. The NIH could also limit the overhead costs of research grants, which might have only limited effects on the amount of research actually undertaken. Alternatively, research projects could be funded at 90 percent of cost, thereby encouraging researchers to find additional sources of support for their work.

Advocates of a reduction believe that NIH spending is excessive. They point to its rapid growth--about 78 percent between 1983 and 1989, or 56 percent after allowing for inflation. They also note that operational overhead is consuming a large and growing proportion of NIH's total funding for grants, averaging about 30 percent in 1989.

Opponents of a reduction maintain that cuts would have adverse effects on the country's biomedical research. They contend that some researchers who receive reduced or no funding might leave the field,

because private support would probably not increase enough to offset this reduction. Opponents note that reductions in research funding for some diseases would have to be even higher than 10 percent if funding for high-priority research in Acquired Immune Deficiency Syndrome (AIDS) is to be increased or even maintained at current levels.

NDD-34 ELIMINATE SUBSIDIES FOR THE EDUCATION OF HEALTH PROFESSIONALS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	210	220	230	240	250	1,150
Outlays	90	170	210	220	230	900

The Congress provided funds totaling \$203 million in 1989 to institutions and students to promote graduate education for physicians, nurses, and public health professionals. The three largest programs, funded by the U.S. Public Health Service, are for primary care specialists, nurse midwives and nurse practitioners, and minorities in the health professions:

- o Primary care grants. These subsidies provide incentives for teaching hospitals to expand and improve graduate medical education programs in the primary care specialties. Funding for 1989 is \$63.6 million.
- o Nurse training. These subsidies to nursing schools are designed to increase the numbers of graduates in two specialties--nurse mid-wives and nurse practitioners--and to increase graduate training for nurse administrators. Funding for 1989 is \$55.9 million.
- o Disadvantaged student assistance. This program is the principal federal program designed to increase the numbers of minorities and disadvantaged individuals who pursue careers in the health professions. Only 20 percent of the funds go directly to disadvantaged students; the rest go to the professional schools. Funding for 1989 is \$27.1 million.
- o Other health professions subsidies. The remaining subsidies support a variety of educational efforts, including scholarships, specialized training in geriatric care and pediatric

emergency care, and onsite training in medical personnel shortage areas. Funding for all other health professions activities in 1989 is \$56.7 million.

Eliminating all of these subsidies would save about \$900 million over the period 1990-1994. If, because of concern about a possible nursing shortage, the nursing training subsidies were not eliminated, the savings would be about \$650 million over the period 1990-1994.

Those who oppose the subsidies cite three main reasons for eliminating them. First, they argue that market forces provide incentives for physicians and nurses to prepare for the specialties and locate in the geographic areas of greatest need, because most health care professionals are no longer in short supply. Physicians--the principal health profession targeted by the subsidies--rapidly increased in number from 142 physicians per 100,000 people in 1950 to 161 per 100,000 in 1970 and to 228 per 100,000 in 1985. Second, students in the well-paid health professions should be able to finance their own education by borrowing against their future income. For example, physicians--the highest-paid group--earned an average of \$120,000 in 1986. Nurses, although not as highly paid as physicians, had average starting salaries of about \$20,000 in 1987, comparable with those of business administration graduates in the same year. (Pay for nurses, however, peaks at a lower level than that for many other professions.) Finally, the subsidies--which go mostly to institutions--may have little or no effect on the numbers or characteristics of people studying to be health professionals.

Proponents argue, however, that the subsidies have desirable effects. The incentives supplied by market forces may not suffice in all cases because third-party reimbursement schedules may not reward primary care well enough--particularly outside major metropolitan areas--to get physicians to enter primary care or to go to less-populated areas. Minority and disadvantaged patients may also benefit from having health professionals who share their backgrounds. Finally, any nursing shortage might be reduced by continuing the nurse training subsidies.

**NDD-35 MODIFY THE FEE STRUCTURE FOR
LOCAL AND STATE AGENCIES THAT
ADMINISTER FEDERAL HOUSING PROGRAMS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	40	40	45	45	50	220
Outlays	140	140	140	140	140	700

The Department of Housing and Urban Development (HUD) pays fees to local and state public housing agencies (PHAs) for administering the Section 8 existing-housing and voucher programs. For each assisted household, PHAs receive an annual fee as well as a one-time fixed fee when the new assistance commitment is first issued. Under current policy, the annual fee ranges from 6.5 percent (for vouchers) to 7.65 percent (for Section 8 existing-housing) of the local two-bedroom Fair Market Rent (FMR) for commitments funded from pre-1989 appropriations. This fee is set at 8.2 percent for all program types for commitments funded from the 1989 appropriation. The ceiling for the one-time fee is now typically \$275 per assistance commitment.

A recent study based on newly collected data from a sample of large urban PHAs estimated that actual annual administrative costs for both the Section 8 existing-housing and the voucher programs average about 5 percent of the two-bedroom FMR, but that the average start-up cost amounts to about \$590 per household. Changing the current fee structure to reflect these estimated actual costs would reduce federal outlays by \$140 million in 1990 and by \$700 million over the 1990-1994 period. Such a fee structure would more accurately reflect the costs of providing these types of housing assistance. Moreover, it would equalize fees for programs that were found not to differ in terms of administrative costs, and would eliminate the current administrative complexity under which fees vary according to the year that the commitment was first funded.

This option could, however, impose financial difficulties on some PHAs. For example, in areas where FMRs are low relative to the overall cost of living, reduced fees might not cover actual administrative costs. Also, some PHAs perhaps use their current excess reimbursements to cover shortfalls in funding for other subsidized housing programs that they administer. Moreover, it is not clear whether the study on which these estimated costs are based can be generalized to smaller urban and rural PHAs, which may have patterns in their administrative costs that are quite different from those of the large urban PHAs covered by the study. Thus, some further modifications in the fee structure might be necessary, which could change the estimated federal savings.

NDD-36 SHIFT HOUSING ASSISTANCE FROM NEW CONSTRUCTION TO VOUCHERS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Partially Replace Section 202/8 Program with Vouchers						
Budget Authority	930	960	990	1,000	1,050	4,950
Lending Authority	290	310	320	330	350	1,600
Outlays	a	25	70	120	150	370
Replace Section 202/8 Program with Vouchers						
Budget Authority	1,600	1,650	1,700	1,750	1,800	8,550
Lending Authority	500	520	540	570	590	2,700
Outlays	a	40	120	200	260	610

a. Increase in outlays of less than \$2.5 million.

A number of federal programs administered by the Department of Housing and Urban Development (HUD) address the housing needs of lower-income households. Rental assistance is provided through two basic approaches: subsidies tied to projects specifically constructed for lower-income households, and subsidies that enable renters to choose standard housing units in the existing stock of private housing. In recent years, the production-oriented approach has been sharply curtailed in favor of the less costly existing-housing approach. For 1989, less than one-fifth of additional commitments is for construction of new dwellings, while the remaining incremental aid is provided through the Section 8 existing-housing and voucher programs. The largest new construction program that is still active is Section 202/8 for the elderly and handicapped.

Appreciable savings could be realized by further reducing commitments for the Section 202/8 program--from 9,500 to 4,000, or eliminating them completely, for example--and replacing them with vouchers. Both options would slightly increase outlays in 1990 but would save \$370 million and \$610 million, respectively, over the 1990-1994 period. Additional savings would continue to accrue for more than 20

years thereafter. Short-term savings in outlays would result primarily from reductions in direct loans to developers of the projects, while long-term savings would accrue because of the lower subsidies associated with vouchers compared with Section 202/8 aid. (The reduced need for direct loans would also generate savings in lending authority. The short-term savings in budget authority that would be derived from the shorter contract term of vouchers--5 years versus 20 years--would be offset by higher budget authority in future years if expiring vouchers were renewed for 15 years. In contrast, the savings in budget authority related to the lower subsidies associated with vouchers would not be offset.)

Support for these options comes from those who see little need for subsidizing new construction. The overwhelming housing problem today--according to this view--is the inability of poor households to afford the rents that existing units command, rather than a shortage of rental units. Furthermore, even if there are shortages, subsidizing new construction may merely displace private activity rather than adding to the total housing stock. Moreover, subsidizing new construction can, at best, have an impact only with a long lag because it is slow to be put in place. Vouchers could help alleviate high housing expenditures for poor households at a faster rate and at much lower cost to the federal government than using new construction. In addition, vouchers would give households greater flexibility in choosing where to live.

On the other hand, national statistics on the supply of rental units may mask local shortages in units suitable for the elderly and the handicapped that rent for amounts within HUD's guidelines. Many elderly and handicapped households need housing that can provide special social and physical services not available in their current residences; some analysts contend that the private sector does not respond adequately to these needs.

NDD-37 REDUCE FEDERAL EXPENDITURES FOR LOW-INCOME RENTAL ASSISTANCE PROGRAMS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Reduce Section 8 Subsidies						
Budget Authority	20	40	65	90	120	330
Outlays	160	310	440	570	720	2,200
Reduce Public Housing Operating Subsidies						
Budget Authority	100	210	320	460	600	1,700
Outlays	50	150	270	390	530	1,400

In general, federal rental assistance programs--primarily the Section 8 and public housing programs--administered by the Department of Housing and Urban Development aid lower-income renters by paying the difference between 30 percent of the tenants' adjusted incomes and either the actual cost of the dwelling or, under the voucher program, a payment standard. In 1988, average federal expenditures per household for all rental housing programs combined were more than \$3,300--including both housing subsidies and fees paid to administering agencies.

Savings in outlays could be achieved by reducing federal payments on behalf of recipients. To diminish the impact of this change on assisted tenants, state governments--which currently contribute no funds toward federal housing assistance programs--could be required to make up some or all of the decrease in federal subsidies as a condition for receiving federal rental assistance commitments from newly appropriated funds. Increasing combined tenant and state rent contributions over a five-year period to 35 percent of adjusted income would save \$160 million in federal outlays for the Section 8 programs in 1990 and a total of \$2.2 billion over the 1990-1994 period. Similarly, this option would increase rental income in public housing projects. Federal outlays would fall, however, only to the extent that operating subsidies were decreased in the future. If federal appropriations were

cut by the amount of increased rent collections, savings for public housing would amount to \$50 million in 1990 and \$1.4 billion over the five-year period.

One rationale for involving states in housing assistance is that these programs generate substantial local benefits including, for example, improved quality of the housing stock. If the states became involved and each state paid close to 5 percent of the adjusted incomes of its recipients, housing costs for assisted families would increase little. Moreover, since eligibility for housing assistance is determined by each area's median income, tying states' contributions to tenants' incomes would ensure that lower-income states would pay relatively less per assisted family than would higher-income states. Finally, even if a state contributed little or nothing and tenants' rent payments increased to 35 percent of their adjusted incomes, these out-of-pocket costs would still be well below the nearly 50 percent of income that the typical renter who is eligible for assistance now pays.

On the other hand, unless all states made up the full reduction in federal assistance, this strategy would increase housing costs for some current recipients and generate unequal treatment of assisted renters across the nation. Moreover, raising rent payments could prompt some stable, slightly higher-income tenants to leave assisted housing projects in areas of the country where unassisted housing of the same quality would now be cheaper. This outcome would change the economic mix of households in these projects, reduce their viability, and increase the average cost of subsidizing them.

NDD-38 REDUCE FUNDING OF NEW HOUSING ASSISTANCE COMMITMENTS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	4,600	4,800	4,950	5,150	5,350	24,850
Outlays	15	420	1,050	1,800	2,500	5,750

Since 1975, the Department of Housing and Urban Development (HUD) has made new commitments each year under the Section 8 and public housing programs to provide housing assistance for a number of lower-income households in addition to those already receiving aid. The Congress determines the amount of the additional assistance and the terms for which funding is committed, which have ranged historically from 5 to 40 years. By the end of fiscal year 1988, about 4.5 million assistance commitments, mostly in the form of rent subsidies, were outstanding for all housing programs combined, and about 4.2 million households actually received aid. As of 1989, commitments that were made some time ago will start to expire--1,437 in 1989 and more than 950,000 over the 1990-1994 period.

If new commitments were funded in 1990 and thereafter at the rate assumed in CBO's baseline, the total number of outstanding commitments would fall to about 4.0 million by 1994. This would happen because the baseline does not assume that all expiring commitments will be renewed. Rather, it assumes a continuation of the program mix and the real level of funding stipulated by the 1989 appropriation--that is, around 98,000 new commitments of which some 14,000 would be earmarked for so-called nonincremental commitments, including only 1,400 for replacing expiring subsidies. In spite of the net decrease in assisted households, outlays in current dollars for all housing programs combined would continue to increase, from \$14.0 billion in 1988 to almost \$16.5 billion by 1994, because of inflation in rents and particularly because of the relatively large expenditures being incurred for the upfront grants that now finance construction and modernization of public housing units.

Appreciable savings could be realized if real funding for new commitments for the next five years were restricted to the level of nonincremental activities provided by the 1989 appropriation. That is, new budget authority could be restricted to the 1989 level of funding (adjusted for inflation) for modernizing decaying public housing projects and to funding for approximately 14,000 nonincremental commitments, including the roughly 1,400 for replacing expiring subsidies, each year. This option would generate reductions in outlays of \$15 million in 1990 and \$5.8 billion over the 1990-1994 period, with additional savings continuing to accrue for up to 20 years more, when all contracts assumed to result from 1990-1994 budget authority under the baseline projections would have expired.

A rationale for this option, besides decreasing outlays, is that the existing uneven treatment of households in similar economic circumstances--some of whom receive subsidized housing and some of whom do not--would be reduced, particularly if some of the savings were redistributed in the form of direct cash payments to all households eligible for but not receiving housing assistance. On the other hand, fewer than 35 percent of all eligible renters can be served with currently available aid, according to a recent CBO estimate, and the amount of funding assumed in the CBO baseline is not sufficient to continue assisting all households that now receive aid. Thus, the proportion of eligible households aided would decline more rapidly and the need to ration aid would increase faster under this option. Households that would face increased housing costs might be forced to move from their current residences unless their landlords reduced their rents.

NDD-39 ELIMINATE OR SCALE BACK LOW-INCOME HOME ENERGY ASSISTANCE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Eliminate Program						
Budget Authority	1,450	1,500	1,550	1,650	1,700	7,850
Outlays	1,300	1,500	1,550	1,600	1,700	7,700
Scale Back Program						
Budget Authority	720	750	780	810	850	3,900
Outlays	660	750	780	810	840	3,850

The most recent program providing aid to reduce home energy costs for low-income households is the Low Income Home Energy Assistance Program (LIHEAP). Authorized by the Omnibus Budget Reconciliation Act of 1981 and administered by the Department of Health and Human Services, the LIHEAP provides funds to states, which may use their program allotments to help eligible households pay their home heating or cooling bills, to meet energy-related emergencies, or to fund low-cost weatherization projects. Although states can establish additional criteria for program eligibility, federal rules specify that the states must start with one of two basic criteria. Households in a state may be eligible for aid if their incomes are less than the greater of 150 percent of the federal poverty threshold or 60 percent of the median income in their state. Alternatively, households may be eligible if they receive aid from certain other programs, such as Aid to Families with Dependent Children or Supplemental Security Income. (See ENT-21 for a proposal to count LIHEAP assistance as income in the AFDC and the SSI programs.) In addition to these basic criteria, federal law requires states to give preference to households with the highest energy costs when disbursing LIHEAP funds. Although precise data are not available, there is some evidence that only some of the households that satisfy these conditions actually receive aid. In some cases, additional state eligibility requirements, combined with constraints on federal funding, limit the number of eligible

households actually assisted. In other cases, states may assist all the eligible households that apply for aid, although applicants represent only a fraction of those who are eligible.

Eliminating the LIHEAP would result in outlay savings of \$7.7 billion between 1990 and 1994, while reducing future appropriations by 50 percent would lower outlays by about half of that amount. Although the LIHEAP and its predecessor energy assistance programs were created in response to the rapid price increases between 1972 and 1980 of energy used in the home (most notably fuel oil), the real costs of many types of energy have returned to their levels of the early 1970s, which could justify either eliminating or scaling back the LIHEAP. On the other hand, in states with severe winter or summer weather, doing so could result in some low-income households being forced to choose between paying their energy expenses and paying for other household necessities. Moreover, an advantage of retaining the program at some level would be the flexibility to distribute more quickly any future increases in funding that might be needed to respond to future increases in energy prices.

NDD-40 CLOSE INEFFICIENT OR UNDERUSED UNITS IN VETERANS ADMINISTRATION HOSPITALS

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	55	110	130	150	150	590
Outlays	55	110	130	140	150	590

The Veterans Administration (VA) operates a nationwide medical care system that includes 172 hospital centers, 119 nursing homes, and 233 outpatient clinics. Many of the facilities are treating increasing numbers of patients: most of these hospitals are large and have been modernized and kept well staffed, thereby maintaining access to high-quality care for eligible veterans. In contrast, some facilities have experienced a declining demand for services, such as major surgery or general acute-care procedures, often as the result of declining local veteran populations. At some centers, low demand for care has made it difficult to maintain a skilled medical staff. The VA plans to add 363 nursing home beds through conversion of hospital beds in 1990.

The VA could achieve greater efficiency in its system by ceasing operation of a larger number of small hospitals or underused hospital units or by converting them into facilities offering services that are in greater demand. If only about 2 percent of VA hospital beds were selected for closing, federal savings would total about \$425 million between 1990 and 1994. The criteria for selecting units could include the existence of adequate alternative sources of care, as well as low use rates for the VA facilities. Complete conversion of facilities to nursing homes or outpatient clinics might also be appropriate in some areas, and could yield a further \$165 million over the five-year period.

The advantage of this strategy is that it would reduce the number of expensive surgical and other acute-care units with low average case-loads or occupancy rates. Recent VA studies indicate that at least 10 percent of VA hospitals fall into the underused category for

one or more of their acute-care services. Transferring such operations to other VA hospitals or to adequate private facilities would not eliminate VA care for veterans, but it would provide needed care more economically. To the extent that veterans were transferred to facilities with greater professional resources, it would also improve their quality of care.

This option could have the effect of reducing access to services for some veterans who might perceive that VA care was no longer available to them. Even if this were not the case, if closings were in areas without other facilities--especially rural areas--some veterans could find it more difficult to obtain care.

NDD-41 END FUNDING FOR THE LEGAL SERVICES CORPORATION

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	320	340	350	360	380	1,750
Outlays	280	330	350	360	380	1,700

The Legal Services Corporation (LSC)--an independent, not-for-profit organization--supports free legal assistance to the poor in civil matters. About 300 state and local agencies receive LSC grants that are paid for by federal appropriations. President Reagan's 1990 budget proposes, as did previous budgets, that the Corporation not be re-authorized, and that no further funds be provided. Terminating federal appropriations to LSC would generate five-year outlay savings of \$1.7 billion through 1994.

From its inception in 1974, the LSC has been the subject of much controversy. Proponents of this option charge that the activities of legal aid lawyers too often focus on the advancement of social causes rather than on the needs of poor people with routine legal problems. LSC critics believe that the responsibility for legal assistance to the poor should rest not with the federal government but with states and localities. From this perspective, reprogrammed support from other federal grants and expanded support from private sources, including donated services, could help to meet local needs for legal aid. Federal funds for social services block grants totaled \$2.7 billion in 1988, nearly nine times the funding level for LSC. Nonfederal donations make up about 25 percent of cash resources at the field level, and in recent years services donated by private attorneys have expanded greatly. This option, critics argue, would give localities more control over legal aid programs, and would thus permit services to be more responsive to local needs.

Opponents of the option argue that a specifically targeted federal assistance program is the only way to ensure that legal aid is avail-

able to people who cannot pay. They point out that the inadequacy of local and private support was one of the factors that led to direct federal financing in the first place, and they believe that a strong federal program provides essential oversight and national direction. Some even argue that federal support should be increased. Also, in response to the continued criticism that LSC lawyers act too often as social activists, proponents of the program point out that the Congress, through legislation, has curtailed the activities that some observers find objectionable.

**NDD-42 MODIFY THE DAVIS-BACON ACT BY RAISING
THE CONTRACT THRESHOLD AND
ALLOWING UNRESTRICTED USE OF HELPERS**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	670	680	700	730	760	3,550
Outlays	170	410	540	610	660	2,400

Since 1935, the Davis-Bacon Act has required that "prevailing wages" be paid on all federally funded or assisted construction projects of \$2,000 or more. Procedures for determining prevailing wages in the area of a construction project, and the classifications of workers receiving them, in some cases favor union wage rates, although recent changes in regulations have lessened this effect. The act also provides incentives to use journeymen rather than lower-wage, less-skilled workers such as helpers. Under current regulations, wages for helpers are usually not determined separately, with the result that most workers on covered projects are paid journeymen's wages.

Federal outlays for construction could be reduced by raising the threshold for determining projects to be covered by Davis-Bacon, by allowing unrestricted use of helpers, or by doing both. The specific option depicted in the table would raise the threshold from \$2,000 to \$250,000 and allow unrestricted use of helpers. These measures would reduce outlays by about \$175 million in 1990 and about \$2.4 billion over the 1990-1994 period, assuming that federal agency appropriations were reduced to reflect the anticipated cost savings. About 30 percent of the savings would be in the national defense budget function. Most of the savings would result from the increased use of helpers; allowing their unrestricted use, while not changing the threshold, would reduce outlays by about \$2.2 billion over this five-year period. (Allowing unrestricted use of helpers and raising the threshold to \$25,000 or to \$1 million would reduce outlays over this five-year period by about \$2.2 billion or \$2.7 billion, respectively.)

Relaxing Davis-Bacon standards would help reduce the cost of federal construction projects. In addition, unrestricted use of helpers probably would increase employment opportunities for less-skilled workers on federal projects. Raising the project threshold to \$250,000 would exclude about 7 percent of the value of all contracts currently covered by the act. (Setting the threshold at \$25,000 would exclude only 1 percent of the value of all contracts currently covered, and setting it at \$1 million would exclude about 19 percent.)

On the other hand, such changes would lower the earnings of some construction workers. Moreover, opponents argue that relaxing Davis-Bacon standards could jeopardize the quality of federally funded or assisted construction projects.

**NDD-43 MODIFY THE SERVICE CONTRACT ACT
BY ELIMINATING THE
SUCCESSORSHIP PROVISION**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	130	140	140	150	150	710
Outlays	120	140	140	150	150	700

The McNamara-O'Hara Service Contract Act of 1965 sets basic labor standards for employees working on government contracts in which the principal purpose is to furnish labor services, such as laundry, custodial, and guard services. Contractors covered by this act generally must provide their employees with wages and fringe benefits at least equal to those prevailing in their locality or those contained in a collective bargaining agreement of the previous contractor. The latter provision applies to successor contractors regardless of whether their employees are covered by a collective bargaining agreement.

One method of reducing the cost of services procured by the federal government would be to permit successful bidders to pay lower wage rates or provide less in fringe benefits than their predecessors, as long as they satisfied the rules governing prevailing wages. Doing so would reduce outlays by about \$120 million in 1990 and about \$700 million over the 1990-1994 period, assuming that federal agency appropriations were reduced to reflect the anticipated cost savings. About 60 percent of the savings would be in the national defense budget function.

In addition to reducing federal procurement costs, this option could promote greater competition among contractors. The current rule is likely to discourage potential new contractors from bidding on contracts in which the existing provider has a collective bargaining agreement, unless they have similar agreements.

On the other hand, the successorship provision is intended to prevent bidders from undermining existing collective bargaining agreements. Eliminating this provision would probably reduce the compensation of workers in some firms that provide services to the government. Some supporters of the provision argue that a reduction in compensation would, in turn, reduce the quality of such services.



CHAPTER VI

FEDERAL WORK FORCE

In 1989, the federal government will disburse about \$135 billion to meet its civilian employee payroll and to cover the costs of benefits, including those for former employees and their families. Such spending, representing about 12 percent of federal outlays, is often targeted for reduction in debates on the federal budget deficit. This section presents eight options for reducing costs associated with the government's civilian work force--five address employee pay and benefits, one addresses government travel expenses, and two address the size of the federal work force. Most of the items in the chapter are variations on or extensions of measures the Congress has considered or adopted in past efforts to reform government operations and control costs. Most also derive a substantial portion of their savings from the Department of Defense, which employs almost half of all civilian employees outside the Postal Service.

Consistent with past actions on federal pay, the first option (FWF-01) suggests different approaches to limiting the size of annual pay raises for federal civilian employees. Options FWF-02 and FWF-03 address the savings associated with providing less generous retirement benefits. The restrictions on future cost-of-living adjustments described in FWF-03 build on reforms adopted in 1986 for both military and civilian retirement.

Option FWF-04 presents two approaches for requiring the U.S. Postal Service to bear the cost of certain retirement benefits currently funded by federal taxpayers. FWF-05 describes how the costs of employee health insurance could be reduced by extending to the Federal Employees Health Benefits program a hospital payment reform similar to that adopted earlier for military health insurance.

Options FWF-06 and FWF-07 both would reduce the federal civilian payroll, the former by cutting federal civilian employment across the board, the latter by relying more on private firms for federal ser-

vices. The last option (FWF-08) would limit funding for employee travel in nondefense agencies.

Many of the options require reductions in agency spending to realize the savings indicated. The Congress could achieve such reductions by cutting agency appropriations or by authorizing and directing the Office of Management and Budget to withhold funds from agencies. Without such actions, the affected agencies could use the savings for other purposes. The Department of Defense, for example, has applied savings from payroll cuts and similar measures in the past to other national security areas. All the savings estimates set out in this section assume that each reduction measure would be implemented alone. If they were implemented together, savings would be less than the sum of the amounts indicated for each item.

FWF-01 LIMIT PAY ADJUSTMENTS FOR FEDERAL CIVILIAN EMPLOYEES

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	

Eliminate Increase for One Year and Delay Effective Date for Subsequent Adjustments by Three Months

Budget Authority	2,250	3,800	3,900	4,050	4,250	18,250
Outlays	1,900	3,650	4,050	4,200	4,400	18,150

Limit Adjustments to CPI Increase Minus Two Percentage Points for Five Years and Delay Effective Date by Three Months

Budget Authority	1,250	2,300	3,400	4,750	6,250	17,950
Outlays	1,050	2,150	3,300	4,650	6,200	17,400

The nation's 2.2 million federal white- and blue-collar employees may receive annual pay increases under procedures that compare federal and private-sector salaries for comparable jobs. Largely because of budgetary pressures, however, annual governmentwide federal pay raises have been strictly curtailed during the past decade. In 1986, no increase was allowed; and in other years the increase was held well below the level necessary to achieve comparability. From January 1985 through January 1989, annual raises in federal wage and salary scales have averaged 2.5 percent--about one percentage point below increases in both private-sector rates and the rate of inflation.

The Congress could again target federal pay for budget reduction. This option includes two alternatives, both of which would maintain the current practice of delaying the annual effective date of raises by three months. (White-collar workers' pay would continue to rise in January rather than in the preceding October as authorized by law.) One alternative would also eliminate the pay increase in 1990. In this case, savings would accumulate to \$18.2 billion over the next five years. If, as in the second alternative, annual January pay raises through 1994 were kept two percentage points below the previous year's increase in inflation, outlay savings would accumulate to \$17.4 billion over the same period. (In calculating changes in inflation, CBO

used its projections of the Consumer Price Index, third quarter over third quarter.) While the latter alternative produces about the same savings over five years, savings in the first year total only half of those achieved by skipping a raise altogether. In both cases, about half the savings derive from national defense activities.

The savings estimates are measured against CBO's baseline, which uses the authorized effective dates. (President Reagan's budget assumes a continuation of the practice that amends the law each year to make federal white-collar adjustments effective in January. The Administration's projected increases in federal civilian pay through 1994 average 2.4 percent, almost two percentage points below those assumed in CBO's baseline.) To realize savings, the Congress would need either to lower appropriations in recognition of reduced agency spending for pay, or to institute a mechanism that prevents agencies from spending funds already appropriated.

Advocates of pay limits argue that they are necessary in light of projected large budget deficits. The options set forth here, moreover, would not differ that much from recent practice. Supporters of capping adjustments point out that such action would result in average annual adjustments of about 2.2 percent--only about 0.3 percentage points under the average annual adjustments over the preceding five years. Other supporters of pay limits claim that federal employees receive higher pay than their counterparts in the private sector with similar experience, education, and other demographic characteristics.

Critics of pay limits question the fairness of asking federal employees for further sacrifices on behalf of the federal budget--especially at a time when the demand for government services is growing. They point out that not once since October 1977 have federal pay adjustments occurred at the levels provided under law to make federal pay comparable with private-sector rates. The case against pay limits, however, rests largely on concerns about the ability of the federal government to compete with the private sector to get and keep a well-qualified work force. Concerns about the competitive position of government have been reinforced by a recent report from the Office of Personnel Management and by the work of the Commission on the Public Service (a public interest group headed by Paul Volcker, former Chairman of the Federal Reserve Board). They predict that changes in the nature of federal work and the people available to do it will

make hiring and retention much more difficult in the future. Federal agencies already report problems in hiring and retaining workers for critical jobs, in part because of low pay. Major regional offices of the FBI, for example, report losing many of their most experienced special agents and having problems finding suitable replacements. The Department of Defense has experienced some problems in hiring and retaining scientists and engineers. According to the General Accounting Office, the government has had trouble attracting and retaining flight controllers, revenue agents, and computer specialists.

Because of these concerns, critics question the wisdom of adopting federal pay limits that could lead to a further decline in real wages of as much as 10 percent; they point out that, on average, salaries for white-collar federal jobs are already estimated to lag more than 25 percent behind rates for comparable private-sector jobs. This assessment, based on government surveys of private-sector compensation set for particular job descriptions, differs from those based on comparisons of income reported by federal and nonfederal workers with similar characteristics. Differences in survey design and analytic methodology may account for the different assessments. Critics of the government's surveys say that they do not give proper recognition to the size of the employing organization and to pay differences among local labor markets. Critics of the other income analyses--which usually show the federal employee receiving a salary premium--challenge their use of old data, their small sample size, and their failure to recognize pay differences that might reflect the quality of workers employed, the type and level of job duties, and the federal government's equal opportunity practices.

Finally, instead of specifically targeting federal pay for reduction, the Congress could always consider pay limits as part of a broad effort to curtail cost-of-living adjustments (COLAs) for federal programs. (ENT-24 would limit COLAs on non-means-tested entitlements like Social Security, and REV-02 would repeal the indexing of income tax schedules.)

**FWF-02 REDUCE FEDERAL EMPLOYEE
RETIREMENT BENEFITS**

Savings/Additions Relative to CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Totals
	1990	1991	1992	1993	1994	
Restrict Agency Match on Thrift Plan Contributions to a Uniform 50 Percent Rate						
Outlays	130	200	230	250	280	1,090
Base Initial Benefit on Four-Year Average Annual Salary						
Outlays	5	30	80	140	200	455
Raise Employee Pension Contributions by 0.5 Percent of Pay						
Additional Revenues	400	400	500	500	500	2,300

Federal civilian workers hired after January 1984 must participate in Social Security's retirement and disability program. To supplement this coverage, the Congress enacted the Federal Employees Retirement System (FERS) to provide these workers with a defined-benefit pension plan and a tax-deferred Thrift Savings Plan that includes matching employer contributions. The number of FERS employees, currently estimated at 0.9 million, will continue to grow over the next decade because all new hires will be covered. The Congress also provided the 2.2 million workers hired before January 1984 with a choice of retirement plans. They could remain covered by the Civil Service Retirement System (CSRS), or they could join FERS. More than 2 million workers elected to continue their CSRS coverage; since then, mainly as the result of retirements, the number has declined to 1.9 million. These CSRS workers can also participate in the Thrift Savings Plan, but do not receive matching employer contributions.

The Congress could curtail retirement costs to the government, as employer, by increasing employee contribution rates for CSRS and

FERS, by moderating initial benefit levels, or by restricting the agencies' matching rate on voluntary contributions made by FERS employees to the Thrift Savings Plan. A lower matching rate would not automatically result in budgetary savings, however, unless commensurate reductions in agency spending were achieved--either by authorizing the Office of Management and Budget to withhold funds or by appropriating lower funding levels. Limiting the postretirement indexation of federal pensions offers another approach to reducing benefit costs. (See ENT-24 and FWF-03.) President Reagan's proposed budget would disallow a cost-of-living adjustment for 1990 and, in general, limit subsequent annual adjustments to one percentage point below the change in the Consumer Price Index.

The strongest case against these options is that the relative generosity of federal retirement programs has served as a substitute for below-market pay. Erosion of the value of the retirement package, with no change in federal pay practices, would lower total compensation and would eventually affect the quality of the federal work force.

Restrict Agency Match on Thrift Plan Contributions. On behalf of any worker covered by FERS, federal agencies automatically contribute 1 percent of individual earnings to the Thrift Savings Plan. In addition, any voluntary deposits made to the Thrift Plan by a FERS participant, up to 5 percent of earnings, are matched by the employing agency. But the marginal rate of the agency match declines with the level of voluntary savings: agencies match employee deposits up to 3 percent of earnings at a 100 percent rate, and deposits between 3 percent and 5 percent at a 50 percent rate. If an employee deposits 5 percent of pay, for example, the agency match equals four percentage points, or an average match rate of 80 percent.

This option would continue the automatic 1 percent contribution, but would match employee deposits up to 5 percent of pay at a uniform rate of 50 percent. The total maximum agency contribution to the Thrift Savings Plan would thus decline from 5 percent of covered earnings to 3.5 percent. Assuming a January 1990 effective date, reducing the employer match would produce five-year outlay savings estimated at \$1.1 billion. (Agency contributions to the Thrift Savings Plan are treated as federal outlays, similar to disbursements for wages and salaries. About half of the outlay savings would derive from national defense functions. The estimates exclude savings realized by

the Postal Service, which would total \$0.3 billion through 1994, because operating cost reductions eventually benefit mail users rather than U.S. taxpayers.)

Alignment with practices representative of private employers is a long-standing goal for federal employees' compensation. But total federal compensation is less than what it would be if the government adopted typical private-sector pay and benefit provisions. Higher federal pay rates coupled with lower deferred compensation from the government's retirement and thrift plans would improve comparability. Private employers typically match an individual's voluntary thrift plan deposits up to 6 percent of pay at a 50 percent rate. Thus, the federal thrift plan as modified by this option would remain superior to most employer-provided matches because of the 1 percent automatic agency contribution. Reducing the government's thrift plan contributions could help justify higher federal pay—at least for those positions for which it is difficult to attract and retain highly qualified workers—although doing so would erode the budgetary savings.

Because the FERS program is so new, changing a major element like the Thrift Savings Plan could be perceived as unfair. It would tend to discredit new retirement system commitments—reached after more than two years of analysis and debate by the Administration, the Congress, and employee representatives. Especially hard hit by changes in FERS would be higher-salaried professional and administrative employees. These workers, who already face some of the widest salary disparities with the private sector, are more likely than other FERS employees to participate in the savings program. Many of them elect to make voluntary contributions at or above 3 percent of earnings, and halving the 100 percent agency match would be roughly equivalent to a 1.5 percent pay cut for this relatively small group. The former CSRS employees who elected to transfer their future federal retirement coverage to the FERS program (about 100,000) would also feel cheated. If the government decided to renege on its commitment to the original thrift matching rates, these workers might demand a chance to reconsider their decision.

Moderate Initial Benefit Levels. Both CSRS and FERS calculate initial benefits based on the employee's highest average annual salary over three years. This option would institute a four-year average; five years is generally used for defined-benefit pension plans in the private

sector. Adopting the four-year average would cut new retirees' pensions on average by 2 percent to 3 percent. To discourage workers from accelerating their planned date of retirement in order to avoid a benefit cutback, any change in calculating benefit levels could be phased in. For estimating purposes, CBO assumed that the salary base would increase from 36 months to 48 months during 1990. Through 1994, this would save less than \$0.5 billion. Another approach would grandfather the three-year average for employees currently eligible to retire. But this would produce even smaller outlay savings through 1994. As more and more employees retire, however, either approach would generate significant savings over the long run. On an actuarial or long-term accrual cost basis, the change in the salary base used for calculating retirement benefits would save the equivalent of 0.7 percent of CSRS-covered payroll and nearly 0.5 percent of FERS. (Because the pension for CSRS is larger than the defined benefit portion of the FERS annuity, the savings impact would be larger.)

CSRS and FERS employees would argue that their retirement benefits have already been cut indirectly by caps on annual federal pay raises. During the 10 years ending December 1988, the rise in private-sector salaries and wages as measured by the Employment Cost Index exceeded the cumulative increase in federal pay rates by about 20 percent. A 1 percent federal civilian pay raise over a 12-month period costs about \$0.7 billion. Thus, any serious attempt to correct the existing imbalance between federal and private pay rates would cost much more than the retirement savings available from adopting a four-year average salary base.

Raise Employee Pension Contributions. Compared with the typical cost of private employer-provided retirement benefits (pensions and capital accumulation plans coupled with the costs of Social Security), CSRS and FERS benefit costs are high. Although mandatory retirement contributions for most CSRS employees are 7 percent of pay (and FERS employees pay less than 1 percent in addition to their Social Security contributions), the cost to the employer is still higher than in private plans. Thus, increasing CSRS and FERS employee contributions by 0.5 percent of pay would improve the alignment between the federal government's cost of retirement benefits and those of private employers. It also would lower the 1990 deficit by \$0.4 billion and generate cumulative savings through 1994 of \$2.3 billion.

(The estimated savings represent the increase in federal revenues without the corresponding outlay increases for workers who leave the government and elect to withdraw their pension contributions plus applicable interest earnings. In 1994, these additional outlays would total less than \$50 million.)

By reducing take-home pay, this option is about equal to a cut in the next general pay adjustment of 0.5 percentage points. (See FWF-01 for options to curtail federal pay raises directly.) From the employees' perspective, a pay cut affects career and noncareer workers equally, whereas hikes in pension contributions can be recovered by non-career workers when they leave federal service.

**FWF-03 RESTRICT COST-OF-LIVING ADJUSTMENTS
FOR FEDERAL RETIREES UNDER AGE 62**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1989	1990	1991	1992	1993	
Eliminate COLAs						
Military Retirement	430	1,000	1,650	2,300	3,000	8,380
Civilian Retirement	110	210	290	350	390	1,350
Total	540	1,210	1,940	2,650	3,390	9,730
Cap COLAs to CPI Increase Minus One Percentage Point						
Military Retirement	90	210	350	500	670	1,820
Civilian Retirement	20	50	70	100	130	370
Total	110	260	420	600	800	2,190

NOTE: Amounts represent outlay savings.

The Civil Service Retirement System (CSRS) and the Military Retirement System (MRS) now provide benefits for about 3.7 million people at an annual cost of \$50 billion. Continued indexing of these benefits to inflation, as measured by the Consumer Price Index (CPI), will generate cumulative outlays through 1994 of \$35 billion. About 60 percent of MRS beneficiaries and 10 percent of CSRS beneficiaries are nondisabled retirees under age 62. Benefit payments in 1989 for this relatively young group will exceed \$14 billion. Cost-of-living adjustments (COLAs) for federal retirees under age 62 are fully paid for by the government and are expensive relative to adjustments available under the largest and most generous private pension plans.

Eliminating COLAs or capping COLAs to the inflation rate less one percentage point (CPI minus one) for nondisabled federal retirees until they reach age 62 would reduce five-year outlays by \$9.7 billion and \$2.2 billion, respectively. Each of these alternatives would grant a catch-up raise at age 62 to account for the inflation since retirement. Full COLAs would be provided after age 62. (Although the catch-up

adjustment would restore the monthly pension to what it otherwise would have been at age 62, the annuitant would not be compensated for the smaller benefit payments received during the period COLAs were either eliminated or capped.) Over 90 percent of the losses would be taken by current retirees, and the rest by those retiring in the next five years.

Military and civilian retirement reforms enacted in 1986 reduced the future cost of federal pensions for newly hired employees. The military system reforms curtail pension benefits for newly hired armed-services personnel by reducing most initial annuities and by capping COLAs at CPI minus one. In addition, these future military retirees will receive a catch-up adjustment, at age 62, that restores the purchasing power lost since retirement. Nondisabled civilian retirees under the new Federal Employees' Retirement System, on the other hand, will not receive any COLA until age 62, nor any catch-up raise for price increases since their retirement. For both groups, COLAs awarded after age 62 are generally limited to CPI minus one. But COLAs for individuals who remain covered by the old CSRS and MRS systems are unaffected--still set at 100 percent of the CPI. (The budget proposed by President Reagan would deny the 1990 COLA and, with some variations, limit subsequent annual adjustments to CPI minus one.)

Eliminating or capping COLAs for individuals before age 62 who are now covered by the old CSRS and MRS systems would moderate the government's cost for early retirement. Either approach would reduce protection from inflation and thus real benefits for relatively young federal retirees. Most of these individuals, of course, should be able to supplement their income by taking other jobs. The loss in retirement income would be especially pronounced for nondisabled MRS employees, who retire at an average age of 43. But at age 62 and beyond, COLAs for federal pensions would remain more generous, with the catch-up, than would the partial inflation protection for those receiving private pensions combined with Social Security. About one private-sector retiree out of four receives Social Security benefits and an employer-sponsored pension. Private pension COLAs may recover--over the long run--30 percent to 40 percent of general price increases, but neither the timing nor the size of the adjustments is guaranteed. Of course, Social Security COLAs are automatic and keep

pace with inflation; but employees cannot draw Social Security retirement until age 62.

Because considerable planning and changes in personal affairs often precede decisions to retire, changing the rules for people after they retire could be perceived as unfair. CSRS employees who elected not to join the new retirement program mainly because of its weaker COLAs would also feel shortchanged. (Another proposal, FWF-02, would reduce benefits under the new retirement system.) Moreover, many critics would contend that federal workers traditionally have accepted a compensation package that provided superior pensions at the expense of lower pay. They might also argue that future budgetary pressures could either erode the size of the proposed catch-up adjustment or delay it beyond age 62. Finally, restricting COLAs for military retirees would diminish the financial reward for many now making a career of military service. Over the long term, adopting the no-COLA approach would cause an estimated 55,000 officers and enlisted personnel to depart early--eventually lowering average military service and experience levels by about 5 percent. The increase in departures of personnel with more than four years of service would result, over time, in a less experienced military force.

There are other restrictions on COLAs the Congress could consider to generate near-term savings. One possibility would be to curtail adjustments for all nondisabled CSRS, MRS, and Social Security annuitants (see ENT-24, which would restrict federal retirement and Social Security COLAs). Other possibilities could pivot directly--or indirectly, like the two options introduced above--on the beneficiary's earnings capability. In general, financial hardships from smaller COLAs would be more pronounced for disabled and survivor annuitants than for the relatively young retirees targeted here, who should be in a better position to face a temporary loss in real benefits. Presumably, these young retirees are able to supplement their federal pensions by working--as most military retirees already do.

**FWF-04 CURTAIL THE INDIRECT RETIREMENT
SUBSIDY TO THE U.S. POSTAL SERVICE**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
10 Percent Payroll Surcharge						
Outlays	0	1,500	1,400	1,400	1,400	5,700
Amortize New COLA Liabilities						
Outlays	0	50	130	220	320	720

As an employer, the U.S. Postal Service (USPS) makes two types of payments for the future cost of employee retirement benefits provided under the Civil Service Retirement System (CSRS). One, set at 7 percent of pay, matches the contribution of postal employees who participate in the CSRS program; the other, referred to as the "amortization payment," helps finance the future benefit increases that result from collectively bargained pay raises. But the costs associated with indexing CSRS benefits to increases in the cost of living are not funded by these payments, which will total \$2.6 billion in 1989. Neither are these costs paid by postal employee contributions. Such postretirement increases are expensive and paid for by the U.S. taxpayer rather than by the mail user. Because the costs are not recognized in the pricing of postal services, mailers receive an indirect subsidy from the government. Shifting costs to postal customers would affect businesses more than households because about 90 percent of mail volume is business related. The additional postage revenue generated by requiring the USPS to fund cost-of-living adjustments (COLAs) for its retirees, depending on the particular method selected by the Congress, could cut accumulated deficits through 1994 by \$0.7 billion to \$5.7 billion. This option describes two alternative approaches to funding COLAs--adopting a payroll surcharge or expanding amortization payments. (Option NDD-15 would increase postage revenue from certain mailers by curtailing direct subsidies appropriated to USPS.)

Advocates of discontinuing the indirect federal COLA subsidy, however it is done, believe that postal customers should bear the full cost of the services received. The Postal Service is already charged, unlike other federal operations, for increased CSRS pension liabilities caused by collectively bargained pay raises and for the employer's share of annuitant health insurance costs for postal workers retiring after September 1986. Extending the USPS financial responsibility to future COLAs would lessen the federal budget's burden and would support, within the communications industry as well as within the USPS, a more efficient allocation of resources.

Supporters of the status quo argue that shifting financial responsibility to the Postal Service for retirement COLAs would add pressure to raise postage rates at a time when increases may be higher and more frequent than in the past. Others believe that the indirect COLA subsidy should continue in light of the many ways that federal statutes increase postal operating costs. For example, the USPS has only limited authority to negotiate reductions in fringe benefits provided postal workers; it must deliver the mail six days a week; and it cannot close small post offices solely because they are not self-sustaining. Postage rate payers argue, moreover, that it is too early for additional changes. The retirement and annuitant health care financing changes enacted in 1986, they point out, already hit the postal customer for higher user fees to fund fringe benefits. (Under retirement reforms enacted in June 1986, postal customers now fund the future COLA expenses for newly hired postal employees covered by the Federal Employees Retirement System. The FERS funding requirements, which apply to all federal agencies, use actuarial methods to estimate pension costs as a fixed percentage of the payroll. These amounts plus investment earnings should, at the time of retirement, provide sufficient resources to cover overall benefit payments--including the projected costs of COLAs.)

Institute a 10 Percent Payroll Surcharge. Congress could require the USPS to recognize and pre-fund COLA liabilities for current postal workers participating in the CSRS program. As a supplement to existing financing arrangements, this approach could increase the USPS agency contribution from 7 percent to 17 percent of payroll, but would not alter requirements for pay amortization payments nor for employee payroll withholdings. The effective date coincides with the next general rate increase, which CBO assumes will occur in October

1990. By assigning costs as a fixed percentage of covered payroll, as the new FERS system does, the USPS would only incur financial responsibility for COLAs awarded to annuitants who retire after the next postage rate increase. The COLA surcharge would push up postage revenue requirements by an amount just under that provided by an increase equivalent to a 1-cent hike for first-class stamps. (A detailed description of this approach is presented in the CBO staff working paper, "Alternatives for U.S. Postal Service Funding of Certain Employee Benefits," August 1988, pages 6-9.)

Difficulties with the 10 percent surcharge approach include its sheer size--at least a 50 percent increase over current law costs for CSRS benefits--and its sensitivity to long-term assumptions, particularly the underlying economic variables. Critics also might argue that the Congress should assign any COLA surcharge to all agencies rather than to the USPS alone. But this objection overlooks the revenue-generating aspect of USPS, the cost of its operating budget, and its legislative requirement to recover costs from mail users and thus operate on a self-sufficient basis.

Amortize New COLA Liabilities. As an alternative that would begin in 1991, the Congress could require the USPS to amortize future COLA liabilities for individuals retiring since October 1986--the group already covered under the 1986 USPS health care funding provisions. This option would finance the liability for pension COLAs over a 15-year period in order to lessen the initial impact on postal rate payers. (Shortening or lengthening the 15-year amortization period would raise or lower, respectively, the potential for near-term deficit reduction.) While this approach would require calculation of the present value of future COLAs, the estimating variables would be limited to the appropriate interest rate and the life expectancy of the affected beneficiaries. The size of each COLA would be known, as would the initial number of annuitants entitled to receive it. (President Reagan's budget proposes a similar approach for recouping the cost of postretirement COLAs. It, however, would place a greater annual burden on the USPS by expanding the coverage to all annuitants regardless of retirement date and by using a 10-year amortization period.)

Relative to the payroll surtax approach, this option has the disadvantage of placing successively higher cost burdens on postal

customers--at least for 15 years. It would raise total USPS costs by 0.1 percent for 1991 and 0.6 percent for 1994. Postal customers might object to this trend and to the option's failure to exclude costs for all military service and for federal civilian service that predates the creation of the USPS in 1972. At that time, of course, the new USPS took advantage of an existing and experienced labor force. Thus, some might characterize the COLA expenses attributable to pre-1972 government service as a type of buy-in cost that, after 18 years, should now be borne by postal rate payers rather than by federal taxpayers. After all, the Postal Service agrees in principle with the Congress's decision that postage rate increases at least fund annuitant health care costs for postal workers retiring after 1986. This COLA option for pensions satisfies the same criteria. It coordinates the effective date with the next general increase in postage rates and excludes COLA liabilities pertaining to individuals who retired before October 1986--regardless of the extent to which benefits derive from Postal Service employment.

**FWF-05 MODIFY THE WAY HOSPITALS ARE PAID
UNDER THE FEDERAL EMPLOYEES HEALTH
BENEFITS PROGRAM**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	0	0	130	350	630	1,110
Outlays	0	0	130	350	630	1,110

The Federal Employees Health Benefits (FEHB) program offers health insurance coverage for federal employees, retirees, and their dependents. In 1989, the program will cover about 4 million enrollees at an estimated cost to the federal government of \$6 billion. About one-third of this amount, the subject of this option, pays for certain inpatient services provided by hospitals to individuals with FEHB insurance. Federal costs will continue to grow in future years because of higher health care expenses and greater numbers of retirees. (The estimated government costs exclude amounts paid by the U.S. Postal Service because such costs are eventually paid by mail users rather than by U.S. taxpayers.) Reforming hospital reimbursement, as described below, would reduce such costs and thus lower federal outlays through 1994 by an estimated \$1.1 billion. The savings represent a gradual reduction in the rate that hospital costs rise in future years. For calendar year 1994, relative to the level otherwise expected for systemwide costs, the reductions would total 15 percent. To realize budgetary savings, just over one-fourth of which applies to national defense functions, the Congress would need to reduce agency funding accordingly. (To allow time for implementation, the new reimbursement system would begin to take effect for the FEHB contract year that begins January 1991. No net budgetary savings are expected to materialize, however, until the following year.)

FEHB insurance carriers pay hospitals primarily in two ways--some pay on the basis of actual charges, and others pay on the basis of predetermined rates that have been negotiated with the hospitals and that reflect certain discounts. An alternative reimbursement system

could require carriers to use a prospective payment system patterned after the one instituted in 1987 by the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) for military dependents and retirees. The military program modified the diagnosis-related group (DRG) payment schedules used by Medicare to reflect the health care needs of younger patients. Under a modified DRG system, hospitals receive a fixed payment per case based primarily on a patient's diagnosis, and adjusted for certain hospital characteristics that affect the costs of treating that diagnosis. Hospitals that accept federal reimbursement from Medicare would be required to accept the predetermined rate as payment for FEHB enrollees, just as they do for CHAMPUS. In some cases, the payment schedules might need refinement to take account of the insureds' demographic characteristics and other pertinent cost considerations. The size and timing of premium reductions would depend on rate negotiations with more than 400 FEHB insurance carriers. Savings realized under this prospective payment system eventually would allow for lower premium payments by both the federal government and enrollees. The reductions realized in 1991-1994 could save enrollees nearly \$0.6 billion.

With few exceptions, such as in the Washington, D.C., area, patients with FEHB insurance represent a relatively small portion of hospital cases. Thus, proponents believe that an expanded DRG reimbursement system would save the government money without adverse financial effects on most hospitals. In their view, the current system drives up costs because hospitals tend to provide FEHB and other insured patients more amenities, more technology, and more staff than are necessary. Several states have implemented DRG systems, although most had little initial success in reducing hospital costs. Initial budgetary impacts aside, the information generated by a DRG approach provides a valuable management tool for long-term cost control.

Opponents of this proposal voice some of the same concerns about jeopardizing the quality of health care that were raised during debate on adopting the DRG scheme for Medicare and again for CHAMPUS. The DRG-payment system is not yet refined to the point where it recognizes all of the appropriate cost variations for treating different patients with the same diagnosis; nor can it identify all of the relevant cost variations among alternative hospitals. As a result, hospitals might realize a profit from cases where an identical diagnosis in a

different hospital could represent a financial loss. Such economic forces, critics would argue, might cause hospitals in some instances to shift care to a local competitor or to limit the amount of care provided. In other cases, especially in areas with a relatively high concentration of federal workers or annuitants, hospitals might try to collect excess expenses directly from FEHB patients or to shift some costs and procedures to outpatient services not covered by DRG fee schedules. (Vigilant program monitoring should, of course, limit the opportunity for such abuse.) Finally, federal budgetary pressures might lead to future DRG payments that were lower than the cost of providing adequate care to a typical patient, causing hospitals to accentuate the selection of patients on the basis of financial considerations.

FWF-06 TRIM THE SIZE OF THE FEDERAL CIVILIAN WORK FORCE

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	0	240	490	740	1,000	2,500
Outlays	0	230	490	760	1,050	2,500

Appropriation and other action to trim the size of the federal work force offers another way to reduce personnel costs. Eliminating the equivalent of 50,000 full-time federal jobs through 1994 would reduce the civilian work force in nonpostal Executive Branch agencies by about 2 percent from its current level of 2.2 million and would generate outlay savings of \$2.5 billion over five years. (If applied proportionately to all agencies, about half the estimated savings would be attributable to cuts at the Department of Defense. Of course, the Congress could exempt certain governmental functions such as tax collection and public health and safety.)

Given normal employee turnover, this option could be achieved largely without layoffs. The modest employment reduction specified would require agencies to forgo filling the equivalent of roughly one out of twelve vacancies that normally occur as a result of quits and retirements from full-time permanent positions. A Congressional mandate to reduce employment would have to specify both the actions to be taken and the Executive Branch authority responsible for carrying it out. For example, the President could be required to develop and adopt annual hiring limits. To realize budgetary savings, moreover, the Congress would have to ensure that reduced employment was followed by lower agency spending--either through authority given to the Office of Management and Budget to withhold funds or through reduced appropriations.

Proponents argue that reductions in the work force could encourage improved operating procedures, more productive use of training programs, increased use of computers and other labor-saving equip-

ment, and better agency management of human resources. More far-reaching and often-proposed reforms might also be adopted, including restructuring major Defense Department maintenance and supply activities, greater sharing of defense support services, and closing or consolidating some military facilities as recommended by the Secretary of Defense and the Commission on Base Realignment and Closures. Adoption of such measures would further the Administration's goal of improving the productivity of government operations and might mean that employment could be reduced without lowering the level and quality of services. The Administration has already launched a program to improve productivity in government. Productivity gains of only 0.5 percent a year through 1993 could permit elimination of about 50,000 jobs while maintaining existing levels of service. Most agencies should be able, with little difficulty, to realize such a rate of improvement. According to recent governmentwide data, labor productivity for sampled civilian nonpostal activities has risen at an average annual rate of about 2 percent since 1980. At the Department of Defense, however, greater effort may be required in view of the agency's relatively poor productivity performance in recent years.

Opponents criticize across-the-board reductions as measures that avoid a careful weighing of priorities among the wide variety of federal programs. They also note that such reductions aggravate the hardships caused by governmentwide requirements that agencies absorb the cost of pay raises. (Other options, by contrast, would reduce employment as a result of decisions to increase efficiency or to curtail specific programs. See, for example, FWF-07, DEF-20, NDD-40, NDD-27, and NDD-28.) Some analysts believe that across-the-board reductions can be counterproductive. Such reductions apply to efficient and effective programs in the same way they apply to programs that are less so. Moreover, the goals themselves may be unrealistic in view of the unique limitations and mission requirements of many activities, especially those relating to important national priorities such as public health and safety and defense. At the Defense Department, some observers believe that such goals would decrease the control and flexibility managers need to maintain military readiness. Should agencies fail to find ways of improving productivity to compensate for employment cuts, the quality or level of services would decline.

Other critics express concern about the uncertain costs of obtaining new equipment and of other measures to improve productivity. In

response to this concern, the estimated savings presented here represent net amounts from the CBO baseline after allowing for substitution of capital investment for labor and other associated costs. For estimating purposes, such costs correspond to a one-time charge of 12 months' compensation for each workyear eliminated. Any other costs are assumed to be covered by reallocating existing funds.

**FWF-07 REDUCE AGENCY SPENDING IN
ANTICIPATION OF MORE CONTRACTING OUT**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	70	230	390	570	760	2,020
Outlays	45	140	240	350	470	1,245

Private contractors can often provide the government with supply, maintenance, and other services at lower cost than can federal workers. Executive Branch policy, set forth in Office of Management and Budget Circular A-76, requires agencies to streamline their operations and then to rely on the private sector if it is still more economical to do so. Despite recent increases in A-76 activity, reports by the Reagan Administration and by others suggest that the government could contract out more work. While it is difficult to predict precisely the extent to which contracting out would increase as a result of the measures described below, it is not unreasonable to assume that current efforts could increase by half. Accordingly, an additional 10,000 jobs would be considered for contracting out each year. Over five years, savings would accumulate to \$1.2 billion, and the equivalent of about 36,000 federal jobs would be eliminated--as a result of both contracting out and the streamlining of federal operations. (About 70 percent of the savings derive from more A-76 reviews of defense activities.) Given normal employee turnover and the possibility of reassignment, job reductions could probably be accomplished without layoffs.

Several measures might be taken to encourage more contracting out. The Congress could eliminate legislative and administrative prohibitions that prevent agencies--primarily the Veterans Administration and the Department of Defense--from considering large numbers of support activities for contracting out. Providing a specific Congressional mandate for the A-76 program offers another approach to expanding contracting out. Such a mandate could, for example, require agencies, at the direction of the President, to undertake a

specified number of A-76 reviews each year. Periodic reporting to the Congress on implementation could also be required. The Congress might also consider reducing employee resistance to A-76 policy--for example, by mandating job placement in the same commuting area for federal workers who lose their jobs as a result of contracting out.

To achieve deficit reductions as a result of contracting out, whatever methods are chosen to boost the program, the Congress would also have to ensure that A-76 activity resulted in reduced agency spending. Under current practice, agencies are free to apply some savings to meet other spending priorities. Any significant budgetary savings from expanded A-76 activity would therefore require reductions in agency spending, which could be accomplished by reduced appropriations or by legislation requiring the Office of Management and Budget to withhold from agencies funds saved from A-76 activity. CBO's estimates of budgetary savings from contracting out assume that one of these measures is used to reduce funding at Defense and other agencies that achieve savings from the A-76 program.

Advocates of contracting out point to it as economically prudent. At Defense, for example, data reveal that the A-76 program can reduce the cost of affected activities by about 30 percent on average. Supporters buttress their position by arguing that the federal government should not provide services that the private sector can provide. Much contracting out, for example, has been for facility support activities such as laundry, dry cleaning, refuse collection, and air conditioning maintenance, and for administrative support functions such as audio-visual services, data processing, and telephone service--all commercial activities generally available from private firms.

Opposing arguments focus largely on the lower quality of services that contractors sometimes deliver, and on the concerns of federal employees threatened by loss of jobs. Furthermore, restrictions on contracting out may be necessary to help the government fulfill its special obligations, including maintaining national security and caring for patients in Veterans Administration hospitals. This reasoning assumes that, when work is kept in-house, managers retain more control over it and can better assure the quality of the services rendered.

**FWF-08 REDUCE EXPENSES FOR FEDERAL
NONDEFENSE TRAVEL**

Savings from CBO Baseline	Annual Savings (In millions of dollars)					Cumulative Five-Year Savings
	1990	1991	1992	1993	1994	
Budget Authority	190	200	210	220	230	1,050
Outlays	180	200	210	220	230	1,040

Nondefense agencies currently spend about \$2.0 billion on employee travel. Appropriation action requiring a 10 percent across-the-board cut in travel costs for nondefense agencies would save, relative to the CBO baseline, \$1.0 billion over five years.

Recent budget reduction efforts have reduced either travel funds specifically or the general operating funds from which travel expenses are paid. The continuing resolution for 1988, for example, cut 15 percent from the funds that certain agencies requested for travel. According to the General Services Administration, which manages travel arrangements for civilian personnel, other reductions in travel costs have been achieved through continued improvements in procurement methods. Nevertheless, travel expenses for nondefense agencies, which last year averaged \$1,700 per civilian employee (except postal workers), have increased faster than inflation. By the end of 1989, average annual costs per employee will have increased an estimated 37 percent over the 1985 level, while prices in general will have increased by only 14 percent during the same period. Although improvements effected by agencies have prevented some unnecessary travel expenses, further changes in travel management or outright reductions in the amount of travel could produce additional savings.

Carrying out this option would probably require limitations in successive annual appropriation measures, patterned after the selective one enacted last year, that would direct the President to determine for specific agency accounts the amount of funds to be withheld from obligation. The President could be required either to apply a uniform percentage reduction necessary to achieve a specified total

outlay savings or to allocate the reduction among agencies based on their particular mission requirements. The legislative mandate could require the President to report his actions to the Congress and to provide for use of apportionment and other accountability controls.

Proponents argue that an across-the-board reduction in 1990 would prompt agencies to pursue cost-saving practices more aggressively. Such practices include better monitoring of costs, eliminating low-priority travel, and greater use of innovative procurement methods like negotiated discounts for high-volume travel, commercial charge cards, and travel offices.

On the other hand, enactment of a 10 percent reduction in travel expenses could create difficulties for agencies that rely heavily on travel for effective management and for carrying out mandated programs. Agencies with many field offices, inspection sites, or contractors, for example, might have to reduce service, face inefficiencies, or incur added costs for items such as telecommunications. Moreover, as possible management improvements and cuts in low-priority travel are exhausted, the risk of inefficiencies increases. Instead of cutting travel, the government might be better served by encouraging more employee review of field operations. Reducing funds for particular types of expenditures--such as travel, energy consumption, purchase of supplies, and so on--is a rigid approach that prohibits the most efficient and effective use of available resources. From this perspective, focusing reductions on travel is less preferable and more difficult to carry out than a general reduction in agency operating expenses.



CHAPTER VII

REVENUES

Additional federal revenue could be raised from existing tax sources by raising tax rates, broadening tax bases, or extending the coverage of taxes to include additional taxpayers. Revenue could also be raised by tapping new tax sources. This section presents a broad range of options for increasing federal revenue. The effective dates and transition rules for specific bills will invariably differ. As a result, revenue estimates for these bills may differ slightly from those for similar options shown here.

Although most of the budget options in this volume would take effect on October 1, 1989, the revenue options generally have an effective date of January 1, 1990, because changes in income tax law usually take effect at the beginning of a calendar year. The excise and energy tax options, however, are assumed to take effect on October 1, 1989. For the value-added tax (VAT), an effective date of January 1, 1991, is assumed because a VAT could not be put in place before then, even if it were enacted by mid-1989.

The recent passage of the Medicare Catastrophic Coverage Act affects the revenue estimates for many of the options. The act imposes an income surtax (supplemental premium) on Medicare-eligible taxpayers beginning in 1989. Because the surtax rate is set by statute through 1993 and cannot be adjusted downward in 1994, any options that increase individual income tax revenue automatically increase revenue from the surtax. The effect of the surtax is included in the revenue estimate for each option. If the additional revenue from the surtax causes overfunding of the catastrophic coverage under Medicare, the Congress can choose to lower the surtax rate.

Although all of the options raise revenue, they create different economic incentives and, ultimately, have different effects on the allocation of economic resources. REV-01 would increase the tax rate on all sources of income currently subject to federal income tax, while REV-24 would impose a new tax on a broad consumption base. Both

options seek to reduce the effects of taxes on resource allocation by imposing a small incremental tax on a broad base. Many of the options, however, would increase the tax burden on specific types of income and economic activity that presently benefit from relatively favorable tax treatment. For example, REV-03 through REV-09 would reduce or eliminate differences in the tax treatment of alternative sources of capital income, while REV-11 and REV-13 would tax labor income on a more uniform basis. A few of the options would tax behavior that some have argued is in the public interest to restrict. For example, REV-26 would increase excise taxes on tobacco and alcohol.

REV-01 RAISE MARGINAL TAX RATES FOR INDIVIDUALS AND CORPORATIONS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Individuals						
Raise Marginal Tax Rates to 16 Percent and 30 Percent	17.3	32.9	35.7	38.8	42.0	166.7
Add a 5 Percent Surtax	12.6	24.0	26.0	28.2	30.6	121.4
Raise the Top Marginal Tax Rate to 30 Percent	9.4	18.1	20.0	22.1	24.4	94.0
Add a 33 Percent Bracket	3.6	5.1	8.7	10.4	15.1	42.9
Corporations						
Increase Top Marginal Rate to 35 Percent	1.3	2.3	2.5	2.7	2.8	11.6
Add a 5 Percent Surtax	3.4	6.0	6.3	6.5	6.9	29.1

If additional revenue must be raised, rate increases have some advantages over other tax changes. They do not add to the costs of enforcement or compliance because they do not increase the complexity of the tax code or the record-keeping requirements for taxpayers. Furthermore, the Treasury begins to receive the additional revenues relatively quickly because rate increases are reflected in withholding or estimated tax schedules. Rate increases, however, reduce incentives to work and save, and worsen any inefficiencies associated with remaining preferences in the income tax code. They would also run counter to the changes in the Tax Reform Act of 1986 (TRA), which

reduced statutory marginal tax rates significantly for both individuals and corporations in exchange for broadening the tax base.

Individuals. Under current law, the income tax structure has two explicit marginal tax rates--15 percent and 28 percent. (The marginal tax rate is the percentage of an extra dollar of income that a person must pay in taxes.) Some taxpayers face a marginal tax rate of 33 percent--a result of the top statutory rate plus a 5 percent surcharge associated with the phaseout of the 15 percent bracket and personal exemptions over a range of taxable income. In 1990, the projected phaseout range of taxable income is \$47,000 to \$109,050 for single taxpayers, and \$78,350 to \$208,510 for a couple with two children. Taxpayers with incomes above the phaseout range face a 28 percent marginal rate.

Increasing all marginal tax rates for individuals by approximately the same percentage--to 16 percent and 30 percent (with a 35 percent rate for income in the phaseout range)--would increase revenues by a large amount: about \$167 billion in 1990 through 1994. An equal percentage increase in all rates would be roughly equivalent to imposing a surtax on regular tax before credits. This option would not increase taxes for those whose taxes are computed according to the alternative minimum tax, unless that tax rate were also increased (see REV-03). It would also cause families with tax credits to face a larger percentage increase in their tax liabilities than other taxpayers. Families whose Earned Income Credit (EIC) gives them a zero tax liability or an EIC refund might incur a positive tax liability as the result of this option.

An alternative to a rate increase would be to impose a surtax applied to tax liability after credits. A surtax of 7 percent would raise about the same revenues, and result in roughly the same marginal tax rates, as raising marginal tax rates to 16 percent and 30 percent, but the tax increase would be distributed differently among taxpayers. Higher taxes would be paid by all taxpayers who now face a positive tax liability, even those who pay the alternative minimum tax, but not by families who have no tax liability under current law. This form of a surtax would not affect recipients of EIC refunds. A 5 percent surtax applied to tax liability after credits would increase revenues by about \$121 billion in 1990 through 1994.

Another option for raising revenues is to increase only the top marginal tax rate. Increasing only the current 28 percent rate to 30 percent (resulting in a 35 percent marginal rate for income in the phaseout range) would raise revenues by about \$94 billion in 1990 through 1994. For 1990, this option would increase taxes for married couples with taxable incomes over \$32,400.

Another alternative would be to drop the phaseout of the 15 percent bracket and personal exemptions and create an explicit 33 percent bracket that would apply to all income above the start of the current phaseout. Taxes would be raised only for the small number of high-income families for whom the 15 percent bracket and personal exemptions would be completely phased out under current law. This option would raise about \$43 billion in 1990 through 1994, increasing taxes for about 600,000 taxpayers. For example, a married couple with two children would pay higher taxes if their taxable income for 1990 was \$208,510 or higher.

All of these options would either increase the maximum marginal tax rate on capital gains or increase the number of taxpayers who would pay at the current maximum. (Under current law, capital gains are treated as ordinary income and thus the maximum rate can be as high as 33 percent.) Higher marginal tax rates on capital gains can discourage investors from selling assets that have appreciated.

Corporations. The top statutory tax rate on corporate income is 34 percent. Lower marginal rates apply to the first \$75,000 of taxable income, but corporations with taxable income above \$100,000 pay an additional 5 percent tax until the benefits of the lower marginal rates are phased out.

About \$12 billion would be raised in 1990 through 1994 by increasing the top marginal rate to 35 percent. While only 10 percent of corporate taxpayers would be affected because they pay the top rate, these firms earn approximately 90 percent of all corporate taxable income. All corporations that continue to pay the alternative minimum tax would be unaffected by the change, and those with unused credits would be able to offset some of the increased tax liability.

An alternative to raising the top corporate rate would be to impose a surtax on tax liabilities. A 2 percent surtax would raise about the

same revenues as an increase in the top rate to 35 percent; under this surtax, the top rate would be 34.7 percent. In contrast to a rate increase, a surtax would apply to corporate liabilities from the alternative minimum tax, and it also would not expand the amount of credits that corporations can claim.

An increase in the corporate rate, either directly or through a surtax, could affect the decision a business makes about its form of organization. Businesses may be organized and taxed as corporations, in which case their income is taxed at both the corporate and individual levels; if they choose a noncorporate form, their income is taxed only at the individual level. TRA lowered the maximum individual income tax rate by more than the corporate rate, increasing the incentive for corporations to reorganize into noncorporate forms. Any rate change that widens the distance between the corporate and individual rates would further increase this incentive.

REV-02 AMEND OR REPEAL INDEXING OF INCOME TAX SCHEDULES

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Delay Indexing Until 1991	4.5	9.6	11.0	13.0	14.8	52.9
Repeal Indexing	4.5	14.8	27.1	41.9	57.6	145.9

Under current law, the personal exemption, the standard deduction, and tax bracket widths are adjusted annually to offset the effects of inflation (indexed). The Earned Income Credit (EIC) is also indexed.

Eliminating all future indexing beginning with the adjustment scheduled for 1990 (except for the EIC) would raise revenues by about \$146 billion in 1990 through 1994, assuming that the annual rate of inflation will average 4.6 percent over the period. Revenues from repealing indexing would grow rapidly because of the cumulative effects of inflation. Delaying indexing by eliminating only the indexing adjustment scheduled for 1990 would raise revenues by about \$53 billion over the same period.

Repealing or delaying indexing would raise the taxes of most taxpayers, but would not increase taxes for those with very high incomes who itemize their deductions, because the tax benefit from personal exemptions and the 15 percent bracket has been phased out. (As a result, all of the income of these taxpayers, after itemized deductions, is subject to a single rate of 28 percent and is unaffected by indexing.) For taxpayers with incomes below the top tax bracket, eliminating indexing would raise tax liabilities by a greater percentage for families who use the standard deduction (generally low- and middle-income families) than for families who itemize deductions.

One argument for retaining indexing is that it requires the Congress to decide explicitly on tax increases. Without indexing, inflation causes many taxpayers to move into higher tax brackets, so that tax liabilities increase at a faster pace than income. This results in an

increase in real tax liabilities without legislative action even for taxpayers with no increase in real income. Some people argue that these automatic tax increases give legislators an incentive to pursue inflationary policies and that indexing protects against this bias.

REV-03 INCREASE THE ALTERNATIVE MINIMUM TAX

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Individuals						
Raise AMT Rate to 25 Percent	0.5	2.6	2.5	2.7	3.0	11.4
Corporations						
Raise AMT Rate to 25 Percent	3.4	5.3	4.8	4.6	4.6	22.7

The alternative minimum tax (AMT) limits taxpayers' use of tax preferences to reduce their tax liability. Increasing the AMT rate would raise revenues from the individuals and corporations that benefit the most from tax preferences. Revenue gains from these rate increases are somewhat uncertain, however, because taxpayers can avoid the AMT to some extent by careful tax planning. Some tax practitioners attribute the recent growth in leasing activity to the avoidance of the AMT by taxpayers.

Raise the Individual AMT Rate to 25 Percent. The AMT for individuals is 21 percent of alternative taxable income in excess of the exemption amount--\$40,000 for a joint return or \$30,000 for a single return. The exemption is phased out for high-income taxpayers. Some adjustments and deductions that are allowed in computing regular taxable income are disallowed when computing taxable income for the alternative tax. These adjustments are of two types: deferral preferences, such as accelerated depreciation, excess intangible drilling costs, and profit or loss from long-term contracts; and exclusion preferences, such as the charitable deduction for appreciated property, itemized deductions of state and local taxes, some tax-exempt interest, percentage depletion, and miscellaneous itemized deductions. Two other preferences that are disallowed under the AMT will also be disallowed under the regular tax after a phase-in period. These prefer-

ences are losses from "passive" business activities and personal interest deductions other than for home mortgages.

Taxpayers must pay the larger of the regular tax or the AMT. To the extent that the AMT results from deferral preferences, one year's AMT can be credited against future years' regular tax liability. Thus, a portion of the revenue gain from a higher AMT rate results from a shift of some future tax liabilities to earlier years.

Raising the AMT rate to 25 percent would raise more than \$11 billion in 1990 through 1994 and would increase progressivity by further limiting the use of tax preferences by middle- and upper-income taxpayers. This rate increase would preserve the preferences in current law, but would reduce the maximum combined tax benefit from preferences for individuals.

This option would complicate the tax system by more than doubling the number of filers who would owe an alternative tax. In addition, some preferences in the tax code are designed to encourage certain kinds of behavior; taxpayers who pay the AMT are not given these incentives.

Raising the Corporate AMT to 25 Percent. The tax base for the corporate AMT includes many of the same preferences as the individual AMT. In addition, the AMT base includes half of the excess of pretax book income reported to shareholders over other alternative taxable income through 1989. Beginning in 1990, this book income preference is replaced by a provision that adds 75 percent of the excess of adjusted current earnings (ACE) over other alternative taxable income. (ACE is a measure derived from earnings and profits as computed for purposes of Subchapter C of the tax code, with certain specified adjustments for depreciation and other deductions.) The current AMT rate is 20 percent for corporations. Raising the rate to 25 percent would increase revenues by about \$23 billion through 1994.

The corporate AMT, with its book income preference, is intended to ensure that corporations reporting profits to shareholders cannot avoid paying corporate tax. Proponents of the minimum tax argue that it improves the perceived fairness of the tax system and spreads the tax burden more evenly. Critics argue the opposite—that it places a greater tax burden on rapidly growing and heavily leveraged

corporations and provides corporations with an incentive to engage in tax-motivated transactions, such as equipment leasing. Furthermore, raising the AMT rate would only increase the disparity in the tax burden on new investment between those corporations that are hit by the AMT and those that are not.

**REV-04 DISALLOW NET INTEREST DEDUCTIONS
ON INDEBTEDNESS EXCEEDING 50 PERCENT
OF THE BASIS OF TANGIBLE ASSETS**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	0.2	0.4	0.6	0.7	0.8	2.7

Because interest expenses are deductible at the corporate level while dividend payments are not, the corporate income tax is, in effect, a tax on the return to equity-financed corporate capital. The taxation of equity encourages the use of debt for corporate financing.

Corporations can replace equity with debt in a variety of ways. For example, a corporation can borrow funds either to repurchase outstanding stock or to pay an extraordinary dividend to shareholders. A corporation can also borrow to acquire the stock or assets of another corporation.

The recent growth in the use of junk bonds to finance leveraged acquisitions has renewed the debate over the desirability of tax incentives that encourage debt financing. Some critics of junk bonds view them as socially undesirable because they increase the risk of corporate default by increasing the cash flow required to meet the claims of creditors. So far, however, defaults have been infrequent, perhaps because the terms and interest rates on junk bonds are often renegotiated to avoid a pending default.

Other critics of junk bonds view them as a form of "disguised" equity differing little from preferred stock, except that the income used to pay interest on junk bonds escapes corporate taxation. These critics express concern that the growth of leveraged acquisitions is eroding the corporate tax base.

Current law already denies corporate interest deductions on indebtedness for certain acquisitions when the resulting debt-equity

ratio exceeds two and the debt is convertible to stock or is subordinated to a substantial amount of other debt. Current law also provides the Treasury with authority to issue regulations distinguishing debt from equity, although no regulations have ever been issued. In the absence of regulations, common-law factors are used to distinguish debt from equity. These factors include whether a contractual right to repayment of a specified amount at a specified date exists and whether a reasonable economic expectation of such repayment exists.

The existing restrictions on corporate interest deductions have been largely ineffective in stemming the growth of corporate debt and preventing the erosion of the corporate tax base. While regulations that would recharacterize disguised equity as debt could prevent some of this erosion of the corporate tax base, the Treasury's inability to issue regulations defining the differences between debt and equity, despite several attempts, indicates the difficulty of distinguishing debt from equity.

Instead of formulating rules for recharacterizing debt as equity, an *ad hoc*, "bright line" rule limiting corporate interest deductions could be established. For example, net interest deductions on indebtedness exceeding 50 percent of the basis of tangible assets could be disallowed. To compute the disallowance, total indebtedness would first be reduced by the ratio of interest income to total interest expense multiplied by total indebtedness. The remaining indebtedness would then be reduced by half the tax basis of all tangible assets including land, depreciable property, and inventory. The interest expense on any indebtedness still remaining after these two reductions would then be disallowed. The disallowance would raise about \$3 billion over a five-year period.

Disallowing corporate interest deductions for excessive indebtedness would lessen the tax code's bias in favor of debt financing and would help preserve the corporate tax base. It would also discourage leveraged acquisitions that depend heavily on tax-deductible financing to make them economically feasible.

Some critics would argue that a rule disallowing excessive interest deductions would simply encourage additional tax-motivated transactions to circumvent it. For example, corporations with low

debt could, in effect, borrow from corporations with high debt by borrowing to purchase equipment that is then leased to the corporation with high debt. The leasing arrangement would allow the shifting of interest expense from a corporation that could not deduct it to one that could. In the case of leveraged acquisitions, opponents argue that the proposal would unwisely encourage the breakup of operations and the quick sale of assets to reduce debt.

Other critics would argue that disallowing excessive interest deductions still fails to achieve the objective of taxing the income from debt-financed capital and equity-financed capital on an equal basis. As an alternative, they might favor disallowing all corporate interest deductions in exchange for either a much lower corporate tax rate or a tax credit for dividends and interest payments. Either alternative would eliminate the bias in favor of debt financing.

REV-05 LIMIT MORTGAGE INTEREST DEDUCTIONS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Limit Deductions to \$12,000 per Return (Single) or \$20,000 (Joint)	0.5	1.4	1.7	1.9	2.1	7.5
Limit Value of Deductions to 15 Percent	3.6	10.0	10.9	11.8	12.8	49.1
Limit Deductions for Second Homes	0.1	0.3	0.3	0.3	0.3	1.2

A home is both the largest consumer purchase and the main investment for most Americans. The tax code has historically treated homes more favorably than other investments by allowing homeowners to deduct mortgage interest expenses even though homes do not produce taxable income, and by exempting most capital gains from home sales (see REV-06). This preferential treatment has been defended because it encourages home ownership and home improvement, which can improve neighborhoods for all residents. The Tax Reform Act of 1986 (TRA) preserves the deductibility of mortgage interest on first and second homes, but phases out the deductibility of other consumer interest by 1990. It also limits the extent to which interest deductions for carrying other assets can exceed income from assets.

One way for taxpayers to circumvent the limits on consumer and investment interest deductions is to finance consumer purchases and assets with home-equity loans. In an effort to restrict this re-characterization of interest deductions, TRA imposed limits on the amount of home-equity debt that qualifies for home mortgage interest

deductions: qualified home debt was limited to loans used for home purchase and improvements, and for medical and educational expenses. The Omnibus Budget Reconciliation Act of 1987 replaced these limits with two others. Debt to acquire and improve first and second homes is limited to \$1 million, and home-equity loans for all other purposes are limited to \$100,000.

These limits are criticized for several reasons. The amounts are so high that the tax code still provides a generous subsidy for relatively expensive homes. Further, only taxpayers who are fortunate enough to have substantial home equity are allowed to circumvent the limits on consumer and investment interest. For example, many homeowners will be able to deduct interest on home-equity loans used to finance autos, while renters will not be able to deduct interest on auto loans. In addition, some find it unfair that the same limits apply to single taxpayers as to larger households.

About \$8 billion in revenues could be raised in 1990 through 1994 by capping the mortgage interest deduction at \$12,000 per tax return (\$20,000 for a joint return and \$10,000 per return for married couples who file separately). This option would affect less than one-half of 1 percent of taxpayers. It would retain the basic incentive for home ownership, but would not subsidize the luxury component of the most expensive homes and vacation homes. Because the caps are higher than the deductions now taken by nearly all homeowners, they would cause limited disruption to home prices and homebuilding.

The high interest deduction currently allowed, along with the other tax advantages accorded to owner-occupied housing, shifts investment into homes and away from less subsidized investment in businesses. This shift contributes to a relatively low rate of investment in business assets in the United States compared with other developed countries that do not allow such large mortgage and consumer interest deductions. Currently, about one-third of national investment goes into owner-occupied housing, so even a modest shift of investment to other sectors could have important effects.

If the caps were not indexed for inflation, they would affect more homeowners over time. The gradual phasing down of the real value of the deduction with inflation would cushion the effects on current

homeowners and the homebuilding industry, while encouraging a shift to more productive activities.

Opponents of the interest caps point out that their effects would be highly uneven across the country. In the high-priced markets of many large cities, the caps would affect many upper-middle income homeowners, while in most other areas they would affect only those with the most luxurious homes. Further, in periods of high interest rates, recent homebuyers and those with adjustable-rate mortgages could find themselves affected by the limits, while longer-term owners with fixed-rate mortgages would not be.

Another way to reduce the tax subsidy for upper-income taxpayers would be to limit the tax savings from the current deduction to 15 percent of interest paid, the value of the deduction to those in the lowest tax bracket. This limit would increase revenue by about \$49 billion in 1990 through 1994. It would affect about half of the taxpayers that use the mortgage interest deduction and therefore would probably cause some home values to decline.

A final option would be to limit the deductibility of interest on debt to acquire and improve a primary residence, plus \$100,000 of other debt secured by that home. This would require interest deductions for second homes to qualify under the \$100,000 interest limit on home-equity loans. Most second homes are vacation homes, and some people argue that nearly unlimited borrowing for such a luxury is inappropriate when the deductibility of interest on loans for education, medical expenses, and other consumer purchases is limited. Others argue that many owners and builders of vacation homes would suffer losses and resort areas would face reduced growth. This proposal would raise about \$1 billion in revenues in 1990 through 1994.

REV-06 TAX 30 PERCENT OF CAPITAL GAINS FROM HOME SALES

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	0.6	6.1	8.1	8.7	9.1	32.5

Capital gains on most assets are taxed as ordinary income at the time an asset is sold. Capital gains on home sales, however, generally escape taxation. The tax on the capital gain from the sale of a principal residence is deferred if the seller purchases another home of at least equal value within two years. If the taxpayer dies before paying tax on the gain, this tax is never owed. Further, taxpayers aged 55 and over are allowed one opportunity to exclude up to \$125,000 of gain from a home sale even if another home of equal or greater value is not purchased within two years. If the above provisions were replaced with a tax on 30 percent of capital gains from home sales, about \$32 billion could be raised in 1990 through 1994.

The preferential treatment of capital gains from home sales is only one of the ways that the tax code strongly favors owner-occupied homes over other investments. (For a discussion of other tax preferences for owner-occupied homes, see REV-05.) All of these tax preferences divert saving from more productive investments into housing. One way to make the tax treatment of housing more like that of other assets would be to replace the capital gains deferral and exclusion provisions with a small tax on gains from home sales. If 30 percent of the gain from home sales were included in taxable income, the tax would be no more than 10 percent for taxpayers facing a 33 percent marginal tax rate, no more than 8.4 percent for those subject to the 28 percent marginal tax bracket, and no more than 4.5 percent for those in the 15 percent bracket.

A tax on gains from home sales would discourage home sales, just as current law provides an incentive for taxpayers to hold, rather than sell, other capital assets. The economic losses caused by this "lock-in"

effect might be more serious in the case of home sales than for other assets, especially if families were discouraged from relocating to change jobs. The tax might also deter some homeowners (especially older taxpayers with large accrued gains) from changing homes as family requirements change.

Opponents of the tax claim that without the rollover and exclusion allowed by current law, taxpayers would be burdened by additional recordkeeping on home improvements. These records would be needed to establish the tax basis of a home upon sale. Currently, many taxpayers do not keep such records because the probability of any future tax on gains from a home sale is remote and the present value of such a tax is small.

Opponents also claim that much of the gain on a home sale is attributable to inflation and that very little real gain is ever realized. They argue that it is unfair to tax gains that are largely illusory. However, others argue that taxing inflationary gains is an appropriate way to offset the tax benefit that homeowners enjoy from inflation because they can fully deduct mortgage interest payments, including the inflation premium. The partial inclusion of gain upon the sale of a home represents a possible compromise between these two views.

Any reduction in the tax benefit from home ownership would tend to lower the value of existing housing relative to other assets such as stocks. The loss in value would hurt primarily the middle class because homes are their principal asset. If the tax benefit for home ownership needs to be reduced, limiting mortgage interest deductions instead of taxing gains on sale is preferable, because taxing gains creates a lock-in effect and imposes a greater recordkeeping burden.

**REV-07 DECREASE LIMITS ON CONTRIBUTIONS TO
QUALIFIED PENSION AND PROFIT-SHARING
PLANS**

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Lower Limits for Defined Benefit Plans to the Social Security Wage Base (with Equivalent Reduc- tions for Defined Contribution Plans)	0.9	2.8	3.2	3.6	4.0	14.5
Decrease the Limit for Deferrals in Salary Reduction Plans to \$4,000	0.2	0.5	0.5	0.6	0.6	2.4

Saving for retirement through employer-provided qualified pension and profit-sharing plans provides two tax advantages: the employment income contributed to qualified plans is not taxed until retirement, when the marginal tax rate is often lower, and the investment income earned within qualified plans is effectively not taxed.

Decrease Limits on Employer Contributions. Retirement payments from defined contribution plans depend on annual contributions, usually expressed as a percentage of the employee's annual earnings, while defined benefit plans specify the pension to be received, usually expressed as a percentage of preretirement earnings. Currently, contributions to defined contribution plans are limited to the lesser of 25 percent of compensation or \$30,000 per employee. Contributions to defined benefit plans are limited to amounts that will result in annual benefits for pensions that begin at age 65 of the lesser of 100 percent of wages or \$103,100 (estimated for 1990). For pensions that begin at an earlier age, this limit is reduced on an actuarial basis. When an employee is eligible for payments from both types of plans sponsored by

the same employer, a combined limit applies--the lesser of 140 percent of wages or \$128,900 (estimated for 1990).

These funding limits are far higher than the preretirement earnings of most workers. Only one-half of one percent of employees earn more than \$128,900 a year. Many analysts have questioned the need to subsidize such high levels of retirement income. They note further that many workers (especially in the lower half of the income distribution) are not covered by qualified plans and thus do not have access to these subsidies for retirement saving.

If the dollar funding limits for defined benefit plans were lowered to the Social Security wage base (projected to be \$50,700 in 1990), with equivalent reductions in limits for defined contribution plans, the limits would still be higher than the earnings of all but about 7 percent of earners. Lowering the limit to \$50,700 for defined benefit plans and \$14,800 for defined contribution plans in 1990 and indexing the limit thereafter would raise about \$14 billion in 1990 through 1994. Alternatively, the limits could be lowered to amounts between current law and the Social Security wage base. For example, indexed limits of \$76,900 and \$22,400 in 1990, which would exceed the earnings of all but about 2 percent of earners, would raise about \$3 billion over five years.

The principal argument against reducing funding limits is that it would make participation less attractive to high-income business owners and top managers, and thus might discourage them from sponsoring these plans both for themselves and for their employees.

Change Salary Reduction Arrangements. Most salary reduction arrangements are part of employer-sponsored profit-sharing plans that allow employees to choose to receive lower current (taxable) compensation and to defer the remainder of compensation as a contribution to the plan. These arrangements typically are called 401(k) plans after the provision of the tax code that authorizes them. Similar arrangements are possible for workers in the nonprofit sector (403(b) tax-sheltered annuities), for federal workers, and for workers enrolled in some Simplified Employer Plans (SEPs).

The Tax Reform Act of 1986 capped employee deferrals for 1987 in salary reduction arrangements at \$7,000 in the case of 401(k) plans,

SEPs, and the federal plan, and \$9,500 for 403(b) tax-sheltered annuities. The cap is indexed for inflation and is estimated to reach \$8,800 by 1990.

If elective deferrals in all salary reduction arrangements were limited to \$4,000 in 1990 and indexed thereafter, about \$2 billion would be raised in 1990 through 1994. Some would argue that lowering the maximum deferral would raise revenue while having little or no effect on private saving. Lowering the maximum deferral would retain the full incentive to save among middle-income taxpayers. For high-income taxpayers, lowering the maximum deferral would make it less attractive to save through salary reduction arrangements, but this may not reduce the total amount saved because high-income taxpayers have substantial discretionary income that is likely to be saved in any event.

However, benefits for high income taxpayers have already been limited by tougher nondiscrimination rules, which were included in the Tax Reform Act and take effect in 1989. Some would argue that the maximum deferral should remain at \$7,000 until the effects of the new rules are evaluated. In addition, keeping the maximum limit high may encourage small employers who do not offer pensions to offer salary reduction plans, thereby extending saving incentives to more workers. Currently, only about half of employees are covered by an employer pension.

**REV-08 IMPOSE A 5 PERCENT TAX
ON INVESTMENT INCOME
OF PENSIONS AND IRAs**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	3.5	5.8	6.2	6.7	7.1	29.4

Under normal income tax rules, deposits to savings accounts are not deductible from taxable income. In addition, the investment income earned by those deposits is taxed in the year in which it is realized. In contrast, most contributions to qualified pension and profit-sharing plans and to Individual Retirement Accounts (IRAs) are deductible, and the investment earnings of the contributions accumulate tax-free. Taxation is deferred until the accumulated amounts are paid out, usually in retirement. The tax due in retirement is equal to, at most, the tax originally due on the contributions plus interest for the delay in payment. The investment income, however, essentially escapes taxation. A 5 percent tax on the realized investment income of pension and profit-sharing plans and of IRAs would raise about \$29 billion over five years.

Taxing pension and profit-sharing plans and IRAs more favorably than other savings gives taxpayers an incentive to provide for retirement. However, the tax benefits are unequally distributed; higher-paid workers, especially those working long periods for a single employer, receive a disproportionately large share.

A low-rate tax on the realized investment income of these qualified plans and IRAs would retain some incentive for retirement saving, while reducing the inequality of taxation between the higher-paid and the longer-term employees who gain the most from the current tax treatment, and the lower-paid and mobile workers who gain the least. On the other hand, the tax would reduce retirement income or require larger contributions for those already participating. It also would discourage some employers and workers from continuing their

plans or setting up new ones. The current failure of many employers and workers to use pensions or IRAs suggests that the existing incentive may not be strong enough. Finally, because employers offering qualified plans must provide benefits on a nondiscriminatory basis, taxing the retirement income of qualified plans and IRAs might actually exacerbate inequality in retirement income among some currently covered workers. If the tax reduced the number of such plans, then fewer workers would be protected by requirements for equal treatment.

Taxing the realized investment income of qualified funds and IRAs would encourage these retirement funds to shift from bonds and short-term stock investments to long-term investments in growth stocks and real estate; a large share of the return on such investments comes from appreciation in value that is not realized until the asset is sold. These shifts in assets would increase the exposure of these funds to risk and decrease their responsiveness to changing conditions, both of which may be particularly undesirable for retirement savings. On the other hand, advantages for the entire economy could exist. Longer-term commitments by these large institutional investors could permit corporations to focus more on long-term strategies to modernize production and to develop new products and markets. Reduced trading of stocks by these institutional investors also could reduce short-run volatility of stock prices.

Taxing realized gains would also make pension funds less willing to sell their stock holdings in takeovers, thereby discouraging such takeovers. Pension funds would also be less interested in purchasing the high-yielding junk bonds needed to finance many takeovers because the realization of interest income could not be deferred.

REV-09 TAX CAPITAL GAINS AT DEATH

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Tax Gains at Death	0.3	5.5	5.5	5.5	5.4	22.2
Enact Carryover Basis	a	0.9	1.1	1.4	1.5	4.9

a. Less than \$50 million.

Capital gains are taxed as income when realized, usually when the appreciated asset is sold. When a person sells an inherited asset, however, only the gain accrued after the date of inheritance is included in taxable income. The rest of the gain is never taxed under the income tax. The estate of the donor may be taxed on the bequest under the separate estate and gift tax, but few estates pay this tax because it generally applies only to estates whose value exceeds \$600,000 (see REV-10). Taxing capital gains on the decedent's final income tax return would raise about \$22 billion in 1990 through 1994, assuming that the gain on a primary residence held at death would still be eligible for the one-time exclusion of \$125,000.

Taxing gains at death would reduce the opportunity for wealthy families to avoid tax permanently on an important source of their income, although part of the tax could still be avoided by establishing trusts or by making gifts before death. Taxing gains at death would also reduce the tax incentive for investors to hold assets until death in order to avoid being taxed. This incentive was strengthened by the increase in tax rates on capital gains realized before death (contained in the Tax Reform Act of 1986), and by the reduction in the estate and gift tax (contained in the Economic Recovery Tax Act of 1981).

A major argument against taxing gains at death is that the tax would reduce the incentive to save by raising the expected value of future capital gains taxes. Another argument is that the tax might force small farms or businesses to liquidate assets to pay the tax.

Surviving spouses would confront the same problem if they did not hold assets in common with the deceased. Pressures to sell the inherited asset to finance the tax could be reduced by allowing generous averaging provisions and deferral of tax payments.

As an alternative to taxing gains at death, beneficiaries could be required to carry over the cost basis of inherited assets just as they do currently for gifts granted before death. Beneficiaries would then be taxed on all untaxed gain when the inherited assets are sold. This requirement would avoid the liquidity problem mentioned above, because carryover basis allows a continued tax deferral on the unrealized gain for heirs. It would, however, discourage heirs from selling their inherited assets and require estate administrators to allocate the basis of assets when an asset passes to more than one heir. This allocation would not be necessary if gains were taxed at death. Enacting carryover-basis provisions would raise about \$5 billion in 1990 through 1994.

The Congress enacted carryover basis for assets transferred at death in the Tax Reform Act of 1976, but this provision was postponed for three years in the Revenue Act of 1978, and was repealed in 1980. One of the chief objections to the provision was that it could be difficult for estate administrators and heirs to determine the decedent's basis. Establishing a decedent's basis would also be a problem if gains were taxed at death. This problem would result in part from the fact that the provision would require new documentation not previously needed to comply with tax law. It might be lessened over time as taxpayers begin to take the provision into account when planning their estates.

REV-10 DECREASE THE EXEMPTION FOR ESTATE AND GIFT TAXES

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	a	2.6	3.2	3.9	4.9	14.6

a. Less than \$50 million.

Current law imposes a gift tax on transfers of wealth during a taxpayer's lifetime and an estate tax on transfers at death. The estate and gift taxes, together, constitute a unified transfer tax, since one progressive tax is imposed on the cumulative transfer during lifetime and at death. The estate and gift tax rates currently range from 18 percent on the first \$10,000 of transfers to 55 percent on transfers of more than \$3 million. (Beginning in 1993, the top rate will be 50 percent on transfers of more than \$2.5 million, and the graduated rates and unified credit will be phased out for estates above \$10 million.)

The cumulative amount of estate and gift taxes is reduced by a unified credit. The tax is first computed without any exemption, and then the unified credit is subtracted to determine the amount of tax payable. Since 1986, the amount of the credit has been \$192,800, effectively exempting the first \$600,000 of transfers from estate and gift tax. The Economic Recovery Tax Act of 1981 increased the credit to its present level from \$47,000. This increase was intended primarily to offset the effects of inflation on property values. Also, the Congress had determined that the credit amount, which had not been increased since 1976, failed to provide relief for estates containing farms, ranches, or small businesses, with the result that legatees often were forced to sell family businesses to pay the estate or gift tax.

Some would argue that the increase enacted in 1981 was too large because the rate of inflation has been lower than had been anticipated. Lowering the credit to the 1982 level adjusted for inflation would exempt from taxation the first \$225,000 of transfers, raising nearly \$15 billion in 1990 through 1994 and affecting roughly 5 percent of

estates. Although the majority of estates would still be untaxed, many large homes, family farmers, and small businesses would be made subject to tax. Lowering the credit would increase the tax on midsized estates, the assets of which could have to be liquidated to pay the tax--an issue that concerned the Congress when it voted to increase the credit in 1981.

Lowering the credit, however, would have a leveling effect on the distribution of wealth. Also, a great deal of wealth consists of capital gains that have never been taxed. Higher estate taxes would be a means of taxing these gains.

REV-11 PHASE OUT THE CHILD- AND DEPENDENT-CARE CREDIT

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Phaseout Starting at						
\$30,000	0.1	1.1	1.2	1.3	1.4	5.1
\$50,000	a	0.4	0.5	0.5	0.6	2.0
\$65,000	a	0.2	0.2	0.3	0.3	1.0

a. Less than \$50 million.

Taxpayers who incur employment-related expenses for the care of children and certain other dependents may claim a tax credit. The credit per dollar of allowed expenses declines from 30 percent for taxpayers with adjusted gross incomes (AGI) of \$10,000 or less to 20 percent for taxpayers with AGI above \$28,000. Creditable expenses are limited to \$2,400 for one child and \$4,800 for two or more, and cannot exceed the earnings of the taxpayer or, in the case of a couple, the earnings of the spouse with lower earnings. In 1986, about \$3.5 billion in credits were claimed on over 9 million tax returns.

The tax code first recognized work-related child care costs in 1954, when an itemized deduction of up to \$600 was allowed for all single taxpayers and for lower-income couples when both spouses worked. In 1976, the deduction was converted to a 20 percent credit and the income limitations were removed. In 1981, the credit was raised to 30 percent for the lowest-income taxpayers. In 1987, expenses for overnight camps were made ineligible for the credit. In 1988, the credit was restricted to expenses for children under age 13 and creditable expenses were reduced by the amount of employer-paid dependent care benefits.

Some people view the credit as a tax subsidy intended to encourage workers to provide adequate care for dependents. The cost of this subsidy can be reduced by targeting it more narrowly on families who otherwise would have difficulty affording adequate care. One

way to target the subsidy would be to reduce the credit percentage as incomes rise. For example, the credit percentage could be reduced by one percentage point for each \$1,500 of AGI over \$30,000. This option would raise about \$5 billion in 1990 through 1994. It would reduce the credit for about 44 percent of families that would be able to claim the credit under current law and would eliminate it for an additional 10 percent of claimants (families with AGI over \$58,500). Alternatively, phasing out the credit between \$50,000 and \$78,500 would raise about \$2 billion in the same period; this option would reduce credits for about 17 percent of claimants and eliminate it for another 5 percent. Finally, phasing out the credit between \$65,000 and \$93,500 would raise about \$1 billion in the same period. This phase out would reduce credits for 10 percent of claimants and eliminate it for another 3 percent. This third alternative was in the version of the Family Welfare Reform Act of 1987 passed by the House, but was not included in the Family Support Act of 1988.

Opponents of reducing the credit argue that it is not a subsidy. Instead, they view it as needed for horizontal equity: families who pay for dependent care in order to work are less well off, and therefore should pay less tax than taxpayers with the same income who either have no dependents or have one spouse at home. Phasing out the credit also could be criticized because it would raise the marginal tax rate for taxpayers with incomes in the credit phaseout range, which could discourage some secondary wage earners from working. For those taxpayers with incomes in the phaseout range who claim the full credit, these proposals could raise marginal tax rates by 3.2 percentage points.

If the credit were phased out, employees could seek other tax subsidies for dependent care by asking their employers to provide plans for dependent-care assistance. Current law allows up to \$5,000 in payments under these plans to be excluded from an employee's income, in effect allowing plan participants to purchase dependent care out of pretax income. Repealing this exclusion would make all tax preferences for dependent care subject to the income phaseout of the dependent-care credit described above.

**REV-12 TAX THE INCOME-REPLACEMENT PORTION
OF WORKERS COMPENSATION AND
BLACK LUNG BENEFITS**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline	0.9	2.4	2.5	2.6	2.7	11.1

Under current law, unemployment benefits are fully taxable and Social Security and Railroad Retirement (Tier I) benefits are partially taxable to upper-income households. Other entitlement benefits are not taxable. Many of these benefits, such as Aid to Families with Dependent Children (AFDC), are means-tested. Revenue gains from making such benefits taxable would be extremely small because few people who qualify for these programs would have enough income to incur any income tax liability. However, revenues could be raised by taxing the portion of Workers' Compensation and Black Lung benefits that replaces income lost as the result of work-related injuries or Black Lung disease. The share of these benefits that reimburses employees for medical costs is about 30 percent. Including the income-replacement portion of these benefits in AGI would add about \$11 billion to revenues in 1990 through 1994.

Taxing the income-replacement portion of Workers' Compensation and Black Lung benefits would make the tax treatment of these entitlement benefits comparable to the treatment of unemployment benefits and to the treatment of the employment income that these benefits replace. It would also improve work incentives for disabled workers who are able to return to work. Under current law, the after-tax value of the wages they are able to earn may be less than the tax-free benefits they receive while disabled.

Opponents of taxing these benefits note that legal or insurance settlements for non-work-related injuries are not taxable, even if a portion of them reimburses workers for income loss, and that taxation

of workers' compensation benefits would therefore treat these two types of compensation inconsistently.

REV-13 TAX NONRETIREMENT FRINGE BENEFITS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Tax Some Health Insurance Premiums						
	(See ENT-15)					
Tax Life Insurance Premiums						
Income tax	1.5	2.1	2.2	2.3	2.4	10.3
Payroll tax ^a	0.8	1.1	1.2	1.2	1.3	5.6
Impose a 3 Percent Excise Tax on the Value of Nonretire- ment Fringes	2.4	3.6	3.9	4.3	4.7	18.9

a. Estimates are net of reduced income tax revenues.

Employee compensation is taxable unless the tax code contains an explicit exception. Such exceptions apply to most employer-paid nonretirement fringe benefits, which are excluded from the income and payroll tax bases even though they constitute current compensation to employees. This exclusion reduces revenues substantially. For employer-paid health and life insurance premiums alone, the revenue loss will be roughly \$32 billion in income taxes and about \$17 billion in payroll taxes in 1990.

In addition to employer-provided health and life insurance, the law explicitly excludes from gross income employer-paid dependent care and miscellaneous benefits, such as employee discounts, parking, and athletic facilities. (The exclusion of legal service plans and educational assistance benefits expired on December 31, 1988.)

The exclusions can be opposed on the basis of both efficiency and equity. They are inefficient to the extent that employees bargain for tax-free benefits that they would not be willing to purchase out of after-tax income. Increased demand for the tax-free services leads, in turn, to higher prices for the services. For example, employer-paid

health insurance plans may have contributed to the strong growth in demand for health care, which may have contributed to sharp rises in health care costs. The higher prices are paid by all who need health care, not just recipients of tax-free insurance.

The exclusions are viewed as unfair because a taxpayer receiving no fringe benefits pays more tax than another with the same total income but a larger share in the form of fringe benefits. Further, the benefits of the exclusion are greater for those with higher incomes because they face higher marginal tax rates and because fringe benefits are rarely provided for low-wage workers.

Making all fringe benefits taxable presents problems in evaluating those benefits and in assigning the value to individual employees. Few valuation problems arise when the employer purchases goods or services and provides them to employees, but it is more difficult to determine the value of a facility, such as a parking lot, provided by the employer. Further difficulties arise if the total value of the fringe benefits needs to be assigned to individual employees. In cases where the employer provides a service, such as day care, it might be considered unfair to assign the same value to all employees regardless of their level of use; however, it could be administratively complex to assign values that depend on each worker's use. Further, the costs of collecting taxes on small fringe benefits (such as employee discounts) could exceed the revenue collected.

The per-employee value of employer-paid health and life insurance is relatively easy to determine. The premiums paid for each employee could be reported on the employee's W-2 form, and withholding computed as it is for other taxable income, as is already done for some life insurance premiums (see below). The measurement of insurance values would be more difficult when benefits are provided directly, as when employers provide medical care or reimburse employees for medical costs incurred under self-insurance plans.

One way to tax all nonretirement fringe benefits would be to impose the tax on employers, based on the total cost of the fringe benefits provided, rather than on employees. Determining the total cost of fringe benefits would present some difficulties. This option would, however, eliminate the need to assign the value of fringe benefits to individual employees.

Tax Some Employer-Paid Health Insurance Premiums. Health insurance premiums were made subject to nondiscrimination rules for the first time in the Tax Reform Act of 1986. These rules limit the extent to which employer-paid health plans may favor higher-paid workers. Still, the present exclusion for employer-paid health insurance premiums has been criticized as unfair to those who must pay for their health insurance with after-tax dollars. The self-employed can exclude only 25 percent of their health insurance costs now, and none of them after 1989; taxpayers who pay for their own health insurance can deduct the cost of their insurance only to the extent that their total medical expenses exceed 7.5 percent of adjusted gross income. Two options to tax some employer-paid health insurance premiums are described elsewhere (see ENT-15).

Tax Employer-Paid Life Insurance Premiums. Group term-life insurance premiums paid by employers are currently excluded from taxable income, but the exclusion is limited to the cost of the first \$50,000 of insurance, and nondiscrimination rules apply. The Omnibus Budget Reconciliation Act of 1987 made the part of life insurance premiums that is taxable under the income tax also taxable under the payroll tax. The exclusion is not available to the self-employed. Making all employer-paid premiums taxable would add about \$10 billion to income-tax revenues and about \$6 billion to payroll-tax revenues in 1990 through 1994.

A difficulty with this tax option arises because many employers provide death benefits under pension plans as substitutes for life insurance. Employer contributions to pension plans are income-tax deferred (and the first \$5,000 of death benefits paid are tax-exempt) and are exempt from the payroll tax. If employer-paid life insurance plans were made taxable, employers might choose to offer less life insurance and larger death benefits on pension plans instead.

Impose an Excise Tax on the Value of Nonretirement Fringe Benefits. An alternative to including employer-provided benefits in the income of recipients would be to impose an excise tax on specific benefits, to be paid by employers. These benefits would include the full employer's share of health insurance, premiums to fund the first \$50,000 of life insurance, dependent care, parking, athletic facilities, and employee discounts. A tax imposed at a 3 percent rate, for example, would raise about \$19 billion in 1990 through 1994. The bulk of these revenues

would come from taxing employer-paid health insurance. Under this option, employers would need to know only their total fringe benefit costs; they would not have to value the benefits paid to each employee. This tax would maintain most of the incentives for employers to provide fringe benefits instead of taxable wages because the 3 percent excise tax rate would be much lower than the tax rate on wages.

This tax could be criticized as unfair for two reasons: the tax rate would not rise with the income of employees, as it would if the benefits were taxed under the income tax; and the tax might result in lower taxable wages for all employees, regardless of the benefits each receives. The degree of the inequity, however, would be small as long as the tax were imposed at a low rate.

REV-14 INCREASE TAXATION OF SOCIAL SECURITY AND RAILROAD RETIREMENT BENEFITS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Current Law Thresholds						
Tax up to 60 Percent of Benefits	0.3	1.0	1.1	1.3	1.5	5.2
Tax up to 85 Percent of Benefits	1.0	3.5	4.0	4.6	5.3	18.4
No Thresholds						
Tax 50 Percent of Benefits	2.4	8.2	8.7	9.4	10.1	38.9
Tax 60 Percent of Benefits	3.3	11.3	12.1	13.1	14.1	54.0
Tax 85 Percent of Benefits	5.9	20.2	21.7	23.8	25.7	97.2

Social Security and Railroad Retirement (Tier I) benefits constitute the federal government's largest entitlement commitment. These benefits could be reduced directly through changes in the benefit formula (see ENT-25 and ENT-27) or cost-of-living adjustments (see ENT-24), or indirectly by further using the income tax to decrease the net value of benefits paid to recipients with other income. For the same reduction in the federal deficit, an increase in the taxation of benefits would concentrate the burden more on higher-income households than would, for example, a cost-of-living adjustment (COLA) freeze, where the burden would also fall on lower-income households whose principal source of income is Social Security. Many argue that increased taxation of benefits is, therefore, a preferable way to achieve a given target of deficit reduction among the elderly and disabled.

On the other hand, increased taxation of benefits could be regarded as a violation of long-held understandings about the implicit promises in the Social Security and Railroad Retirement programs during the time these people were working and paying their payroll taxes. In addition, taxing up to 50 percent of benefits under current law already has decreased the rate of return that today's high-wage workers will receive in Social Security; taxing a higher percentage would decrease their rate of return even further, thereby possibly eroding support for the program.

The 1983 Social Security Amendments made Social Security and Tier I benefits partially taxable to higher-income households. Under current law, adjusted gross income (AGI) includes the lesser of one-half of Social Security and Tier I benefits, or one-half the excess of the taxpayer's combined income (AGI plus nontaxable interest income plus one-half of Social Security and Tier I benefits) over a threshold amount. The threshold amount is \$25,000 for single returns and \$32,000 for joint returns. Because these thresholds are not indexed, a growing percentage of recipient households will be affected by this 1983 provision.

In the immediate future, taxation of Social Security and Tier I benefits could be increased by reducing or eliminating the thresholds, or by raising the fraction of benefits included in AGI.

Eliminate or Reduce the Thresholds. In addition to the thresholds, the tax code protects lower-income elderly households from income taxation through personal exemptions, the regular standard deduction, and an additional standard deduction for the elderly. Under current law, 82 percent of couples and individuals with benefits pay no income tax on their benefits. If the benefit taxation thresholds were eliminated, about \$39 billion would be raised in 1990 through 1994, and the share of beneficiary couples and individuals paying no tax on their benefits would decline to 48 percent. Eliminating the thresholds would remove a tax preference that is not well targeted on those with lower incomes and would reduce tax disparities among middle-income households. In addition, for a comparable deficit reduction, eliminating the thresholds would have smaller effects on the disposable incomes of the lower-income elderly than curtailing cost-of-living increases or similar measures.

On the other hand, complete elimination of the thresholds with no other changes would decrease the disposable incomes of today's elderly with incomes below the median, while leaving upper-income elderly unaffected. To minimize the effects on moderate-income recipients, the thresholds instead could be lowered--for example, to \$12,000 for single filers and \$18,000 for joint returns. With up to 50 percent of benefits includable in AGI, these lower thresholds would raise about \$21 billion in 1990 through 1994, an amount that is roughly half of what would be generated by including 50 percent with no thresholds.

Increase Fraction of Benefits Included in AGI. Employers pay one-half of workers' combined payroll taxes from before-tax income under current law. Accordingly, many people reason that one-half of Social Security and Tier I benefits are properly includable in AGI. A competing view is that these benefits should be taxed more like public employee pensions and those few private-sector pensions in which individuals make contributions from after-tax income. Under current law, a fraction of benefits from contributory pension plans is excluded from tax. This fraction, called the exclusion ratio, is based on the nominal amount of after-tax contributions made by employees. The remaining share of these benefits is fully taxable. Because the ratio of after-tax contributions (the employee share of payroll taxes) to Social Security and Tier I benefits varies by each worker's earnings history and marital status, no single exclusion ratio is correct for all beneficiaries. Requiring the Social Security Administration to calculate separate exclusion ratios for each beneficiary, however, would be administratively burdensome. A 15 percent exclusion ratio--that is, including up to 85 percent of benefits in AGI--would make the tax treatment of Social Security for workers with high earnings roughly comparable to that afforded contributory pensions under current law, and would be more generous for those with lower earnings.

If current law thresholds were maintained, about \$18 billion would be raised in 1990 through 1994 by increasing includable benefits to 85 percent. This provision would affect 18 percent of couples and individuals receiving benefits in the 1990 tax year. With thresholds of \$12,000 and \$18,000 and up to 85 percent of benefits includable in AGI, approximately \$54 billion would be raised over the period. This change would raise, from 50 percent to 85 percent, the maximum portion of benefits included in AGI and the fraction of benefits included in combined income. (As under current law, no more

than 50 percent of the excess of combined income over the thresholds would be included in AGI.)

A third view is that the current tax treatment of contributory pensions--and, by extension, Social Security and Tier I--should be changed to allow retirees to recover tax-free the amount of their after-tax contributions adjusted for inflation. Under current tax law, however, no such inflation adjustments are made for a taxpayer's investments from after-tax income in pensions, capital assets, or other holdings.

Depending on long-term inflation assumptions, an inflation-adjusted exclusion ratio along the same lines falls between 30 percent and 40 percent; this would mean including up to 60 percent or 70 percent of benefits in AGI. For example, including up to 60 percent of benefits in AGI with current thresholds would raise about \$5 billion in 1990 through 1994, and about \$54 billion in the same period if the thresholds are eliminated. (For more discussion of alternative exclusion ratios, see Congressional Budget Office, "An Analysis of Alternatives for Taxing Social Security as a Private Pension," Staff Working Paper, March 1988.) With thresholds of \$12,000 and \$18,000 and up to 60 percent of benefits includable in AGI, approximately \$30 billion would be raised over the same period.

A change in the taxation of Social Security and Tier I benefits would also affect the income-related supplemental premium paid by retirees, which funds a portion of catastrophic benefit-insurance. The increase in these premiums would be small under the proposals that increase the maximum percentage includable in income under current law thresholds. Under the three proposals with no thresholds, additions to these premiums account for about 14 percent of the revenue increases. For example, \$6 billion of the \$39 billion that would be raised in 1990 through 1994 by eliminating the thresholds under the current 50 percent exclusion ratio comes from supplemental premiums paid by retirees.

REV-15 EXPAND SOCIAL SECURITY COVERAGE

Addition to CBO Baseline ^a	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Extend HI Coverage to State and Local Govern- ment Employees Not Now Covered	1.2	1.9	1.9	1.9	1.9	8.8
Extend OASDI Coverage to New State and Local Government Employees	0.3	1.2	2.1	3.0	3.9	10.5

a. These estimates do not include the effect of any increases in benefit payments that would result from this option. These effects would be small over this five-year period. Estimates are net of reduced income tax revenues.

In the past, government workers were not required to pay Social Security payroll taxes. Beginning in 1982, legislation made Social Security taxes mandatory for certain groups of government workers. All federal workers were required to contribute to Medicare Hospital Insurance (HI) beginning in 1983. New federal employees were required to contribute to the Old-Age, Survivors, and Disability Insurance (OASDI) trust funds starting in 1984. In 1986, HI taxes were made mandatory for all new employees of state and local governments (those hired after March 31, 1986).

Coverage under the HI and OASDI programs could be expanded to include more state and local employees. Under current law, many of these employees will qualify for benefits when they retire based on other employment in covered jobs or their spouses' employment. Thus, these workers will receive benefits in return for a smaller amount of lifetime payroll taxes than is paid by those who work continuously in covered employment. This is especially true for HI benefits: about 90

percent of retired state and local government workers receive benefits, but only about 70 percent worked in a covered state and local government job. Inequitable treatment is less of a problem for OASDI benefits, because these benefits are reduced for retired government workers who have worked a substantial portion of their careers in employment not covered by Social Security.

As more workers pay OASDI and HI payroll taxes, the government's liability for future program benefits will grow. Because most state and local workers are already able to claim HI benefits upon retirement, however, expanding HI coverage would have a small effect on future benefit payments. Expanding OASDI coverage would raise future benefits more significantly, but the added payroll tax revenue would exceed any added benefits for many years to come. Thus, these two tax options would reduce the deficit even when the added benefits are taken into account, and even in the longer term.

Extend HI Coverage to State and Local Employees Not Now Covered. State and local government employees hired on or before March 31, 1986 are the only group for which HI coverage is not mandatory. A proposal to extend HI to these employees, which would raise about \$9 billion in 1990 through 1994, was considered during the budget reconciliation process in the last four years, and was included in the President's budget request for 1988, 1989, and 1990.

Extending OASDI Coverage to New State and Local Employees. Extending OASDI coverage to new state and local employees would raise \$10.5 billion in 1990 through 1994. Social Security coverage would improve the protection that many new state and local government workers and their families would have, because it is easier to qualify for disability and survivors' benefits under Social Security than under many public employee benefit programs, and eligibility is not lost if the employee changes jobs. Further, for a given amount of covered wages, younger and short-service workers will receive more generous retirement benefits from Social Security than if the wages were covered solely by a public pension plan. The difference is that Social Security benefits are calculated based on indexed wages, while benefits from public pension plans are based on nominal wages.

State and local governments would have to pay the employer share of OASDI taxes on new employees if coverage were made man-

datory. As state and local government participation in OASDI is now voluntary, those states with a low percentage of covered employees would bear most of the cost from mandatory coverage. Eight states--Alaska, California, Colorado, Louisiana, Maine, Massachusetts, Nevada, and Ohio--now have less than 50 percent of their state and local employees covered under OASDI. Representatives of some localities argue that the change would create a difficult financial burden for two reasons. First, state and local governments would have to create a separate pension plan for workers newly covered by OASDI, so that their pension benefits would not duplicate Social Security retirement benefits. Maintaining separate pension plans could be administratively complex. Second, the funding for current state and local pension plans might be inadequate for governments operating their pension plans on a pay-as-you-go basis, using current contributions to pay benefits to current retirees.

REV-16 REPEAL THE MEDICARE TAXABLE MAXIMUM

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline ^a	3.1	8.6	9.1	9.8	10.6	41.2

a. Estimates are net of reduced income tax revenues.

Under current law, wages above the taxable maximum (\$48,000 in 1989) are exempt from all payroll taxes, including the Medicare Hospital Insurance (HI) tax. For workers now paying payroll taxes, only about 10 percent of wages are above the taxable maximum. If the taxable maximum for Medicare were repealed beginning in 1990, the deficit would decrease by about \$41 billion in 1990 through 1994. This option was included in the President's budget request for 1989.

Revenues from a repeal of the Medicare taxable maximum would help improve the solvency of the HI trust fund; the fund's trustees projected in 1988 that it will begin showing a negative cash flow in 1998 and will be exhausted by 2005. Repeal of the Medicare taxable maximum would end the current situation in which highly paid workers pay a smaller share of their wages to finance Medicare than do most workers.

Opponents of this option argue that high-wage workers already subsidize other workers, because they pay more HI taxes yet receive the same coverage as other workers. Thus, they claim that an HI tax increase should not apply to high-wage workers alone. Increasing the HI tax rate from 1.45 percent to 1.63 percent for both employers and employees would raise about the same revenues over the five-year period as repealing the taxable maximum.

Some people oppose any increase in HI taxes. They argue that the financial problems of the HI trust fund stem from unanticipated growth in outlays and that the solution to these problems should be sought by decreasing spending and not by increasing taxes.

REV-17 INDEX THE UNEMPLOYMENT INSURANCE TAXABLE WAGE BASE

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline ^a	0	0.3	0.7	0.9	1.0	2.9

- a. These estimates assume that the tax change is effective January 1, 1991, to allow time for changes in state laws. Some states with Unemployment Insurance programs in good financial condition are assumed to offset at least part of the increases in the state tax base with reductions in state tax rates. Estimates are net of reduced income tax revenues.

The Unemployment Insurance (UI) program is financed primarily by federal and state payroll taxes on employers. The federal UI tax is imposed on the first \$7,000 of wages per worker. This amount also serves as the minimum base for state UI taxes. Because the federal wage base has been increased only three times since 1940, when it was \$3,000, the proportion of wages in covered employment subject to the federal tax has fallen from over 90 percent in 1940 to less than 35 percent today. The ratio of the net aggregate state trust fund balance to total wages and salaries has also fallen from 2.2 percent in 1970 to 1.3 percent in 1988.

Indexing the federal UI wage base by linking it to the change in the national average wage--as is done with the Social Security wage base--would prevent further erosion in the real wage base. Indexation would maintain the current relationship between covered wages and unemployment taxes, assuming no change in state UI tax schedules. It would also preserve the current relationship between per capita tax payments and per capita benefits, because UI benefits tend to increase with nominal wages.

Indexing the wage base would increase combined federal and state UI revenues by almost 5 percent, while reducing the federal budget deficit by about \$3 billion in 1991 through 1994. (Because both federal and state taxes are counted as revenue to the federal government, increases in both revenue sources decrease the federal budget deficit.) Federal UI tax revenues would rise nearly in

proportion to future increases in the federal tax base. In contrast, aggregate state UI taxes might rise less than proportionately: states with tax bases currently higher than the federal base (about two-thirds of states) might not be affected by indexation for several years, and states that do not need additional UI revenues might choose to offset the effects of an increased wage base by reducing their tax rates. Indexation would concentrate the tax increase on the wages of workers now earning more than the current tax base; this change would make the UI tax somewhat less regressive than it is now.

Opponents of indexing argue that it would result in higher labor costs in some states, which could lead to higher unemployment in those states. Moreover, incentives for state UI programs to remain solvent have increased in recent years. For example, states are now charged interest on loans from the federal UI program. Thus, states may increase their programs' solvency on their own, obviating the need for this option. Opponents also argue that the states, not the federal government, should determine whether UI taxes should be raised through an increase in the base or through higher rates.

REV-18 REDUCE TAX CREDITS FOR REHABILITATION OF OLDER BUILDINGS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Repeal Credit for Nonhistoric Structures and Reduce Credit for Historic Structures to 15 Percent	0.1	0.1	0.1	0.1	0.1	0.5
Repeal the Credits	0.2	0.2	0.2	0.2	0.2	1.0

Tax credits for rehabilitation are intended to promote the preservation of historic buildings, encourage businesses to renovate their existing premises rather than relocate, and encourage investors to refurbish older buildings. The credit rate is 10 percent for expenditures on structures built before 1936, and 20 percent for buildings certified as historic structures by the Department of the Interior because of their architectural significance.

The credits favor commercial use over most rental housing and may, therefore, divert capital from more productive uses. Commercial buildings can qualify for the 10 percent or 20 percent credit, whereas rental housing can qualify only in certified historic structures. Moreover, in favoring renovation over new construction, the credits may encourage more costly ways of obtaining more housing and commercial buildings.

Rehabilitation may, however, have social benefits: for example, it may discourage the destruction of historically noteworthy buildings. This objective may, however, be accomplished at a lower cost by retaining a credit only for the renovation of certified historic buildings. Some surveys have indicated that a 15 percent credit would be sufficient to cover both the extra costs of obtaining certification and of historic-quality rehabilitation. If the credit for historic structures were reduced to 15 percent and the credit for nonhistoric structures

were repealed, revenue gains over the 1990-1994 period would be \$0.5 billion. Repeal of the credit would raise \$1 billion over the same period of time.

REV-19 TAX CREDIT UNIONS LIKE OTHER THRIFT INSTITUTIONS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Tax All Credit Unions	0.4	0.7	0.7	0.8	0.9	3.5
Tax Credit Unions with More than \$10 Million in Assets	0.4	0.6	0.7	0.8	0.9	3.4

Credit unions, organized for the benefit of members and operated without profit, are not subject to federal income taxes and hence are treated more favorably than competing thrift institutions, such as savings and loan institutions and mutual savings banks. Taxing all credit unions like other thrift institutions would raise \$3.5 billion in 1990 through 1994. About the same amount of revenue would be raised by taxing only credit unions with assets above \$10 million.

Historically, savings and loan institutions, mutual savings banks, and credit unions were tax-exempt because they were regarded as operating for the sole benefit of their members. For credit unions, membership was limited to groups sharing a "common bond," such as place of employment, membership in a church or private club, or neighborhood affiliation. In 1951, the tax exemptions for savings and loans and for mutual savings banks were removed because they were considered to be more similar to corporations than to mutual organizations. Since 1951, credit unions have come to resemble other thrift institutions very closely. For example, many large credit unions now offer services comparable to those of other thrifts, such as first and second mortgages, direct deposit, automatic teller access, pre-authorized payments, credit cards, safe deposit boxes, and discount brokerage services. Since 1982, credit unions have also been allowed to extend their services to unrelated groups, prompting some credit unions to recruit members from other organizations. In fact, most credit unions have relaxed their traditional membership limits by allowing all members and their families to participate, even if the

member leaves the sponsoring organization. Credit union membership has grown from about 5 million in 1950 to about 55 million today. Taxable thrift institutions argue that credit unions' tax-exempt status gives them an unfair competitive advantage that is no longer justified by differences in services provided or in potential membership.

The tax acts of 1982, 1984, and 1986 greatly limited the tax preferences of taxable thrift institutions. The resulting increase in the tax burden of those institutions increases the competitive advantage that credit unions derive from escaping taxation. Credit unions contend, however, that the original reason for their special tax treatment--that they operate without profit and solely for the benefit of their members--justifies their current status. Unlike taxable thrift institutions, credit unions tend to be more closely managed by their depositors, who by statute generally serve on the board of directors as volunteers; the credit union industry argues that this management structure reduces profit-making behavior.

Credit unions also argue that their accumulation of retained earnings does not indicate a profit-making purpose, but is intended only to provide members a cushion for unexpected losses. Taxable thrift institutions, however, assert that credit unions use the retained earnings to expand, in competition with the taxable thrift market.

REV-20 REPEAL TAX PREFERENCES FOR EXTRACTIVE INDUSTRIES

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Repeal Percentage Depletion	0.6	0.8	0.9	1.0	1.1	4.4
Repeal Expensing of Intangible Drilling, Exploration, and Development Costs	0.4	1.1	1.2	1.2	1.2	5.1

Businesses engaged in extracting oil and gas or hard minerals enjoy special cost recovery rules. These special rules include the expensing of exploration and development costs (including intangible drilling costs) and deductions for depletion in excess of capitalized costs.

Mineral properties, such as oil and gas wells, coal mines, or gravel quarries, are similar to depreciable assets in that they require large "up-front" expenditures to produce assets that generate future income. These capital costs for mineral properties are of three types: costs associated with acquiring mineral rights and exploring for possible mineral deposits; development costs, including expenses such as those related to drilling oil wells or excavating mines; and costs for capital equipment, such as pumps or construction machinery. Under general income tax accounting principles, such capital costs may not be deducted immediately (that is, may not be expensed) but must be capitalized and recovered in future years through depreciation or depletion deductions. Extractive industries, however, may expense certain capital costs that normally would have to be recovered over the life of the asset, and can take depletion deductions that exceed the actual amount of other capital spending.

Items that may be expensed include certain exploration and development costs for hard mineral industries (such as coal or iron ore) and much of the cost necessary to prepare and drill wells for oil and gas (called intangible drilling costs). In the case of corporations

engaged in hard mineral extraction and integrated producers of oil and gas, expensing is limited to 70 percent of these costs, with the remaining 30 percent deducted over a 60-month period.

Under cost depletion, firms are allowed to deduct costs according to the percentage of estimated reserves produced each year. For example, if 5 percent of a well's remaining reserves is produced in a given year, 5 percent of the well's unrecovered depletable costs is written off in that year. The total amount of cost depletion deductions allowed over time equals the total amount of capitalized costs. Many taxpayers, however, are allowed the alternative of percentage depletion to compute their annual depletion deduction. Percentage depletion allows firms to deduct a certain percentage of the gross income from a property as depletion, regardless of the firm's actual capitalized costs. For example, nonintegrated oil and gas companies are allowed to deduct 15 percent of the gross revenue from their first 1,000 barrels per day of oil and gas production each year. (Integrated oil and gas producers are required to use cost depletion for recovering capitalized costs.) Hard mineral producers are also allowed to use percentage depletion at varying statutory rates. Minerals eligible for percentage depletion include sand (5 percent), coal (10 percent), iron ore (14 percent), dimension stone and mollusk shells (14 percent), oil shale (15 percent), gold (15 percent), and uranium (22 percent). Percentage depletion may not exceed 50 percent of the net income from the mineral property. Thus, percentage depletion provides little or no incentive to develop or expand production from marginal properties because the amount of percentage depletion allowed decreases as production costs increase.

The current tax treatment of mineral and energy properties has been criticized because many of the preproduction expenses of mineral properties can be deducted, providing the taxpayer with an interest-free loan of deferred taxes for a portion of the cost. For example, drilling expenditures by oil companies produce assets (producing wells) that gradually decline in value as oil reserves are depleted. The tax code normally requires preproduction costs to be "capitalized" (added to the value of the asset) and deducted as the asset wears out. Most drilling costs, however, can be deducted immediately. Moreover, percentage depletion over the life of the well often allows firms deductions that exceed their original investment, especially when exploration and development costs and intangible drilling costs are not

capitalized. In many cases, percentage depletion is even more generous (in present-value terms) than expensing of all depletable costs. Because percentage depletion depends on the value of sales rather than the cost of the asset, it is more akin to a production subsidy than a method of cost recovery.

Because of these provisions, mineral and energy producers face effective tax rates that are lower than statutory tax rates and, for many producers, lower than effective tax rates on other industries. TRA increased the effective rates on most industries by, among other things, replacing the Accelerated Cost Recovery System (ACRS) of depreciation with one that is less generous for many assets and by eliminating the investment tax credit. Tax preferences for extractive industries were not directly curtailed by TRA, although they were subjected to a more stringent minimum tax. Taxpayers paying the minimum tax derive little or no tax benefit from percentage depletion for production during the year. They also must defer deductions for current exploration and development costs into later tax years. Thus, as a result of the minimum tax, the tax advantages of extractive industry preferences are curtailed for certain taxpayers, but not for others. The remaining tax advantages could be eliminated by requiring all expenditures on mineral and energy rights, and on exploration, development, and drilling of productive mines and wells, to be capitalized and recovered by cost depletion. Repeal of percentage depletion would raise more than \$4 billion in 1990 through 1994. Repeal of the expensing provisions would raise about \$5 billion over the five-year period, assuming that expenditures on dry holes, unproductive mines, and worthless mineral rights could still be expensed.

Opponents of expensing and percentage depletion argue that these provisions are unnecessary subsidies, and cause too much capital to be allocated to extractive industries as opposed to other, more productive uses. Further, the subsidies may cause greater consumption of domestic resources (especially oil and gas) and less of imported resources. Providing the subsidies has been called a policy of "draining America first," which may result in greater reliance on foreign energy producers in the future. Finally, it is argued that the differential taxation of integrated and independent oil companies is an inefficient way of promoting oil production.

The major argument for retaining the expensing and percentage depletion provisions is that they provide necessary incentives for increasing domestic production of oil, other fuels, and hard minerals. However, given the net income limitation mentioned above, percentage depletion provides little incentive for the development of marginal properties. Proponents also argue that, because the oil and gas industry is highly risky, favorable tax treatment is required so that firms can raise sufficient capital. Moreover, extractive industries are facing particularly hard times, and some people argue that now is a bad time to increase their tax burden.

REV-21 FURTHER RESTRICT DEDUCTIONS FOR BUSINESS MEALS AND ENTERTAINMENT

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Disallow Deductions for Half of Business Meal and Entertain- ment Expenses	1.8	3.1	3.3	3.6	3.7	15.5

The tax code does not generally allow deductions for personal living costs, but it allows full deductions for ordinary and necessary business expenses. Deductions for business meals, entertainment, and travel expenses are restricted: taxpayers are required to show that the purpose of the expenses is related to business, the portion of expenses that is "lavish and extravagant under the circumstances" is disallowed, and the deductions are limited to 80 percent of expenses. The Congress imposed these restrictions because of concerns that some taxpayers are able to deduct personal living expenses because they appear to be undertaken for business purposes. Even when connected with a taxpayer's business, expenditures for items such as parties, meals, tickets to theater and sports events, and country club dues provide substantial personal benefit to the taxpayer and other recipients. Deductibility of these expenses provides a tax subsidy that is not available to those who make meal, entertainment, and travel purchases outside a business setting. This tax subsidy could be further reduced by lowering the 80 percent limit. For example, imposing a 50 percent limit would raise revenues by \$15.5 billion in 1990 through 1994.

Determining the component of entertainment expenses that represents ordinary and necessary business expenses and the part that represents personal consumption is necessarily arbitrary; some might regard 50 percent as too stringent a standard. In addition, the proposal could have negative effects on some restaurants and on the professional sports and entertainment industries because business customers provide them with a large fraction of their income.

REV-22 ELIMINATE PRIVATE-PURPOSE TAX-EXEMPT BONDS

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Eliminate All Private-Purpose Tax-Exempt Bonds	0.1	0.4	0.7	1.2	1.6	3.9
Raise Cap and Extend Volume Limits to New Issues of All Private-Purpose Bonds	a	0.1	0.2	0.4	0.6	1.4

a. Less than \$50 million.

State and local governments have for many years issued bonds exempt from federal taxation to finance public investments such as schools, highways, and water and sewer systems. Beginning in the 1970s, these governments began to issue a growing volume of tax-exempt bonds to finance quasi-public facilities, such as ports and airports, and private-sector projects, such as housing and shopping centers. These bonds eventually became known as "private-purpose" bonds because the ultimate users of the tax-exempt financed facilities were private nongovernment entities.

Private-purpose tax-exempt bonds include mortgage revenue bonds for rental housing and single-family homes for low-income and middle-income households; industrial development bonds (IDBs) used by private firms for a wide variety of purposes; student loan bonds issued by state authorities to increase funds available for guaranteed student loans; and bonds for nonprofit institutions, such as hospitals and universities.

Although private-purpose bonds provide subsidies for arguably worthwhile activities, tax-exempt financing is an inefficient way to provide assistance. With a direct subsidy, the benefit goes entirely to

the borrower. With tax-exempt financing, the benefit is shared between the borrower of funds and the investor in tax-exempt bonds. A further drawback of tax-exempt financing is that it is an off-budget expenditure not routinely reviewed during the annual budget process.

The Congress has placed restrictions on the use of tax-exempt financing several times, beginning in 1968. During the 1980s, these restrictions have included limiting the volume of new issues of tax-exempt bonds for some activities and setting expiration dates on the use of tax-exempt financing for other activities.

Most recently, the Tax Reform Act of 1986 (TRA) made the alternative minimum tax applicable to interest earned on newly issued private-purpose bonds and placed a single state-by-state limit on the volume of new issues of IDBs, student loan bonds, and housing and redevelopment bonds. The new state volume limits, which are more restrictive than prior law limits, are the greater of \$50 per resident or \$150 million a year. Bonds for publicly owned airports, ports, and solid waste disposal facilities, and bonds for nonprofit 501(c)(3) organizations (primarily hospitals and educational institutions) are exempt from the new volume limits. With the exception of hospitals, however, nonprofit institutions may not issue bonds if they have more than \$150 million in tax-exempt debt outstanding. This provision primarily affects large universities. Tax exemption for mortgage revenue bonds and for small-issue IDBs (under \$10 million) used for manufacturing facilities will terminate at the end of 1989.

As a result of the Tax Reform Act, the volume of new, private-purpose bonds over the next five years will be about 20 percent less than it would have been under previous law. But while current law limits the growth of new issues, it does not end it--or the continued loss of federal revenues. If the Congress were to eliminate tax exemption for all new issues of private-purpose bonds, revenue gains would be about \$4 billion in 1990 through 1994, assuming that at least some construction of airports, and sewage and solid waste facilities would qualify for tax-exempt financing as government facilities. Eliminating the tax exemption would eventually result in higher user costs for facilities such as low-income housing and nonprofit hospitals, unless the Congress provided direct subsidies as a substitute. However, these direct subsidies would be more efficient and, hence, less costly in the long run.

Including all bonds for private nonprofit and quasi-public facilities in a single state volume limit and raising the limits beginning in 1990 to \$75 per capita or \$200 million a year would raise \$1.4 billion in 1990 through 1994. These changes would curb the growth of all private-purpose bonds without sharply reducing their use. The curb would primarily affect bond issues for nonprofit hospitals, which are not included in the current cap. Advocates of limiting or eliminating these bonds question the need for any subsidy when the supply of hospital beds seems to be adequate; opponents point out that such limitations will raise health care costs. Bonds for airport facilities for the exclusive private use of airlines under long-term leases, such as departure gates, would also be curtailed, but public airport facilities, such as runways and control towers, could continue to be financed with the tax-exempt bonds as government facilities.

REV-23 ELIMINATE OR RESTRICT DEDUCTIBILITY OF STATE AND LOCAL TAXES

Addition to CBO Baseline	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Eliminate Deduct- ibility of State and Local Taxes	4.1	27.9	29.6	31.4	33.3	126.2
Maintain Deduct- ibility of Taxes Above Floor of 1 Percent of AGI	0.7	4.6	4.9	5.2	5.5	20.9
Prohibit Deduct- ibility of Taxes Above Ceiling of 9 Percent of AGI	0.7	4.5	4.9	5.3	5.8	21.2

Under current law, taxpayers may deduct state and local income, real estate, and personal property taxes from their adjusted gross income (AGI). The deductions mean, in effect, that the federal government subsidizes the state and local tax payments of taxpayers who itemize. This subsidy may cause itemizers to support higher levels of state and local services than they would otherwise; to the extent that this is true, the deductions may indirectly increase state and local spending at the expense of federal revenues. The Tax Reform Act of 1986 reduced the subsidy to state and local governments directly, by repealing the deduction for state and local sales taxes, and indirectly, by increasing the standard deduction and lowering marginal rates, thus reducing both the number of itemizers and the value of the deductions.

Deductibility of state and local taxes has drawn criticism on several grounds. First, the deductions reduce federal tax liability only for itemizers and, because the value of an additional dollar of deductions increases with the marginal tax rate, the deductions are worth more to higher-bracket taxpayers. Second, deductibility favors wealthier communities; the higher the income level in a community, the more itemizers it will have, and thus the greater the likelihood

that residents of the community will support a higher level of spending. Third, deductibility may discourage states and localities from financing services with nondeductible user fees, thus discouraging efficient pricing of some services.

Supporters of deductibility argue that it is needed because a taxpayer with a large state and local tax liability has less ability to pay federal taxes than one with equal total income and a smaller state and local tax bill. However, a taxpayer who pays higher state and local taxes may also receive more benefits from publicly provided services. In this case, the taxes are more like other payments for goods and services, and hence should not be deductible.

Supporters of deductibility also note that any higher public expenditures resulting from deductibility benefit all members of a community, including lower-income nonitemizers who do not receive a direct tax saving. Increased spending on such public goods as education, transportation, and pollution control may also have spillover benefits for residents outside the taxing jurisdiction. Further, since some direct federal grants-in-aid to states and localities have been reduced or terminated in the past few years, deductibility may be needed more.

Limiting the value of the state and local deduction could raise significant revenues. Eliminating deductibility would raise about \$126 billion in 1990 through 1994. In its consideration of tax reform, however, the Congress chose to continue deductibility. Most of the incentive effect of the present deductions on public spending could be preserved if the deductions were permitted only for state and local tax payments above a fixed percentage of AGI. The average itemizer's state and local tax deductions exceed 1 percent of AGI in every state. If the floor were set at 1 percent, revenues in 1990 through 1994 would increase by about \$21 billion. Another alternative would be to prohibit deductions above a fixed ceiling, which also might be a percentage of AGI. A ceiling set at 9 percent of AGI would increase revenues by slightly more than \$21 billion in 1990 through 1994. A floor and a ceiling would have very different effects on incentives, however. With a floor, the incentive for increased state and local spending would remain; with a ceiling, the incentive would be reduced.

REV-24 IMPOSE A VALUE-ADDED OR NATIONAL SALES TAX

Addition to CBO Baseline ^a	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
5 Percent Rate, with Comprehensive Base	0	82.3	125.4	136.7	147.5	491.9
5 Percent Rate, with Exemptions for Food, Housing, and Medical Care	0	47.3	72.0	78.3	84.3	281.9
5 Percent Rate, with Low-Income Relief Under Means- Tested Programs ^b	0	68.0	103.5	112.7	121.2	405.5

a. Estimates are based on an effective date of January 1, 1991, and are net of reduced income and payroll tax revenues, but do not reflect added administrative costs.

b. Includes increased outlays for Food Stamps, Supplemental Security Income, and Aid to Families with Dependent Children.

A national value-added tax (VAT) could raise substantial revenue at relatively low tax rates. A VAT is typically administered by taxing the total value of sales of all firms, but allowing firms to claim a credit for taxes paid on purchases from other firms of raw materials, intermediate materials, and capital goods. In the aggregate, the tax base equals sales to final consumers. Another method of taxing the same base is to impose a national retail sales tax.

A 5 percent VAT on a broadly defined consumption base (see Table 5) would increase net revenues by about \$82 billion in fiscal year 1991 and by roughly \$492 billion in 1990 through 1994. At the same rate, a VAT on a narrower base (see Table 5) would net about \$47 billion in 1991 and about \$282 billion in 1990 through 1994. These projections assume that collections would not begin until January 1, 1991, because the Internal Revenue Service estimates that it would take approximately 18 months after the date of enactment to begin to administer a VAT.

If a large amount of revenue is to be raised, a VAT might be preferable to an income-tax increase because it is theoretically neutral between present and future consumption, and therefore would not

TABLE 5. SAMPLE CALCULATION OF A VALUE-ADDED TAX BASE, 1986

Items Included in Tax Base		Amount (In billions of dollars)
Total Personal Consumption in GNP		2,807
Less:	Rental value of housing	434
	Net foreign travel expenditures	12
	Religious and welfare activities	63
Plus:	New residential construction	211
Broad VAT Tax Base		2,509
Possible Exclusions from the Base ^a		
	New residential construction	211
	All medical care (including insurance)	359
	Food purchased for off-premises consumption (excluding alcohol beverages)	303
	Food furnished to employees	8
	Food produced for farm consumption	1
	Brokerage, banking, and life insurance services	141
	Local transit (excluding taxis)	4
	Clubs and fraternal organizations	5
	Toll roads, etc.	1
	Private education and research	47
Narrower VAT Tax Base		1,429

SOURCE: Congressional Budget Office, based on Department of Commerce, Bureau of Economic Analysis, National Income and Product Accounts.

a. The excluded amount assumes that consumption is taxed at a zero rate.

adversely affect incentives for saving and investment, as an equal increase in income taxes would. In addition, it would distort economic decisions less than would an equal revenue increase in selective consumption taxes. The VATs that have been enacted in other countries, however, have seldom conformed to the ideal. A tax with many exceptions and multiple rates would distort consumption choices more than a broadly based VAT and could be more distorting than higher income tax rates.

The major argument used against a VAT is that it is regressive when compared with annual income: the tax per dollar of consumption is the same for all taxpayers, but the ratio of consumption to income falls for people in higher income groups. Regressiveness can also be measured by comparing the tax with annual expenditures, which vary less than annual income and may be a better indicator of long-run income. Under this measure, a VAT appears less regressive (and some forms of VAT appear proportional).

A VAT could be made less regressive by allowing exemptions for goods and services consumed by low-income people, although such exemptions would substantially increase costs of enforcement and compliance and would reduce revenues from a VAT. One alternative for offsetting regressiveness would be to allow additional exemptions or refundable credits for low-income people under the federal income tax, though this would reduce the revenue gains from the VAT and would cause many people to file tax returns who otherwise would have no need to file.

Another alternative might be to include food and medical care in the narrower tax base, but to increase payments to low-income individuals through means-tested programs. For example, a 5 percent increase in Food Stamps, Supplemental Security Income (SSI), and Aid to Families with Dependent Children (AFDC) benefits would compensate low-income people for taxes on food, as well as partially offset taxes on other purchases. After accounting for the costs of these additional outlays, this option would reduce the deficit by \$68 billion in 1991, and about \$406 billion in the years 1990 through 1994. To the extent that a VAT would cause medical care costs to rise, the Congress could consider increasing some or all of the payment levels for Medicaid and Medicare. The deficit estimates shown above do not reflect potential increases in these benefits.

Other arguments against a VAT are that any one-time increase in the price level it induces might have inflationary repercussions, though this result would depend on monetary and fiscal policies, and that states would regard a federal sales tax as interfering with their traditional revenue base. In addition, the large revenue-raising potential of a federal VAT is of concern to some people who fear it might facilitate undue growth of the federal government. Finally, a federal VAT would impose compliance costs on the firms paying the tax and claiming credits, and it would require new collection and enforcement personnel and procedures. In 1984, the Treasury Department estimated that a VAT would require 20,000 additional personnel at an annual cost of about \$700 million. Because the administrative and compliance costs per dollar of revenue collected are high when compared with other federal taxes, some analysts argue that it would be inefficient to impose a VAT at rates below 5 percent.

REV-25 INCREASE ENERGY TAXES

Addition to CBO Baseline ^a	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Impose Tax on Domestic and Imported Oil (\$5 per barrel)	20.5	20.8	21.1	21.4	21.7	105.6
Impose Oil Import Fee (\$5 per barrel)	7.7	8.3	8.9	9.1	9.2	43.2
Increase Motor Fuel Taxes (12 cents per gallon)	11.9	11.5	11.4	11.4	11.6	57.8
Impose Broad- Based Tax on Energy Consumption (5 percent of value)	13.5	14.3	15.3	16.3	17.6	77.0

a. Estimates are net of reduced income and payroll tax revenues. Increases in federal government expenditures for energy products under these options are not estimated. The revenue estimates are based on CBO's baseline oil price forecast of \$16 per barrel in 1990, rising to \$21 per barrel by 1994. The effective date for all of these proposals is October 1, 1989.

Energy taxes could raise significant amounts of revenue, increase conservation by making energy more expensive, and reduce the country's dependence on foreign oil suppliers. The United States depends on foreign sources for about 40 percent of the oil it consumes, and about 20 percent of its total energy. This dependence exposes the U.S. economy to potential interruptions in energy supplies.

Energy taxes would raise energy prices and reduce energy consumption. Thus, they could help preserve recent conservation gains that might otherwise be lost because of lower world oil prices. To the extent that taxes on oil lead to reduced demand for imported oil,

foreign suppliers would absorb part of the tax through lower world oil prices. To the extent that energy taxes reduce energy consumption, they would also reduce carbon dioxide emissions and could, therefore, reduce global warming.

One argument against energy taxes is that they are regressive because they would absorb a larger fraction of family incomes for low-income taxpayers, who spend a higher percentage of their income on energy than do high-income families. Regressiveness can be measured against annual expenditures, instead of income; using this measure, energy taxes appear almost proportional. Whichever measure is used, the regressiveness of energy taxes would be offset somewhat if the taxes cause an increase in the Consumer Price Index that leads to higher benefits from indexed transfer programs. It also could be offset by adjustments in income tax rates and by direct energy subsidies for low-income people.

Energy taxes have been opposed on several other grounds. They could have widely different effects in different parts of the country. For example, taxes that increase the relative price of fuel oil would have the greatest impact on the Northeast, while taxes that increase the relative price of gasoline would have the greatest impact on the West. (See Congressional Budget Office, *The Budgetary and Economic Effects of Oil Taxes*, April 1986.) Further, some observers argue that stockpiling oil is a better way of relieving dependence on imports because it would not artificially reduce current energy use by households and businesses. This argument is based on the premise that, aside from the problem of supply interruption, world energy prices accurately reflect real resource costs and thus already provide an appropriate incentive for energy conservation.

Excise Tax on Domestic and Imported Oil. An excise tax of \$5 per barrel on all oil--both domestically produced and imported--would raise revenues by about \$21 billion per year. It could increase the price of a gallon of gasoline or fuel oil by as much as 12 cents.

A tax on oil would increase the price that consumers must pay, giving them an incentive to use less oil either through conservation efforts or by switching to an alternative source of energy such as natural gas or coal. The tax would cause oil reserves to decline in value, and coal and gas reserves to increase in value. These shifts in value would

discourage the exploration and production of oil and would encourage the production of coal and natural gas.

An oil tax, whether on all oil or only imported oil, would raise the costs for industries that use oil as the primary production input (for example, petrochemicals and paints). It would make it more difficult for domestic companies in these industries to compete with foreign companies that would pay less for oil.

Since 1981, the average cost of a barrel of oil has dropped from about \$35 to under \$15. A \$5-per-barrel oil tax would partially offset this price reduction, thereby encouraging the conservation of oil and the development of alternative energy sources. The tax would still leave consumers paying significantly lower prices than eight years ago. It could, however, further depress the after-tax prices that suppliers of oil receive.

Oil Import Fee. As an alternative to an excise tax on all oil, the Congress could impose the tax only on imports. This type of tax was discussed during the deliberations over the budget resolutions for fiscal years 1986, 1987, and 1988. An oil import fee of \$5 per barrel would raise revenues by about \$9 billion per year.

An oil import fee would allow domestic suppliers to charge a higher price and still remain competitive with imports, thereby providing an incentive to increase domestic production. Like the tax on all oil, the fee would also maintain incentives for conservation by increasing energy prices. These effects would reduce U.S. dependence on foreign oil in the short term, although long-term dependence might be increased if U.S. oil supplies were depleted faster. Opponents of an oil import fee argue that the United States should take advantage of cheap foreign oil to preserve the more costly U.S. reserves for future use.

Because an oil import fee will reduce demand and prices for imported oil, some important U.S. trading partners might object to the fee (though others who are net energy importers would benefit from lower world energy prices). Exempting oil imports from selected countries such as Canada, Mexico, and the United Kingdom, however, would substantially reduce the fee's revenue potential. Imports from these countries now account for about 30 percent of U.S. oil imports.

An oil import fee would have different effects in different regions of the country. It would benefit oil-producing states, because producers would receive higher prices, but oil-consuming states--especially in the Northeast--would bear much of the burden of the tax and of the higher prices U.S. oil producers receive.

An oil import fee would cause expenditures for oil products to increase by about 15 percent, but only about 40 percent of this increase in expenditures would be collected as federal revenue. The remainder would increase the incomes of domestic oil producers. Thus, the risk of inflation relative to the revenue collected is higher than for most other taxes on selective products.

Additional Motor Fuel Excise Taxes. Federal motor fuel taxes are currently 9.1 cents per gallon of gasoline and 15.1 cents per gallon of diesel fuel. The revenue from these taxes is earmarked for the federal Highway Trust Fund, which pays for construction and improvement of interstate highways, bridges, and mass transit facilities, and for the Leaking Underground Storage Tank Trust Fund. State governments also impose gasoline taxes ranging from 7.5 cents to almost 21 cents per gallon. Compared with other countries, many of which levy taxes of well over \$1.00 a gallon, the U.S. tax rates on motor fuels are among the lowest in the world.

An additional 12-cent federal tax on motor fuels would raise revenues by about \$1 billion per year for each cent per gallon of tax. Because the average national price of gasoline has dropped from a peak of about \$1.39 per gallon in March 1981 to under \$1.00 in 1988, an additional tax of 12 cents per gallon would not put the total cost of gasoline above what consumers have already experienced. In order for proceeds from the additional tax to reduce the deficit, they must not be used to support additional spending from the Highway Trust Fund. One way to ensure that the additional revenues are used for deficit reduction is to allocate them to the general fund.

The tax increase would reduce consumption of gasoline and diesel fuel by encouraging people to drive less or purchase more fuel-efficient cars and trucks. Some proponents of the tax view it as an appropriate charge for the costs of pollution and road congestion associated with automobile use. Another advantage of a motor fuel tax increase is that it would not have the same adverse effects on the international

competitiveness of U.S. firms as other energy taxes. This advantage results from the fact that most gasoline and diesel fuel is used either by consumers or in the domestic transportation sector, not as an input in industrial production.

Opponents of a motor fuel tax rate increase argue that this tax would impose an unfair burden on the trucking industry and on people who commute long distances by car, who are not necessarily the highway users that impose the highest costs of pollution and congestion on others. These costs are much higher in densely populated areas, primarily in the Northeast, whereas per capita consumption of motor fuel is highest in sparsely populated states, mostly in the West.

A rate increase could lead to more tax evasion. Compliance with the motor fuel taxes is already a problem. It is particularly difficult to enforce the tax on diesel fuel because the same product can be sold as nontaxable home heating oil or as taxable diesel motor fuel. In addition, sales of motor fuels to some users are tax-exempt. However, recent legislation has reduced opportunities to evade the tax by changing the collection points to earlier stages of the production and distribution process.

Broad-Based Tax on All Energy. An alternative to selective excise taxes is a broad-based tax on all forms of energy consumption. A national energy tax would heighten incentives for conservation and reduce consumption of all forms of energy. Further, because the tax would apply to all energy sources, it would raise much more revenue at a lower rate than selective taxes. The tax could be imposed as a fraction of the value of fuel, or could be based either on units produced (such as barrels of oil, tons of coal, or cubic feet of gas) or on the heat content of the fuel measured in British thermal units (Btu). Unlike a Btu or per-unit tax, a tax on the retail value of energy would not change relative fuel prices and would not encourage consumers to switch from one form of energy to another. Tax evasion, however, would be a problem with such a tax because a very large number of retailers would be involved in the collection of this tax. If the tax were imposed at an earlier stage of the distribution process, tax evasion would be less of a problem, but the tax would distort relative prices because different fuels have different markups at the retail level. These distortions, however, would be smaller than for taxes imposed on selected fuels. A 5 percent tax on the value of energy consumption,

including coal, petroleum, natural gas, hydroelectricity, and nuclear power, would raise an average of \$15 billion per year in revenues.

Other options would be preferable to a broad-based energy tax if revenue were not the only objective. For example, if the objective were to decrease dependence on imported oil, an oil import fee might be preferred; if the objective were to encourage the use of nuclear energy to reduce global warming, a tax based on the carbon content of fuel might be preferred.

REV-26 INCREASE EXCISE TAXES

Addition to CBO Baseline ^a	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Raise the Cigarette Tax to 32 Cents per Pack	2.9	2.9	2.9	2.8	2.7	14.2
Increase Taxes on Distilled Spirits	0.4	0.5	0.4	0.4	0.4	2.2
Raise Taxes on Beer and Wine to the Rate on Distilled Spirits	4.7	4.8	4.9	4.9	5.0	24.2
Index Current Cigar- ette and Alcohol Tax Rates for Inflation	0.4	0.7	1.0	1.4	1.7	5.2

a. Estimates are net of reduced income and payroll tax revenues.

Additional revenues could be raised by increasing existing federal excise taxes on tobacco and alcohol.

Increase the Cigarette Tax. The excise tax on cigarettes has been 16 cents per pack since January 1, 1983. The tax is now less than 15 percent of the current average market price (including tax) per pack, significantly less than the 42 percent of the price it represented in 1951. Doubling the current tax on October 1, 1989 would raise net revenues by a little more than \$14 billion in 1990 through 1994.

An increase in the cigarette tax could be seen as compensation for the social costs of smoking, such as smoking-related medical costs borne by both smokers and nonsmokers. A higher tax rate might also discourage smoking, especially among teenagers, and reducing consumption could result in long-run improvements in health. On the other hand, if the higher tax exceeds the net costs imposed on other taxpayers by smokers, the tax could be regarded as discriminatory against smokers (about 30 percent of the adult population). In addition, the tax is regressive: it is a higher share of the income and

expenditures of low-income households than of households with higher incomes. (See Congressional Budget Office, "The Distributional Effects of an Increase in Selected Federal Excise Taxes," Staff Working Paper, January 1987.) Furthermore, increases in the federal cigarette tax might have an adverse effect on state and local revenues from cigarette taxes.

Increase Taxes on Alcoholic Beverages. The tax on distilled spirits was increased to \$12.50 per proof gallon effective October 1, 1985. This has been the only increase in the distilled spirits tax since 1951, when the rate was set at \$10.50 per proof gallon. Even at the current rate of \$12.50, the real value of the tax is much lower compared with the value of the tax in 1951. Increasing the tax to \$15.00 per proof gallon on October 1, 1989 would raise about \$2 billion in revenues in 1990 through 1994; the tax on a 750 milliliter bottle of 80 proof liquor would rise by 40 cents.

The per-unit taxes on beer and table and dessert wines have not changed since 1951. Moreover, beer and wine are taxed much more lightly compared with distilled spirits. Increasing the taxes on beer and wine to the alcohol-equivalent rate on distilled spirits effective October 1, 1989, would raise about \$24 billion in 1990 through 1994. The tax on a 750 milliliter bottle of table wine would increase from 3 cents to 54 cents, and the tax on a six-pack of beer would increase from 16 cents to 63 cents. Increasing the tax on wine to the alcohol-equivalent rate on beer would raise \$1.2 billion in 1990 through 1994.

Increased taxes on alcoholic beverages would partially restore their real values, which have declined with inflation, and they would also help to offset the social costs of drinking (such as costs from alcohol-related automobile accidents). Alcohol taxes are regressive when measured as shares of household incomes; the CBO study cited above indicates that these taxes account for slightly higher shares of household income for low-income households than for households with higher incomes.

Index Cigarette and Alcohol Tax Rates for Inflation. Indexing the taxes on cigarettes and alcoholic beverages to the Consumer Price Index (CPI) would ensure that tax revenues keep pace with inflation. Indexing current cigarette and alcohol tax rates to changes in the CPI after October 1, 1989, would raise slightly above \$5 billion in revenues

in 1990 through 1994. Indexing these taxes would prevent the erosion through inflation of tax revenues in a gradual and predictable manner, thereby avoiding abrupt increases in unit rates.

An alternative to indexing would be to convert the unit taxes to *ad valorem* taxes (set as percentages of manufacturers' prices). This method would also link tax revenues to price increases, although revenue would be tied to the prices of the taxed goods, not the general price level. One drawback to an *ad valorem* tax is that it would create an incentive for manufacturers to lower their sales prices artificially to company-controlled wholesalers in order to avoid part of the tax.

**REV-27 REPEAL THE AUTOMATIC AVIATION-RELATED
EXCISE TAX RATE REDUCTION**

	Annual Added Revenues (In billions of dollars)					Cumulative Five-Year Addition
	1990	1991	1992	1993	1994	
Addition to CBO Baseline ^a	0.9	1.5	1.6	1.8	1.9	7.7

a. Estimates are net of reduced income and payroll tax revenues.

Expenditures from the Airport and Airway Trust Fund (AATF) support airport and airway expansion and improvements, as well as a portion of FAA operations (see NDD-23). These expenditures are financed by an 8 percent tax on domestic airline tickets, a 5 percent tax on air freight shipping costs, a \$3.00 departure tax for people flying to a foreign country, and a tax on general aviation fuel (14 cents per gallon on jet fuel and 12 cents per gallon on gasoline). The Airport and Airway Safety and Capacity Expansion Act of 1987 (P.L. 100-223) reauthorized these taxes at current rates for two years. Beginning in 1990, tax rates will be tied to trust fund expenditures for the first time. The act will reduce tax rates by half in 1990 if the sum of obligations for airport grants in fiscal years 1988 and 1989, and appropriations for facilities and equipment, research, engineering, and development in fiscal years 1988 and 1989 is less than 85 percent of the total authorized amounts for these programs in these years.

Based current limits on obligations and actual appropriations to date, this funding percentage for 1988 and 1989 is estimated to be less than 85 percent. Therefore, aviation-related excise tax rates are expected to drop by 50 percent beginning January 1, 1990, under CBO baseline assumptions. (The international departure tax rate would remain at \$3.00.) Reflecting current law, the CBO baseline includes aviation-related taxes at their current rates for fiscal year 1989 and at the reduced rates beginning January 1, 1990. (AATF taxes are scheduled to expire at the end of 1990 under current law, but CBO assumes extension under standard baseline practices.) Abolishing the automatic reduction of the tax rates and extending these taxes at current rates for the 1990-1994 period would reduce the deficit by

about \$8 billion over the same period relative to the CBO baseline projections.

The trust fund's current \$5.8 billion surplus indicates that trust fund spending for aviation has not kept pace with revenues. If aviation-related taxes are viewed strictly as user fees to fund aviation programs, then either taxes have been too high or aviation spending has been too low. Some would argue that the automatic tax rate reduction should be retained to preserve the link between trust fund revenues and spending.

Federal government expenditures for aviation, however, are actually much larger than the amounts currently financed from the AATF. These expenditures include the costs for FAA operations, such as the air traffic control system, that are currently financed primarily by general revenues. Some argue that all the costs imposed by users of the airport and airway system should be financed by aviation-related taxes, which suggests that current aviation tax rates are too low and should be increased to offset funding from general revenues. However, others argue that society as a whole benefits from the airport and airway system and, therefore, that some financing of these programs from the general fund is in order. (For a detailed analysis of the AATF, see Congressional Budget Office, *The Status of the Airport and Airway Trust Fund*, January 1989.)



APPENDIX

SPENDING AND TAXATION OPTIONS

BY BUDGET FUNCTION

050 National Defense

DEF-01	Cancel Procurement of the F-15	23
DEF-02	Cancel the Trident Refit Program	25
DEF-03	Cancel the Binary Munitions Program	27
DEF-04	Terminate Early the Phoenix Missile Program	29
DEF-05	Cancel the Army Helicopter Improvement Program	31
DEF-06	Terminate Early the SSN-688 Submarine Program	33
DEF-07	Cancel Procurement of Rail MX	35
DEF-08	Cancel Procurement of the V-22 Aircraft	37
DEF-09	Slow Procurement of the C-17 Aircraft	39
DEF-10	Slow Procurement of F-16 Aircraft	41
DEF-11	Slow Procurement of DDG-51 Guided-Missile Destroyers	43
DEF-12	Restructure the Army's Forward Area Air Defense Program	45
DEF-13	Delay Production of Stealth Bomber Until 1993	47
DEF-14	Delay New Program Starts One Year	49
DEF-15	Increase the Use of Multiyear Contracting	51
DEF-16	Limit Funding for Supporting Procurement	53
DEF-17	Slow the Funding for the National Aerospace Plane	55
DEF-18	Slow the Growth in the Strategic Defense Initiative	57
DEF-19	Reduce Funding for Operation and Maintenance	59
DEF-20	Close or Realign Selected Military Bases	61
DEF-21	Reduce the DoD Civilian Acquisition Work Force	64

DEF-22	Urge Allies to Pay More of the Cost of U.S. Forces Stationed Overseas	66
DEF-23	Reduce the Number of Active-Duty Personnel Because of the INF Treaty	69
DEF-24	Reduce the Number of Deployable Aircraft Carriers to Thirteen	71
DEF-25	Reduce the Tactical Air Force by Three Wings	74
DEF-26	Eliminate Three Army Light Divisions	76
DEF-27	Reduce Enlisted End Strength in Light of Projected Growth in Seniority	78
DEF-28	Limit Military Pay Raise	80
DEF-29	Restrict Reserve Retirement Benefits	83
DEF-30	Increase Cost-Sharing for Military Health Care	86

See also:

NDD-42	Modify the Davis-Bacon Act by Raising the Contract Threshold and Allowing Unrestricted Use of Helpers	274
NDD-43	Modify the Service Contract Act by Eliminating the Successorship Provision	276
FWF-01	Limit Pay Adjustments for Federal Civilian Employees	281
FWF-05	Modify the Way Hospitals Are Paid Under the Federal Employees Health Benefits Program	296
FWF-06	Trim the Size of the Federal Civilian Work Force	299
FWF-07	Reduce Agency Spending in Anticipation of More Contracting Out	302

150 International Affairs

NDD-01	Reduce Security Assistance	186
NDD-02	End the Export-Import Bank Direct Loan Program	188

NDD-03	Eliminate "Cargo Preference" and Related Subsidies to U.S.-Flag Vessels	190

250 General Science, Space, and Technology

NDD-04	Cancel the NASA International Space Station Program	192
NDD-05	Postpone Major New Spacecraft Development Projects in a Major NASA Space Science and Applications Program Area	194
NDD-06	Cancel or Defer the Superconducting Super Collider	196

270 Energy

NDD-07	Reduce Subsidies Provided by the Rural Electrification Administration	198
NDD-08	Reform Debt Repayment Policy for Power Marketing Administrations	200
REV-20	Repeal Tax Preferences for Extractive Industries	357
REV-25	Increase Energy Taxes	371

300 Natural Resources and Environment

NDD-09	Change Revenue-Sharing Formula from a Gross to a Net Receipt Basis for Commercial Activities on Federal Lands	202
NDD-10	Improve Pricing for Commercial and Recreational Uses of Public Lands	204
NDD-11	Increase the Harbor Maintenance Tax	210
NDD-12	Eliminate Federal Support for Local Wastewater Treatment Plant Construction ..	211
NDD-20	Eliminate Further Clean Coal Technology Program Funding	228
NDD-26	Allow Oil and Gas Leasing in the Arctic National Wildlife Refuge	241

350 Agriculture

AGR-01	Reduce Deficiency Payments by Lowering Target Prices	163
AGR-02	Charge an Insurance Premium for Target Price Protection	166
AGR-03	Replace Deficiency Payments with Declining Direct Payments	168
AGR-04	Raise Domestic Commodity Prices by Increasing Unpaid Acreage Reduction Programs	170
AGR-05	Establish a 2 Percent Origination Fee for CCC Nonrecourse Loans	172
AGR-06	Restrict Eligibility for Price Support Program Benefits and Reduce the Payment Limitation	173
AGR-07	Eliminate the Export Enhancement Program	175
AGR-08	Eliminate the Targeted Export Assistance Program	177
AGR-09	Cut Dairy Price Support Program Costs by Requiring Producer Contributions	179
AGR-10	Reduce the Crop Insurance Subsidy	181
AGR-11	Reduce the Direct Lending Authority of the Farmers Home Administration for Farm Ownership and Operating Loans	183

370 Commerce and Housing Credit

NDD-13	Require a Special Assessment on Deposits of Commercial Banks	213
NDD-14	Include Foreign Deposits of U.S. Banks in the FDIC Insurance Base	215
NDD-15	Discontinue Postal Subsidies for Not-For-Profit Organizations	217
NDD-16	Scale Back the Rural Housing Loan Program ...	219
NDD-17	Scale Back the Rural Rental Housing Assistance Program	222
NDD-18	End SBA Loans and Loan Guarantees	224
NDD-19	Improve Pricing of Licenses to Use Electromagnetic Spectrum	226

FWF-04	Curtail the Indirect Retirement Subsidy to the U.S. Postal Service	292
REV-03	Increase the Alternative Minimum Tax	315
REV-04	Disallow Net Interest Deductions on Indebtedness Exceeding 50 Percent of the Basis of Tangible Assets	318
REV-05	Limit Mortgage Interest Deductions	321
REV-06	Tax 30 Percent of Capital Gains from Home Sales	324
REV-09	Tax Capital Gains at Death	331
REV-19	Tax Credit Unions Like Other Thrift Institutions	355
REV-21	Further Restrict Deductions for Business Meals and Entertainment	361
REV-22	Eliminate Private-Purpose Tax-Exempt Bonds	362
REV-26	Increase Excise Taxes	377

400 Transportation

NDD-21	Reduce Federal Aid for Mass Transit	230
NDD-22	End Support for Aviation Development	232
NDD-23	Impose User Fees on the Inland Waterway System	235
NDD-24	Establish User Fees for Certain Coast Guard Services	237
NDD-25	Reduce New Spending Authority for Highways to the Level of Highway Tax Collections	239
REV-27	Repeal the Automatic Aviation-Related Excise Tax Rate Reduction	380

450 Community and Regional Development

NDD-27	End Funding of the Economic Development Administration	243

NDD-28	Eliminate or Restrict Community Development Block Grants	245
REV-18	Reduce Tax Credits for Rehabilitation of Older Buildings	353
REV-22	Eliminate Private-Purpose Tax-Exempt Bonds	362

500 Education, Training, Employment, and Social Services

ENT-01	Reduce Subsidies for Stafford Loans	93
NDD-29	Reduce Untargeted Funding for Elementary and Secondary Education	248
NDD-30	Eliminate Federal Funding for Campus-Based Student Aid	250
NDD-31	Reduce Pell Grant Funding and Increase Targeting	252
NDD-32	Eliminate or Reduce Funding for Arts and Humanities	254
REV-11	Phase Out the Child- and Dependent-Care Credit	335
REV-13	Tax Nonretirement Fringe Benefits	339

550 Health

ENT-02	Eliminate Federal Matching in Medicaid for Medicare's Premiums	97
ENT-15	Tax Employer-Paid Health Insurance	127
ENT-16	Increase the States' Share of AFDC, Medicaid, and Food Stamp Benefit Costs	130
ENT-17	Reduce the Matching Rate for Administrative Costs in AFDC, Medicaid, and Food Stamps ..	133
NDD-33	Reduce Funding for Research Supported by the National Institutes of Health	256

NDD-34	Eliminate Subsidies for the Education of Health Professionals	258
FWF-05	Modify the Way Hospitals Are Paid Under the Federal Employees Health Benefits Program	296
REV-13	Tax Nonretirement Fringe Benefits	339
REV-22	Eliminate Private-Purpose Tax-Exempt Bonds	362

570 Medicare

ENT-02	Eliminate Federal Matching in Medicaid for Medicare's Premiums	97
ENT-03	Rebase PPS Payments to Hospitals Under Medicare	99
ENT-04	Reduce Medicare's Payments for the Indirect Costs of Patient Care that Are Related to Hospitals' Teaching Programs	103
ENT-05	Reduce Medicare's Direct Payments for Medical Education	105
ENT-06	Reduce Reimbursements for Capital Expenditures Under Medicare	107
ENT-07	Adopt a Fee Schedule for Reimbursing Physicians Under Medicare	110
ENT-08	Reduce Geographic Variation in Payment Rates for Physicians' Services	113
ENT-09	Include Hospital-Based Physicians' Services in Hospitals' Prospective Payments	115
ENT-10	Continue the Transition to Prospective Rates for Facility Costs in Hospitals' Outpatient Departments	117
ENT-11	Increase Medicare's Premium for Physicians' Services	119
ENT-12	Tax a Portion of Medicare Benefits	121
ENT-13	Increase Medicare's Deductible for Physicians' Services	123
ENT-14	Collect 20 Percent Coinsurance on Clinical Laboratory Services Under Medicare	125

REV-16	Repeal the Medicare Taxable Maximum	350

600 Income Security

ENT-16	Increase the States' Share of AFDC, Medicaid, and Food Stamp Benefit Costs	130
ENT-17	Reduce the Matching Rate for Administrative Costs in AFDC, Medicaid, and Food Stamps ..	133
ENT-18	Require a Two-Week Waiting Period for Unemployment Insurance Benefits	136
ENT-19	End or Scale Back Trade Adjustment Assistance	138
ENT-20	Reduce the Subsidy for Nonpoor Children in Child Nutrition Programs	140
ENT-21	Count Energy Assistance as Income in AFDC, SSI, and Food Stamps	142
ENT-22	Eliminate the \$50 Child-Support Payment to AFDC Families	144
ENT-23	Reduce the Federal Matching Rate for Child Support Enforcement Costs	146
NDD-16	Scale Back the Rural Housing Loan Program ...	219
NDD-17	Scale Back the Rural Rental Housing Assistance Program	222
NDD-35	Modify the Fee Structure for Local and State Agencies that Administer Federal Housing Programs	260
NDD-36	Shift Housing Assistance from New Construction to Vouchers	262
NDD-37	Reduce Federal Expenditures for Low-Income Rental Assistance Programs	264
NDD-38	Reduce Funding of New Housing Assistance Commitments	266
NDD-39	Eliminate or Scale Back Low-Income Home Energy Assistance	268
FWF-02	Reduce Federal Employee Retirement Benefits	284
FWF-03	Restrict Cost-of-Living Adjustments for Federal Retirees Under Age 62	289

REV-07	Decrease Limits on Contributions to Qualified Pension and Profit-Sharing Plans	326
REV-08	Impose a 5 Percent Tax on Investment Income of Pensions and IRAs	329
REV-12	Tax the Income-Replacement Portion of Workers' Compensation and Black Lung Benefits	337
REV-17	Index the Unemployment Insurance Taxable Wage Base	351

650 Social Security

ENT-24	Restrict Cost-of-Living Adjustments in Non-Means-Tested Benefit Programs	147
ENT-25	Reduce the Replacement Rate Within Each Bracket of the Social Security Benefit Formula	152
ENT-26	Eliminate Social Security Benefits for Children of Retirees Aged 62-64	154
ENT-27	Lengthen the Social Security Benefit Computation Period by Three Years	155
REV-14	Increase Taxation of Social Security and Railroad Retirement Benefits	343
REV-15	Expand Social Security Coverage	347

700 Veterans Benefits and Services

DEF-31	Enact DoD's Proposed Changes in the New GI Bill	88
ENT-28	End Certain Veterans' Compensation Payments for Those with Low-Rated Disabilities	157
ENT-29	Extend and Raise the Loan Fee for Veterans Administration Guaranteed Housing Loans	159

NDD-40	Close Inefficient or Underused Units in Veterans Administration Hospitals	270

750 Administration of Justice

NDD-41	End Funding for the Legal Services Corporation	272

850 General Purpose Fiscal Assistance

REV-23	Eliminate or Restrict Deductibility of State and Local Taxes	365

INDEX

The single numbers shown below indicate the page on which the relevant option begins. Inclusive page numbers indicate that the subject is covered in more than one sequential option, or on more than one page in Chapter I.

A-76 Program	302
Agriculture	
Direct loan programs	172, 183
Price support programs	163-174, 179
Water sales	204
Aid to Families with Dependent Children	130-135, 142-146, 367
Aircraft	
Bombers	47
Fighters	23, 41, 74
National Aerospace Plane	55
Tilt-rotor	37
Aircraft Carriers	71
Air Force	
Operation and maintenance	59-63, 66, 74
Personnel	69, 78
Procurement	23, 27, 35, 39-42, 47-54
Research and development	55
Airports	232, 362, 380
Air Traffic Control	232
Alcoholic Beverages	377
Army	
Operation and maintenance	59-63, 66, 76
Personnel	69, 76
Procurement	27, 31, 45, 49-54
Arts and Humanities	254
Banks	213-216
Base Closures	61
Baseline Budget Projections	3-5

Biomedical Research	256
Black Lung	337
Block Grants	245, 268
Budget Freeze	14-15
Burden Sharing	66
Business Income Taxes	
Rates	309, 315
Tax deductions	318, 361
Tax preferences	353-360, 362
Business Meals and Entertainment	361
Capital Gains	309, 324, 331
Chemical Weapons	27
Child and Dependent Care	335, 339
Child Nutrition	140
Child Support	144-146
Cigarettes	377
Civil Service Retirement	147, 284-295
Clinical Laboratories	125
Coast Guard	237
Commodity Credit Corporation	163-180
Community Development	243-247, 353, 362
Consumption Taxes	367-379
Contracting Out	302
Conventional Programs	
Aircraft	23, 31, 37-42, 74
Ships	33, 43, 71
Vehicles	45
Corporate Income Tax	
See Business Income Taxes	
Cost-of-Living Adjustments	147, 289-295
Credit Programs	
Administration	200
Debt repayment	200
Direct lending	168, 172, 183, 188, 198, 219-223, 243, 262
Disaster	181, 224
Loan guarantees	93, 159, 198, 243
Loan origination fees	93, 159, 172
Minority	224
Small Business	224, 243
Credit Unions	355
Davis-Bacon Act	274

Disability	147-151, 157
Economic Development	243-247
Economic Forecast	1-2
Economic Projections	2-3
Economic Support Fund	186
Education	
Elementary and secondary	248
Medical	103-106, 258
Postsecondary	93, 250-253
Energy	
Assistance	142, 268
Electric systems	198-201
Marketing	200
Research	228
Taxes	371
Environment	204, 211, 241
Estate Taxes	333
Excise Taxes	239, 339, 371-381
Exports	163-171, 173-178, 188
Export-Import Bank	188
Farmers Home Administration	183, 219-223
Federal Aviation Administration	232
Federal Civilian Employees	
Contracting out	302
Health benefits	296
Pay adjustments	281
Postal Service retirement costs	292
Productivity	299
Retirement benefits	147, 284-291
Thrift Savings Plan	284
Travel Expenses	304
Work-force size	64, 299
Federal Communications Commission	226
Federal Debt	1, 10
Federal Deficit	3-5, 10, 11-13
Federal Deposit Insurance Corporation	213-216
Federal Employees' Retirement System	147, 284-291
Federal Savings and Loan Insurance Corporation	213
Food Stamps	130-135, 142
Foreign Aid	186
Forest Service	202-209

Formula-type Budget Options	13-15
Fringe Benefits	
Nonretirement	127, 296, 335, 339
Retirement	284-295, 326-330
Taxation	127, 326-330, 335, 339
Gasoline and Other Motor Fuels	239, 371
GI Bill	88, 159
Gift Taxes	333
Government Travel Expenses	304
Guaranteed Student Loans	
See Stafford Loans	
Health	
Medical education	103-106, 258
Other	127, 256, 270, 296
See Medicaid	
See Medicare	
Health Insurance	
See Federal Civilian Employees	
See Insurance	
See Medicaid	
See Medicare	
Highways	239, 371
Hospitals	
Civilian	99-109, 115-118, 296, 362
Military	86
Veterans Administration	270
Housing	
Taxation	321-325
Veterans Administration	159
See Subsidized Housing	
See Mortgages	
Income Distribution	18-19
Income Taxes	
See Business Income Taxes	
See Individual Income Tax	
Individual Income Tax	
Capital gains	324, 331-334
Fringe benefits	127, 326-330, 335, 339
Indexing	313
Itemized deductions	321, 365
Social insurance benefits	121, 337, 343

Tax rates	309, 315
Other	335
Insurance	
Agricultural programs	166, 181
Deposit	213-216
Health	127, 296, 339-346
Life	339
Unemployment	136, 351
See Medicaid	
See Medicare	
Intercontinental Ballistic Missiles	35
Interest Deductions	318-325
Itemized Deductions	321, 365
Legal Services Corporation	272
Leveraged Acquisitions	318, 329
Loans	
Agriculture	168, 172, 183
Disaster	181, 224
Economic development	243
Energy	198-201
Foreign	186
Housing	159, 219-223, 262
Minority	224
Small business	224, 243
Student	93, 250
See Credit Programs	
Low-Income Home Energy Assistance	142, 268
Marine Corps	
Operation and maintenance	59, 66
Personnel	78
Procurement	37, 53
Mass Transit	230
Medicaid	97, 130-135
Medical Education	103-106, 258
Medicare	
Hospital Insurance (Part A)	99-109, 115, 121, 347-350
Supplementary	
Medical Insurance (Part B)	97, 110-120, 123-126
Military Personnel	
Active-duty	69-79
Medical care	86

Pay	80
Reserve	83
Retirement	83, 147, 289
Mineral Extraction	202-209, 241, 357
Minimum Tax	315
Missiles	25, 29, 35, 45
Mortgages	
Interest deductions	321
Subsidies	159, 219-223, 262, 362
National Aeronautics and Space Administration	55, 192-195
National Aerospace Plane	55
National Institutes of Health	256
National Park Service	204
Navy	
Operation and maintenance	59-63, 66, 71
Personnel	71, 78
Procurement	25, 29, 33, 43, 49-52
Net National Saving	11
Nursing	258
Oil and Gas	241, 357, 371
Operation and Maintenance	59-63, 66, 71-77
Outpatient Departments	117
Payment in Lieu of Taxes	202
Payroll Taxes	
Fringe benefits	284, 339
Medicare	127, 347-350
Social Security	127, 347
Unemployment Insurance	351
Pell Grants	252
Pension and Profit-Sharing Plans	284-295, 326-330
Physicians	110-116, 258
Pollution	211
Postal Service	217, 292
Poverty Trends	18-19
Power Marketing Administrations	200
Premiums	
Agricultural insurance	166, 181
Bank deposit insurance	213
Health insurance	127, 296, 339
Life insurance	339
Medicare	97, 119

Pricing of Public	
Services/Resources	198, 204-210, 217, 226, 235-238
Procurement	
Aircraft	23, 31, 37-42, 47
Missiles	25, 29, 35, 45
Ships	25, 33, 43
Vehicles	45
Other	27, 49-54
Prospective Payment System	99-109, 115, 296
Public Health Service	256-259
Public Housing	
See Subsidized Housing	
Public Lands	202-209, 241
Public Works/Infrastructure	210-212, 230-236, 239
Railroad Retirement	147, 343
Research and Development	
Civilian	192-197, 228, 256
Military	55-58
Retirement	
Federal civilian	147, 284-295
Military	83, 147, 289
Pension and profit-sharing plans	326-330
Social Security	147-156, 343-349
Rural Electrification Administration	198
Sales Taxes	367
Savings and Loans	213
School Breakfast and Lunch Programs	140, 179
Science and Technology	192-197
Security Assistance	186
Sequestration	14
Service Contract Act	276
Shipping	190, 210, 235-238
Ships	25, 33, 43, 71, 190
Social Security	147-156, 243-249
Space Programs	55-58, 192-195
Stafford Loans	93
State Grants	
Economic development	243-247
Education	248
Highways	239

Mass transit	230
Means-tested	97, 130-135, 146, 268
Wastewater treatment construction	211
State and Local Taxes	365
Strategic Defense Initiative	57
Strategic Programs	
Bombers	47
Missiles	25, 35
Space	57
Submarines	25
Student Financial Aid	93, 250-253
Submarines	25, 33
Subsidized Housing	219-223, 260-267
Superconducting Super Collider	196
Supplemental Security Income	142
Tax Credits	
Child and dependent care	335
Rehabilitation	353
Tax-Exempt Bonds	362
Telephone and Telecommunications	226
Thrift Savings Plan	284
Tobacco	377
Trade Adjustment Assistance	138
Transportation	
Airports	232, 362, 380
Air traffic control	232
Highways	239, 371
Mass transit	230
Water	190, 235
Unemployment Insurance	136
Urban Development	243-247
Value-Added Tax	367
Veterans' Benefits	88, 152, 157-160, 270
Wastewater Treatment Construction	211
Weapons	23-36, 41-48
Welfare	
See Aid to Families with Dependent Children	
See Food Stamps	
See Medicaid	
See Subsidized Housing	
See Supplemental Security Income	
Workers' Compensation	147, 337