TABLE VII-4. (Continued)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Reduce and Reallocate Elementary and Secondary Education Aid						
Budget Authority	250	265	280	295	310	1,400
Outlays	20	165	260	275	290	1,010
Reduce and Redirect Vocational Education Assistance						
Budget Authority	260	270	285	300	315	1,430
Outlays	35	190	265	285	300	1,075
Reduce Eligibility for Community Development Block Grants						
Budget Authority	722	758	792	823	854	3,949
Outlays	14	289	679	769	802	2,553
Further Limit Eligibility for Urban Development Action Grants						
Budget Authority	115	121	127	132	136	631
Outlays	24	45	71	98	126	364
Terminate Funding for Juvenile Justice and Delinquency Programs						
Budget Authority	74	77	81	84	88	404
Outlays	17	51	72	80	84	304
Target Administration on Aging Programs						
Budget Authority	70	75	80	80	85	390
Outlays	50	65	75	80	85	355

savings would come from redefining the Interstate system to include only projects that serve interstate commercial and passenger travel. At present, locally oriented routes account for more than half of the $39 billion (in 1979 dollars) needed to complete the remaining 1,500 miles of the Interstate system. Focusing federal dollars on Interstate routes of national significance would reduce outlays by $10.5 billion over the next five years alone. Returning financial responsibility for urban and secondary roads to state governments would reduce federal spending by an additional $5.1 billion over the next five years. On the other hand, withdrawing federal support for such routes would involve breaking commitments of many years' standing and would force either substantially greater state and local expenditures or the curtailment of some construction and repair work. The added burden on states could be reduced somewhat by providing them with a portion of the revenues from the recent increase in the federal motor fuels tax, but this would also reduce the federal budgetary savings.

Reduce Federal Mass Transit Aid. The development and operation of mass transit systems represents another area of shared federal-nonfederal financial responsibility in which federal outlays could be reduced by shifting a greater proportion of the total costs to states and localities. At present, the federal government provides 75 to 80 percent of the cost of capital projects and, on average, 15 percent of operating costs--involving total outlays of $2.8 billion for capital and $1.0 billion for operations in 1982. In the future, $1.1 billion per year in revenues generated by 1 cent per gallon of the recently enacted motor fuels tax increase will be available for capital expenditures, in addition to the regularly appropriated funds. Federal operating subsidies, by contrast, are slated to decline by 16 percent between 1982 and 1983 as a result of the most recent appropriations actions.

It can be argued that little rationale exists for lending national taxpayer support to local transit operations, because the principal benefits are realized locally. On the other hand, transit systems may also offer significant regional benefits, as instruments of economic development and as means of avoiding downtown congestion.

One specific option for reducing the federal role would be to lower the federal share of capital costs to two-thirds--and reduce federal spending accordingly--while withdrawing all operating subsidies. Together, these changes would result in outlay savings of $5.3 billion over the 1984-1988 period. Such a cutback in capital assistance would increase the burden on states and localities but would also encourage them to apply more stringent economic criteria to potential investments, severely discouraging new capital-intensive transit systems such as subways. Ending federal operating subsidies would result either in increased locally financed subsidies or in increased fares. Indeed, without federal operating subsidies, some small cities that do not depend heavily on public transit would probably end service entirely.

Reduce Federal Airport Assistance. Appreciable savings could be realized by withdrawing federal grants from airports that do not substantially serve national transportation objectives. Currently, some 780 commercial facilities and 2,379 general aviation facilities--serving owners of small planes in corporate and recreational use--receive grants in aid for airport development. Under current policies, these airports would receive approximately $1 billion in grants annually over the next five years for improvement and expansion projects. However, only 66 of the commercial airports--less than 10 percent of the total--serve virtually all of the nation's commercial airline traffic. Moreover, only 155 of the general aviation airports receiving federal aid are needed to help reduce congestion at the major commercial airports. Withdrawing federal support from all airports that serve only locally oriented aviation activities would reduce federal outlays by $1.6 billion over the next five years. Terminating federal aid could, however, cause short-term disruptions for small commercial carriers and general aviation users.

Further savings could be achieved by targeting funds more narrowly on the least self-sufficient facilities. Even after eliminating aid for all airports not serving national transportation objectives, funds would still be available to many facilities that are financially self-sufficient and generally able to meet their debt-service requirements from landing fees, terminal concessions, and parking charges. If assistance was also withdrawn from such self-sufficient facilities, approximately 25 additional airports would no longer be eligible for aid at an added five-year outlay savings of $705 million.

Reduce and Reallocate Elementary and Secondary Education Aid. The 1981 Reconciliation Act created the Chapter II elementary and secondary education block grant by consolidating more than 20 separate categorical programs. In contrast to its predecessor programs, Chapter II funds are generally not targeted on specific groups of children or on specific educational services, although some states are attempting to maintain targeting of some of the funds for children formerly served by Emergency School Aid--the largest of the earlier programs. Because Chapter II funds are distributed on the basis of the school-age population, they are not targeted by the financial need of the recipient school districts. Funded at $479 million in 1983, Chapter II grants account for about one-half of one percent of all funds spent on public elementary and secondary education.

Federal savings could be achieved by eliminating the Chapter II program while shifting some of the money saved to more targeted programs. If, for example, the Chapter II program was terminated in 1984 and 50 percent of the Chapter II funds were shifted to the Chapter I compensatory education program, which finances services to the educationally disadvantaged, savings over the 1984-1988 period would total $1 billion. Such a change might increase federal assistance to disadvantaged students but would lower total education aid at a time when many school districts are experiencing severe financial strains.

Reduce and Redirect Vocational Education Assistance. Federal support for vocational education could be reduced by targeting support more narrowly on disadvantaged students. Although $722 million has been appropriated in 1983 to help states finance vocational education efforts, only about 30 percent of the federal funds are earmarked by federal law for disadvantaged students, including the handicapped, the economically disadvantaged, and students with limited proficiency in English. Furthermore, the federal funds constitute less than 10 percent of total federal, state, and local expenditures for vocational education.

Eliminating the untargeted federal contribution and using half of the money saved to increase funding for disadvantaged students would reduce federal outlays by about $1.1 billion over the next five years. Such a shift would increase explicitly targeted federal assistance but would diminish total support for vocational education by one-third.

Reduce Eligibility for Community Development Block Grants. Funding for the large cities and urban counties component of the Community Development Block Grant (CDBG) program could be reduced by providing aid only to the needier jurisdictions. Currently, all metropolitan cities and urban counties are entitled to funds, although needier jurisdictions receive larger grants per capita. CDBG funds are used at the recipients' discretion for a wide range of development activities, including housing rehabilitation, street and sewer repair, and recreational facilities funding. It can be argued, on the one hand, that such activities are properly the responsibility of local governments and that no pressing interest is served by funding them at the national level--particularly for jurisdictions that have above-average capacity to finance such projects themselves. On the other hand, most CDBG funding benefits low- and moderate-income households that might not be served in the absence of federal funds. Eliminating the least needy cities and counties and reducing CDBG funding by 20 percent would lower federal outlays by approximately $2.5 billion over the next five years, while retaining aid for the most distressed jurisdictions.

Further Limit Eligibility for Urban Development Action Grants. Funding for the Urban Development Action Grant (UDAG) program could also be reduced by further limiting eligibility. The UDAG program provides grants to local governments to support private development projects in economically distressed areas. Supported projects include commercial development such as offices or hotels, as well as industrial projects and housing. As of 1981, UDAG grants provided, on average, 12 percent of planned project costs; the private sector contributed 81 percent, and other public sources added the remaining 7 percent. On the one hand, it can be argued that the benefits of economic development generated by the UDAG program are local in nature, and that such activities should be funded at the level at which the benefits are generated. On the other hand, UDAG projects are located in distressed areas, which might not have the resources to participate in such projects without federal aid. If the one-fourth least severely distressed jurisdictions now eligible under the UDAG program were eliminated and federal funds were cut by a like amount, federal savings of more than $360 million could be realized over the next five years without cutting aid to the neediest governments.

Terminate Funding for Juvenile Justice and Delinquency Programs. Currently, the federal government provides approximately $70 million annually to states to support research, education, training, and related efforts in the juvenile justice and delinquency area. Opponents of such assistance argue that federal funds add little to state and local efforts, and that states and localities are best able to assess their needs in this area without federal direction and control. Opponents also note that ineffective program monitoring and evaluation further limit the value of federal aid. Proponents of continued federal assistance contend that the high rates of youth crime make federal support important. They point out that, despite certain administrative problems, activities funded under these programs have been successful in achieving some of the statutory objectives--notably in demonstrating less costly and more effective methods for dealing with juvenile offenders. Terminating juvenile justice and delinquency grants would reduce federal outlays by about $300 million over the next five years.

Target Administration on Aging Programs. The Administration on Aging within the U.S. Department of Health and Human Services funds a variety of nutritional and social services for the elderly through grants to state governments. Although the Congress has specified that programs funded through these grants are not to be means-tested, about 60 percent of the $636 million distributed in 1982 was eventually used to benefit individuals with incomes below the poverty line. In addition, although no payments are required from participants, increasing amounts have been recouped since 1979 through voluntary contributions from the elderly persons using the services. In 1982, these contributions totaled about $100 million, which was used by state agencies to increase the volume of services provided.

Reducing funding by 10 percent, while imposing a means test for free participation, would lower federal outlays by more than $300 million over the 1984-1988 period, while protecting the benefits of the neediest participants. This change, however, would entail substantial administrative costs, since a mechanism for assessing participants' incomes would need to be established and maintained. Moreover, the means test could discourage participation, even by some needy individuals.

Assistance to Business and Commerce

The federal government provides assistance to business and commerce through a broad array of programs involving direct expenditures, subsidized credit, loan guarantees, and information. Among the largest of these programs are agricultural credit assistance efforts, aid to exporters, assistance to small businesses, and subsidies to specific industries, such as shipowners. On-budget outlays for assistance to business and commerce totaled approximately $7 billion in 1982 and are expected to remain at about that level in 1983.

Business assistance programs often developed either because particular markets were perceived as not meeting the needs of certain groups or because desired public benefits coexisted with the private benefits. Once initiated, however, many programs acquire an institutional inertia that can keep them alive long after their original purposes have been realized. In the 1930s, for instance, the Congress created the Rural Electrification Administration (REA) to finance electrical power development in areas not adequately served by private financing sources; such aid continues today although rural areas are now better integrated into national credit markets.

Substantial savings could be realized by curtailing private-sector subsidies that no longer convey substantial public benefits. This could be accomplished by eliminating programs outright, or, in the case of credit programs, by raising the interest rates charged on loans. The examples described below and summarized in Table VII-5 cover several industries and sectors of the economy.

Terminate Operating Subsidies for the Maritime Industry. The Maritime Administration, a unit of the Department of Transportation, currently assists the U.S. maritime industry through operating assistance for shipowners. Foreign carriers operate at about two-thirds the costs of U.S. ships. Thus, the U.S. maritime industry, as currently constituted, is no longer competitive in world markets. Proponents of continued federal assistance argue that, because most other nations subsidize their merchant marines,

TABLE VII-5. BUDGET SAVINGS FROM REDUCTIONS IN ASSISTANCE TO BUSINESS AND COMMERCE (In millions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Terminate Operating Subsidies for the Maritime Industry						
Budget Authority	427	448	467	485	503	2,330
Outlays	425	445	464	483	501	2,318
Terminate Funding for Overseas Agricultural Market Development						
Budget Authority	41	43	44	45	47	220
Outlays	28	39	44	45	46	202
Reduce Export-Import Bank Aid						
Budget Authority	3,389	3,753	3,878	3,978	4,567	19,565
Outlays	334	1,608	2,614	2,971	2,934	10,461
End Selected SBA Business Loans						
Budget Authority	160	130	105	80	60	535
Outlays	155	125	105	80	60	525
Raise Interest Rate on REA Loans a/						
Budget Authority	6	23	48	70	90	237
Outlays	6	23	48	70	90	237
Eliminate REA Loan Guarantees a/						
Budget Authority	---	1,740	2,950	3,820	4,460	12,970
Outlays	---	1,740	2,950	3,820	4,460	12,970
Raise Interest Rate on FmHA Loans to Limited-Resource Farmers						
Budget Authority	---	20	45	65	90	220
Outlays	---	20	45	65	90	220

a. Savings from these options result from the borrowings of the Federal Financing Bank and thus appear off-budget.

parallel American aid is needed. It is also argued that a domestic maritime industry is essential on national security grounds. Opponents of operating subsidies note that, even in the absence of such aid, shipowners would continue to benefit from laws that reserve certain shares of American cargo trade to U.S. flag vessels. Moreover, continued subsidies may promote higher labor costs as well as operating inefficiencies. Eliminating operating subsidies would reduce federal outlays by $2.3 billion over the 1984-1988 period.

Terminate Funding for Overseas Agricultural Market Development. Since 1954, the federal government has supported efforts to develop foreign agricultural markets through planning assistance in this country and through offices overseas. This support has been premised on the notion that aiding domestic producers to develop overseas markets could boost exports, help the U.S. balance of trade, and increase farmers' incomes. Once the markets have been developed and the overseas potential demonstrated, however, federal support is no longer clearly needed. Agricultural producers and exporters, it is argued, should have adequate incentives to pursue foreign markets on their own. Others note that shifting such market-development expenses back to private producers would place additional strains on an already-pressed sector of the economy. Eliminating federal funding for foreign market development in 1984 would save a total of about $200 million over the 1984-1988 period.

Reduce Export-Import Bank Aid. The Export-Import Bank (Eximbank) provides direct loans and loan guarantees to promote exports of U.S. goods and services. The direct loan program is intended to increase exports by providing loans at below-market rates of interest to finance foreign purchases of U.S. goods. The loan guarantee program aims at encouraging commercial banks to extend export credit loans by reducing the risk inherent in export financing. These guarantees are attractive because interest rates charged on such guaranteed loans are among the lowest available in the market.

Federal export credit programs are aimed at increasing employment and output in the United States. They do so to the extent that they encourage consumption--and, therefore, production--of U.S. goods that would not have otherwise taken place. Opponents of export subsidies argue, however, that a substantial portion of Eximbank aid goes to industries in which U.S. firms enjoy near monopolies, therefore only subsidizing consumption in the importing nation rather than promoting additional exports. Proponents of Eximbank programs argue that they are necessary to counter export subsidies provided by other nations that displace potential U.S. exports. Savings of $10.5 billion could be realized over the next five years if direct loans were eliminated entirely and if loan guarantees were provided to only those industries that truly face subsidized competition, such as electronic equipment and machine tools.

End Selected SBA Business Loans. The Small Business Administration (SBA) provides direct loans to small businesses unable to secure conventional financing--promoting business development generally and aiding economically and socially disadvantaged groups. The loans are written at an interest rate equal to one percentage point above the average yield on outstanding marketable obligations of the U.S. government with comparable maturities. 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. Others note that these benefits do not necessarily flow from all small businesses. Indeed, because SBA limits its direct loans to firms that cannot obtain conventional financing from private lenders, the aid may go to the firms least likely to create stable employment, improve technology, or enhance national productivity. Another consequence of the SBA's selection criteria has been a default rate of nearly 10 percent. Eliminating all SBA direct business loans, other than for disaster assistance and for the Minority Enterprise Small Business Investment Companies program, would reduce net federal outlays by $525 million over the 1984-1988 period.

Raise Interest Rates on REA Loans and Curtail Loan Guarantees. As mentioned above, the Rural Electrification Administration was established more than 40 years ago to help finance the extension of electrical service to rural areas. Today, however, 99 percent of the nation's farms have access to electricity and 95 percent have access to telephones. Nonetheless, the REA continues to provide loans at 5 percent interest to rural electrical and telephone cooperatives through a revolving fund that is financed largely off budget. The REA also provides loan guarantees (in effect, direct loans as well) at the Treasury's cost of funds plus 0.125 percent interest.

Although a 5 percent interest rate for direct loans did not represent a significant subsidy when the current revolving fund was established in 1973, at today's federal borrowing costs it entails a sizable subsidy in pursuit of a public policy objective that has been largely realized. The $1.1 billion in direct REA lending in 1982, for example, will cost the fund about $3 billion over the lives of the loans. As a result of these costs, the fund's resources for absorbing interest subsidies may be exhausted by the mid-1980s under current policy. Raising the interest rate on new direct REA loans to the Treasury's borrowing costs plus 0.125 percent--the same rate as on the so-called guaranteed loans--would restore solvency to the direct loan fund while reducing long-term federal interest-subsidy costs by more than $1.3 billion for each $1 billion in new lending at 1983 interest rates. Outlay savings relative to the CBO baseline would total more than $200 million through 1988, with the savings appearing outside of the unified budget totals because REA activities are financed through transactions with the off-budget Federal Financing Bank. While raising the interest rate on REA loans would increase cooperatives' borrowing costs, it would leave their financing expenses well below those faced by investor-owned utilities.

REA guaranteed loans--unlike direct loans--do not involve interest-subsidy costs for the government. The guaranteed loans do, however, entail off-budget outlays, because they are made by the Federal Financing Bank, with offsetting repayments spread out over many years. In addition, the guarantee exposes the government to sizable risks in the event of defaults. The guaranteed loans--a minimum of $5 billion of which are provided annually under current law--are used primarily for electrical generating facilities, such as nuclear power plants. Many of these are projects jointly owned by REA cooperatives and investor-owned utilities--providing those utilities with a financing source not available to companies not developing projects in concert with REA cooperatives. Eliminating the loan guarantee program would reduce federal exposure by more than $30 billion over the next five years and would lower off-budget outlays by $13 billion through 1988. Lowering the $5 billion annual loan guarantee minimum while maintaining the program would, of course, reduce exposure and outlays somewhat less. Any rapid cutbacks in these programs could, however, cause financial hardships for some rural cooperatives while raising costs for their customers.

Raise Interest Rate on FmHA Loans to Limited-Resource Farmers. To encourage new entrants into farming, the Farmers Home Administration (FmHA) provides reduced-interest loans to young farmers who, for various reasons, are not deemed creditworthy by commercial banks. Current law requires that at least 20 percent of FmHA's farm loans go to such limited-resource farmers. Under current law, real estate loans are provided at one-half the government's borrowing cost, but no less than 5 percent interest; operating loans are provided at an interest rate fixed at five percentage points below the government borrowing rate, but no less than 5 percent.

If borrowers under these programs lack access to private credit because of inappropriate market judgments by private lenders rather than because the borrowers lack potential as farmers, federal credit at market interest rates might be sufficient to meet their credit needs. Interest subsidies may attract persons who are in fact not creditworthy and who will become dependent on continuing direct federal aid. Raising the interest rate on new loans to the Treasury's cost of funds beginning in 1984 would save about $220 million over the 1984-1988 period, while appreciably increasing costs for potential entrants into farming.

Benefits and Services to Individuals

The federal government finances benefits and services to individuals (such as income support, nutrition assistance, health care, and education) through the large entitlement programs discussed elsewhere in this report, through the state and local grants discussed earlier in this chapter, and through appropriated programs directly administered by the federal government. Federally administered nonentitlement benefit programs include veterans' health care, housing assistance, and aid for college students. On-budget outlays for such programs totaled about $25 billion in 1982--up from $23 billion two years earlier--and are due to rise to $28 billion in 1983.

Federal expenditures in this area could be reduced either by curtailing aid for all current recipients or by targeting assistance more narrowly on the most needy individuals. Four examples of program cutbacks are described below and summarized in Table VII-6.

Require Copayments for VA Health Care. The cost of health care provided through the Veterans Administration (VA) could be reduced by requiring copayments for hospital care offered to some persons without service-connected disabilities. Many believe that the VA's primary responsibility is to provide medical care to veterans with service-connected disabilities. Today, however, over 70 percent of the recipients of free VA hospital care have no service-connected injuries or illnesses.

Some persons contend that establishing deductibles and coinsurance requirements for nonservice-disabled veterans would be a logical way of containing increases in VA health care costs, while decreasing the preference that some veterans show for VA care over care in private facilities. This, in turn, would help ensure that VA-provided services would continue to be adequate to meet the needs of service-disabled veterans as the demand for VA health services increases with the aging of the veteran population. Since over 40 percent of the nonservice-disabled group using VA services are poor or have no public or private health insurance, however, some would argue that such veterans should be exempt from any cost-sharing arrangements. Establishing copayment requirements, equivalent to those under Medicare for the first 90 days of inpatient care, for all nonpoor veterans without service-connected disabilities and with health insurance could reduce five-year VA outlays by $1.3 billion.

Reduce Campus-Based Student Assistance. Savings could be achieved in postsecondary student aid programs by reducing funding for three programs administered at the campus level--College Work-Study, National Direct Student Loans, and Supplemental Educational Opportunity Grants. In

TABLE VII-6. BUDGET SAVINGS FROM REDUCTIONS IN BENEFITS AND SERVICES TO INDIVIDUALS (In millions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Require Copayments for VA Health Care						
Budget Authority	160	190	245	300	355	1,250
Outlays	160	190	245	300	355	1,250
Reduce Campus-Based Student Assistance						
Budget Authority	170	175	185	195	205	930
Outlays	10	160	175	185	195	725
Reduce Rural Housing Subsidies						
Budget Authority	85	140	195	250	310	980
Outlays	85	140	195	250	310	980
Reduce Subsidies for the Arts and Humanities						
Budget Authority	58	61	63	65	68	315
Outlays	31	60	62	64	67	284

1982, these programs provided $1.1 billion to assist between 1 and 2 million students, some of whom also received aid under the larger Guaranteed Student Loan and Pell grant programs. Reducing funding for the campus-based programs by 15 percent would result in five-year savings of $725 million. The number of students affected by such a cutback would depend on actions taken by program administrators at colleges and universities. Consolidating the three campus-based aid programs into a single block grant would increase administrators' discretion in allocating remaining funds but would not result in administrative savings sufficient to make up for the funding decrease.

Reduce Rural Housing Subsidies. The major rural housing assistance programs administered by the Farmers Home Administration provide about $3.3 billion of reduced-interest loans annually to finance single-family and multifamily housing for low-income households. In the single-family assistance programs, interest rates are set so that borrowers spend 20 percent of their income on mortgage principal and interest payments plus taxes and insurance. In the multifamily assistance programs, developers receive mortgages at 1 percent interest, and tenants pay a minimum of 25 percent of their incomes for rent.

The costs of these programs could be reduced by requiring that assisted households pay larger shares of their housing costs. If new single-family borrowers were required to pay 25 percent--rather than 20 percent--of their incomes for principal, interest, taxes, and insurance, for example, federal outlays would fall by $855 million over the next five years, while borrowers' housing expenses would rise by roughly one-fourth. Increasing the minimum tenant rent payments in multifamily projects from 25 percent to 30 percent of income would reduce five-year outlays by $125 million. It would also ensure more nearly equal treatment of households receiving FmHA assistance and those aided by the Department of Housing and Urban Development, which already has a standard of 30 percent of income for new tenants. An alternative approach to reducing federal outlays would, of course, be to lower the volume of new loans made annually.

Reduce Subsidies for the Arts and Humanities. In 1982, the federal government provided approximately $270 million in subsidies for the arts and humanities through the National Endowment for the Arts and the National Endowment for the Humanities--down from $310 million the year before. Almost all grants by the Endowments require matching by recipients, at rates ranging from 90 cents to $3 per federal dollar. The proportion of funds to be obligated at each matching rate is set by law, and currently about three-fourths of the Endowments' funds require the lowest matching rates: 90 cents or $1 per federal dollar.

Reducing funding for the Endowments by 20 percent would lower federal outlays by almost $300 million over the next five years. The impact of such a cut on beneficiaries might be lessened by shifting a larger proportion of remaining funds into grant categories requiring higher matching rates. Under present conditions, however, the potential for increased contributions from nonfederal sources is probably limited.

Infrastructure, Environment, and Related Services

The federal government finances the development and maintenance of the public infrastructure (transportation networks, sanitation systems, and

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the like), the protection of the environment, and related services through state and local grants discussed earlier in this chapter, and through programs funded and administered directly by the federal government. The principal federally administered programs--discussed in this section--include environmental and natural resource programs, transportation programs, and community and regional development aid. Outlays for these programs totaled $18 billion in 1982--down from $19 billion in 1980. Expenditures are estimated to rise to $20 billion in 1983.

The primary rationale for these programs is that they provide services essential to the productive operation of the economy (such as an inland waterway system) or convey benefits the private market would not necessarily offer (such as pollution abatement). In some instances, however, the benefits may not outweigh the costs, or may be highly localized. Identifying such programs and reducing their funding could result in substantial budgetary savings (see Table VII-7).

Terminate Less Cost-Effective Bureau of Reclamation Water Projects. In 1902, the Bureau of Reclamation within the Department of Interior began building and operating water projects for irrigation, hydropower, and other uses. The bureau's mission was to help settle the West by stimulating local economies with inexpensive, federally subsidized water and power. After 80 years, however, that mission is largely satisfied--the West is settled and most of the obviously beneficial water projects have already been built. Today, federal subsidies--which have totaled between $500 million and $700 million annually during the 1970s and 1980s--charge general taxpayers for building projects that small groups of beneficiaries would probably be unwilling to pay for if they were assessed their full cost. Although some of the projects currently under construction will probably yield benefits in excess of costs, others may not.

Terminating currently authorized and ongoing projects with benefit-to-cost ratios less than 1.3 (calculated at lower than current interest rates) would save about $1.5 billion over the next five years. If local beneficiaries judged these projects to be economically sound, other sources of financing--including tax-exempt revenue bonds--could substitute for federal subsidies. The revenue loss from such bond financing would, however, offset some of the savings from cutting back direct expenditures. If federal subsidies were eliminated, beneficiaries of locally financed projects--primarily western farmers and users of hydroelectric power--could be required to pay up to five times more than they currently do for water and up to 50 percent more for power.

Terminate Maintenance Dredging for Less Cost-Effective Waterways and Ports. The U.S. Army Corps of Engineers maintains the nation's system of inland waterways, ports, and harbors. In 1982, the Corps spent about

TABLE VII-7. BUDGET SAVINGS FROM REDUCTIONS IN INFRASTRUCTURE, ENVIRONMENT, AND RELATED SERVICES (In millions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Terminate Less Cost-Effective Bureau of Reclamation Water Projects						
Budget Authority	300	300	300	300	300	1,500
Outlays	260	300	300	300	300	1,460
Terminate Maintenance Dredging for Less Cost-Effective Waterways and Ports						
Budget Authority	200	200	200	200	200	1,000
Outlays	160	200	200	200	200	960
Reduce Funding for Amtrak						
Budget Authority	280	300	310	320	330	1,540
Outlays	280	300	310	320	330	1,540

$800 million for this purpose, of which only about $40 million was recovered from a 6-cents-per-gallon fuel tax on waterborne traffic. Operation and maintenance expenditures are made regardless of the traffic that benefits from such an investment. If maintenance dredging was terminated for all shallow-draft harbors, seven high-cost/low-volume waterways, and 55 high-cost/low-volume deep-draft ports, about $200 million could be saved annually over the next five years. While dredging would be available on the private market if local jurisdictions judged their projects worthy of investment, having to bear such costs without federal aid could cause severe economic dislocations for some localities.

Reduce Funding for Amtrak. Amtrak was founded in 1970 to ensure continuing intercity rail passenger service as private providers withdrew.

The Congress initially funded it with the intention that it should be self-sufficient after one year. Over time, however, Amtrak's subsidy rose, with federal aid now covering all capital costs and one-half of all operating costs. In 1982, the federal subsidy totaled $735 million. Analysis of Amtrak indicates that it provides few of the public benefits claimed for it at a high cost: in 1980, Amtrak received 31 percent of net federal transportation expenditures, yet carried less than 1 percent of all intercity passenger traffic. In the same year, Amtrak received 23.6 cents per passenger mile in net federal subsidies, compared with the 0.2 cent net federal subsidy provided to commercial aviation and the 0.1 cent net subsidy that went to passenger cars and intercity buses. 4/

One means of reducing Amtrak's subsidy would be to eliminate routes that have low ridership and dim future prospects. If the Amtrak system was limited to routes on which ridership is strongest and for which the prospects for improved ridership and better financial performance are greatest--located primarily in the Northeast Corridor, along part of the West Coast, and on certain routes around Chicago--the federal subsidy would decline by $1.5 billion over the 1984-1988 period.

Research and Development

The federal government supports numerous research and development (R&D) efforts that encompass a broad range of activities from the search for new knowledge--or basic research--to the commercialization of improved products and processes. Basic research plays a special role in developing a knowledge base upon which scientific and technological breakthroughs are built. Commercial development is more concerned with promoting the application of the results of basic research to social and economic outcomes. In 1982, the federal government spent $16 billion for R&D, other than that financed through defense agencies. 5/ Of that total, $6 billion went for space and aeronautical research and exploration, $3.9 billion for energy R&D, and $3.6 billion for health research.

While both the private sector and the government support R&D, their underlying purposes often differ. Because much R&D--particularly more speculative basic research--involves long-term investments whose full benefits may not be easily captured by the party financing the work, private

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4. For further analysis, see Congressional Budget Office, Federal Subsidies for Rail Passenger Service: An Assessment of Amtrak (July 1982).

5. R&D spending by defense agencies is dealt with in Chapter II.

entities may be reluctant to invest in such endeavors. Government, by contrast, can afford to wait longer to realize the benefits of research and is concerned with benefits that accrue to the public at large, rather than to private parties. On the other hand, because government lacks market feedback and does not have the same financial constraints as businesses, it may be at a relative disadvantage in carrying out commercialization efforts.

The differing perspective of the private and public sectors suggests one strategy for reducing federal R&D spending--focusing budget cuts on those projects near the development and commercialization end of the R&D spectrum, thereby freeing more funds for basic research. The examples described below and summarized in Table VII-8 are concentrated in the energy and applied aeronautics areas.

TABLE VII-8. BUDGET SAVINGS FROM REDUCTIONS IN RESEARCH AND DEVELOPMENT (In millions of dollars)

Options	1984	1985	1986	1987	1988	Cumulative Five-Year Savings
Terminate Funding for the Clinch River Breeder Reactor						
Budget Authority	180	215	225	235	250	1,105
Outlays	105	190	220	230	245	990
Abolish the Synthetic Fuels Corporation						
Budget Authority	---	---	---	---	---	---
Outlays	21	22	23	24	25	115
Reduce NASA's Aeronautical Research						
Budget Authority	105	110	120	125	130	590
Outlays	40	100	110	120	125	495
Refocus the Work of the National Laboratories						
Budget Authority	550	575	600	625	650	3,000
Outlays	275	565	590	615	640	2,685

Terminate Funding for the Clinch River Breeder Reactor. The Clinch River Breeder Reactor (CRBR) is a joint government-industry project originally intended to demonstrate that nuclear reactors that make highly efficient use of the uranium ore base could be licensed and operated commercially. When first proposed in 1972, the CRBR was estimated to cost $700 million, of which the private nuclear industry was to pay $300 million. Since then, cost estimates have grown to more than $3 billion, while the private contribution has remained unchanged. As costs have grown, questions have also arisen regarding the need for early commercialization--most estimates of the supply and demand for nuclear fuel suggest that the breeder would not become economic until the 2020-2030 time period. Terminating funding for the CRBR would save $105 million in 1984 and a total of $1.0 billion between 1984 and 1988. Loss of this project could, however, erode the long-term competitive position of the U.S. nuclear industry, if breeder reactors become economic at an earlier time.

Abolish the Synthetic Fuels Corporation. Synthetic fuels--substitutes for oil and gas products--are extracted from more plentiful resources such as coal and oil shale. The Synthetic Fuels Corporation (SFC), an independent federal entity, was created in 1980 to assist the private sector in developing a number of commercial-sized synthetic fuel plants. The SFC, with $12.2 billion in budget authority granted before 1983, functions primarily as an investment bank. It is authorized to provide loan guarantees, price guarantees, purchase agreements, and direct loans. In exceptional circumstances, the SFC may participate in joint ventures with private firms.

The rationale for SFC subsidies rests on long-term energy security concerns--the need to develop technologies to convert abundant domestic resources into energy products that could eventually displace imported oil. However, the recent decontrol of oil and the impending decontrol of natural gas, together with a general softness in world oil prices, has reduced the urgency of such development. Under these circumstances, full funding for the SFC may no longer be needed. On the other hand, continuing the SFC might provide some insurance against the effects of a future interruption in foreign oil supplies and could help maintain the synthetic fuel industry should oil prices rise again. SFC proponents also argue that the United States will eventually have to make the transition to synthetic fuels and that the experience provided by early plants will be helpful in choosing the appropriate technologies. If the SFC was abolished in 1984, five-year savings would amount to more than $100 million, with eventual savings totaling several times that.

Reduce NASA's Aeronautical Research. The aeronautical research and technology section of the National Aeronautics and Space Administration (NASA) is authorized to spend approximately $300 million each year to improve various facets of aircraft flight and to ensure that the United States maintains its technological superiority in the field of aeronautics. However, NASA has centered much of its effort around aircraft performance and fuel mileage--two areas in which private industry does a great deal of research and development. Funding for such programs could thus probably be cut at little risk and the remainder of the high-speed aircraft R&D effort transferred to the Department of Defense, since most of the research in these programs would be used for military applications. The programs left in aeronautical research after these cuts would deal primarily with safety and long-term speculative questions.

These cuts in NASA's budget would save almost $500 million through 1988. Since fuel efficiency and performance are important factors in the number of aircraft that manufacturers sell, incentives exist for private research to be done in these areas. Without NASA, however, domestic manufacturers might eventually have difficulty maintaining their current margin of technological superiority over foreign competition. Moreover, while private industry has the incentive to continue much of the research in aircraft performance and fuel efficiency, fewer incentives exist for industry to take up NASA's efforts in the areas of particulate and noise emission.

Refocus the Work of the National Laboratories. More than $4 billion of the federal civilian R&D funds is spent annually in the government's "intramural" facilities--the national multipurpose laboratories and agencies' in-house laboratories. This national laboratory complex developed as an outgrowth of specific national needs. The multipurpose laboratories under Department of Energy jurisdiction, for example, grew from the Manhattan Project, and were formalized and expanded under the Atomic Energy Commission. The atomic bomb project led naturally to the specific needs for research in radiation biology and more generally in all of the physical sciences. As their missions expanded, the national laboratories became focal points for making large research facilities available to universities and industry, for assisting other federal agencies, and for acting generally to link technological areas.

Some concern now exists that in many cases the laboratories may be performing research in competition with the private sector, conducting research that may be inappropriate for federal government activity, or being used inefficiently. Savings might be achieved by reorganizing, consolidating, or eliminating some of the functions of the national laboratories, and refocusing their efforts on basic research. For example, cutting applied and development (potentially commercial) research by one-half while doubling basic research would result in five-year savings of approximately $2.7 billion. Such a shift might, however, weaken the national scientific infrastructure in which the national laboratories play an important role.

Aid to Foreign Governments and International Organizations

The United States aids developing countries through economic and security assistance programs consisting of outright grants or reduced-interest loans. Economic assistance programs include bilateral aid such as Public Law 480 food aid, which provides agricultural commodities for distribution abroad and finances sales of U.S. agricultural exports; Agency for International Development programs; and multilateral assistance programs, including contributions to the World Bank, the Inter-American and Asian Development Banks, and various agencies of the United Nations. Security assistance includes the Economic Support Fund (ESF) programs, which provide assistance to promote political and economic stability, and military assistance through training grants and the financing of sales of military equipment and services. Net outlays for all aid programs totaled $8 billion in 1982 and are expected to rise to $9 billion in 1983.

Foreign aid programs are intended to advance a wide range of U.S. interests. Since the early 1970s, when the "Basic Human Needs" approach was adopted, bilateral economic aid programs have focused primarily on improving the lot of the poorest segment of the population in those nations receiving assistance. Multilateral programs have historically focused on building the foundations of developing economies, including such basic needs as road systems, electrification, and irrigation. More recently, increasing proportions of the resources of the multilateral institutions have been devoted to maintaining levels of development already attained. The World Bank, for example, has provided increasing proportions of its loans for balance-of-payment support to nations encountering financial crises.

Because aid programs advance a wide range of foreign policy objectives, major reductions in aid should be made in the context of a thorough reassessment of those objectives. The Congress could, however, reduce outlays for foreign aid somewhat by altering current programs to adjust to changing international political and economic conditions. As market interest rates rise, for example, the subsidy inherent in reduced-interest foreign aid loans increases. Substantial savings could be realized by making appropriate adjustments in interest charges on these loans. Similarly, aid policies could be altered in accordance with the changing income positions of recipient governments. As economic development progresses, for