

CHARGING FOR FEDERAL SERVICES

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NOTES

Except for historical dates, such as those marking the passage of legislation, all dates referred to in this study are fiscal years.

All dollars are current-year dollars unless stated otherwise.

Errata

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TABLE 11. POSSIBLE COAST GUARD USER FEES, 1984

User Category	Type of Fee	Size of Fee (In dollars per vessel)		Annual Receipts (In millions of dollars)
		Average	Range	
ANNUAL SYSTEMWIDE FEES				
Recreational Boats	Prorated for vessel size	18	4-600	287
Fishing Fleets (Foreign and Domestic)	Prorated for ton- nage capacity	1,488 <u>a/</u>	1,350- 40,000	300
Commercial, Domestic Inland Shipping	Prorated for horsepower (tugs/ towboats) or gross cargo tonnage	1,300	800- 10,000	48
Commercial, Domestic Coastal and Shipping	Prorated for horsepower (tugs/ towboats) or gross cargo tonnage	3,817	800- 40,000	282

SPECIFIC FEES				
Personnel and Vessel Services <u>b/</u>	At each use of service	--	77- 210,000 <u>c/</u>	70
Facilities Services	Annual and one-time	--	100- 14,400 <u>c/</u>	64
Total	--	--	--	1,051

SOURCE: Congressional Budget Office from data prepared by the Coast Guard for 1982.

- a. Domestic fishing vessels only.
- b. Documentation, licensing, and inspection.
- c. Dollars per transaction.

PREFACE

Over many years, the federal government has initiated programs that provide services and facilities of benefit to private individuals and enterprises. Some of these programs, such as the Federal-Aid highway network and the nation's airport and air traffic control system, are now financed mostly by their users through taxes and other charges; others are still supported by the general taxpayer. Concern with a wide federal deficit and the cost-effectiveness of federal spending has already focused Congressional attention on the issue of user financing for public services, leading to recent enactment of several important pieces of legislation. This study, undertaken at the request of Chairman Pete V. Domenici of the Senate Committee on the Budget, examines prospects for new or increased user fees in seven areas of federal service. In keeping with the Congressional Budget Office's mandate to provide impartial analysis, this study offers no recommendations.

The study was prepared in CBO's Natural Resources and Commerce Division, under the supervision of David L. Bodde and Everett M. Ehrlich. Richard R. Mudge was principal author, and David Lewis, Kenneth Rubin, Suzanne Schneider, and Philip Webre prepared individual chapters. Johanna Zacharias assisted in drafting the manuscript and edited it in cooperation with Nancy H. Brooks. Other CBO staff members who contributed to preparing the study include Debra Goldberg, Kathleen Kelly, Mary Maginniss, Patrick McCann, Mark Mussell, Jeffrey Nitta, and Pearl Richardson. Important contributions also were made by Damian Kulash, Barry Holt, and Larry Oppenheimer, all formerly with CBO. Reviewers outside CBO include G. William Hoagland of the Senate Budget Committee, Joseph Hopkins of the U.S. Postal Service, William R. Riedel of the U.S. Coast Guard, Kenneth G. Maxey of the Bureau of Reclamation, and Kenneth Frederick of Resources for the Future.

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Rudolph G. Penner
Director

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of Chapters II through VIII.)*

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CHAPTER I. FEDERAL SUBSIDIES AND USER FINANCING

The federal government supports a variety of economic activities out of general revenues, providing facilities and services to specific groups without charge or substantially below cost. Though the Congress created such subsidies to pursue national objectives, many original goals have now been met, and federal priorities have shifted. When this is the case, continued subsidization distorts federal spending, encouraging inefficient use of resources, widening the budget deficit, and creating economic inequities. Increased reliance on reimbursement from the recipients of federal services could mitigate these problems. This paper deals with fees for federal services--where new or increased levies might be considered, where they are inappropriate, and what transitional difficulties might ensue.

Recent Congressional actions demonstrate a growing interest in user financing for federal services. The revenue increases legislated in the Inland Waterway Revenue Act of 1978, the Airport and Airway Development Act of 1982, and the Surface Transportation Assistance Act of 1982 are part of a long-term reorientation toward more efficient and equitable federal investment and provision of services.

PLAN OF THE PAPER

This chapter introduces general principles for the application of federal fees. Chapters II through VIII present studies of seven programs that seem likely candidates for new or increased government charges: ports and harbors, inland waterways, U.S. Coast Guard activities, aviation services, certain postal services, irrigation water, and the Strategic Petroleum Reserve. In each program area, new or increased fees to users appear to offer good prospects for improved cost effectiveness in federal investment and reduced federal borrowing. Their potential benefits seem to outweigh by far their administrative costs to the government--an essential criterion of an effective financial mechanism. Because the list includes several off-budget items, reduced subsidies in these areas would not directly narrow the federal budget deficit. Nonetheless, all reduced subsidies would lessen the federal government's borrowing needs. Each chapter outlines the present federal program and describes how user charges could operate, taking account of the administrative problems that might influence decisionmaking and possible hardships caused by the transition.

The seven program areas considered in this paper illustrate the range of programs over which the federal government could attempt to recover its costs from users. Some of the subsidies are small, in that they either involve relatively small amounts of federal money (see Table 1), serve small and distinct populations, or constitute minor fractions of the total costs of the private concerns using them. For example, of the \$13 billion in total public and private deep-draft port transactions in 1984, the 4.2 percent that is federally supported seems relatively small (see Table 2). Others are large, in costing sizable federal sums, in serving broad populations, or in furnishing major shares of the costs of private enterprises. Special appropriations for the U.S. Postal Service, for instance, benefit small, clearly identified groups, though at \$715 million in 1984, they entail considerable expense. Subsidies for inland waterways, costing some \$577 million in 1984, absorb a major part of the costs of barge freight shipping. The Strategic Petroleum Reserve's subsidy is large both in terms of dollar commitment--\$2.3 billion in 1984--and in terms of the population it stands to benefit, though it is small in terms of the cost to each potential payor.

This list is by no means comprehensive. Other federal programs not analyzed here might also be considered for user financing. These include the satellite-launching services provided by the National Aeronautics and Space Administration and the low-cost electricity provided by the Federal Power Marketing Administrations. 1/

The \$6 billion in total 1984 federal subsidies considered here cannot all be regarded as immediately recoverable. In some program areas, abrupt transition from public to private support could inflict debilitating hardship on an economic sector or population group. Many current beneficiaries of federal support may need time to adjust their operations to accommodate a changed order of federal priorities. This suggests that a measured approach, with cost recovery instituted in phases, might be appropriate.

ORIGINS OF SUBSIDY PROGRAMS AND EMERGING PROBLEMS

Various goals have motivated the formation of subsidized programs, including regional development, establishment of the capital-intensive infrastructure for economic activity, assistance for nascent industries, and relief for sufferers of special hardships. For example, the economic development of the West was fostered by federal grants of land to railroads, by construction of a toll-free canal and river system, and by provision of

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1. See also President's Private Sector Survey on Cost Control, Report on User Fees (September 1983), and forthcoming CBO analysis of it.

low-cost irrigation water. The airline industry, though self-supporting today, got its start with the help of guaranteed postal service contracts during the 1920s and 1930s. And in more recent years, a wide range of development aid has been provided to the chronically impoverished Appalachian region.

Many federal services continue to be subsidized, however, even though their original goals have been met, and new national priorities have emerged. For example, agriculture in the West today is a mature industry. Indeed, the early need to promote farming on arid land has long since been overtaken by problems of agricultural overabundance, and appreciable national resources now go toward dealing with excess production.^{2/} This suggests that the need to encourage western agricultural development through federally subsidized water might be reevaluated. Similarly, freight shipping on inland waterways is a mature business. Yet federal subsidies still cover about one-fourth of the cost of barge shipment--many times the subsidies to railroads, trucks, or pipelines (the latter have never received federal financial support).

Such subsidies can encourage overuse of facilities and waste of resources. Services or commodities that are provided cheaply or even free discourage conservation. For example, the almost 90 percent federal subsidy for irrigation water leaves farmers with little incentive to conserve. Overuse, in turn, leads to exaggerated estimates of water resource investment needs. In addition, federal subsidies can distort markets. Where subsidized facilities compete with others that are not, the subsidized set enjoys an artificial advantage. For example, barge shippers, using heavily subsidized waterways, have an advantage over truckers and rail shippers, who move freight on largely self-supporting road and rail networks. Similarly, federal construction and maintenance subsidies to ocean ports draw traffic away from more efficient ports to less efficient ones. Because such inefficiencies impose avoidable losses on the economy, they warrant reexamination of the fees the federal government charges for its facilities and services.

PAST AND CURRENT EXPERIENCE WITH USER FEES

User fees--most generally, any tax or other levy designed to recover the costs of government services from identifiable beneficiaries--are by no

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2. See Congressional Budget Office, "Review of Federal Farm Programs," Staff Memorandum (May 1983), and Farm Revenue Insurance: An Alternative Risk-Management Option for Crop Farmers (August 1983).

TABLE 1. PROFILE OF SEVEN CURRENT FEDERAL SUBSIDY PROGRAMS (In millions of dollars)

Program	1984 Program Costs	Revenues Forgone		Subsidy as a Percent of Total 1984 Program Costs
		1984	1984- 1988	
Deep-Draft Ports and Harbors	570	570	3,200	100
Inland Waterways	630	577	2,800	91
Coast Guard Services	2,520	1,051	5,600	42
Civilian Aviation Services	4,100	940	4,900	23
U.S. Postal Service	24,400	715	3,900	3
Irrigation Water <u>a/</u>	350	17	300	90
Strategic Petroleum Reserve	<u>2,300</u>	<u>2,300</u>	<u>10,500</u>	<u>100</u>
Total	34,870	6,170	31,200	18

SOURCE: Congressional Budget Office.

- a. Current federal spending for irrigation water is substantially higher than the revenues forgone, since existing contracts with farmers inhibit rate increases. Receipts from current user payments equal about 10 percent of estimated Bureau spending on construction and operation of irrigation facilities.

TABLE 2. FEDERAL SUBSIDIES AND COSTS RECOVERED
RELATIVE TO ENTERPRISE SIZE, AS OF 1984

Program and Principle Beneficiaries of Subsidies	Total Enterprise Transactions <u>a/</u> (In billions of dollars)	Percent of Enterprise Costs Subsidized <u>b/</u>	Percent of Federal Costs Recovered
Deep-Draft Ports and Harbors			
Cargo shipping	13.7	4.2	0
Inland Waterways			
Barge freight shippers	2.5	23.0	9
Coast Guard Services			
Recreational boaters,	9.2	3.1	1
Fishermen,	2.9	10.2	0
Commercial shippers	15.5	3.0	1
Civilian Aviation Services			
General aviation	10.2	9.2	15
U.S. Postal Service			
Not-for-profit organizations	67.1	0.7	69
Irrigation Water			
Western farmers	7.7	4.5 <u>c/</u>	10
Strategic Petroleum Reserve			
Oil consumers	183.3	1.3	0

SOURCE: Congressional Budget Office.

- a. Data are estimates for 1982 inflated to 1984 dollars. For recreational boaters and general aviation, data reflect total associated private plus unrecouped federal spending. Otherwise, data reflect activities' total value in the economy, calculated as the sum of private revenues and unrecouped federal spending.
- b. Value of federal subsidy divided by total enterprise transactions.
- c. For some farmers, subsidy may amount to a much higher fraction of costs.

means new in public finance. The Bureau of Reclamation, for example, has collected partial fees for irrigation water for nearly a century. And since 1956, most federal highway spending has been paid for by special taxes earmarked for the Highway Trust Fund. Like the highway program, commercial aviation services are virtually self-supporting, as is most of the mail handling done by the U.S. Postal Service. In other areas, however, the government has imposed no charges; the deep-draft harbor dredging carried out by the U.S. Corps of Engineers, for example, is done without reimbursement. In such cases, general revenues are the sole source of support for the government's services.

In some areas of service, state and local authorities have also applied user fees to good advantage. Many states have used public authorities to build, finance, and operate harbors, airports, roads and bridges, water supply systems, and wastewater treatment plants. User fees are the most common means of financing these services.

Even where the government now imposes user fees high enough to cover most program costs, however, problems remain in the form of "cross-subsidies." A cross-subsidy occurs when one class or regional group pays fees that reflect more than its share of program costs, while another group pays fees that reflect less than its share. In such cases, the source of the subsidy is the high-paying user, not the general taxpayer. Cross-subsidies are particularly conspicuous in the highway and aviation programs. As federal highway taxes are constructed, operators of light trucks tend to subsidize operators of heavy trucks.^{3/} Similarly, in aviation, commercial airline passengers pay a disproportionately large share of the costs of airports and air traffic control, while owners of small private aircraft pay disproportionately little. Even when the overall receipts are sufficient to pay for the service, such cross-subsidies raise issues of efficiency and fairness among users.

ADVANTAGES OF USER FEE FINANCING

A desire to improve efficiency in the economy, coupled with concerns about fairness and the federal deficit, could motivate reconsideration of the subsidies to users of federal services.

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3. At present, the heaviest class of trucks pays about 70 percent of its share of federal costs, while light trucks overpay by about 20 percent. For further treatment, see Congressional Budget Office, testimony of Alice M. Rivlin before the Senate Committee on Environment and Public Works, August 18, 1983, and Public Works Infrastructure: Policy Considerations for the 1980s (April 1983), Chapter II.

Economic Efficiency

Four gains in efficiency could derive from user fees: more cost-effective federal programs, better allocation of private resources, better use of facilities now in place, and assured funding for the most economic projects. First, federal fees give the users of services an incentive to demand suitable choices of federal investment. Faced with the prospect of having to pay, beneficiaries will want to see the government invest in the most useful services. Thus, fees give users a means to signal the government about what are likely to prove productive investments. In turn, adequate fee collections support economically correct levels and types of service; insufficient collections, conversely, discourage unneeded or overbuilt projects. Thus, for example, if the construction of the Tennessee-Tombigbee waterway had been financed by barge operators, projected collections would not have produced the money needed.

Second, if the relative costs of competing services are not distorted by selective public subsidies, improved allocation of private resources follows. Federal support of freight shipment on inland waterways offers a case in point. If barge operators had to pay for government expenditures made on their account, shippers of freight might be encouraged to seek a more cost-effective mode of transport--possibly truck or rail.

Third, user fees applied properly can encourage efficient use of existing capacity, thus helping to reduce the need for new construction. Surcharges for airport use during peak periods, for example, though still only rarely applied, have been demonstrated to reduce congestion and delay, encouraging use of available and convenient airport space and reducing the need for new airport construction. The same principle could be applied to inland waterways.

Fourth, financing backed by user fees can be critical to the start of needed new projects. New deep-draft ports, for example, appear to offer long-term cost savings for coal exports. To date, however, dredging has not proceeded, stalled by disagreements among officials at all levels of government and private port authorities regarding the size and type of user fees best suited to finance this work. As a result, the potential savings in coal exports continue to go unrealized.

Deficit Reduction

In fiscal year 1984 alone, the seven subsidies considered in this paper will together claim \$6.2 billion worth of federal resources, and over the coming five years, that sum could reach \$31 billion. By supporting the total