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Mr. Chairman, I am pleased to appear before your Committee this morning to discuss increasing the fees for using the nation's inland waterways. During fiscal year 1982, the federal government will spend $770 million to build, operate, and maintain the inland waterways. Users, however, will pay back only a small fraction of this amount through fees. Two bills before this Subcommittee--the Administration's proposal (Amendment No. 637) and the Domenici amendment (Amendment No. 32)--would increase waterway user fees.

In the Congressional Budget Office's (CBO) assessment, higher waterway user charges would help promote a more efficient federal investment policy for waterways, as well as more efficient use of the nation's transportation resources. This morning, I would like to comment on five topics associated with increasing waterway user fees:

- The economic rationale;
- The user-fee principle in general, and some examples of its application;
- How present waterway user fees compare with fees on competing modes, and how the two proposals would affect such comparisons;
- How much revenue could result; and
- What impacts increased user fees might have on shippers and waterway operators.

THE ECONOMIC RATIONALE

The federal government finances many investments either because of the substantial national economic benefits that result or because only the federal government can supply the authority and resources needed. When the benefits of such investments are very widespread, having taxpayers in general bear the costs is appropriate. When an investment benefits a relatively small and identifiable group, charging the costs to the specific users may be more appropriate. In other modes of transportation, users carry much of the financing burden; such has not been the case for inland waterways, although it probably could--and should--be.

Waterway user fees have three clear economic advantages. First, if shippers and barge companies know that they will have to repay any expenditures made on their behalf--such as for canals and locks--they will have a greater incentive to work with the government to develop sound waterway investments. Second, to the extent that users of all modes of transportation paid back government expenditures made on their account, shippers would be encouraged to use the most efficient form of transport. In recent decades, the trend has been to reduce federal transportation subsidies; this trend will probably accelerate in future years under growing budgetary pressures. More economical distribution of traffic among the various modes will almost certainly result. Third, waterway user fees could

help to reduce the need for new construction by making more efficient use of existing capacity. Rivers and locks would be less congested by traffic that places little value on the services--that is, users unwilling to pay the fees.

THE USER FEE PRINCIPLE--THEORETICAL PROBLEMS AND PRACTICAL EXAMPLES

Developing the most efficient user charges is a difficult task. Many transportation investments are made in part to further such societal goals as regional development or environmental preservation. Thus it is not always clear who the real beneficiaries are or how costs should be allocated. Furthermore, there are choices about the levels at which user fees could be set. They could be set at levels that would partly offset the federal subsidies, or they could go further and, with higher fees, recoup all the federal government's costs. When the service is one for which there is a private market, the government could base charges on the market rate.

Despite these complications, users finance a substantial portion of federal spending on highways and on airport and airway services, for example. User payments have traditionally financed highway spending at both the federal and state levels. Federal excise taxes on vehicles and tires

were enacted before 1920, and the gasoline tax started in the early 1930s. The Highway Trust Fund now finances 96 percent of spending by the Federal Highway Administration, while the Airport and Airway Trust Fund pays for federal capital grants and a portion of Federal Aviation Administration operating costs. The Administration has proposed sizable new fees for other transportation users as well, including fees for recreational and commercial vessels, general aviation, and both deep draft and inland navigation.

Altogether, the user fees now in effect yielded nearly $10 billion dollars in 1981, most from fees for highways, airways, and uranium enrichment (see Table 1). Additional annual revenues of $6.7 billion (in 1982 dollars) could be generated by increasing user fees for aviation and by imposing user fees to finance the Strategic Petroleum Reserve, deep-draft navigation, various Coast Guard activities, and inland waterways.

TREATMENT OF INLAND WATERWAYS COMPARED WITH OTHER MODES

Compared with other modes of freight transportation, inland waterways are heavily subsidized and will continue to be so even when the waterway fuel tax rises to 10 cents per gallon in 1986, as required under current law. Both of the proposals before this Subcommittee would reduce the subsidies to inland waterways and make them more comparable to

TABLE 1. SELECTED FEDERAL USER FEE PROGRAMS

Investments Subsidized	Receipts (In billions of dollars)	Services Covered
	Current Fees for 1981 a/	
Highways	6.3	Highway construction and reconstruction from the Highway Trust Fund
Air	1.4	Airport construction grants and portion of Federal Aviation Administration operating costs
Inland Waterway	0.03	Portion of Corps of Engineers operating costs
Irrigation and Power	0.4 b/	Portion of Bureau of Reclamation costs related to irrigation and power generation
Uranium Enrichment	1.1	Uranium processing for sale to domestic and foreign utilities
Bank Services	0.4 c/	Federal Reserve Banks costs including check collection and clearing services, safekeeping of securities, and currency and coin transportation

(Continued)

TABLE 1. CONTINUED

Investments Subsidized	Receipts (In billions of dollars)	Services Covered
	Potential Increases in Fees d/	
Increase Aviation User Fees	0.9	Primarily Federal Aviation Administration operations related to general aviation
Inland Waterway User Charges	0.7	Corps of Engineers operating and capital costs
User Charges for Deep-Draft Navigation Expenses	0.5	Corps of Engineers operating and capital costs
User Charges for Certain Coast Guard Activities	0.7	Coast Guard search and rescue costs, aids to navigation and other programs that aid recreational boating and commercial users
Finance the Strategic Petroleum Reserve with a Petroleum Tax	2.7	Department of Energy costs of purchasing petroleum for storage in the strategic reserve
Postal Service	0.8	Federal subsidies for operations and pensions
Other	0.4	Including uranium enrichment program, nuclear waste research, outdoor recreation, and irrigation cost recovery

a/ Receipts are shown in current dollars for the year for which they are reported.

b/ 1979.

c/ Estimate for 1982; includes cost savings for programs taken over by private sector.

d/ Based upon Congressional Budget Office, Reducing the Federal Deficit: Strategies and Options (February 1982). (Estimates shown here are for 1983 and have been converted to 1982 dollars.)

existing rail and truck subsidies. Indeed, since these competing modes will themselves probably be less amply subsidized in future years, the two proposals under consideration now are consistent with a broad federal policy of charging the users of transportation services for the costs that the government bears on their behalf. They do not put waterways at a disadvantage relative to other modes: rather, they help correct a present distortion created by waterway subsidies.

Relative to volume of traffic, domestic inland water transportation received the highest subsidy of any freight mode in 1980--3.9 mills per ton-mile, which is substantially above the 2.2 mills per ton-mile received by railroads and the 1.8 mills per ton-mile received by trucks (see Table 2). Pipelines, which carry more ton-miles than either barges or trucks, receive no federal capital or operating subsidies.

Present waterway subsidies are particularly large relative to the total cost of operations. In 1980, federal subsidies covered more than one-fourth of all inland waterway shipping costs. This is more than four times rail subsidies and almost 30 times more than truck subsidies.

Both the Administration bill and the Domenici amendment would sharply reduce waterway subsidies by means of user fees. Under the Administration bill, waterway users would pay fees that would rise to about

TABLE 2. COMPARISON OF FEDERAL SUBSIDIES TO FREIGHT TRANSPORTATION

Mode	Federal Subsidy in Mills per Ton-Mile (In constant 1982 dollars)	Federal Subsidy as a Percent of Total Costs
Truck		
1980 Actual	1.8	1.0
Railroad		
1980 Actual	2.2	6.2
Waterway		
1980 Actual	3.9	29.5
1987 Administration Bill	0.7	7.0
1987 Domenici Amendment	1.1	10.7

2.0 mills per ton-mile in 1987. Waterway users would continue to pay less than the government spends, leaving a subsidy of 0.7 mills per ton-mile. This subsidy is smaller than those now received by railroads and trucks, although subsidies to these modes will also probably decline. In terms of overall financial importance, the Administration proposal would reduce the waterway subsidy to about 7 percent of the total cost of waterway operations--still more than current rail and truck subsidies.

The Domenici amendment, which would impose lower user fees than the Administration bill, would result in subsidies of 1.1 mills per ton-mile, or about 11 percent of total costs, in 1987. Thus, if this plan were enacted,

waterways would still have a larger fraction of their costs covered by federal subsidies than would competing modes but would receive smaller subsidies per ton-mile than those now going to trucks and railroads.

Such comparisons are rough generalizations that may not apply to specific regions or companies, since much federal aid is linked to projects in particular locales. In addition, some joint investments benefit several groups at the same time; an example is highway projects, which aid both trucks and cars. Such joint subsidies cannot be precisely allocated to specific user groups. Further, there is no concensus about what is a subsidy and when it should be accounted for. For example, which loans should be counted? (The CBO did include federal purchases of Conrail securities in 1980, and other loans, but did not include loan guarantees.) Should federal support for the Railroad Retirement Fund be counted among subsidies to railroads? (CBO did include it in our calculations.) Which tax expenditures should be included? And finally, the federal subsidy to any mode during a particular year may not closely reflect the historic, long-term investment.

Although such questions of definition make any measure of subsidy a very rough index, even simple, aggregate statistics (outlined in Table 2) can serve as an approximate yardstick for measuring relative federal subsidies to each mode. This measure shows that waterways now receive the largest subsidies of any mode of freight transportation, and that either of the

proposals before this Subcommittee would place waterways on a more comparable footing with railroads and trucks.

ESTIMATED REVENUES

Increasing user fees in general is one important strategy for reducing the large federal deficits now projected. Roughly $10 billion per year now comes from user fees. A series of examples of increased or new user fees that could raise another $7 billion per year is presented in the CBO's report, Reducing the Federal Deficit: Strategies and Options, released last week. Higher waterway user fees could generate $1.0 billion to $1.7 billion over the 1983-1987 period. On the basis of the projected schedule for waterway projects currently authorized, the Administration bill would raise about $300 million in 1983 (or about 40 percent of the $770 million projected to be spent on waterway subsidies in 1982), increasing to almost $400 million by 1987 (see Table 3). The Domenici amendment would generate about $76 million in 1983 and more than $300 million in 1987.

The amount of revenues generated under the Administration proposal would depend on when projects were opened to through-traffic. For example, in the CBO calculation, no increased user charges are added for the Tennessee/Tombigbee waterway until 1987, when the waterway is

TABLE 3. PROJECTED REVENUES FROM ALTERNATIVE PROPOSED FEES ON USERS OF INLAND WATERWAYS (In millions of constant 1982 dollars)

	1983	1984	1985	1986	1987	Total 1983-1987
Continuation of Current Policy	40	47	48	55	50	240
Administration Proposal (Amendment 637) a/	309	310	320	327	394	1,660
Domenici Amendment (No. 32) a/	76	151	227	266	307	1,027

a/ This includes revenues generated by user fees contained in current policy and assumes that no waterways will be closed. Under the Administration's proposal, if low-volume waterways closed, revenues could be reduced by $60 million a year, with a corresponding drop in operating expenditures.

scheduled to be open. As a result, the projected revenues jump from $327 million to $394 million between 1986 and 1987. In addition, the Administration bill would recover all of the cost of waterways that are now under construction but not yet open. This has the effect of charging waterway users retroactively for construction investments made prior to 1983. If the Administration proposal were modified to exempt from recovery funds expended before 1983, the revenue generated over the 1983-1987 period would be slightly less--around $1.5 billion, or about $132 million less than under the Administration bill as it is now written.

IMPACTS ON SHIPPERS AND CARRIERS

The Administration bill, which would increase the average waterway operators' total costs by around 16 percent in 1990, could curtail traffic on some rivers. These effects would be greatest if the fees were charged as specific tolls for separate segments. Under such segment tolls, the tolls on certain low-volume segments would have to be very high to offset the costs; the Kentucky, Apalachicola/Flint, and Ouachita/Red Rivers would face the highest segment charges. Navigation on these rivers would therefore probably cease altogether. Similarly, traffic on the Tennessee/Tombigbee route would probably be unable to cover its costs.

Alternatively, user fees could be set at a uniform level across the entire waterway system, using either a fuel tax or a tax of a set amount for each ton-mile hauled anywhere on the system. Under such a system-wide fee arrangement, the regional disparities would be smaller because tolls would be uniform throughout the waterway network. As a result, no segments would face charges high enough to force them to close. This would mean, however, that the federal government would continue to pay the operating and maintenance costs of those segments, and that these added costs would be passed on to users. As a result of these higher charges, the amount of total traffic diverted could be greater.

Shippers of certain commodities would probably bear the greatest impact of increased waterway user fees. Coal, for example, accounts for roughly one-fourth of all tonnage on the nation's inland waterways. Much of this coal moves relatively short distances, however, and is received by utilities or industries that have made substantial investments based on the availability of waterborne coal. As a result, few of these receivers have any reasonable alternative sources of supply. Thus, barge operators could presumably pass along virtually all of the increased user fees to shippers. (Relatively little traffic will be diverted, though.) Since much of the coal goes to utilities, the fees would ultimately get passed along to electricity consumers, particularly since many utilities have automatic surcharges to recover their increased fuel prices. As a result, consumers in affected areas could end up paying about 1 percent more for electricity.

Grains and soybeans account for about 10 percent of all barge tonnage. Since these commodities are light relative to their volume, and since they move quite long distances, these crops account for a larger share of barge revenues. The impact of increased waterway users on farmers would fluctuate, however, because of many factors--including variations in domestic grain production and export demand, and railroads' and truckers' differing responses to increased barge rates. The experience with increased fuel prices during the last several years offers a few insights concerning

these reactions. In particular, it suggests that railroads would raise their rates as barge rates went up. But barge operators themselves absorbed much of the short-run impact of higher fuel prices, largely because they had excess capacity and were willing to carry grain as long as the rate kept ahead of the additional operating costs.

The degree to which higher waterway user fees would fall on grain farmers could vary widely. The user fees in the Administration bill would increase the transportation costs for grain by about 6 cents per bushel in 1990. Assuming that half of this is borne by farmers and the other half by owners of grain elevators, consumers, truckers, or waterway operators, then farmers would absorb about 3 cents of the increase. With corn, wheat, and soybeans now selling at $2.40, $3.70, and $6.05 per bushel, respectively, this represents roughly a 1 percent loss in gross income for corn and wheat, and about a one-half-percent loss for soybeans. In other terms, for a representative commercial family farm producing 400 acres of corn and soybeans each year, these user fees would cause a loss of gross annual income of about $900. For smaller family farms that rely heavily on nonfarm incomes, annual gross income from farming would decline by around $150.

When the market for grain exports is slack--as it is now--many water carriers would probably have excess capacity; thus, competitive pressures would probably force them to absorb part of any increases in

waterway user fees. Alternatively, when the market for export grain is expanding, as it was in the early 1970s, water carriers would probably be able to pass along any increases in user fees to handlers and shippers. These firms, in turn, would probably be able to pass much of this along to foreign consumers. To whatever extent that this happened, the burden of increased user fees could be substantially transferred to countries that import U. S. grain. Although many factors influence who will bear the burden of higher waterway user fees, grain farmers would hardly have to shoulder the burden alone.

Mr. Chairman, that concludes my prepared remarks. I will be happy to answer any questions.