



Deep Draft User Fee Studies: Summaries

GREAT LAKES COMMISSION STAFF

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DEEP DRAFT USER FEE STUDIES: SUMMARIES

Introduction

The Great Lakes Commission (GLC) undertook a compilation of the major findings for ten deep-draft user fee studies completed over the last several years. The purpose of this assessment was to provide a ready reference for Commissioners and Advisors regarding past user fee studies. Also, one of the review categories, Great Lakes Implications, was established to put some of the chief findings into a regional perspective.

The issue of cost recovery for navigation projects has been under consideration for many years. The national and regional debate has generated substantial discussion within the maritime community. In the Great Lakes region, the issue is very controversial principally due to the fact that regional shippers have had to absorb "user fees" in the form of Seaway tolls since 1959. The Great Lakes Commission in 1981 adopted two resolutions pertaining to user charges calling for a full economic analysis of projected deep-draft user charge impacts on a national basis. In addition, the GLC recommended that if any cost recovery legislation is adopted, it should be premised on uniform charges, collected by the federal government, include a dedicated trust fund and not have retroactive application. Since 1981 the Great Lakes Commission has also gone on record against Coast Guard user charges for icebreaking and against all possible Coast Guard user charges without adequate prior analysis.

This summary of deep-draft user charge studies includes all major and recent federal efforts in this area that have gained national attention. The summary has not reviewed all local/port and state level efforts but has selected ones that permit a reasonable sample. One study which will be released in April 1984 concerns the impact of possible user fees on Great Lakes grain flows. This report will be published by Michigan Sea Grant and reflects the work of Rebecca Johnson, a Ph.D candidate at Michigan State University.

Study - THE ECONOMIC IMPACTS OF A UNIFORM, DEEP-DRAFT USER CHARGE ON GREAT LAKES SHIPPING

Agency - Great Lakes Commission (GLC) - contract to Data Resources, Inc.

Status - Completed in September 1983.

Preparation Comments: The GLC decided in Spring 1983 that more information was needed regarding regional impacts of proposed commercial navigation user fees. Several bills were pending in Congress and Commissioners felt that a study was needed to help evaluate the basic legislative approaches. The study firm in consultation with the GLC staff decided that two kinds of user fees would be assessed. One example user charge was a 16 cent/ton uniform charge that would recover approximately 60% of current national operations and maintenance (O&M) costs. The other charge was a .0005 cents per dollar of cargo value ad valorem charge that would recover approximately 42% of O&M costs.

The study assessed the user fee impact (through transportation rates) on seven principal bulk commodities representing 94% of Great Lakes tonnage for 1980. Much of the transportation rate analysis was based on the Great Lakes Network Model developed by DRI to assess over 800 origin-destination U.S. commodity flows on the Great Lakes. Because the tonnage fee resulted in the greater impact between the two user fees, it became the principal study focus.

Description and Findings - The GLC-funded study concluded:

1. The 16 cent/ton user charge would raise laker transportation costs between 2 and 4% resulting in \$27.5 million transportation increase for the selected commodities.
2. The ad valorem charge would only increase water transportation rates by 1% or \$4.5 million.
3. At 100% cost recovery, the lakes transportation cost increases are substantially greater - tonnage charge 26.8 cents/ton: \$46 million and the ad valorem charge - \$.0012/\$ cargo value: \$10.8 million.
4. There would be little, if any, modal diversion for most of the commodities. Cement though, because of transport patterns and rail availability, would be most subject to diversion.
5. Rail carriers would increase rates in response to the user charge - could raise costs considerably for the region.
6. Source diversion also appears to be minimal for most of the current lake-based tonnage.
7. The steel industry and electric utilities would experience the greatest user fee impact: .04% increase in the final price of steel; .02% increase in electrical energy costs.

8. For grain, 1/2 cent per bushel impact would occur. If a 1.1 mill per ton-mile user charge is added to the present inland waterway fuel tax, the prospect of substantial grain diversion to the Great Lakes is enhanced.
9. For each study commodity the breakdown between an ad valorem charge and the tonnage charge reveals different results. For example, limestone, a low value bulk commodity, would experience a 6.2% transportation rate increase under the tonnage fee but only .1% rate increase under the ad valorem approach.
10. For several commodities that move through the St. Lawrence Seaway a reduction (50% and 100%) in U.S. Seaway tolls was factored into the user charge analysis. For example, with grain there would be between an 8 and 18 cent per ton reduction in tolls. Thus a 100% reduction in U.S. Seaway tolls for grain would only offset a national tonnage user fee pegged at 60% cost recovery (assuming 1/2 cent/bushel user fee impact - 35 bushels per ton).

Great Lakes Implications - This study is the only region-wide assessment of possible navigation user fees to be completed to date. It is also the first significant attempt to address the impacts of both an ad valorem and a tonnage fee on bulk commodity movement through Great Lakes ports.

The fact that most of the regional transportation cost impact would fall on the steel industry should caution federal policy-makers. The regional steel industry has been beset by depression conditions as has most American steel operations. For user fees to be imposed on Great Lakes ore transportation at this time, the prospects for sustaining the recent beginnings of recovery would be dampened. While modal and source diversion are not indicated or likely at partial cost recovery levels, the threat of substantial diversion looms for particular commodities at higher recovery levels. Export grain is very sensitive to price factors and the Great Lakes could experience serious problems. Even imported overseas ore could become a serious problem whether it comes in via the Seaway, inland rivers or rail. One interesting point developed in the study was that rail rates may ratchet up to correspond with user fee increases for competitive movements. The total cost impact for the region would be substantially greater than that for the lake mode alone.

Study: CHARGING FOR FEDERAL SERVICES

Agency: Congressional Budget Office - Natural Resources and Commerce
Division

Status: Completed in December, 1983.

Preparation Comments: The CBO study was undertaken at the request of Senator Domenici, Chairman of the Senate Committee on the Budget. The study examined the prospects for new or increased user fees in seven areas of federal service. Chapter II, "Deep-Draft Ports and Harbors" and Chapter IV, "U.S. Coast Guard Services" are the sections most relevant to Great Lakes transportation. In keeping with a tradition of impartial analysis, no recommendations were made.

Description of Findings: With respect to deep-draft user fees, the CBO report indicated that project-specific fees would be more suitable than uniform system fees. According to the study, cross-subsidization would be reduced and the marketplace test would guide future investment. The fact that smaller ports may be seriously disadvantaged under this concept was acknowledged and mention was made that a "cap" on user fees and a forestalling of small port closure (through whatever means) would benefit local economies. Using 1978 tonnage levels, the report divided up the national port system into three classes and projected the average port-specific deep-draft user fees for full O&M cost recovery:

Large ports:	\$.12/ton
Medium ports:	\$.59/ton
Small ports:	\$9.87/ton
All ports:	\$.18/ton

The CBO study indicated that various kinds of user fees could be implemented to recover nearly \$1 billion of the \$2.5 billion annual budget of the Coast Guard. Those services most suitable for such fees are: search and rescue operations, aids to navigation, marine safety and environmental protection. Icebreaking is considered under the aids to navigation category. The need for additional revenue (non-budget) to help finance Coast Guard programs is particularly acute with the increased attention and resources given to drug enforcement and marine environmental protection program areas.

The CBO study found that a combination of user fees - project specific and systemwide - to be administered by an agency such as the Postal Service would be appropriate if user fees are to be implemented. For example, a specific charge could be made for vessel documentation and inspection whereas an annual fee per vessel would be more appropriate for rescue coverage. This latter example is intended to reduce private vessel operator decisions on the timing of rescue calls therefore promoting safety. The impacts of these kinds of fees would vary according to type of user. The study points out that recreational craft would not be seriously burdened when the fee was compared with overall expendi-

tures for the activity. However, commercial fishermen could have more difficulty because their endeavor is their livelihood and not an avocational pursuit. The study mentioned that in the fishermen's case, any fees could be phased in to lessen the immediate impact.

Great Lakes Implications: A port or segment specific user fee for O&M cost recovery has been shown by other studies to be unsuitable for the region. The diversity of O&M costs would eventually result in port community dislocations. Not only would some ports gain an "unfair" advantage over others, but particular business organizations would experience disparate impacts. Where one company is the principal shipper from a port and that port or the destination port has unusually high O&M costs, the resulting user fee burden could have a disproportionate impact among competing firms. Also, annual fluctuations in tonnage and O&M costs would contribute to business planning uncertainty.

Coast Guard user fees particularly for commercial laker operations would also have unreasonably harsh impacts. Icebreaking charges are a good example. The fringe of the main 8-1/2 to 9 month navigation season normally requires limited ice operations on the Great Lakes. Charges for Coast Guard ice assistance would be added to substantial fees paid to private towing firms for harbor ice breaking - the Coast Guard normally defers to private icebreakers if they are available and capable of doing the particular job. The Lake Carriers' Association estimates that a day-long icebreaking assist from the Coast Guard could cost more than \$20,000. For a 20,000 ton laker the cost would amount to \$1.20 ton. Obviously, smaller capacity vessels would pay more per ton. The Lakes maritime community asserts that these possible costs would become a major handicap and especially during those times when demand is off normal levels.

Study - ECONOMIC EFFECTS OF LEVYING A USER CHARGE ON FOREIGN AND DOMESTIC COMMERCE TO FINANCE HARBOR MAINTENANCE

Agency - The study was conducted under a grant from the Economic Development Administration, U.S. Department of Commerce. The consultant firm was Bushnell, Pearsall, and Trozzo, Inc. Alexandria, Virginia.

Status - A Summary Report dated September 16, 1983 is a matter of public record. A Final Report is expected during March 1984.

Preparation Comments - EDA, as the contracting agency, established an inter-agency review group for the study. U.S. DOT, a member of the review group, participated late in the study review process. Because some of the study results carry negative implications for US/DOT navigation user charge advocacy, DOT did not want the study findings to be given wide publicity and apparently argued against official release. DOT's approach did not prevail.

The study consultants were careful to emphasize that the study was not as comprehensive as it could have been - apparently an allusion to funding limitations.

Description and Findings - The study entailed an input-output economic analysis. Essentially this method disaggregates impacts by geographic and economic sector. Direct impacts such as tonnage reductions and customs revenue reductions and net employment charges among others were described. Induced impacts were also looked at. For example, what effect does the user fee have on hinterland industries - those who use imports or who produce import substitute goods?

The sample user fee used in the study was a 25 cent per ton uniform charge. It should be pointed out that this level of user charge does not equate with current 100% cost recovery but may be assumed to be in the 90% range.

According to the study:

For national impacts, the basic or net effects were:

1. \$337 million in revenues would be generated by the user fee.
2. 10 million short tons of potential cargo would not be generated.
3. Over 10,000 jobs would be lost approximately (30% in the ports/shipping sector and 70% for the hinterland). Also, \$260 million of income would vanish.
4. Customs duties would decline by over \$12 million.
5. Income and indirect business tax revenues would decline by about \$67 million and the commodity balance of trade would decline by \$56 million.

As for regional impacts:

1. More than half of the net impacts would fall on the port area of the Gulf of Mexico and the hinterland industries serving it. The Great Lakes and Pacific Northwest would follow.
2. The Gulf would experience the greatest decline in imports but the Lakes would experience the greatest decline in export tonnage.
3. More than half of the national loss of potential net tonnage is attributed to the Great Lakes - 48 million short tons compared with a national figure of 9.5 million short tons.
4. The largest industrial sector impacts would fall on the carriers.

Great Lakes Implications - Under this analysis, the impact of user fees is presented in a national context. The "hinterland"/ports sector breakdown did indicate that the Great Lakes would experience the second highest level of impacts with respect to coastal ranges and commodity tributary areas. It should be pointed out that the word "hinterland" in this study describes large vaguely-defined areas with substantial overlap. The hinterland for the Gulf includes portions of the Great Lakes region states and therefore impacts identified for the Gulf would also affect the Great Lakes region. The Great Lakes would suffer the greatest burden in the export category. In the U.S. Great Lakes, grain which accounts for 90% of all overseas export shipments would encounter significant problems.

Several Great Lakes ports have criticized the study because the 25 cent/ton user charge did not reflect a realistic cost recovery level for study purposes nor did it represent a range of types of user fees needed for comparison purposes. Also, the fact that the analysis did not consider Seaway toll levels was considered another study failing by the particular ports.

Study - PORT DEEPENING AND USER FEES: IMPACT ON U.S. COAL EXPORTS

Agency - Energy Information Administration - U.S. Department of Energy

Status - The final results of the study were made public at a "National Port Policy" hearing held by the House Subcommittee on Merchant Marine on April 21, 1983. A report was subsequently published.

Preparation Comments - According to EIA, the study results do not purport to represent the policy positions of the U.S. Department of Energy or the Reagan Administration.

Description and Findings - Three different deep-draft user fee scenarios were developed. The user fee examples were:

1. 100% federal share up to 45'; 50% local share for harbor deepening and 75% local share for maintenance beyond 45'.
2. 100% local share for operations and maintenance and new construction for harbors over 14'.
3. Approximately 60% local cost recovery based on a uniform fee of \$.15 per ton.

In addition to these scenarios, an export coal only user fee based on the above criteria was assessed.

The main conclusion of this study was that none of the hypothetical user fees would significantly reduce total U.S. coal exports. Also, even the deeper harbors made possible through the cost sharing arrangement, would not significantly increase the present U.S. share of world coal exports.

The port-specific proposals for cost recovery would result in varying levels of regional-port impact but the national impact would be diffused. A port such as New Orleans which has high maintenance costs would pay relatively high amounts particularly under the 100% cost recovery plan. Under the nationwide, uniform user fee, depending on the depth eventually attained, some ports could gain an advantage through the use of larger colliers. The greatest burden for the coal commodity would occur if export coal was the only commodity taxed. Under these circumstances (according to the study), the costs of harbor deepening would prohibit the undertaking, therefore preserving the status quo.

Great Lakes Implications: - Great Lakes origin coal exports were not specifically considered. In fact, the analysis lumped Great Lakes coal exports with those of the East Coast. The Great Lakes coal export scene is so unique and different from other coastal ranges that failure to consider it in detail with respect to user charge impacts would appear to be a major problem with the study from a regional perspective. For example, these factors should be considered in an export coal user charge study: impact of Seaway tolls, midstream transfer to larger colliers, seasonal navigation, and predominance of export flows to Canada carried in Canadian lakers.

Study - AN ANALYSIS OF PROBABLE IMPACTS OF USERS' FEES ON MINNESOTA'S GREAT LAKES SHIPPING

Agency - Minnesota Department of Transportation.

Status - The study was completed in February, 1982

Preparation Comments - The study was based on a site-specific, per ton user charge and was applied to Minnesota's share of principal bulk commodity traffic on the Great Lakes. This type of user fee was similar to one initially proposed by the Reagan Administration. By using a 100% operations and maintenance (O&M) cost recovery level a "worst case" situation was analyzed.

Description and Findings - This analysis is the only study for the Great Lakes that has focused on a site-specific user charge. Such user charges were soundly criticized by the national port community and have been abandoned by user charge advocates with respect to O&M costs. For those bulk commodities that had a Minnesota-origin, it was determined that the total accrued user fee for annual tonnage in that category could be considered a Minnesota impact. Although it is clear that increased transportation costs attributable to user fees would be reflected in end product costs and therefore distributed widely, the user charge nevertheless, was incurred by a Minnesota-produced raw material. The total impact was determined to be about \$22.5 million. Iron ore, ore concentrate and grain would incur over 95% of the total projected impact.

Great Lakes Implications - The study concluded that not only would the magnitude of the impacts be damaging to regional industry and agriculture but that serious commodity flow disruption could occur resulting in modal diversion and drastic changes in Great Lakes port traffic share. The MN/DOT study also addressed the issue of combining user charges with existing Seaway tolls and the impact on overseas traffic.

Study - IMPACT OF DEEP-DRAFT USER CHARGES ON THE GREAT LAKES STATES

Agency - Illinois Department of Transportation

Status - Preliminary findings were available in February 1984. A final report is expected after the methodology and preliminary findings are reviewed by the states covered in the study.

Preparation Comments - The study was designed to estimate the cost to shippers in the six western Great Lakes states of imposing nationally uniform deep-draft user charges. The study includes all deep-draft shipments originating from or destined to each state via both Great Lakes and tidewater ports.

Description and Findings - The IDOT first estimated the weight and value by commodity group of the states' exports, imports and domestic shipments by vessel from all U.S. ports. The user charge rates used were calculated to represent 100% cost recovery of deep-draft operations and maintenance expenditures (tonnage charge -\$.268, ad valorem charge - \$.0012 per dollar value of cargo). The weight and value were multiplied by the user charge rates to obtain the estimated cost to the states of imposing a user charge. IDOT estimates that a national tonnage charge of \$0.268 per ton would cost the states \$85 million in user charges, and an ad valorem charge of \$0.0012 per dollar of cargo value would cost the states \$110 million.

Preliminary Findings
Tonnage Charge = \$0.268 per ton

<u>State</u>	<u>Tonnage</u> <u>(1,000,000)</u>	<u>Cost to</u> <u>Shippers</u> <u>\$1,000,000)</u>
Illinois Foreign	65.1	\$17.5
Indiana Foreign	25.1	6.7
Michigan Foreign	31.5	8.5
Minnesota Foreign	22.9	6.1
Ohio Foreign	40.5	10.8
Wisconsin Foreign	13.9	3.7
Domestic Great Lakes	117.4	\$31.4
Total	316.4	\$84.7

Ad Valorem Charge = \$0.0012 per dollar of cargo value

<u>State</u>	<u>Value</u> <u>\$1,000,000)</u>	<u>Cost to</u> <u>Shippers</u> <u>(\$1,000,000)</u>
Illinois Foreign	\$21,409.7	\$25.7
Indiana Foreign	8,381.8	10.1
Michigan Foreign	13,297.8	16.0
Minnesota Foreign	6,909.1	8.3
Ohio Foreign	16,256.3	19.5
Wisconsin Foreign	6,389.1	7.7
Domestic Great Lakes	18,696.1	22.4
Total	\$91,339.9	\$109.6

Note: The category "Foreign" in these tables includes exports and imports via U.S. Great Lakes ports to both Canada and overseas. The category "domestic Great Lakes" includes only shipments between U.S. ports on the Great Lakes. Totals may not add due to rounding.

Great Lakes Implications - The results present a dilemma for the Great Lakes states. The example user charges indicate that the ad valorem approach would cost the region more. However, even though individual states are not listed according to relative impact on domestic shipments, there is sufficient reason to believe that one or more of the states would individually be better off under the tonnage approach if all traffic (domestic and foreign) were to be considered.

Study - WATERBORNE COMMERCE USER FEE SUMMARY

Agency - Wisconsin Department of Transportation

Status - The initial effort was completed in May, 1983. Subsequent development of WIS/DOT deep-draft user fee position was based in part on study findings.

Preparation Comments - Wisconsin has deep-draft vessel and inland river commerce and therefore considered both for purposes of assessing impacts of possible commercial navigation user fees. The initial study effort looked at national impact levels including Wisconsin ports for both an ad valorem and uniform tonnage user charge. The subsequent effort focused on the five deep-draft bills before Congress at the time and their potential impact on Wisconsin. On the basis of staff work and discussion of the findings, a WIS/DOT position on deep-draft user fees was developed.

Description and Findings - Average tonnage levels were developed from Corps of Engineers data for the period 1976-1980. An "adjusted average" was also computed separately from total tonnage figures by counting domestic traffic only once - a procedure most likely to be incorporated in any feasible user charge proposal. Tonnage values were based on New York-New Jersey average commodity values. Average operations and maintenance levels were used for all federally-maintained ports. For the Great Lakes/Seaway region, the O&M costs for the connecting channels were included with the Michigan costs and U.S. Seaway O&M costs were included with New York costs.

On the basis of the study's data, the Great Lakes and Wisconsin fare more favorably under an ad valorem recovery mechanism than the per ton system. It should be pointed out that national cost recovery levels differ among the two user fee examples which represent actual legislative proposals - 50%-S.970, 16 cents/ton) and 40% - S.865 and H.R.2406 (.0005/\$cargo). The WIS/DOT study indicates that under both types of user fees, Wisconsin and Great Lakes ports would be substantially subsidized by other coastal ports if some sort of cap on user fees, related to a national average is not part of a proposed user fee.

Great Lakes Implications - The degree of cross-subsidization from national ports to the Great Lakes-Seaway system was also evaluated in the study. S.970 which incorporated a 50% reduction in Seaway tolls into its uniform tonnage fee would result in little overall change in federal expenditures in the system. Interlakes movement would pay but overseas import and export shipments would experience little net change. However, S.865 and H.R.2406 that entail a 100% Seaway toll reduction (related to O&M) in their ad valorem approach would result in greater cross-subsidization and H.R.1512, that would exempt ports and channels less than 45' in depth would give the Great Lakes the biggest benefit compared with national user fee impacts. However, the Seaway tolls situation is not clearly addressed in H.R.1512 and therefore the toll levels would still remain higher for system shipments than would new user fees for other ports and the blatant inequity would remain although tempered somewhat.

Study - IMPORTANT PROVISIONS OF THREE MAJOR BILLS TO MAINTAIN AND IMPROVE THE U.S. DEEP DRAFT NAVIGATION SYSTEM

Agency - Port of Milwaukee

Status - Completed October 1983.

Preparation Comments - The analysis was undertaken to support information sharing with Wisconsin Congressmen on the subject of user fees.

Description and Findings - The user fee analysis has two parts. Three types of user fee approaches as represented by S.865 and H.R.2406, S.970 and H.R.3678 are described through a matrix of individual provisions. Another part displayed for six commodity categories the impact per ton of the ad valorem and uniform tonnage user fees. The ad valorem fee was set at \$.00033/dollar of cargo value and the tonnage fee was established at \$.099/ton. Both of these amounts reflect federal O&M expenditure levels projected for FY 1985. Of course, the tonnage fee remains the same for each commodity. The ad valorem fee results per ton based on commodity value are:

coal (\$40/ton) - \$.013
iron ore (\$42/ton) - \$.014
corn (\$123/ton) - \$.041
petroleum prods. (\$225/ton) - \$.074
general cargo (\$500/ton) - \$.165
containerized cargo (\$6000/ton) - \$1.98

In a further analysis, the impact per ton of the two user fees on the delivered cost of four products per ton is given.

<u>Product</u>	<u>Delivered Cost</u>	<u>Ad Valorem</u>	<u>Tonnage</u>
Imported shirts	\$18,000	\$5.94	\$.099
Imported tires	\$12,121	\$4.00	\$.099
Export wheat	\$143	\$.047	\$.099
Export corn	\$123	\$.041	\$.099

Great Lakes Implications - It is apparent from the Port of Milwaukee's analysis as well as other studies that for the total spectrum of U.S. goods shipped on the Great Lakes-Seaway, the ad valorem approach would have less of an impact than a tonnage fee if both fees were set to recover about half of national O&M expenditures irrespective of changes in Seaway toll levels. However, it is also apparent that if all vessel-shipped goods (both domestic and import-export) are subject to user fees the impact picture is not as clear. Those states that have relatively large levels of high value shipments may, in fact, end up disadvantaged under the ad valorem approach. Also, for particular industries and shippers depending on their commodity make-up, the ad valorem approach could result in very serious competitive impacts.

Study: WATERWAY USER CHARGE IMPACT

Agency: Port of Portland

Status: Completed April 1981

Preparation Comments: The port of Portland is a deep-draft Columbia River port with substantial overseas as well as river commerce. Federal cost recovery for both deep and shallow draft would be especially burdensome for the area because of the interdependency of both systems and the cumulative effect of the user fees. The study was accomplished in part to provide comments to Senate and local Congressional offices respecting the user charge issue.

Description and Findings: The Portland study assumed complete cost recovery on a segment specific basis. This basic assumption was in response to federal proposals current at the time. This approach did not consider the type of fee - ad valorem, tonnage, fuel tax etc. The study also addressed the need for a thorough cost allocation process whereby only those navigation costs assignable to commercial navigation users would be made subject to cost recovery.

An example of an individual vessel impact was given. A 50,000-ton grain ship would incur a deep water and river system tax of \$23,750 for its cargo. This assumes that delivery to a Portland area export terminal was via barge. If the deepening of the Columbia estuary and reconstruction of the Bonneville Lock is included (amortized over 50 years), then the vessel cost would be raised to \$63,750.

The study estimated that an immediate cargo loss of 4 to 5 million tons (15% of total) could be expected. Eventually, as new load centers are established under a port specific user fee, then more cargo erosion could take place. The authors point out that many of the region's port districts (particularly the smaller ones) would take the brunt of the potential job loss and reduction in economic activity.

The study concluded that more research on impacts was imperative. One area that needed further study was the national transportation system and its ability to handle cumulative mode user fees.

Five suggestions for altering the Administration's (1981) proposal were advanced:

- o Impose partial rather than full recovery user charges.
- o Assess user charges on a uniform basis for O & M on the existing system.
- o Assess user charges with a combination of uniform and segmented charges for new construction projects.
- o The types of charge, whether it is by vessel, value, tonage, or other measure should be studied.

Great Lakes Implications: This study was a relatively early effort based on the site-specific user charge approach. It is obvious from a regional standpoint that this form of cost recovery for O&M would not be feasible in the Great Lakes region. Mention of port-specific user fees is nearly non-existent in the Great Lakes region now.

Study - DEEP RIVER STUDY - LOWER MISSISSIPPI RIVER

Agency - Louisiana Department of Commerce - Principal contract to Tippetts - Abbett - McCarthy - Stratton, subcontractors were Booz, Allen and Hamilton, Inc. and Pyburn and Odom, Inc.

Status - Completed in July 1983.

Preparation Comments - The study was designed to define the best plan for providing deep-draft vessel access to the lower Mississippi River. The governor of Louisiana established a task force to explore the feasibility of a proposed Corps of Engineers dredging plan (1981) and various financing alternatives. The contract study was intended to provide decision makers with independent analysis of the issue.

Description and Findings - Sixteen different dredging plans were assessed. Each alternative reflected a phase-in of different drafts and topping off operations at various locations along a 172 mile reach of the river. The financial feasibility of the alternative dredging plans was evaluated on the basis of project costs (both on-shore and navigation work), transportation cost savings and financing mechanisms.

The study authors presumed that some form of cost recovery will eventually be implemented by the federal government for deep-draft navigation projects. The alternative dredging plans were reviewed in light of 50% and 75% local cost shares amortized over the life of the project. The study indicates that the local share would be best met by debt financing with a graduated system of user charges, provided the federal government picks up initial project costs. Project depths would be increased in increments. For study purposes, only the commerce expected to benefit from the deepened channel would be assessed user charges and those charges would be scaled according to ability to pay. The study indicated that some form of debt financing (e.g. general obligation bonds or general revenues) separate from user charges would be needed during the early years of the project's development to cover expected deficits in the user charge program. User charges would be deferred completely during the earliest years.

Great Lakes Implications - This study dealt with a situation that has some relevance for the Great Lakes-Seaway system. The deep river project contemplates a dredging program way beyond feasible depths for the Great Lakes region. However, the financing issue for "improvement" work will possibly be pertinent to our region with respect to proposals for Seaway modernization, Soo Locks replacement and increased depth for certain harbors and connecting channels. Up front federal financing would appear to be necessary also in the Great Lakes if cost recovery ever comes to pass. But, because of the international nature of much of the connecting channel and Seaway system, financing mechanisms whether incorporating user fees or not must be tailored to the unique bi-national cargo flows that dominate system traffic.

The impact of a deeper lower Mississippi River channel on Great Lakes-Seaway tonnages raises some interesting questions. There is no doubt that provisions for substantially greater draft vessels will keep Gulf

grain rates competitive if not make them more competitive with the lakes even with the cost sharing requirement. The natural hinterlands for both systems do overlap depending on crop production characteristics and variation of inland freight rates. The two systems rely on transshipping and topping off operations. Both are served by rail year round although full rail service to export terminals is available only at the Gulf ports. More important than a deeper lower Mississippi River channel for the Lakes-Seaway system are the tolls and season extension matters. If these two issues were resolved satisfactorily, then improved competitive posture for the Great Lakes shipping region would be forthcoming.