Harbors and Inland Waterways: 
An Overview of Federal Financing

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Summary

Harbors and waterways are a significant part of the nation’s transportation system. Because of the national economic benefits of maritime transport, the federal government has invested in navigation infrastructure for two centuries. The future direction of federal financing of the system, however, remains uncertain. A recent proposal by the Bush Administration and proposed legislation are in opposite directions: the Administration proposed reducing the navigation system’s draw on general revenue funds, while H.R. 2557 (passed by the House, September 24, 2003) could increase federal investment in the nation’s harbors.

There are also many other areas of debate, such as how to balance navigation uses and other river uses and how to improve the efficacy and environmental sensitivity of federal investments. Moreover, there is much debate over individual projects and the planning processes used to justify them.

This report outlines the commercial navigation system, how the federal government finances the system, some of the proposals to change federal financing, and current challenges to the future of harbors and inland waterways. The contentious policy issues related to the harbor maintenance tax are not addressed in this report; see CRS Report RL31264, *Harbor Maintenance Funding*, by John F. Frittelli. This report will be updated as developments warrant.
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Introduction to the U.S. Commercial Navigation System

Harbors and waterways are a significant part of the nation’s transportation system. More than 900 deep and shallow draft harbor projects are estimated to handle foreign trade representing 25% of the nation’s economic activity. The inland waterway system carries one-sixth of the national volume of intercity cargo, primarily via nearly 12,000 miles of commercially-active inland and intracoastal waterways. In addition to its commercial role, the U.S. navigation system also supports the mobilization of the military. The U.S. Army Corps of Engineers develops and maintains much of the system for the federal government.1

The navigation system in the United States today evolved largely out of the federal government’s interest in improving interstate and international commerce. The maritime transportation system remains dynamic because of evolving uses of the system (e.g., which cargoes are transported and to what final destinations) and evolving national priorities and values (e.g., rivers increasingly valued for recreational uses and ecosystem benefits).

The federal government continues to invest in navigation because of its benefit to the national economy. The distribution of cost between the federal government and the local project sponsor (i.e., the cost-share) for harbors and waterways was established in the Water Resources Development Act (WRDA) of 1986 (P.L. 99-662). Nonetheless, how the costs are allocated between the federal government and private beneficiaries continues to be debated. Recently, various proposals would change how some harbor and waterway expenses are shared and funded. Also, the federal investment in the construction and maintenance of specific projects has come under scrutiny by environmental and taxpayer advocacy groups. Because of the continuing congressional role in authorizing and funding specific projects, as well as establishing navigation policies, it is useful to review the current funding sources of navigation infrastructure, recent proposals to change federal funding, and issues shaping the congressional debate about the future federal role in harbors and waterways. Controversial aspects of the harbor maintenance tax are discussed elsewhere; see CRS Report RL31264, Harbor Maintenance Funding, by John F. Frittelli.

1For more information on the role of the Army Corps of Engineers in water resources, see CRS Report RS20866 The Civil Works Program of the Army Corps of Engineers: A Primer, by Nicole T. Carter and Betsy A. Cody.
Inland Waterway and Harbor Financing

Prior to 1986, harbor and inland waterway infrastructure was almost entirely a federal expense. Congress through WRDA 1986 fundamentally transformed the financing of Corps water projects, including its commercial navigation projects. The Act established cost-share requirements for harbor and inland waterway projects that resulted in a greater financial and decision-making role for non-federal stakeholders, such as port authorities. The maximum federal share of costs for harbor and inland waterway projects are shown in Table 1; the remaining expenses are paid by non-federal project sponsors. Federal spending on inland waterway construction averages $200 million annually; on harbor construction it ranges from $150 million to $300 million annually, with the variation largely due to activity on a few large harbor deepening projects (e.g., New York and New Jersey Harbor, Houston-Galveston Navigation Channels, and Oakland Harbor). Major rehabilitation is typically considered a construction activity, and the costs are shared according to construction cost-share arrangements. Navigation channel dredging to maintain the channel at its congressionally-authorized depth and width is considered a maintenance cost; in contrast, the deepening of navigation channels is cost-shared as a construction project. Operation and maintenance (O&M) expenses for the inland waterway system average around $500 million annually. O&M expenses for harbors average $700 million annually.

Table 1. Cost-Share Requirements for Commercial Navigation Projects of the Army Corps of Engineers

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<td>Coastal Ports—</td>
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<td>&lt;20 foot harbor</td>
<td>50% (GR)</td>
<td>80% (GR)*</td>
<td>100% (HMTF)</td>
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<tr>
<td>20-45 foot harbor</td>
<td>50% (GR)</td>
<td>65% (GR)*</td>
<td>100% (HMTF)</td>
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<tr>
<td>&gt;45 foot harbor</td>
<td>50% (GR)</td>
<td>40% (GR)*</td>
<td>50% (HMTF)</td>
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<tr>
<td>Inland Waterways</td>
<td>100% (GR)</td>
<td>100% (50% IWTF; 50% GR)</td>
<td>100% (GR)</td>
</tr>
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GR - General Revenue, HMTF - Harbor Maintenance Trust Fund, IWTF - Inland Waterway Trust Fund.
* The non-federal sponsor pays 10% of the cost of the general navigation features of the harbor project over a period not to exceed 30 years. For example, of the 20% paid by a non-federal sponsor for the construction of a harbor of less than 20 feet, 10% of the total (half of the non-federal sponsor’s costs) is paid over 30 years.

The source of the federal funds used to cover these expenses varies. In general, Congress appropriates funds from the federal general revenue fund (GR) as part of the annual process in the Energy and Water Development Appropriations bill. (See CRS Report RL31807 for more on this appropriations legislation.) There are two significant exceptions for harbors and waterways. Congress created two trust funds...
Inland Waterway and Harbor Maintenance Trust Fund Status

Expenses associated with construction and major rehabilitation of inland waterways is 100% a federal responsibility as shown in Table 1; 50% of the federal monies are from the IWTF and 50% from the federal general revenue fund. The IWTF monies derive from a fuel tax imposed on vessels engaged in commercial waterway transportation on designated waterways, plus investment interest on the balance. The fund was originally authorized under the Inland Waterways Revenue Act of 1978 (P.L. 95-502). As currently authorized in §1404 of WRDA 1986, the tax is 20 cents per gallon and is collected by the Internal Revenue Service.

In contrast to the IWTF, which is used for construction expenses, the HMTF historically has been limited to financing 100% of expenditure for operation and maintenance of federally-authorized channels for commercial navigation. The HMTF does not cover the O&M expenses for facilities that are part of the inland waterways fuel tax system described above. That is, the use of the HMTF has been largely limited to funding O&M expenses for access channels to deep-draft harbors and for shallow-draft waterways and harbors not subject to the fuel tax. Historically, the HMTF has been limited to expenditures for maintenance dredging and excludes channel deepening projects. The HMTF was authorized by WRDA 1986. To date, the HMTF has provided for the O&M of more than 650 commercial navigation projects maintained by the federal government.

The HMTF monies derive from receipts of a 0.125% ad valorem (i.e., percent of value) tax imposed upon commercial users of specified ports. The tax revenues are collected by U.S. Customs and transferred to the HMTF. This tax has been highly contentious and is now applied only to imports, domestic shipments, and cruise line passengers at designated ports. Exports have been exempt from the tax since the U.S. Supreme Court found that the tax on exports violated the export clause
of the Constitution. The tax as currently applied continues to be contentious; for example, the European Union sees the current application of the tax as a discriminatory import tariff that violates U.S. obligations under the World Trade Organization, while the federal government represents it as a user fee. Consequently, many view the current tax as a short-term measure until a long-term revenue source is devised.

Dispersals from inland waterway and harbor maintenance trust funds require annual appropriation by Congress. Spending from the trust funds is considered part of the Corps budget and is subject to the congressional budget ceiling for Energy and Water Development Appropriations. Because Congress has appropriated less than collections have been, the IWTF and HMTF have built up authorized, unappropriated balances since the early 1990s. The Inland Waterways Users Board — an 11-member advisory committee made up of barge and towboat operators and shippers established by WRDA 1986 to advise the Corps on construction and rehabilitation priorities — argues that the IWTF’s growing balance is not due to a lack of needed construction but results from what it believes are insufficient appropriations by the federal government for waterway construction projects. Port industry groups similarly argue that the HMTF’s growing balance is the result of insufficient appropriations for harbor maintenance. Other stakeholders argue that congressional appropriations reflect the national interest and that the current balance in the trust funds should be put to use by expanding the scope of activities eligible for IWTF and HMTF monies.

**Recent Financing Proposals**

**Bush Administration’s Proposal.** In its FY2004 budget request, the Administration set out a proposal for expanding the types of activities covered by the HMTF and the IWTF, with the intent of reducing the general revenues used to pay for the maritime transportation system. Under the Administration’s proposal for FY2004, the IWTF would have financed 25% of the O&M cost of eight waterways that have averaged annually more than five billion ton-miles of traffic over the past five years, and 50% of the O&M cost for the other 20 waterways in the inland and intracoastal waterway system. The IWTF, therefore, would have been used not only for construction but also for O&M. The Administration’s proposal would have increased the amount spent from the trust fund from $104 million in FY2002 and an estimated $84 million in FY2003 to $256 million in FY2004 — $110 million for construction and $146 million for O&M. According to the President’s FY2004 budget documents, the increased withdrawal would have reduced the IWTF balance from an estimated $433 million at the end of FY2003 to $287 million at the end of FY2004. The Inland Waterways User Board calculated that the Administration’s
The proposal would empty the fund in three years, if current collections were maintained; the Board also expressed concerns that this proposal would eventually lead to a dramatic increase in the fuel tax.

Under the Administration’s proposal for FY2004, the HMTF would have financed all federal costs associated with the construction of coastal ports and channels. The Administration’s proposal would have increased the use of the trust fund from $653 million in FY2002 and an estimated $769 million in FY2003 to $826 million in FY2004 — $212 million for construction and $600 million for O&M. Port and river trade groups responded quickly to the FY2004 budget request with criticisms that the Administration was raiding these funds for an unprecedented use of the money that had not been endorsed by the users paying the fees. They also expressed concern about the impact of this expansion on O&M spending. One of their primary arguments against the expanded use of the HMTF was that the federal government would be covering all of its fiscal responsibilities for harbors through a trust fund financed by users even though harbors provide national benefits. The increased withdrawal would not have caused the HMTF balance to drop, since revenues are expected to be $880 million in FY2004. Neither the House nor the Senate included the President’s proposal in appropriations bills for FY2004.

Proposed Legislation. The Administration’s proposal for the trust funds appears to be in the opposite direction of the language passed by the House in H.R. 2557 — the Water Resources Development Act of 2003 — related to harbors. Section 2003 of H.R. 2557 would increase the depth of projects eligible for the federal cost-share of 65% for construction and 100% for O&M from 45 feet to 53 feet. The harbor projects with depths between 45 and 53 feet would require additional federal general revenue appropriations for construction (from 40% to 65%) and for O&M (from 50% to 100%). This would increase the demand for general revenue appropriations for construction and the demand for funds from the HMTF for O&M. According to the bill language, the change would be applied to projects for “which a contract for physical construction has not been awarded before the date of enactment of this Act.”

Although both the proposed legislation and the Administration’s proposal would likely put a greater amount of the HMTF monies to use, the impact on general revenues would likely be opposite. The Administration’s proposal would likely decrease the draw on general revenues by substituting HMTF for general revenue appropriations while the proposed legislation would likely increase demand for general revenue funds by reducing the fiscal demands on non-federal sponsors. The proposed legislation, however, would likely lead to greater investment in navigation infrastructure, and the anticipated economic benefits of those investments. The conflicting signals from the two proposals reflect the larger debate about the future federal role in the maritime transportation system.

Issues Shaping the Future Financing of Harbors and Inland Waterways

The two proposals discussed above bring attention to the underlying question of what is the appropriate role for the federal government in maritime transportation
Navigation industry groups argue that the current system makes a significant contribution to the national economy and that the aging infrastructure warrants increased investment by the federal government. Some taxpayer advocacy groups, however, oppose even current levels of federal investment and argue for a greater share of the financial burden to be borne by the users of these facilities. Environmental groups also oppose many individual projects because of possible environmental harm from the projects and from the disposal of the dredged material to maintain the harbor and waterway channels. For example, these groups question if segments of the inland waterway system with lower cargo movement, such as the Apalachicola-Chattahoochee Flint River Project, should be managed for purposes other than navigation because current operations harm the environment, limit other uses, and are economically unjustified.

Taxpayer advocacy and environmental groups have also criticized the project development and evaluation process that the Corps uses for harbor and inland waterway projects; specifically, they have criticized the economic analyses justifying federal investments in navigation projects such as the Delaware River Deepening and the Upper Mississippi Navigation Study. Supporters of these projects argue that the projects are economically justified, that the economics of maritime transportation is complicated both to model and to understand, and that the U.S. consumer is the ultimate beneficiary of these investments.

There are also disputes over planning efforts on how best to allocate federal investments. For example, some observers are interested in optimizing federal spending through system-wide planning of harbor deepening projects that are necessary to accommodate the larger container ships being adopted. Planning efforts of this sort, however, are opposed by those arguing that the federal government should not be deciding which ports are going to be the winners and the losers in attracting these container ships. Overall, the challenges that the navigation system is facing grow out of the current climate of fiscal responsibility and government accountability and the evolving perception of the nation’s harbors and waterways as natural resources as well as transportation routes.

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9Green Scissors 2003 by Friends of the Earth, Taxpayers for Common Sense, and U.S. Public Interest Research Group provides an example of the arguments made to change current practices and investments in the navigation system. The document is available at [http://www.greenscissors.org/publications/gs2003.pdf]. The arguments to maintain current investment levels or to increase investment levels are made by industry groups. Some examples of these groups and the information they provide are the Midwest Area River Coalition 2000 at [http://www.marc2000.org/] and the American Association of Port Authorities at [http://www.aapa-ports.org/govrelations/resources/index.html].