PROCEEDINGS
OF
12th ANNUAL SUMMER CONFERENCE ON PORTS, WATERWAYS, INTERMODAL TERMINALS, AND INTERNATIONAL TRADE TRANSPORTATION ISSUES
JULY 1987
NORFOLK, VIRGINIA

INTRODUCTION

The TRB Committee on Inland Water Transportation and the Committee on Ports and Waterways have been holding summer conferences for the past twelve years. This year they were joined by the Committees on Intermodal Freight Transportation, Intermodal Freight Terminal Design, and International Trade and Transportation, and the scope of the meeting was broadened to include the activities and interests of those committees. For the third consecutive year, the conference was co-sponsored by the AASHTO Standing Committee on Water Transportation. This expanded 12th edition of the summer conference was held July 7-10, 1987, in Norfolk, Virginia.

The summer conference is always held at a coastal or inland waterway port city to provide the opportunity for local technical presentations and field trips. The Norfolk location was excellent in this regard. The program included technical tours of the Newport News Shipbuilding Yard, Dominion Coal Terminal, Norfolk Harbor, and the container yards and new 50-container per hour dual-hoist cranes at the Norfolk International Terminal. In addition, the Hampton Roads chapter of the Transportation Research Forum and the Norfolk Southern hosted a demonstration of a new intermodal "spine" car. The joint program attracted 100 participants to hear 16 speakers in four conference sessions. The session topics included:

- The structural, financial and policy aspects of international trade.
- Intermodal freight terminals and operations.
- Port technology and innovation.
- Planning, development and economics of inland and coastal waterways.

One of the highlights of the conference was a luncheon presentation by Bory Steinberg, Department of the Army-Office of Civil Works, on the key provisions in the Water Resources Development Act of 1986 affecting ports and waterways. This included a status report on the harbor deepening projects authorized by the Act.

Following are the papers presented at the conference or summaries of the papers, including excerpts from the presentation by Mr. Steinberg.

THE PROVISIONS IN THE WATER RESOURCES DEVELOPMENT ACT OF 1986 (PL-99-662) FOR PORTS AND WATERWAYS

By
Bory Steinberg
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Public Law 99-662 was enacted by the 99th Congress in October 1986 and signed by the President a month later. There were 900 differences between the House and Senate versions of the bill and a threat of a veto in the event the House version was passed. The final bill had many of what the Administration called objectionable provisions. However, along with the objectionable provisions are safeguards against spending money without an appropriate review and the requirements of cost sharing and user fees for the major construction programs.

The law calls for cost sharing of 10 percent for port projects shallower than 20 feet, 25 percent for 20 to 45 feet, and 50 percent for deeper than 45 feet. In addition, the non-federal partner in the project pays an additional 10 percent of the project cost over a period not to exceed 30 years and is responsible for providing lands, easements, rights-of-way, relocations, dikes and disposal areas for the dredged material.

There is an ad valorem fee placed on imports and exports of .04 percent. These funds are intended to pay for about 40 percent of the annual amount that the Corps spends in maintaining the harbors of the United States. Four dollars on a $10,000 imported automobile doesn't sound like a lot, but .04 percent of cargoes valued at $4 to $5 billion, generates an estimated $160 million a year. The following is the progress on the port deepening projects. Baltimore Harbor is proceeding with a 50-foot deepening. At the Norfolk Harbor, construction is proceeding with the 50-foot outbound lane only. The Corps recently awarded contracts in Mobile, New Orleans and Baton Rouge to deepen their channels to 45 feet. The new cost sharing has taught us something about the current dredging market. The projects formulated in Corps district offices, where most of the planning and engineering work is done, were developed without cost sharing in mind. Benefit estimates were frequently based on continued growth in coal exports and increased demand for oil imports. Design parameters without cost sharing were liberal. With cost sharing, there have been substantial changes. First, project sponsors have asked our district offices to stage construction and to modify the design. In the case of Norfolk, we are deepening a 50-foot outbound lane only, at a cost of less than $50 million, rather than the planned $400 million plus to deepen both lanes to 55 feet. The Baltimore 50 foot deepening project was authorized to be 1,000 feet wide, but the pilots and vessel operators both indicated that 700 to 800 feet would be safe, effective and acceptable. In Mobile and in the channel between New Orleans and Baton Rouge, we are proceeding with deepening to 45 feet rather than the full 55 foot authorized channel.

The 25 to 50 percent cost sharing for port projects is a substantial financial burden for the non-federal sponsors. Where the state is involved as a partner, or where cost sharing was accepted and planned for over a period of time by a non-federal sponsor, the financing appears to be more readily available. Where a combination of operational revenues and bond issues provide the source of non-federal financing, the cost sharing is achievable as long as the benefits are perceived as realistic by the sponsor. However, putting together the financing package may take a substantial amount of time.

At the time the bill was signed into law, the price of fuel dropped and then stabilized. There was also a significant amount of underutilized dredging capacity within the total dredging industry. These factors and perhaps others have resulted in the bids coming in substantially below the amounts that we advised both Congress and the project sponsors would be needed when we testified for federal appropriations.

Cost sharing has improved the budget for the Corps of Engineers, certainly through fiscal year 1988 and probably beyond. Cost sharing makes federal funds available for more projects than would otherwise be possible, and when considered in conjunction with the phasing of construction, enables the Corps to stretch the federal dollar to accomplish all authorized port projects that are ready to proceed. Cost sharing has also prompted sponsors to take a keener interest in how the Corps administers and manages its design and dredging contracts.

Another new process that we are using involves improved cash flows. In the past, when the Corps financed the entire dredging costs, it was common to obligate funds for the entire year upon award of the contract or at the start of the following year if it was a continuing contract. With cost sharing, we are obligating the funds much more frequently so that the sponsors may continue to draw interest on their money. Generally, this has been accomplished by establishing an escrow account from which the contracting officer, which is the Corps district engineer, draws funds for incremental contract obligations. The interest on the balance of the principal can be substantial and may serve to finance a portion of the non-federal share.

The Corps is conducting an analysis of dredging schedules and work load versus available equipment. We recently prepared a 5-year program in which we are considering all program dredging work, deepening projects, operation and maintenance, and work we do for the Navy. This will help us to determine whether there is adequate equipment available to keep prices competitive. Toward the end of 1988, the amount of equipment may be tight, and this could have a bearing on the bids we will be receiving. We will continue to monitor this with a view toward scheduling work consistent with the ports needs but also to assure that we get the best prices we can.

Another new issue is treating sand as a resource. In certain parts of the country, we are under considerable pressure to dispose of suitable dredged sand on the beach rather than offshore into deep holes. Florida recently passed legislation to this effect, and the work we're doing for the Navy at Kings Bay includes beach disposal. We are considering this type of disposal at other locations, keeping in mind that the type of equipment needed to dispose of major quantities of sand on the beach rather in deep holes is considerably different. The deepening of Norfolk Harbor and the approach channels provide ample opportunity for nourishing Virginia beaches particularly in the vicinity of the heavily developed Virginia Beach and New Virginia Beach areas. Philosophically, I believe that when the material is suitable and there is a need for beach quality sand, we ought to take full advantage of navigation dredging contracts for that purpose. There are a number of external considerations aside from the purely technical engineering considerations. You have to revise the environmental impact statement for a different type of disposal.

Financially, the question arises: should the federal government contribute its 50 percent share of difference in costs between dumping sand in deep holes versus putting it on the beach? We are wrestling with these issues, and I believe that next year you will see the contracts for dredging reflect bid items for putting sand on the beach.