

## SUMMARY

The inland navigation systems analysis program was intended to provide the Corps of Engineers with tools to diagnose inland waterway transportation problems. The program attempts to investigate waterway problems for their transportation and economic impacts and also to evaluate actions proposed for coping with these problems. In identifying the problems, reviewing potential solutions, and testing proposed actions, the INSA program has always been operated from the perspective that

problems and solutions should be considered in light of their effects on transportation cost and capacity. INSA can thus predict the probable course of problems and the probable impact of proposed actions on inland waterway navigation.

## REFERENCE

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## Port-Funding Dilemmas in a Regional Planning Context

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The purpose of this paper is to explore the funding problems that confront those who prepare comprehensive development plans for inland ports. Using as an example the study of the Port of Metropolitan St. Louis conducted by the East-West Gateway Coordinating Council, the paper discusses traditional and innovative funding sources and their applications, advantages, and weaknesses, with reference to the ongoing regional port study. It is concluded that, although the survival of the inland waterway industry as a healthy mode of transportation depends on improved port operations, the existing port authorities and related planning agencies often lack adequate financing for planning port development. It is therefore vital that some type of sole-source funding program be developed to provide the funds necessary for efficient port planning and development.

Although the amount of freight carried on the inland waterways of the United States has grown annually since the 1920s, growth of freight traffic at the Metropolitan Port of St. Louis has not kept pace. Between 1961 and 1970, for example, freight carried on the Mississippi River as a whole grew by 87 percent, but freight at the metropolitan port [based on the 30-km (19-mile) definition] grew by only 10 percent.

The Port of Metropolitan St. Louis, like many other U.S. ports, has been faced with a bewildering dilemma in recent years: an overwhelming need for some kind of development plan that would serve not only to identify areas suitable for industrial and port-related development but also as a rallying point for those who make their living in the waterway industry. The need for such a plan for the port became apparent in 1973. There was general agreement among the business and labor leaders of the community that something had to be done, but that something was not yet defined. To add to the confusion, there was no single port authority to whom they could turn.

## THE PROBLEM

In an effort to better understand the current position and problems of the port, community leaders turned to the East-West Gateway Coordinating Council, the regional planning agency, for an investigative analysis of the port. The general objective was to enhance the economy of the St. Louis area by capitalizing on the strategic location

of the port of St. Louis on the inland waterways of the United States.

Although an agency had been identified to conduct the study, community leaders were faced with another dilemma: How were they to pay for the study effort? The council was authorized to survey all existing funding sources to determine the best method. Careful analysis revealed that there were no existing programs at the local, state, or federal level to provide funds for the type of effort needed. There was only one ray of hope: Community leaders had been advised by officials in a federal agency that if the local community provided funds for the preliminary investigation as a gesture of its good faith and to indicate how serious it felt the problem to be, the federal government might provide funds to complete the effort. Based on this premise, the study was divided into a series of phases. The first phase was designed to be an investigative effort, with a funding requirement between \$50 000 and \$60 000. Ultimately, a 35-member task force, organized to provide advice and guidance to the council, raised nearly \$57 000 through private sources.

The first phase of the study of the Port of Metropolitan St. Louis was completed in 1973. Its principal recommendation called for the St. Louis region to develop an efficient inland port to serve the industries that are major users of inland waterway transport. However, the task force and the council were again faced with the problem of obtaining the funds needed to prepare a port development plan. Again, the council was charged with the responsibility of surveying all available sources of funds. Now that the first phase of the study had been completed, the staff went to the federal official who had implied that he could provide the funds for completion of the study. No funds were available.

## METHODS OF FUNDING

In examining various traditional methods of funding port development, the staff of the East-West Gateway Coordinating Council surveyed the following sources:

1. General obligation bonds,
2. Revenue bonds,

3. Consolidated bonds,
4. Industrial development bonds,
5. State and local subsidies,
6. Federal aid, and
7. Other.

#### General Obligation Bonds

General obligation bonds have traditionally been used for capital financing for the acquisition, construction, maintenance, or operation of a facility. This type of bond is generally tax supported and is usually issued by a state, county, or municipality acting as the legislative parent of the port authority. On issue of a general obligation bond, the state, county, or municipality is required to provide collateral security by pledging its full faith and credit. The payment of these bonds is the responsibility of the issuer and payment is made from, and primarily secured by, ad valorem property taxes. The issuance of a general obligation bond is normally preceded by a voter referendum in which the community accepts or rejects each bond issue. Should such a bond be issued, the principal and interest are usually repaid by the issuing body either from general revenues or through a special tax assessment or levy on the taxpayers.

Although this type of financing is used by many port authorities and districts throughout the United States, it could not be used by the Metropolitan Port of St. Louis primarily because there is no single port entity to sponsor such a bond issue (the metropolitan port encompasses two states and seven counties, and none of the states or counties would be able to issue the bonds necessary to finance a regionwide effort).

#### Revenue Bonds

Revenue bonds are normally issued by a port based on lease and operation of facilities that can generate sufficient funds to repay both principal and interest. Many U.S. ports prefer revenue bonds to general obligation bonds as a means of capital financing because the revenues accruing from the facility itself are pledged as security for the outstanding bonds. However, despite the fact that interest rates on revenue bonds are generally higher than on general obligation bonds, revenue bonds are not normally attractive to investors because all financial risks are borne by the port rather than by the state or local government.

Because of the regionwide nature of the port of St. Louis this method of financing was not suitable either. There was simply no equitable formula by which the counties and the two states could issue revenue bonds to provide the necessary funds to complete the planning effort.

#### Consolidated Bonds

Consolidated bonds are normally used by ports that have broadly based sources of revenue. For example, a port that operates not only waterway terminals but also bridges or tunnels, owns real estate, and has a good reputation with investors can issue revenue bonds backed not only by the potential revenue of one project but by the revenue obtained from all of the facilities within the organization. Proceeds from such a bond could then be used for the acquisition of new facilities or the renovation of older facilities at the discretion of the port without being subject to the more confined terms of the single-facility revenue bond.

This source of financing was not available to the port of St. Louis because of the multiplicity of agencies within the port boundaries. Had the port districts and

authorities been legally linked in some way, this source might have been available, but that was not the case. As port agencies begin to work more closely together in the future, this will probably become a viable method of financing.

#### Industrial Development Bonds

Industrial development bonds are normally issued by local governmental bodies and used to buy or build docks, terminals, or manufacturing plants and to obtain equipment that could in turn be leased to private enterprise. Normally, industrial development bonds are issued as revenue bonds, which are then repaid with the rents or fees derived specifically from the benefiting facility. It is possible, however, to issue an industrial development bond under terms similar to those for a general obligation bond. This method of financing was not available to the port because, although the ultimate outcome of the effort would be industrial development, the funds were needed primarily for planning purposes and not facility development.

#### State and Local Subsidies

Almost every public port in the United States receives some kind of public aid or subsidy from some level of government. These funds range from direct appropriations, direct taxes levied by the port district, and taxes levied by local government on behalf of the port authority to exemptions from taxation or indirect subsidies incorporated in public community services provided to the port authority by the local, city, or county government.

This source of funding appeared to hold promise for the St. Louis effort because the port had two states from which it could petition funds and six operating, autonomous port authorities that could act as intermediaries in obtaining funds from the states. Unfortunately, the Missouri port authorities, with the exception of the port commission of the city of St. Louis, had only been established under a law passed in 1974 and were operating out of the Missouri Department of Transportation, which was not yet 5 years old. The amount of funds available to these relatively new organizations was extremely limited. In fact, two of the Missouri port authorities were operating on budgets of less than \$10 000/year. The Illinois port districts were in comparatively better condition, but only one of those districts had a full-time staff and the other two did not own or operate a single dock.

#### Federal Aid

There are more than 40 federal agencies whose activities affect the operation, administration, or development of U.S. ports. Only three of these agencies—the U.S. Coast Guard, the U.S. Maritime Administration, and the U.S. Army Corps of Engineers—have either direct or indirect responsibility for port operation and development. The activity of even these agencies is very limited in the area of port development; none has any statutory authority to provide funds to public or private port authorities for development projects involving terminals or other port structures.

The port program of the Maritime Administration stresses the promotion and development of U.S. ports and related transportation facilities, but its participation is limited to rendering advice and technical assistance. The Corps of Engineers is responsible for constructing, improving and maintaining navigable waterways, channels, and harbors—not for port-development planning. The Coast Guard is responsible for the protection and security

of vessels, harbors, and riverfront facilities and for enforcement of environmental regulations.

The federal government does provide funds for port improvement through the Economic Development Administration (EDA) of the U.S. Department of Commerce, which has a public works and development program of grants and loans. Before an area can qualify for these funds, however, it must be declared an economically depressed area by EDA. Some counties within the Port of Metropolitan St. Louis did not qualify.

#### Other Sources

The only other apparent source of funding was revenue derived from the port's daily operations, i.e., rent, leases, and service charges. However, as noted above, only two of the six port authorities were actually operating, and neither had any surplus funds for a region-wide port planning effort.

#### FURTHER ANALYSIS AND SOLUTIONS

Nearly \$60 000 had been expended in the unfinished study of the Port of Metropolitan St. Louis, and no solution to the problem of funding had been found. Nevertheless, it was apparent that, if the port was going to continue to benefit the people and the economy of the region, it would have to become an efficient inland port to serve the industries that would be its major users for the next 25 years.

The Maritime Administration determined in 1973, in conducting a comprehensive market analysis of all domestic waterborne shipping, that there would probably not be future advances in the efficiency of line-haul waterborne movements comparable to the major advances of the last 40 years. There did appear, however, to be an opportunity for significant improvement in inland port operations. Consequently, a domestic waterborne shipping market analysis recommended that the Maritime Administration promote development and widespread use of improved cargo-handling technology for inland waterway ports. In this area the council finally found a common interest between a federal agency and the port of St. Louis. The port had operational problems peculiar to an inland river port that would have to be alleviated or solved before it could develop to its full potential; the Maritime Administration, through its research and development program, had funds available to investigate those problems.

The combined interest of the U.S. Maritime Administration and the East-West Gateway Coordinating Council ultimately led to the study of inland waterway port operations at St. Louis. The study had two main objectives: (a) to determine the impact of water flow, including fluctuations of river level, on the operation of inland ports and (b) to devise strategies to minimize the adverse effects of these and other operational problems. This was called the phase 2 study, and, because of its research and development nature, the Maritime Administration provided 80 percent of the funds needed. The council staff was able to obtain local matching funds from the Illinois Department of Transportation and the Ozarks Regional Commission in Missouri.

Phase 2 was completed in a little more than 12 months and resulted in the development of information on present port operations, an analysis of these operations to identify opportunities for improvement, an analysis of specific applications of new waterway concepts (such as LASH-SEABEE), and a set of recommendations for consideration by the Maritime Administration and the waterway industry. Freight forecasts through the year 2000, by commodity, were also developed based on

historic and economic trends.

Two additional tasks that could not be included in the study funded by the Maritime Administration because of its unique application to the St. Louis region were necessary to complete the port development plan and to institute development activities to attract water-related industries. These tasks were

1. To conduct detailed market research interviews to identify the specific requirements for attracting port and waterway development to the region (this was originally called for in the study recommendations of phase 1 and would provide the information needed to attract major target industries) and
2. To package the recommendations for regional port development in a form suitable for effective communication and for use in promoting both the port and the region to prospective new industries (this would take the form of a document and a slide presentation explaining the recommendations for regional port development in terms appropriate for a variety of audiences).

The council was once more faced with the problem of obtaining funds to complete the effort. Because private industry had provided money for the first phase of the study, the staff hesitated to go back to them for additional funds. The remaining work could not be considered as research and development; because of its regional nature, the federal government would not provide the funds needed; and the local port districts and authorities had not yet developed any funding sources for such purposes.

The only sources left were the two state governments. Because the Port of Metropolitan St. Louis is about evenly divided between Missouri and Illinois, neither state was willing to provide more than half the funds needed for fear its money would be used to the other state's advantage. For several months the council staff and various agencies of the two state governments explored alternative methods of financing. Ultimately, the Ozarks Regional Commission provided some of the funds because of the economic development that would occur as a result of the effort, and the Illinois Department of Transportation provided some because of the impact that this effort would have on regional transportation patterns.

#### CONCLUSION

The problems encountered by the East-West Gateway Coordinating Council are not unique to the Port of Metropolitan St. Louis but are faced by all planners of inland river ports. The ever-increasing necessity of making the best possible use of the land available within port areas makes the problem critical. Until recently there has been a decided lack of planning for inland waterway ports. Random development is the single most important cause of the current inefficiency of port operations. There is an urgent need for carefully designed river docks associated with industrial parks and for new materials-handling procedures specifically designed for use in the river environment. Present commodity-handling technology is based on equipment designed for situations that no longer exist. Design criteria for new equipment must be related specifically to loading and unloading river barges.

Survival of the inland waterway industry depends on improved port operations. Opportunities for improving the efficiency of inland waterway port operations are greater than are the productivity increases presently foreseen for barge line-haul transportation. Potential productivity increases in the railroad industry (especially as a result of federal aid) make port improve-

ments mandatory if river transportation is going to remain competitive.

Port authorities and related planning agencies, however, often lack adequate financing for planning port development. Some type of sole-source funding program must be developed to provide the funds for efficient port planning and development. Because critical decisions relating to the successful functioning of an inland port are made before any construction or development takes place, funds invested in this area may largely determine the future viability of inland waterway transportation.

#### REFERENCES

1. Port of Metropolitan St. Louis Appendix A: Profile of the Port, 1975. A. T. Kearney, Inc., and East-West Gateway Coordinating Council, St. Louis, 1976.
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