## State of Wisconsin Harbor Assistance Program

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The Wisconsin Harbor Assistance Program is designed to provide financial assistance to local governments for the maintenance and development of commercial ports along the Great Lakes and Mississippi River. The Program is administered by the state's Department of Transportation within the Division of Transportation Assistance. It is a grant program that presently operates on a biennial budget of \$4 million--\$2 million coming from segregated fuel tax and registration fee revenue and \$2 million from bond sale authority.

Grants require a minimum 20% local match unless the U.S. Army Corps of Engineers is involved. In these cases, the state share may not exceed 50% of the non-federal portion.

All proposals must be endorsed and submitted by a local governing body and be part of a local 3-year port development plan. These 3-year local statements of intention are updated annually.

Once proposals are received, the selection process takes approximately two months and involves four steps. Proposals are intially screened for eligibility--that is, they must benefit a publicly-owned commercial transportation facility on the Great Lakes or Mississippi River at a port that handles at least 1000 tons of commercial cargo a year. (For recreation-related harbor improvements, the state has another grant program administered through the Department of Natural Resources.)

The second step in the grant review involves a staff analysis of the project's transportation efficiency-sometimes referred to as an economic analysis. The third element of the evaluation is the review and recommendation of a 5-person advisory council composed of representatives from the Army Corps of Engineers, the State Department of Development, Wisconsin's Coastal Management Program and the Sea Grant College Program. The fourth step is a final decision on funding. This rests solely with the Secretary of Transportation.

In summary, the four-step selection process involves: 1) an initial screening for eligibility, 2) an analysis of transportation efficiency, 3) a review and recommendation by an advisory group, and 4) a final decision by the department secretary.

The term transportation efficiency means the maximum use of available transportation resources. It involves both a concern for economic efficiency (will benefits over the life of a project outweigh the capital investment?) and a concern for port competitiveness (that is, will the proposed project result in cost savings to the final user to such a degree that port traffic will increase?).

The proposed project is compared to the next likely alternative. For example, if Kenosha proposes a new dockwall to handle "food for peace" cargo, the land and water transportation cost difference between shipping the cargo at Kenosha or would be compared with Milwaukee, if it happens to be the next best

alternative are computed. If Chicago happens to be the next likely alternative, it would be used as a point of comparison. In the interest of transportation efficiency, the state does not consider only alternative ports in Wisconsin.

As an example, suppose a port along Lake Michigan wants to build a dock to accommodate increased commerce through the area. The first step in the analysis is to determine the total project cost and project life. Total project costs include not only the initial capital investment, but operation and maintenance costs and other site development costs such as access roads or fencing. The total costs of a project, not just that portion included in an application, are considered.

If properly maintained, a dock should have a useful life of at least 25 years, and general maintenance for this type of structure will require an annual expenditure of 5% of construction costs.

The next step in the calculation involves an estimate of cargo throughput. Present tonnage figures come from the applicant as well as the U.S. Army Corps' annually-updated publication "Waterborne Commerce." Future projections are based on figures from the National Waterways Study as well as estimates from individual ports.

The third phase of the analysis includes an assessment of project benefits--transportation cost savings--the difference in total transportation cost for each cargo as compared to the most likely port alternative. For example, coal handling at a facility may be 8 cents per ton cheaper than an existing facility because it eliminates the need for rail transport. Manufactured goods may cost less because of a 4 mile difference in truck transportation that translates into a 24 cents/ton saving.

In order to bring the value of future costs and savings to a present value figure, a discount rate of 5% is applied.

Several assumptions are being made with regard to future cargo traffic, rates and markets, and a final sensitivity analysis--what economists call a "what-if" test on the project -- is made. Some of the variables such as project life, operation and maintenance costs and capital investment require evaluation through a range of values to see how they affect the benefit-cost ratio. Since this package is available as a computer program, it makes it easy to try different values.

This analysis of transportation efficiency has been applied to projects ranging in size from \$35,000 to over \$2 million. It has been an effective tool in analyzing harbor projects of varying magnitude and is also consistent with analyses of transportation projects for other modes.

For all projects that have a favorable benefit-cost ratio, a second ranking occurs. The program prioritizes the type of projects that are eligible for funding. The repair and maintenance of such things as dockwalls, containment dikes and dredging are of highest priority.

Since the program began in 1979, 12 projects have been funded at a state share greater than \$5-1/2\$ million.