length by 80 feet in width and has a depth of 23 feet. The lock is used primarily by recreation and tour boats, and about 600,000 tons of commercial traffic uses the lock each year. The lock is owned by the Metropolitan Sanitary District of Greater Chicago, and is operated by the Corps of Engineers under contract with a private company. This is the first Corps of Engineers' project to be operated under contract.

Paper Presentations

At the conference, presentations were divided into four major topics: 1) cargo forecasts and data needs, 2) analysis of inland waterway operations, 3) developments in rail/port intermodal coordination, and 4) port economics and port funding. The following are the papers or summaries of the presentations.

Cargo Forecasting and the Strategic Planning Process by James Brennen Temple, Barker & Sloane, Inc.

To gain an understanding of the role of strategic planning in the development of cargo forecasts, one needs to be aware of what is involved in strategic planning, why it is required, the role of cargo forecasts, the process of trade forecasting and interpreting the results.

Overview of Strategic Planning

Strategic planning is a continuous process which is different from traditional project specific planning. Strategic planning is required by a port or by a steamship company because of recent industry trends that are characterized by an acceleration of change, increased competition for cargoes, overcapacity and depressed earnings.

Industry Changes

- Between 1960 and 1985, the coastal shares of U.S. liner service changed significantly. In 1960, the North Atlantic handled about 42% of U.S. liner cargoes; the Gulf, 29%, Pacific coast, 19% and South Atlantic, 4%. By 1985, the coastal shares and shifted dramatically as the Pacific coast handled about 37% of liner cargoes; North Atlantic, 29%; Gulf, 19% and South Atlantic, 14%.
- 2. Deregulation of railroads, trucking and ocean shipping has caused a shift from tariff rates to contract rates and to volume-driven pricing, increases in the types of transport services and depressed rates.
- 3. Changes in vessel technology have led to introduction of jumbo containerships which in turn have fostered innovations such as load ports, round-the-world vessel services and consortiums of steamship companies that rationalize services and share cargoes and revenues.
- 4. Double-stack rail services have proliferated in the U.S. to expedite inland shipments of containers to and from ports. By July 1986, most service was primarily from west coast ports. Seattle/Tacoma had 12 trains weekly to

Chicago, Oakland had 2 trains to Chicago and Los Angeles/Long Beach had 8 trains weekly to Chicago, 2 trains to St. Louis and 3 trains to Houston and New Orleans with one train on to Savannah. On the east coast, New York had 4 trains weekly to Chicago.

Defining Strategic Issues

A critical step in the strategic planning process for a port, or for any agency, involves a determination of strategic issues that confront it and an analysis of the external environment and the internal strengths and weaknesses of the organization. External issues of concern may include such factors as trade trends; cargo forecasts, regulatory shifts, competitive advantages of other modes and ports, inland services, economic development opportunities, legal constraints and funding sources.

Trade Trends and Cargo Forecasts

An analysis of trade trends involves a compilation of past markets served and commodities handled and a determination of future markets. Identifying future markets to be served by the port should include analyses of those world markets in which the port can compete, how the port can exploit its advantages to serve those markets and the resources required to market the port.

Estimation of future markets and the development of cargo forecasts is both a science and an art. As a science, cargo forecasting involves the use of econometrics, regression analyses, statistics and other mathematical models. As an art, cargo forecasting involves sound judgement and competitive evaluations.

A recently developed tool to assist ports in developing trade forecasts is the International Trade Forecasting System, by Temple, Barker & Sloane and Data Resources, Inc. (DRI). The system includes DRI trade forecasts for 47 countries by the value and volume of flows of imports and exports. A total of 40 different commodities are included in the trade forecast system. For each country or world region, the system analyzes time series factors that affect trade such as changes in demand, relative prices of goods and exchange rates. Also, the system analyzes the relative wealth, market size, internal economic structure and certain non-economic factors for each country or region and develops an estimate of the ability of the U.S. to serve the market. The final product of the trade forecast system involves both an assessment of the overall volume and value of future trade and the number of containers that may be involved in such trade.

State Database on Waterborne Commerce by Norman B. Wolf Illinois Department of Transportation

Introduction

Good data is essential to good decision-making by government agencies, port authorities and the shipping industry. The availability of good data is important in determining the need for capital investments, for developing strategic plans and for formulating policies on maritime issues.