THE MARIPORT GROUP LTD.

REPRESENTATIVE PROJECTS IN DATA BASE MANAGEMENT, CREATION AND ANALYSIS

Marine Incident Data Base

Utilizing TSB and Stats Canada data, Mariport created a unique database for analysis of marine incidents in Eastern Canadian, Great Lakes and Arctic waters. The database contains marine incidents from 1980 to 1999 and Stats Canada data from 1983 to 1996 and was organised so that ice-related incidents could be analysed separately from non-ice incidents. Type of incident and degree of damage were standardized, as was geographic location. The database was created in-house by Mariport. Ongoing work expanded its utility and it was used extensively by the NRC for ice incident analysis and in studies of the proposed Polar Code. For Polar Code work, additional data was obtained for the Russian Arctic and the Antarctic.

To support this analytical work, Mariport maintains a significant historical record of VTS, trade, transit, vessel incident and related information.

Icebreaking Data Base

For the icebreaking sub committee of the Marine Advisory Board, Mariport undertook an original analysis of icebreaker service during the winter of 1993/94. The database created for December 1993 through May 1994 incorporated the following:

- CCG IODIS database of icebreaker assignments
- StatsCan traffic data
- VTS Laurentian and Maritimes data
- Ship arrival data from 18 ports in the Gulf of St. Lawrence, River and Newfoundland.

Vessels were "tracked" to determined transit O/Ds when icebreaker service was requested and separate analyses, by month, were prepared for various regions within the Gulf, River and Newfoundland. The eventual report was fundamental to work of the sub-committee in determining future levels of service and pricing mechanisms for cost recovery.

Commercial Trade & Traffic Activities

For St. Marys Cement, a major Canadian cement producer, Mariport coded log entries for their fleet of 3 tug/barge units as well as port operations to ensure an accurate and detailed analysis of shipping productivity. The work was undertaken for the 1994 and 95 seasons and benchmark times for various activities were developed. A number of problem areas were identified for action by St. Marys.

Canada/US Cross Border Traffic

Mariport utilized three distinct databases to analyze cross border traffic for a proposed truck ferry between Hamilton (ON) and Oswego (NY). Traffic Analysis concentrated on the Niagara gateway, utilizing Statistics Canada, PIERS and MTO data to determine numbers of trucks moving on candidate routes. The Stats Canada data was further analyzed to obtain an indication of the commercial impact of the US Harbor Maintenance Fee on the route.

Canadian Arctic Shipping

Mariport produces an annual "Ships in Arctic" report that draws on INNAV data, assembled and analyzed by ship. The report shows ports of call and (where available) dates of arrival/departure.

Trade Data - Turks & Caicos

For a port master plan in Turks and Caicos Islands, Mariport had to create a trade database for the islands. Customs data was only available on value, whereas forecasting for port utilisation required different categorisation of imports and actual weights.

Mariport sampled manifests at the three customs ports of entry for the years 1989, 1990 and 1991 to establish a consistent time series. The forecast imports from the sampling was then spot checked with specific importers to assess its accuracy. The base data of imports by SITC code was later used by several agencies as a planning resource for Turks and Caicos. Further work on trade has utilized Customs data and manifests for activity in 2002/2003, which validates forecasts made a decade earlier.

Survey Data

For an economic impact and port marketing study in Bellingham, Mariport undertook a major survey of passengers using the cruise terminal to determine spending, length of time in the town, origin, destination, purpose of travel, knowledge of the area etc. Results were coded for some 2,000 responses and valuable information for marketing the region as well as increasing visitor spending was extracted from the database created.

Survey data has also been compiled from intercept surveys for several ferry studies, each involving analysis of over 1,000 individual entries. A major survey of potential Great Lakes cruise passengers was also undertaken, with some 1,500 forms returned and analyzed.

Trade Data - Bangladesh

Bangladesh does not keep comprehensive transportation data for internal movements, and this lack of data is even more marked for the river systems. For a river navigation study in Bangladesh, Mariport created a traffic base for forecasting purposes, from a combination of local surveys and Bangladesh Bureau of Statistics consumption data. The local surveys were undertaken at market centres, and with major wholesalers and merchants in the region to determine seasonal flows, mode of transportation and price. Consumption data was used as a "top down" check on survey data, with quantities being adjusted to reflect knowledge of the local economy and practices. The final assessment of quantities was agreed between Mariport and local experts on Delphic principles. The trade and transportation cost data was then used as a basis for forecasting economic benefits as a result of proposed river dredging work.

Contact Management

On behalf of Cruising the Great Lakes, Mariport developed and maintained a database of nearly 19,000 contacts (early 2005) for cruise marketing in the Great Lakes Region. The database covers specific categories of persons and companies.

Marine Liability Act

For work associated with the impact of the MLA, Mariport created a major marine database to enable operators of commercial waterborne craft in Canada, or calling in Canada, to be tracked, as well as details of their liability insurance. Encryption options were incorporated in the event that the database became web accessible. Coverage extended from cruise ships to white water rafting.

Canadian Industry Dependence on Waterborne Transportation

For a major study with Consulting and Audit Canada on behalf of the Treasury Board Secretariat, Mariport undertook a broad analysis of Canadian industry use of the marine mode. This study involved a comprehensive multi-year analysis of Stats Canada port series, which has been used for several other projects.

Ferry Systems

For studies of ferry services, both proposed and existing, Mariport has used a combination of telephone, intercept and web based surveys to determine interest in the service, price points, service needs or impact of ferry service withdrawal.