Although this "extra-charge" situation does not apply to U.S. shipments, exporters should be aware that these factors (i.e., odd shape, need to segregate) will be built into commodity classifications and associated rates by transborder carriers. Therefore, the possibility of securing lower rates by properly and accurately describing your goods to carriers can not be overly emphasized.

## 4. MAXIMIZE PHYSICAL DISTRIBUTION MANAGEMENT

While this report addresses various means available to help Atlantic Canada shippers secure the lowest transportation cost, it is important to be aware that efficient goods distribution requires more than obtaining the lowest freight rate. It includes determining the lowest total cost consistent with service requirements to distribute goods from the factory to the customer's dock. The concept of viewing distribution as a total system is most often referred to as physical distribution management. Trade-offs are at the heart of the concept. Reduced transportation costs can translate into increased costs tied up in inventory especially when very slow modes are used. Failure to properly crate or package goods in a protective manner on some modes can result in product loss and damage and customer aggravation.

Detailed physical distribution cost analysis is particularly important for very large shippers who face a wide selection of transportation options and who can offer large volumes to carriers in return for low specially negotiated rates. For the smaller Atlantic Canada shipper to whom this report is addressed, simple "shopping" and comparison of rates versus transit time (of course taking into account qualitative service aspects) is usually sufficient.

A simplified example shows how such an analysis can help shippers evaluate and select the best distribution channels by looking at transportation rates and the cost of money. Consider the hypothetical case of a Halifax electronic equipment manufacturer shipping an annual volume of 300,000 lb. to customers in New York. Every day he produces 1,200 lb. of product for export worth approximately \$5,000. The alternatives he has identified are to ship 1,200 lb. every working day by air or LTL motor carrier, 6,000 lb. once per week by LTL motor carrier, or full 40,000 lb. truckloads approximately once every six weeks. The shipper might also be able to ship by rail, but at a production rate of only 1,200 lb. per day, even if the rail rate is comparable to the truckload rate, it would take 100 working days or 5 months to produce enough product to fill a 120,000 lb. box car.