

If this hypothetical shipper selected the transportation mode only on the basis of transportation costs (i.e., line 1) he would obviously select the rail mode. However, if the other physical distribution elements are taken into consideration, using a motor carrier would be the most cost effective.

Because the rail mode is the slowest and delivery times most variable, it requires the shipper to keep a larger inventory (in plant or on wheels) than would be required for other modes. (For air, minimal or no inventory is required.) Rail also ties up significantly more of the shipper's working capital in goods than do the other modes. Finally, loss and damage charges using rail are shown to be higher here for this imaginary shipper, because this mode could cause greater damage to fragile goods.

Looking at each mode's costs on a per-unit basis, the highway mode is shown to be the most economic for this shipper because while its transportation rates are not as low as that of the rail mode, the associated savings in warehousing, working capital costs, and loss and damage, more than compensate for this drawback. Thus, from a total physical distribution/logistics standpoint, this shipper should choose to ship by motor carrier.

Analyzing your transportation alternatives on an annual basis for shipments to a specific market as shown above is a beneficial exercise which will point you in the right general direction. However, changing circumstances in plant production capacity, new sales orders, inventory, terms and conditions of sale, customer delivery requirements, cash flow, availability of new carriers, transportation legislation, and a host of other factors mean that you should evaluate your transportation options frequently. For example, if your sales arrangements are "30 days net" and your company is one which carefully watches cash flow, it may be worthwhile occasionally to pay a premium transportation charge to get your goods to the customer as quickly as possible.

Futhermore, no two companies are exactly alike. Traffic managers in some of Canada's largest firms in the same industry competing in identical markets often make very different transportation arrangements for very good reasons, and with equally profitable results. For example, a second Calgary manufacturer of industrial machinery parts (in competition with our illustrated hypothetical shipper above) with parallel export volumes to Arizona would face a different set of options and decision-making criteria if he owns a fleet of trucks, or if his customer wishes to pay a premium for expedited delivery, or if his customer has negotiated special volume discounts or backhaul rates for input materials returning from Alberta to the Western U.S..

The fact is that for any industrial sector or regional group of companies, there is no "one mode fits all" conclusion as to the most efficient and cost-effective means of transportation. If in order to build a competitive edge in your Canadian markets you are doing things differently than your direct competitors, it stands to reason that you will be able and want to do different things to secure your export markets. A guiding principle to remember in transportation is to never accept a no-choice situation; choices are available for you to seek out and evaluate.

Although the type of evaluation you should be conducting requires some homework on your part, it will help you determine your true total transportation and distribution