

Trade Growth Tied To Transportation Infrastructure

Expanding trade between Canada and its Pacific Rim trading partners has spurred much construction of shipping, storage and freight handling facilities in British Columbia. These facilities account for a large part of the province's transportation infrastructure, and their operations account for many of the 118 thousand transportation sector jobs in the province.

An expanding transport infrastructure has encouraged further growth of the province's own exports by providing quicker and more efficient access to international markets.

International shipping moving into or out of British Columbia passes through a diverse but increasingly interdependent mix of facilities including seaports, air ports, roads, rail lines, pipelines and power lines. Some are owned and operated directly by government. Others are owned by government, but operate independently as not-for-profit agencies. Still others are purely private sector ventures. More facilities will be needed in future as the province continues to expand and diversify its international trade, and as more international trade to and from other provinces is channelled through west coast ports.

Some new investment will be needed from governments. Questions will inevitably arise as to where individual projects stand in relation to others on the priority list for transportation expenditures. While all contribute to the general prosperity of the

province, some will be of more particular benefit to certain industries or regions.

Discussions on spending will necessarily be complex, involving many considerations. Among these considerations will be the roles played by each mode of transport in moving trade goods to, from, and through the province.

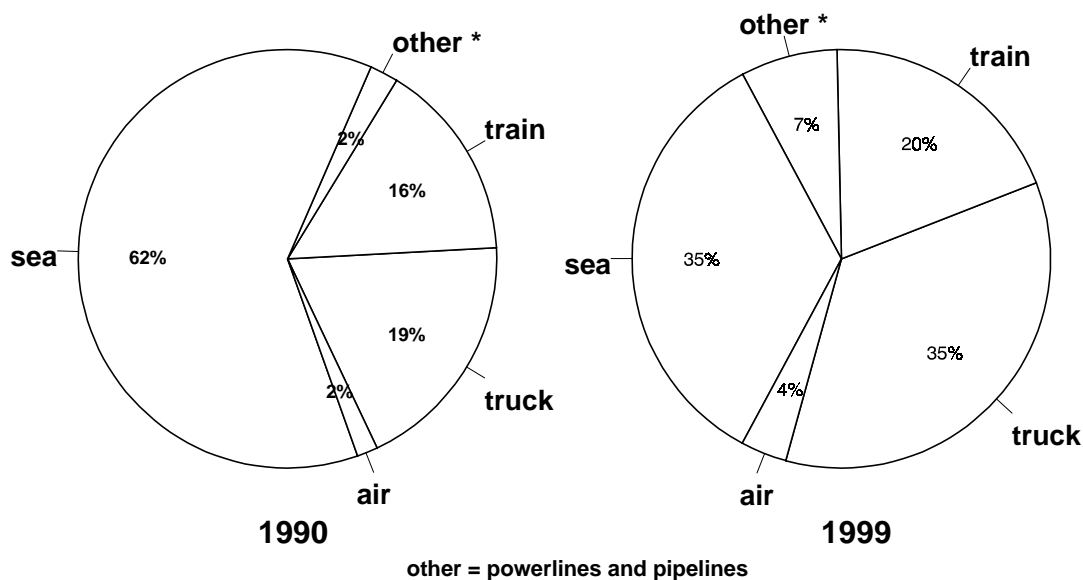
A Growing Reliance On Trucking

Judging by export trends of the 1990s, British Columbia's international trading competitiveness could be enhanced by an upgraded and expanded road network to support fast, reliable and cost efficient truck transport services. Perhaps, the single most important development in British Columbia's export shipping patterns over the past decade has been a substantial increase in the use of truck transport. The value of British Columbia produced exports shipped by truck increased 220 per cent between 1990 and 1999, much faster than the 73 per cent increase in exports shipped by all modes of transport.

These figures are based on the mode of transport used when goods cross the Canadian border. They likely understate the importance of truck transport because many goods departing British Columbia by train, ship or airplane have already been carried on part of their domestic journey by truck.

B.C. Export Shipping Now Relies As Much On Trucks As Ships

(per cent of B.C. exports by mode of transport)



BC STATS

Unfortunately, comprehensive statistics are not available to monitor the purely domestic portion of export shipments; so this study is necessarily restricted to exploring mode of transport patterns for the cross border portion of the export journey.

The most obvious reason that trucking has come into greater use for shipping exports out of British Columbia over the past decade is that a much larger portion of the province's exports are now destined for the United States. NAFTA, along with a relatively cheap Canadian dollar and a booming U.S. economy, produced a major reorientation of British Columbia exports to the United States over the 1990s. The portion of total British Columbia exports destined for the U.S. market expanded from 42 per cent in 1990 to 67 per cent in 1999.

This alone would have been enough to account for strong growth in the proportion of the province's total exports shipped by truck. The trend has been further strengthened by changes in the mix of export products being shipped to the United States. In general, they now include more value added manufactured goods shipped in smaller lots directly to the customer's door.

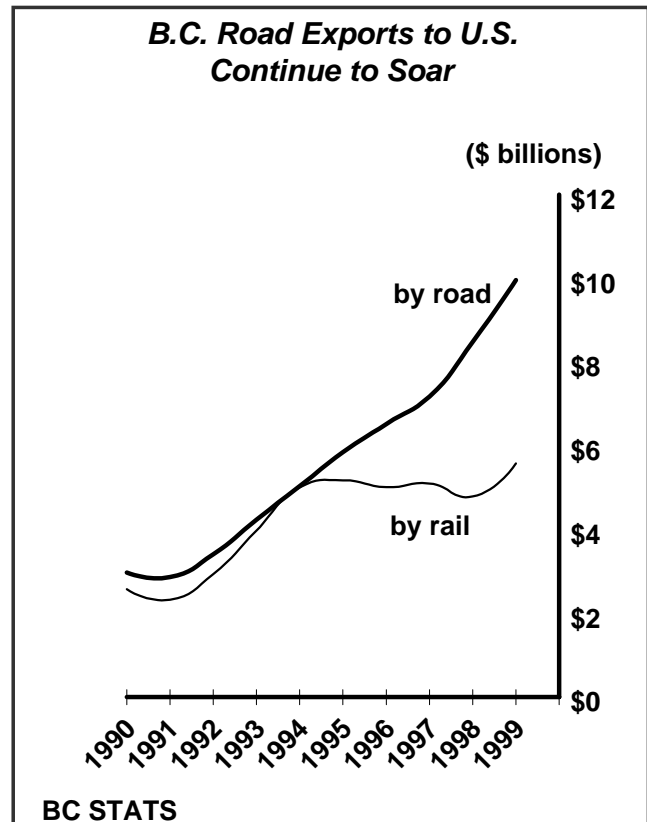
Many fall under the broad classification of machinery and equipment. Eighty-five per cent of 1999 U.S. bound exports in this category were carried by truck. Between 1990 and 1999, the total value of machinery and equipment exports shipped by truck to the United States rose 346 per cent.

Total British Columbia exports to the United States crossing the border by truck grew 234 per cent between 1990 and 1999. This compares with export growth rates of 23 per cent for all goods shipped by sea to the United States, and 117 per cent for goods shipped by rail. Air freighted exports to the United States grew much faster, increasing 571 per cent between 1990 and 1999. But they still represent only a small part of the total dollar value of exports to the United States

Air freighted exports to the United States amounted to \$490 million in 1999. Exports moving by truck amounted to \$9,957 million. Those moving by rail amounted to \$5,580 million, and those moving by sea amounted to \$1,215 million. Total exports to the United States, by all modes of transport, amounted to \$19,369.

NAFTA has not produced any dramatic increases for British Columbia exports to Mexico. Total British Columbia exports to Mexico continue to account for a very minor part of its total international trade, amounting to only \$41 million in 1999. Exports to Mexico have remained small because there has as yet been very little demand from that country either for resource commodities from British Columbia, or for the relatively high value manufactured products that the province is now beginning to produce.

Statistics are not available on the value of British Columbia consumed imports from either Mexico or the United States. However, statistics are available for imports from those countries into Canada as a whole. Again, the trends indicate increasingly heavy reliance on truck transport.



Total Canadian imports from Mexico rose from \$1.7 billion in 1990, to \$9.5 billion in 1999 – a 459 per cent increase. Seventy-five per cent of the 1999 figure arrived by truck. Eighty-four per cent was cleared through Customs in Ontario, where auto-makers and other manufacturers absorb a growing volume of components from Mexico.

Canadian imports from the United States rose 105 per cent between 1990 and 1999. Of the \$215 billion worth of Canadian imports from the United States in 1999, \$175 billion (81 per cent) arrived by truck. Truck shipped imports from the United States included \$37 billion of autoparts, \$13 billion of assembled automobiles, and \$59 billion of other machinery and equipment products.

Machinery and equipment imports include parts and components needed by Canadian manufacturers. Uninterrupted flows of truck hauled imports from the United States and Mexico have become increasingly important for the health of Canadian manufacturing businesses, and the job security of Canadian workers.

Access to imported industrial components is specially important for the more heavily industrialised central Canadian provinces. But it is also becoming increasingly important for British Columbia's fast growing secondary manufacturing sector.

Exports By Rail Grow Slowly Through Much of the 1990s

Railroads still carry substantial volumes of British Columbia's bulk resource exports to the United States, and a considerable volume of container traffic.

But when compared with exports shipped to the United States by truck, exports by rail appear to have grown very slowly. Between 1990 and 1999, the value of British Columbia produced exports moving by rail to the United States market rose only 117 per cent, as the value of goods moving by truck climbed 234 per cent.

In dollar terms, exports by rail to the United States were valued at \$5.6 billion in 1999. This included \$3.9 billion of lumber and lumber products, \$998 million of pulp and paper products, and \$487 million of refined metals such as zinc, aluminum, and lead.

Although rail has lost considerable export shipping business to trucking over the past decade, the trend is not necessarily irreversible. Railroads could well regain some competitive advantage in future through

innovations in technology and by introducing new, more flexible operations.

For example, greater use of intermodal shipping (moving goods by a combination of two or more different modes) could lead to a greater proportion of exports to the United States completing at least the intermediate portion of their journey to market by rail. Regulatory changes, tax changes and further integration of continental rail services could also help railways regain some export shipping business lost to trucking.

So too could higher fuel costs. If fuel prices continue to rise over the long term, the impact on shipping rates could be more severe for truck transport than for rail, encouraging some shifting back to rail transport.

Sea Transport Facilities Still Expanding

Only 6 per cent of British Columbia's 1999 exports to the United States moved by ship. However, ocean shipping is obviously the means by which most trade is moved between British Columbia and Asia. Much of British Columbia's seaport infrastructure constructed over the past two decades was built initially to accommodate resource commodity export traffic from British Columbia to Asian markets.

Facilities at British Columbia seaports must also cope with fast rising Pacific Rim trade of other provinces. In recent years the value of export goods clearing through British Columbia ports has been growing faster than the value of goods originating in British Columbia.

Exports from the rest of Canada clearing through British Columbia seaports rose 52 per cent between 1990 and 1999, while the value of British Columbia origin exports actually fell 3 per cent.

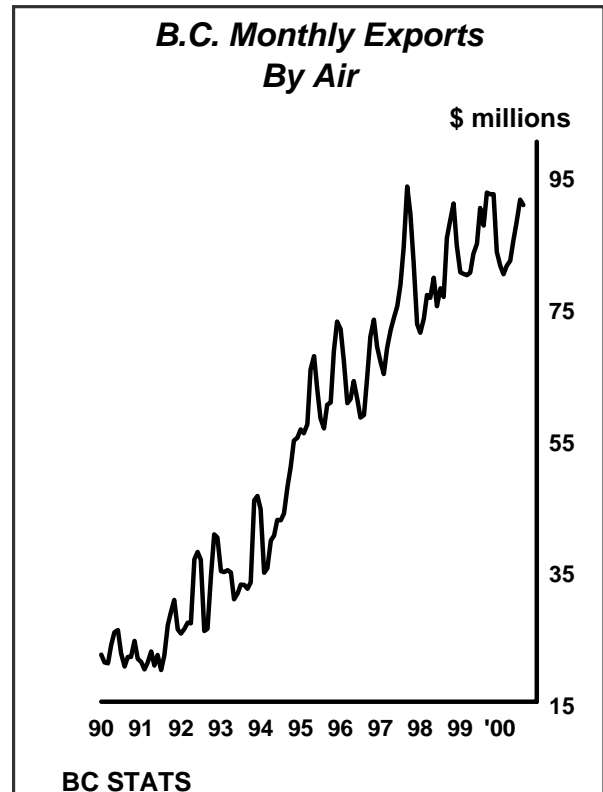
Export traffic passing through British Columbia seaports now includes a greater value from the rest of Canada than from British Columbia. In 1999, exports from other provinces amounted to \$10.8 billion. British Columbia's exports passing through its own seaports amounted to \$9.6 billion.

Regardless of the origin or destination of the cargoes they handle, British Columbia seaports make a sizeable contribution to the provincial economy. New jobs are created directly and indirectly by port activity. The establishment of scheduled sailings to and from overseas markets provides prospective exporters in British Columbia with competitive advantages that they could not otherwise have enjoyed.

By Air

Air transported exports still amount to a relatively small part of the province's total export trade. However, the use of air freight for shipping exports originating in British Columbia has been growing very fast. As the provincial export commodity mix diversifies to include more secondary manufactured products, air freight can be expected to move a larger portion.

Between 1990 and 1999, the value of British Columbia's air freighted exports to all destinations grew 276 per cent. By comparison, exports by truck grew 220 per cent, and exports by rail grew 116 per cent.



The expansion of air freighted exports over the 1990s has been partly attributable to the sharply higher levels of international passenger traffic passing through Vancouver International Airport. Passenger aircraft carry air freight cargo in their bellies, along with their passengers' baggage. It has been estimated that this belly cargo space accounts for up to half of global air cargo capacity.

More passenger flights through Vancouver international have thus meant more air cargo space available for shipping goods to Asia, the United States, or to the other destinations for which passenger aircraft are bound.

Vancouver International Airport management have followed up on this advantage by expanding cargo facilities. Reliable and convenient air freight services to international markets are a key component of transport infrastructure needed to nurture high technology industries, value added

food processing, and manufacturers of a variety of other high value products.

These are the types of production that can diversify British Columbia's economy beyond the simple processing of natural resource commodities.