Ports: A Component of Canada's Critical Infrastructure

Michael C. Ircha, PhD
Professor of Civil Engineering
Acting Vice-President (Academic)
University of New Brunswick
Fredericton NB E3B 5A3

Published in *Canadian Ports Magazine,* Association of Canadian Port Authorities, spring 2003, pp. 14-21.

Since the World Trade Centre disaster on September 11th, the world has become a very different place. Security concerns have led to tighter border controls, increased vigilance reflected in rigorous inspection of import cargos, and subsequently, higher costs to shippers and consumers. Current fears of an impending war with Iraq have dampened the anticipated economic recovery. These restrictions and concerns add to the difficulties Canadian ports have in competing with their US counterparts in the North American continental transportation system.

Canada's growing bilateral trade with the US has shifted our exports and imports north-south. Despite this shift, Canadian ports continue to serve as major hubs for Canada's international and domestic commodity flows. In 2001, some 420 million tonnes of bulk, break-bulk and containerized goods crossed Canadian wharfs. About 85% of port traffic was international. Canada Port Authorities (CPA), representing the country's major marine facilities, handled more than 56% of marine trade, with the remainder, primarily bulk commodities, flowing through private and smaller regional ports.

Economic integration of Canada-US trade has encouraged container diversion across the border to ports in each country. The imposition of increased import inspections and other controls on cross-border trade coupled with a perception that Canadian ports may not be as secure as US facilities could lead to diminished levels of container diversion. The loss of diverted US containers would be a serious blow to Canada's major container ports. To offset some of these security concerns, US Customs officers are now posted in major Canadian container ports to pre-inspect US destined boxes and Canadian ports are scambling to acquire mobile, gamma ray container inspection units along with taking other steps to enhance port security. The need for relatively high level port security is becoming another component in the competition of Canadian ports with their US counterparts.

The federal government has established an Office of Critical Infrastructure Protection and Emergency Preparedness (OCIPEP) to define and protect the nation's critical infrastructure. OCIPEP has focussed on protecting the key elements of the electronic and physical infrastructure that underpins the national economy. Ports provide a crucial node in the country's critical transportation infrastructure. Ports need enhanced security to ensure they continue to effectively serve Canadian and diverted US trade.

Port Competitiveness and Infrastructure Development

Canada's major ports compete directly with many US ports. A recent ACPA study on the competitiveness of Canadian ports found that US governments consider ports as key to serving the public interest. Canadian ports, on the other hand, tend to be seen to be a source of revenue for the federal and municipal governments. This stark contrast was summarized in the ACPA study as: "in essence, Canadian governments take [from their ports] while US governments give."

US ports receive direct and indirect subsidies and grants from their local, state and federal governments. These subsidies and grants range from the ability to issue tax-exempt revenue bonds to support port capital projects to the provision of state loans and grants to the right of some ports to levy state and local taxes to support their cargo-handling operations. As an example of the latter, the ports of Seattle and Tacoma levy property taxes to supplement their ports. As shown in the ACPA study, in 2002, Seattle raised $39.8 million and Tacoma, $8.4 million from property taxes. US ports are increasingly using revenue bonds to raise the capital needed for major projects. Port funds come from leasing their facilities to offset the debt servicing required for the revenue bonds. Interest payments on these bonds are exempt from federal income tax and, in some cases, from state income tax. In addition, revenue bonds are attractive for private terminal investors as the facility remains "owned" by the port and is leased to the private operator. In this case, the revenue bond supported facility is not subject to municipal property taxes, although in most cases, the private terminal operator is charged a "leasehold tax in lieu of property taxes." This payment is generally lower than equivalent property taxes. The increasing use of revenue bonds means US ports have a greater ability to invest in needed cargo-handling and port facilities.

In contrast, Canada's major ports contribute an annual levy to the federal government based on the port's gross revenues and provide payments in lieu of property taxes (PILT) to adjacent municipalities. For example, in 2001, the Vancouver Port Authority, in direct competition with Seattle and Tacoma, paid $2.1 million in property taxes and a further $3.8 million in its annual levy to the federal government. These payments result in a loss of port operating revenue; limiting the CPAs' ability to support required capital projects. In addition, there are strict limitations on CPA borrowing authority and severe constraints on pledging federal port lands as collateral for commercial loans. These financial restrictions severely limit the ability of Canada's major ports to develop cargo-handling capacity to meet growing trade needs. The ACPA study found that US ports use their retained earnings and other government support to invest in new and expanded capital facilities to handle their growing marine traffic (including diverted Canadian cargo).

In the Canadian case, port capital investment lags in comparison to the US. The ACPA study found that from 2001-05, US ports expected to invest about $9.5 billion in facility and infrastructure development. In contrast, the ACPA study estimated Canadian port capital expenditures for 2002-06 to be only $730 million. The contemporary modernization and expansion of US ports poses a serious competitive threat to Canadian ports.

The lack of capital investment in Canadian ports, due in part to the inability of CPAs to borrow funds and the lack of incentive financial instruments such as those used in the US, may contribute to the further diminution of diverted trade in the future.

Port Security in a Competitive Environment

Increasingly in our security conscious world, ports considered insecure may be at a competitive disadvantage to those demonstrating the ability to prevent imports of threatening cargos. Thus, Canadian ports ignore enhanced security at their peril. Fortunately, major Canadian ports have taken steps to counter such security threats. However, unlike the US situation, where the federal government financially supported port security, the Canadian government has yet to provide direct financial aid to its ports. Since September 11th many ports have invested their own funds on security measures. Ports have initiated increased security checks, identity passes, improved perimeter fencing, and in the major container ports, the acquisition of one or more mobile gamma ray container inspection units and mobile radiation detectors. The costs of these security enhancements have been borne by the ports, a further drain on their revenues. The absence of federal financial support for port security inevitably implies higher port charges to offset these costs, further eroding the competitiveness of Canadian ports.

The *Canada Marine Act* (CMA) currently prevents the federal government from providing direct financial assistance to the CPAs. The CMA was prepared in the pre-September 11th period when this critical need for government support to ports could not have been foreseen. Rumours abound that there is pending legislation to loosen the government's purse strings to assist ports with their security needs. However, such steps seem to be too little, too late.

Canadian Ports as Critical Infrastructure

Canadian ports need their current financial problems addressed to ensure they can provide the security levels needed to remain competitive. In 2002, the Minister of Transport, David Collenette, appointed a panel to review the *Canada Marine Act.* The CMA Review Panel undertook a series of stakeholder consultations across the country.

The major issues dealt with by the Review Panel included: port finances, governance, port lands and property, and environmental issues. The financial concerns facing major Canadian ports include the impact on their retained earnings of an annual levy to the federal government and payments in lieu of property taxes. As discussed above, particularly in light of increased security needs, CPAs need ready access to federal financial support, and the removal of federally imposed, restrictive borrowing limits. In submissions to the CMA Review Panel, CPAs and others recommended port revenues be retained to build capital reserves to meet competitive needs.

One could ask what the federal government wants for its ports and shippers? Under the liberalised free trade regime with the US, Canadian shippers can easily use US ports, bypassing Canadian facilities. Is this what is the government wants? Should Canadian ports be allowed to languish in our increasingly integrated continental competitive environment? Or, is there a strong case for supporting Canadian ports as key components in our critical national transportation infrastructure? Developing a strong network of major Canadian ports reinforces national sovereignty and ensures Canadian shippers have access to international markets without fear of increased US border restrictions. Developing a critical infrastructure perspective means a significant change for the federal government - a shift from "taking" from ports to the US approach of "giving." Is there a role for OCIPEP in assisting ports in seeking critical infrastructure support from the federal government?

Currently, there are too many government constraints, restrictions and limitations on Canada's purportedly commercialized ports. There is a clear need to liberalize our ports to allow them to compete effectively within the continental transportation system. Hopefully, the CMA Review Panel will recommend changes to the *Canada Marine Act* to allow CPAs to be independent, autonomous, corporate entities. Such steps should enable CPAs to improve cargo-handling productivity, improve security, compete effectively with US ports, and serve Canada's essential trade in an efficient manner.