

The Seaway – Western Canada’s “Gateway to the East”

David K. Gardiner, President of WESTAC, gave this presentation on the economic benefits and the future of the St. Lawrence Seaway, at the Seaway’s Fortieth Anniversary celebrations in Montreal on May 19.

Canada is a big country. We are a diverse collection of issues, priorities and style. A viable and efficient transportation system is absolutely vital to keep us together and to enable our nation to compete effectively on the world stage. This is especially important for western Canada with its considerable reliance on relatively low value primary product exports and the long distances to markets.

The focus in western Canada is on diversification: in markets; in products; in transportation routes and systems.

The seaway system has played a significant role in the economic success of western Canada. Its future role has yet to be clearly defined; however, there is little doubt that the pressures and pace of change will require some innovative responses if the system is to remain an important strategic asset for the west.

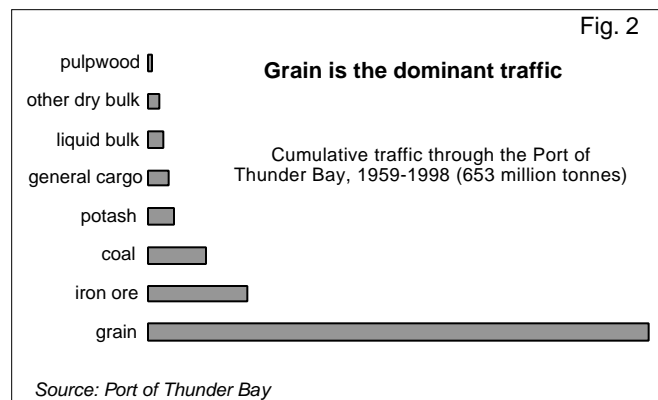
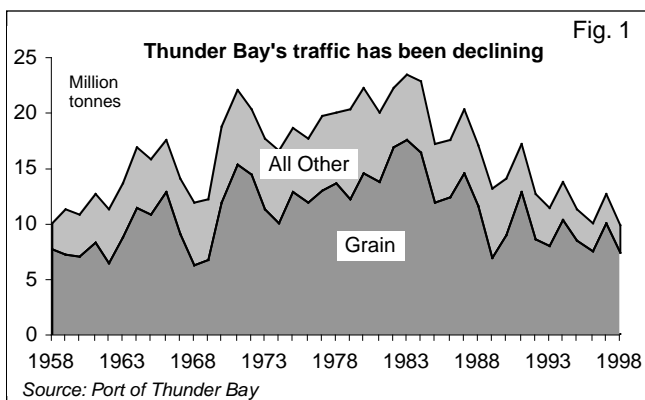


The Seaway and Western Canada to the Present

There is little data showing the importance of the seaway on a province by province basis. The one true barometer of western Canadian involvement with the seaway is the port of Thunder Bay. In the 40-year life of the current seaway system, over 650 million tonnes of commodities have moved through Thunder Bay, although volumes have been declining in the last

decade (Fig. 1). Almost 70% of this traffic has been grain (Fig. 2). Since the demise of iron ore movements in the mid-1980s, coal and potash have become the next largest volumes; in 1998 they accounted for 22% of total port activity. There are also significant volumes of other products moving through the port. These include forest products, manufactured goods, food products, heavy equipment, steel, and petroleum and chemical products. However, these commodities represent only 5% of total activity, are not growing, and are primarily produced or consumed in the regions near the port.

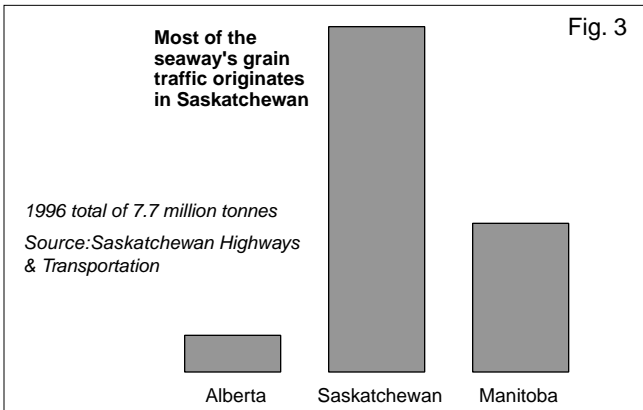
Up to 95% of Thunder Bay’s volume is provided by



Grain has been the mainstay of western Canada's seaway business.

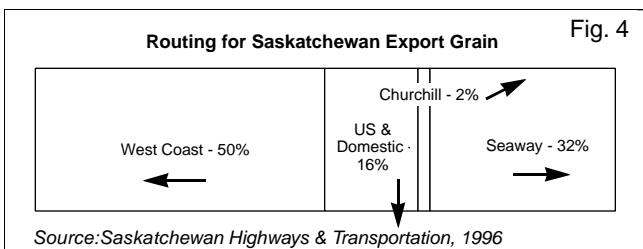
the provinces of Manitoba, Saskatchewan and Alberta. (In a larger context, the three prairie provinces have historically provided a quarter of the total traffic on the entire seaway system).

As might be expected, the contribution of traffic to the seaway is not evenly distributed over the western



provinces. Saskatchewan provides 65% of the grain, Manitoba 28% and Alberta only 7% (Fig. 3). Saskatchewan provides all of the potash, and Alberta and British Columbia each originate 50% of the Canadian coal traffic on the seaway.

As dominant as Saskatchewan is with respect to grain, it is important to note that only one-third of that province's grain is exported via the seaway (Fig. 4).



Both the west and south bound movements of Saskatchewan grain are growing, and this trend is noticeable in the other provinces as well.

The seaway depends on the western provinces to a larger degree than those provinces depend on it.

Of course, over such a long time period there have been numerous peaks and valleys: "highlights and lowlights". In the 40 years since the opening of the

seaway system as we know it, transportation patterns in the west have shifted in response to a whole range of events. Some of these have run their course, others are only really beginning and the full impact may not be determined for years.

The Seaway and Western Canada into the Future

Major changes, again from a western Canadian perspective, that have already had (or will yet have) an impact on seaway traffic mix and volume include:

- a complete turnabout from the dominance of eastward movement to westward movement for the major portion of grain exports, reducing Canadian grain volumes on the seaway;
- the emergence of a market for western coal in the eastern half of the continent, creating new business for the seaway;
- the growth of containerization and intermodalism and the reliance on just-in-time delivery practices for consumer products, driving many break bulk shipments off the seaway; and
- improved efficiencies in rail and truck, allowing these modes to become increasingly aggressive with respect to price and service in some "traditional" seaway trades. These include potash and forest products from western Canada to central and eastern US, and, most recently, unit trains of grain from the prairies direct to the Saint Lawrence during the seaway season.

One could probably argue that these developments have largely worked their way through. The system has adjusted and survived – and indeed in some respects prospered – so why should the system not remain an important gateway for the western provinces?

Well, it should. But it will take greater awareness of what is still to happen in the west, and a concerted effort to respond aggressively to new developments, for this to occur.

You can probably tell that the trends I am about to

The seaway has a number of inherent advantages that will ensure its role as a major transportation artery.

describe are not all that favourable with respect to the seaway. Developments in western Canada need, therefore, to be put in perspective vis-à-vis the seaway system as a whole.

The seaway system is not dependent on western Canada for its ultimate survival. It has a number of inherent advantages that will ensure its continuity. The strength and scope of that continuity will, however, be affected in part by how well the system can continue to serve western Canada.

These advantages include, in no particular order:

- the existence of what I will call some "captive" sources for raw materials used in steel-making (although the interdependency of upbound iron ore and downbound grain movements should not be minimized);
- a system of grain transfer elevators accessed only by water;
- world leadership in the application of self-unloading ship technology;
- a group of knowledgeable international shipowners specializing in the nuances of trading on the seaway;
- a very large population and industrial base around the lakes;
- a new commercial focus for the system managers; and
- the favourable status of the marine mode with respect to greenhouse gas emissions, which is an emerging and very important consideration in the design of Canada's transportation system in the future.

These strengths should ensure that the system will continue to be a major force in the movement of many bulk and raw materials around the lakes on both sides of the international border, and a significant factor in trade between North America and many areas of Europe, the Mediterranean, and North Africa. But what, specifically, will its role be as the western Canadian gateway to the east?

Trade and Transportation Trends in Western Canada

There are a number of forces at work that will shape the future of commerce and trade in western Canada and must be understood by all providers of transportation and logistics services. I submit that the most significant of these, from the seaway perspective, are the following (Fig. 5).

Fig. 5

Major Trends Affecting Western Canada:

1. North/South Focus
2. Commodity Prices
3. Post-WGTA
4. Transport Costs
5. The "Custom" Economy

North/South Focus: The impact of NAFTA and the rapid growth of north-south highway and rail volumes are leading to "corridor thinking" and practice. This is an important change in the focus of the western provinces and recognizes annual growth rates of 4% for east-west traffic, compared with 10% for north-south traffic. There are examples of this shift throughout the west.

In its 2001-02 Business Plan dealing with the role of transportation in improving access to world markets, the Government of Alberta lists priorities as follows:

- The north-south trade corridor connecting BC/Alaska through Alberta to Montana, the US midwest and Mexico – This involves millions of dollars of investments to 4-lane much of the highway to the border and to reduce border delays for both truck and rail.
- The western ports and corridor route – This involves maximizing the efficient use of the combined routes through Prince Rupert, Vancouver, and even the US Pacific Northwest.
- Increasing the availability and use of intermodalism (containers shipped by truck, rail and marine) to enhance export prospects for value-added products.

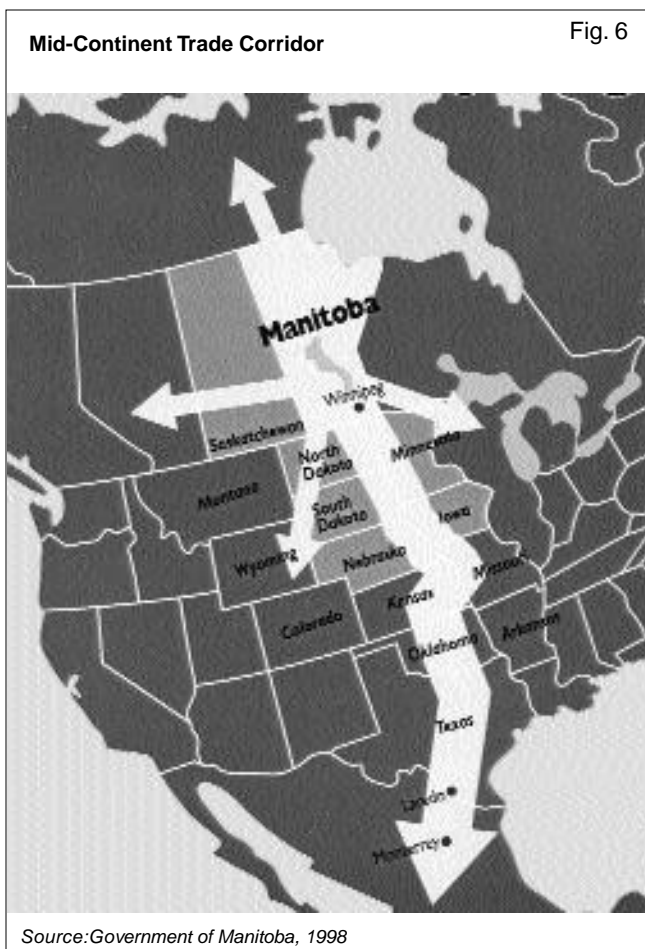
North-south transportation corridors are a growing factor.

The more traditional east-west transportation system is mentioned in an almost defensive manner, for example, in the context of working with other governments to "prevent further deterioration of infrastructure".

In Saskatchewan the focus is much the same. The Saskatchewan Transportation Agency recently stated "in recent years new markets for Saskatchewan products have been emerging in the United States, Mexico and South America. Our transportation system is not well developed to service these markets".

The first item highlighted in the province's plan of action is "working to improve north-south road and rail transportation links" in recognition of recent doubling of trade with the US and tripling with Mexico.

Manitoba highlights the same prospects for growth to support its focus on what is called the "Mid-Continent Trade Corridor Strategy". Manitoba's view of its



future trade world is illustrated in Fig. 6, supported by the kind of growth prospects as shown in Fig. 7.

So integrated is this strategy with that of the US states along the corridor, that at least three projects of direct benefit to Manitoba (Border Infrastructure; Northern Great Plains Potential; improvements to several interstate highways and Manitoba Trunk Highway 75) are benefiting from TEA-21 funding, essentially using an American program to improve transportation infrastructure in Canada!

Commodity Prices: A recent article in Fortune magazine stated that the IMF index of real non-oil commodity prices is today at about one-third the level of its 20th-century peak at the end of World War I. The continuing pressure on profit margins in the primary commodities sector is resulting in a constant drive to reduce costs and find opportunities to add value to products before they are shipped.

No where is this more evident than in the agri-business sector.

Saskatchewan's Economic Vision contains a major focus on supporting the growth of: specialty grain crops; agri-business biotechnology; crushing, processing and packaging; and expanded hog production and meat processing. In Manitoba almost \$200 million of new investments in food processing and related activities have been announced since 1996.

The movement toward value-added agriculture will have major implications on transportation requirements, both in responding to the pressure to reduce

traditional primary product movements, and in terms of adjusting to service parameters required for handling and transporting value-added commodities.

Post-WGTA: The long term implications of the demise of the WGTA include the re-drawing of the prairie map of grain collection points, closure of branchlines, and imposition of "truer" transportation costs. In Saskatchewan, it is forecast that grain delivery points will be reduced from over nine hundred in 1972/73 to possibly fewer than one hundred within the next few years. This will result in increased cleaning of grain on the prairies and greater utilization of unit trains that can be spotted at high throughput facilities.

Transport Costs: Costs are decreasing in various transport modes. The application of new technologies, operating procedures, and streamlined operations have resulted in rail and truck costs decreasing to the point where certain commodities normally moving in the marine mode are at risk. For example, Saskatchewan expects that potash movements via the seaway will continue to decline in light of aggressive railway pricing and improved rail connections to US markets. The inroads of railways into summer-month grain movements to terminals in Quebec has already been noted.

The "Custom" Economy: The growth of the "Custom Economy" is placing more emphasis on just-in-time deliveries, supply chain management and improved transportation response times. While this is

often thought to apply to high value manufactured products, the same disciplines are beginning to appear in the traditional bulk commodity movements.

Fig. 8 illustrates this process in the case of milling wheat destined for the UK. The customer, a huge British bakery chain, pays a premium to dictate everything from planting schedules and fertilizer application to customized handling and transportation.

Some Questions for the Future

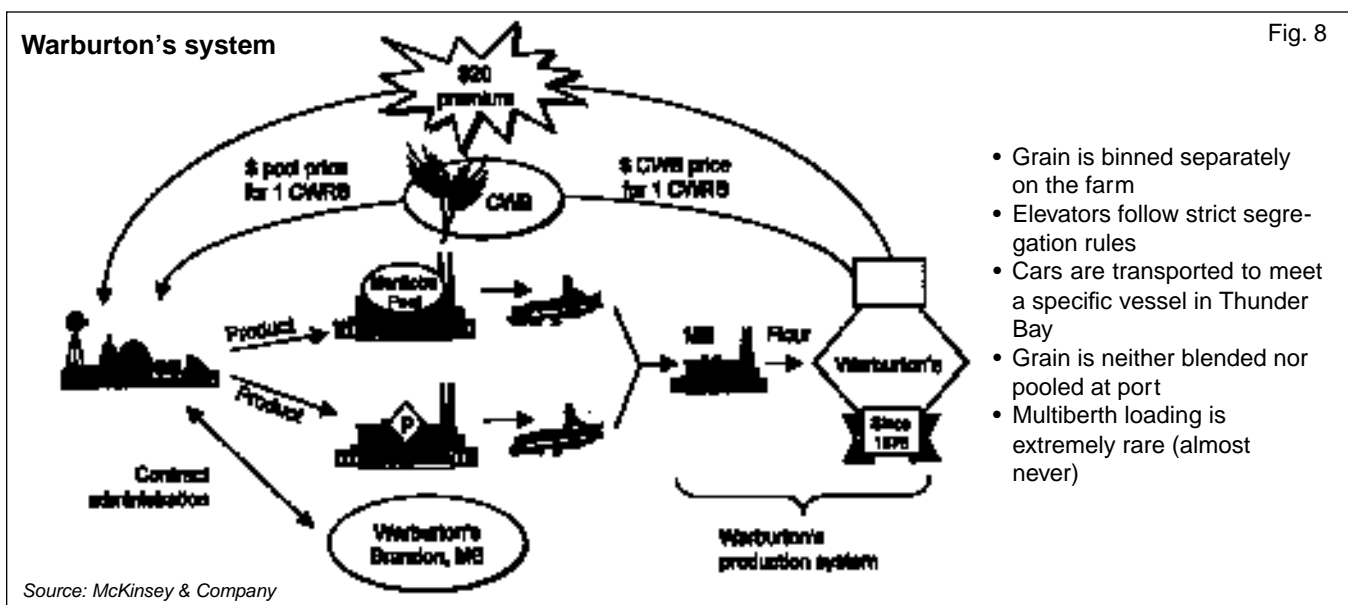
Most of these developments present challenges for the seaway system and will demand some imaginative thinking to turn them into opportunities.

There are a few questions (Fig. 9) that I suggest require an answer in the quest for the seaway to remain an attractive cost/service alternative for moving products from western Canada. In some respects these underscore issues that have recently been raised by Peter Cresswell of Algoma Central and other concerned industry leaders, but they bear repeating.

Fig. 9

Questions Facing the System:

1. Lower Costs?
2. Customized Service?
3. Evening the Flow?
4. Sustainability?
5. Strategic Approach?



The seaway's success will depend on its ability to retain existing traffic and be viewed as a viable transportation option.

1. Are there yet more opportunities to lower costs in the system?

The system must continue to do all that it can to keep its remaining grain, coal and potash traffic. The seaway doesn't have the scope to reduce costs through economies of scale as ship sizes are limited by lock dimensions and channel depths. Cost savings will have to come from joint management and labour efforts to gain efficiencies, remove redundancies and replace outmoded practices. This will involve cooperative efforts from terminal operators, shipowners and service providers. For example, voluntary consolidation of grain loading facilities, or development of a truly needs-based pilotage regime could contribute to cost efficiency. The western provinces continue to take an active interest in such issues as the review of pilotage and the operation of the new Saint Lawrence Seaway Management Corporation (SLSMC) in the belief that cost-effective services can result.

2. Can the system respond to the demands for a more customized approach to service?

The "iron highway" concept of providing scheduled train service for the trucking industry has resulted in the capture of traffic previously thought to be beyond the reach of the railways. Is there a place for regularly scheduled bulk carrier service that could cater to shippers of less-than-shipload volumes of specialty grains in bulk? This could be attempted as a co-operative experiment on the part of the Canadian bulker fleet operators, for example.

3. What can be done to better utilize system resources by smoothing fluctuations in traffic volumes?

With respect to the grain trade at least, shipments are not evenly distributed throughout the season. Although not new, the idea that incentive rates could be implemented to attract cargo during low utilization periods should be re-visited. As grain sales, handling and distribution techniques evolve in a more competitive framework, imaginative transportation pricing will have a place. Another example of unevenness in the system is the continuing inefficient practice of

multi-berth loading at the Lakehead, for which an institutional or commercial solution ought to be possible.

4. Are opportunities to ensure sustainability being seized?

Canada has committed to some very ambitious targets for reducing greenhouse gas emissions under the Kyoto Agreement. The marine mode is demonstrably the "best" mode from the point of view of reduced emissions in virtually any situation where speed of delivery is not paramount. To date, however, most of the analysis being undertaken by the Freight Transportation Table seems to be focussed on rail/truck modal shift implications. Is enough being done to promote the inherent advantages of the marine mode? The conclusions of the 1993 Great Lakes Commission study on the environmental impact of modal shifts are even more pertinent today, and must not be lost on policy makers.

5. Are seaway proponents actively engaged in strategic planning with other transportation decision makers?

This is probably the most critical question of all. As mentioned earlier, the western provinces are engaged in various sophisticated strategic planning exercises with various partners in Canada and the US. This includes: workshops on railway issues; joint approaches to the federal government on infrastructure and regulatory issues; multi-stakeholder initiatives on corridor development; cooperative international projects to reduce border delays; and so forth. Are seaway interests making sure that they are participating in critical strategic and planning efforts by these governments? It is interesting to note that the western provinces are represented on the new Vancouver Port Authority board, but are not involved in any way with the governance of the SLSMC. Yet, fully one-quarter of seaway traffic comes from the three prairie provinces.

Another opportunity that could be explored on a truly regional strategic basis is the possibility of attracting

The seaway and western Canada can succeed together.

US grain from northern areas of the US midwest states through the seaway system via Duluth, rather than the Mississippi routing. If north-south corridors are the wave of the future, then why not determine if they can be used to advantage?

Strategic deliberations are going on throughout the continental mid-west on both sides of the border. The seaway must get involved, take an active role in the discussions and develop some strong allies.

Someone said that "not aggressively searching for answers is the same as napping through a revolution". Think of what might have not happened if these learned points of view had held sway:

- T. Watson, IBM chairman in 1943: *"I think there is a world market for maybe five computers."*
- K. Olsen, chairman Digital Equipment Corp. 1977: *"There is no reason anyone would want a computer in their home."*
- Bill Gates, 1981: *"640K ought to be enough for anybody."*

The Saint Lawrence Seaway System has been an integral part of western Canada's economic success for 40 years. Times and circumstances are rapidly changing. There is a revolution going on in western Canada. It is vitally important that the seaway do all it can to understand and react with due dispatch, to ensure its role as western Canada's "Gateway to the East". Canada needs a viable alternative mode and route to provide balance and security and to ensure that we have access to all parts of this global economy.

Thank you/Merci Beaucoup.

The Western Transportation Advisory Council is a non-profit association of major organizations in the Western Canadian transportation system. Since 1973, WESTAC has been a unique and powerful forum dedicated to the advancement of the Western Canadian economy through the continued improvement of the region's transportation system.

WESTAC's strength is its active and diverse membership of business, labour and government leaders, supported by a focused, professional secretariat. Members include carriers, shippers, ports and terminals, labour unions, and the three levels of government. Member organizations are represented by their senior people—executives, ministers, and labour leaders.

The Council is not a lobby group; rather, it aims to focus attention on and provide impartial information about critical transportation issues. It is founded on the view that issues are best resolved through a non-confrontational, non-adversarial approach.