

MONTREAL PORT AUTHORITY

VISION 2020

Achieving Long-Term Sustainable Development



Mubashir Jamal prepared this case with the assistance of Mr. Jean-Philippe Paquin. This case is solely intended for use in the 2009 John Molson Undergraduate Case Competition (JMUC C) being held from February 22-28, 2009 in Montreal, Canada. The author has used a combination of primary and secondary research; the sources for the secondary research have not been disclosed for the duration of the case competition.

February 27, 2009 – As Patrice M. Pelletier, CEO of the Montreal Port Authority (MPA), gazed outside his window, he wondered what decision he would recommend to the Board of Directors (BOD) at the coming Monday’s *Strategic Planning* meeting. Mr. Pelletier had only three days to finalize his recommendation on which site to select to build the new port terminal to further pursue the MPA’s ambitious Vision 2020. Mr. Pelletier reviewed the article on his desk and recalled the opposition that Loto-Quebec and Cirque du Soleil faced in 2005; local community groups succeeded in stopping the joint venture that promised to build a new casino, a luxury hotel and a permanent Montreal home for Cirque du Soleil just in the outskirts of Downtown Montreal. He recalled that other recent projects in Quebec, such as the Griffintown project, the Suroît power generation project and the Rabaska liquefied gas terminal, all faced strong opposition; Quebec was a challenging province to launch large projects. Mr. Pelletier wondered if the MPA would face similar opposition: “We’re definitely not going to face the same type of opposition, but it would be naive to think the MPA would have no opposition at all, especially with minimal public awareness...” Mr. Pelletier looked at the blue prints of the two proposed sites for the new terminal: “There’s no significant cost advantage between the new Montreal East site or the existing Contrecoeur site, but there are other factors that need to be addressed in going forward with the site selection.” Mr. Pelletier needed to differentiate the sites and determine what criteria were absolutely critical for the BOD. He wondered: “Which stakeholders would the MPA need to consider? How would the MPA meet stakeholder needs? What potential partners to seek and what would be the partnership structure? What would be the action plan for the MPA and its selected partners, for the 5 to 7 years before the terminal is in service? What would need to be considered in the long-term? And what to make of recent discussions with the BOD that the MPA should consider becoming a terminal operator...” Mr. Pelletier knew that he had his work ahead of him in developing a long-term sustainable strategy and action plan, one that addressed all stakeholders and was inline with the MPA’s Vision 2020...

BACKGROUND

The Montreal Port Authority (MPA) is an autonomous federal agency created in accordance with the Canada Marine Act. It does everything within its power to make the port as competitive as possible, and takes pride in providing top-notch infrastructure to

shipping lines, land carriers, terminal operators and shippers. It does not receive any public funding, and finances majority of its own projects.

The MPA's mandate is to facilitate domestic and international trade, and thereby contribute to the attainment of local, regional and national socio-economic objectives. The MPA is committed to providing highly efficient facilities and services while respecting the environment. It increases and promotes the competitive advantages of the Port of Montreal.

The MPA is an international port linked to more than 100 countries around the world. It is a member of a select club of ports, which handle more than one million TEU (twenty foot equivalent units, or containers) each year. The MPA is a leader on the North Atlantic container market, serving year-round such markets as North Europe, the Mediterranean, Central Canada and the U.S. Midwest and Northeast.

The MPA operates the world's largest inland port. It is a leader among container ports, handling 26 M tones of cargo annually. In 2007, the MPA handled a total of 1,363,021 containers TEU. Through its activities, the MPA generates 18,200 jobs and CDN \$1.5 B in economic spin-offs for the City of Montreal.

While New York is the leading port on the North American East Coast and serves an enormous local market, Montreal is the foremost port to Chicago and the Midwest market, not only from Northern Europe, but also from the Mediterranean and Latin America. Along with the province of Quebec, Central Canada and the Midwest, this enables the MPA to serve a market of 135 million inhabitants. Montreal is located 1,600 kilometers (1,000 miles) inland. Having its own railway system allows the MPA to directly transfer goods from ships to train cars very efficiently. This makes Montreal one of the cities in the world where proportionally, less trucking and more rail transportation are used to ship goods in and out of the Port, a sustainable competitive advantage.

MPA's success, in the face of economic malaise, in large part hinges on location. It's healthy cargo traffic is a result of its geographical position and the speed with which it can process goods coming to and from the over 100 countries with which it does business. Cargo shipped via Montreal from Germany, for example, takes just less than 10 days to reach Chicago, compared with almost 12 days via New York. Because Montreal is so far inland from the Atlantic coast, the MPA has the edge over many of its Eastern Seaboard competitors.

An integrated transport and distribution system also contributes to the port's competitive edge. The MPA operates 100 kilometers of railway (including rolling stock) that connect to its berths and terminals and which, in turn, feed into the networks of the two major Canadian railways, CN and CP. The MPA is also linked to a major highway system and operates a grain terminal and a marine passenger terminal. Private stevedoring firms operate all other terminals. Moreover, the port's customer base is fairly diversified. It is not reliant on one major market such as the United States or China, two of the countries

most affected by the current economic meltdown. Imports and exports are almost equally balanced, with 55 per cent of goods leaving Canada and 45 per cent coming in.

A leader among container ports serving the North Atlantic, the MPA handles highly-diversified cargo: containerized and non-containerized general cargo, grain and other dry bulk, petroleum and other liquid bulk products. Its export and import container traffic is such that it fosters economies of scale, allowing shipping lines to offer regular, high-frequency services which are particularly appreciated by companies requiring just-in-time delivery.

Of all the ports along the North American East Coast, Montreal is the one that offers, year-round, the fastest, most direct and most economical access to major markets in Central Canada, the U.S. Midwest and the U.S. Northeast. Ships need only stop at one port - Montreal – to access these vast markets. Majority of shipping lines offering regular service to the MPA fully unload and load their vessels here, offering considerable savings in time and money. Transatlantic, rail and road links interconnect to shorten distances and reduce door-to-door cargo transportation costs.

THE TRANSPORTATION AND INTEGRATED LOGISTICS INDUSTRY

A port is essentially a point where goods are transferred from one mode of transport to another. In an era of economic globalization, ports are evolving rapidly from being traditional land/sea interfaces to providers of complete logistics networks. This means that ports have had to face many challenges due to unpredictable environmental changes and trends in the shipping, port and logistics industries.

Globalization has been the most influential phenomenon among the major trends in the world economy over the last two decades. It has been recognized as an inevitable technologically driven process that has dramatically increasing commercial and political relations between people in different countries. Unlike most of the 20th century, during which production remained national, industrial production has become increasingly international over the last 20 years increasing competition among businesses the world over.

There are close to 600 container ports across the world with an estimated combined handling capacity of 442 M TEU. The largest ports that handle in excess of 1 million TEU per annum, account for nearly two thirds of global capacity. The MPA currently has capacity to handle 1.6 M TEU annually, though is reaching near full capacity. **See Table 1 in the Appendices.**

TRANSFORMATIONS IN THE INDUSTRY

Liberalization of trade in goods and services, new integrated transport networks and information communication technology (ICT) developments have created unprecedented business opportunities for the transportation and integrated logistics industries. Increased levels of competition have also resulted in public sector and private sector organizations

recognizing the need to move from national and regional business strategies to global business strategies.

Achieving cost reductions and maintaining and improving product quality while responding to customer demands requires new business tools, which will enable companies to improve their competitiveness in the global market. Manufacturing companies are thus taking a greater interest in managing the total supply chain from the multiple sourcing of raw material to the production and the final distribution of the finished product. Manufacturing companies are also taking steps to establish regional logistics/distribution centers, especially around port hinterlands, to improve their competitiveness by reducing inventory and raw material procurement costs, and by providing swift, customer-oriented just in-time (JIT) services and value added logistics services. While the MPA does not actively pursue the manufacturing segment (high volume customers of the port) competing ports have begun to solicit multi-national corporations to setup manufacturing facilities close to port operations, sometimes within port premises.

These trends in logistics and supply chain management are accelerating as tariff and non-tariff barriers, including customs procedures, are streamlined. Increasing international trade volumes, coupled with the adoption of standardized containers to move cargo have fundamentally changed the shipping industry. Standardized containerization has led to the design and introduction of ships of increasing size and capacity. There are significant economies of scale for shippers in building larger and larger ships, but the looming introduction of mega-sized vessels will require new investment in infrastructure to support these ships. The recent introduction of vessels with capacity of 8,000 TEU, along with future introductions of vessels with capacity of 18,000 TEU further justifies the creation of large hub and spoke systems that can accommodate inter-modal solutions. Currently, the largest vessel MPA has served is of 4,200 TEU, though electronic navigation can allow the MPA to service vessels up to 6,000 TEU. Mr. Pelletier noted: "Ship width is a current limitation for the MPA; due to navigation rules on the St. Lawrence, these rules prohibit wider vessels from meeting on the channel, because some points are too narrow. We will never have the required draft to accommodate vessels of 12,000 TEU." Mr. Pelletier wondered if the MPA would be at a disadvantage in the should the trend towards larger vessels continue to grow as it appeared in some Asia and European routes.

HUB AND SPOKE NETWORK

In the last two decades, the hub and spoke system in liner service has developed as larger containerships have been adopted on major sea transport routes such as the Europe-Far East-American West Coast route. The large ships on the east/west routes will call mainly at transshipment hubs where containers will be shifted to multi-layered feeder subsystems serving north/south, diagonal and regional routes. These events have important implications for both the viability of port owners and operators, and on how the network for shipping services will continue to evolve. This is an important consideration for the MPA in how these events will impact Vision 2020.

While different views exist between carriers and shippers on the merits of the hub and spoke network, its evolution will ultimately be determined by the balance of power between carriers and shippers. For carriers, economies of scale are critical, while for the shipper, total freight rates, time and service quality are more important. The more cost efficient the network becomes from a carrier's perspective, the less convenient that network could be for the shippers' needs in terms of frequency and flexibility. The development of the hub and spoke network has increased competition between ports to offer hub services, and the MPA anticipates intense competition in this regard.

As hub port competition intensifies, ports must increasingly focus on achieving cost reductions for shippers, and on providing value-added services around port facilities. Logistics systems cannot be explained simply in terms of the customer's needs, such as transit time and better services. The hub and spoke system are also related to the regional or local characteristics of the final destination, such as the existence of major ports in the vicinity of the final destination, land transport networks and land transport cost from nearby major ports around the destination to the final delivery place, the existence of another hub port with lower total logistics costs close to the final destination, the amount of cargo volume available and so on.

Dedicated logistics zones in the areas immediately surrounding ports, referred to as hinterland, which facilitate smooth inter-modal movements of goods and ensure goods reach their final destinations quicker and more cheaply, are one way of value-adding to port facilities. The MPA has invested heavily in dedicated logistics zones but will have to continuously invest in this area to remain a hinterland port leader.

As a result on increasing demand for inter-modal solutions, ports have been developing their physical infrastructures, especially container terminals and related facilities, and expanding their port hinterland. Much of these development are linked to many ports carrying out regulatory and procedural reforms, including port governance restructuring, transferring ownership to private operators and streamlining regulation. Currently, the MPA is a subsidiary of the Federal government, and while operating as a crown corporation, the senior leadership teams of many government-operated ports questioned if maintaining a federal status will become a disadvantage in the medium and long-term in terms of staying efficient and competitive.

Freight forwarders will arrange the most economic transport routes that will satisfy the shippers' needs after considering whole transport networks. Some shippers may prefer a lower transport cost with relatively long transport times, while some other shippers may be in favor of quick transport times with relatively higher payment. Logistics costs are, therefore, one of the major elements influencing competitiveness and productivity in the globalization of manufacturing and material outsourcing. The ability to source finished or partially manufactured goods and intermediate goods in areas of low cost has been at the centre of the globalization of industries. The total logistics costs are estimated to reach up 20 per cent of total production costs in Organization for Economic Co-operation and Development (OECD) countries. Transport usually accounts for a quarter of total logistics costs in OECD countries, storage for a fifth and inventories for a sixth. This

means that low transport costs along with information technology development have made it possible for companies to globalize their manufacturing, outsourcing and logistics systems, and logistics costs already occupy a major portion of total product cost. Taking into account this current situation in terms of the globalization of world industry and increasing pressure on current logistics costs, shippers and shipping lines cannot disregard cost aspects, and this adds pressure to the MPA of maintaining efficient operations.

Shipping lines, which are a capital intensive and risk high industry, have suffered low profitability over past decades even though they are making good profits due to the increases of recent freight rates and significant world container volume increase during the period of 2003-2004. This means that shipping lines must try to reduce the fixed cost incurred because the recent boom will not continue, and the efforts for better profitability may not be negotiable due to strong resistance to freight rate increases among shippers. Shippers have already shown strong resistance to freight rate increases on the part of some liner conferences in recent years.

Recently most ports have introduced incentives to promote transshipment, such as offering longer storage periods, lower handling charges and reductions in port tariffs for larger shipping lines. Moreover, most shipping lines have been introducing vertical integration by transforming their role from shipping carriers to global logistics providers covering logistics supply management, distribution and global logistics and value-added services. The role of shipping lines is evolving to include offering total logistics services. This transformation further put downward pressure on traditional port authorities like the MPA as the trend minimizes revenue opportunities for the MPA to only tariffs and rent collection.

PORT REFORMS, DEREGULATION AND CHANGING ROLES

In most economies in this 21st century, public/private partnerships to finance port investments and manage port facilities have been commonplace for many years. The first port privatization occurred in the United Kingdom in 1983 when the government sold a 49 per cent stake in Associated British Ports. In the following year the remaining 51 per cent was also sold. Between 1990 and 1998 some 112 port projects with private participation reached financial closure in 28 developing countries with investment totaling more than US\$ 9 B. Many governments have accelerated deregulation of economic activities and decentralization of decision making, with the objective of reducing demands on the public sector budget, increasing financial viability and improving productivity and efficiency in the port industry. The United Kingdom alone has raised some US\$ 121 B through its privatization program whilst globally the figure stands at well over US\$ 1 trillion.

There are four types of port management models:

1. Service port
2. Tool port

3. Landlord port
4. Private service port

Except for small ports with small portion of commercial activities, most port management or port authorities in the world are categorized into landlord port with a few exceptions as a result of recent privatization process or participation of private sector in the port sector. **See Table 2 in the Appendices.**

For privatization basically there are three distinct and essential elements of a port, which should be carefully considered:

1. Port regulator
2. Port landowner
3. Port operator

Firstly, regulatory activities within a port will generally be related to duties and responsibilities such as enforcing regulations and providing pilotage services and vessel traffic management, most of which will have been established by statute.

Traditionally, a government body conducts this function. A port authority may also be expected to monitor the performance of the port, coordinate policy making with local and national government bodies, plan for future expansion, and market and promote the entire port and its facilities to users.

The second element is port land. The key tasks a port landowner will need to undertake include:

- Managing and developing the port estate
- Conceiving and implementing port policies and development strategies
- Supervising major civil engineering works
- Providing and maintaining channels, breakwaters, locks, turning basins, berths, piers and
- Wharves
- Providing or arranging road access to the port complex.

The third element is operations, which may include a range of value-added activities and free trade zone related activities within the port estate. Most private participation takes place in this element. Currently, the MPA acts as the Port Regulator and Port Landowner while operations are privately operated.

See Table 3 in the Appendices. Table 3 shows all three of key port elements of privatization options. In this framework, most world ports are considered as PRIVATE/I in which only port operations are carried out by the private sector. This PRIVATE/I type is a similar concept to the landlord port. In 1999, 88 ports out of the top were PRIVATE/I and seven ports were PUBLIC. The reason that most ports have adopted the PRIVATE/I model is that this model allows the state to leverage private sector investment in its ports without losing either control of its port industry or ultimate property rights with respect to

port land, often linked to security concerns. This model in practice has shown a reasonably positive outcome for private port operators, for the state and for port users. However, some countries, such as Hong Kong, China and South Africa, have adopted *corporatization* models which are essentially private style companies but under the control of government. Other countries such as Poland have adopted a mixture of public, at both a state and municipal level, together with private interest. While currently the MPA is using the PRIVATE/I model, global trends could shift the MPA to adopt a PUBLIC model and conduct operations, or adopt a PRIVATE/II model and transform the MPA into a private corporation, similar to Bell Enterprise and Air Canada.

Governments must pay careful attention to the need for port management organizations to change in order to meet national objectives and economic strategies, customer's needs and to cope with rapidly the changing maritime environment. Ports must look outside their immediate jurisdiction as a focus of their future development. Such strategies fall within a perspective of port regionalization where a port seeks a closer integration with the supply chains of its hinterland.

GLOBAL CONTAINER TERMINAL OPERATORS

Increase of world trade volume and introduction of larger container ships require quality services and productivity in the stevedoring industry, and have increased the importance of the role of the industry. The privatization of port activities throughout the world has also increased the participation of global terminal operators, especially in container port operations.

Recently, global terminal operators have penetrated the global container stevedoring market more aggressively in order to increase their competitiveness through the establishment of global networks. Active horizontal integration of terminal operators has appeared in forms of mergers and acquisitions, investments for container terminal development in other countries through joint ventures with local companies, other global terminal operators or shipping lines. Examples are Hutchison Port's acquisitions of concessions at ports in China, Indonesia, the Republic of Korea, Thailand and Myanmar, and PSA's acquisitions in China and Brunei.

The leading terminal operators have developed diverging strategies towards the control of larger parts of the supply chain with clear understandings that the transport chain is viewed as a totally integrated system. The door-to-door concept has transformed a number of terminal operators into logistics organizations. The services offered include warehousing, distribution and value added logistical services such as customizing products for the local markets. Many terminal operators have been involved in inter-modal transport to create a land-bridge between ports and inlands, for example, by operating rail terminals, setting up road haulage companies or operating their own feeder services. Such vertical expansion includes the downstream diversification of shipping lines into terminal management.

Owing to these horizontal and vertical expansions, the top ten global terminal operators handled around 150 M TEU in 2003. For example, Hutchison Port Holdings (HPH) operates 219 berths in 39 ports in 17 countries along with a number of transportation related service companies. In 2003, the HPH Group handled 41.5 M TEU (HPH online). In 2003, the top five terminal operators in the world handled 118.4 M TEU, representing 52 per cent of world total throughput. **See Table 4 in the Appendices.** Table 4 shows the container throughput of the top ten global terminal operators and their capacity expansion.

In recent years, shipping lines have opted for their own dedicated terminals, which mean that traditional definition for stevedoring and carriers sectors is getting vague. As vessel size increase, the control available by integrating stevedoring with vessel scheduling becomes increasingly attractive. It is far from clear that dedicated terminals are cheaper – rather they represent an integration of the service to the customer.

HUB PORTS BECOMING GLOBAL LOGISTICS CENTRES

Increasing competition among hub ports has been growing as previously less developed ports in countries undergoing national economic growth have been developing port infrastructures to compete with the existing hub ports. As competition among ports has been increased, shipping alliances and major shipping lines have been taking advantage of their growing power in negotiating concessions for dedicated terminals and/or in deciding ports of call. Ports are losing their bargaining power and have been forced to provide deep water, quality services, productivity, efficiencies, infrastructures including rails and roads, all of which are frequently demanded by shipping lines with bargaining power created by great amounts of container volume. When a port fails to meet the shipping line's demand, it may lose its major clients. Ports and container terminal operators are under strong pressure from their clients, which means they are forced to take part in the competition among ports by actively enhancing productivity and investing a great amount of money in order to stay in the game.

The demands of shipping lines (customers of ports) exercising their growing bargaining power for lower port tariffs, quick turnaround times, accommodation of super large ships and many other quality services, and industry trends towards containerization, super larger ships, consolidated port operations, and concessions to global operators all have a significant impact on the MPA and the implementation of Vision 2020.

Many ports are faced with impediments to implementing their ambitious policies. For example, port development projects generally require a huge budget. In 1998, more than US \$20 B was earmarked around the world for port development projects, and this figure in 2009 will be significantly higher. Forty per cent of this, that is, US \$8 B, was in Asia alone, and this is a rather conservative estimate. To secure a port development budget, many ports have tried to attract private sector participants such as stevedoring companies or ocean carriers through deregulation and preferential incentives. This policy to attract private sector in port development is also aimed at improving efficiencies and productivity by utilizing the expertise of the private sector. Even if ports are successful in

attracting private sector participation in their development projects, they are still under pressure when attempting to secure their development budget because in many cases involvement of private companies is through a joint venture with the port authority (or other private sector organizations), or investment for part of whole structures.

The space for port expansion is usually scarce because port location is traditionally near the commercial centre of a city. Many ports have suffered from this problem when they try to establish an ambitious port development project, and the MPA is anticipating its fair share of opposition. Some ports have also been threatened by the local community's demand for commercializing the port area, introducing housing, waterfront parks and other commercial developments. All this means that the land price in the port area may be too expensive to maintain logistics activities. In case of developing inter-modal facilities, there are many government bodies involved, which means there are likely to be difficulties in coordination among government organizations involved. This will act as a barrier to the promotion of multimodal logistics because of the lack of consensus and the different priorities among the organizations. Ports also face a plethora of environmental legislation, which makes the procedure for obtaining consents more complex and more time consuming. It is, of course, important that there is legislation in place to provide adequate safeguards to protect the environment. Ports, by definition, have to be at the sea-land interface and the coastal zone tends to be an area where environmental sensitivities are high. The MPA would face resistance in further implementing Vision 2020 from a varied set of groups, including environmentalists.

Many companies have experienced significant cost savings through integrating existing logistics places into a few integrated logistics centers, and some other companies have achieved success in penetration of specific markets by thorough localization strategies such as quick response times or different design and functions. In this way, ports have a great chance to play an important role as the centre of global logistics activities. However, because business structures of supply chain networks are decided wholly by a company's specific strategy, ports dreaming to become a hub have been struggling to meet and provide the global standard in terms of hardware and software by investing for world class infrastructures and by experimenting with several policies. One of the major trends in port industry is to develop logistics related zones such as free trade zones or international logistics zones to accommodate value-added logistics activities and to attract global logistics companies. The advantage of special logistics-oriented zones (whether or not they are designated as free trade zones providing tax related incentives) is that they attract foreign investment and create new employment. In addition, successful logistics zones are able to secure freight volume, which may be generated by established logistics companies, and to develop their ports as hub ports. Many ports have been trying to develop their ports towards hub ports to take advantage of these benefits through developing the necessary infrastructures and marketing a variety of advantages and incentives. Thus, competition among ports towards global logistics centers or global load centers is getting more intense.

Considering this growing competition among global logistics centers, most ports have been actively trying to attract regional distribution centers of multinational logistics and

manufacturing companies. In this regard, ports and governments are placing great emphasis on establishing strong support from governments, which may guarantee a reliable business environment and quality administrative support.

MPA VISION 2020 – TAKING ACTION

Mr. Pelletier reviewed the Vision 2020 Strategic Plan that was initially created by the MPA to lobby support from relevant stakeholders: “Vision 2020 is going to create an additional CDN \$2 B in economic impact while supporting 23,200 jobs in Montreal and surrounding regions. Surely the public at large will want the economic benefits of going forward with Vision 2020.”

Given that the MPA was reaching capacity of its 1.6 M TEU, in order to keep up with competing ports, all of whom were adding capacity, the MPA needed to invest in building infrastructure for additional capacity, especially to further develop its end-to-end inter-modal port model. With the implementation of Vision 2020, the MPA would increase TEU handling capacity from 1.6 M TEU to 4.5 M TEU by 2020.

INFRASTRUCTURE

The MPA will undergo several major infrastructure projects in order to maintain Montreal's leadership position on the eastern North American seaboard and ensure sufficient capacity is available.

Although expanding container capacity will be the primary focus, other projects, such as maintaining existing infrastructure, are also critical. Additionally, the marine passenger terminal will have to be rebuilt, providing the opportunity to redevelop the Alexandra Pier into a tourist landmark worthy of Montreal's waterfront. The MPA's container expansion projects are divided into four phases:

1. Phase 1 – Optimization: Maximizing existing infrastructure is the fastest and most cost efficient way to ensure short-term capacity requirements.
2. Phase 2 –Reorganization: Transforming existing lands into container terminals will increase medium-term capacity by 2011.
3. Phase 1 – Terminal Expansion I: A new terminal will be built in East end Montreal or at Contrecoeur in order to provide significant additional capacity by 2014 - 2016. The MPA anticipated that the public and private sectors are will help finance, develop and select the optimal location.
4. Phase 1 – Terminal Expansion II: A second major expansion will be necessary by 2020 to further expand capacity and facilitate growth. Its exact timing and location will be dependent on the first expansion phase.

SITE COMPARISONS:

The MPA operates 25 kilometers along the Island of Montreal, in addition to a potential new facility 40 kilometers up the St Lawrence River at the Contrecoeur site. A key

strategic decision concerning Vision 2020 is which site should the MPA select to build the terminal. **See Figure 1, Figure 2 and Figure 3 in the Appendices.** The terminal would be developed either on the Montreal East site, or on the Contrecoeur site, and the decision would impact the MPA's long-term ability to remain as a global hinterland port and expand capacity past 2020. Mr. Pelletier noted the following comments concerning the two sites:

Site 1 – Montreal-East

- Brownfield site
 - Has been used for liquid bulk, currently used for dry bulk
 - Existing docks
 - Industrial/refinery area
 - Some contaminated soils
- On the Island of Montreal
 - Close to market
 - Near residential areas
 - Notre-Dame street crosses through planned terminal area
- Rail access provided by CN
 - Sufficient tracks available for 10-12,000 feet train assembly maneuvers, but many road crossings that would require new grade separations (overpass)

Site 2 – Contrecoeur

- Greenfield site
 - No planning constraints
 - Requires some dredging
- Off the Island of Montreal
 - Away from market
 - Geographic dispersion of port activities
 - Economic impact not as concentrated in Montreal
 - Less road congestion
- Railway access provided by CN
 - No planning constraints for on-dock and train assembly tracks
 - Existing tracks pass through three significant residential areas
- Ample space available for future expansion
- Space available for 3 terminals in total, and for logistics platform development

ECONOMIC IMPACT:

The Vision 2020 plan will have quantifiable economic impacts to the local, regional and national economies. By 2020, it is estimated that the MPA will generate nearly CDN \$3.4 B in value-added GDP. This represents an increase of nearly CDN \$2 B from the current level of CDN \$1.5 B. Furthermore, the implementation of the Vision 2020 plan will support an additional 23,000 jobs by the year 2020. In addition to the ongoing annual contributions to value-added GDP and employment from the port's growth, the construction of infrastructure Phases I, II and III alone are expected to generate CDN

\$740 M in additional GDP and 10,000 jobs. Taking immediate action will allow Montreal to maintain its competitive advantages on the Eastern Seaboard and continue harvesting growth in collaboration with its strategic partners.

BOOSTING CRUISE SHIP TRAFFIC

Redeveloping the Alexandra Pier is only the first step in a bigger process that will be undertaken - in partnership with the public and private sectors - to redevelop the Pier into a unique tourist destination and landmark in the heart of Montreal's waterfront. Given that boosting cruise ship traffic would be outside the core competency of the MPA, Mr. Pelletier needed to consider the partnership opportunities, both from an infrastructure development and traffic perspective.

FINDING THE BALANCE BETWEEN PUBLIC AND PRIVATE FUNDING

The MPA estimates that over \$2.5 B CDN will need to be invested in the region in order to finance the Vision 2020 plan. The MPA seeks to engage public and private partners in order to finance these projects, with at least \$450 - 650 M required in government support to ensure the timely construction of the infrastructure, enhance safety and security, and to improve the environment. Given the current economic crisis in Canada, Mr. Pelletier lacked a contingency plan if the government failed to invest in the infrastructure. Where should the MPA seek private funding, and at what costs? How would this impact the PRIVATE/I port management model the MPA operates under?

BECOMING A HOUSEHOLD BRAND IN THE MONTREAL COMMUNITY

On August 31, 2008, the MPA welcomed more than 100,000 visitors from the region who were able to discover the Port of Montreal and its economic importance to the region, Quebec and Canada. Such an initiative was a first for the MPA who traditionally did not play an active role in City of Montreal from a community perspective. Mr. Pelletier realized that obtaining the support from the local community would be critical to implement Vision 2020, especially Phase 3 and 4. He wondered: "How can the MPA become an active member in the community without being perceived as intentionally seeking positive publicity to pursue Vision 2020?" Mr. Pelletier recently acknowledged that the MPA would need to develop a long-term Community Relations strategy.

THE FUTURE

The transportation and integrated logistics industries were fast evolving, demanding billion-dollar infrastructure investments and shifting business strategies to global and inter-modal solutions. Mr. Pelletier knew a sustainable business strategy needed to be developed, one that would position the MPA as a global hinterland port leader, allow it to build additional capacity through infrastructure investment and was welcomed by the City of Montreal and all of its impacted stakeholders. Mr. Pelletier wondered what the MPA's action plan should be in pursuing the full implementation of Vision 2020...

APPENDICES

Table 1: Capacity Utilization Global Ports by Region

(million TEUs)	2002			2008		
	S	D	U (%)	S	D	U (%)
North America	47.9	34.2	71.4	58.6	45.9	78.33
North Europe	50.2	34.7	69.12	64.3	49.2	76.52
South Europe	34	22.9	67.35	49.4	34.7	70.24
Far East	109.4	86.6	79.16	154.3	154.3	100
South East	55.3	40.8	73.78	67.9	69.5	102.36
Middle East	19.3	13.5	69.95	26.8	22	82.09
Central America	15.2	10.6	69.74	18.9	16.1	85.19
South Africa	14.4	8.4	58.33	16.5	14.6	88.48
Oceania	9	5.9	65.56	9.6	8	83.33
South Asia	8.1	6.8	83.95	14.2	12.8	90.14
Africa	11.4	8.3	72.81	14.6	11.5	78.77
East Europe	3.9	1.7	43.59	6.2	3.4	54.84
Global	378.1	274.4	72.57	501.3	442	88.17

S = Supply (Capacity in TEU million)
D = Demand (Throughput in TEU million)
U = Utilization (Throughput/Capacity)

Table 2: Basic Port Management Models

Type	Infrastructure	Superstructure	Port Labour	Other Functions
Public Service Port	Public	Public	Public	Majority Public
Tool Port	Public	Public	Private	Public/Private
Landlord Port	Public	Private	Private	Public/Private
Private Service Port	Private	Private	Private	Majority Private

Table 3: Key Port Elements - Privatization Options

Port Models	Port		Operator
	Regulator	Landowner	
PUBLIC	Public	Public	Public
PRIVATE/I	Public	Public	Private
PRIVATE/II	Public	Private	Private
PRIVATE/III	Private	Private	Private

Table 4: Container Throughput by Global Terminal Operators

Handling Volume (million TEU)				Capacity (million TEU)			
	2002	2003	Increase (%)		2002	2003	Increase (%)
Hutchison Port	36.7	41.5	13.1	Hutchison Port	44.2	48.9	19.5
PSA Corp.	26.2	28.7	9.5	PSA Corp.	34.5	37.2	6.9
APM Terminals	17.2	21.4	24.4	APM Terminals	23.3	24.4	4.6
P&O Ports	12.8	16	25	P&O Ports	18.1	21.5	18.9
Eurogate	9.5	10.8	13.7	Eurogate	11.3	12.9	13.9
Cosco	4.7	7.4	57.4	Cosco	6	9.4	56.1
Evergreen	5.7	6.7	17.5	Evergreen	6.9	9.2	32.6
Dubai Port International	5.3	6.5	22.6	Dubai Port International	6.8	8.3	21.6
SSA Marine	4.4	5.4	22.7	SSA Marine	6.1	7.7	25.8
APL	4.3	4.9	14	APL	6.8	7.5	9.6
Total	126.8	149.3	17.7	Total	164	187	14
World Total Throughput	266	286.93	7.9				

Figure 1: Montreal-East Site

Phase 3: Montreal-East
Commissioning date
2014: 1 M TEU

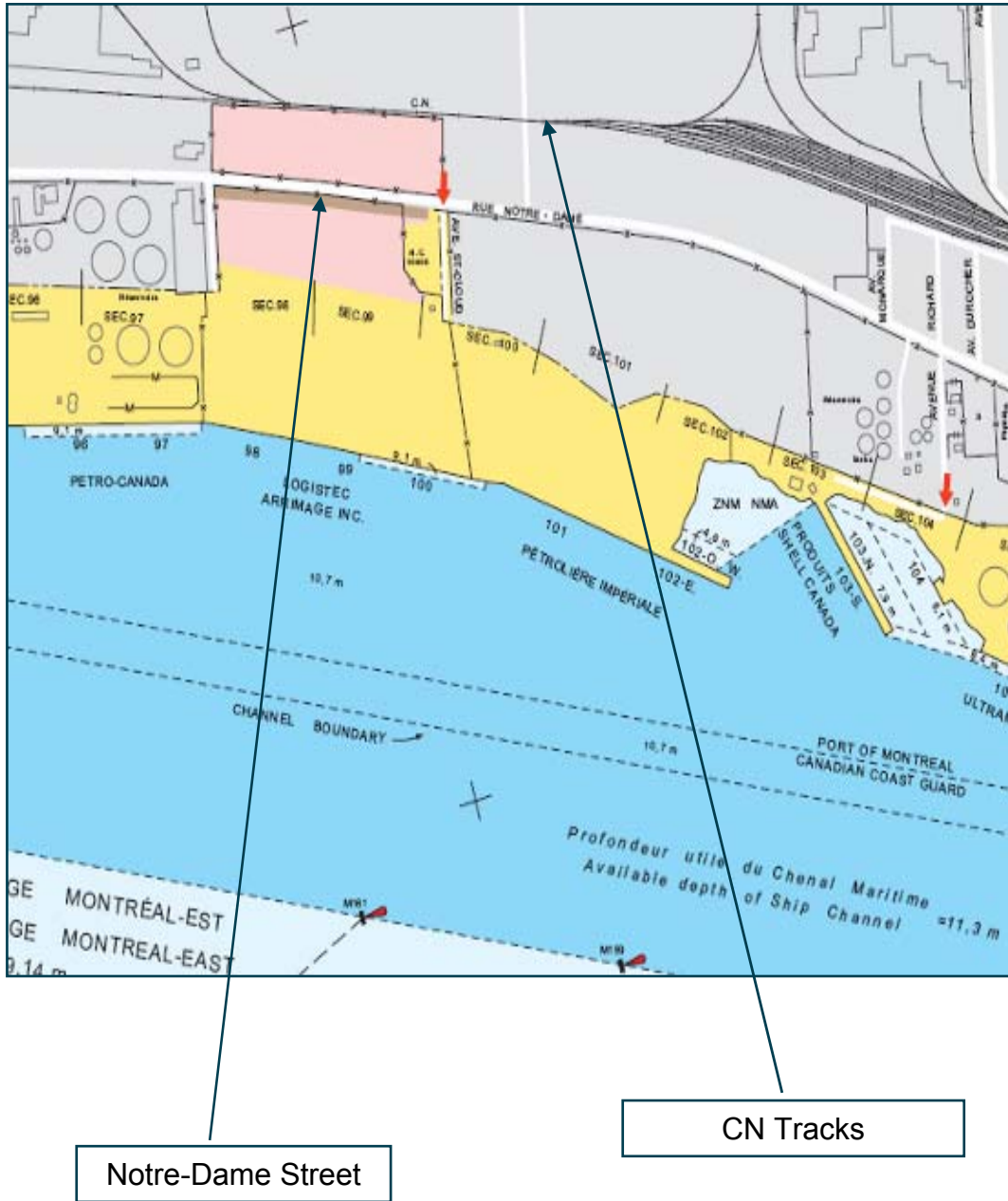
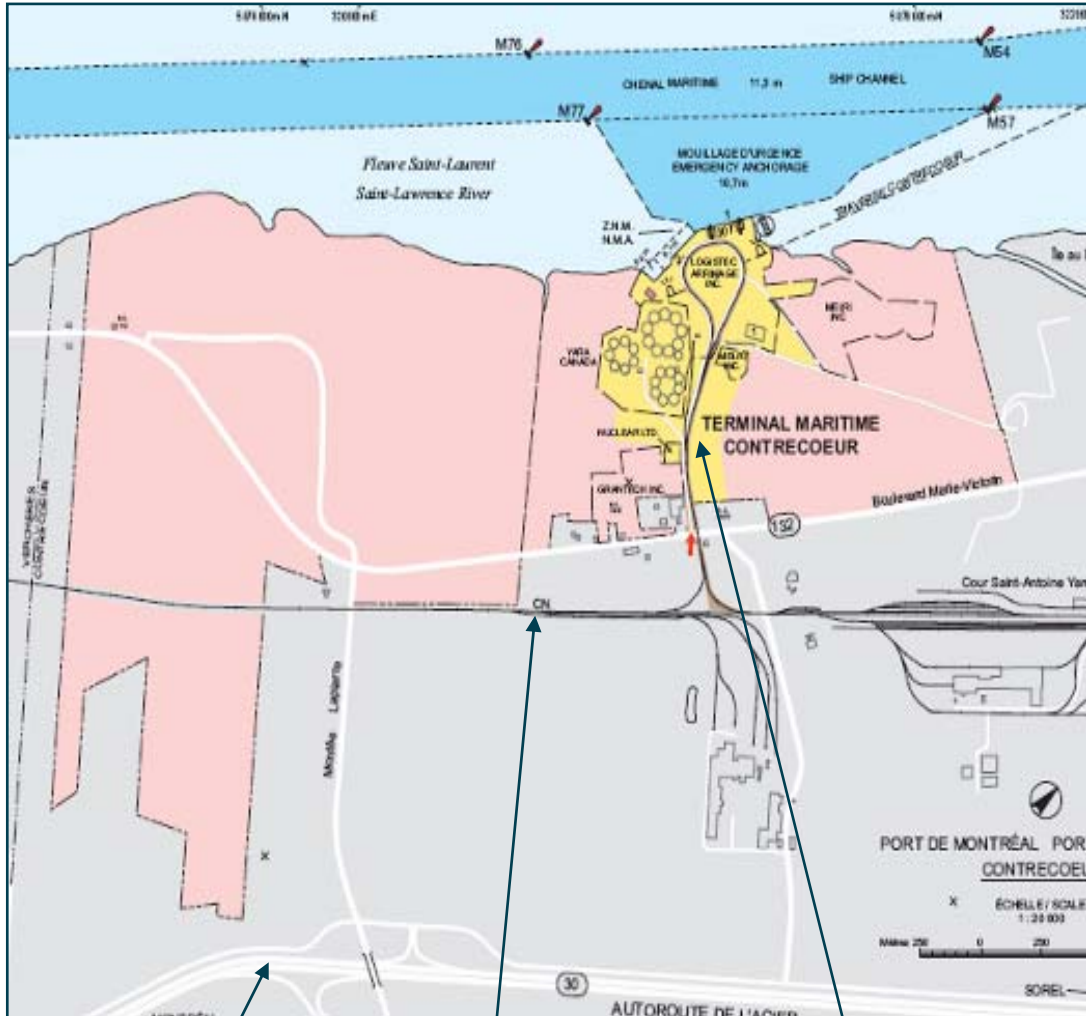


Figure 2: Contrecoeur Site

Phase 3: Contrecoeur I
Commissioning date
2016: 1 M TEU



Highway 30

CN Tracks

Existing bulk terminal, mostly used for iron ore.

Figure 3: MPA Road and Rail Infrastructure

