



In response to this drastic contraction in volume and rate levels, in mid-2008 ocean carriers began to reduce the amount of capacity deployed in many trades by cutting the number of vessels in their fleets or even entire vessel strings, as highlighted in the following tables.

Historical Review of Transpacific Services

Sources: Drewry's Annual Container Market Review and CI-online

Service Type	2003				2005			2008			Y-T-D 2009		
	# of Services	% of Services	% of Capacity	Oneway Capacity (TEU-mil)	# of Services	% of Capacity	Oneway Capacity (TEU-mil)	# of Services	# of Capacity	Oneway Capacity (TEU-mil)	# of Services ¹	% of Capacity	Oneway Capacity (TEU-mil)
West Coast (WC)	55	82%	83%	11.1	61	81%	13.2	53	76%	14.5	39	71%	11.6
Panama (PN)	11	16%	15%	2.0	14	18%	2.9	16	20%	3.8	15	22%	3.5
Suez (SZ)	1	1%	2%	0.2	1	1%	0.2	3	4%	0.8	4	7%	1.2
Total	67	100%	100%	13.4	76	100%	16.3	72	100%	19.0	58	100%	16.4

1) Includes the shutdown of Maersk's / CMA's TP2 service in Sept 2009

The table above shows that ocean carriers in the Transpacific trade have eliminated 14 separate vessel services in this trade since July of 2008. Only one of these services was an all-water service via the Panama Canal. Interestingly, traffic through the Suez actually increased by one service. The net result was a huge reduction in the Transpacific services (2.9 Million TEUs in each direction) to/from the U.S. West Coast with a slight increase in East Coast capacity.

Historical Review of Transatlantic Services

Sources: Drewry's Annual Container Market Review and CI-online

Service Type	2003				2005				2008				Y-T-D 2009			
	# of Services	% of Services	% of Capacity	Oneway Capacity (TEU-mil)	# of Services	% of Services	% of Capacity	Oneway Capacity (TEU-mil)	# of Services	% of Services	% of Capacity	Oneway Capacity (TEU-mil)	# of Services	% of Services	% of Capacity	Oneway Capacity (TEU-mil)
Atlantic/Gulf Coast (AGC)	17	81%	75%	2.5	17	74%	70%	2.5	18	78%	70%	2.6	15	88%	83%	2.4
Pendulum (PDM)	4	19%	25%	0.8	6	26%	30%	1.1	5	22%	30%	1.1	2	12%	17%	0.5
Total	21	100%	100%	3.3	23	100%	100%	3.5	23	100%	100%	3.7	17	100%	100%	2.9

Includes: Rationalization of service to/from Montreal, the closure of the N.Europe leg of Evergreen's NUE and Maersk's TP7 services

The Transatlantic trade also experienced significant declines in the number of services and capacity as demonstrated in the table above. This trade has seen its one-way capacity fall by 23% since July of 2008. Almost all of the contraction in this lane has come from removing ships out of pendulum deployments. The result of this change has been the termination of the European segment of those service rotations (while sustaining the Transpacific portion) and the consolidation of Montreal services.

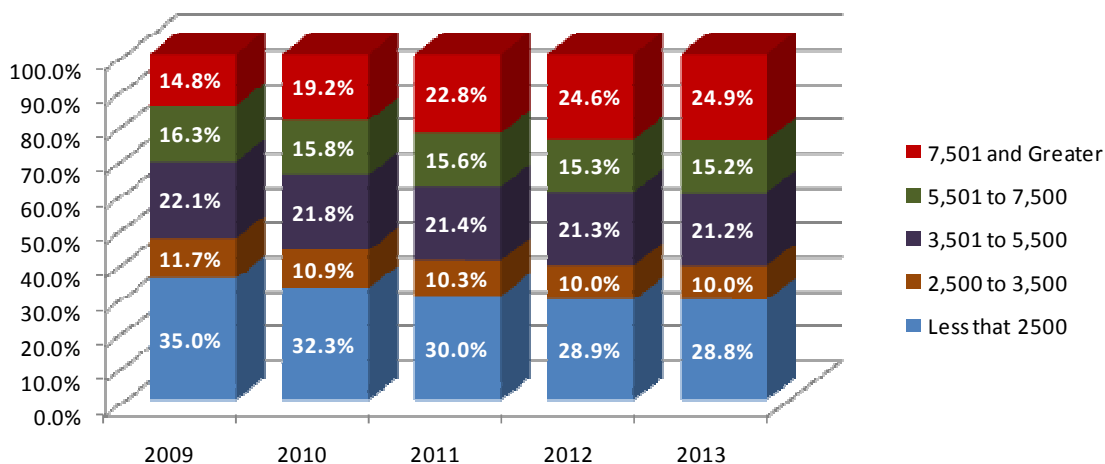
Near-term Market Conditions

While containerized volumes in all the major east-west trades experienced double digit declines in 2009, delivery of a large number of new vessels from the world's shipyards occurred simultaneously. The orders for these ships were placed well before most of the world's major economies began to contract. Additionally, many of these orders are for multiple Post-Panamax (PPX) vessels (ships' with a nominal capacity of 5,501 TEUs or greater and Super-Post Panamax (SPPX) vessels (ships' with a nominal capacity of 7,501 TEUs or greater). Additionally, these orders have delivery schedules that stretch out over several years, thus, the container vessel market will receive 326 new deliveries through 2013. These deliveries will cause the share of slots generated by PPX and SPPX vessels in the world's fleet to increase by nearly 10%, as shown in the following chart.



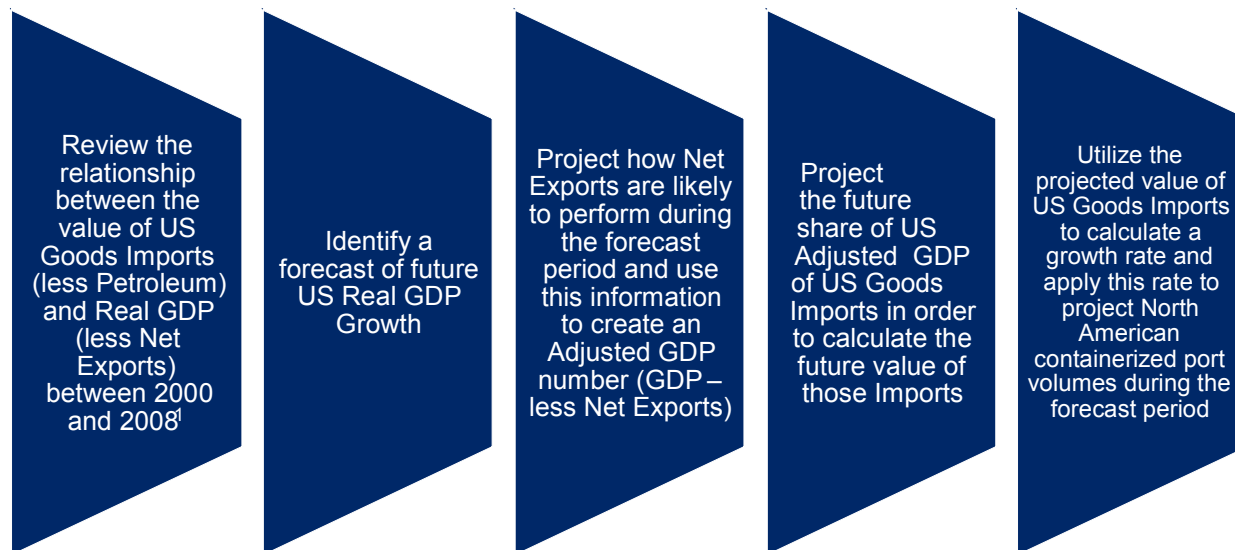
Forecasted Share of Slot Capacity by Size Category as of December 2009

Source: CI Data



In order to better illustrate the market conditions that will be in place when this new tonnage comes on-line, Mercator constructed a near-term forecast of North American port container volumes, based on the methodology outlined below.

Forecast Methodology

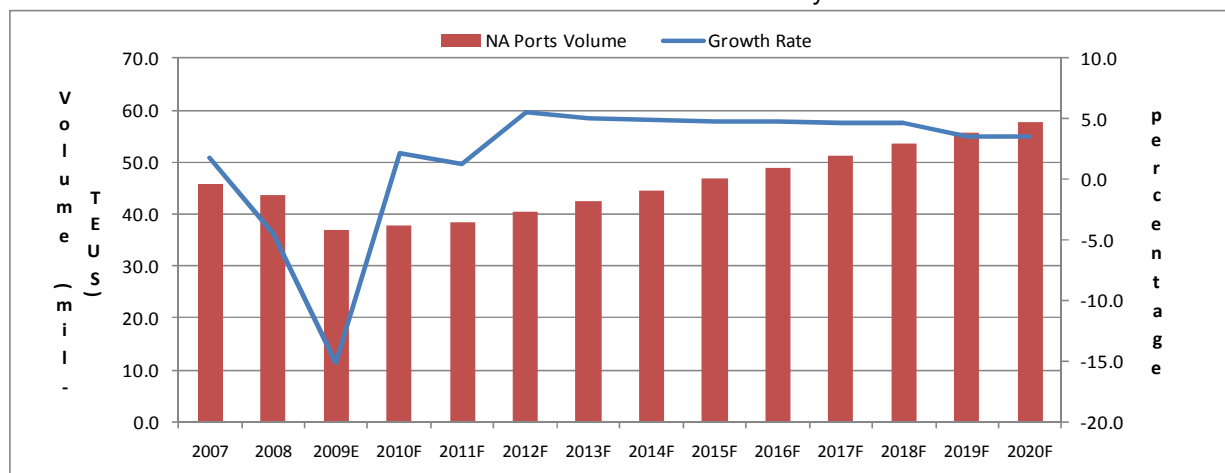


The results of this forecast can be seen on the next page.



Forecast of North American Port Volumes

Source: Mercator International Analysis



The forecast indicates that the North American container market is not expected to undergo a sharp rebound in activity over the next 1 to 2 years. This projection is supported by the view that the drop in housing values and employment levels in North America, especially in the USA, will continue to be a drag on consumer spending. Also, the US dollar's value is expected to remain weak versus the currencies of its primary trading partners over this period, thus slowing, and potentially shrinking imports' share of the US GDP.

Impacts of Near-term Market Conditions

The slow pace of the recovery in container volumes means that North American port through-puts are not expected to return to pre-recession peak levels until at least the end of 2014. Therefore, ocean carriers involved in North American trades will continue to face lower volume levels than they expected at the time they placed orders for new tonnage. While the carriers have made aggressive cuts in capacity levels, the prospect of continued infusion of new Post-Panamax tonnage and slow growth in demand will continue to put downward pressure on ocean rate levels across all major trades.

These conditions should induce carriers to consolidate strings where feasible in order to deploy their new and existing PPX and SPPX tonnage in a manner that will not increase a trade's overall capacity, thus maintaining existing utilization rates, while lowering ocean carriers' unit cost levels. Also, deploying new PPX and SPPX tonnage in a roll-up of smaller strings minimizes the downward pressure on existing rates levels.

The slow recovery in volumes and lack of upward pressure on rates is likely to continue to drive additional consolidation among global carriers. Should carrier consolidations occur, these newly formed groups would control higher levels of market share and would be likely to replace a number of smaller services in a single trade with a one string of more cost efficient PPX vessels.

Ocean carriers' financial problems are also expected to cause these companies to put significant pressure on their vendors (particularly terminal operators and port authorities); to reduce rates and not pass on inflationary increases in their cost structures until a sustainable level of profitability is reached by the lines.



Areas of Opportunities for Halifax

It is clear that ocean carriers will be strongly incented to deploy Post-Panamax vessels between now and 2014 in trades that have adequate volumes and infrastructure to support these larger vessels. Given the constraints of the Panama Canal until 2015, and the geographic location of Halifax, there are essentially only three relevant vessel service corridors with any near-term potential for the deployment of PPX and SPPX ships:

- The US East Coast – Med – Suez Canal – Indian Subcon/Far East corridor
- The US East Coast – North Europe corridor
- The US East Coast – East Coast South America corridor



The potential for the deployment of PPX and SPPX vessel services in these three trade corridors and the corollary volume opportunities for Halifax are discussed below.

Far East – Suez Canal – US East Coast Corridor

As indicated on page 2, liner shipping companies collectively eliminated 14 weekly vessel services between the Far East and the North American West Coast from 2008 to 2009, while cutting only 1 weekly service between Asia and the US East Coast via the Panama Canal and actually adding 1 deployment in the all-water trade via the Suez Canal.

While the carriers' increased emphasis on East Coast all-water services is a trend that favors Halifax, the deployment of PPX vessel services on deployments via Panama will not be possible until 2015. Even then, unless those PPX vessels are used in a pendulum service between the Far East, the US East Coast, and Europe, they are not likely to extend as far north as Halifax.

Ocean carriers, however, still have the option before 2015 of upsizing existing all-water Suez strings and simultaneously removing all-water Panama deployments. The cargo from the discontinued Panama services would be handled on the additional capacity created by the upsized Suez string, thus lowering ocean carriers' existing slot costs. While Suez services cannot effectively compete for all-water cargo from ports in Northeast Asia, they are well positioned to handle all-water movements from South China (Pearl River Delta) and South East Asia.

Due to Halifax's geographic position along the Great Circle route across the North Atlantic Ocean, it is well positioned to compete for Suez services as it offers:

- Minimal deviation from the largest East Coast market, New York
- The deepest container berths on the Eastern Seaboard of North America
- A terminal with no air draft restrictions
- Ability to feeder cargo to selected US ports (such as Boston and Philadelphia) without Jones Act restrictions
- Rail access to a number of interior Canadian and US population centers

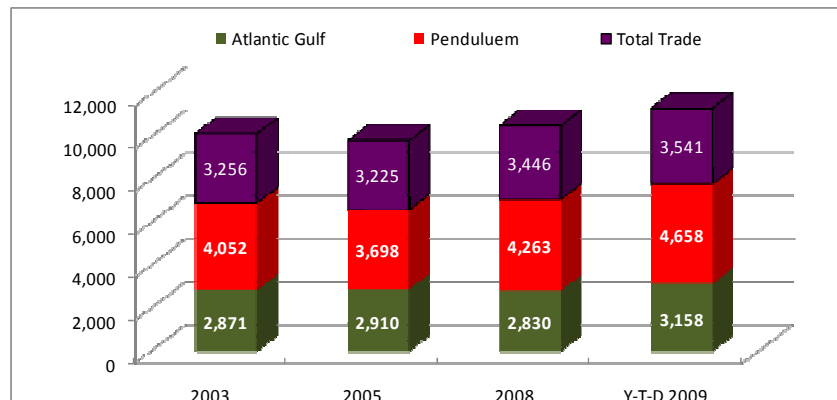


North Europe – US East Coast Corridor

Analysis of the current deployments in the Transatlantic trade indicates a reduction in slot capacity of 23% by the carriers since July of 2008. However, average vessel size in this trade is still relatively small, as highlighted in the chart below.

Average Nominal Vessel Size in the Transatlantic –TEUS

Source: CI-Online



If only **dedicated** Transatlantic strings (services that call ports on the ECNA and North Europe exclusively) are considered, the average vessel size in this trade is 3,541 TEUS. It is conceivable, if not likely, that the high volume carriers in the Transatlantic trade are considering a rollup strategy to allow for the deployment of Post-Panamax tonnage. Halifax is well positioned to receive a call from a service of this type due to its geographic proximity to Europe and the ability of the Port to provide deep water and a terminal without air draft limitations.

East Coast South America – US East Coast Corridor

Currently, there are only four weekly services between the East Coast South America (ECSA) and the East Coast of North America, as this trade is significantly smaller than the Transpacific or the Transatlantic, in-terms of volume. Also, a number of the main ports in South America do not currently have the infrastructure needed to support Post-Panamax vessels, and therefore the use of PPX deployments in this corridor is viewed as unlikely in the near-term.

Halifax's Competitive Position

In order to best capitalize on the near-term opportunities that could arise from carriers deploying Post-Panamax ships on selected routes, Halifax will need to exploit its relative strengths, such as superior port/rail infrastructure, and work to mitigate its weaknesses relative to other East Coast North American competitors. Halifax has the ability to develop incremental, air draft unrestricted terminal capacity cost effectively in the short-term. Halifax can develop additional deep-water berth capacity and further concentrate infrastructure much more cost effectively than greenfield container ports could be developed to meet capacity requirements for the next 10-15 years. Investing in Halifax infrastructure will allow for the retention and attraction of a critical mass of vessels and cargo to ensure competitive port operations. An analysis was undertaken to determine Halifax's relative competitive position as compared to its six main competitors, which are identified on the map to the right.





- The competitive port parameters that ocean carriers primarily focus on are as follows:
- Vessel access efficiency
- Marine terminal infrastructure
- Rail connectivity infrastructure
- Inland market rail access
- Local hinterland market size

Three of the six ports have poor vessel access efficiency, because their navigation channels are significantly depth-constrained:

- Philadelphia, with only 12.1m MLW
- Boston, with only 12.1m MLW
- Montreal, with only 11.1m MLW



A typical 6000 TEU ship has an expected laden draft of 12.5 meters in USEC trades, and would need at least 0.7 meters of under-keel clearance thus requiring 13.2m of channel depth to operate without tidal restrictions.

None of these three ports has any prospect of its channel being deepened sufficiently during the next five years.

The Port of New York/ New Jersey (PONYNJ) is viewed by ocean carriers to have water depth constraints. However, the current harbor deepening project of the US Army Corps of Engineers (USACE) will mitigate most of those limitations, once it is completed in 2013. Moreover, the channel leading to the APMT, Maher, and PNCT terminals in Elizabeth and Newark will be dredged to 50' MLW by 2011, while the Global Terminal in Bayonne is slated to have a similar channel depth by end-2010.

However, for ships to access all of the container terminals in the PONYNJ, except for Global Terminal, they have to pass under the Bayonne Bridge. The air draft of this bridge is only 151 ft. (45.7 m) at mean high water (MHW) and it increases to 155.3 ft. (47.1 m) at mean low water (MLW). Once the Kill van Kull Channel is deepened to 50' MLW, vessels with a maximum keel-to-masthead height of 196' (59.4 m) can transit the Bridge at all times of the day, assuming minimums of 2 feet of under-keel clearance and 3 feet of above-mast clearance, and assuming drafts of exactly 48' (14.5m).

The US Army Corps of Engineers (USACE) conducted an analysis of the global containership fleet and concluded that an overwhelming majority of vessels with capacities in excess of 7000 TEU are not able to transit under the Bayonne Bridge, even at MLW. Consequently, USACE and PONYNJ are currently evaluating 4 alternative engineering solutions to replacing, or modify the existing bridge, but none of these solutions are expected to be operational before 2019. Therefore, given the air draft limitations of the Bayonne Bridge, the PONYNJ will have just one terminal capable of handling 7500+ TEU ships over the next ten years, which is Global Terminal (owned by GCT). This 98-acre facility has 6 cranes (of which 4 are PPX) and a linear berth of 545 meters, with an estimated capacity of 600,000 TEU/year. As 7500+ TEU ships have lengths in the range of 325-340 meters, Global effectively can presently handle only one PPX vessel at a time.



While GCT is prepared to extend the berth at Global by approximately 210 meters, this project will take at least 2 years to complete and will require the terminal to obtain additional container yard acreage. To accomplish this, GCT will need to reach an agreement with PONYNJ, which owns the adjacent property on the peninsula and will need to convert this property into a container yard, with at least one additional berth. Once an agreement between the Port Authority and GCT is reached, the complete conversion process is expected to take 7-8 years. Thus, the PONYNJ will have limited capacity for Super Post-panamax (SPPX) vessels with capacities in excess of 7,000 TEUS for a number of years.

The Maryland Port Authority (MPA) has one primary container terminal in Baltimore, Seagirt Marine Terminal, although the break-bulk/ro-ro facility at Dundalk also has container gantry cranes. The Seagirt terminal has the following specifications:

- 3125' (953 m) of linear berth
- 7 PPX gantry cranes
- 313 acres of container marshalling area
- 1 million TEUS of annual capacity
- 45' MLW water depth alongside and the channel accessing the berth has 50' MLW water depth.

While it is feasible to dredge Seagirt's berth to that same depth as the access channel, there is no publically authorized project for doing so at this time. However, the MPA is in the process of concluding a long-term lease with Ports America, Inc. for this terminal and it is understood that as part of the concession Ports America would be obligated to construct a new berth that would have a depth 50' at MLW.

The suitability and capacity of Baltimore's Seagirt Marine Terminal is offset by the relative inefficiency of the rail infrastructure that links the Port with the key east-west rail routes of CSXT and NS. Although Seagirt has a near-dock intermodal terminal, neither the Norfolk Southern (NS) nor the CSX railroads can operate high-profile double-stack trains (i.e. loaded with high-cube containers) to/from the facility. CSX's intermodal trains between Baltimore and the Midwest have to move through a 100+ year-old, 1.4 mile-long tunnel that is underneath the center of the city, has clearance restrictions, and would be prohibitively expensive to rebuild. NS's trains to/from the Ohio Valley have to operate on Amtrak's electrified main line between Baltimore and Harrisburg, and the catenary structures on that line similarly restrict NS train heights.

The Hampton Roads port complex contains three main container terminals::

- Portsmouth Marine Terminal (PMT), which has about 3500' (1060 m) of linear berth, with a depth of 43' MLW, plus 9 cranes and approximately 225 acres, less than half of which is on-dock CY
- Norfolk International Terminal (NIT), which has about 5600' (1700 m) of linear berth in two separate sections, with 15 SPPX cranes and a depth of 50', on a footprint of 670 acres, of which about 250 acres is for CY operations
- APMTV, once fully built, will have a 4000' (1210 m) linear berth, 12 SPPX cranes, a depth of 55', and a rectangular, semi-automated CY of over 290 acres

These facilities have no notable water or air draft constraints relative to handling PPX vessels (although PMT would require some dredging alongside its berths). In terms of rail access the Norfolk Southern offers competitive services to/from the Ohio Valley, as well as to/from Chicago. The NS service is expected to improve measurably when its Heartland Corridor project is completed in 2010. Therefore, Hampton Roads is emerging as a strong competitor for new PPX services.



Strategic Initiatives to Exploit Opportunities

Currently there is a window of opportunity, which should last for the next 30 to 36 months, for Halifax to be highly competitive in securing new PPX/SPPX that are deployed in order to “roll –up” smaller and less economical vessel strings. This opportunity is driven by the fact that New York has relatively little PPX/SPPX terminal capacity, but the Port Authority of NY/NJ is working to address this deficiency. Therefore, Halifax is the only Atlantic Canadian gateway port that currently can handle traffic flows to/from Ontario, Quebec and the USA Midwest on new PPX/SPPX services that are expected to be deployed in the Transatlantic and Suez Asia. The port also has a number of options to cost effectively expand its capacity for these classes of vessels. Thus Halifax represents Canada’s best existing and future resource to insure that Canadian import and export supply chains moving in Atlantic / Suez trade corridors on new PPX/SPPX services continue to flow over Canadian ports.

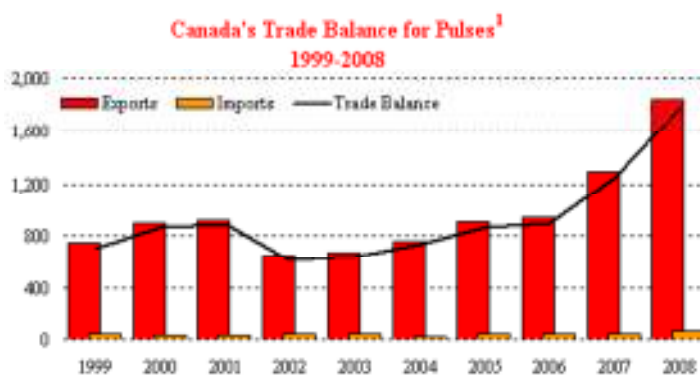
However, due to the inherent unpredictability of ocean navigation, container carriers are reluctant to utilize single berth terminals. Halifax is well equipped with three PPX / SPPX berths and is developing a second unrestricted SPPX berth to accommodate two SPPX ships simultaneously. We do not anticipate the deployment of the Ultra Large Container Ship (ULCS) ships in excess of 10,000 TEUS until well into the second of the decade, although Halifax is presently able to handle the largest container vessels afloat.

Given the relatively small population and manufacturing base of Nova Scotia/PEI, the Port of Halifax clearly needs to function as a gateway for exporters/importers in Quebec, Ontario, and Midwestern provinces/states. Further, given the distance between Halifax and these markets, rail intermodal service is the only economically and commercially viable surface transport link for large blocks of container movements. Therefore, it is an imperative that CN actively engages in the process.

Another market segment for which Halifax has the potential to increase its participation in containerized shipments is pulse crops, given that Canada is a leading exporter of these commodities. Exporters of these crops are increasingly turning to container shipping to supply foreign markets as it allows for:

- Maintenance of source tracing
- Smaller shipment sizes
- Faster total transit times
- Short order to cash cycles

The provinces of Alberta, Saskatchewan and Manitoba are the country’s primary producing areas for pulse crops. As these products are produced in Canada’s interior, they need to be transported overland to a port for export, which is primarily done via rail. Montreal is presently the main Atlantic gateway for containerized shipments of these cargoes.



1: Pulses include: dry peas, dry beans, lentils and chick peas.
Source: Statistics Canada, May 2009.



Canadian exports of pulses and specialty crops are estimated to be 3.9 million tons per annum, considering that an ocean container holds a maximum of 27 tonnes, this segment has the potential to generate over 144,000 container shipments each year for the ports of Vancouver, Montreal, and Halifax.

Halifax is well positioned to serve several large export destinations for these pulses and specialty crops (in particular, India, Spain, and Turkey) from a geographic perspective, and considering the liner services currently calling at the port.

Pulses are considered base commodities and have relatively low values -- thus transport cost represents a material portion of the products' landed cost. Therefore, Halifax will need to meet the following criteria to become a gateway for pulse commodities:

- Offer a competitive rail cost, as it is often the largest single transport cost element
- Insure that ocean carriers have surplus equipment in the area in order to generate competitive rates
- Provide facilities that are equipped to transfer bulk rail shipments from railcars to ocean containers at a competitive cost level

The development of a rail-adjacent facility that is proximate to the Port's two container terminals and would allow heavily-loaded containers private road access is considered to be a key step in developing Halifax as a gateway location for pulse exports.

January 2010

