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## Item No. 5

**Halifax Regional Council**  
**August 11, 2009**

**TO:** Mayor Kelly and Members of Halifax Regional Council

*Church*

**SUBMITTED BY:** \_\_\_\_\_  
Jennifer Church, Managing Director External and Corporate Affairs

**DATE:** July 21, 2009

**SUBJECT:** Container Trucking Options

### INFORMATION REPORT

#### ORIGIN

1. Regional Council resolution, item 10.1.3 of May 27, 2008 meeting. Moved by Councillor Rankin, seconded by Councillor Walker to:  
“Endorse, in principle, the *Atlantic Gateway DistriPark Plan* and submit it to the Province of Nova Scotia and Transport Canada for their consideration in upcoming studies related to the development of an Atlantic Gateway”.
2. Regional Council resolution, Item 12.2 of February 10, 2009 meeting. Moved by Councillor Uteck, seconded by Councillor Watts:  
“That a presentation of the Atlantic Gateway Distripark Study come to a future Regional Council meeting and that the option of Phase 3 be undertaken if it is financially viable”.

## **BACKGROUND**

An Executive Summary of the Atlantic Gateway Distripark Plan, prepared by Marinova Consulting Ltd, was included in the staff report that Council considered at its May 27, 2008 meeting.

The distripark concept arose from the second phase of a study that examined the feasibility of moving some aspects of the Halifax port terminal operations to an inland location as a way to manage container truck traffic congestion on Halifax peninsula. The first phase focussed on examining the concept of an inland terminal which the second phase determined to be not feasible. As suggested in Council's February 10, 2009 resolution, Phase 3 would have entailed the actual construction of a distripark facility.

The May, 2008 staff report provided a comparison of four options for managing container truck traffic:

- a) distripark;
- b) inland terminal;
- c) truckway corridor; and
- d) third harbour crossing.

Using broad weighting factors staff suggested that the distripark concept had more merit than the other three truck management options.

At the time the May staff report was submitted to Council, the Province announced plans to study the feasibility of converting the CN Rail corridor through Halifax peninsula to an Integrated Transportation Corridor (ITC). Consequently, Council's May 27, 2008 motion also included direction to "submit the (Distripark) Plan to the Province of Nova Scotia and Transport Canada for their consideration in upcoming studies related to the development of an Atlantic Gateway."

The Province has since decided not to pursue the ITC option due to cost concerns. Given that the inland terminal had previously been determined to be not feasible, and given the needs assessment undertaken by the Bridge Commission suggests a third crossing is not a near term requirement, the distripark concept was considered to be the last trucking option to be evaluated.

## **DISCUSSION**

### **The Distripark Concept**

Much of the container truck traffic on downtown Halifax streets services the transload industry which has experienced recent growth. The distripark plan proposes an integrated facility at a location in Burnside, connected to the port by rail and in proximity to transload warehouse facilities that have recently developed in the park. Currently, containers from the port are trucked across the city to Burnside for delivery at transload or intermodal facilities. The distripark offers the option of moving these containers by rail shuttle as a less expensive and more environmentally sustainable delivery

alternative to individual truck service. For a business located in a “campus” surrounding the facility, the containers can be delivered by a “yard shunt” from the train directly to their facility without ever having to be loaded onto a truck.

The Marinova study provides conceptual costing and operational analysis in support of the distripark concept. It projects that operation of the distripark would result in an initial 40% decrease in truck traffic entering and leaving the port, increasing to 50% diversion by year twenty. In year one, this would be a reduction of 130,000 truck movements. According to the study, the distripark option would reduce the per-unit cost of moving empty and full containers to and from the terminals resulting in an estimated \$1.1 Million savings to the overall transportation system in 2009. Overall cost savings would increase in proportion to the volume of containers handled by the facility.

The distripark concept was advanced by HRM in order to emphasize the need for an effective way of managing container truck traffic on the local roadway network. There is no intention that HRM would build, operate, or fund in any way a facility of this nature. The Distripark plan was intended to present a business case for a potential opportunity that could be pursued by private sector interests. As indicated in the previous staff report, the Municipality’s involvement would be limited to preserving the opportunity for such a facility to be established in its planning for expansion of the Burnside Business Park. This is consistent with the Municipality’s role in providing strategic support to the Atlantic Gateway as stated in a position paper endorsed by Regional Council in January, 2008.

#### Industry Response to Distripark Plan

The Halifax Gateway Council was formed in 2004 to provide a forum for transportation stakeholders in the Halifax region to work collectively to improve the competitiveness and efficiency of the Halifax component of the Atlantic Gateway. Transport Canada and the Province of Nova Scotia are among the interests represented on the Halifax Gateway Council. As per the direction of Council’s February 10 motion, the Distripark plan was submitted to the Halifax Gateway Council for review.

On the basis of concerns about financial and operational feasibility, the Gateway Council does not consider the distripark concept to be a viable option. Specific concerns are that:

- additional information on the financial feasibility and a business case would be required in order to convince a private operator(s) or investor to participate in the project;
- present container truck volumes are not sufficient to warrant the initial capital investment and operating costs associated with a distripark; and
- two key customers - Consolidated FastFrate and Armour Transport - have already constructed transload facilities in Burnside at locations that do not have direct access to rail service or the “shunt yard” service that would be part of the distripark. Consequently, these operators would be obliged to “double handle” their containers thereby reducing their competitiveness.

Examining Other Trucking Options

In response to the position taken by the Halifax Gateway Council, there appears to be no support for furthering the distripark concept, including a requirement for the study consultant to make a presentation to Council. Staff have met with representatives of the Port of Halifax in order to better understand transportation industry concerns and to identify other truck traffic management options. For example, ways to better manage container truck vehicle flow on downtown streets, limit container truck travel during peak periods and allocate containers destined for transload distribution to the north end terminal could be evaluated and implemented as part of a short term strategy. Implementation of such measures over the short term would provide opportunity to study a longer term solution that could entail an inland component such as a distripark should it prove financially viable in the future.

**BUDGET IMPLICATIONS**

There are no budget implications associated with this report.

**FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN**

This report complies with the Municipality's MultiYear Financial Strategy, the approved Operating, Capital and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Capital and Operating reserves, as well as any relevant legislation.

**ATTACHMENTS**

Executive Summary - Atlantic Gateway DistriPark Plan

If the report is released to the public, a copy can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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# **Atlantic Gateway Distripark Plan Executive Summary**

**Prepared For  
Halifax Regional Municipality  
and  
Partners**

**Prepared By  
MariNova Consulting Ltd.  
UMA Engineering  
CPCS Transcom  
Dillon Consulting  
Colliers International**

**March 2008**

## Executive Summary

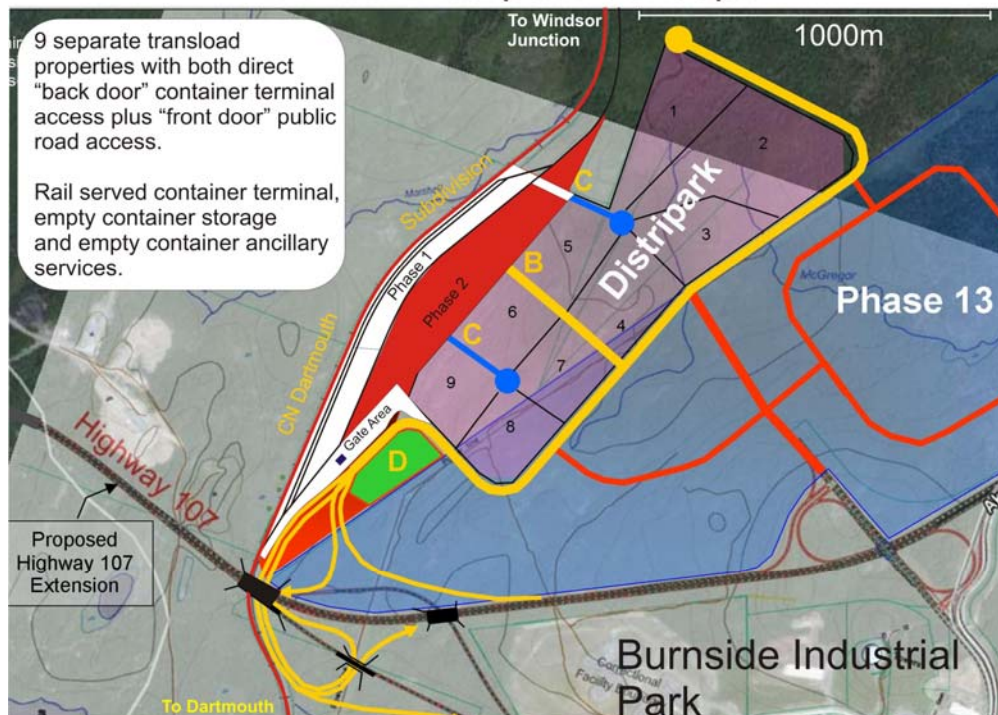
The original objective of this study was to follow up on the previous study (Halifax Inland Terminal and Trucking Options Study) that suggested that, under certain circumstances (mainly the need for port capacity), an inland terminal and container shuttle to a site at Rocky Lake was a compelling project from a number of perspectives.

A number of events that negatively impact on the economic viability of the original project have occurred since that report was prepared in 2005. The estimated capacity of the port was revised from 800,000 to 900,000 TEUs per year to 1.4M to 2M TEUs per year; this coupled with the lack of growth in the last two years pushes the point at which an inland terminal concept could be viable too far out into the future to be relevant. The more positive change from a port perspective is that transload activity has started and is growing in Halifax.

A new concept was therefore required to reduce/remove truck traffic from city streets. As its title implies, this study now focuses on the opportunity to leverage this transload activity to reduce truck traffic without increasing the overall cost of transportation. It actually *reduces* the cost of transload container delivery chain through the Port of Halifax.

The new concept is a commercially driven Distripark adjacent to the proposed Phase 13 Transportation Node in Burnside Industrial Park that is a combination transload service, empty yard container terminal and possibly a Long Combination Vehicle (LCV) yard at some point in the future. A daily shuttle would move transload containers between the container terminals and the proposed facility and empties would be received, stored and delivered from the Atlantic Gateway Distripark (AGD). Full import containers destined to locations other than Burnside would continue to be delivered by truck from the terminals as would the full export containers.

### A Real Distripark Concept



Schemes to improve the cost of handling containers to/from their origin/destination are not new in the industry but are growing in popularity as governments attempt to find sustainable solutions to remove trucks from roads and reduce costs of cargo distribution. Variations of this concept have been studied and are being implemented in Auckland, Sydney, Gothenburg, Virginia, Vancouver and other cities. Each was developed to deal with the specific needs of the situation.

Based on a number of assumptions that are detailed in the report, the volumes that would be attracted to the new terminal would result in 23,183 truck moves shifted to rail within the city and a further 43,322 empty container truck moves shifted from the container terminals to the AGD in 2009. This represents approximately 40% of the international container truck traffic that would flow through the city otherwise.

Use of the AGD facility would be primarily justified by transload cargo that could benefit from going directly to rail, and transported more economically between the AGD and the terminals more economically using a rail shuttle. The empties generated by the transload activity would provide the base volume for the AGD's secondary role as an empty yard. This empty yard activity contributes to the removal of truck traffic from city streets and adds volume necessary to lower handling costs at the AGD. The direct transportation costs benefits are summarised in the table below, based on the projected 2009 volume levels:

Estimated Net Savings (Costs)			
	Total Savings	Per Unit Savings	Units
Transload Handling	\$278,433	\$12.01	Per transload container through the AGD
Empty Exchange	\$815,028	\$17.59	Per empty move shifted to the AGD
Total	\$1,093,461		

While not included in the economic analysis, the transfer of CN's Halifax Intermodal Terminal (HIT) activities would increase the volume of traffic through the AGD and significantly enhance its economics as the savings per HIT container would exceed \$20.00 per unit.

Even without the HIT volumes, the operating benefits of the AGD are positive in 2009 (net savings of \$1.1M) and improve as volumes grow, mainly because the cost of the rail shuttle is nearly fixed. The projected cost savings in 2028 is between \$5.9M and \$6.2M.

It should be noted that, just as in the previous report, the economics are calculated on the basis of holistic costs and assume the incremental savings and costs are realized. The actual rates the various stakeholders may charge for additional services or be willing to give back through rate reductions for savings incurred may vary significantly. This difference between costs and rate constitutes one of the main challenges of creating a deal that would permit all stakeholders to benefit.

In addition to the direct transportation operating cost savings and the reduction of the number of trucks from city streets, the AGD will also:

- reduce GHG (Green House Gas) emissions by reducing truck mileage or concerting such mileage to more fuel efficient rail transport;
- reduce the wear and tear on city streets; and

- reduce the wear and tear on bridges.

The following table shows a summary of the quantifiable operational benefits of the AGD.

	<b>Costs/Savings at Year 1 (\$000s)</b>	<b>NPV Of Costs/Savings at 20 Years (\$000s) Using 5% Discount</b>
<b>Ocean Terminal Activity</b>		
Full Containers (ship-to-truck or truck-to-ship)	\$(115)	\$(1,921)
Empty containers (to/from terminals)	\$538	\$8,968
<b>Distripark Activity</b>		
Transload containers	\$40	\$962
Transload empties	\$1,100	\$26,443
<b>MT Yard Activity</b>		
MT yards	0	0
<b>Truck Wait Time</b>		
Truck waiting time cost	\$732	\$13,778
<b>Total savings</b>	<b>\$2,294</b>	<b>\$48,229</b>
Less Annual Shuttle Cost	\$(1,201)	\$(14,963)
<b>NET Handlings Savings/(Costs)</b>	<b>\$1,094</b>	<b>\$33,266</b>

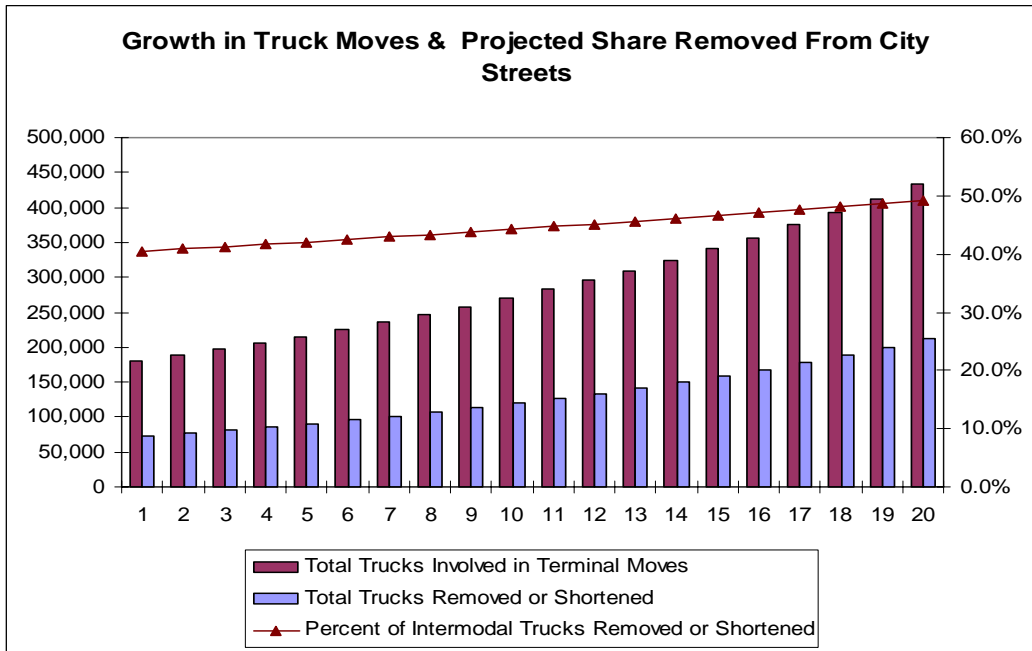
The economics are sensitive to a number of variables as described in the assumptions, not the least of which is:

- the volume of transload cargo through the AGD (particularly since the rail shuttle costs are mostly fixed);
- the ability of the container terminals to go directly to/from rail rather than ground containers (captive railcars have been assumed in the cost of the shuttle);
- the volume of empty exchanges at the AGD; and
- the volume of transload exports (consolidation of high volume export commodities).

The transload traffic is expected to grow at a faster pace than the organic growth of the local market. As such, the percentage of container truck traffic that could be removed from city streets is projected to grow from 40.5 % in 2009 to 49.1% by 2028.

The truck avoidance potential is summarized in the following figure:





The AGD, at an estimated infrastructure capital cost of \$14.5M compares favourably to the Rail Cut alternative in terms of truck avoidance potential. However, a direct comparison between the “Rail Cut” options in the earlier study and the Distripark is difficult because the cut could be used by other than container trucks and it would be used one way for all traffic in the South end of Halifax, while the AGD would affect only intermodal traffic from the port as a whole. The AGD at \$14.5M promises a 40.5 % reduction of intermodal truck traffic, growing to 48.6% over time, while the use of the Cut would reduce south end truck traffic by an estimated 55% but cost some \$40M.

At least at the beginning, the capital cost of the facility cannot be fully paid for by the AGD operator and government and other stakeholder funds will be required. It is recommended that the facility be operated by a private sector operator under a long term concession agreement that would be awarded to the qualified operator willing to pay the most towards the capital cost of the infrastructure. The concessionaire would be required to provide handling equipment and take the commercial risk of the business.

In summary, the AGD:

- has the potential to reduce the impact of growing truck traffic on city streets;
- can be commercially viable from an operating perspective;
- is located in an industrial area that does not appear to have any significant negative environmental or neighbourhood impacts;
- is consistent with the Port’s strategy to attract transload facilities to Halifax;
- is compatible with the long term plans of the Burnside Industrial Park;

- is a sustainable solution to the desire of HRM and many other stakeholders to reduce the numbers of trucks on Halifax Peninsula; and
- uses the *rail* cut for a *rail* shuttle.

The next steps, if the project is deemed acceptable to government, are to develop a consensus among the main stakeholders, structure a deal for the financing of the infrastructure between the government and the shuttle operator (railway), and concession the AGD to a qualified operator.