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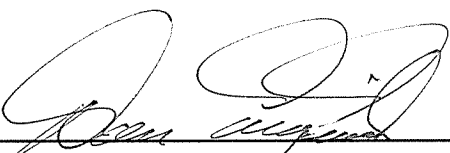


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Halifax Regional Council
February 28, 2006

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Dan English, Chief Administrative Officer



Wayne Anstey, Acting Deputy Chief Administrative Officer

DATE: February 21, 2006

SUBJECT: Inland Terminal & Trucking Options Study

ORIGIN

At the April 27, 2004 Regional Council meeting, a motion was passed to submit an application to Transport Canada funding competition for a \$160,000 study titled Halifax Trucking Options. The application indicated that HRM and the Halifax Port Authority were prepared to contribute \$40,000 each to the study. The application was successful in receiving funding

On March 8, 2005, Regional Council awarded a \$155,000 contract to Marinova Consulting Ltd.

RECOMMENDATION

It is recommended that Regional Council adopt, in principle, the findings of the Halifax Inland Terminal and Trucking Options Study.

BACKGROUND

In early 2004, HRM and the Halifax Port Authority applied for and received \$80,000 in funding from Transport Canada to undertake a \$160,000 consulting study to explore options that would have the potential to remove or reduce the need for container truck traffic to use streets in the urban core of Halifax. That study is now complete, and the report's executive summary is attached.

In addition to the Halifax Port Authority, CN participated on the project steering committee. Both parties have endorsed the final report and have shown interest in pursuing further stages in developing a business plan for concept of an inland terminal.

DISCUSSION

The study involved two basic components:

- (1) to evaluate the feasibility of constructing a truckway parallel to the existing CN line within the rail cut through the peninsula, and,
- (2) to evaluate the feasibility and optimal siting for an inland terminal to which containers handled by truck would be shuttled into and out of the Port of Halifax by rail.

The study determined that a truckway in the CN rail cut could, at best, handle only single-direction truck traffic at one time. This results in decreased productivity for the trucking industry, which made this option untenable.

It was determined that an inland terminal could produce the following benefits:

- (1) substantial reduction of truck traffic on streets in the urban core,
- (2) reduction in land requirements at the Dartmouth Marshalling Yards and the CN Richmond Intermodal Terminal, thereby creating new waterfront development opportunities,
- (3) postpone capital investment in the expansion of the Fairview and Halterm Container Piers, and
- (4) overall reduction in truck travel times.

Although HRM has a strong interest in the first two benefits, construction of an inland terminal by the private sector would not likely occur until one or both of the last two benefits could be realized. The report indicates that these final two benefits will not be realized until container traffic at the port reaches a certain volume (900,000 TEUs) and traffic congestion in the urban core becomes greater, respectively. Since the current volume is less than 550,000 TEUs, neither of these conditions may occur for several years. At some point, HRM must decide whether to create a partnership that would move forward with a terminal, or to wait for economic conditions to inspire the Halifax Port Authority and/or a private sector interest to develop such a facility when the time is right. Further study will assist Regional Council in making such a decision.

HRM, HPA and CN have now jointly applied to Transport Canada for additional funding to take the business case for an inland terminal to the next level. If funding is not granted, Staff will return to Regional Council for direction on whether to proceed further with this investigation or not. In adopting this report in principle, there are no immediate budget implications, nor specific recommendations upon which to act, other than conducting further investigation as explained above.

BUDGET IMPLICATIONS

There are no immediate budget implications.

FINANCIAL MANAGEMENT POLICIES / BUSINESS PLAN

This report complies with the Municipality's Multi-Year 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.

ALTERNATIVES

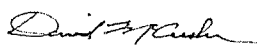
There are no recommended alternatives.

ATTACHMENTS

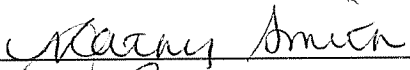
Halifax Inland Terminal and Trucking Options: Executive Summary

A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/agenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

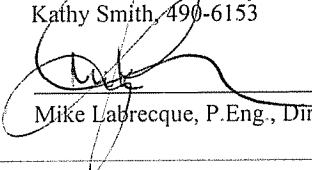
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Final Report
Halifax Inland Terminal and Trucking Options Study
Presented to
Halifax Regional Municipality
and
Halifax Port Authority
by
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January 2006

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Executive Summary

1.0 Introduction

The Halifax Port Authority (HPA) and Halifax Regional Municipality (HRM) commissioned the present study to evaluate the role that an Inland Terminal or truck access to the railcut through the Halifax peninsula could play in alleviating some of the challenges presented by trucking activity within HRM.

The study includes a site selection evaluation for a terminal to be located within Nova Scotia, an operational analysis of the inland terminal concept and an economic analysis of an inland terminal, as well as an assessment of the feasibility of the railcut option.

2.0 Current Situation

In 2004 the Port handled about 525,000 TEUs of intermodal cargo. The same year, approximately 25,000 intermodal units were handled through the Halifax Intermodal Terminal (HIT). Overall, the number of trucks calling at all of the intermodal terminals in the city averages 343 trucks (686 one way) per normal business day.

The estimated practical port capacity of the existing terminals in Halifax is 800,000 to 900,000 TEUs per year. The existing terminals, in effect, act as inland terminals and empty storage yards for local cargo within trucking distance of Halifax.

3.0 Best Practices

Three other ports – Auckland, Vancouver and New Orleans – were examined, and there are a number of conclusions that can be drawn from their experience:

- 1) Chronic congestion is required somewhere in the existing system to make it work.
- 2) An inland terminal appears to achieve better asset utilization for both ports and truckers.
- 3) Shippers get better and quicker access to cargo. They avoid long queues getting into container terminals and highway congestion getting to and from the terminal.
- 4) It helps to have the port and other partners invest in the project.

4.0 Vision for New Inland Terminal (NIT)

All truck-related activities presently carried out at HIT and at the port's container terminals would be relocated to the New Inland Terminal (NIT) that would serve local and regional container markets. A NIT would free up land presently used for empty storage, truck marshalling, gate processing and truck roadways on the existing terminals, thus increasing port capacity by as much as 250,000 TEUs, and postponing the need for a third container terminal.

The NIT would become an expansion of the port terminals, but on property that is substantially less expensive to develop compared to waterfront areas. It would also be

located to provide ancillary business opportunities, particularly related to distribution and transload activities.

The NIT would connect operationally with the port terminals by using dedicated rail shuttles. Sufficient captive rail cars would be used to ensure that at least 95% of import containers destined for the local market, as well as repositioned empties, would be handled directly from ship to rail.

5.0 NIT Site Selection

In order to determine the best site, a site characteristics model with 35 parameters was employed. The sites studied were HIT, Rockingham, Rocky Lake, Oakfield, Milford Station, and Debert. They scored as follows:

Sites considered						
Site	Guiding Principles	Size	Expansion	Topography	Compatible Neighbours	Shuttle Distance
H.I.T.	No	Insufficient	Major Cost	Good	Yes	OK
Rockingham	No	Expensive fill	Major Cost	Good	Mitigation	OK
Rocky Lake	Yes	More Quarrying	Nearby	Good	Mostly	OK
Oakfield	Yes	Insufficient	Insufficient	Unacceptable	Mitigation	Fair
Lantz	Yes	Marginal length	Nearby	Flood plain	Mitigation	Marginal
Milford Station	Yes	Sufficient	Nearby	Acceptable	Mostly	Marginal
Debert	Yes	Ample	Good	Good	Yes	Too Far

Legend

NO GO Issue

Issues

No Issue

The study recommended that both Milford Station and Rocky Lake be short-listed. Upon further evaluation of the capital and operating costs and benefits of these two sites, it was recommended that Rocky Lake be selected for conceptual design and closer analysis.

6.0 NIT Design

The NIT is configured to follow the shoreline of Rocky Lake to take advantage of the level grade and existing quarried areas to minimize the amount of rock excavation required. Further development of this site could allow the CN mainline and NIT to be more efficiently linked to the Dartmouth branch.

7.0 Shuttle Operation

The rail shuttle has two basic purposes:

1. Conveyance of locally-destined import containers from the port terminals to NIT.
2. Conveyance of locally produced export containers from NIT to the port terminals.

The proximity of Rocky Lake to the port allows enough flexibility to handle the service requirements at a reasonable cost. Over the long term, the shuttle costs should remain relatively constant as port volumes increase. The peaks should fill in, making better use

of the dedicated railcar fleet. Longer shuttle trains will only incrementally add line haul costs. Thus, the shuttle will become increasingly cost effective per unit moved as volumes grow.

8.0 The Railway Cut Truckway

The Railway Cut, linking the Bayers Road/Bi-High entrance and the South End Terminals, can be looked upon as an underutilized transportation resource within HRM. However, CN has determined that paving over the tracks is impractical and only one-way traffic could be accommodated.

The use of the railcut as a truckway could remove an estimated 270 one-way truck transits from downtown streets. While the truckway has a beneficial impact on trucking times and costs, road maintenance and greenhouse gas emissions, these benefits are insufficient to justify the \$40M required to modify the railcut to accommodate one-way truck traffic.

9.0 Economic Analysis

The Port of Halifax has enormous economic impact on HRM and the Atlantic Region. While neither the NIT nor the railway cut truckway option has a positive benefit/cost on its own, the NIT has potential justification in the postponement of major capital investment by increasing the effective capacity of the port.

An investment of \$60M in NIT provides up to 250,000 TEUs of handling capacity for the port, whereas according to the Maersk-Sealand proposal of 1998 for a new ocean terminal (NOT), an investment of \$300M would be required to provide an additional 550,000 TEUs of capacity. The NIT can postpone the capital investment required for a NOT and is a cost-effective alternative to a third container terminal when the Port approaches its capacity. The NIT allows the Port to grow and to continue to generate significant economic benefits.

10.0 Stakeholder Consultations

A number of stakeholders were consulted during the course of this study. Concern was expressed over who would operate the shuttle and the NIT and how service levels would be maintained in the long term. Shipping lines, in particular, expressed concerns that they would end up paying for the extra costs incurred and yet be unable to recover these costs from either offsetting savings or from the cargo itself.

11.0 Value Added Opportunities

A NIT could act as a catalyst in the development of a new distribution park at the north end of Burnside Industrial Park, providing synergies to shippers and national distributors and retailers. At a minimum, the terminal provides better asset utilization for the trucking industry. There will also be opportunities to do container storage, repair, reefer maintenance and trip preparation, in addition to container leasing.

12.0 Value Proposition

The NIT reduces truck traffic in the city and saves wear and tear on local roads. It also reduces air pollution and Greenhouse Gases (GHGs). There is also some potential to use hybrid locomotive technology for the shuttle operation.

The NIT increases the effective capacity of existing container terminals and postpones the need to construct a new terminal when the port reaches its capacity. The NIT also allows CN to move HIT and consolidate its volumes with NIT, leading to efficiencies. CN would also have the option to consolidate its Rockingham and Dartmouth yard activities at one location at some point in the future.

The project results in total economic impact of \$130M in the construction phase. The more interesting and longer term economic benefit is that the expansion allows the port to continue to provide its economic impact (measured at \$700M per year in 2001). At this rate and under some assumptions concerning growth in port volumes (3.5%), the port's overall economic impact will include 15,606 direct and indirect jobs and more than \$1.1B in annual income generation by 2022. The value of the NIT is in preserving the continuation of economic benefits so that the growth of the port can reach this level of activity and not be encumbered by capacity limitations which will inhibit these incremental economic benefits.

13.0 Conclusions

Of the two alternatives considered to remove truck traffic from city streets, the NIT concept is by far the best option.

However, there is not enough congestion at either container terminal or in downtown Halifax to justify the NIT at present (2005). Moreover, whatever port congestion exists in Halifax does not relate to locally- or regionally-trucked cargo, but to moving cargo inland by rail to Quebec, Ontario and the US Midwest.

From an overall perspective, NIT operating costs can be slightly better than break-even despite the additional handling, as long as sufficient captive railcars are provided to ensure that locally-destined freight can go directly to rail.

The actual impact on the cost of moving local cargo will depend on negotiations amongst the interested parties and how much each is willing to contribute towards achieving a positive outcome.

The NIT's economic justification is primarily based on the avoidance of capital costs required to build a new container terminal. An investment of \$60M in NIT provides an additional 250,000 TEUs of handling capacity, whereas an investment of \$300M in a New Ocean Terminal provides an additional 550,000s TEUs of capacity.

It is recommended that the Halifax Port Authority and partners adopt a plan now to have a NIT in operation by the time the port reaches its practical capacity. Negotiations should begin as soon as possible to secure the quarry site and the northern rail right-of-way around Rocky Lake. Some combination of HRM, HPA and CN should acquire these properties in a prepared state, and work out the framework for moving forward.

When the existing terminals are within 1-2 years of reaching capacity, the terminal should be built (assuming the economics are still positive) and an operating company established. A management strategy should be implemented to work with stakeholders (terminals, shipping lines, shippers, truckers, labour) to ensure a smooth transition to the new entity. Consideration should be given to providing the new entity with short-term operating support.