

# HALIFAX

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**Item No. 14.1.5**  
**Halifax Regional Council**  
**January 30, 2018**

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

**SUBMITTED BY:**

Original Signed by 

\_\_\_\_\_  
Jacques Dubé, Chief Administrative Officer

**DATE:** December 5, 2017

**SUBJECT:** Rail-to-Trail Conversion – Windsor & Hantsport Railway

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## **ORIGIN**

At the September 5, 2017 meeting of Regional Council a motion was passed to request a staff report on the feasibility of developing an active transportation facility on the corridor of the Windsor and Hantsport Railway (W&HR) that includes information on the potential cost, property permission options, implementation options, and connectivity to the active transportation network in Halifax and the Municipality of the District of East Hants.

## **LEGISLATIVE AUTHORITY**

The Halifax Charter section 79(1)(ah) states that The Council may expend money required by the Municipality for playgrounds, trails, including trails developed, operated or maintained pursuant to an agreement made under clause 73(c), bicycle paths, swimming pools, ice arenas, and other recreation facilities.

## **RECOMMENDATION**

It is recommended that Halifax Regional Council:

- 1) Direct staff to maintain communication with municipalities along the Windsor and Hantsport Rail Spur corridor on this issue;
- 2) Monitor any changes in the ownership and operation of the facility; and
- 3) Send a letter to CN and the Canadian Transportation Agency that expresses HRM's interest in acquiring the portions of this corridor in the Municipality for a rails-to-trails facility, should it become available.

## **BACKGROUND**

A rail spur from Windsor to Windsor Junction was built as the Windsor Branch of the Nova Scotia Railway in 1858. In February, 2013 this section of track returned to control of its owner Canadian National Railway (CN) after a 99-year lease expired. Upon regaining control of the spur line, CN immediately initiated the federal rail abandonment process (Part III, Division V of the Canada Transportation Act, S.C., 1996, c. 10, as amended).

Through this process, CN determines a “net salvage” value for the property and rail assets. The process then progresses through a series of sequential time windows which allow the corridor to be purchased at the net salvage value by (in sequential order) parties interested in continued rail operation, the federal government, the provincial government, the local transit authority, the municipality, and finally the private sector. Should there be no expression of interest in continued rail operation in the initial stage, the subsequent parties are no longer obligated to maintain a rail operation and the rail corridor may be “abandoned”. During the first phase of the process, W&HR declared an interest in continued rail operation, although they challenged CN’s determination of net salvage value. The Canadian Transportation Agency (CTA) was asked to determine its own net salvage value which is non-binding on the parties. CN and W&HR continue to negotiate a purchase. While this process is underway, CN cannot negotiate a sale to any other party. W&HR are currently leasing the corridor from CN.

W&HR have not operated trains on this line since 2010 so the line is considered “discontinued” but not “abandoned”.

## **DISCUSSION**

### **Status and Connectivity**

Making Connections: 2014-19 Halifax Active Transportation Priorities Plan (approved by Regional Council in 2014) recommends this for the corridor: “Land rights secured for future greenway (if this property becomes available for acquisition)”.

The corridor is part of the vision for a Regional Active Transportation Greenway Network. A greenway in this corridor would connect well to the First Lake Trail Network and to the Sackville River Greenway and potentially to a future Active Transportation Greenway between Dartmouth and Bedford/Lower Sackville adjacent to a planned extension of Highway 107 by the Province. It would create a number of effective community connections to Beaver Bank, Millwood and Middle Sackville. Eventually, the greenway could become part of the evolving Harvest Moon Trail which would be a 180 kilometer connection between Windsor Junction and Annapolis Royal.

### **Design Options**

In discussion with both W&HR and Transport Canada, staff has identified five possible ways to design a greenway in the Hantsport Spur Line within HRM. These options are shown in Attachment One and described below:

#### ***Option 1: Rails TO Trails***

This is the standard mechanism for constructing greenways and was last used by HRM to construct the Chain of Lakes Trail. It is the recommendation of the Active Transportation Plan once acquisition of the corridor is possible. As this requires ties and rails to be removed and train traffic no longer supported, it is not an option W&HR would currently consider.

#### ***Option 2: Rails UNDER Trails***

In this option, rails and ties would be covered over to operate as a greenway. Because the rails are covered, train operation is not possible. This differs from the Rails To Trails option as the rails can presumably be

exposed if there was a desire to remove active transportation uses and resume rail operation. This option could work only if HRM agreed to abandon active transportation uses if W&HR decided to resume rail operation. While future rail operation may be unlikely, this still creates a significant risk to investing in the trail conversion, let alone the public backlash expected when the active transportation uses are lost.

We understand this option to be in place on some sections of the rail corridor within Kings County. W&HR has indicated this option is acceptable in that location due to the much greater certainty that rail operations there will not be resumed, compared to the section within HRM.

***Option 3: Rails WITH Trails***

This option is essentially construction of a new greenway parallel to the rails, but takes advantage of extra space within the rail right-of-way to minimize property acquisition. Because this requires clearing, grading and a new granular substructure, it is the most expensive of the options.

***Option 4: Rails IN Trails***

This is the option that is being proposed by W&HR. In some locations within Kings County they have constructed this using recycled asphalt to bring the trail surface flush with the crown of the rail (see Attachment Two). HRM staff has concern that wear and erosion will make it difficult to keep the surface flush with the rail and that there is need to maintain a flangeway for the wheel flanges of the train. Both conditions will result in the greenway being hazardous, particularly for bicycle traffic. In the Attachment One diagram for this option, an asphalt surface is used to ensure the surface remains flush with the crown of the rail and a flangeway that meets the minimum Transport Canada requirement is included.

***Option 5: Rails ABUTTING Trails***

In this option, only a portion of the existing rail bed is used for the greenway and granular fill is used to extend it to its needed width. This layout avoids having exposed rails within the greenway but will have a sharp drop-off on the side of the trail that abuts the rail.

**Trains and Active Transportation Sharing a Corridor**

There is a need with Options 4 and 5 (and in Option 3 to a lesser degree) for trains and active transportation uses to share the same space. While this may seem hazardous, there are Transport Canada regulations that allow this to happen. Trains using a shared space must travel at low speed and must be accompanied by flaggers. W&HR is in agreement with operating their trains in this manner.

Staff believes this arrangement of sharing can be successful, particularly since the frequency of train traffic is certain to be very low, if any.

**Proposal by Windsor & Hantsport Railway**

W&HR have developed a financial model for building a Rails IN Trails facility within their corridor. They have proposed this model to Kings County, Village of New Minas and Town of Windsor and currently have agreements in place with all three for trail sections. Their model suggests a construction cost of \$50,000 per kilometer and a leasing charge of \$2500 per year per kilometer. The leasing charge covers routine maintenance of the trail, but not the initial construction cost or capital upgrades.

The construction cost would increase substantially for Options 3 and 5, but presumably the leasing cost remains the same for any option. W&HR has indicated a willingness to construct a short demonstration section within HRM showing their proposed approach.

**Evaluation of Options**

Table One below summarizes the features of each of the options identified.

**TABLE ONE: COMPARISON OF OPTIONS**

	Option 1 Rails TO Trails	Option 2 Rails UNDER Trails	Option 3 Rails WITH Trails	Option 4 Rails IN Trails	Options 5 Rails ABUTTING Trails
Relative magnitude of cost	\$	\$	\$\$\$	\$	\$\$
Safety/functionality of trail	●	●	●	○	◐
Separation of trail/train operation	●	●	●	○	◐
Achieve desired min 3.5m width	◐	○	●	○	●
Acceptable to spur line owner	○	○	●	●	●

Key: ● Fully meets criteria  
 ◐ Partially meets criteria  
 ○ Does not meet criteria

Conclusion

HRM staff met with a number of stakeholders, both internal and external to HRM, regarding the future of an active transportation greenway within the spur line corridor. Although there was some acceptance of an ability to construct and operate a shared-use corridor, the group unanimously agreed that acquisition and constructing a greenway as a traditional Rails TO Trails project is clearly the preferred option. Several factors were cited in that determination:

- Regardless of the option chosen, any option that provides for shared train use will cost more than a Rails TO Trails project and will compromise the safety and functionality of the greenway;
- In addition to bearing the construction cost of the greenway, the Municipality will be obligated to lease (or sub-lease) the land from WH&R;
- If the rail line is eventually abandoned, the optics of having constructed a new trail substructure a few meters away from an already-built one will be poor;
- Active transportation uses sharing space with trains, while workable, is not an ideal situation.

Staff has concluded that the best approach to developing active transportation uses is to acquire the right-of-way and undertake a Rails TO Trails (Option 1) project. If that is not possible, or if Council directs staff to expedite trail development through a leasing arrangement with W&HR, staff recommends the Rails ABUTTING Trails (Option 5) approach. Table Two below shows rough comparative costing of these two alternatives, along with Rails IN Trails (Option 4) proposed by W&HR. Three optional corridor lengths are also provided.

**TABLE TWO: COST ESTIMATES**

	Dist (km)	Rails TO Trails		Rails ABUTTING Trails		Rails IN Trails	
		Construction	Annual Lease	Construction	Annual Lease	Construction	Annual Lease
Windsor Jct to Middle Sackville	9.0	\$980,000	\$0	\$4,040,000	\$22,500	\$1,015,000	\$22,500
Windsor Jct to HRM/Hants Line	15.4	\$1,320,000	\$0	\$6,460,000	\$38,500	\$1,390,000	\$38,500
Windsor Jct to South Uniacke	16.0	\$1,350,000	\$0	\$6,680,000	\$40,000	\$1,430,000	\$40,000

**Notes:** Construction costs are all Class D estimates.  
 All construction estimates include \$500,000 to repair severely eroded sections of the corridor. This cost would also be incurred to make the corridor capable of supporting future train operation. It is our expectation, however, that 100% of this cost would be borne by the municipality.

Acquisition of the corridor would require a coalition between HRM, the Municipalities of East and West Hants, and the Town of Windsor. The Province may also have a role to play. Table Three below summarizes the costs suggested by each of the three parties currently involved in the corridor valuation. It should be noted that an independent evaluator suggests that while 31% of the corridor length is within HRM, approximately 64% of the land value is within our boundaries.

**TABLE THREE: NET SALVAGE VALUE POSITIONS**

	W&HR	CN	CTA
Track Assets	\$325,000	Not Available	\$1,700,000
Land Value	\$400,000	\$1,910,000	\$590,000

**Source:** Canadian Transportation Agency Decision 360-R-2013

**Note:** Where the original document provides a range of values, the average has been used for better comparison.

**FINANCIAL IMPLICATIONS**

Order of magnitude financial variations between the staff recommendation and alternatives are shown in Table 2. There are no immediate financial implications with proceeding to planning work. More exact financial implications will be developed when planning for the greenway proceeds. These figures will be presented to Regional Council for approval once the project is ready to be added to the Project Budget.

**RISK CONSIDERATION**

**Risk:** Investing in infrastructure costs within a leased corridor, only to have the lease terminated or not renewed. (Options 2, 3, 4 and 5).

**Approach:** Ensure the Municipality enters into a long term leasing agreement or include terms that provide for partial compensation of capital upgrade costs should early termination be necessary. For Option 2, negotiating a long term lease is unlikely due to the need of WH&R to activate train operation quickly.

**Risk:** A collision occurs between a train and a greenway user. (Options 3 and 4).

**Approach:** Ensure compliance with Transport Canada regulations and provide a high level of signage and communication to greenway users that the corridor has a shared use.

**Risk:** The rail line is eventually abandoned by W&HR and substantially more infrastructure money was spent than what was needed for a simple rails-to-trails project. (Options 3 and 4).

**Approach:** There is no way to avoid this risk other than using options other than 3 and 4, or holding off on any project until the rail line is abandoned.

**Risk:** The greenway is constructed as proposed by W&HR despite the concern that the rail crown and flangeway will create a hazard for bikes and other users.

**Approach:** Some risk may be mitigated by posting clear and abundant warning signs indicating the presence of rails within the greenway and the hazard they create, particularly for bikes.

### **COMMUNITY ENGAGEMENT**

Substantial community engagement has been undertaken in formulating the greenway plans in the Active Transportation Functional Plan and the Integrated Mobility Plan. Some community engagement related to sections of the corridor outside of HRM has occurred recently, but none organized by HRM has been undertaken other than a stakeholder meeting referenced in the Discussion section of this report.

### **ENVIRONMENTAL IMPLICATIONS**

There are positive environmental implications to constructing greenways, as there is potential to make community connections that result in a reduction of automobile trips and an increase in active transportation trips. This results in a decrease in greenhouse gases due to emissions.

### **ALTERNATIVES**

Regional Council may direct staff to refrain from considering acquisition of the corridor, to negotiate an agreement with W&HR to lease the corridor, and to begin planning for construction of one of Options 2 to 5 as outlined in this report. If an alternative is to be pursued, staff recommends Option 5 (Rails ABUTTING Trails) as the preferred approach due to a higher degree of user safety.

### **ATTACHMENTS**

Attachment One: Options for Constructing a Greenway  
Attachment Two: Photos of Trail Sections within Kings County

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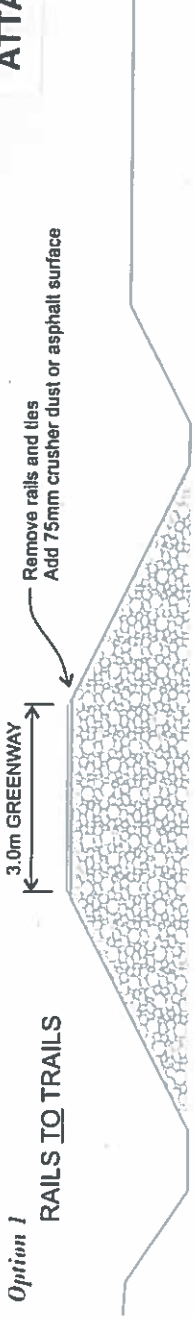
A copy of this report can be obtained online at [halifax.ca](http://halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: David McCusker, P.Eng., Parking Co-ordinator, Transportation & Public Works, 902.490.6696

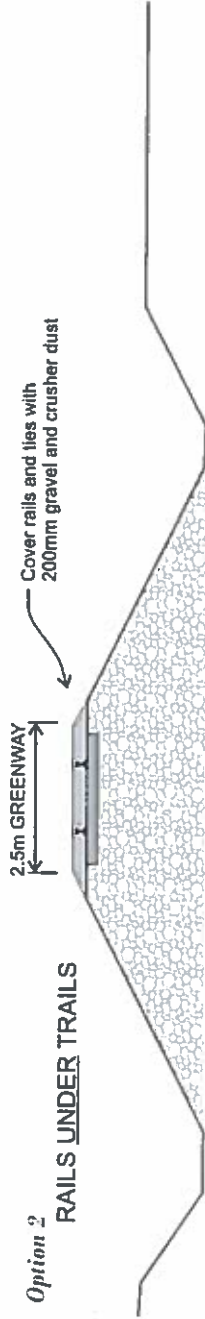
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# ATTACHMENT ONE

*Option 1*  
RAILS IN TRAILS



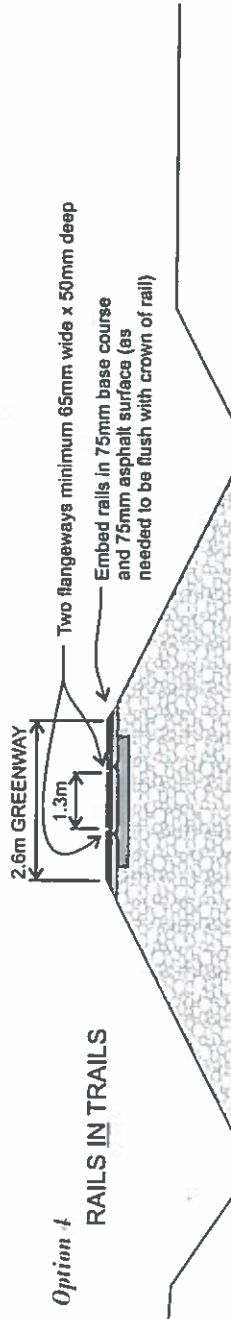
*Option 2*  
RAILS UNDER TRAILS



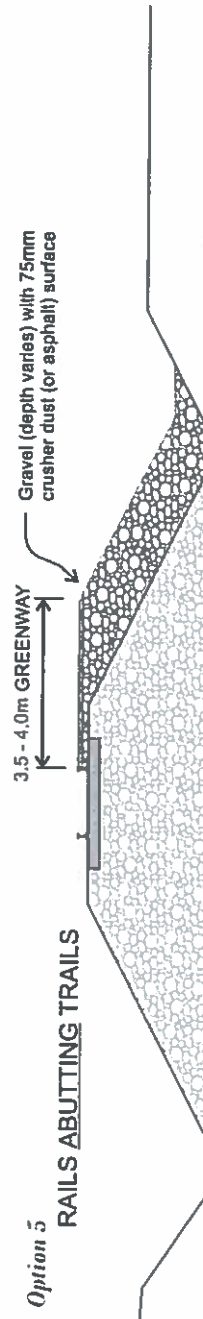
*Option 3*  
RAILS WITH TRAILS



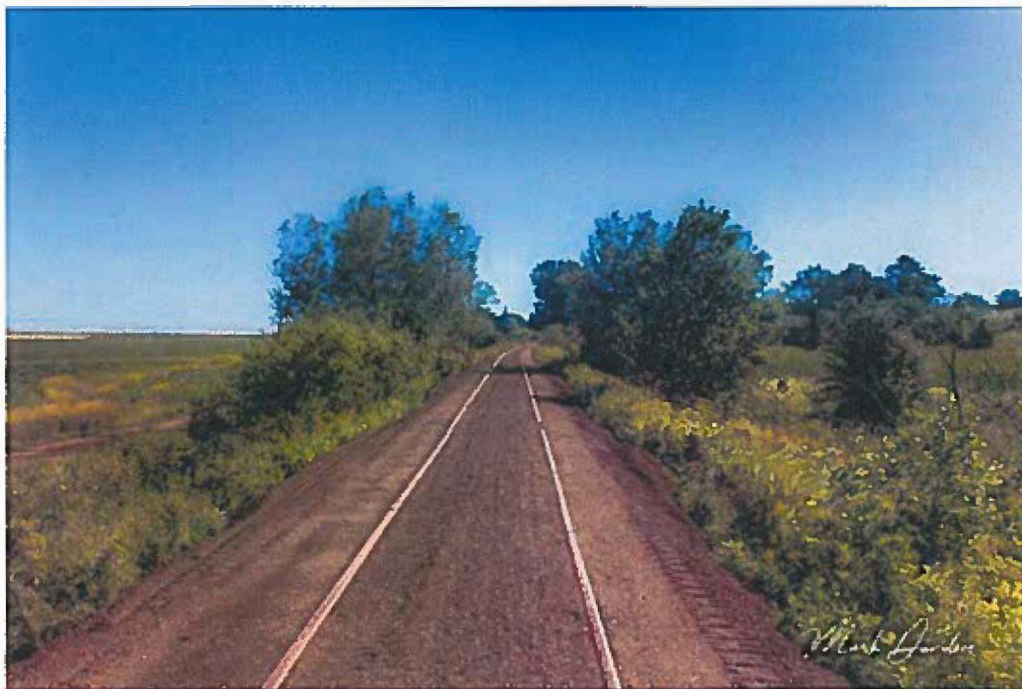
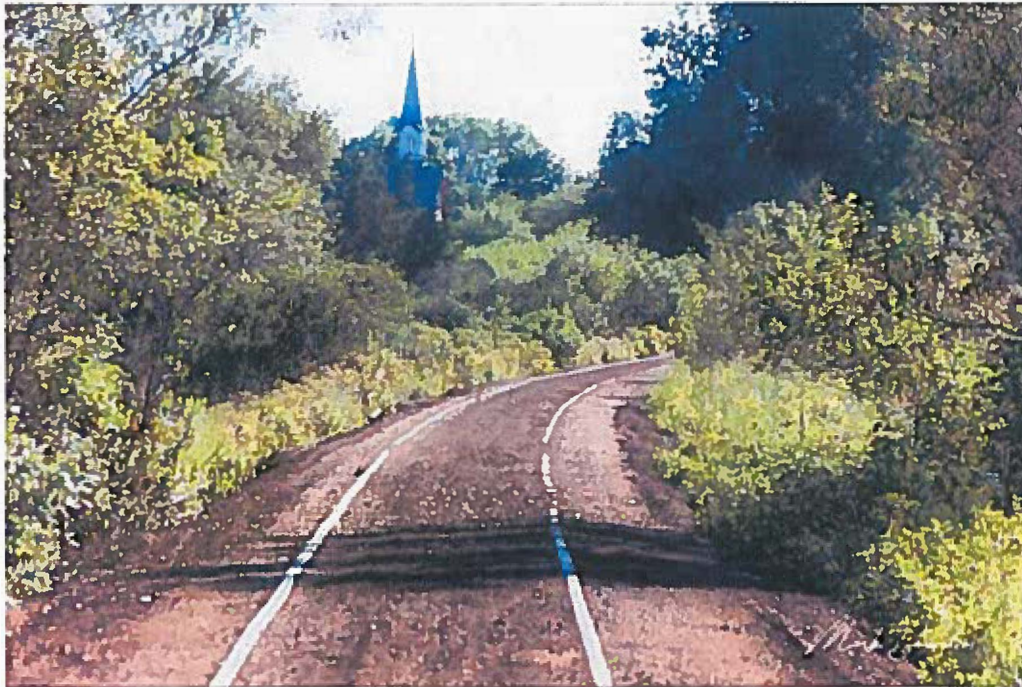
*Option 4*  
RAILS IN TRAILS



*Option 5*  
RAILS ABUTTING TRAILS







**RAILS IN TRAILS OPTION  
AS PROPOSED BY WINDSOR & HANTSPORT RAILWAY**