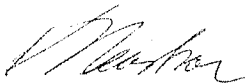




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**Regional Plan Advisory Committee**  
**August 11, 2010**

**TO:** Chair and Members of Regional Plan Advisory Committee

**SUBMITTED BY:**   
Ken Reashor, P.Eng., Acting Director, Transportation & Public Works

**DATE:** July 12, 2010

**SUBJECT:** Road Network Functional Plan

**ORIGIN**

Regional Municipal Planning Strategy, Section 4.3.1

**RECOMMENDATION**

It is recommended that the Regional Plan Advisory Committee recommend that Halifax Regional Council adopt, in principle, the Road Network Functional Plan to guide the strategic expansion of the road network in tandem with the set of other transportation functional plans resulting from the Regional MPS.

## **BACKGROUND**

Within HRM, the framework for promoting and encouraging sustainable transportation has been established within the Regional Municipal Planning Statement (to be referred to as the Regional MPS). The Regional MPS integrates land use and transportation planning allowing for improved management of travel demand and the strategic improvement of the transportation network. As well, this approach allows for the integration of mixed use transit- and pedestrian-oriented centres which are complemented by a multi-modal transportation system. The design and location of these centres will encourage the use of sustainable modes of transportation.

## **DISCUSSION**

The Road Network Functional Plan is one of five elements of a comprehensive approach to managing future transportation demand to maximize sustainability, minimize cost, and maintain mobility while remaining realistic in its expectations.

The plan is integrated with the other functional plans delivered as part of the Regional Municipal Planning Strategy:

- Transportation Demand Management Functional Plan
- Regional Parking Strategy
- Transit Functional Plan
- Active Transportation Plan

The Road Network Functional Plan is somewhat different from other functional plans in that the project recommendations were included in the Regional MPS based on detailed computer modeling of the future settlement pattern. These recommendations, as they appear in Table 4.2 of the Regional MPS, are shown in Attachment One along with an update on the status of each project. The Road Network Functional Plan document is simply a restating of these recommendations accompanied by a description of the modeling approach used to identify them.

The approach taken involves a determination of the number of person-trips that will be generated by future growth, knowing where those trips will be produced (residential areas) and attracted (workplace nodes) based on the future settlement pattern. A certain number of these person-trips were then allocated to transit and active transportation based on predicted access to these modes for specific geographic areas. Aggressive targets were set for each of these alternative modes to attract more trips than they do currently based on a recommendation of greater investment in the functionality of these modes.

Person-trips that are not attracted to transit and active transportation remain as vehicle trips that must then be accommodated on the road network. Even with aggressive targets for attraction of trips to

alternative modes, regional growth results in more vehicle trips on the roadway network. In order to maintain existing levels of congestion and delay, this increase requires additional lane capacity in certain parts of the roadway network. The projects needed to provide this capacity are those identified in Attachment One. It should be recognized that the scope and ultimate need for these projects is sensitive to the targets set for transit and active transportation. If transit ridership exceeds targets, the need for road projects is reduced, and vice-versa.

By attracting more regional trips to transit and active transportation, as well as locating more future population in areas where these alternatives can be more effective, the increase in vehicle trips can be reduced substantially. While the scope and number of roadway projects has been reduced significantly with the Regional MPS from what it would be without a plan, the number of projects can not realistically be reduced to zero.

The projects identified in the Road Network Functional Plan are those projects which provide incremental increases in traffic capacity on regional corridors to manage projected growth in traffic demand. These, however, will not be the only road network projects that will be developed during the life of the Regional Plan.

Some projects will be developed to improve efficiency or safety of intersections or corridors without adding a full traffic lane for through traffic. Examples of projects like this are the creation of a two-way centre left turn lane on a section Main Street in Dartmouth and the consideration of creating turn lanes on Joseph Howe Drive using a portion of the former spur line acquired from CN. The conversion of some signalized intersections to roundabouts is another example of this type of project.

Other road projects will be developed as part of master plan areas or other development business cases. Two examples of this type of project are the widening of Hammonds Plains Road to four lanes to accommodate development of Bedford South and other nearby developments and the creation of an underpass of Highway 102 to extend Washmill Lake Court to allow some expansion opportunity in Bayers Lake Business Park.

### **BUDGET IMPLICATIONS**

There are no immediate budget implications to the adoption of this plan. Projects are budgeted for on an individual basis and adopted independently by Regional Council.

### **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

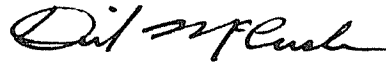
Regional Council may choose not to adopt this plan. This is not recommended as this document simply provides background to a set of recommendations which was approved as part of the Regional MPS and the implementation of which has been moving forward since the adoption of the MPS in 2006.

ATTACHMENTS

Attachment One: Table 4-2 from Regional MPS (2006) with status updates

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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Table 4-2: Growth Related Capital (Road Construction) Projects and Priorities

Programmed Projects	Planned Projects	Future Potential Projects
<p>Lacewood Drive - Extend four lane width from Main Street to Joseph Howe Drive</p>	<p>Bayers Road - Widening to five or six lanes between the CN Rail overpass and Connaught Avenue and to four lanes between Connaught Avenue and Windsor Street</p>	<p>Barrington Street - Four lanes between the two bridges</p>
<p>Mount Hope Interchange and Extension of Mount Hope Avenue to Baker Drive</p>	<p>Burnside Drive/Commodore Drive Intersection - Addition of intersection approach lanes</p>	<p>Beaver Bank By-pass</p>
<p>Fairview Interchange Upgrade - Upgrades recommended in the <i>Bridge Capacity Study</i><sup>17</sup></p>	<p>Wright Avenue Extension - Extend Wright Avenue from Burnside Drive to Highway 118</p>	<p>Highway 113 (Provincial)</p>
<p>Armdale Rotary Conversion and Access and Egress Improvements - Conversion of rotary to modern roundabout and upgrading of roadway(s) to improve access and egress to and from the Armdale Rotary</p>	<p>Highway 107 Extension - Connect Akerley Boulevard to Highways 101 and 102 (Provincial)</p> <p>Herring Cove Widening - Four lanes on Herring Cove Road between Old Sambro Road and the Armdale Rotary</p> <p>Mount Hope Avenue - Extension from Baker Drive to Caldwell Road</p> <p>Bedford South Interchange</p> <p>Middle Sackville Connector</p> <p>Highway 101 Connector and Interchange (Provincial)</p>	<p>Highway 107 - Cherrybrook By-pass (Provincial)</p> <p>Mackay Bridge Twinning and Connection to Bedford Highway</p>