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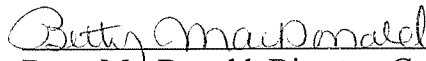
Halifax Regional Council
December 2, 2003

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY:



Rick Paynter, P.Eng., Director, Public Works & Transportation



Betty MacDonald, Director, Governance & Strategic Initiatives

DATE: December 2, 2003

SUBJECT: Traffic Congestion Coming Onto the Peninsula

INFORMATION REPORT

ORIGIN

At the October 7, 2003 meeting of Halifax Regional Council, staff was requested to prepare a report addressing the issue of heavy traffic congestion accessing the Peninsula in the short term, item 9.4.1 (ii).

BACKGROUND

Concern has been expressed in the past that development of the regional plan may result in implementation of key transportation projects being delayed. At the May 14, 2002 meeting of Committee of the Whole, staff presented a process whereby various transportation projects would be categorized as either:

- A. **Localized Projects** - smaller projects without regional implications
- B. **Strategic Projects** - larger projects with regional implications, but with clear strategic value and committed or near-committed sources of funding
- C. **Long-Term Projects** - larger projects with regional implications which require a regional planning context to determine their strategic value

Staff has continued to work towards implementation of projects in the first two of these categories. Projects fitting into the third category have significant fiscal and regional development implications and will be thoroughly investigated as part of the regional planning process.

DISCUSSION

Staff has worked diligently in developing a number of transportation projects, studies, and initiatives. Descriptions of these projects were made available to councillors through a two-day open house session held at Halifax Hall on October 28 and 29.

Localized Projects (Category A)

Although generally small in scale, local street and intersection upgrades can have great value in addressing traffic delay and congestion. These projects are funded through the approved capital budget for Traffic Improvements or Metro Transit and projects are prioritized on their ability to address traffic safety and operations concerns. Over the past two years, the following important projects have been completed:

- Nantucket Avenue realignment and signalization at Victoria Road
- Chebucto Road widening at North Street intersection
- Connaught Avenue double left turning at Quinpool Road
- Signal control of pedestrian crosswalks on Quinpool Road
- Median opening on Alderney Drive at Portland Street
- Transit priority signals at North/Brunswick and Mumford/Romans
- Traffic signal installation at several intersections

In addition, land acquisition has been completed and design work done for several localized projects for which construction will begin soon:

- Robie Street widening at Cunard intersection
- Realignment of Bayers Road and Young Street at Windsor Street
- Extension of transit lane on North Street across Gottingen
- Parkland Drive extension to Kearney Lake Road including signalization

Strategic Projects (Category B)

Several larger-scale projects have also been developed and are at various stages of implementation or application for funding. These are projects that have clear value for existing traffic or transit loads and that have little potential of directing or influencing future growth. These include:

- Lacewood Drive underpass widening at Highway 102 (end of November completion)
- Mic Mac Blvd. underpass widening at Highway 111 (underway with 2004 completion)
- Implementation of Metro Transit Study including Cole Harbour transit terminal (construction in 2004)
- Wright Avenue extension to Highway 118 (design study underway)
- Bus Rapid Transit proposal (Transport Canada funding pending)
- Cole Harbour Arterial and Interchange (Federal infrastructure funding pending)
- Larry Uteck Blvd interchange at Highway 102 (funding under Capital Cost Charges)
- Implementation of Metro Transit Study
- Implementation of Bikeways Master Plan
- Hiring of Transportation Demand Management Coordinator

Transportation Planning

In transportation planning, we define “screenlines” within our network. A screenline is a line that defines an entity (often a geographic feature) where there is limited ability to cross. A screenline typically has several crossing opportunities, and when capacity is added to one crossing point, it benefits the screenline as a whole. The harbour, the isthmus separating the peninsula from the mainland, and a line just outside of the Circumferential Highway are probably our most critical screenlines. It is important to understand that congestion at the Armdale Rotary may best be solved by adding capacity at a different location along that screenline.

We fully acknowledge that none of the projects listed above add road capacity to any of these critical screenlines. Projects that do add capacity to our critical screenlines will require significant capital investment and should be considered along with growth and land use issues. As part of the regional plan, considerable study is ongoing in determining the value of potential transportation investment. Such studies include:

High capacity transit options - This study will evaluate the best means of delivering high capacity transit service to each key commuting corridor within the region. The study will consider commuter rail, high speed ferry, and bus rapid transit and be completed in June 2004.

Transit-oriented development - This project will generate recommendations on how future development can be planned and designed to be better supportive of transit and will be completed in March 2004.

Freight movement options - The objective of this project is to evaluate options for the movement of trucks from the Ocean Terminal that do not rely on the use of downtown streets. The study, scheduled to be completed in March 2004, will consider shared use of the CN rail cut, piggybacking trucks and trailers on rail flatcar, and ferrying trucks across the harbour to the end of Circumferential Highway.

Downtown street network traffic modeling - This project will involve the development of a computer model to evaluate traffic flow within the downtown street network. The study will consider improvements to traffic flow as well as opportunities to decrease roadway space in favour of pedestrian areas and transit facilities. This work will be completed in March 2004.

Lacewood-Bedford Highway connection options - The goal of this project is to develop an effective street connection for regional traffic traveling between Lacewood Drive and the Bedford Highway without using streets designated as minor collectors. The two alternatives being considered are upgrading of Lacewood Drive and construction of a new connection through the lands of the Sisters of Charity (under redevelopment) and adjacent to Mount St. Vincent University. This project will be completed in January 2004.

Evaluation of modern roundabouts - This project, being led by the province with active participation by HRM, will implement and evaluate modern roundabouts in Nova Scotia. Staff believes that a conversion of the Armdale Rotary to conform to the rules of a modern roundabout may improve its overall function.

Transit priority pilot installation design - This work will result in design of several pilot installations which will provide priority to transit buses at signalized intersection using a variety of techniques. These pilot designs, scheduled to be completed in January 2004, will equip staff with a template to apply along additional transit priority corridors with the objective of providing more competitive transit trip times.

Reversible Lanes

Staff is often provided with ideas for quick and inexpensive solutions to traffic congestion. Although these suggestions are gratefully accepted and always investigated, some cannot safely or feasibility be implemented. One such example, mentioned specifically in council's request for this report, is the use of reversing lanes on Quinpool Road.

Staff has indicated to Regional Council in a previous information report that use of reversible lanes, while beneficial on long continuous facilities like the Macdonald Bridge, are inappropriate on streets with frequent intersections, driveways and pedestrian crossings. Furthermore, existing facilities at

the Armdale Rotary and the Willow Tree intersection are not currently capable of handling three lanes of incoming traffic.

This position is supported by the following references:

"The difficulty of handling cross and turning traffic, the confusion for pedestrians, and the questionable suitability of an at-grade facility for the high volumes may make other highway types preferable".

A Policy on Design of Urban Highways and Arterial Streets; American Association of State Highway and Transportation Officials.

"While the concept of reversible lanes [on Quinpool Road] appears to offer some benefits, there are substantial problems expected in terms of implementation, local operations, and cost, all of which make it a non-starter".

Halifax Peninsula Traffic Capacity Opportunities Study; SNC-Lavalin, April 2002.

Staff does recognize that, in certain circumstances, the use of reversible lanes may add peak direction capacity without the need for expensive roadway widening. Opportunities for use of this technique will continue to be explored.

Parking Enforcement

Staff feels that existing parking management controls on Quinpool Road strike an appropriate balance between traffic flow and commercial needs for parking supply. We believe that permitted parking does not interfere with effective flow of traffic, but that illegal parking does. Staff from Regional Planning, Traffic Services, Parking Enforcement, and Regional Police will work together to more effectively address this problem.

Transit Opportunities

Development of higher order transit systems holds great promise for managing trips across our key screenlines but, like roadways, seemingly quick and easy projects to not always deliver value.

There are two rail corridors that cross the Halifax Isthmus screenline. The High Capacity Transit Study will evaluate the benefits of increasing screenline capacity through one of several alternatives or combination of alternatives including commuter rail, rapid bus on shared rail corridor, rapid bus on exclusive corridor, and rapid bus on surface streets with transit priority measures. The study will also look at expanding the ferry network with high speed vessels which also has potential to reduce traffic loading. The study recommendations will be completed by next summer and it is the intention of staff to request approval of capital funds in 2004-05 to initiate implementation of these recommendations.

Park-and-ride lots at locations such as Exhibition Park could easily feed into such an enhanced transit system. But until that time, there would be little benefit to such a facility without vehicles to service it and without systems in place for transit to provide competitive trip times. It is the intention of staff to seek capital funding for transit fleet expansion and transit priority measures that will allow opportunities like this to be developed within the next three years.

Although ferries may also have some ability to attract trip loading away from the Armdale Rotary, staff believe that even a small investment in a permanent ferry across Northwest Arm would be imprudent due to poor connections to the transportation network at either end.

BUDGET IMPLICATIONS

Budget implications of the projects mentioned in this report have been addressed through the normal process for capital budgeting.

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.

REGIONAL PLANNING IMPLICATIONS

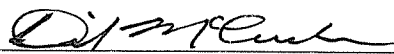
The implications of larger scale transportation projects are integral with and being examined through the regional planning process. Smaller localized transportation projects are acknowledged to have no regional planning implications and development of these projects through the Traffic Improvements and Transit budgets are proceeding.

ALTERNATIVES

There are no applicable alternatives.

Additional copies of this report, and information on its status, can be obtained by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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DMC/bmh