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Item No. 12.1.1
Transportation Standing Committee
November 29, 2018

TO: Chair and Members of the Transportation Standing Committee

Original Signed

SUBMITTED BY:

Brad Anguish, P.Eng., Director, Transportation and Public Works

Original Signed

Jacques Dubé, Chief Administrative Officer

DATE: September 14, 2018

SUBJECT: **Extension of the University Avenue Protected Bikeway Pilot Project**

ORIGIN

Halifax's Integrated Mobility Plan (IMP) includes University Avenue in a network of bicycle routes designed for users of all ages and abilities (AAA) to be implemented by 2022. The IMP identifies a protected bikeway as the preferred facility type for University Avenue.

The "Pilot Protected Bikeway Project Agreement" between Dalhousie University and HRM was signed by both parties. The term of the agreement commenced on August 15, 2016, with a duration of two years unless terminated earlier according to Clause 12 of the agreement.

Halifax Regional Council Minutes, May 12, 2015: "The following was before Council: A staff recommendation report dated April 13, 2015, with attached Dalhousie Protected Bicycle Lane Proposal *MOVED by Councillor Mason, seconded by Councillor Whitman that Halifax Regional Council:*

1. Approve the construction of protected bicycle lanes on University Avenue as described in the staff report dated April 13, 2015; and

2. Authorize the Chief Administrative Officer to enter into an agreement with Dalhousie University for the construction and pilot operation of said bicycle lanes."

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter section 322(1) states that "Council may design, lay out, open, expand, construct maintain, improve, alter, repair, light, water, clean and clear streets in the Municipality."

Motor Vehicle Act, subsection 90 (3) "The traffic authority may also mark lanes for traffic on street pavements at such places as they may deem advisable, consistent with this Act and may erect traffic signals consistent with this Act to control the use of lanes for traffic."

Administrative Order One, the Procedures of Council Administrative Order, Schedule 7, Transportation Standing Committee Terms of Reference, clause 7(b) which states: "The Transportation Standing Committee shall… (b) promote and encourage the Municipality's Active Transportation corridor initiatives which supports the overall Transportation Strategy as outline in the Regional Plan."

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend to Regional Council that HRM extend the University Avenue Pilot Protected Bikeway Project and assume responsibility for the infrastructure and maintenance related to the bikeway until Council considers the permanent all ages and abilities cycling facility for this corridor.

BACKGROUND

In 2014, Dalhousie University proposed showcasing a protected bicycle lane on University Avenue between LeMarchant and Robie Streets. This was intended to implement previous university and district plans, and support HRM's active transportation objectives. While the Municipality would retain full ownership of the street, a partnership with Dalhousie was proposed to help expedite implementation of the project, and to provide increased monitoring support than the Municipality could achieve on its own. Dalhousie and its funding partner, the Province of Nova Scotia, offered to pay the entire construction cost (approximately $50,000) and all operational costs for the pilot project.

On May 12, 2015 Regional Council approved the construction of protected bicycle lanes on University Avenue from LeMarchant Street to Robie Street and authorized the Chief Administrative Officer to enter into an agreement with Dalhousie University for the construction and operation of the pilot project.

In September 2016, the pilot project was implemented, which included removal of on-street parking on University Avenue, relocating accessible parking spaces, installing flexible bollards and pavement markings to create protected bicycle lanes with breaks for loading, adding a pay and display parking lot behind the LeMarchant Place building and installing automatic counters to count cyclists using the facility.

A Dalhousie-led monitoring committee was formed and included representation from HRM's AT group, Dalhousie's Art Centre, Office of Sustainability and Facilities Management departments. Representatives from the Dalhousie Bike Centre and the Halifax Cycling Coalition attended some meetings as guests. The committee employed several strategies to collect feedback on the pilot project that was used to inform modifications made to the facility and will inform the design of the permanent AAA cycling facility for University Avenue. Feedback was gathered through comment boxes at the Arts Centre, Student Union Building and the Killam Library, direct emails, the Dalhousie project webpage, social media, and Dalhousie's 2017 Commuter Survey.

DISCUSSION

Active Transportation staff will initiate a functional planning study in the fall of 2018 to plan and design a permanent all ages and abilities cycling facility for the University Avenue/Morris Street corridor. Pending Council approval of a preferred design for the permanent facility, the project would proceed to detailed design with a target date for construction of 2020. As the term of the pilot project agreement with Dalhousie expired in August 2018, staff proposes to extend the pilot until HRM is ready to construct the permanent cycling facility. Extending the pilot would require that HRM assumes full responsibility for the infrastructure (i.e., flexible bollards, planter boxes and pavement markings) and the year-round maintenance of the facility, including snow removal.

The pilot project has served as an effective demonstration and test of unidirectional protected bicycle lanes, a new cycling facility type for Halifax, and much has been learned over the two years since implementation.

During the first three months of the pilot project, much of the feedback received voiced concerns related to loading of people and equipment in front of the Dalhousie Arts Centre, especially during events when demand for loading/unloading of patrons is high. In response to this concern, the monitoring committee decided, in December 2016, to remove the bollards in front of the Arts Centre (North side of University Avenue between Henry Street and Seymour Street) to lengthen the area where vehicles can access the curb for loading.

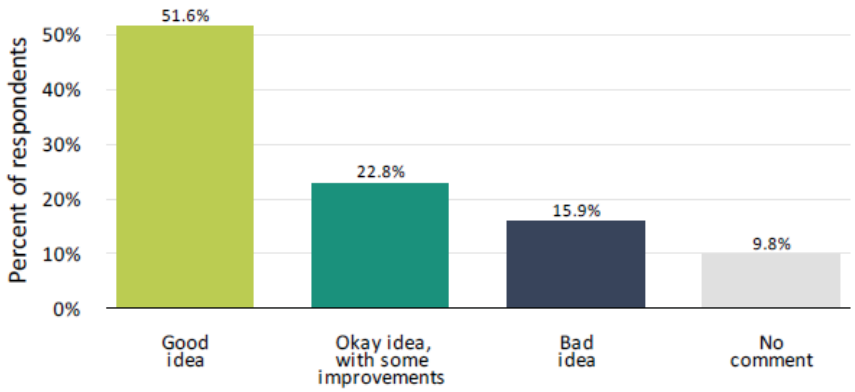
The feedback also highlighted some confusion amongst users about the parking and loading restrictions that apply to the sections of bike lane with no physical barrier. The high demand for loading at Dalhousie's buildings that front onto University Avenue results in many vehicles stopping in the bike lanes mid-block for loading purposes, which is legal under Nova Scotia's Motor Vehicle Act. However, vehicles stopping in the bike lanes greatly reduces the functionality of the facility for cyclists and the committee received many comments about this issue.

Dalhousie contracted the Dalhousie Transportation Collaboratory (DalTRAC) to gather and analyse data on the usage of the protected bike lanes over the two-year term of the pilot project. This report is not yet complete. As part of this assessment process, DalTRAC installed a permanent EcoCounter with a display on the westbound bike lane in front of the Arts Centre, and maintains a temporary EcoCounter on the eastbound bike lane in front of the Rowe Management building between May and October.

From DalTRAC's public EcoCounter portal (http://www.eco-public.com/ParcPublic/?id=4638), AT staff extracted some ridership data for the pilot facility. The weekday average volume for the Eastbound and Westbound bike lanes combined, from May to mid-October 2017, was 240 cyclists per day. The peak eastbound average weekday volume was 179 cyclists/day in September 2017 and the peak westbound average weekday volume was 149 cyclists/day in October 2017.

The Dalhousie Office of Sustainability added a question about the University Avenue pilot project to their 2017 Commuter Survey, an annual survey they have conducted since 2009. Dalhousie received 1690 completed responses, which DalTRAC analyzed and presented in the report, "Dalhousie University Commuter Study 2017." The survey asked respondents for their opinion of the University Avenue protected bike lanes (see the responses in the figure below from the DalTRAC report).

Figure 5-1: Opinions on the University Avenue Bicycle Lane



From the 583 qualitative comments received in response to this question, several themes emerged. The most frequently mentioned themes include:

- Impacts to on-street parking
- The pilot bike lanes do not continue along the full University Ave corridor and don't connect to a larger cycling network so impact on ridership is limited
- Vehicles stopped or parked in the bike lanes
- Various suggested design solutions
- The bike lanes are underutilized

The comments received through the survey and other engagement opportunities reflect the key lessons learned from the pilot as understood by the monitoring committee:

- Loading demands (people and goods) are high in front of Dalhousie buildings on University Avenue.
- The Arts Centre has daytime and evening loading demands, with peak demand for loading/unloading of patrons occurring during evening and weekend events.
- Allowing vehicles to stop in the bike lanes for loading is not an effective solution and greatly impacts the comfort, safety and appeal of the cycling facility.
- There is general support for a protected cycling facility on University Avenue, but many concerns about the design and winter maintenance of the pilot facility.
- There is consistent year-round usage of the pilot bike lanes, with the peak usage occurring in September and October.

These lessons and the data gathered by Dalhousie and DalTRAC will inform the design of the permanent AAA cycling facility for the University Avenue/Morris Street corridor. Members of the Monitoring Committee, as well as representatives from other stakeholders along the corridor, will be engaged in HRM's functional planning process. The recommended option for the permanent facility requires approval from Council.

FINANCIAL IMPLICATIONS

There will be a cost associated with year-round maintenance of the pilot bike lanes, including snow clearing, line painting and replacement of damaged bollards and/or planter boxes. Over the two years of the pilot, Dalhousie replaced 32 bollards. Replacing 15 bollards per year would cost HRM approximately $2,112 (net HST included) per year. Repainting all the pavement markings associated with the pilot facility would cost approximately $8,806 (net HST included) per year.

TPW's Road Operations and Construction staff are aware of the need to maintain year-round operation of the bike lanes and, pending the decision on this report, will be able to assume responsibility for snow clearing. The estimated cost for winter maintenance is $5,040 per year (net HST included) based on 700 metres (350m of bike lane in each direction).

The total cost, estimated at approximately $16,000 per year, is an unbudgeted expense and, therefore, will be managed through the annual projection process in 2018/19 and will be included in the proposed annual budget for 2019/20.

RISK CONSIDERATION

There are no significant risks associated with the recommendations in this Report. The risks considered rate Low. To reach this conclusion, consideration was given to operational and financial risks.

COMMUNITY ENGAGEMENT

Extensive community feedback was gathered by Dalhousie and reviewed by the Monitoring Committee over the course of the two-year term of the pilot project, as described above in the Discussion section. Engagement, specifically about extending the pilot term, is not required as no changes to the right-of-way are proposed.

ENVIRONMENTAL IMPLICATIONS

This project is supportive of the sustainability objectives of the municipality as it aims to make it safer and more comfortable for residents to choose sustainable transportation options for everyday transportation purposes.

ALTERNATIVES

The Transportation Standing Committee may recommend to Regional Council that the pilot project be terminated and the infrastructure removed. This is not recommended as the pilot facility is providing some benefit to cyclists while staff plan the permanent facility for University Avenue, which is identified in the Integrated Mobility Plan as part of the all ages and abilities cycling network targeted for completion by 2022.

ATTACHMENTS

n/a

A copy of this report can be obtained online at halifax.ca or by contacting the Office of the Municipal Clerk at 902.490.4210.

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