Date: May 1, 2020
Submitted by: Engineering and Operations Department – Infrastructure Engineering Services Division
Subject: Spring Street Traffic Pattern Change

Purpose
To meet the requirements of the Traffic and Public Places Bylaw No. 1528 by obtaining Council direction to implement a traffic pattern change on Spring Street to reduce through travel of non-local traffic during peak hours between Moody Street and Douglas Street.

Recommended Resolution(s)

THAT the pilot project for a traffic pattern change on Spring Street between Douglas Street and Grant Street be implemented as recommended in the report dated May 1, 2020 from the Engineering and Operations Department – Infrastructure Engineering Services Division regarding Spring Street Traffic Pattern Change;

AND THAT the permanent measures be implemented for a traffic pattern change on Spring Street between Grant Street and Moody Street;

AND THAT the $21,000 required to complete the traffic pattern change and associated communication plan be forwarded to the Finance Committee to identify a funding source.

Background
The City has received complaints regarding traffic volumes and speeding on Spring Street including safety concerns and confrontations between drivers and local residents for many years. Previous initiatives to try to address these concerns have led to the installation of speed humps.

In June 2019, staff conducted a traffic assessment that confirmed high volumes of non-local traffic on Spring Street during Peak hours.

Future improvements to Spring Street to support local traffic, pedestrian, and bicycle goals are identified in both the Official Community Plan (OCP) (section 15.5.2 Spring Street Promenade) and the City’s Master Transportation Plan (MTP) (Action A.2 Establish Pedestrian-Priority Streets; Action B.1(d) Repurpose Spring Street to be a pedestrian priority street).
On June 19, 2019, staff presented proposed traffic pattern changes to the Transportation Committee and the following resolution was passed:

**TC19/007**

THAT the Transportation Committee endorse the conceptual Spring Street Streetscape and traffic pattern changes as presented by staff at the June 19, 2019 Transportation Committee meeting.

The City’s Streets, Traffic and Public Places Bylaw No. 1528, part 4.1.23, identifies the following requirements for a One-Way Highway:

One-way Highway means a highway designated by resolution of the Council as one upon which vehicular traffic shall move only in the direction indicated in such resolution.

This report seeks the required resolution of Council to authorize staff to proceed with conversion of Spring Street to one-way travel.

**Discussion**

Spring Street is a unique east-west local road extending through Moody Centre from Douglas Street to Electronic Avenue. The road is identified in the Official Community Plan (OCP) as the Spring Street Promenade and a Pedestrian Priority Street in the Master Transportation Plan (MTP); the goal is to acknowledge its character, and focus on pedestrians and bicycle priority while maintaining the functionality for local traffic needs. Proposed improvements identified in the OCP and MTP include narrowed street entrances, varied paving materials, landscaping, lighting, street furniture, off-setting on-street parking, and restricting vehicle traffic to one-way traffic flow in sections.

Currently, Spring Street is a ten-metre wide lane which provides access, delivery, and waste services to the adjacent lands including a mix of residential, commercial, and historic buildings. The original infrastructure adjacent to historic buildings includes gravel or grass boulevards, ditches, and traffic control measures; where redevelopment has occurred, improvements identified in the OCP and MTP have been incorporated, including sidewalks, concrete barrier curbs, and sections of pocket parking. Over time, as Moody Center redevelops, Spring Street Promenade will continue to be improved to achieve the goals of a pedestrian priority street.

One of the goals of the OCP for Spring Street is to service local traffic. The MTP identified restricting traffic to one-way flow in sections of Spring Street as critical to improving the pedestrian and bicycle environment. It was believed that during peak hour periods, commuters were using Spring Street to avoid congestion on either Clarke Street or St. Johns Street. Staff conducted a traffic count in 2019 to evaluate the volume of non-local traffic, and identified that on average, there are under 100 vehicles per hour during the day; however, during the evening peak hours, the traffic exceeds 500 vehicles per hour. The traffic pattern is indicative of the fact that the back lane is being used by non-local vehicles during the peak hour as a route to avoid the congestion on Clarke Street and St. Johns Street.

To address this traffic issue, staff prepared a plan to implement a traffic pattern change to alternating one-way travel as shown in Figure 1. The direction of travel for each block was
carefully selected to prevent cut-through traffic while directing local traffic to the signalized intersections to eliminate the need to make left turns onto Clarke Street or St. Johns Street at an uncontrolled intersection.

![Proposed Traffic Pattern Diagram](image)

**Figure 1: Proposed Traffic Pattern**

The plan would be implemented as a pilot project from Douglas Street to Grant Street, including the provision of temporary measures. The measures will be monitored and adjusted as necessary until development occurs and permanent measures can be implemented. Temporary measures will be installed to allow bicycles and pedestrians to continue to travel two-ways on Spring Street.

Under the current COVID-10 Pandemic, staff are observing significantly lower traffic volumes than seen in prior years. With the current reductions in traffic, the subject plan can be implemented and appropriate measures taken to advise commuters prior to traffic volumes beginning to return in the future as restrictions and closures ease. These temporary measures can be monitored to ensure the success of the plan and steps can be taken to adjust the pattern as development occurs and permanent infrastructure is installed.

Currently, a development is being completed on Spring Street between Grant Street and Moody Street. A permanent conversion to one-way traffic has been designed and would be constructed as part of the adjacent development to restrict the turning movements at Moody to right-out only. This will improve the safety at this Moody intersection, promote local traffic only, as well as support the no-through movement on the overpass during peak hours.

**Other Option(s)**

1. THAT the report dated May 1, 2020 from the Engineering and Operations Department – Infrastructure Engineering Services regarding Spring Street Traffic Pattern Change be received for information.
Financial Implications
Implementation of final measures will be through development projects and will not impact the Engineering capital plan.

Infrastructure costs for the installation of temporary measures will require the modification of five intersections with temporary concrete or plastic barriers and a signage plan with an estimated cost of $8,000 - $20,000.

Prior to implementation of the traffic pattern change, a communication plan will be required to advise both the local residents as well as non-local traffic of the traffic pattern change. It is anticipated that the communication cost will be under $5,000.

Communications and Civic Engagement Initiatives
A communication plan will be developed to inform residents, business owners/operators, and non-local traffic about any changes to the road infrastructure and traffic patterns on Spring Street.

Council Strategic Plan Objectives
Improving public safety and functionality of the City’s road network aligns with Council’s 2019-2022 Strategic Plan pillar of Community Evolution, specifically to ensure City assets are optimized, maintained, and funded for current and future needs.

Report Author
Stephen Judd
Manager of Infrastructure Engineering Services
Report Approval Details

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This report and all of its attachments were approved and signed as outlined below:

Jeff Moi, General Manager of Engineering and Operations - May 25, 2020 - 6:06 PM
Dorothy Shermer, Corporate Officer - May 26, 2020 - 10:00 AM
Rosemary Lodge, Manager of Communications and Engagement - May 26, 2020 - 3:19 PM
Paul Rockwood, General Manager of Finance and Technology - May 26, 2020 - 4:31 PM
Tim Savoie - Jun 1, 2020 - 1:44 PM