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Item No. 13.1.1
Transportation Standing Committee
September 25, 2025

TO: Chair and Members of Transportation Standing Committee

FROM: Cathie O'Toole, Chief Administrative Officer

DATE: July 28, 2025

SUBJECT: Spring Garden Road Transit Priority Corridor

ORIGIN

Staff initiated.

EXECUTIVE SUMMARY

A transit priority pilot on Spring Garden Road was first proposed in 2021 following a prolonged period where construction had prevented private vehicle access to Spring Garden Road between South Park and Queen Streets. Given the significant flow of buses through this corridor, typical congestion levels in the area, and successful adaptation of drivers to the closure, piloting a Spring Garden Road Transit Priority Corridor was an attractive option at this time.

However, since 2021 general traffic has returned to this section of Spring Garden Road, and planning has begun to realize the municipality's Bus Rapid Transit (BRT) plan. This plan would depend on significant transit priority measures and rely not just on Spring Garden Road, but also on neighbouring streets to act as key transit corridors.

Information requested by council concerning options for a revised Spring Garden Road Transit Priority Corridor Pilot is included in Attachment A. Most physical interventions explored require substantial design work and high infrastructure costs, such that they would exceed the project budget and would not be easily reversible/appropriate for a pilot project. The exception to this is manually operated barriers, which could be used relatively cost effectively on a short-term basis to enforce a transit-only pilot and can be removed easily. However, given the state of ongoing BRT work, evaluating transit priority options on Spring Garden Road on a permanent basis as part of a more extensive and integrated network of transit priority measures is recommended over a manually enforced pilot.

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Regional Council:

1. Not proceed with the implementation approach described in the staff report dated March 28, 2023 for a transit priority corridor pilot project along Spring Garden Road, between South Park Street and Queen Street; and

2. Direct the CAO to continue to consider options for transit priority on Spring Garden Road as part of the broader planning for Bus Rapid Transit (BRT) implementation.

BACKGROUND

Spring Garden Road serves as a key east-west corridor on the Halifax Peninsula, linking Robie Street with Barrington Street. Such east-west connections are limited in number. As a densely developed corridor with major trip generators, Spring Garden Road accommodates 999 buses every weekday as of May 2025, and the section of Spring Garden Road between South Park Street and Queen Street accommodates 84 per cent of these buses. The implementation of Bus Rapid Transit (BRT) as proposed in the municipality's 2020 Rapid Transit Strategy would result in 1379 buses traversing Spring Garden Road each weekday, with 88 per cent using Spring Garden Road between South Park Street and Queen Street. As a vital transit corridor now and in the future, Spring Garden Road is identified as a future transit priority corridor in the municipality's 2017 Integrated Mobility Plan.

A transit priority pilot which would exclude private vehicles from Spring Garden Road between South Park Street and Queen Street was originally proposed in 2021 and intended to follow a six-month-long span where this section of Spring Garden Road had been closed to private vehicles due to construction. A transit priority corridor which excluded private vehicles was piloted for five days on Spring Garden Road between South Park Street and Queen Street in July of 2022 before being halted.

On March 30, 2023, the Transportation Standing Committee (TSC) received a report that provided an updated implementation approach for a transit priority corridor on Spring Garden Road. The proposed implementation approach augmented the approach taken in July 2022 by including prohibitive signage, transit pavement markings, lane reassignments, presence of Halifax Transit staff and informational and educational signage. At that time, a supplemental report was requested to investigate options that include physical barriers and/or signalization, information on the impact on surrounding areas, tools for ensuring pedestrian safety, consultation with local businesses, a communications plan and responses to concerns raised during the March 30, 2023, meeting.

Since March 30, 2023, additional steps have been taken towards planning for a future BRT network, of which Spring Garden Road would be a key corridor. The Government of Canada has launched a new Canada Public Transit Fund, which represents a potential avenue to fund significant transit improvements, such as BRT. With this development, it is now advisable to imagine building Spring Garden Road transit priority not just in the context of the linear space between South Park Street and Queen Street, but in the context of a broader transit priority network.

DISCUSSION

Bus Rapid Transit (BRT) refers to an enhanced form of bus service with high frequency and high reliability. BRT systems typically achieve enhanced service with extensive transit priority measures, including dedicated right-of-way.

A BRT system for Halifax was approved in the municipality's 2020 Rapid Transit Strategy, as shown below



Figure 1: Proposed Rapid Transit Network (BRT plus ferries) (source: Rapid Transit Strategy)

The image above displays the four BRT routes proposed in the Rapid Transit Strategy. The Red Line and Yellow Line travel along Spring Garden Road, with the Green Line stopping at the intersection of Spring Garden Road and Robie Street.

In preparation of pursuing funding opportunities for BRT, a draft implementation is being prepared that considers transit priority options throughout the network. This work would include evaluation of Spring Garden Road as a permanent transit priority corridor, which may join other transit priority corridors on adjacent streets. Building a wider transit priority network needs a significantly different approach than that used to achieve transit priority on a single corridor over a potentially short period of time. What works in one circumstance could be harmful in the other, making a BRT-centric long-term approach advisable.

Additional Information Requested

Additional details regarding physical barriers, enforcement, signalization, communications planning, etc. that were requested are found in Attachment A. Generally, options for physical barriers and signalization would be likely to increase compliance, but these come at significant costs and are better suited for a permanent implementation, not a pilot project. However, they have the most value if transit priority is only

being pursued on a segment of Spring Garden Road. As part of a broader BRT plan, they would likely become redundant, or it would be found that alternative measures would be more appropriate.

After significant legal and infrastructure review, it has been determined that the municipality could employ attendants to operate temporary traffic barriers from the sidewalk on Spring Garden Road at the Queen Street and South Park Street intersections. This option was not included in the most recent report and would potentially allow for a relatively cost-effective option for a pilot, with a low upfront investment, easy reversibility, and higher compliance rates. However, this method is best suited for relatively short periods of time, due to the ongoing costs of personnel.

Conclusions

Many of the physical interventions explored require substantial design work and high infrastructure costs, such that they would exceed the project budget, may take several years to complete, and may not be easily reversible/appropriate for a pilot project. However, simultaneous municipal work on BRT implementation has highlighted the importance of permanent transit priority on this section of Spring Garden Road. As such, it is recommended to evaluate transit priority on Spring Garden Road on a permanent basis, with the BRT implementation plan.

Should Regional Council provide direction to instead proceed with a pilot, as described in the report dated March 28, 2023, and with/without the addition of temporary traffic barriers, the next steps would include staff finalizing the implementation approach, beginning preparatory work and setting an official start date.

Should direction be provided to pursue automated physical barriers or signalization for a pilot, additional design work and budget would be required, which would necessitate bringing the project forward as part of the 2026/27 business planning and budget approval process.

FINANCIAL IMPLICATIONS

No immediate costs are associated with the recommendation. Costs for alternative approaches, should council choose to proceed with a pilot, are explored in Attachment A.

COMMUNITY ENGAGEMENT

Halifax Transit staff met with the Spring Garden Area Business Association (SGABA) and held an open house for representatives of individual businesses on April 29, 2024.

Key themes from this engagement activity included:

1. Concerns about safety

- Concerns the corridor could encourage disruptive public gatherings.
- Concerns with side street traffic congestion (Brenton Street and Birmingham Street).
- Concerns about the speed of buses and wind effects.
- Suggested more/changed pedestrian signs around Birmingham Street.

2. Concerns about insufficient enforcement

- Participants largely understood the limitations and did not expect a prolonged presence from HRP officers during a pilot.
- The idea of automatic barriers was generally well received, but businesses were unsure if they would work here.

3. Concerns about business visibility and performance

- Food delivery drivers may struggle with access to food establishments in the corridor.
- Concerns that tour buses won't be permitted through the corridor, leading to lower business visibility by tourists.

- Reinforcement that a 24-hour transit only corridor would eliminate access for vehicles necessary to service the businesses.
- 4. Traffic control measures**
- The addition of pavement markings was generally well-received.
 - Generally positive feedback was received regarding the potential for street art; however, it was unclear to participants how/if it could work with regulatory markings.
 - It was suggested the pavement markings should include the time of the traffic restriction in the bus lanes.
- 5. Communications**
- Clear communications are needed to inform that emergency vehicles can enter the priority corridor. This was a concern for several businesses.
 - Communication is needed on how this pilot would benefit the broader community; many businesses felt this would impact sales.
- 6. Extent of Pilot**
- Many participants suggested the pilot be more restrictive and also remove transit services from this portion of Spring Garden Road, resulting in a pedestrian only environment.

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, S.N.S. 2008, c. 39 as amended

318(2) In so far as is consistent with their use by the public, the Council has full control over the streets in the Municipality.

321(2) The Council may, by policy, appoint a traffic authority for all or part of the Municipality.

321(8) The traffic authority for the Municipality has, with respect to highways in the Municipality, excluding those for which the Provincial Traffic Authority has authority, the powers conferred upon a traffic authority by or pursuant to the Motor Vehicle Act.

322(1) The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality.

Motor Vehicle Act, R.S., c. 293, s. 1

90(5)(c) The traffic authority may ...

(c) exclude from traffic on specified streets or specified portions of streets vehicles other than public transit vehicles or vehicles specified by the traffic authority”.

ATTACHMENTS

Attachment A – Additional Information

Attachment B – Spring Garden Road Transit Priority Corridor Report dated March 28, 2023

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.

Report Prepared by: Nick Cuthbertson, Project Manager, Transit Planning, Halifax Transit, 902.497.5847

Additional Information

Spring Garden Road Transit Priority Corridor Pilot

Prepared by:

Transportation Planning & Halifax Transit
August 2025

Physical Barriers

Overview

Three types of physical barriers were considered:

1. Automatic gates,
2. Automatic, retractable bollards, and
3. Temporary traffic barriers, moved by personnel.

Gates, bollards, and traffic barriers were investigated for use at both ends of the proposed transit priority corridor (South Park Street and Queen Street intersections), but not at intersections along the corridor (Brenton Street, Dresden Row, and Birmingham Street), due to the time associated with moving these mechanisms, and current traffic flows. Other physical interventions such as sump busters, bus traps and collapsible bollards (bollards which collapse when driven over by a bus) were not explored in as much depth.

Automatic Gates

Were a Spring Garden Road transit priority pilot to be pursued, automatic gates at inbound lanes would establish a physical barrier that could prevent general automobile traffic from entering the transit priority corridor at South Park Street and Queen Street. Placing gates at inbound traffic lanes on Spring Garden Road but leaving outbound lanes without gates would prevent non-compliant cars from getting trapped inside the corridor. Gates would rise as buses approach but stay closed for all other traffic. Because a physical barrier is created with automatic gates, this solution could provide a higher level of regulatory compliance, while also limiting the need for dedicated enforcement from Halifax Regional Police; though, general automobile traffic could continue to access the transit priority corridor via Brenton Street, Dresden Row, and Birmingham Street, or by closely following a bus as it passes through an open gate. Automatic gates have been used successfully to allow transit access to a restricted corridor in Banff, Alberta, although the space is focused foremost on pedestrian traffic.

There would be technological, infrastructure, and regulatory requirements for the implementation of automatic gates, including:

- Excavation of the sidewalk for the gate's mechanical housing. Due to on-street constraints, the mechanical housing would need to be located along the curb, which requires cyclists to move closer to the centre line when making movements through the intersections around the gates as cyclists would not trigger the gates to rise. Excavating to place the gate's housing on the curb would also reduce the expected life span of the pavement/sidewalk infrastructure.
- A detection system so gates automatically rise when approached by a Halifax Transit bus. The detection system would also need to accommodate emergency service vehicles. This would require coordination with external agencies to ensure they can proceed through the gates.

- Safety features, including pedestrian and vehicle sensors, to ensure gates do not close on pedestrians, cyclists, or vehicles; and
- Redundancies, either technological or staffing, in the event that extreme weather, power supply, or mechanical issues prevent the use of the gate as intended.

Other potential issues related to automatic gates include:

- Automatic gates have the potential to create hazards within the right of way should they fail to open as buses approach, or close unexpectedly.
- Gates may become inactive and require resetting if the gate arms are tampered with. Halifax Transit experiences this routinely at transit terminals.
- Automatic gates could create hazards for pedestrians (e.g., pinch points and moving parts).
- Gates could detract from the overarching goal of beautifying the public realm along Spring Garden Road.
- The gate would have to lower each morning at 8:00 a.m., this would provide an opportunity for a lowering gate to impact oncoming traffic.
- The rising/falling speed of gates ranges from 1 to 3 seconds, depending on the model of the gate, which could negatively impact transit performance at intersections.
- Gates would need to be connected with existing traffic light control mechanisms to ensure the gate does not open at an inappropriate cycle phase, and new programming would be required to facilitate this.
- Automatic gates would require careful design and construction in such an infrastructure-dense area, which could take several years to complete.

Some of the potential issues with an automatic gate can be mitigated:

- The use of 'breakaway' arms, whereby a vehicle can drive through the gate without significant damage to the vehicle or gate.
 - Using soft material to surround the arms can also mitigate damage if the arm were to ever come down on a passerby or vehicle.
- Audible and light signals can also direct public attention to gate movements. While signaling each time a bus opens and closes the gate may be excessive, signaling each morning gate closing on an 8:00 a.m. - 8:00 p.m. pilot could increase public awareness considerably, and reduce the likelihood of cars driving into a closing gate.

While issues concerning gates have been addressed by Halifax Transit in controlled environments, installation on a public street would be novel. An arm broken off the gate and lying on the pavement will have a far greater impact on Spring Garden Road than in a controlled area, such as at the Burnside Transit Centre, for instance.

Current estimates put the cost for the purchase and installation of gates 10 feet or less in length at both ends of the corridor at a minimum of \$200,000. Additional costs could be incurred related to integration with technology. This number is based on quotes received from existing municipal contractors for technology provision and road maintenance. Furthermore, additional costs would apply if gates need to be removed at the end of a pilot, or during it if they fail to operate as intended.

Automatic Retractable Bollards

Retractable bollards are bollards that fall, pneumatically or hydraulically, as buses approach and rise once buses have passed. This method of implementing physical barriers for a transit priority corridor along Spring Garden Road would be expensive and have a significant operational impact. Like automatic gates, retractable bollards would create a physical barrier within the roadway at each end of the corridor, which would prevent automobiles from entering the transit priority area, while allowing buses, emergency vehicles and service vehicles into the area and reduce the need for active enforcement from Halifax Regional Police. Retractable bollards have been used successfully in cities like Christchurch, New Zealand to keep general automobile traffic out of designated zones at certain times of day, while providing protection to pedestrians.

Like gates, bollards could be placed on a timer for a time-restricted transit priority corridor; however, there is a high probability of conflict between bollards and vehicles moving through the intersection when the bollards rise at the start of the operational period, including a risk of partially lifting a vehicle. As such, it is questionable whether retractable bollards represent a viable option for a time-restricted corridor. Like gates, many technological and infrastructure challenges exist for retractable bollards. These include:

- Bollards have a large underground infrastructure component and, therefore, their installation would require significant excavation and impact to underground infrastructure, including Halifax Water and Nova Scotia Power transmission lines. Moving existing underground infrastructure would greatly increase the cost of bollard installation, and further study is required to determine what type of reconfiguration, if any, would be possible on Spring Garden Road.
- A detection system so the bollards automatically lower when approached by a Halifax Transit bus. The detection system would also need to accommodate emergency services vehicles.
- Redundancies in the event that extreme weather, power supply, or mechanical issues prevent the use of the bollards as intended.
- The use of automatic retractable bollards in this context (traffic configuration, climate, etc.) would be novel, and the municipality would have few relevant examples to compare to, so this approach introduces a new level of risk.

Other potential issues related to retractable bollard installation include:

- Drivers who do not recognize the presence of bollards may collide with the bollard and cause damage to their vehicle and/or the bollards and could pose a risk to other road users.
- Bollards have high maintenance and repair costs because a significant portion of their systems are located underground.
- Rising/falling speeds for bollards range from three to 10 seconds, depending on the model of the bollard, which could negatively impact transit performance at intersections.
- Bollards would need to be connected with existing traffic light control mechanisms to ensure the bollards do not fall at an inappropriate cycle phase, and new programming would be required to make this happen.
- Costing is much less certain than gates due to the significant underground component and uncertainties with this type of construction.
- Automatic bollards would require careful design and construction in such an infrastructure-dense area, which could take several years to complete.

Lanes blocked with bollards are expected to cost between \$40,000 and \$150,000 before costs to alter underground infrastructure. Costs to alter underground infrastructure for bollard installation are expected to be in the hundreds of thousands of dollars, if this is possible at all while maintaining functional utility infrastructure under the right of way.

Further, while potential issues with gates can be mitigated with measures such as breakaway arms, few if any measures of this type apply to bollards.

Temporary Traffic Barriers

Should council choose to proceed with a transit priority pilot on Spring Garden Road, manually moved traffic barriers, such as a sawhorse, barrels or small moveable gates may represent a viable option for excluding private vehicles from Spring Garden Road and can be implemented relatively quickly. Barriers would be placed in the roadway at the beginning of the pilot period and moved out of the way by dedicated staff to allow buses to enter the corridor.

Although as discussed at the March 30, 2023, meeting, enforcement options for a pilot are limited, HRM's Legal & Legislative Services and Traffic Services teams have confirmed that a designated person could operate a barrier to prevent unauthorized vehicles from entering a transit priority corridor.

To minimize the need for the personnel/attendant to enter active traffic lanes, barriers under consideration would include a small retractable, wheeled, swing, or lift gate, all of which would be designed to operate with minimal physical effort, from a safe location. It is anticipated that a gate of this nature would cost approximately \$5,000 - \$10,000. Staffing the pilot with attendants would represent a much more significant cost, estimated in the range of \$30,000 - \$50,000 per month. A temporary/moveable gate/barrier would not require the same level of infrastructure investment as automatic gates/bollards, and would allow a pilot to proceed sooner, and with minimal long-term impact on the streetscape/infrastructure.



Figure 1: A Foldable Traffic Barrier (*source: ULINE*)



Figure 2: A Wheeled Traffic Barrier/Crowd Control Barrier (*source: Seton*)

Several considerations apply to this approach:

1. The intent would be for the person(s) responsible for moving/operating the barrier(s) to be on-site for the full daily duration of the transit priority corridor in all weather conditions for the initial launch. As the public becomes used to the pilot, it may be possible to reduce the presence of barriers and their attendants. This would be approached incrementally, based on compliance and observations to public reaction to the pilot.
2. The attendants would not be able to penalize drivers disobeying the rules of the pilot; that authority would remain with Halifax Regional Police.
3. Keeping with the implementation approach in the March 28, 2023 staff report, a Halifax Transit Mobile Supervisor could be onsite regularly to support a pilot, including supporting the attendants operating the barriers.
4. Traffic barriers would need to be removed or left in the open position during snow clearing operations.

Signalization

Overview

Two signalized solutions were considered:

1. Re-signalization of the intersections along the transit priority corridor with context-specific traffic signals; and
2. The use of LED blank-out signage (Figure 3) with the existing traffic signal configuration maintained for a time-restricted transit priority corridor (e.g., 8:00 a.m. to 8:00 p.m.) or 24/7 implementation.



Figure 3: LED Blank-out Sign (*source: Orange Traffic*)

Transit Priority Corridor-Specific Signal Solution

A transit priority corridor-specific signal solution (that is, a traffic signal configuration where permitted movements are explicitly designated by the traffic signals) represents a possible solution for a transit priority corridor implementation.

A signal solution would explicitly designate permitted movements along the transit priority corridor, thus improving regulatory compliance. There is a significant cost associated with implementing a signal solution. Traffic poles, pole bases, and arms would need to be upgraded at several locations to accommodate the additional equipment and load, as well as wiring and programming changes to implement the solution.

Upgrading the inbound traffic lights at the South Park Street and Queen Street intersections to multi-light consoles with bus signals, and green arrows is the primary corridor-specific solution being considered at this time.

In this configuration, buses could be signaled onto Spring Garden Road, while diverting car traffic away from the transit priority corridor with green arrows denoting approved movements. On a 12-hour pilot, the arrows could be inactive in favor of a simple green ball at 8:00 p.m. Hardware costs for the six upgraded consoles are estimated at a minimum of \$34,000 each. However, to fully redesign any of the intersections in question would be a time-consuming endeavor and costs could easily be in excess of \$500,000.

Existing Signal Configuration with Blank-out Signage

LED blank-out signage is light-up signage that can be turned on or off at specific times. It is often used in other cities to denote time-based restrictions. For example, a no right turn from 4:00 p.m. – 6:00 p.m. restriction would be denoted by simply lighting a no right turn sign from 4:00 p.m. – 6:00 p.m. each day. LED blank-out signage could be used in association with the existing traffic signal configuration to implement a time-restricted (e.g., 8:00 a.m. to 8:00 p.m.) priority corridor. The programming for blank out signs could also be changed to alter pilot duration as desired. In

a case study from Toronto, Ontario, the installation of LED blank-out signs resulted “in an average reduction in prohibited left turns during common restricted times ranging from 39% to 54%.¹” This was in a study of two intersections on King Street, where dedicated transit lanes were set alongside right turn or right turn/straight ahead lanes. While the context of Toronto differs from Halifax, these results show LED blank-out signs may improve regulatory compliance.

In the case of Spring Garden Road, no straight through blank out signs could be affixed to poles or arms to face oncoming traffic at the Queen Street and South Park Street intersections, and no right turn and no left turn signs could be affixed to poles at these intersections to inform cars moving perpendicular to the corridor. These signs could be lit as desired for the duration of the pilot (either 8:00 a.m. - 8:00 p.m. or 24/7).

Because of the additional weight added to the traffic arms, it is anticipated that traffic pole bases, poles and arms would need to be upgraded to accommodate LED blank-out signage. Like the signal solution, LED blank-out signs would require wiring and programming for their implementation but have a low maintenance and upkeep cost, making them more suitable for long-term use. Installation of blank out signs is estimated to be at least \$41,000 per sign, including arm, pole, and base upgrades.

In addition to the signals at the Queen Street and South Park Street intersections, should additional signage be used to implement a transit priority corridor, no left turn and no right turn signs are also thought appropriate northbound at the intersection of Spring Garden Road and Dresden Row and southbound at the intersection of Spring Garden Road and Birmingham Street. A no right turn sign would also be appropriate northbound at the intersection of Spring Garden Road and Brenton Street. Additional signals added on top of this are likely to be unnecessary and confusing for drivers. While traditional signs would be most cost effective and are expected to communicate the rules of the proposed pilot, blank out signs could be used to bring more attention to the change.

Enforcement

A concern raised by TSC members during the March 30, 2023, meeting was the enforcement of the regulations for a transit priority corridor. Committee members asked staff to explore alternative solutions to having police at the site to control traffic during any transit-only periods. Requests included declaring Spring Garden Road as a work zone under the *Motor Vehicle Act* or closing Spring Garden Road by motion of Council.

As outlined above, related to temporary traffic barriers, it has been determined that it is possible to have attendants on site to operate temporary traffic barriers (i.e., gates), during a transit priority pilot. In a pilot, this appears to be the most viable solution to manually controlling vehicle access

¹ Fu, H. (2018). LED Blank-Out Signs: By-law Turn Prohibition Enhancement, City of Toronto. [PowerPoint Presentation \(itscanada.ca\)](#)

without the presence of police.

Several other alternatives were explored and are summarized below for reference:

1. Have Halifax Transit Mobile Supervisors give tickets. This is not possible, as Mobile Supervisors can only give tickets to vehicles parked or stopped in bus stops or bus lanes.
2. Declaring Spring Garden Road as a work zone. This is not possible without performing construction or maintenance type work. Provincial regulations clearly state construction, maintenance, or utility work must be done to create a work zone.
3. Use special constables to issue tickets to drivers breaking the rules of the pilot. None of the municipality's special constables are authorized to issue tickets to moving vehicles. The Nova Scotia Department of Justice has advised that empowering special constables to give tickets to moving vehicles is not possible with the current provincial framework.
4. Have crossing guards prevent cars from entering the corridor. As stated during the March 30th, 2023, meeting, crossing guards have no legal authority to direct traffic.
5. Issue tickets with traffic monitoring cameras. At time of writing this is not legal in Nova Scotia and will not be legal until the proclamation of the Traffic Safety Act, for which the province has not provided a timeline.

Pedestrian Safety

A transit priority corridor along Spring Garden Road, between South Park Street and Queen Street, would result in general automobile traffic being diverted from existing travel patterns. At the intersections of Spring Garden Road and South Park Street and Queen Street, pedestrians cross on protected signal phases. Traffic would be reduced turning into the Spring Garden Road pilot area, and traffic may also divert around these intersections as restrictions increase, however, turning movements away from the pilot area would likely increase. It is challenging to anticipate what new patterns could emerge and the impact on volumes and turning movements at each of these intersections. If council proceeds with a transit priority corridor, no immediate risk to pedestrians has been identified, however, whether a pilot or permanent implementation, it is recommended any Transit Priority Corridor approved on Spring Garden Road closely monitor pedestrian interactions and adapt measures along the corridor as necessary.

During consultation with local businesses, additional pedestrian lights were requested for Birmingham Street at both sides of its intersection with Spring Garden Road, as well as at Brenton Street. However, estimates for a full half-signal installation start at approximately \$250,000, and these crossings do not meet the criteria typically used to warrant an intervention at this time.

Measuring Impacts on Surrounding Areas

Experience during the construction period for the Spring Garden Road streetscaping project suggests that local area traffic can be managed if Spring Garden Road is closed to private

vehicles. Preliminary Streetlight Data shows that automobile traffic largely shifted to use Sackville Street and Morris Street from Spring Garden Road during the streetscaping construction, resulting in an increase in volume on these streets and some connecting streets, primarily Queen Street. South Park Street overall saw a decrease in daily volume, as drivers destined for Spring Garden Road largely rerouted to use Sackville and Morris Streets. Dresden Row and Birmingham Street within Schmitville showed small increases in volume during the streetscaping as well, indicating that some drivers were re-routing, likely to avoid construction-related congestion on Queen Street and Morris Street during the busiest hours of the day. However, there was likely a significant amount of traffic that would have avoided the area altogether due to the construction.

Some vehicles would likely avoid the area due to the pilot restrictions, as they did for construction restrictions, and a pilot would have the added advantage of not forcing buses onto surrounding streets, freeing up capacity there compared to construction levels of traffic.

Communications Plan

A plan has been developed that could guide the communication for a resumed transit priority pilot on Spring Garden Road. The plan details an education and awareness campaign to communicate to key audience groups about the project details, benefits, regulations, and what can be expected in terms of impacts to the public, and Spring Garden business owners. Should the campaign move forward, its goals are expected to be realized through close collaboration between Halifax Transit, the Spring Garden Area Business Association, and Halifax Regional Police.

The plan includes robust paid and unpaid social media campaigns, traditional and digital advertising, proactive media relations, and the establishment of a central web page. The plan includes a recommended budget of \$20,000 - \$30,000 compared to a budget of \$11,000 for the initial pilot.



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Item No. 12.1.3
Transportation Standing Committee
March 30, 2023

TO: Chair and Members of Transportation Standing Committee

SUBMITTED BY:


Cathie O'Toole, Chief Administrative Officer

DATE: March 28, 2023

SUBJECT: Spring Garden Road Transit Priority Corridor

ORIGIN

September 29, 2022, meeting of the Halifax Regional Council (Item 15.3.1):

MOVED by Councillor Mason, seconded by Councillor Stoddard

THAT Halifax Regional Council:

1. Rescind Regional Council's approved resolution from December 7, 2021 directing the Chief Administrative Officer to "proceed with a year-long daytime transit priority corridor pilot project on Spring Garden Road between South Park Street and Queen Street during the hours of 7a.m. –8 p.m., starting June 2022"; and
2. Direct the Chief Administrative Officer to complete an operational review to investigate additional traffic control measures and other operational needs that are required to operate a transit priority corridor pilot project on Spring Garden Road between South Park Street and Queen Street and return to the Transportation Standing Committee with a recommended implementation approach by February 2023 for the pilot project for a spring of 2023 implementation.

MOTION PUT AND PASSED

LEGISLATIVE AUTHORITY

Halifax Regional Municipality Charter, subsection 318(2): "In so far as is consistent with their use by the public, the Council has full control over the streets in the Municipality."

Halifax Regional Municipality Charter, subsection 321(2): "The Council may, by policy, appoint a traffic authority for all or part of the Municipality."

RECOMMENDATION ON PAGE 2

Halifax Regional Municipality Charter, subsection 321(8): “The traffic authority for the Municipality has, with respect to highways in the Municipality, excluding those for which the Provincial Traffic Authority has authority, the powers conferred upon a traffic authority by or pursuant to the *Motor Vehicle Act*.”

Halifax Regional Municipality Charter, subsection 322(1): “The Council may design, lay out, open, expand, construct, maintain, improve, alter, repair, light, water, clean, and clear streets in the Municipality.”

Nova Scotia Motor Vehicle Act, subsection 90 (5) which states that “The traffic authority may (c) exclude from traffic on specified streets or specified portions of streets vehicles other than public transit vehicles or vehicles specified by the traffic authority”.

RECOMMENDATION

It is recommended that the Transportation Standing Committee recommend that Halifax Regional Council approve the implementation approach developed as described in this report for a transit priority corridor pilot project along Spring Garden Road, between South Park Street and Queen Street.

EXECUTIVE SUMMARY

In July 2022, a transit priority corridor pilot project was implemented on Spring Garden Road, between South Park Street and Queen Street, that prohibited through vehicular traffic (except buses) on this section of Spring Garden Road between 7:00 a.m. and 8:00 p.m. The pilot was paused after five days in operation due to operational challenges stemming from a lack of compliance with the new traffic regulations. On September 29, 2022, Regional Council directed staff to complete an operational review that would investigate options aimed at better implementing the pilot and develop a new implementation approach that could be delivered in spring 2023. The findings of this work are summarized in this report.

The findings suggest that additional traffic control measures and adjustments to the July 2022 approach are necessary. Options remain limited as a fully robust traffic control option would likely require infrastructure investment that is not considered appropriate for a pilot installation. The operational review also identifies the need for enforcement of the transit priority corridor; however, through discussions with Halifax Regional Police, there is no guarantee that enforcement will be available. Based on the operational review, a revised implementation approach was developed that includes the following:

- Adjusting the operational period to 8:00 a.m. to 8:00 p.m.
- Updating the traffic control configuration to include:
 - prohibitory regulatory signage;
 - lane reassignments using temporary barriers;
 - transit priority pavement markings; and
 - supplemental, information signage.
- Enforcing the regulations of the pilot through:
 - A dedicated, onsite Halifax Transit Mobile Supervisor for the duration of the pilot will assist with providing information to members of public about the pilot and help staff respond to any operational needs of the project. Subject to operational availability, Halifax Regional Police will support enforcement through patrols in the first two weeks as well as ongoing enforcement as part of their regular traffic patrols to the extent possible without impact other operational priorities.

The objective of the pilot project is to gain a better understanding of how Spring Garden Road can operate as a transit priority corridor and how the pedestrian realm can be enhanced. These factors will be important to consider as part of ongoing planning for the Bus Rapid Transit (BRT) service that was identified in HRM's

Rapid Transit Strategy. The updated implementation approach described in this report represents what staff consider to be the most appropriate way to deliver the pilot considering the balance of functionality and cost that is fundamental to a pilot project. There are multiple risks, however, that should be considered:

- The traffic control configuration and time of day nature of the regulations are unique and could be confusing for drivers. Although the proposed improvements to the traffic control configuration are expected to improve driver compliance relative to the initial pilot, it is expected that it will continue to be a challenge, particularly in the early days of the pilot. There will likely be a period during which compliance will be relatively poor, which could result in driver confusion and frustration. As drivers adapt to the changes, it is expected that compliance will improve. Although 100% compliance would be ideal, it is not likely to occur and is not critical to the success of the pilot from a transit operation or pedestrian realm perspective. However, driver compliance is important overall and should be closely monitored.
- Transit travel times could increase relative to current operation as traffic congestion may occur at the Queen Street and South Park Street intersections due to the required traffic diversion. Traffic-related impacts are expected to abate over time as drivers adjust their routing in response to the changes.

BACKGROUND

A transit priority corridor pilot project launched along Spring Garden Road, between South Park Street and Queen Street, on July 4, 2022. General automobile traffic, excluding buses, were restricted from accessing this section of Spring Garden Road between 7:00 a.m. and 8:00 p.m. In preparation for the pilot, a signage plan was implemented to reflect the regulations of the transit priority corridor and a communications campaign launched to raise public awareness. However, upon implementation of the transit priority corridor, the project experienced immediate challenges—drivers continued to use the section of Spring Garden Road that was intended to be closed to general automobile traffic. Enforcement of the pilot's regulations by Halifax Regional Police was challenging due to the lack of available police resources as well as due to more critical public safety priorities and is expected to continue to be constrained for the purposes of enforcement related to this project. Therefore, having a consistent police presence along the transit priority corridor is not feasible, nor can it be guaranteed by the Halifax Regional Police. Dedicated shifts to enforce the transit priority corridor fall within 'Extra Duty' assignments for officers, meaning they are voluntary, and, therefore, they may not be filled. This was also a contributor to the lack of police resources in July 2022 and is likely to continue to be a challenge.

In September 2022, the Transportation Standing Committee directed staff to conduct an operational review to investigate additional traffic control and other measures required to operate a transit priority corridor pilot on Spring Garden Road and to recommend an implementation approach targeting spring 2023.

DISCUSSION

The overarching goals of the Spring Garden Road streetscaping project were to improve the corridor for pedestrians and transit and to beautify the public realm. With the built-form improvements made to Spring Garden Road during 2021, the objective of the transit priority corridor pilot is to help staff and the public understand how removing general automobile traffic could enhance Spring Garden Road as a pedestrian-oriented street and as an important corridor in the regional public transit network, which can help inform future BRT implementation. As staff experienced during the pilot's initial implementation in July 2022, however, executing a time-based and mode-restrictive transit priority corridor along Spring Garden Road represents a significant challenge.

Transportation mode and user group diversity, right of way constraints, and Spring Garden Road's various functions—as a commercial destination, place of employment, traffic and transit throughfare, residential area, and institutional and public space—create challenges to successfully operationalize a transit priority

corridor pilot project. Traffic control regulations must address these challenges and be clear, enforceable, and interpretable for all road users. As a pilot project, the functionality of regulations and traffic control measures must also be balanced with overall cost and disruption to infrastructure. And, because the street must remain open to allow buses, active transportation users, and emergency vehicles, available traffic control measures are limited. Experience during the construction period for the Spring Garden Road streetscaping project seems to suggest that local area traffic can be managed. However, it is recognized that there was likely a significant amount of traffic that would have avoided the area altogether due to the construction activity and widely publicized closure of Spring Garden Road to all traffic. Staff have prepared an implementation approach that balances functionality and costs that could enable the successful implementation of a transit priority corridor on Spring Garden Road.

Operational Review of Transit Priority Corridor Pilot

An operational review for the transit priority corridor pilot project has been completed which considers the fundamental parameters of a transit priority corridor—operational period, traffic control measures, and enforcement—and identifies and evaluates potential implementation options for each parameter. The review also identifies the high-level operational needs of a transit priority corridor. The findings of the operational review are below.

Operational Period

Although an all-day—'24/7'—transit priority corridor would simplify the regulations and communications for a pilot, a time-based transit priority corridor provides greater operational flexibility. A daytime transit priority corridor pilot can restrict vehicular access when general automobile and Halifax Transit volumes are highest but remain open to other vehicles during off-peak hours when volumes are lower. A time-based transit priority corridor can also limit potential disruptions to businesses along Spring Garden Road for activities such as waste collection, allowing them to shift operations outside of peak periods without the need for special exemptions. Overall, a 24/7 transit priority corridor is generally seen as more restrictive than necessary to improve Spring Garden Road as a pedestrian and transit corridor upon initial implementation.

To understand the full impacts of a transit priority corridor pilot, a 12-month pilot would be required to observe activity-level changes related to seasonality and any other impacts that may occur throughout the year. A shorter pilot duration is possible, but a minimum of six months would be needed for staff to collect, analyze, and report findings to Regional Council.

Traffic Control Measures

The operational review includes an assessment of a range of traffic control measures that could potentially be used to operationalize a transit priority corridor pilot on Spring Garden Road. The need to balance functionality and implementation cost is an important consideration given that the project is temporary in nature. The review highlights the need to ensure street configuration and traffic control measures are coordinated and that they establish a regulatory regime that is clear, enforceable, and safe for all road users.

The review found the intersections along the proposed transit priority corridor represent different challenges to traffic control and different treatments may be necessary at the 'bookend' intersections of South Park Street and Queen Street. Other key findings of the review include:

- **Regulatory Signage**: Regulatory signage is necessary to communicate updated regulations to road users but should be supplemented by informational/educational signage and other traffic control measures to clearly communicate regulations to road users. Regulatory signage must be identifiably 'new' for road users to promote compliance.
- **Pavement Markings**: Pavement markings, such as "BUS ONLY", may help to supplement traffic control measures and provide an additional visual cue for road users. However, this could also introduce confusion for road users for a time-restricted pilot project and there are other potential challenges (e.g., surface traction, durability) that should be considered.

- Temporary Barriers: Temporary barriers do not require significant capital investment and can help to achieve the intent of the pilot without making significant changes to the built environment, though their use can be operationally costly and should be used in a strategic manner.
- Traffic Lane Reassignments: Traffic Lane reassignments on multi-lane intersection approaches are necessary to eliminate potential scenarios where road users are in a traffic lane whose movement is prohibited by the transit priority corridor. Changes to lane assignment could also result in reduced efficiency at intersections which could increase overall delay, thus impacting transit.
- Automatic Gates: Although automatic gates have the potential to have the highest regulatory compliance efficacy of the traffic control measures explored and could reduce the need for dedicated police enforcement, the infrastructure requirements, and operational constraints to implement automatic gates are not considered feasible for this pilot project. Automatic gates require detection systems to automatically rise when approached by Halifax Transit, but problems associated with detection (e.g., malfunctions, proximity of buses, damage to detectors) and timing of the gates could result in significant delays to Halifax Transit buses and general automobile traffic as well as create hazards within the right of way. Halifax Transit experiences challenges with gate infrastructure at existing bus terminals. Gates and gating technology may also require excavation for the implementation and removal of infrastructure, including for the gate's mechanical housing, which is deemed to be not feasible for a pilot project.
- Traffic Signal Adjustments: Traffic signal adjustments (i.e., adding a left turn, right turn, and bus/bike-only signal at some intersections) would require physical changes to existing traffic signal infrastructure (e.g., additional signal heads). An investigation of the signal infrastructure and programming requirements for such a change would be required, as well as a structural review of the loading capacity of the existing traffic poles, arms, and bases to determine if such a setup would be feasible as a permanent setup given the potential impact. It is anticipated that replacement of some or all of the existing traffic signal infrastructure would be required to accommodate these changes, which would have substantial costs and would not be feasible for a pilot project. Traffic signal modifications, in association with lane reassignments, regulatory signage, and pavement markings, could be the most effective way of operationalizing a transit priority corridor on Spring Garden Road. It is also possible that there may not be a signal configuration for this application that can be implemented without resulting in an overly complicated and confusing signal display that drivers may have difficulty interpreting properly.

Enforcement

The operational review highlights the current limitations of the municipality to enforce the regulations of a transit priority corridor. Per the *Motor Vehicle Act*, enforcement of moving violations and prohibiting certain vehicle types from entering a street must be completed by peace officers. Within the urban core, this authority is generally appointed to the Halifax Regional Police¹. Thus, Halifax Regional Police must be present at the site, either as dedicated enforcement or as part of standard police patrol operations, to enforce the regulations of a transit priority corridor. Groups having authority under various statutes, such as Halifax Transit Mobile Supervisors and municipal Compliance Officers, or traffic control personnel cannot enforce the regulations needed to implement the transit priority corridor.

While the regulatory enforcement needs of a transit priority corridor are a function of the traffic control measures used (some traffic control measures may mean a higher level of enforcement is necessary), a consistent enforcement presence could improve regulatory compliance and the overall efficacy of the pilot. During the July 2022 pilot, based on staff observations, compliance with the regulations of the pilot was significantly higher when police were present at the site. However, having a consistent police presence along the transit priority corridor is not feasible, nor can it be guaranteed by the Halifax Regional Police. Dedicated shifts to enforce the transit priority corridor fall within 'Extra Duty' assignments for officers, meaning they are voluntary, and, therefore, they may not be filled. This contributed to the lack of police resources in July 2022 and is likely to continue to be a challenge.

¹ The *Motor Vehicle Act* defines "police" as a member of the Royal Canadian Mounted Police, a police officer appointed by a city, town or municipality, a police officer appointed by the Attorney General, or a motor vehicle inspector.

Photo enforcement, another potential enforcement tool, does not have supporting proclaimed legislation to be applied. Photo enforcement is not permitted under the current regulations of the *Motor Vehicle Act*, and the *Traffic Safety Act* (the successor legislation to the *Motor Vehicle Act* which enables photo enforcement) has been passed but has not yet been proclaimed as provincial legislation. In other jurisdictions, notably in the United Kingdom, photo enforcement is often used for enforcement of transit only streets. A [Photo Enforcement Feasibility Study](#) was completed and presented to Regional Council in March 2022, but the study recommended HRM not initially pursue transit lane photo enforcement. The authors concluded there is a lack of data and consensus that transit lane misuse and infractions are a problem.

Transit Priority Corridor Pilot Implementation Approach

The following section provides details for a potential implementation approach for the Spring Garden Road transit priority corridor pilot based on the findings of the operational review. In developing this implementation approach, staff have attempted to balance the requirements for a successful pilot project with the implementation cost and impacts to infrastructure.

Operational Period

It is proposed that the transit priority corridor be implemented during the daytime, between 8:00 a.m. and 8:00 p.m., seven days a week for the entirety of the pilot's duration. Outside of this time, Spring Garden Road's use will revert back to mixed traffic when overall vehicular traffic is lower and overnight when transit operations cease. This represents a minor deviation from the implementation approach for the July 2022 transit priority corridor, which was proposed for 7:00 a.m. to 8:00 p.m. This change simplifies the pilot from a regulatory and communications perspective (i.e., a 12-hour implementation period compared to a 13-hour implementation period). A 12-hour, 8:00 a.m. to 8:00 p.m. transit priority corridor would incorporate both the morning and evening peaks for general automobile traffic along this section of Spring Garden Road, the evening peak for Halifax Transit service, and a portion of peak morning Halifax Transit service. Although the proposed operational period does not incorporate the full morning peak for transit service, it will allow for reliability comparisons for buses that use this section of Spring Garden Road before and after 8:00 a.m.

Given the risks associated with the project, staff propose that the transit priority corridor pilot be implemented for a minimum of six months (instead of 12 months) and for the pilot to commence in May/June 2023. Approximately two months between the confirmation of the pilot and its commencement date is necessary to ensure staff can implement a communication plan and procure and implement the regulatory and informational traffic control measures. Staff intend to report back to Regional Council in fall 2023—at the six-month mark of the pilot—at which point Council can decide to continue, cancel, or formalize the transit priority corridor. During the initial six-month pilot, staff will document and prepare for any necessary adjustments to the traffic control configuration for the scenario where the pilot is made permanent (e.g., formalizing lane configuration changes with updated pavement markings).

Nevertheless, the HRM Traffic Authority can adjust or cancel the pilot without the direction of Regional Council or the Transportation Standing Committee in the event that safety issues or significant, detrimental operational situations arise. Any minor operational adjustments or improvements to the implementation approach of the pilot during the pilot period can also be done via the Traffic Authority (e.g., changing the hours of the pilot) and may result in additional costs incurred for the project.

Traffic Control Measures

Regulatory signage, pavement markings, and lane reassignments are proposed as the primary traffic control measures to implement a transit priority corridor along Spring Garden Road (Attachment A), which are discussed in greater detail below. Throughout the duration of the pilot, staff will continue to evaluate the effectiveness of the traffic control measures and may alter or augment the implementation approach to respond to any needs of the pilot or, should an opportunity arise, to test the effectiveness of alternative measures.

- **Regulatory Signage:** In contrast to July 2022, which used permissive signage (e.g., straight through only), the proposal is to use signage that focuses on prohibitive messaging (e.g., no left turns, do

not enter, etc.). Signage will include information related to the time and mode restrictions / exemptions (e.g., bus and bike only, 8:00 a.m. to 8:00 p.m.) and will also include starburst “New” tabs to highlight and draw attention to the signage, a feature not included in July 2022, to help improve the conspicuity of the restrictions.

The amount of signage proposed at all intersections along the project area (South Park Street, Brenton Street, Dresden Row, Birmingham Street, and Queen Street) will be increased as compared to what was installed in July 2022. Staff will explore additional signage opportunities—e.g., on flexible bollards along the street centre line—to promote compliance all the while ensuring regulatory clarity.

- Transit Priority Pavement Markings: Staff propose the use of red pavement markings (e.g., “BUS ONLY 8AM-8PM”) to provide an additional visual cue to drivers at all intersections along the transit priority corridor.
- Lane Reassignments: The proposal includes two lane reassignments to implement the transit priority corridor, neither of which were implemented in July 2022. Firstly, for eastbound traffic on Spring Garden Road at South Park Street, right turn movements and through movements are proposed to be combined into a single lane. This will prevent automobile drivers from getting stuck in the existing dedicated through lane while not being able to proceed down Spring Garden Road—a pattern observed during the July 2022 implementation of the transit priority corridor. The second lane reassignment is proposed for southbound traffic on South Park Street approaching Spring Garden Road. It is proposed that the dedicated left turn lane be removed and that all movements (right turn, left turn, and through) be consolidated into one lane. This configuration will resemble the traffic control configuration used during the Spring Garden Road streetscaping construction when no access was permitted to Spring Garden Road. Traffic analysis presented by staff at the [December 7, 2021, Regional Council](#) meeting suggested that the closure of Spring Garden Road to automobile traffic as part of a transit priority corridor would not significantly impact the intersection Level of Service (LOS) within the study area. Staff also analyzed the traffic lane reassignments mentioned above, concluding that they are expected to have minimal impacts on the overall intersection performance of the transit priority corridor.

For the initial implementation of the lane reassignments, temporary barriers will be utilized, such as traffic barrels or cones. Because the lane reassignments are not time-based (i.e., the lane reassignments will remain in place outside of the pilot’s hours), temporary barriers represent a viable option as they will not require daily setup and removal of the barriers at the beginning and end of each day. Should the pilot be extended, these temporary barriers could be substituted for more permanent measures, including traffic line painting and/or tactical concrete barriers.

The regulatory signage, lane reassignments, and pavement markings are proposed to be accompanied and supplemented by information signage, which are part of the broader communications plan. The use of a temporary overhead street banner and temporary electronic variable message signs, which were not used in July 2022, are proposed to inform road users of the pilot. Existing informational signage may also be updated to coincide with the transit priority corridor and to eliminate contradictory messaging (e.g., existing information signage directing automobile drivers down Spring Garden Road to access public parking).

For the initial implementation, staff propose that road users be limited to buses and active transportation users during the pilot’s hours. Under an 8:00 a.m. and 8:00 p.m. transit priority corridor, waste collection services are able to service properties along Spring Garden Road within the provisions of the *Noise By-law* while stopping, loading, and accessible parking provisions along Spring Garden Road (and side streets) will remain the same. Stopping will continue to be prohibited along Spring Garden Road, loading is to be facilitated from side streets, and accessible parking spaces near each cross street will remain. The single loading space along Spring Garden Road will not be accessible during pilot hours.

Enforcement

Staff propose attempting to secure dedicated Halifax Regional Police presence as often as possible for approximately 14 days, following which HRP will be asked to continue to support the project through on-street education and enforcement (of moving violations), to the extent they are able as part of regular patrols. Regular police patrols of Spring Garden Road are part of broader police patrol details, so police patrols of Spring Garden Road would occur intermittently during the pilot's operational period, but HRP is unlikely to have a consistent patrol presence on Spring Garden Road as part of the pilot.

Municipal Compliance Officers from Parking Services and Halifax Transit Mobile Supervisors will assist Halifax Regional Police by enforcing stopping, loading, and parking violations on Spring Garden Road and side streets. A dedicated Halifax Transit Mobile Supervisor will be assigned to assist with providing information to the public about the pilot and monitor how the transit priority corridor is functioning to help staff respond to any operational needs of the project. The Halifax Transit Mobile Supervisor may also assist in monitoring and documenting regulatory infractions to build evidence for future legislation enabling photo enforcement of transit priority lane misuse.

Communication and Education

In addition to traffic control measures, communicating the intent of the pilot and educating the public will form important pieces of the implementation of a transit priority corridor. Staff will develop a robust communication strategy before the pilot is launched to raise awareness and understanding of the pilot, its purpose, benefits, and to support the adoption of changed driving behaviors. The strategy will include media, print, broadcast, and digital assets to reach the public.

As part of the communication strategy, staff will work with online mapping platforms (e.g., Google Maps) to ensure routing options given to users reflect the transit priority corridor regulations. This step was not completed for the July 2022 implementation.

Summary: Transit Priority Corridor Pilot Implementation Approach

Parameter	July 2022	Spring 2023
Operational Period	Daytime, 7:00 a.m. to 8:00 p.m., every day of the week for one year.	Daytime, 8:00 a.m. to 8:00 p.m., every day of the week for a minimum of six months.
Traffic Control Measures	Permissive Regulatory Signage.	- Prohibitory Regulatory Signage. - Lane Reassignments using Temporary Barriers. - Transit Priority Pavement Markings. - Electronic Message Board Signs and Overhead Street Banner.
Enforcement and Education	Two-week dedicated Halifax Regional Police presence and ongoing enforcement as part of regular traffic patrols.	- Two-week dedicated Halifax Regional Police presence and ongoing enforcement as part of regular traffic patrols. - Dedicated, onsite Halifax Transit Mobile Supervisor.

Table 1. Comparison of July 2022 implementation approach and proposed spring 2023 approach.

Evaluating the Pilot

Evaluation of the pilot will form an important aspect of the project. Pilot projects such as this give Council the chance to test new and innovative ideas to inform future decision-making, including whether to maintain the transit priority corridor or to re-open Spring Garden Road to general traffic. The overall objective of the pilot is to gain a better understanding of how Spring Garden Road can function as a transit corridor and how the pedestrian realm can be enhanced, which can help inform future BRT implementation—a key objective of this project. By removing general automobile traffic from the street, staff expect to learn how the project impacts transit service, user experience, road safety and compliance, and the local economy. Potential qualitative and quantitative metrics for the pilot and their measure of success include:

- Change in transit travel times and variability: The desired outcome would be a decrease in the travel time and variability for buses in both directions when transit-only is in effect. Staff expect a small decrease in transit travel times and variability, owing to improvements in travel time already made along this stretch of Spring Garden Road following streetscaping construction.
- Halifax Transit passenger and Operator experience: The desired outcome would be that Halifax Transit passengers and Operators have a better experience and are positive and supportive of the project.
- Halifax Transit boardings and alightings: The desired outcome would be an increase in the total number of boardings and alightings in the area during the project. Although boardings and alightings can be measured, changes may be a result of many factors, and this may be challenging to tie to the pilot.
- Public experience: The desired outcome would be that the general public (pedestrians, residents along Spring Garden Road) are positive and supportive of the project.
- Change in number and severity of collisions: The desired outcome would be a decrease in the number and severity of collisions.
- Intersection performance: The desired outcome would be for no significant delays to occur while transit-only is in effect.
- Traffic speed and volume on side streets: The desired outcome would be for no significant increase in vehicle speeds and volumes on side streets while transit-only is in effect.
- Impact on local businesses: With cooperation from the local business improvement district and its businesses, staff may also measure how the pilot impacted business sales and customer volumes pre- and post-implementation of the transit priority corridor. Like transit boardings and alightings, although business sales and customer volumes can be measured, a correlative relationship with the impacts of the pilot may be challenging to establish.

To assist with project evaluation and monitoring, staff will use a variety of data and sources, including, but not limited to:

- Halifax Transit data (travel time, passenger counts, etc.).
- feedback from community members, staff, and stakeholders, including through surveys.
- traffic analysis cameras positioned along Spring Garden Road; and
- Halifax Regional Police collision data.

During the initial period following implementation of the pilot, staff expect a period of adjustment as road users adapt to the new configuration of the street but expect conditions to stabilize with increasing rates of compliance. While 100% compliance with the regulations is ideal, staff do not feel this is realistic nor is it the level of compliance HRM achieves in other transit priority lanes which are considered successful. Staff also anticipate that following an initial period of adjustment, general traffic in the immediate area will adapt their travel routes.

Additional Considerations

Other factors should be considered for the implementation of a transit priority corridor along Spring Garden Road:

1. Transit Performance: Preliminary data shows that transit performance on this section of Spring Garden Road has improved, especially in the westbound direction, which could be explained by the streetscaping work that was completed in 2021. A comparison of November 2018 and November 2022 sample data shows average travel times along this corridor have decreased for Halifax Transit during many parts of the day in both directions. For westbound buses, year on year time savings were up to 39.6 seconds, or a 36% reduction in travel time, and eastbound bus time

savings were up to 18.7 seconds, or a 25% reduction in travel time. Comparatively, average travel times along Barrington Street, between Scotia Square and Spring Garden Road, also decreased during some periods of the day, but the changes were less pronounced. Northbound buses experienced year on year times savings of up to 25.6 seconds, or a 19% decrease in travel time, while southbound bus time savings were up to 6.3 seconds—an 11% decrease from 2018.

While the implementation of a transit priority corridor could positively impact transit performance along Spring Garden Road, it is unclear the extent to which performance will be improved. There is also potential that transit performance could be negatively impacted due to traffic delays on either end of the pilot project area. Nevertheless, Spring Garden Road accommodates approximately 380 Halifax Transit buses in each direction per weekday, and with the implementation of the [Rapid Transit Strategy](#), the number of buses using Spring Garden Road could increase to 450 in each direction per weekday. A transit priority corridor pilot along Spring Garden Road could represent an important prerequisite to implementing the future Bus Rapid Transit network which includes two-way priority bus lanes along Spring Garden Road between Robie Street and South Park Street.

2. Traffic Operations / Compliance: The traffic control configuration identified as the preferred approach to implementing the pilot project includes features that are expected to improve the clarity of the traffic regulations and improve compliance to an extent. However, the traffic control setup is unique in that it includes some elements that will likely be contrary to driver expectations, which may result in some general confusion and non-compliance. Although ongoing exposure to the regulations over time may result in improved compliance, particularly among regular visitors to the area, challenges with driver confusion and compliance may persist among people who visit the area infrequently. Given the Spring Garden Road area's nature as an important regional and tourist destination, these challenges may be a regular occurrence that does not abate over time.
3. Halifax Water Construction Along Cathedral Lane: Halifax Water has indicated it plans to separate sewer and stormwater infrastructure during 2023 along Cathedral Lane. This work will involve excavation of the roadway and it is anticipated to extend across Spring Garden Road at Cathedral Lane into the Halifax Public Gardens. While staff can potentially influence construction plans for this work, the impacts and timing of construction are unknown at the time of writing this report. Staff will work with Halifax Water to ensure Halifax Transit buses continue to have access to Spring Garden Road through the duration of the construction.
4. Mills Streetscaping Reinstatement: The Mills development, which fronts onto Spring Garden Road between Queen Street and Birmingham Street, is under construction at the time of writing this report. The area under construction includes a portion of the right of way which is to be reinstated to match the other streetscaping work completed on Spring Garden Road. This work is scheduled for 2023 and can be mostly facilitated from the sidewalk but would require a reduced lane width of approximately 3.0 metres (from 4.0 metres) on the eastbound lane for approximately four to six weeks. It is expected that any full lane closures, if required, would be short in duration (four hours or less).
5. Intersection Performance: Before and during the construction of the streetscaping project on Spring Garden Road, staff collected traffic counts and speed data for streets and intersections in the immediate area. This data was analyzed and presented to [Regional Council at the December 7, 2021, meeting](#). The analysis showed the vehicular Level of Service (LOS) for intersections within the study area, under a transit priority corridor scenario, were not significantly impacted. The analysis also showed that a transit priority corridor pilot would not eliminate any of the concepts being considered for Morris Street, including converting Morris Street to a one-way street, as part of the Peninsula South Complete Street project. Mentioned above, however, using data from the construction period of the Spring Garden Road project may not provide a perfect comparison as road users likely avoided the area and used alternative routes due to the construction activity. Nevertheless, the data provides insights into how traffic can be managed.

Next Steps

Should Regional Council direct that the transit priority corridor proceeds, the following steps are proposed to carry out the pilot:

1. Finalize Implementation Approach and Begin Preparatory Work: Staff will finalize the implementation approach, such as the official start date, and begin preparatory work to ensure the pilot's successful implementation. This includes, but is not limited to, procuring traffic control measures, assigning a Halifax Transit Mobile Supervisor, finalizing and implementing the communications strategy, and working with Halifax Regional Police to fill potential shifts.
2. Begin Data Collection: Data collection is required before the start of the pilot project. Staff will collect baseline data, where required, to ensure pre- and post-implementation comparisons can be made.
3. Implementation and Post-Implementation: Following initial implementation of the pilot, which is expected to occur as a single, coordinated event and is anticipated in May/June 2023, staff will continually monitor the conditions along Spring Garden Road during the pilot's six-month operational period. Data collection will continue throughout the pilot.

FINANCIAL IMPLICATIONS

Application of the implementation approach for a transit priority corridor along Spring Garden Road, between South Park Street and Queen Street, would cost approximately \$165,000. The costs included assume a total project length of six months and includes costs to revert the street to its pre-pilot configuration (e.g., removing transit pavement markings) but does not include any additional costs incurred to extend the pilot or make it permanent.

Funding in the amount of \$165,000 is available from CM000009 – Transit Priority Measures. The budget availability has been confirmed by Finance.

Budget Summary:	<u>Project Account Number - CM000009 (Transit Priority Measures)</u>	
	Cumulative Uncommitted Budget Available	\$375,457
	Less: Spring Garden Road Transit Only Pilot (estimate)	<u>\$165,000</u>
	Balance	\$210,457

* The Transit Priority Measures project was estimated in the Approved 2023/2024 Project Budget at \$375,000.

The balance of funds will be used for implementing further complete preliminary studies and analysis, possible modifications/enhancements to previously implemented transit priority measures, and support the implementation of transit priority measures in larger projects.

RISK CONSIDERATION

The following outlines the possible risks of implementing the transit priority corridor and their impacts:

1. The traffic control configuration and time of day nature of the regulations are unique and could be confusing for drivers and compromise some of the potential benefits. Although the proposed improvements to the traffic control configuration are expected to improve driver compliance relative to the initial pilot, it is expected that it will continue to be a challenge, particularly in the early days of the pilot. There will likely be a period during which compliance will be relatively poor, which could result in driver confusion and frustration and negatively impact public perception of the project.
2. There is potential that improvements in driver compliance sufficient to mitigate operational concerns are not realized within a reasonable period of time, which may require consideration of another

pause or cancellation of the pilot. Although regular users of the street are likely to adapt to the changes relatively quickly, Spring Garden Road is a regionally important destination that attracts many infrequent visitors (e.g., weekend visitors, tourists, etc.), which will regularly introduce new users that are more likely to be unfamiliar with the rules and more prone to non-compliance.

3. Potential increase in vehicle / pedestrian conflicts at the South Park Street and Queen Street crosswalks due to traffic diversion (all non-transit traffic required to turn left / right during the pilot's operational hours).
4. Increased traffic congestion and operational delays at the South Park Street and Queen Street intersections could negatively impact transit travel times.
5. Potential increase in vehicle / pedestrian conflicts outside of the pilot's operational hours resulting from a change in expected operations (e.g., pedestrians may assume reduced traffic volumes due to confusion over timing of the change in restrictions).
6. Traffic re-routed away from Spring Garden Road may cause disruption on nearby streets.
7. Vehicular access and circulation may become confusing for road users and have unexpected detrimental impacts on the area.

When the transit priority corridor was previously considered in December 2021, it was to be implemented immediately following streetscaping construction on Spring Garden Road. Staff evaluated the risks of implementing the transit priority corridor as low because automobile traffic patterns were largely not going to change under a transit priority corridor scenario. However, because conditions that contributed to the unsuccessful July 2022 operation have a high chance of occurring again - including the potential for construction in the immediate area and the lack of available policing resources, and automobile drivers must re-adapt their travel patterns - staff have evaluated the above risks as moderate to high. There is also a high reputational risk associated with the transit priority corridor should it need to be canceled prematurely once more.

COMMUNITY ENGAGEMENT

As part of the development of the Spring Garden Road Functional Plan Report, staff prepared a summary of engagement for the functional plan (Attachment B). As noted in previous staff reports, there appeared to be strong support from the public for a transit priority street at the time. During the original engagement for the transit priority corridor, the support from the area's business improvement district—the Spring Garden Area Business Association (SGABA)—for a year-long transit only pilot was effectively split (54% were supportive and 46% were unsupportive).

ENVIRONMENTAL IMPLICATIONS

This project supports the Council Priority Outcome of building healthy, livable communities, as it aims to make it more convenient for residents to choose sustainable transportation options for everyday transportation purposes. While the segment of the street under consideration for this project is 400 metres long, its prominence as a transit and pedestrian-focused corridor in the heart of the urban core will demonstrate Halifax's commitment to climate action under HalifACT.

ALTERNATIVES

The Transportation Standing Committee could choose to recommend that Regional Council:

1. Reject the implementation approach for a transit priority corridor along Spring Garden Road, between South Park Street and Queen Street, and postpone the pilot indefinitely.
2. Reject the implementation approach for a transit priority corridor along Spring Garden Road, between South Park Street and Queen Street, and direct staff to explore alternative measures that do not involve closing Spring Garden Road to automobile traffic but look to improve Spring Garden Road as a transit and pedestrian corridor (e.g., additional turn restrictions).
3. Reject the implementation approach for a transit priority corridor along Spring Garden Road, between South Park Street and Queen Street, and direct staff to explore alternative interventions to implement the transit priority corridor.

ATTACHMENTS

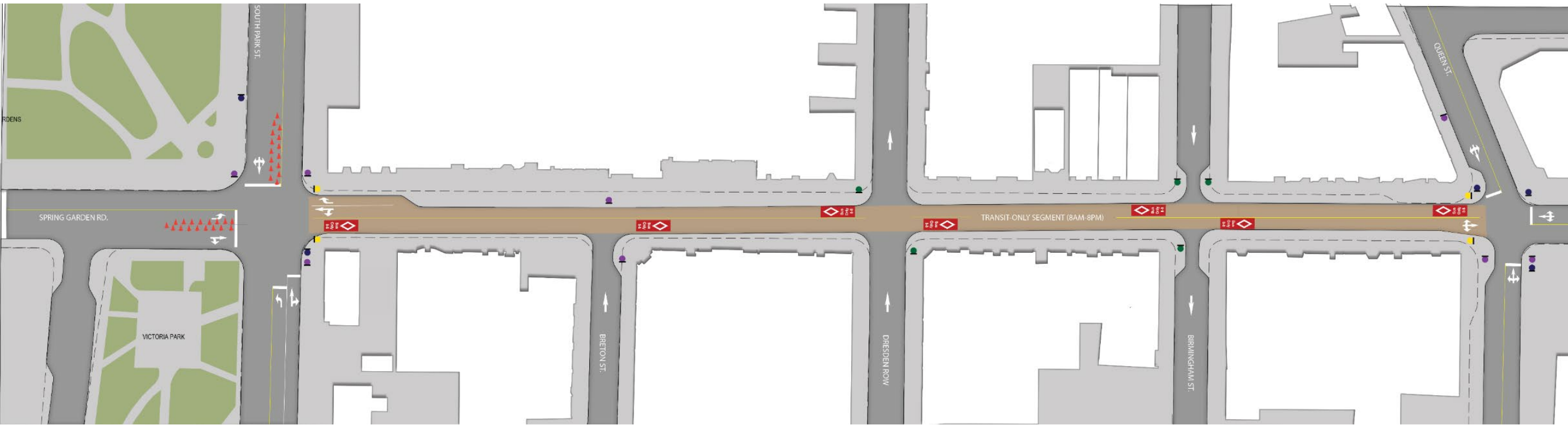
Attachment A – Implementation Approach Traffic Control Setup

Attachment B – Summary of Engagement from Spring Garden Road Functional Plan

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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Attachment A – Implementation Approach Traffic Control Setup



8AM - 8PM

EXCEPT

BUSES / BICYCLES

NEW

8AM - 8PM

EXCEPT

BUSES / BICYCLES

NEW

8AM - 8PM

EXCEPT

BUSES / BICYCLES

NEW

8AM - 8PM

EXCEPT

BICYCLES

NEW

Attachment B – Summary of Engagement from Spring Garden Road Functional Plan

The below is a summary of the engagement completed at the Functional and Schematic stages of the Spring Garden Road Streetscaping project in 2019.

Notification

The public was notified of engagement opportunities via:

- Paid newspaper and social media ads
- Collaboration with the Spring Garden Area Business Association to notify all their members
- Emails directly to stakeholder groups (i.e. resident and advocacy organizations) encouraging them to be forwarded to members.
- Digital screens in 47 HRM facilities, including the Central Library
- Social media campaigns on Twitter and Facebook
- Internally via “HRM Employee Hub”
- Placement of a ‘homepage icon’ on Halifax.ca
- Attraction of significant media coverage (unpaid)
- Posters put up in the area before both public open houses.

Functional Plan Feedback Engagement

Once the draft functional plan options had been developed, another round of consultation began, including:

- A presentation to the Spring Garden Area Business Association Board (December 11th, 2018)
- A public open house (January 7th, 2019, 6:30pm, Central Library)
- An online survey (January 7th to 25th, 2019)
- An online “quick poll” (January 16th to 25th, 2019)
- “Pop-up” engagements (January 10th, 2019, 10am-noon, Central Library; January 15th 1:30pm-3:30pm, Park Lane Mall).
- A presentation and discussion with the Spring Garden Area Business Association (including businesses, residents, and board members) on January 18th, 2019.
- A presentation to HRM’s Accessibility Advisory Committee on February 19th, 2019
- Collaboration with HRM’s new in-house accessibility consultant on an audit of the current street to inform the schematic design (next phase).

A total of 232 people completed the online survey and generated 796 comments which were categorized as either ‘supporting’ or ‘against’ the three options. Option 3 (transit- only with the widest sidewalks) received more positive comments than negative ones (75% vs 25%), and Options 1 (most loading bays and no restrictions on vehicles) and Option 2 (some loading bays with left-turn restrictions on transit) received more negative than positive comments (57% vs 43%).

The most supported aspects of each of the options were:

- Option 1: The least amount of change relative to present conditions, with more sidewalk space on bump outs
- Option 2: Added left turn restrictions, more sidewalk space, and a more balanced approach
- Option 3: Added transit priority, more sidewalk space, boldness and the most appropriate ‘focus’ for the street.

The main concerns cited about each of the options were:

- Option 1: retains too much prioritization of vehicles and ‘not bold enough’
- Option 2: Too confusing and ‘not bold enough’
- Option 3: Implications of traffic diversion on other streets.

In all three options, it is notable that there was significant support for increased sidewalk space and an enhanced pedestrian realm. Most of the comments were related to the traffic operational aspects. Regarding loading, some business/ property owners expressed concerns about moving the loading zones to side streets, however others supported the removal of on-street loading from Spring Garden Road. While some residents were concerned about potential re-routing of traffic to area streets, others recognized alternate routes were available, and that transit/ pedestrian priority was important on Spring Garden Road.

There were some comments about the lack of dedicated cycling facilities in any of the options. In addition to the online survey, 142 people completed an online “quick poll” asking which option they preferred:

- (24%) preferred Option 1: Transit Prioritized Vehicle Thoroughfare
- (23%) preferred Option 2: Turn Restricted Transit Corridor
- (53%) preferred Option 3: Daytime Transit Corridor