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## Protected Bike Lane Demonstration Project – Evaluation and Next Steps

### Recommendation

That the Standing Policy Committee on Transportation recommend to City Council:

1. That a provision for protected bike lanes be included in the Downtown All Ages and Abilities cycling network;
2. That the Administration develop a Downtown All Ages and Abilities cycling network (including protected bike lanes) in concert with other downtown policy and planning initiatives in 2018; and
3. That the existing protected bike lanes on 23<sup>rd</sup> Street (from Spadina Crescent to Idylwyld Drive) and 4<sup>th</sup> Avenue (from 20<sup>th</sup> Street to 24<sup>th</sup> Street) be retained until the Downtown All Ages and Abilities cycling network is developed.

### Topic and Purpose

This report provides an evaluation of the Protected Bike Lane Demonstration Project and outlines the next steps for the provision of the All Ages and Abilities (AAA) cycling network in the Downtown.

### Report Highlights

1. The demonstration project created a 1.6 km network of protected bike lanes to improve cycling as a strategy to increase the attractiveness of, and access to, the Downtown for businesses, residents, visitors, employers, and their employees.
2. The Protected Bike Lane Demonstration Project showed that bike lanes could be implemented successfully in a temporary, retrofit situation.
3. Opportunities to make further improvements to the protected bike lanes have been identified in order to improve operations and address some of the concerns identified through the demonstration project.
4. A Downtown Cycling Network Plan, to be complete in 2018, will recommend the locations and designs for a permanent AAA cycling network in the Downtown.

### Strategic Goals

This report supports the Strategic Goal of Moving Around, Environmental Sustainability and Quality of Life, as well as the Active Transportation Plan and the City Centre Plan which identified the need for improved facilities for people who want to cycle in the Downtown.

### Background

City Council, at its meeting held on March 23, 2015, resolved:

- “1. That the protected bike lanes be installed on 23<sup>rd</sup> Street (from Spadina Crescent to Idylwyld Drive) as a demonstration projects in 2015;

2. That the protected bike lanes be installed on 4<sup>th</sup> Avenue (from 19<sup>th</sup> Street to 24<sup>th</sup> Street) as a demonstration project in 2016; and
3. That the curb parking be installed on the north side of 24<sup>th</sup> Street between Ontario Avenue and Idylwyld Drive.”

The need for improved cycling facilities within the Downtown was identified through several City plans and initiatives. The City Centre Plan, approved by City Council in 2013, identified the need to improve cycling as a strategy to increase the attractiveness of, and access to, the downtown for businesses, residents, visitors, employers and their employees. The Growth Plan, endorsed by City Council in 2016, provides guidance for civic investments in infrastructure and support programs over the short, medium, and long term that will shape growth patterns and increase transportation choices, in order to achieve the social, economic, and environmental aspirations of the community. The Active Transportation (AT) Plan, endorsed by City Council in 2016, also identified the need to improve cycling for people of all ages and abilities, and recommended the Administration develop a Downtown AAA network.

### **Report**

#### Demonstration Project

The demonstration project created a 1.6 km network and showed that bike lanes could be implemented successfully in a temporary, retrofit situation. The demonstration period allowed sufficient time to install the protected bike lanes, obtain feedback from stakeholders and the community, and apply changes to the protected bike lanes based on the feedback received. This process proved to be very effective as the changes to the bike lanes in the spring of 2017 further improved their operation. Some of the notable changes included:

- Replacing the “No Right Turn on Red” restriction with a “Drivers Yield to Cyclists” warning to improve the Level of Service (LOS) for motorists making right turns while maintaining cyclist safety.
- Shifting the bike lane closer to the traffic lane at intersections along 4<sup>th</sup> Avenue in order to improve visibility of cyclists.
- Improving the alignment of traffic lanes at the intersection of 4<sup>th</sup> Avenue and 23<sup>rd</sup> Street to reduce the offset of the northbound through lane.

The Administration has identified additional improvements to further improve their operations and address issues identified through the demonstration as outlined in Attachment 1.

#### Evaluation

The purpose of the demonstration project was to assess the feasibility of installing permanent protected bike lanes in the Downtown (see Attachment 1 for Project Background). Part of determining feasibility was to identify areas in the design of the protected bike lanes that may require refinement, identify gaps in the City’s policies and operations, and provide flexibility to apply those changes as the project progressed. In addition to providing an opportunity to trial changes to the bike lanes, the demonstration period provided sufficient time to evaluate and determine if the objectives of the project

were being met. A set of criteria was developed to assist with the evaluation and provide information to help inform the final decision on the demonstration project.

Satisfaction among all road users is divided; however, all other criterion has demonstrated success and the following objectives of the demonstration project have been achieved:

- The majority of people cycling in the protected bike lanes report their Downtown trips are more comfortable and they feel safer cycling in the Downtown;
- The overall trends for the frequency and severity of collisions between all modes are decreasing along these corridors;
- An increase in the number of people cycling along the protected bike lanes was observed;
- The impacts to people walking or driving have been modest or neutral;
- The impacts to businesses have been largely neutral, with the exception of concerns over parking availability;
- Gaps in civic operations were identified and rectified, where possible; and
- Cost to install and maintain is in-line when compared to bike lane demonstration projects in other Canadian cities (lower than Calgary, Edmonton, Ottawa, and higher than Halifax and Toronto.)

Additional information on the evaluation criteria can be found in Attachment 1.

Public satisfaction with the protected bike lanes remains largely divided. Motorists frequently report increased traffic delays along 4<sup>th</sup> Avenue, confusion when travelling along these corridors and challenges with finding parking. The impact to pedestrians remains largely unchanged, however, challenges for persons with mobility aids accessing parking and businesses have been noted. Cyclists largely support the protected bike lanes, but feel that improvements to the surrounding network (improving their access to the Downtown network), as well as increased visibility at conflict points would improve their experience. Additional information on the public input received can be found in Appendix A of Attachment 1.

Highlights of the evaluation analysis indicate:

- A slight increase in delay to motorists, however, the Level-of-Service remains at B, which is consistent with the prior condition.
- Additional overhead signage is recommended to improve driving lane clarity for motorists.
- Parking availability has decreased along 4<sup>th</sup> Avenue and 23<sup>rd</sup> Street by 17%. However, in the downtown parking demand during the afternoon peak period is only 60% of the parking supply. There is some loss of 'convenient' parking on 4<sup>th</sup> Avenue and 23<sup>rd</sup> Street, however, sufficient parking remains available in the downtown.
- Generally, there is a decreasing trend in the frequency and severity of collisions (for all modes) along 4<sup>th</sup> Avenue and 23<sup>rd</sup> Street.

### Post-Demonstration Improvements

Opportunities to make further modifications to the protected bike lanes have been identified in order to improve operations and address some of the concerns identified through the demonstration project. These issues were not addressed during the demonstration as the work was more costly or substantial than the limitations of a temporary installation would permit, but can be upgraded after the demonstration. The recommended improvements have been informed by a review of best practices for protected bike lanes and are summarized in Appendix D of Attachment 1. These include:

- Improving disabled person parking and loading zones;
- Improving transit stops;
- Installing overhead signage to improve driver clarity of the lane assignments along 4<sup>th</sup> Avenue; and
- Modifying the barrier in the buffer.

These improvements will be incorporated into the permanent design of the protected bike lanes.

Some concerns identified indicate that further education of all road users would be of benefit. A review of the Saskatchewan Government Insurance (SGI) Driver's Handbook identified an educational gap as there does not appear to be any instruction identified on how motorists are to interact with people using protected bike lanes. Going forward, the Administration recommends increased education and awareness for all road users on how to safely navigate streets with protected bike lanes. The Administration intends to produce and deliver an educational campaign to coincide with the bike lane improvements in the spring of 2018 and will work with SGI to include information regarding protected bike lanes in future editions of the Driver's Handbook.

### Downtown AAA Cycling Network Plan

Several comments were received from all road users that questioned if the protected bike lanes are on the 'right' Downtown streets, citing other streets may be more appropriate for a variety of reasons. Additionally, the Administration notes that there are several imminent changes to City Centre streets that could impact how all users get around in the Downtown, notably the Traffic Bridge that will be reopened in fall of 2018 and the Bus Rapid Transit Implementation project that has begun and will identify street redesigns and station area designs. The AT Plan identified the need to complete a Downtown AAA Cycling Network Plan as a foundational action in achieving improved cycling in Saskatoon. This fall, the Administration began working on the Downtown AAA Cycling Network Plan and intends to continue this work into 2018. The Downtown AAA Cycling Network Plan will take into consideration the public input obtained through the Protected Bike Lane Demonstration Project, the operational lessons learned, and the imminent changes to Downtown's transportation network to ensure that the most appropriate streets host AAA facilities. Further engagement to determine permanent locations for protected bike lanes will be undertaken in 2018 and help to form the recommendations for the Downtown AAA Cycling Network Plan.

### **Options to the Recommendation**

City Council may choose to remove the protected bike lanes from Downtown streets until the Downtown AAA cycling network analysis is complete. The Administration does not recommend this option as it would remove the only AAA cycling facilities currently available in the Downtown. The cost to remove the protected bike lanes is estimated to be \$37,000. Removal could take place in the spring of 2018.

### **Public and/or Stakeholder Involvement**

Extensive and thorough engagement with external stakeholder groups, internal civic divisions, and the general public has occurred throughout the entirety of the project. Engagement occurred primarily in three phases: before the demonstration project, during the demonstration project, and near the end of the demonstration period. In addition, community input was received throughout the project via emails to the City's cycling@saskatoon.ca email account. Consultation with the Cycling Advisory Group also occurred at their regular business meetings throughout the demonstration project.

A variety of tools were used in order to provide stakeholders and the community with options to participate in ways that were convenient for them. This included open houses, stakeholder meetings, online surveys, and intercept surveys. A total of 25 engagement events occurred from August 2014 to September 2017. Public input was utilized throughout the process to improve the demonstration project. Many of these changes were implemented in the spring of 2017, with some operational changes taking place as the project evolved.

Public and stakeholder input on the demonstration project has been mixed. The majority of people who use the bike lanes commonly reported that they appreciated having their own space to ride in, making their trip downtown feel more safe and comfortable. Many users also cited that they would often go out of their way to use the bike lane as it improved their experience riding Downtown. A minority of cyclists reported that they did not like the bike lanes stating that they preferred to cycle with traffic. The majority of people who drive along these streets were dissatisfied with the protected bike lanes, commonly citing concerns such as decreased availability of parking along 4<sup>th</sup> Avenue, increased traffic delays along 4<sup>th</sup> Avenue, and that the number of cyclists observed was too low to warrant the costs to install and maintain the protected bike lane. Impact to pedestrians largely remained unchanged, with the notable exception of persons with mobility aids accessing parking along this corridor. Feedback from businesses located in the Downtown at the end of the demonstration project indicated that the bike lanes had little impact on their operations.

A summary of all the engagement events and the results of the final phase of engagement can be found in Appendix A of Attachment 1. Further engagement to determine the permanent locations for bike lanes will be undertaken in 2018 as part of the development of the Downtown AAA cycling network.

### **Communication Plan**

Communication going forward on the protected bike lanes will focus on educational elements to improve awareness for all road users. Commonly cited concerns that will be addressed in the education plan include: how to use bike boxes, how to treat conflict points, parking next to bike lanes, and what to look for when making right-turns as a motorist. This educational campaign will be produced and delivered in spring 2018.

Future communications will also put an emphasis on fostering a forward-thinking vision for the City of Saskatoon that considers many modes of transportation for a growing population.

### **Policy Implications**

There are no policy implications as a direct result of this report. As the Administration continues to work toward providing an AAA cycling network in the Downtown, any policies requiring changes or new policies identified will be brought forward to City Council at the appropriate time.

### **Financial Implications**

The cost to retain the existing protected bike lanes until the Downtown AAA cycling network is developed is estimated at approximately \$80,000. These costs relate to ongoing maintenance including snow clearing and sweeping. Funding for this maintenance is included in Capital Project #2468 - Active Transportation Plan Implementation.

### **Other Considerations/Implications**

There are no privacy, environmental or CPTED implications or considerations.

### **Due Date for Follow-up and/or Project Completion**

The Administration will report back to City Council in 2018 with the Downtown AAA Cycling Network Plan.

### **Public Notice**

Public Notice pursuant to Section 3 of Policy No. C01-021, Public Notice Policy, is not required.

### **Attachment**

1. Downtown Protected Bike Lane Demonstration Project – Project Summary – November 2017

### **Report Approval**

Written by: Danae Balogun, Active Transportation Program Manager  
Mariniel Flores, Transportation Engineer, Transportation

Reviewed by: David LeBoutillier, Acting Engineering Manager, Transportation  
Jay Magus, Acting Director of Transportation

Approved by: Angela Gardiner, Acting General Manager, Transportation & Utilities

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