

Southside Core Neighbourhoods Bike Network

Recommendation

That the August 14, 2018, Urban Form and Corporate Strategic Development report CR_5440, be received for information.

Executive Summary

Administration completed a technical analysis to determine the feasibility of expanding the all ages and abilities bike network into the Strathcona and Garneau neighbourhoods. The analysis identified a preferred network for the area, including preliminary analysis of the type of cycling facility that could be accommodated on the preferred network.

Administration recommends that the Southside Bike Network be implemented as part of the Strathcona and Garneau neighbourhood renewal process. Integrating the two projects will allow for coordinated engagement and project management, aligning with the Public Engagement Policy (C593) and the Capital Project Governance policy (C591). A capital investment of approximately \$5.8 million (-30% to +50%) subject to planning and design and \$234,000 annual operating costs would be required to support implementation of the bike network.

Report

Project History

This report is associated with two Council motions.

At the June 5, 2014, Transportation Committee meeting, the following motion was passed:

That Administration consider north/south connections to the 83rd Avenue route and provide a report with recommendations on any revisions to the Bicycle Transportation Plan or the major bike grid.

At the July 12, 2016, City Council meeting, the following motion was passed:

That Administration, in partnership with Stantec, provide an updated report on a minimum grid for physically separated bike lane infrastructure in the City of Edmonton's core and the report should include the potential use of relatively inexpensive (within existing resources) temporary infrastructure (example:

bollards, mobile concrete curbs), as can be found in the City of Calgary's pilot Project.

The September 28, 2016 Urban Planning Committee Report Minimum Grid for Physically Separated Bike Lane Infrastructure (CR_3890) included the next step “Develop a feasibility analysis for extending the bike grid to adjacent core neighbourhoods” to address the remaining core areas outside of the downtown boundary.

In 2017, Administration implemented the Downtown Bike Network consisting of 7.8 km of all ages and abilities bike routes. A non-standard, rapid implementation approach was used to deliver the bike network.

South of the North Saskatchewan River, approximately 3.7 km of all ages and abilities bike routes were constructed in conjunction with the neighbourhood renewal program. An additional 4.7 km of all ages and abilities facilities is being constructed in 2018, bringing the total length to 8.4 km in the area.

Southside Bike Network Feasibility Study

A feasibility analysis for an all ages and abilities bike network on the south side of the river focused on the Strathcona and Garneau neighbourhoods. These are two of Edmonton’s core neighbourhoods with the highest reported proportion of cyclists. The core neighbourhoods and the study area are shown in Attachment 1.

The Southside Bike Network Feasibility Study (Attachment 2) used a similar methodology to that used by Stantec for the Downtown Bike Network and included the following steps:

- Evaluate the feasibility of cycling routes in the Strathcona and Garneau neighbourhoods to safely accommodate all ages and abilities.
- Identify typical road cross sections and assess operational impacts.
- Identify promising and preferred routes and potential design treatments.
- Assess the capital and operating cost impacts of implementing the preferred cycling network.

Recommended Bike Network

The recommended network (see Attachment 3) builds on the existing cycling network and includes implementation of an additional 5.2 kilometers of all ages and abilities bike facilities. The recommended network fills gaps in the existing network, supports neighbourhood connectivity to destinations, fulfils best practices for cycling network density, and balances operational impacts to the overall transportation network.

The recommended facility configuration builds on insights gained developing the Downtown Bike Network, and complies with current design requirements as specified in the City's Complete Streets Design and Construction Standards, as well as national guidelines.

Roadways that would experience significant operational traffic impacts with the addition of bike routes were removed from consideration where parallel alternatives exist. As an example, the 109 Street corridor was considered as a candidate bike route but was removed due to its importance for transit and motor vehicles.

Implementing the proposed bike network will require a change to one-way operation for a number of roadways, including 86 Avenue, 87 Avenue, and 100 Street, which will affect neighbourhood traffic patterns. New traffic signals are required where the bike routes cross major roadways. The 110 Street bike route is proposed to be extended beyond the Garneau neighbourhood boundary by approximately 250 metres so that it connects to the 76 Avenue bike route.

Implementation of Recommended Network

Should the Southside Bike Network be endorsed by Council, Administration recommends implementation in conjunction with the Strathcona and Garneau neighbourhood renewal process. Integrating the projects will allow for coordinated engagement and project management, leverage for the renewal investment, and alignment with the Public Engagement Policy (C593) and the Capital Project Governance Policy (C591).

The standard neighbourhood renewal process minimizes the risks of cost and schedule overruns and ensures fulsome public engagement on comprehensive neighbourhood enhancements, including bike lanes. The standard process will also incorporate lessons learned from the Downtown Bike Network regarding facility design.

The following timelines are anticipated for infrastructure delivery. Neighbourhood renewal construction staging requirements may change route implementation timelines.

Year	Activity
2018	<ul style="list-style-type: none"> ● Completion of 83 Avenue, 106 Street and 76 Avenue bike routes. ● Initiation of public engagement and concept level design on Strathcona portions of the bike network begin in conjunction with Strathcona neighbourhood renewal ● Preparation of a capital budget profile for Council's consideration

2019-2021	<ul style="list-style-type: none"> Implementation of the Strathcona portions of the Southside Bike Network
2018/2019	<ul style="list-style-type: none"> Initiation of public engagement on Garneau portions of the Southside Bike Network in conjunction with Garneau Neighbourhood Renewal.
2021-2022	<ul style="list-style-type: none"> Implementation of the Garneau portions of the bike network

This process will require coordination with other projects in the area including:

- Centre LRT route alignment and concept design
- Saskatchewan Drive arterial renewal and shared use path widening - Planning and Design underway
- Duggan Bridge replacement Planning and Design underway
- 104 Street (Whyte Avenue to Saskatchewan Drive) arterial reconstruction

Budget/Financial

Administration completed a financial assessment assuming implementation of permanent infrastructure in conjunction with neighbourhood renewal. Neighbourhood renewal will address pavement conditions through full reconstruction of the roadway, sidewalks, and replacement of streetlights, curbs and gutters. Elements of the bike network that are considered growth elements requiring additional budget include the permanent medians, signage, paint and traffic signals. Capital costs required for growth elements of the Southside Bike Network are estimated to be approximately \$5.8 million subject to planning and design, with an estimated accuracy of -30% to +50%. The capital budget requirements are outlined further in Attachment 4.

Snow and ice control is expected to require an additional \$78,000 per year in operating funds, based on initial operating costs associated with the Downtown Bike Network. In addition, ongoing maintenance of signage and pavement markings is expected to cost \$156,000 per year.

A capital budget profile is required to implement the Southside Bike Network. This project will be part of a composite growth profile for Council's consideration as part of the 2019-2022 budget deliberations.

Public Engagement

No public engagement was undertaken specifically for the Southside Bike Network Feasibility Analysis. Some initial feedback has been incorporated from engagement for the Strathcona Neighbourhood Renewal process. Should the Southside Bike Network be funded for implementation, Administration would conduct further public engagement as part of the Strathcona and Garneau neighbourhood renewal process.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmontonians use public transit and active modes of transportation			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmontonians use public transit and active modes of transportation	Journey to work mode (percentage of survey respondents who select Auto Passenger, Transit, Walk, Cycle or Other)	26.1 percent (2016)	25.9 percent (2018)
Active transportation infrastructure is in place	New Active Transportation Infrastructure (total kilometres of protected bike lanes)	13.3 km (2017)	TBD

Corporate Outcome(s): Edmontonians use facilities and services that promote healthy living			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmontonians are healthy and active	Journey to work mode (percentage of survey respondents who select Active modes)	4.8 percent (2016)	Increase over previous year

Risk Assessment

This section identifies the key risks identified in the feasibility analysis and that the key mitigation is to proceed with implementation of the project through the project development and delivery model.

Risk Element	Risk Description	Likelihood	Impact	Risk Score (with current mitigations)	Current Mitigations	Potential Future Mitigations
Project Management	Project not delivered on time, on budget and to desired quality.	3 possible	2 moderate	6 - medium	Implement through project development and delivery model to properly address design uncertainties, project management, and budget requirements	

Public Perception	Minimal consultation may generate backlash about poor process and outcomes that in turn may tarnish City's reputation.	2 unlikely	3 major	12 - medium	Incorporate public engagement into project development and delivery phases	
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Attachments

1. Southside Core Study Area
2. Southside Core Neighbourhoods Bike Network Feasibility Analysis
3. Recommended Southside Core Neighbourhoods Bike Network
4. Capital Budget Requirements

Others Reviewing this Report

- S. Padbury / R. Kits, A/Deputy City Managers, Financial & Corporate Services
- M. Sturgeon, Acting Deputy City Manager, Communications and Engagement
- G. Cebryk, Deputy City Manager, City Operations
- A. Laughlin, Deputy City Manager, Integrated Infrastructure Services