

Cost of Clearing Bike Lanes

(J. Dziadyk)

Recommendation

That the July 6, 2020, City Operations report CR_8194, be received for information.

Previous Council/Committee Action

At the March 9, 2020, City Council meeting, the following Councillor Inquiry was made:

Can Administration provide a report to Council with the amount it cost to clear bike lanes during the last winter season. That the information be additionally broken down into its various costs such as (but not limited to) labour cost and the maintenance of bike lane equipment.

Executive Summary

The City of Edmonton's active pathway network supports all four of ConnectEdmonton's strategic goals of creating a healthy city that promotes equity for all Edmontonians, creating vibrant urban places where mobility options are plentiful and promoting regional prosperity and climate resilience. Bike lanes are a vital part of this network and addressing snow and ice on these bike lanes is important to support Vision Zero's goal of zero traffic-related fatalities and serious injuries.

Edmonton has different types of bike lanes, including protected bike lanes, painted bike lanes, shared roadways and shared pathways. Of this network, roughly 38 km of bike routes (or 2.7 percent of the total) are prioritized for clearing snow and ice. This report includes the costs associated with clearing these prioritized bike lanes over the last two winter seasons.

Report

The City of Edmonton's bike lanes and their associated maintenance play a crucial role in promoting mobility options in alignment with the direction provided in ConnectEdmonton as well as the draft City Plan. The high importance of snow and ice control was a consistent theme throughout Edmonton Bike Plan public engagement activities. In the October 3, 2018 report CR_6320, Alternative Practices to Address Snow and Ice Control, Administration brought forward the updated Snow and Ice Control Policy (C409J) for Council approval. The approved policy directed maintaining

prioritized bike lanes to bare pavement within 24 hours from the end of snowfall with the goal of improving safety and accessibility for all bike users throughout winter.

These prioritized bike routes include 19.7 km of protected bike lanes and 18.3 km of shared pathways for a total inventory of 38 km. Attachment 1 shows the complete map of these prioritized bike lanes.

The City's total inventory of bike routes is 1391 km. This includes the 38 km of protected bike lanes identified in Attachment 1 as well as non-prioritized bike lanes, including contra-flow bike lanes, painted bike lanes, shared roadways and shared pathways. Non-prioritized, non-segregated bike lanes on roadways are serviced at the same level as the rest of the roadway, while bike lanes on non-prioritized shared pathways and sidewalks are serviced to the same level as other pedestrian infrastructure.

Financial Implications

The overall Snow and Ice Control budget for 2018-2019 was \$63.7 million and for 2019-2020 was \$60 million. The total cost of clearing snow and ice off the 38 km of prioritized bike lanes was \$463,059.51 (0.7 percent) for the 2018-2019 winter season and \$335,017.28 (0.5 percent) for the 2019-2020 winter season.

The table below shows the breakdown of the total costs associated with clearing snow and ice off the 38 km of prioritized bike lanes during the winter seasons of 2018-2019 and 2019-2020. Overall, there is roughly 28 percent reduction in the total costs in the 2019-2020 season. While most of this reduction can be attributed to the decrease in labour costs, it should be noted that these costs are also influenced by the weather and can fluctuate year to year.

Season	Labour Costs	Equipment Costs	Materials & Other Costs	Total Costs
2018-2019	\$338,358.85	\$111,968.35	\$12,732.31	\$463,059.51
2019-2020	\$207,850.94	\$106,851.17	\$20,315.17	\$335,017.28

(Winter season has been defined as the period starting November 1 and ending April 30)

The 38 km network of prioritized bike lanes is maintained by dedicated crews and equipment including 19 employees, six one-ton trucks and eight pieces of specialized smaller equipment. Winter maintenance of these bike lanes involves using mechanical means such as plows and brooms as well as applying materials, primarily anti-icing brine, and sometimes salt and sand.

While the prioritized bike lane inventory hasn't changed significantly between the 2018-2019 and 2019-2020 winter seasons, some changes have been made to how labour is allocated within this inventory. In 2019-2020, the dedicated bike lane crew was reallocated to clearing other inventory within Active Pathways (like sidewalks and bus stops) once the bike lanes were completed. This allowed for better utilization of resources and helped reduce the labour costs by about 39 percent for prioritized bike lanes in the 2019-2020 season.

When the protected bike lanes first became operational in 2017, operating impacts of capital were absorbed into the existing Snow and Ice Control program. Administration has been using the existing operating budget of the overall Snow and Ice Control program to deliver the service levels defined in the Snow and Ice Control Policy.

Next Steps

The service levels for Active Pathways, including bike lanes, are currently being reviewed as part of the Snow and Ice Control program audit. The results of the audit will be presented to Council upon completion.

Corporate Outcomes and Performance Management

Corporate Outcome(s): The City of Edmonton has sustainable and accessible infrastructure			
Outcome(s)	Measure(s)	Result(s)	Target(s)
The City promotes increased accessibility and mobility by adhering to the established service levels in the Snow and Ice Control Policy C409J.	Average time from the end of a snowfall to when prioritized bike lanes are cleared to bare pavement.	100% (Bare pavement achieved within 24 hours from the end of every snowfall).	Bare pavement within 24 hours from the end of snowfall.

Attachment

1. Prioritized Bike Lanes Map for Snow and Ice Control

Others Reviewing this Report

- M. Persson, Deputy City Manager and Chief Financial Officer, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- J. Meliefste, Acting Deputy City Manager, Integrated Infrastructure Services
- S. McCabe, Deputy City Manager, Urban Form and Corporate Strategic Development
- B. Andriachuk, City Solicitor