

Process for Review and Design and Construction Standards of Culs-de-sac

Recommendation

That the February 2, 2021, Urban Form and Corporate Strategic Development report UFCSD00008, be received for information.

Previous Council/Committee Action

At the August 17/19, 2020, City Council meeting, the following motion was passed:

That Administration provide a report on the process and implications to revise the design and construction standards to limit the development of cul-de-sacs and detail the resulting potential savings within our snow and ice budget.

Executive Summary

Culs-de-sac are used to maximize land use efficiency and to respond to development constraints and market demand. Cul-de sac design and neighbourhoods that incorporate their use in the broader local road network do pose challenges to the delivery of residential services, including snow and ice control and waste collection. Past reviews of design standards highlighted opportunities for increased efficiency of snow clearing and waste collection along culs-de-sac. Administration routinely reviews design and construction standards to ensure they reflect current corporate outcomes. Work to consider removal or to limit the use of culs-de-sac is not currently in Administration's work plan and would require reallocation of resources to complete.

Report

More than 3,000 culs-de-sac have been built in various forms in Edmonton, reflecting the design standards of the time they were built. Presently, culs-de-sac are often used in response to land use constraints that place limitations on neighbourhood and street design, such as natural features, stormwater management facilities and pipeline rights-of-way. Culs-de-sac are desirable for some residents, considered to be quiet, low traffic roadways.

Administration regularly reviews design and construction standards in consultation with our city building partners and identifies areas to be updated. In 2018, Administration engaged with internal partners and the development industry with a goal of improving

waste collection and snow clearing efficiency along culs-de-sac. The engagement resulted in revised design standards, increasing the cul-de-sac radius from 11 metres to 12 metres. During the engagement, Administration heard that the development industry uses culs-de-sac to respond to development constraints, improve land use efficiency, to respond to market demands and can be designed to support walkability.

Process to Remove or Limit Culs-De-Sac From Complete Streets Design and Construction Standards

Work required to revise the Complete Streets Design and Construction standards would include the following steps:

- Conduct a literature review on neighbourhood design and identify how culs-de-sac may impact city outcomes.
- Review the current state in other Canadian cities and international examples.
- Gather public feedback on community design preferences.
- Engage with internal and external city building partners, including development industry representatives, to understand impacts such as financial implications to land development and City's tax revenue.
- Collect data on how cul-de-sac design affects snow clearing costs. More than one winter season may be required to gather enough detailed data to show cost differentials on operational efficiencies.
- Develop a policy for Council consideration to remove or limit culs-de-sac.

Work to remove or limit culs-de-sac from future use including analysis of data to understand the financial implications is not currently included in the Administration's workplan. Undertaking the work outlined above would require reallocating resources away from priority implementation projects of The City Plan such as District Planning and Mass Transit Planning. It is expected that the work would take approximately 12-18 months to complete.

Corporate Outcomes and Performance Management

Corporate Outcome(s): Edmonton is attractive and compact.			
Outcome(s)	Measure(s)	Result(s)	Target(s)
Edmonton is attractive and compact	Communities are well-designed	53 percent (2017)	55 percent (2018)

Others Reviewing this Report

- C. Owen, Deputy City Manager, Communications and Engagement
- G. Cebryk, Deputy City Manager, City Operations
- A. Laughlin, Deputy City Manager, Integrated Infrastructure Services

- M. Persson, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- B. Andriachuk, City Solicitor