

City Sidewalks

Recommendation

That the March 12, 2019, Urban Form and Corporate Strategic Development report CR_5972, be received for information.

Previous Council/Committee Action

At the March 12, 2019, City Council meeting, the following motion was passed:

That the March 12, 2019, Urban Form and Corporate Strategic Development report CR_5972, be rerouted to the March 19, 2019, Urban Planning Committee meeting.

At the April 24/25, 2018, City Council meeting, the following motion was passed:

That Administration provide a report about city sidewalks that includes:

- the definitions and the process used to identify missing sidewalks and sidewalks requiring repair for purposes including, but not exclusive to, accessibility, walk-ability, and mobility with a focus on commonly used amenities, community resources, and connector routes,
- a high-level inventory of current missing sidewalks and those currently requiring repair, as well as their locations and when they are expected to be added/replaced/repared,
- an overview of the Sidewalk Strategy along with the estimated timelines in the implementation of the strategy.

Executive Summary

Mobility planning for pedestrians is guided by the Active Transportation Policy C544, with direction for pedestrian infrastructure outlined in the City's Sidewalk Strategy - *Ped Connections: a Strategy for Sidewalk Infrastructure* (2008). The Strategy defines missing sidewalks as those links where no sidewalk exists but there is a desire to have one constructed.

Missing sidewalks in industrial, residential and commercial areas are the primary focus for capital funding programs. An inventory of missing sidewalk links is maintained by Administration and prioritized according to influence on safety, accessibility, connectivity to support land uses and expected level of use. There are 91.1 km of missing sidewalks city-wide, compared to approximately 5,200 km of sidewalks along roadways. Timelines to construct these sidewalks is dependent on funding availability. In the 2019-2022 Capital Budget, \$2 million is allocated towards the Active Mode Fund for missing sidewalks infrastructure.

Sidewalks requiring repair or upgrades are identified through public requests and through Administration's Asset Management Inspection Program. The October 31, 2018, City Operations report CR_4701- Budget Strategies for Funding on Enhanced Level of Service for Sidewalk Repairs, identifies and aligns minimum maintenance standards, maintenance service (repair) levels, asset management levels of service, and associated financial requirements. Currently, there are 371 outstanding sidewalk repairs in Edmonton which includes everything from trip hazard repair, sidewalk grinding, asphalt panel replacement, panel replacement, curb and gutter repair etc.

Sidewalks that require renewal are inspected and prioritized based on their condition. Sidewalk rehabilitation is typically coordinated with the renewal of adjacent roadway pavement to optimize life cycle costs, constructability, and overall benefits. As a result, sidewalk renewal along a corridor is typically prioritized in conjunction with roadway conditions and renewal needs. Currently, 16 percent, or 850 km, of sidewalks are in poor or very poor condition, and are eligible for replacement city wide.

Report

Mobility planning for pedestrians is guided by the Active Transportation Policy C544, Edmonton's Walkability Strategy (2009) and the Sidewalk Strategy - Ped Connections: a Strategy for Sidewalk Infrastructure (2008).

Edmonton's Walkability Strategy seeks to reduce barriers and increase walkability in Edmonton. It identifies four factors that influence a person's decision to walk including: quality of journey, urban form, pedestrian infrastructure, and policies and programs.

The Sidewalk Strategy provides detailed direction on pedestrian infrastructure. It consolidates a strategic direction for the sidewalk system in Edmonton towards improvements in walkability and active transportation, identifies deficiencies in the sidewalk system and develops an approach to prioritization and funding of pedestrian infrastructure.

Missing Sidewalks

Definition of Missing Sidewalks

The 2008 Sidewalk Strategy sets out distinct definitions that inform the discussion of pedestrian infrastructure. Pedestrian infrastructure includes sidewalks, curb ramps, shared-use paths, and connections to bus stops. The Strategy focuses on non-existent sidewalks that are classified as both absent and missing sidewalks.

“Absent” sidewalks are defined as any location along a roadway where no sidewalk nor pedestrian infrastructure physically exists. “Missing” sidewalks are locations where the sidewalk is not only absent, but there is a desire to have one constructed or it would be used if it were constructed.

Different areas have different needs with respect to pedestrian infrastructure:

- Industrial areas typically have very few existing sidewalks and need basic pedestrian infrastructure. The minimum requirements of the Complete Streets Design and Construction Standards (2018) are a shared-use path on one side of industrial collector roads and sidewalk on one side of industrial local roads.
- Residential and commercial areas include the majority of the existing sidewalk infrastructure, but still have some significant gaps. Developing neighbourhoods are required to follow The Complete Streets Design and Construction Standards (2018). The Standards require sidewalk on both sides of most local and collector roads and a shared-use path on both sides of arterial roadways. As a result, the majority of missing sidewalks are identified in core, mature and established areas.

Inventory and Prioritization

The Sidewalk Strategy was developed with the input of Edmontonians to identify missing sidewalk links. The knowledge of Edmontonians helped Administration to identify which sidewalk connections are not only absent, but are also desired and therefore missing.

The Sidewalk Strategy identified that there were 4,400 km of total sidewalk in Edmonton in 2007 and 87 km of missing sidewalks in 2008. Although sidewalks have been built since the Strategy was approved, Administration continues to receive requests for missing sidewalks. The current inventory of identified missing sidewalks is as follows:

- 91.1 km city wide
 - 35.1 km (38 percent) in industrial areas
 - 56.0 km (62 percent) in residential and commercial areas

The list of missing sidewalks is prioritized based on factors that influence safety, accessibility, connectivity to supportive land uses and expected level of use of the potential facility. Factors included in the prioritization include:

- Proximity to supportive land uses such as senior's facilities, commercial developments, high or medium density developments, or public spaces.
- Connections to transit centres or transit routes.
- Proximity to high speed arterial or truck route.
- Alignment and efficiencies with other City of Edmonton projects.

Projects are identified for construction based on priority ranking and available funding. Where applicable, construction of these missing links is aligned with the schedule for renewal and reconstruction projects.

Implementation of Sidewalk Strategy

The Sidewalk Strategy recommended a 20-year implementation plan. When the Strategy was developed in 2007, Administration estimated that \$12.5 million in capital dollars would be required annually for the first 10 years and \$6.1 million annually for the following 10 years to address the inventory of missing sidewalks.

Since the development of the Sidewalk Strategy, missing sidewalks have been constructed through a mixture of capital funding programs that include:

- The Active Modes program funds growth elements such as missing sidewalks, shared-use paths and curb ramps.
- The Neighbourhood Renewal and Arterial Renewal programs are designed to replace existing infrastructure. A portion of renewal program funding is allocated to missing sidewalks.
- The Complete Streets program provided additional capital funding during the 2014-2018 Capital Budget cycle for growth elements in renewal projects, such as pedestrian infrastructure.

From 2009 to 2018, an annual average of \$6.1 million capital dollars were allocated towards missing sidewalks and shared-use paths. This resulted in the construction of an average of 13 km to 14 km of missing sidewalks and shared-use paths each year.

The timelines to further implement the Sidewalk Strategy are dependent on funding availability. Funding allocated exclusively towards missing sidewalks and transit connectors projects over the 2019-2022 Capital Budget cycle includes funding of \$2 million through the Active Modes Fund. In addition, funding towards missing sidewalks will continue to occur through the integration of renewal project that are funded within the Neighbourhood and Arterial Renewal Programs (up to 10 percent of overall program funding), notwithstanding other growth priorities within those programs and through other capital projects as the opportunity exists.

Sidewalks Requiring Repairs

Sidewalks requiring repair or upgrades are identified through Administration's Asset Management Inspection Program as well as through public requests. Standard sidewalk repairs occur where there is vertical displacement greater than 20 mm to address trip hazards and as concerns are reported to 311. In some cases, sidewalk repairs may occur if the trip hazard is less than 20 mm vertical displacement depending on the specific location of the hazard within the sidewalk or the proximity to areas with higher pedestrian traffic.

Prioritization of repairs and upgrades is determined by the safety and accessibility of sidewalks. From 2009-2018, an average annual amount of \$4.9 million operating dollars was used for sidewalk repairs and upgrades.

The October 31, 2018, City Operations report CR_4701- Budget Strategies for Funding on Enhanced level of Service for Sidewalk Repairs, outlined minimum maintenance standards for City's infrastructure assets that will be implemented in the *2019 - 2022 Asset Management and Asset Maintenance Plan*. Maintenance standards will be based on asset use and maintenance cost.

Sidewalk Renewal

The City's asset management program identifies sidewalks that require renewal. Sidewalk conditions are assessed regularly. The frequency of inspection is based on the classification of an adjacent roadway. From a capital renewal standpoint, there are two main options. If the assessment indicates a condition rating of Fair, select slabs of sidewalks may be replaced within a block. If the assessment indicates a condition rating of Poor or Very Poor, full block replacement may occur. Full block replacement is most often done in conjunction with a renewal of the adjacent roadway.

Corridors where sidewalks require renewal are typically prioritized based on the asset condition rating and renewal needs of the adjacent roadway, and subject to the availability of funding.

Inventory of Sidewalks Requiring Repairs:

Sidewalk repairs (spot improvements):

- 371 outstanding sidewalk repair notifications city wide
 - 9 (2 percent) in industrial areas
 - 319 (86 percent) in residential and commercial areas
 - 43 (12 percent) along arterial and collector roads

2016 sidewalks conditions:

- 1050 km (20 percent) of sidewalks are in Fair (Grade C)

- 850 km (16 percent) of sidewalks are in Poor or Very Poor condition (Grade D or F)

Budget/Financial

Construction of missing sidewalk links, or those requiring renewal, is funded by the Transportation Planning & Design - Growth, Neighbourhood Renewal Program and Arterial (Goods Movement) Renewal Program capital profiles approved under the 2019-2022 Capital Budget cycle. Sidewalk repairs are funded through the Parks and Roads Operating Budget.

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)
Active Transportation Infrastructure is in place	New active transportation infrastructure	TBD	TBD

Corporate Outcome(s): The City of Edmonton has a resilient financial position

Outcome(s)	Measure(s)	Result(s)	Target(s)
Finances are effectively managed to deliver best value to customers	City Asset Sustainability (actual expenditure on capital infrastructure divided by required expenditure)	0.94 (2017)	1.0 (2018)

Others Reviewing this Report

- T. Burge, Chief Financial Officer and Deputy City Manager, Financial and Corporate Services
- C. Owen, Deputy City Manager, Communications and Engagement
- G. Cebryk, Deputy City Manager, City Operations
- A. Laughlin, Deputy City Manager, Integrated Infrastructure Services