



# PED CONNECTIONS

## A Strategy for Sidewalk Infrastructure in Edmonton

# State of the Sidewalk System

**Edmonton** has an extensive pedestrian network consisting primarily of sidewalks, walkways, multi-use trails (both within road right-of-way and in off-road corridors), and river valley and parkland trails. Other elements of the network traversed by pedestrians include curb ramps, stairs, over/underpasses, crosswalks, and bus-stop pad connections.



As of 2007, Edmonton has approximately **4,400km** of sidewalk along roadsides.

This total includes about **100km** of wide sidewalk designated as multi-use trail, but does not account for walkways that connect neighbourhoods and culs-de-sac to the sidewalk system.

There are about **30km** of paved multi-use trails in rail and utility corridors throughout the city, and about **135km** of paved multi-use trail in the river valley and parkland.

Approximately **45%** (or 3,670 km) of all potential sidewalks are **physically absent** along roadways, where 100% would represent sidewalks on both sides of every road other than freeways/highways. These absent sidewalks are not evenly distributed along Edmonton's streets.

In addition, there are approximately **10,000 absent curb ramps** within Edmonton's existing sidewalk network, which limit the accessibility of the current system.

# Residential & Commercial

Sidewalks in the Residential & Commercial areas of Edmonton may be absent for any one of several reasons. Most commonly, gaps occurred as a result of obsolete construction standards from when a development was first built.

The physical absence of a sidewalk does not necessarily indicate that citizens have a particular desire to have it constructed or that it would be used if it were constructed.

Therefore, absent sidewalk links in the Residential & Commercial areas of the city are only considered to be missing where their absence has been reported by a citizen.

This distinction between **absent vs. missing** sidewalks is a key concept.

Missing sidewalk links in the Residential & Commercial areas of the city are prioritized according to their assessed severity and context.

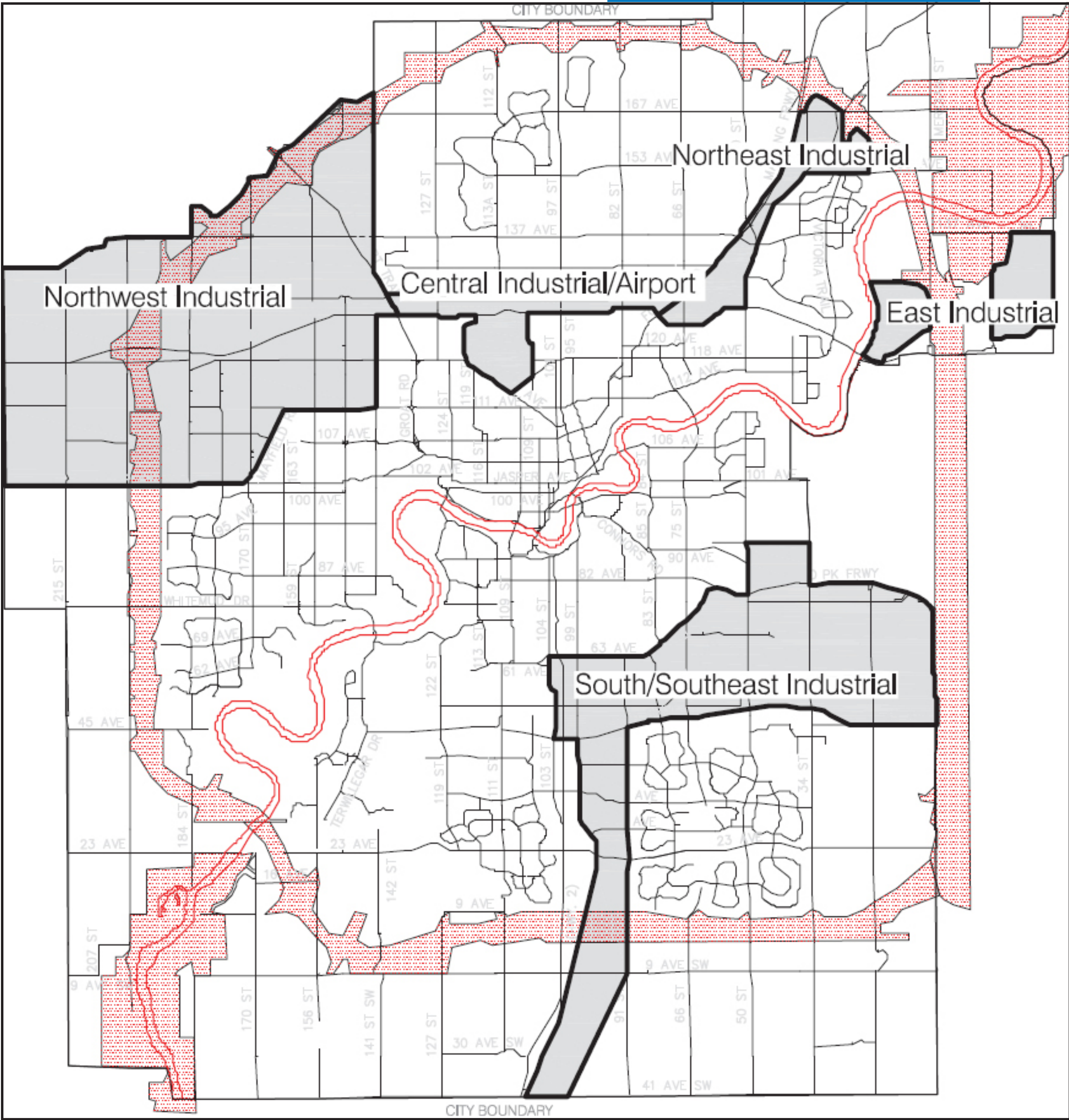
**Severity** deals with the experience of the individual pedestrian, in terms of how badly the deficiency impacts that person’s mobility and safety. Descriptions of the types of severity are listed in the figure to the right.

**Context** deals with the pedestrian experience collectively, in terms of the impacts that providing a missing sidewalk link will have on the connectivity of the overall pedestrian network. A context score for each sidewalk deficiency is assigned based on connection, exposure, and pedestrian trip generation characteristics.

	Importance = Context (connections, potential use, etc.)	
Urgency = Severity (physical condition, accessibility, etc.)	High Urgency / High Importance	High Urgency / Low Importance
	Low Urgency / High Importance	Low Urgency / Low Importance

Severity Code	Severity Description	Context			
		A	B	C	D
A	Poor condition existing sidewalks				
B	Sidewalks missing on both sides				
C.1	Missing curb ramps				
C.2	Isolated bus stops				
D	Sidewalks missing on one side				
E	Existing sidewalks in fair or better condition				

# Industrial



Industrial Area	Location of Absent Sidewalk				
	Along Arterial	Along Collector	Along Local	Total	Along Transit
Northwest	206 km / 92%	89 km / 87%	168 km / 99%	463 km / 93%	121 km / 85%
Central/Airport	19 km / 79%	2 km / 100%	12 km / 86%	33 km / 83%	6 km / 65%
Northeast	18 km / 75%	7 km / 88%	24 km / 86%	49 km / 82%	17 km / 71%
East	6 km / 50%	5 km / 83%	24 km / 100%	35 km / 83%	1 km / 100%
Southeast	146 km / 87%	42 km / 75%	136 km / 92%	324 km / 87%	114 km / 79%
Total	395 km / 87%	145 km / 83%	364 km / 95%	904 km / 90%	259 km / 81%
Remainder of Edmonton	1,380 km / 73%	340 km / 27%	1,050 km / 26%	2,770 km / 39%	990 km / 46%

The system used for identifying and prioritizing missing sidewalk links within the Residential & Commercial areas of Edmonton is mainly focused on gaps in the existing pedestrian network.

In **Industrial areas**, the gaps are far more significant. Whereas about 40% of all potential sidewalks in existing Residential & Commercial areas are absent, approximately **90%** of all potential sidewalks are **absent** within the Industrial areas.

The Industrial areas are in need of basic pedestrian infrastructure, as a functional sidewalk network essentially does not exist at this time in these locations.

Sidewalks in Industrial areas are absent as a result of standards that haven't historically required their construction as a condition of development.

Once again, the distinction between **absent vs. missing** sidewalks is key.

The physical absence of a sidewalk does not necessarily indicate that citizens have a particular desire to have it constructed or that it would be used if it were constructed.

The Industrial areas are typically served by transit during peak periods. However, transit users must travel as pedestrians from the transit stop to their place of employment.

To provide transit users with adequate and safe facilities during the pedestrian ends of their trips, sidewalks should be provided along transit routes. In addition, sidewalks along transit routes accommodate transit users with mobility aids that require an appropriate loading surface to board or alight from transit vehicles.

In the Industrial areas, absent sidewalk is identified as **missing** only **where** it is along a side of the road that is **served by the Edmonton Transit System**.

## Policy

Beyond the basic infrastructure needs, it is necessary to ensure that the City's many bylaws, policies, plans, and processes work together to produce an integrated system of pedestrian infrastructure. Improvements to existing practice were identified, including the following:

**Coordinate** land use and transportation planning activities more extensively.



Review the **Zoning Bylaw** to address the sidewalk needs of **infill development**, and to encourage better **on-site** pedestrian **connectivity**.

Consider **alternative means of funding** for the construction of missing sidewalk links, including collaborating with communities and with other orders of government.

Consider the implications of safety, health, and demographics in providing a **universally accessible** pedestrian network.

