

Route Analysis for an All Ages and Abilities Cycling Route in Buena Vista

Saskatoon's Active Transportation Plan (AT Plan) has identified Victoria Avenue as an all ages and abilities (AAA) cycling route from the Traffic Bridge to Adelaide Street East. Through the engagement process for the Bikeway, Pedestrian, and Traffic Improvement Project along Victoria Avenue, the Administration received questions from the public on why Victoria Avenue was selected as the preferred AAA route instead of Melrose Avenue or Eastlake Avenue. The following discussion provides an overview of the cycling network characteristics that were used to select the routes identified within the AT Plan. Following the discussion of principles, a route analysis comparison between Victoria Avenue, Melrose Avenue, and Eastlake Avenue is provided.

Active Transportation Plan and Mode Share Targets

One of the goals and an essential outcome of the AT Plan is to develop and implement a complete and connected cycling network for all ages and abilities in Saskatoon. Building this connected cycling network of AAA facilities is critical to meeting the cycling mode share targets of 8% of all trips and 4% of commute trips set through the Growth Plan and Active Transportation Plan.

Cycling Network Characteristics

A cycling network should be visible, intuitive, and provide connections between destinations and neighbourhoods. Just like with any transportation network, major network gaps, lack of appropriate intersection treatments, and route deflections in a cycling network can discourage people from choosing cycling as their mode of transportation. Well-designed cycling networks are direct and avoid weaving through neighbourhoods when possible. Since bikes are human-powered and riders are physically exposed to the elements even small detours in the cycling network can discourage people from choosing to ride their bike.

When selecting routes for Saskatoon's cycling network the following was considered:

- A network of connected all ages and abilities facilities that provides an interconnecting system of bicycle facilities that is comfortable and attractive for all users, ensuring that the highest standards of safety and comfort are provided throughout the network.
- A 'Hub' and 'Spoke' network, where key corridors form the 'spokes' of the network, leading to and from the 'hub' of network facilities Downtown and linking neighbourhoods to major destinations.
- A minimum grid of cycling facilities so that residents are within 400 metres of a cycling facility in high demand areas, and within 800 metres of a cycling facility elsewhere. Research, literature, and experience suggests that 400 metres is the ideal distance people are willing to travel to reach a designated bicycle route.

- Direct connections to key destinations on a complete network to ensure cycling is a viable transportation option.
- Enhancing existing facilities and integrating new facilities with existing facilities to improve the connectivity of the network.

Intersection Characteristics

Intersection characteristics are a critical element when creating a cycling network. People travelling on bikes are vulnerable road users and may find it difficult to cross busy intersections if appropriate design treatments are not in place. To be considered complete, a cycling network needs to include intersection design treatments that allow people riding bikes to feel safe and comfortable when crossing busy intersections. Considerations for intersection characteristics include intersection control treatment, number of vehicle travel lanes that need to be crossed, and ability to provide cyclist detection.

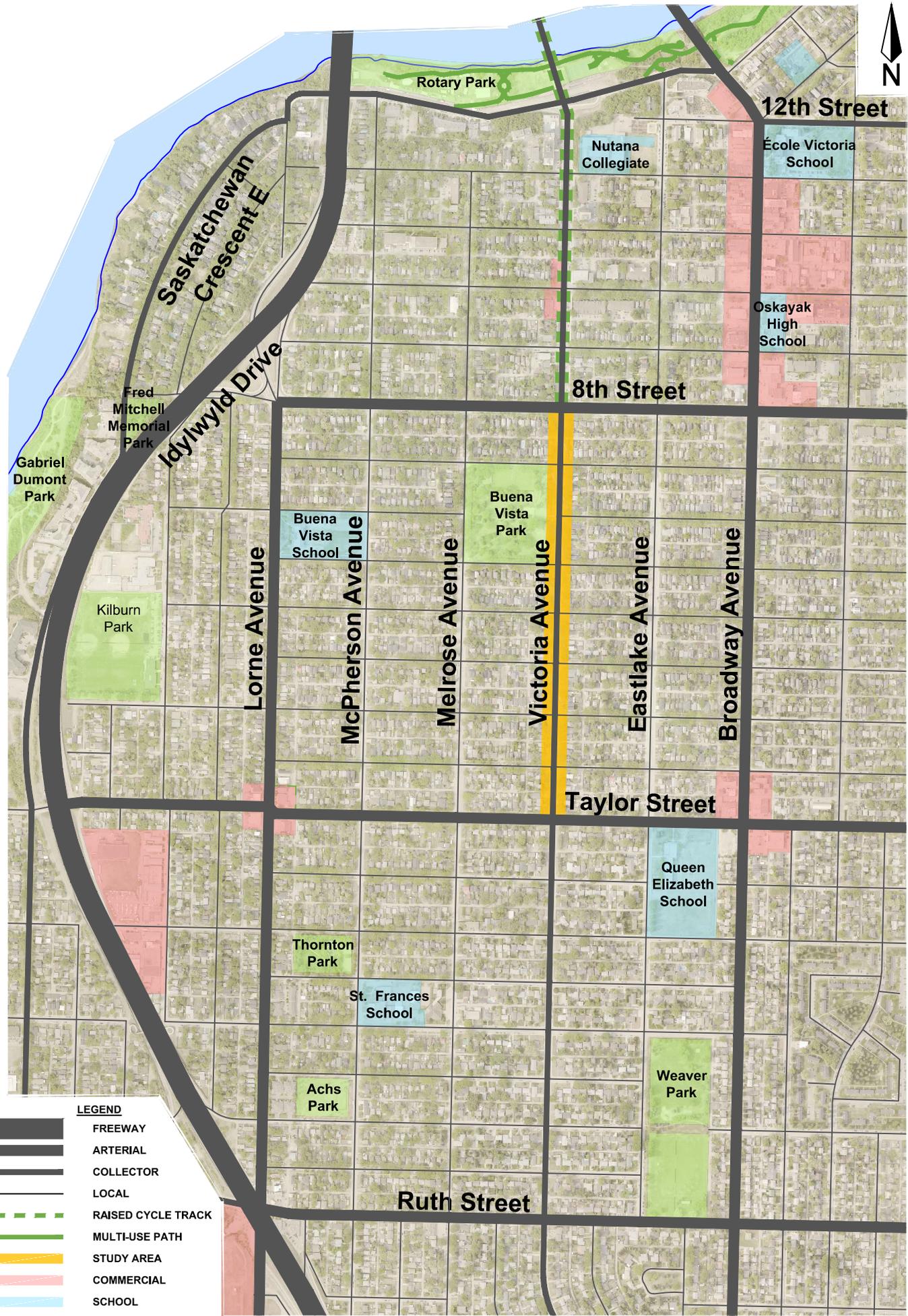
Route Analysis

The table on the following page provides a route analysis comparison between Victoria Avenue, Melrose Avenue, and Eastlake Avenue using the cycling network characteristics and intersection characteristics.

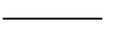
Criteria	Measures	Route Alternatives			
		Do Nothing (Victoria Ave)	Victoria Avenue	Melrose Avenue	Eastlake Avenue
Cycling Network Characteristics	Connection to existing cycling facilities	AAA cycling route does not continue south of 8 th Street East. Cyclists can continue to share lane with traffic 	Direct connection to raised cycle track along Victoria Avenue 	Does not provide a direct connection to an existing cycling facility 	Does not provide a direct connection to an existing cycling facility, connects to Meewasin trail at Saskatchewan Crescent 
	Connections to the north	An AAA route between 8 th Street East and Taylor Street East with a direct connection to the north is not provided 	Direct connection to Traffic Bridge, and proposed 3 rd Avenue AAA bike lanes, and beyond 	Does not provide a direct connection to a river crossing, Melrose Avenue ends at 11 th Street East 	Does not provide a direct connection to a river crossing, terminates at Saskatchewan Crescent East 
	Connections to the south	Victoria Avenue is identified as a future AAA cycling route South of Taylor Street East. Not providing an AAA facility between 8 th Street East and Taylor Street East creates a network gap 	Victoria Avenue becomes Wilson Crescent and continues to the south 	Melrose Avenue becomes Glasgow Street and continues to the south 	Eastlake Avenue ends at Ruth Street and does not continue to the south 
	Access to destinations	Provides access to residential land uses and a non-AAA facility to Buena Vista Park 	Direct access to residential land uses and Buena Vista Park 	Direct access to residential land uses and Buena Vista Park 	Direct access to residential land uses 
Intersection Characteristics	8 th Street Intersection	No AAA route directing cyclists across 8 th Street East. Cyclists can still use the traffic signal at Victoria Avenue and 8 th Street East without cyclist detection 	Existing traffic signal allows cyclists to cross this intersection, cyclist detection will be provided with AAA design option 	Median along 8 th Street East does not allow cyclists to cross this intersection 	Two-way stop on Eastlake Avenue, cyclists must cross six lanes of traffic, provision of future cyclist detection prevented due to proximity of existing traffic signals at Victoria Avenue and Broadway Avenue 
	Taylor Street Intersection	No AAA route directing cyclists across Taylor Street. Cyclists can still use the traffic signal at Victoria Avenue and Taylor Street East without cyclist detection 	Existing traffic signal allows cyclists to cross this intersection, cyclist detection will be provided with AAA design option 	Two-way stop on Melrose Avenue, cyclists must cross two lanes of traffic 	Two-way stop on Eastlake Avenue, cyclists must cross two lanes of traffic 
Total Score		1.5	6	2.75	2.5

LEGEND

Poor	Fair	Good	Excellent
			



LEGEND

-  FREEWAY
-  ARTERIAL
-  COLLECTOR
-  LOCAL
-  RAISED CYCLE TRACK
-  MULTI-USE PATH
-  STUDY AREA
-  COMMERCIAL
-  SCHOOL
-  PARKS