

HALIFAX

Brunswick Street & Rainnie Drive Complete Streets

Active Transportation Advisory Committee



April 21, 2022

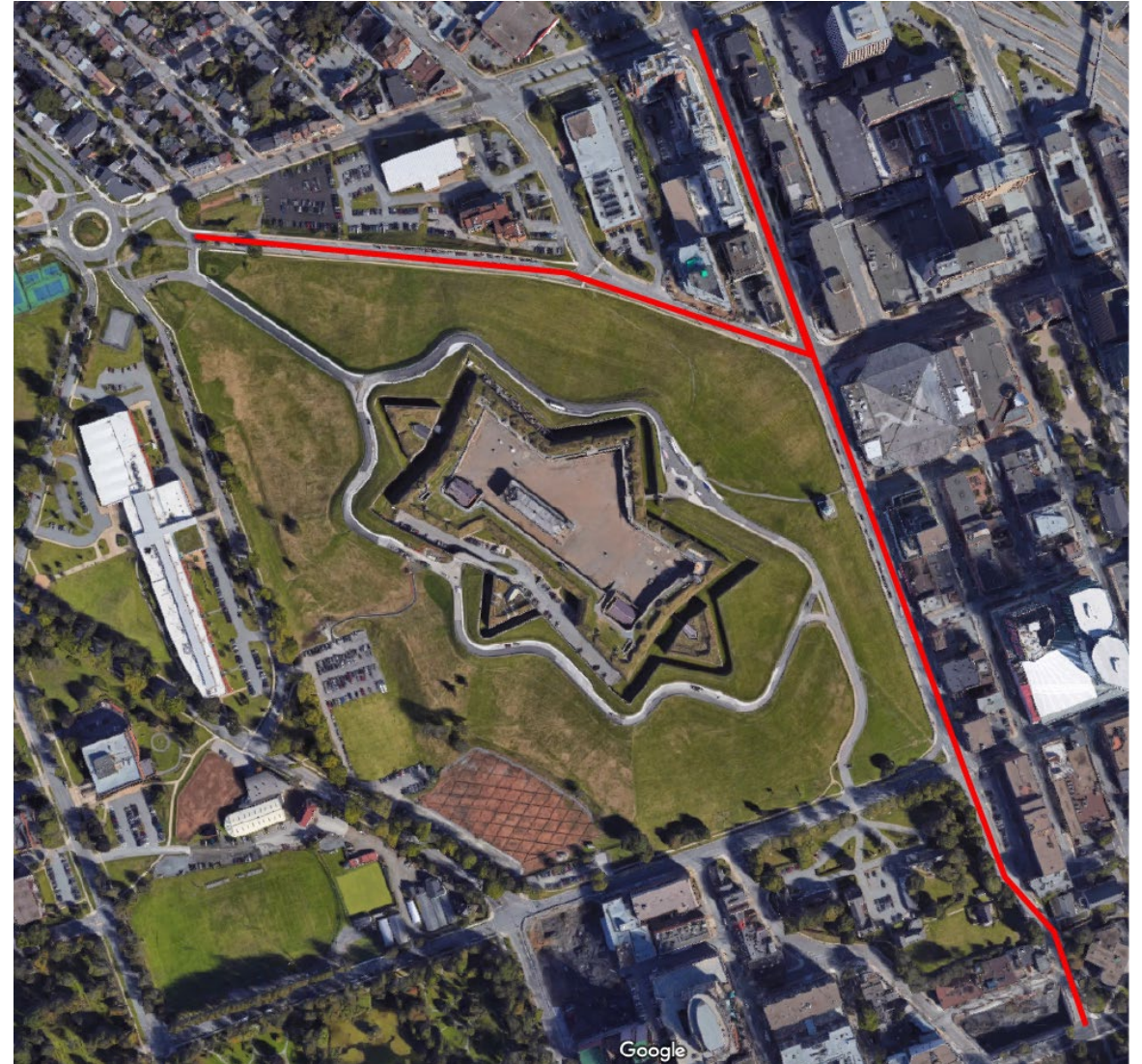


Project Background

In 2017, Regional Council endorsed Integrated Mobility Plan (IMP)

The IMP identified potential protected bikeways, local street bikeways, and multi-use paths to create an All Ages and Abilities (AAA) cycling network throughout our Urban Centre.

Brunswick Street and Rainnie Drive are proposed as part of the protected bikeway network.





Policy Direction

- Guided by the Integrated Mobility Plan – A121

“Identify “Strategic Corridors” – existing road corridors that are key to regional traffic flow, transit, goods movement and active transportation – and develop plans that will guide their development over time.”



Policy Direction

- IMP identifies Brunswick Street as an **All Ages and Abilities Bicycle Route**
- Active Transportation Priorities Plan identifies Brunswick Street as a **Candidate Bicycle Route**



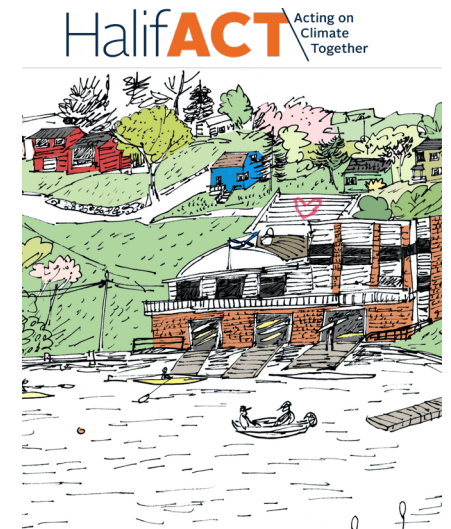
Functional Planning

- Higher vision of the corridor's functionality as a street and as a place
- Understand and justify potential trade-offs
- Fill the missing active transportation and transit gaps



Design Objectives

- Enhance the pedestrian realm
- Develop a 'AAA' bicycle facility
- Continue to accommodate vehicular traffic, including trucks and buses










Rationale for Off-Street Elements

- Expands pedestrian space and resolves pinch points along the corridor
- Ensures adequate separation between pedestrians and cyclists
- Provides buffer space between cyclists and vehicular traffic according to NACTO and TAC recommendations
- Creates opportunities for seating and other amenities



GUIDING PRINCIPLES		OBJECTIVES	HOW? (Examples)
	Encourage cycling by enhancing user experiences and safety	Improved Cycling Infrastructure	<ul style="list-style-type: none"> Extended and connected Brunswick Street bikeway Connections to Halifax Common, Cogswell St, and Spring Garden Road
		AAA Facility	<ul style="list-style-type: none"> Raised, protected bike lane Separation from pedestrians and vehicles
	Improve the pedestrian experience along Brunswick Street	Ease of pedestrian movement along the corridor	<ul style="list-style-type: none"> Smooth, durable walking surfaces Universal Accessibility best practices (depressed curbs, tactile warning indicators, gradual grade changes etc)
		A safe public realm	<ul style="list-style-type: none"> Apply Crime Prevention Through Environmental Design (CPTED) principles Buffered separation between pedestrians, cyclist and vehicle traffic Design street to reduce vehicle speeds
	Improve the public realm and amenities	Street as a place to spend time, not just move through	<ul style="list-style-type: none"> Beautify the streetscape (lighting, wires, etc.) Incorporate streetscape elements to enhance experience (benches, art, plantings etc) Recognize the role of the street in modern urban life Provide buffer between pedestrians and cyclists and vehicles Design vegetation into the streetscape Reconize the importance of Citadel Hill National Historic Site on the west border



GUIDING PRINCIPLES		OBJECTIVES	HOW? (Examples)
	Maintain functional uses along Brunswick Street that support businesses	Provide adequate loading areas for businesses	<ul style="list-style-type: none"> • Accommodate area loading activity • Create time-of-day loading restrictions for deliveries and couriers • Maintain tour bus space
		Consider parking needs along the corridor	<ul style="list-style-type: none"> • Accommodate on-street parking • Use time-of-day restrictions as appropriate • Accessible spaces as required at key locations
	Optimize vehicular use of Brunswick Street, in the context of downtown Halifax	Maintain north-south vehicular movement in the downtown area	<ul style="list-style-type: none"> • Consider impacts of Brunswick Street redesign on use and function for vehicular traffic • Ensure appropriate access to and from adjoining streets • Consider Brunswick Street is a truck route and gateway to downtown



Design Requirements

These dimensions are taken from HRMs Municipal Design Guidelines as well as industry best practices.

Space for Cyclists	Space for Pedestrians	Space for Vehicles
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- Two-way bikeway 3.0m minimum
- Minimum 1.0m buffer between vehicles and cyclists
- Minimum 0.6m buffer between pedestrians and cyclists (1.2m preferred)

- Minimum 1.5m sidewalk (2.1m preferred)
- Minimum 1.5m boulevard/amenity space

- 3.3m travel lane (0.4m gutter)
- 2.2m required for parking (0.4m gutter)
- Consideration of loading needs for businesses





Public Engagement

- Online from August 24 to September 30
 - 1100 survey responses
- 3 Concepts presented
 - Pedestrian Focused
 - Green Space Focused
 - Hybrid – preferred option



Preferred Design by Segment



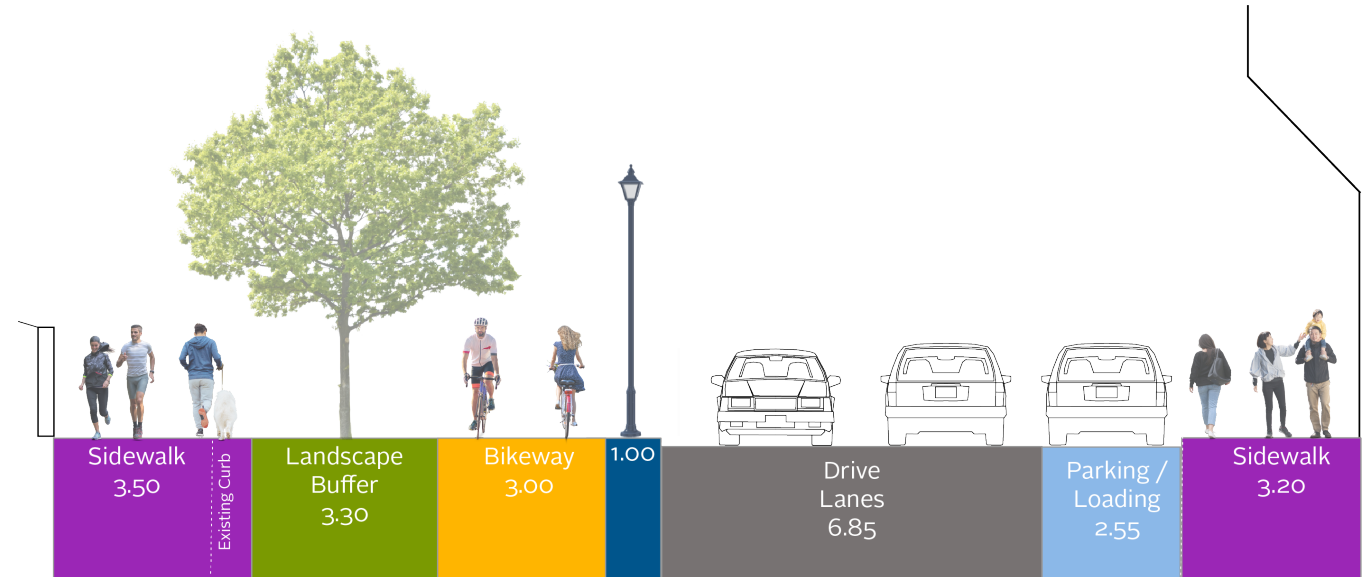
23.3m – Cogswell Street to Duke Street

Advantages:

- ✓ Generous widths for ideal off-street elements on the west side
- ✓ Additional space for snow storage
- ✓ Space to plant trees
- ✓ Curbside access on east side of the street
- ✓ Curb extensions

Disadvantages:

- × Permanent restriction of curb access on west side of street

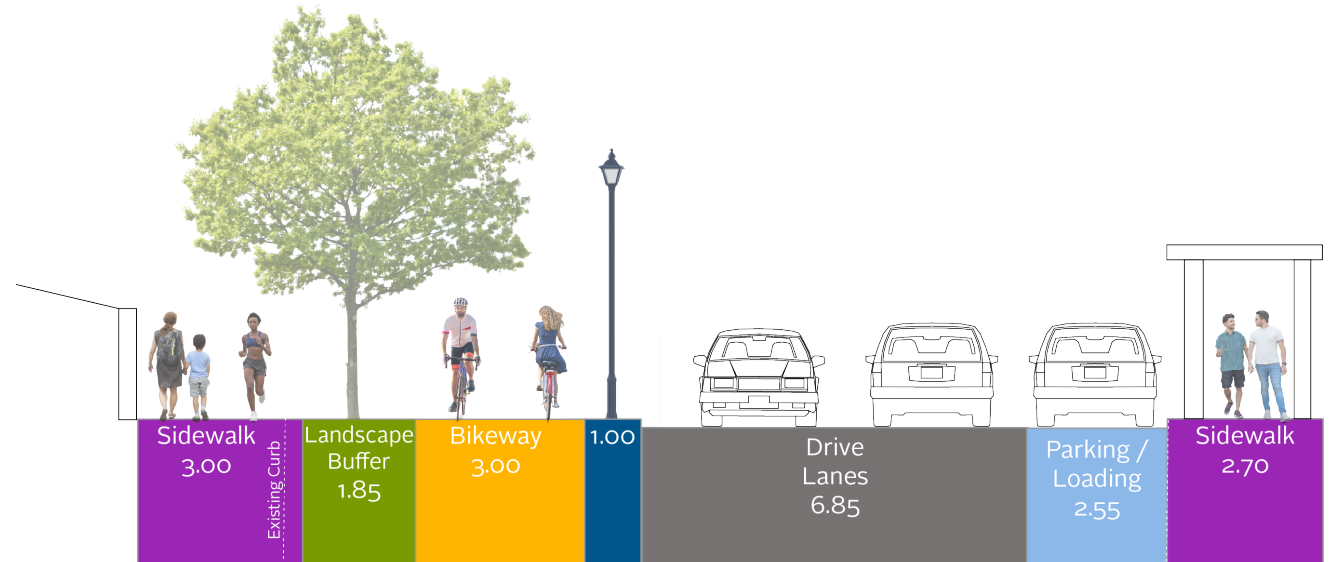




21.3m –Duke Street to Sackville Street

Advantages:

- ✓ Generous widths for ideal off-street elements on the west side
- ✓ Additional space for snow storage
- ✓ Space to plant trees
- ✓ Curbside access on east side of the street
- ✓ Curb extensions



Disadvantages:

- × Permanent restriction of curb access on west side of street



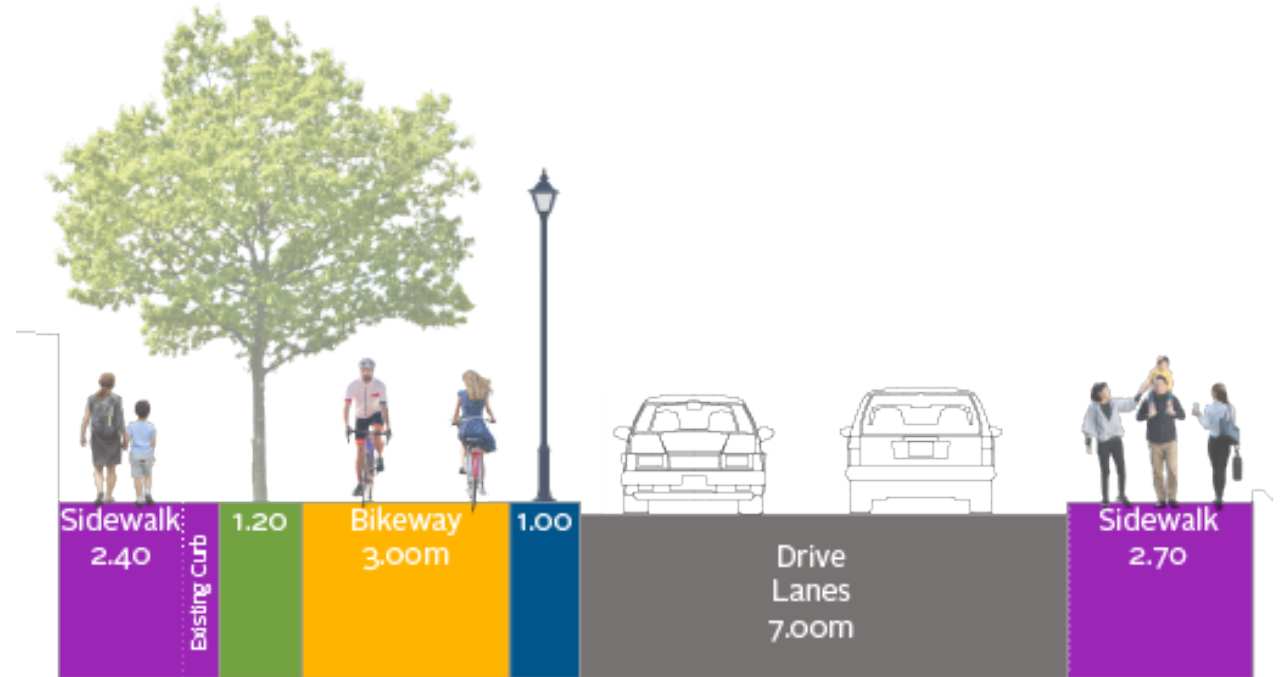
17.3m – Sackville Street to Grafton Park

Advantages:

- ✓ Generous widths for ideal off-street elements on the west side
- ✓ Additional space for snow storage
- ✓ Space to plant trees
- ✓ Curb extensions

Disadvantages:

- × Permanent restriction of curb access on both sides of street

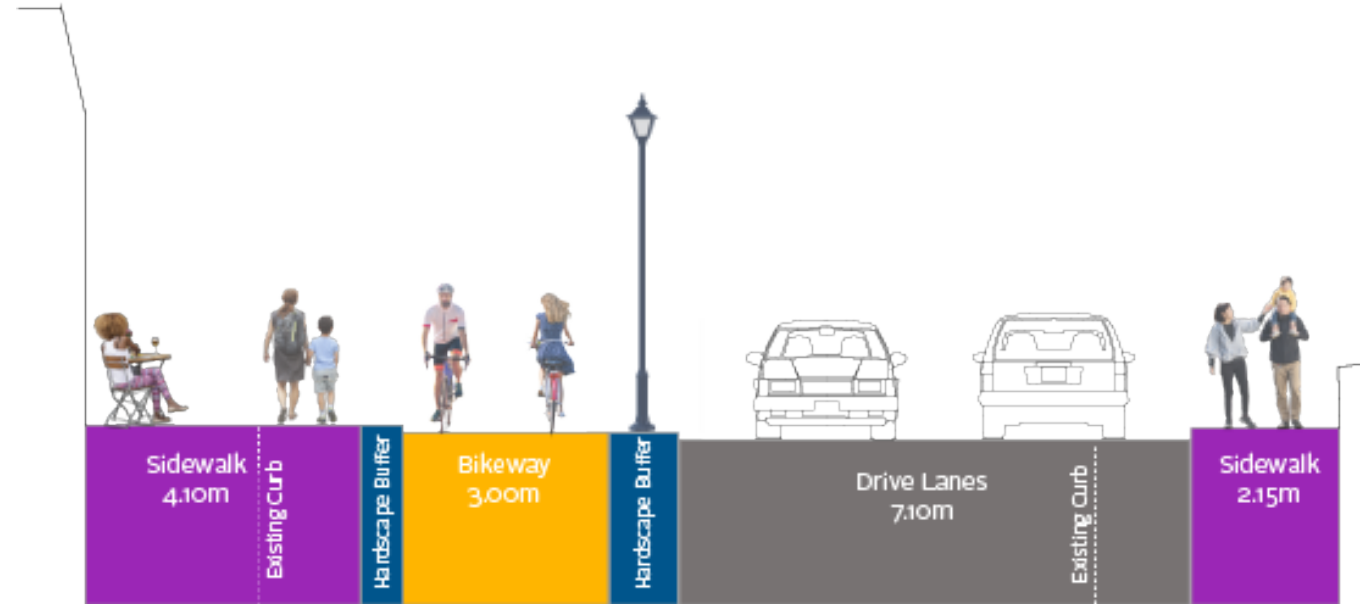




18.3m – Grafton Park to Doyle Street

Advantages:

- ✓ Generous widths for ideal off-street elements on the west side
- ✓ Additional space for snow storage
- ✓ Space to plant trees
- ✓ Curb extensions



Disadvantages:

- × Permanent restriction of curb access on both sides of street



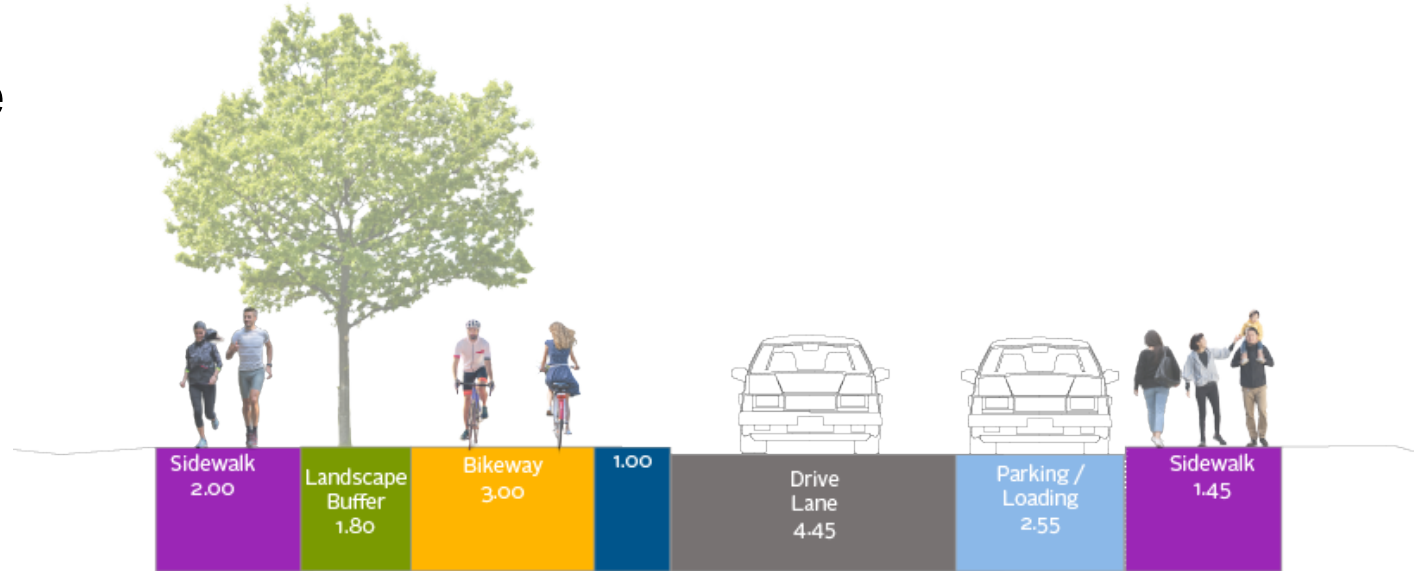
Rainnie Drive

Advantages:

- ✓ Generous widths for ideal off-street elements on the south side
- ✓ Additional space for snow storage
- ✓ Space to plant trees
- ✓ Curb extensions

Disadvantages:

- × Permanent restriction of curb access on south side of street





Next Steps

- Presentation to Transportation Standing Committee in May 2022
- Presentation to Regional Council in June 2022
- Transfer of project to PP&D for Detailed Design phase



Discussion