

Active Transportation: Assets, Opportunities and Challenges

In the Main Street Dartmouth Area



Ross Grant, Student Planning Officer
Graziella Grbac, Executive Director
Paul Dec, Urban Planning Consultant

On behalf of all members of

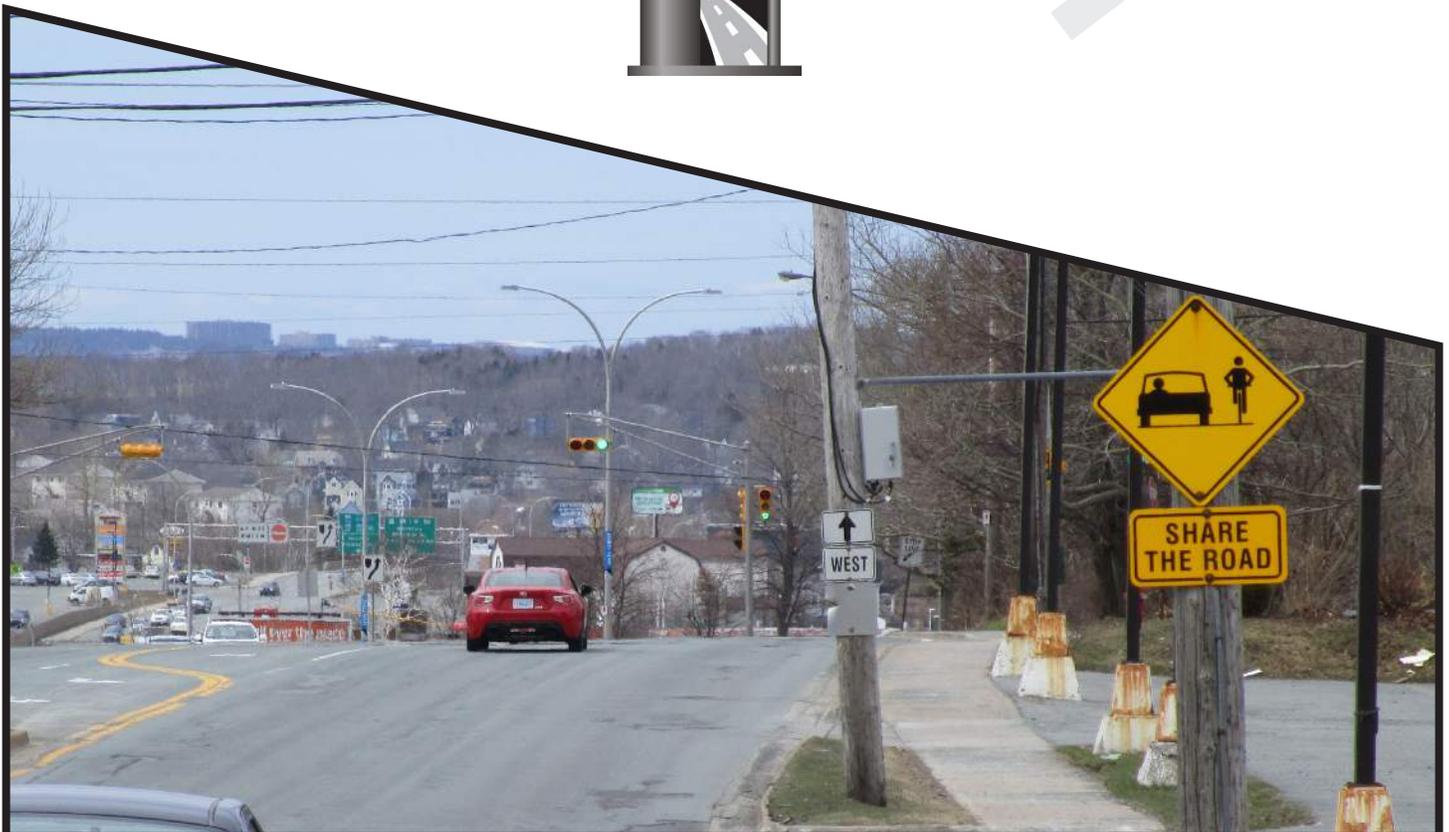
Main Street Dartmouth and Area Business Improvement Association
Suite 208- 175 Main Street
Dartmouth, Nova Scotia, B2X 1S1



Table of Contents

Current Policy Context.....	3
The Challenge.....	4
The Solution.....	5
Is there space for bike lanes?.....	6
Lakecrest Drive to Braemar Drive AT Connection.....	7
Main Street Mid-block Crossing.....	8
Speed Limit.....	9

All of our planning and design information is available on our website
www.reinventingmainstreet.weebly.com



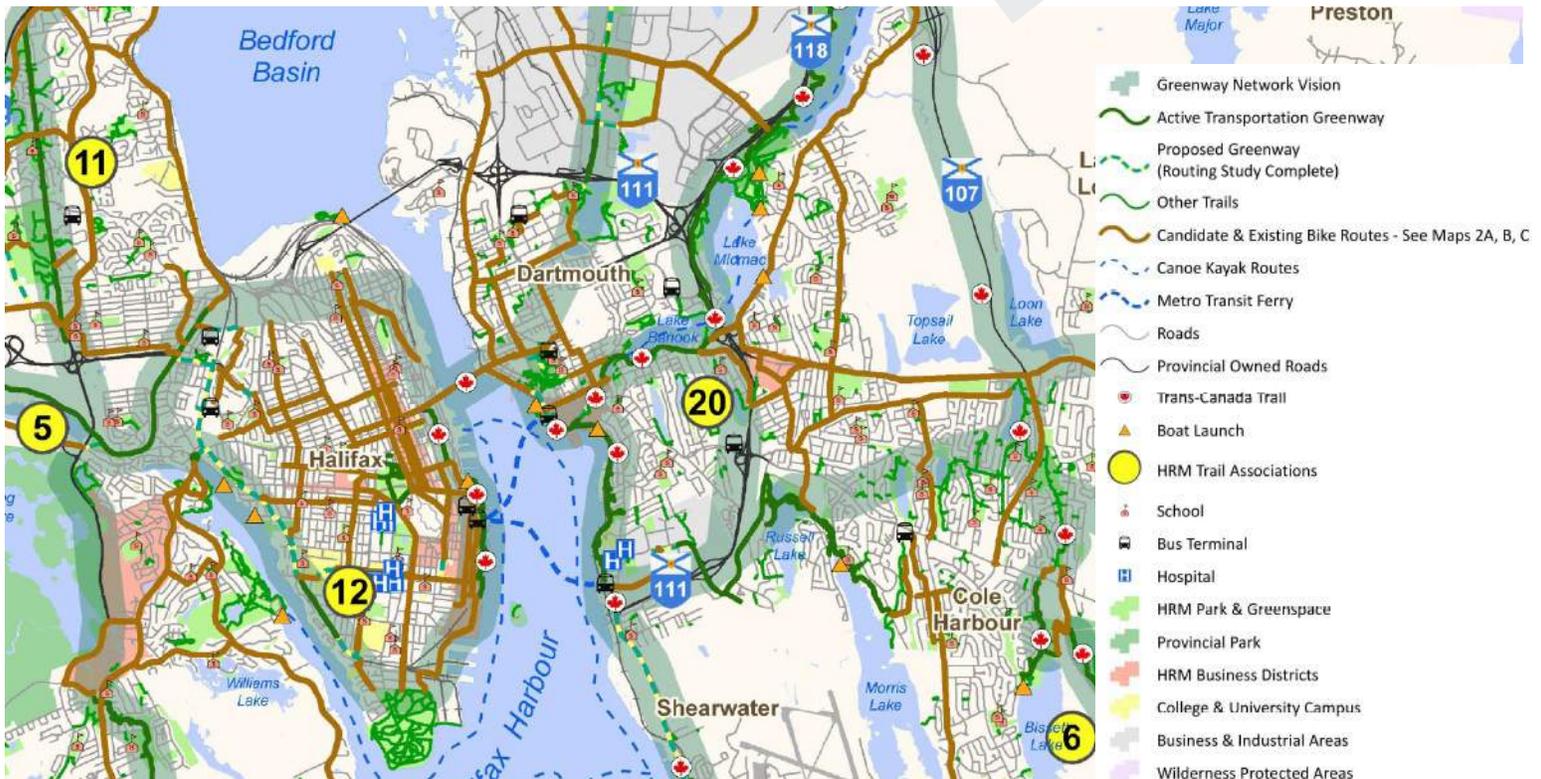
Current policy context

In 2014 HRM Council approved the “*Making Connections: 2014-2019 Active Transportation Priorities Plan*” which is an update of the 2006 Active Transportation (AT) Plan. The 2006 plan had three major goals which “remain relevant today”. They are:

- “Establish a complete, integrated and readily accessible region-wide AT network serving urban, suburban and rural areas;
 - “To double the number of person-trips using AT modes by 2026 and;
- “Make conditions for AT modes safer through the development of appropriate facilities in combination with promotion and safety education.”
- *Active Transportation Priorities Plan, 2014, p. 7*

Expansions to the active transportation network will mostly take place outside of the Regional Center beyond the 111 Highway. The regional center bicycle network is “already connected” and forms “a greenway network which is one of the best in the world” (*Active Transportation Priorities Plan, p. 61*). The focus for communities beyond the regional center is to connect “transit hubs, local schools and community centers (including shopping centers)” (*Active Transportation Priorities Plan, p. 61*). Additionally, Pedestrian trails will continue to expand but most of these projects will take place outside the regional center where there are “significant gaps” in pedestrian infrastructure (*Active Transportation Priorities Plan, 2014, p.63*). Finally, the Dartmouth Municipal Planning Strategy states that the Main Street Area should be designed to “...invite residents to walk or bicycle to obtain their daily needs...” (*Dartmouth MPS, p. 92*). The need for expanded AT connections and infrastructure on Main Street is, therefore, clear.

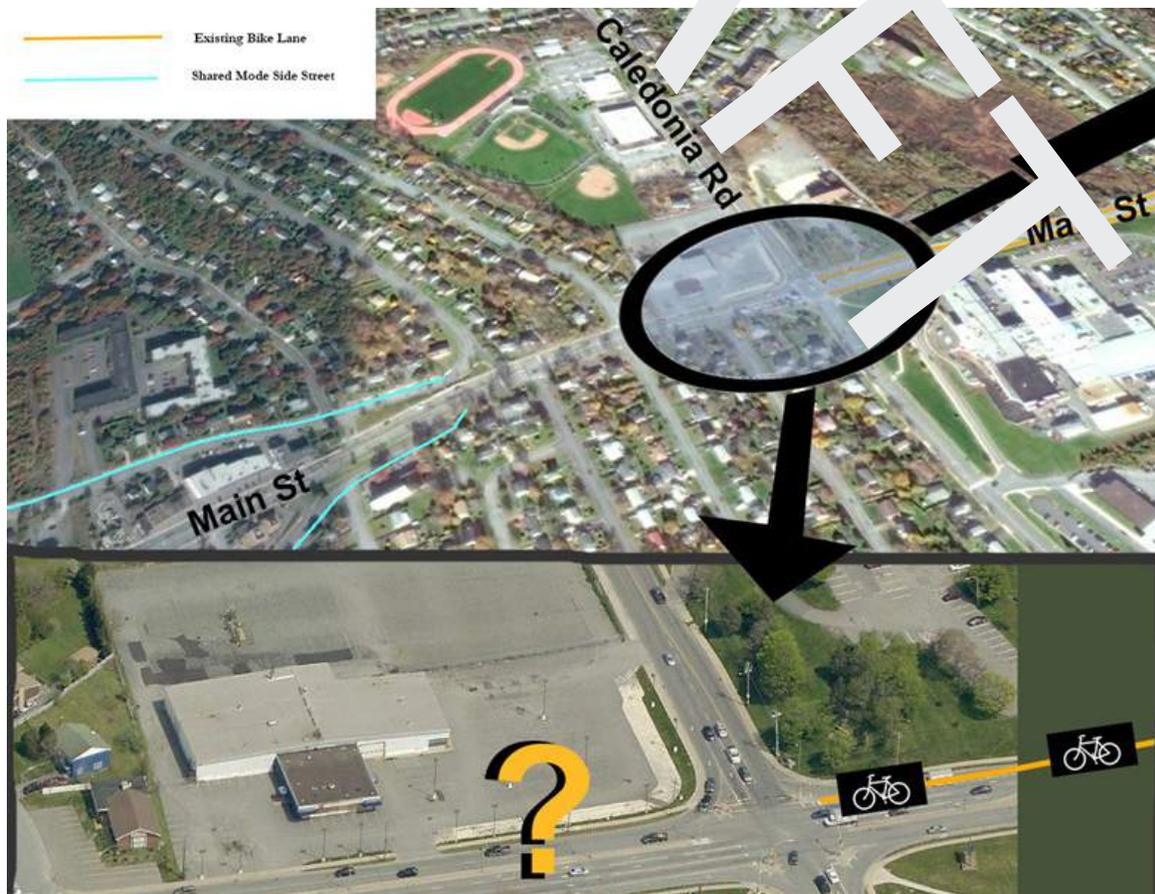
“MAP 3: Vision for a regional greenway and bicycle network”



HRM Active Transportation Priorities Plan, 2014

The Challenge

- + the bike lane on Main Street currently ends at Caledonia Road. The AT Plan calls this bike lane a victory, but it is effectively a bike lane to nowhere. The dangerous nature of cycling on Main Street without a bike lane nullifies the benefits of this lane.
- + commuters from Cherrybrook, Preston and Eastern Dartmouth Communities have no safe bike connections to downtown Dartmouth and Halifax
- + there are no bike connections to the Lake Banook Boardwalk and Shubenacadie Canal Greenway Corridor
- + many pedestrian spaces in the area are dangerous, in need of repair and are not enjoyable spaces for walkers
- + There is a 500 meter gap between the nearest cross walks over Main Street. This puts pedestrians and motorists at risk when jay walkers cross the road.



The *Active Transportation Priorities Plan* makes the goal of creating 12 km of new bike lanes and other on-road bike facilities (e.g. paved shoulders) outside the Regional Centre by 2019 (p.79). Main Street is a prime area to make this change due to the lack of connections to existing bicycle infrastructure.

The Solution

“Map 2B:Dartmouth: Candidate Greenway and bicycle routes”



HRM Active Transportation Priorities Plan, 2014

Situated outside of the regional center, beyond the 111 Highway the Main Street area is within the focus area of the AT Priorities Plan.

Our goals for AT in the area include:

+ extend the bike lane on Main Street to the end of Lakecrest Drive, and eventually Tacoma Drive in accordance with AT Plan goals. Initially, this will not require a painted lane; it will be sufficient to place shared route and bicycle signs. As traffic on Lakecrest Drive and Tacoma Drive increases it will become necessary to paint bike lanes of at least two meters (Genivar: *Transportation Study- Main Street Area, Dartmouth, NS, p. 14*).

+ connect the extended bike lane to the existing lane on Braemar Drive by way of an AT trail off Lakecrest Drive running beside the Main Street off ramp (pictured above).

+ carry out streetscape improvements including trees, benches, landscaping and accessibility elements in the Main Street Area to provide a safe and enjoyable pedestrian atmosphere. This includes reducing the amount of access points to properties on Main Street.

+ Enhance pedestrian connectivity with a mid-block crossing on Main Street between Hartlen Street and Helene Avenue.

Is there space for bike lanes?

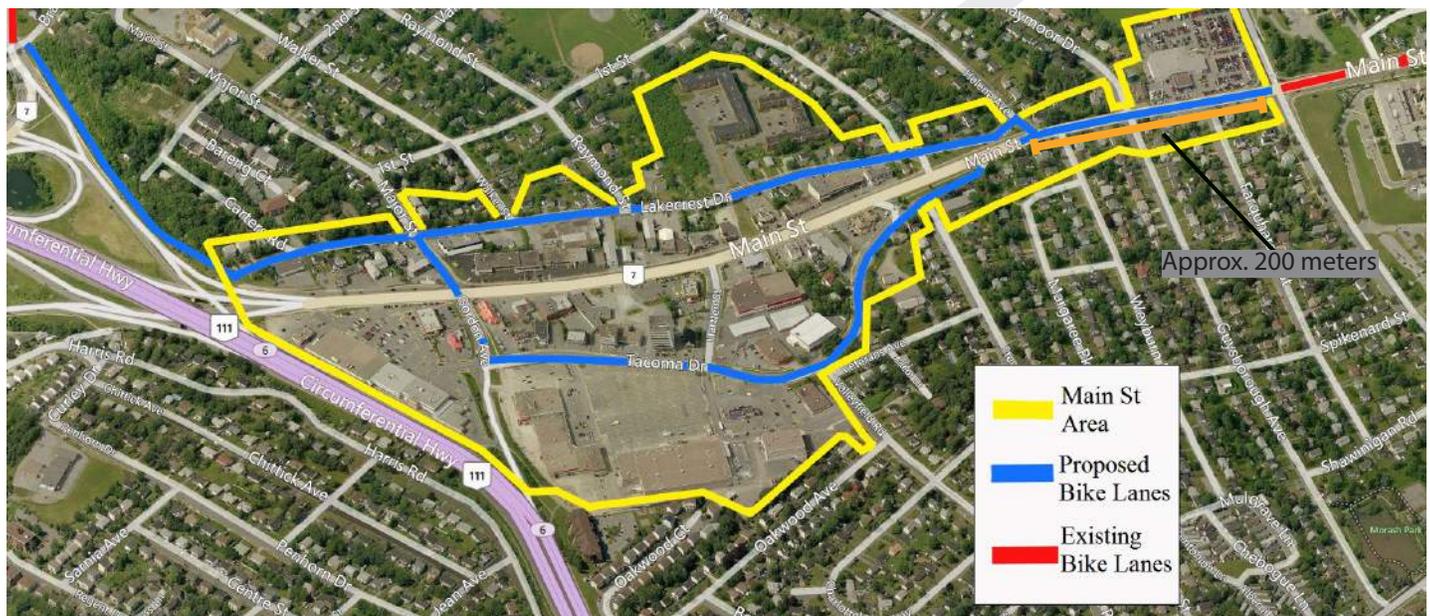
The short answer is, yes.

In order to install bike lanes on Main Street, from Caledonia Drive to Lakecrest Drive, the existing car lanes will need to be made slightly more narrow. Reducing the lane widths by just 20 centimeters each is enough to fit in an acceptable bike lane. This minor reduction in lane width is safe, easy, cheap and it has been done many times before.

In fact there is space to reduce the car lanes to 3.0 meters to enable a 2.0 meter wide bike lane. 3.0 meter wide vehicle lanes in urban areas are recommended by the National Association of City Transportation Officials (NACTO), the Federal Highway Administration (USA) and the National Transportation Authority of Ireland. In 2014 the City of Toronto began to narrow its car lanes to 3 meters in many areas of the city in order to accommodate expanded bicycle lanes. In many European countries it is common to have car lanes of 3 meters and, occasionally, even less. Narrowing the car lanes has the potential to slightly slow the traffic on Main Street making it safer for cyclists. In order to make the cycling experience as safe as possible a 2 meter wide bike lane is the most appropriate option.

Vehicle traffic will not be negatively impacted by this change in lane width. Additionally, the lane changes are only required for a 200 meter stretch of Main Street, shown below.

Having 3.0 meter wide lanes in this area is appropriate for several the reasons as well, which include: The 200 meter stretch that would require the bike lanes is currently lacking in speed limit signs and vehicles tend to speed here, it is on the approach to the proposed mid-block crossing and the street is in a residential area. If the bike lanes do contribute to slower traffic it will mean a safer environment for everyone- pedestrians, cyclists and motorists.



Sources: National Transportation Authority of Ireland: <https://www.cyclemanual.ie/manual/designing/>, "NACTO": <http://nacto.org/usdg/street-design-elements/lane-width/>, Globe and Mail: <http://www.theglobeandmail.com/news/toronto/toronto-to-narrow-traffic-lanes-in-hopes-of-increasing-safety/article21743109/>, http://safety.fhwa.dot.gov/geometric/pubs/mitigationstrategies/chapter3/3_lanewidth.cfm

Lakecrest Drive to Braemar Drive AT Connection

In order to complete the AT connections in the Main Street area with the rest of Dartmouth and Peninsular Halifax an AT trail is needed to connect Lakecrest Drive with Braemar Drive. This option was first mentioned in the 2007 *Ekistics Streetscape Study* for the area and has since been supported by a the Genivar 2010 *Main Street Area transportation Study*, an *Environmental and Design Management Urban Arterials Retrofit* study and subsequently by the HRM *Active Transportation Priorities Plan*. The *Active Transportation Plan* proposes a budget of \$20,000 for a design of this AT trail between 2014 and 2019.

A theoretical model of the trail is pictured below.



Main Street Mid-block Crossing

Main Street needs a mid-block crossing. Currently, there is a 500 meter gap between the cross walk at the Hartlen Street-Main Street crossing and the Helene Avenue-Main Street Crossing. Having a mid-block crossing would prevent jay-walking and make the street safer for pedestrians and motorists. This option is also relatively cheap.

Before



After



Speed Limit

Motorists on Main Street often exceed the speed limit through the area. This makes the environment dangerous for pedestrians and motorists. As the map below shows there are a lack of speed limit signs within in the Main Street Area. Adding speed limit signs to the district could better inform motorists of the speed limit and potentially reduce the amount of speeding vehicles.



“ The theme of “making connections” (AT Plan) is central to the municipality’s active transportation objectives. A fundamental goal of the plan is to make the connections between where people live and where they work, shop, access transit, access services and attend school as easy and direct as possible by foot or by bicycle. ”

-Halifax Active Transportation Priorities Plan, p.6.