

# BRT Separation with Raised Islands

**Durham Region & City of Toronto**



**City of Toronto**

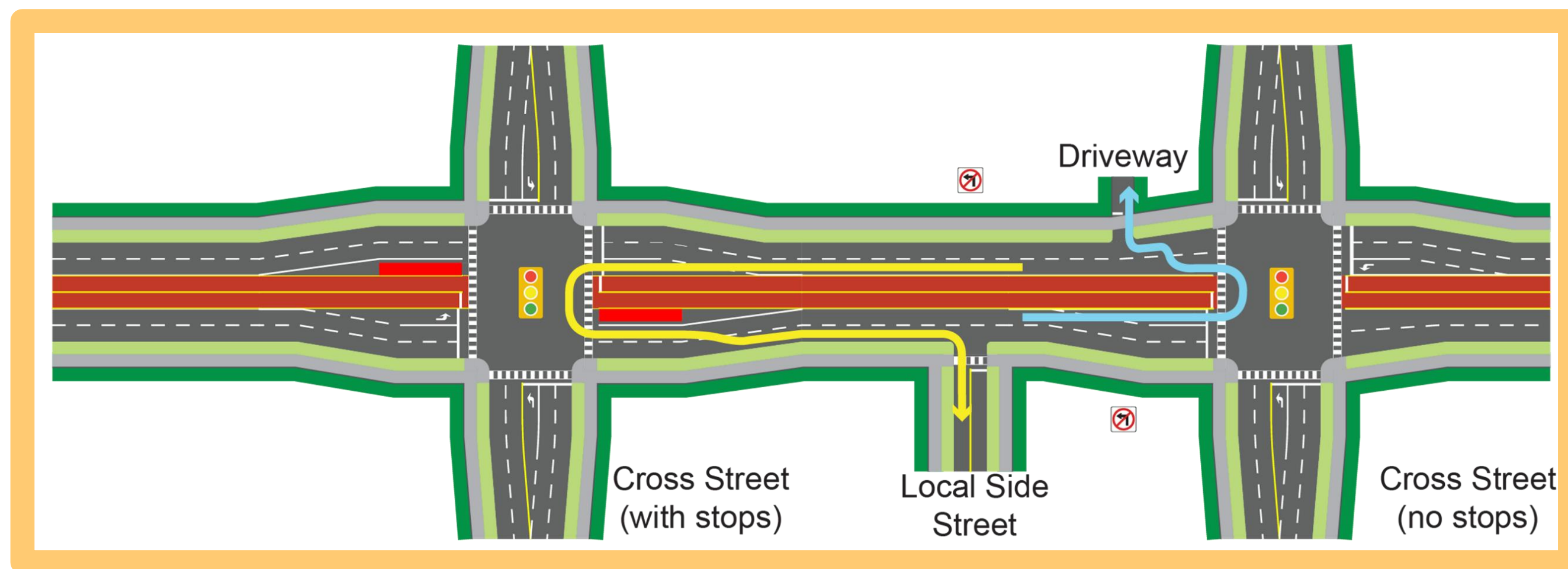




# Left-turns & U-turns

A Traffic Impact Analysis will form part of the Environmental Project Report which will be posted for public review.

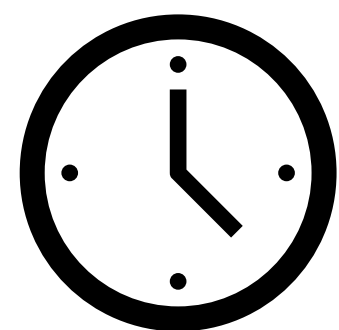
- Raised islands will separate transit lanes from general traffic lanes between signalized intersections. These islands will prevent left-turns at unsignalized intersections and driveways.
- The graphic below shows how travel patterns may change:



- Drivers will be able to make left-turns and u-turns during protected phases at signalized intersections.
- This configuration is expected to enhance safety.
- York Region saw **51-74% fewer collisions** along rapidways, likely due to eliminating midblock left turns across traffic ([YRRTC Annual Report, 2019](#)).

# Transit Travel Time Reliability

- Microsimulation models were developed to examine interactions between transit and general traffic.
- Focus on sections with right-of-way constraints where the existing number of lanes plus dedicated transit lanes doesn't fit.



Performance measures include traffic and transit travel times, and reliability of travel times.

## **Models show that dedicated transit lanes improve transit travel times by 15 to 25%.**

- That means the total travel time between Oshawa and Scarborough Centre from 100 minutes to about 75 to 85 minutes.
- Time saved will be proportional for shorter trips.

## **Models show that dedicated transit lanes improve transit travel time reliability by 10%.**

- That means every transit trip would save up to an additional 10 minutes.
- More reliable transit and faster transit travel times will be key inputs to the Preliminary Design Business Case.



# Active Transportation

The Durham-Scarborough BRT project provides the opportunity to improve connectivity and expand the active transportation network.



Sample rendering of a raised cycle track and sidewalk.

New sidewalks and cycling facilities will be provided to fill in existing gaps. A combination of cycle tracks and multi-use paths are proposed.

Bike parking will be provided near stop locations to connect cyclists to transit.

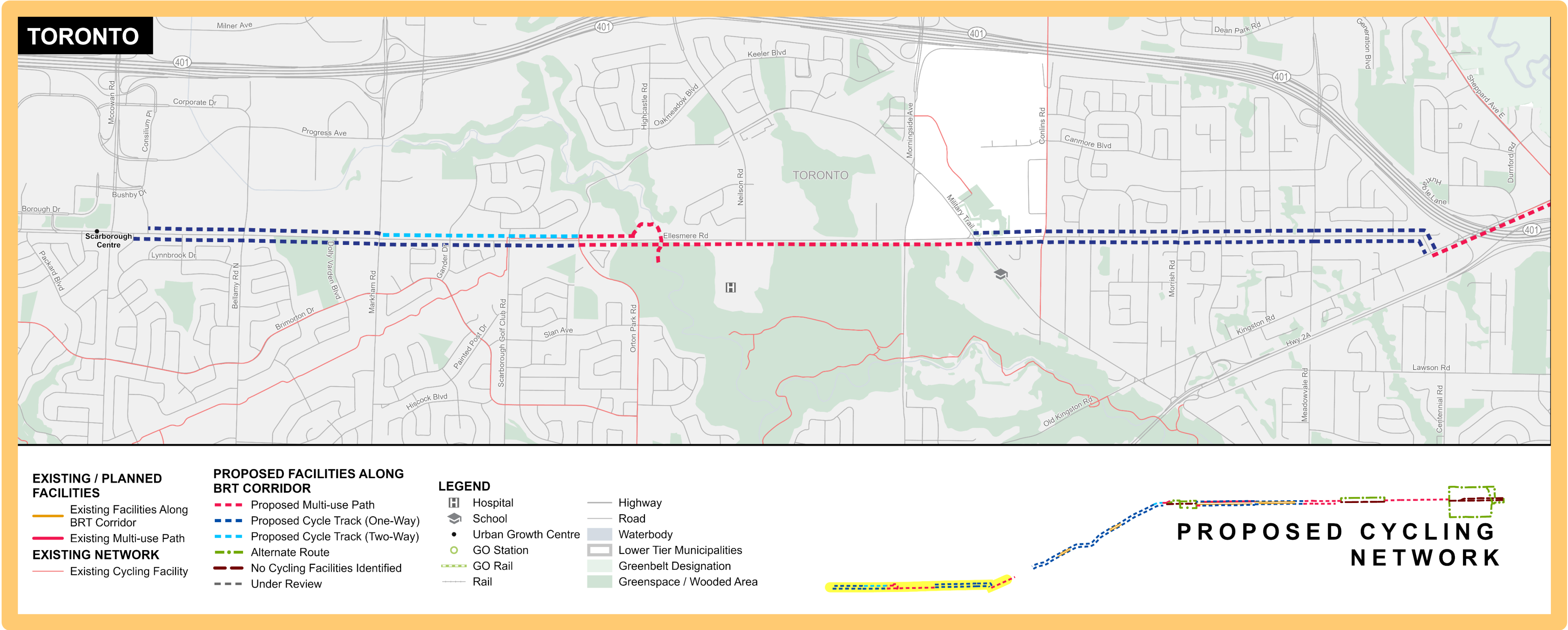
Maps of proposed cycling facilities are shown on the following boards. The type of cycling facility was selected based on a review of:

- Existing cycling infrastructure
- Proposed cycling infrastructure in municipal and regional cycling plans
- Land use context
- Traffic volumes
- Posted speed limits
- Roadway characteristics

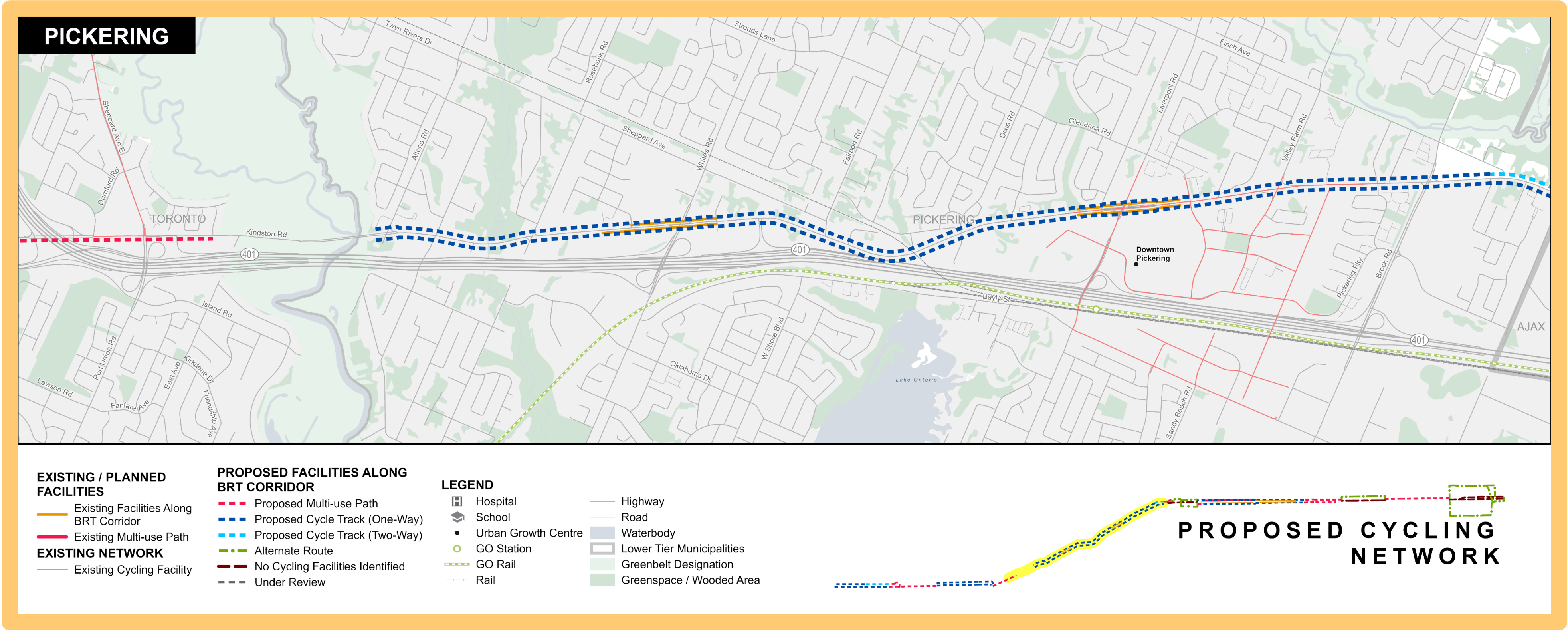
In constrained areas, alternate parallel routes are identified north or south of the DS BRT corridor.



# Cycling Facilities - Toronto

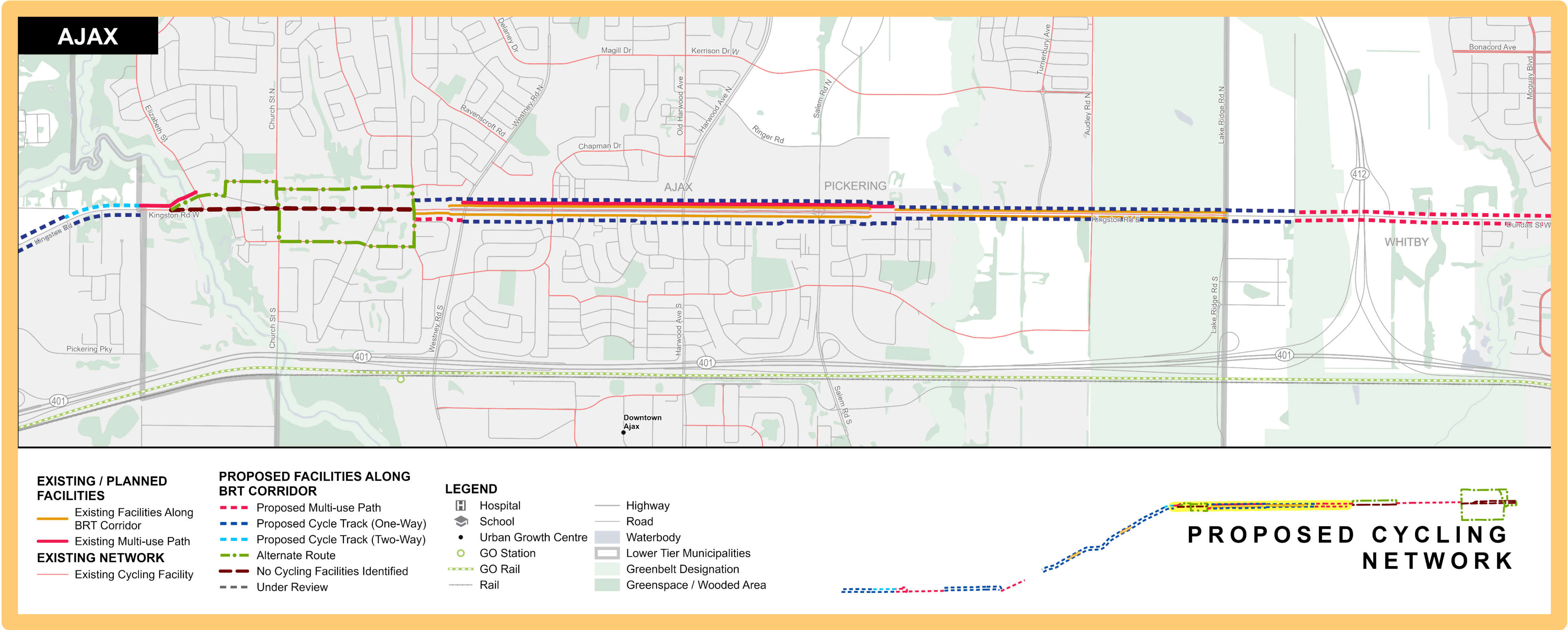


# Cycling Facilities - Pickering





# Cycling Facilities - Ajax



# Cycling Facilities – Whitby-Oshawa

