Public Information Centre (PIC) #2 for the Clarkson Road & Lakeshore Road Intersections Improvements

Municipal Class Environmental Assessment

November 10th, 2021

MISSISSAUGA

Study Purpose

The City is completing an **Environmental Assessment (EA)** study to investigate opportunities to improve the operations, safety and mobility for all road users at the **Lakeshore Road West and Clarkson Road North / Clarkson Road South intersections**.

We want to hear from you

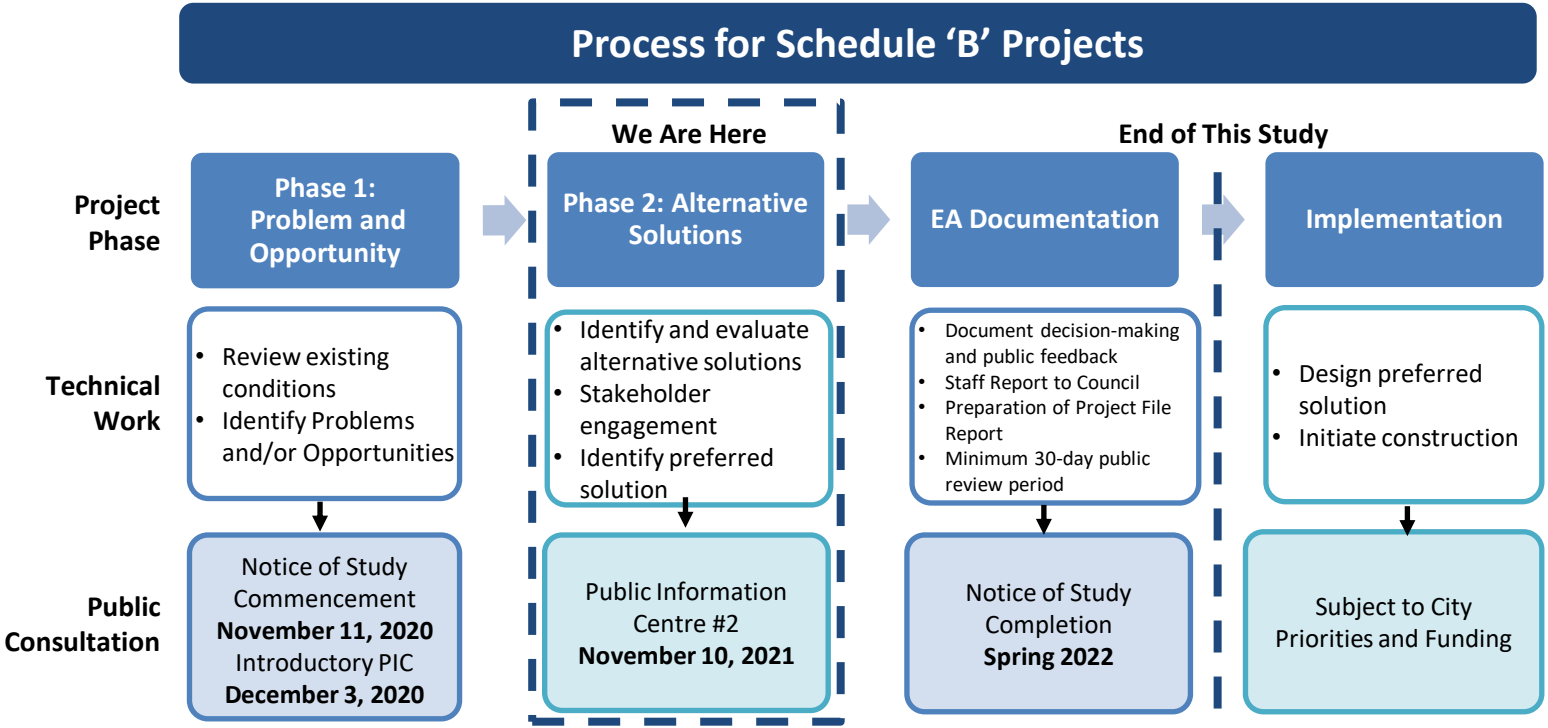
Please provide input on your experience, problems you are facing, and opportunities you envision surrounding the Lakeshore Road West and Clarkson Road North/South intersections. **We welcome all feedback.**

Why are we here?

- Re-introduce the project to the community and share key feedback received on the project so far
- Share existing conditions in the study area
- Present the **refined potential solutions** and their evaluation
- Present the **preliminary preferred solution** and anticipated **mitigation measures**
- Obtain your **input** and **answer any questions** you may have
- Discuss **next steps**

What is an Environmental Assessment?

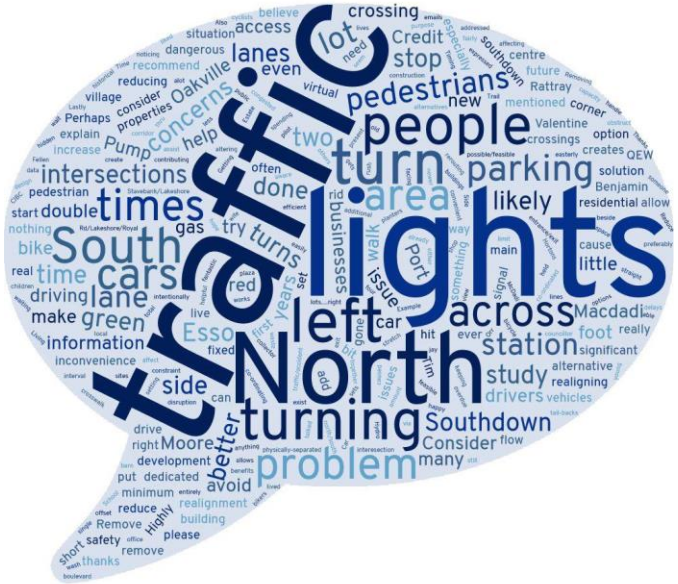
- An **Environmental Assessment (EA)** is a planning and approval process for municipal infrastructure projects, following Ontario's Environmental Assessment Act.
- This study is following the **Class EA process for 'Schedule B'** projects.



What we have heard so far

Key themes included:

- Concerns about **traffic operations**
- **Signal timing** optimization as an alternative
- Concerns about **safety for all road users**
- Need for greater consideration for **active transportation** in the corridor



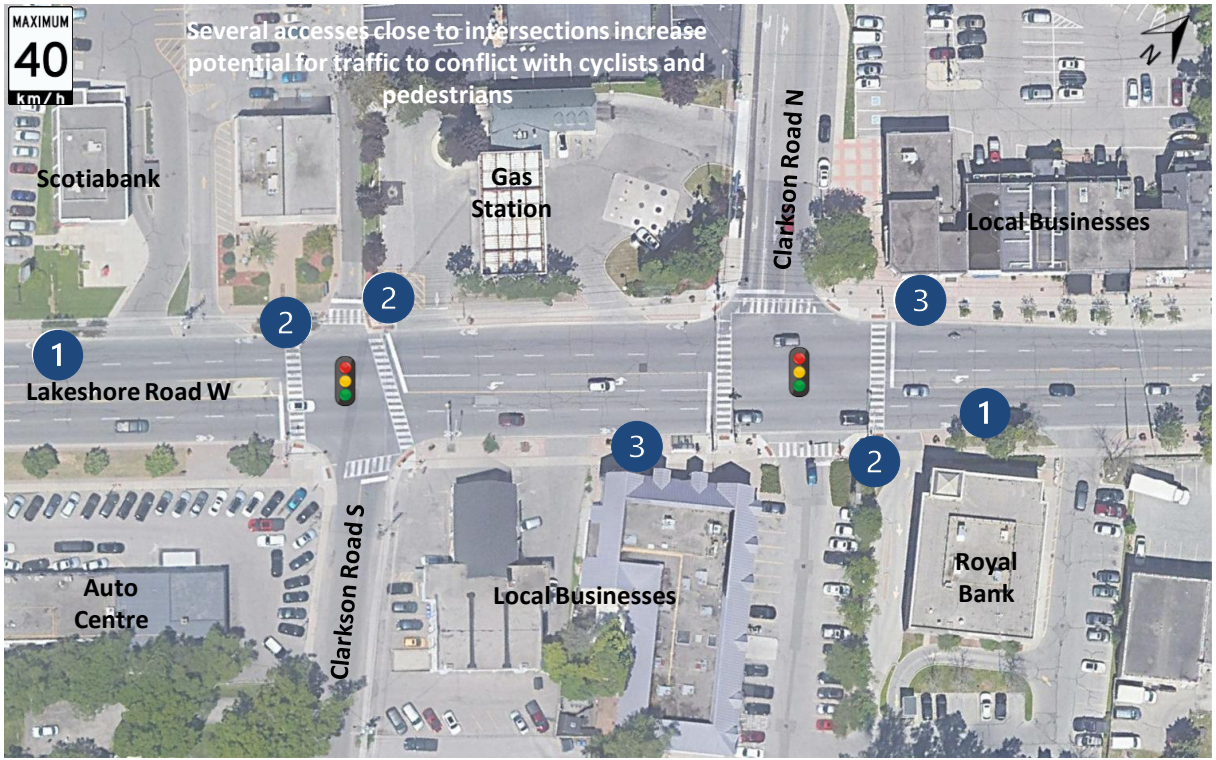
Existing Roadway Conditions

1. Posted speed recently reduced to 40 km/h
2. Several accesses close to the intersections exacerbate traffic issues
3. Intersections are close together (75 m) with back-to-back turning lanes
4. Designated heritage property constrains right of way
5. Two lane cross section (one per direction)

Lakeshore Road W at Clarkson Road S

Lakeshore Road West has two lanes in each direction with left-turn lanes

Existing Active Transportation &Transit Conditions



1. ‘Sharrows’ (cyclists and traffic share lanes) are less desirable than dedicated facilities
2. Obstacles (signal poles/controller cabinet) within pedestrian walkway
3. Route 23 bus stop/shelter (shelter for eastbound only)

Lakeshore Road W at Clarkson Road S

Poles obstructing walkway in northwest corner of Lakeshore Road W/Clarkson Road S intersection

Transportation Analysis

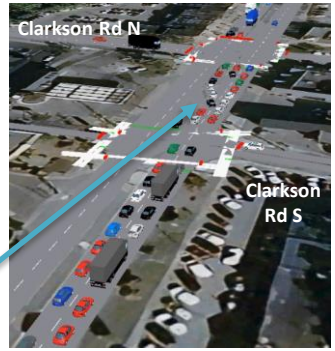
Traffic Analysis

Existing conditions are acceptable; significant congestion will be experienced in the future (horizon years of 2031 and 2041 were considered for this study)

As traffic increases there will be congestion and queueing between the intersections due to overlapping left-turn movements

More congestion expected in the future due to commercial driveways

Future-year modelling has shown eastbound left-turn queues will block 'through' traffic

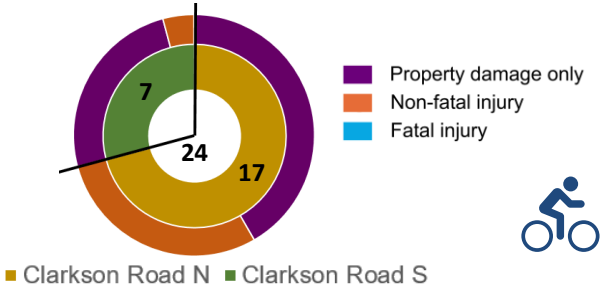


Collision Analysis

Collision analysis was completed based on data from 2014 to 2019. A total of 24 collisions were reported at the intersections during that time.

The majority of collisions occurred at Clarkson Rd N (17 out of 24) and the most common collision type over both intersections was 'turning movement' (7 out of 24).

0 fatal collisions were recorded.

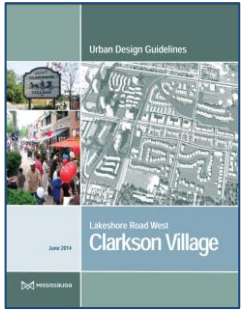


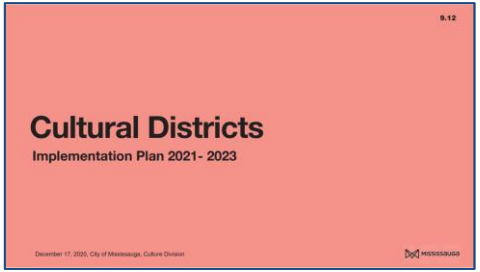
Pedestrian and Cyclist Collisions

5 pedestrian and 0 cyclist collisions reported at the intersections

Planning and Policy Context / Related Studies

The following municipal planning and policy documents and related studies were reviewed and continue to inform this study:





Key Technical Studies

The following technical studies are being undertaken to inform the evaluation of alternatives and provide input into identification of impacts and mitigation measures:

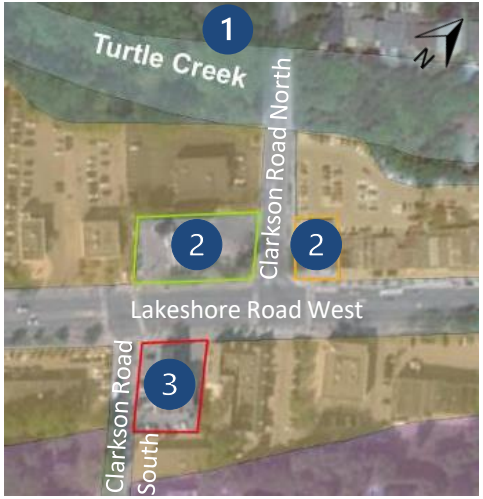
- Stage 1 Archaeology Assessment
- Cultural Heritage Resource Assessment
- Natural Environment Assessment
- Arborist Report / Tree Inventory
- Socio-Economic Assessment
- Noise Assessment
- Phase 1 Environmental Site Assessment
- Access Management Review
- Benefit Cost Analysis
- Traffic Operations Analysis
- Roundabout Screening Report
- Traffic Safety Report
- Air Quality Assessment
- Stormwater Management and Drainage

Key Study Area Constraints

1. Turtle Creek located north of Lakeshore Road W

2. Commercial businesses surround both intersections

3. Cultural heritage property (former church) located near Lakeshore Road W & Clarkson Road S intersection



Commercial Area
Residential Area
Turtle Creek

Development of Alternative Solutions

- Four potential solutions were shown at the Introductory PIC, as shown below
- Following the PIC, the solutions were screened and refined following public input

Roundabout Intersection

Screened out due to geometric constraints and property impacts

Realign Clarkson Road

Carried forward and further refined

Lakeshore Road Centre Median

Carried forward and combined with 'Prohibit Left Turns' solution to develop new options

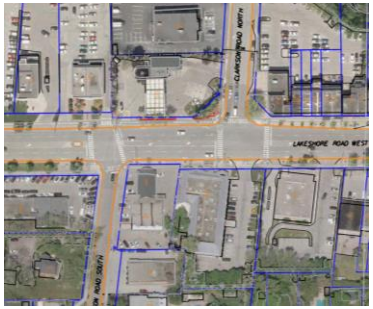
Prohibit Left Turns

Carried forward and combined with 'Centre Median' solution to develop new options

Development of Alternative Solutions (Cont'd)

The following solutions were developed by combining characteristics of the original solutions and further refining the designs.

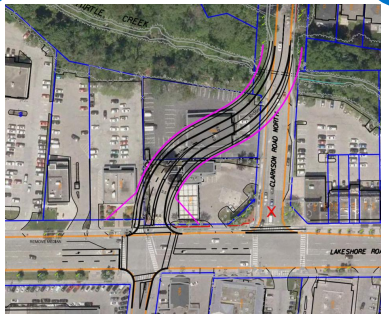
Do Nothing



Do Nothing

- Maintain the status quo
- Monitor traffic signals and further optimize when required
- Intersections subject to large traffic congestion and delay in future years

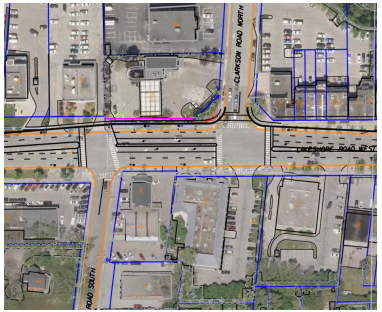
Solution 1



Realign Clarkson Road North

- Clarkson Road North realigned to tie into intersection at Clarkson Road South / Lakeshore Road
- Clarkson Road North / Lakeshore Road intersection closed

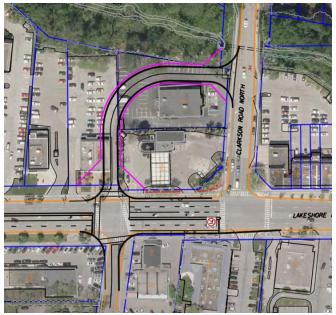
Solution 2



Centre Median and Widen Lakeshore Road

- Lakeshore Road widened to accommodate eastbound/westbound left turn lanes between Clarkson Road North and South
- Raised centre median constructed on Lakeshore Road

Solution 3



Centre Median and Eastbound Left Turn via 'Laneway'

- Eastbound left turns from Lakeshore Road to Clarkson Road North prohibited
- Eastbound vehicles use laneway to access Clarkson Road North
- Raised centre median constructed on Lakeshore Road

Evaluation Criteria

The following criteria was used to evaluate the alternative solutions:

Socio-Economic Environment

- Impacts to property
- Impacts to existing businesses
- Impacts to neighbourhoods
- Noise and vibration
- Air quality
- Streetscape amenities and urban design improvement opportunities

Cultural Environment

- Impacts to Archaeological Resources
- Impacts to Cultural Heritage Features

Natural Environment

- Impacts to environmentally sensitive areas
- Impacts to wildlife, vegetation, aquatic species and habitat, and species at risk
- Drainage, stormwater management, and erosion control
- Climate change impacts and ability to reduce green house gas emissions

Transportation

- Safety for all users
- Congestion and future travel demand
- Pedestrian and cycling experience
- Existing and planned transit services
- Impacts to commercial accesses
- Network connectivity
- Commercial goods movement

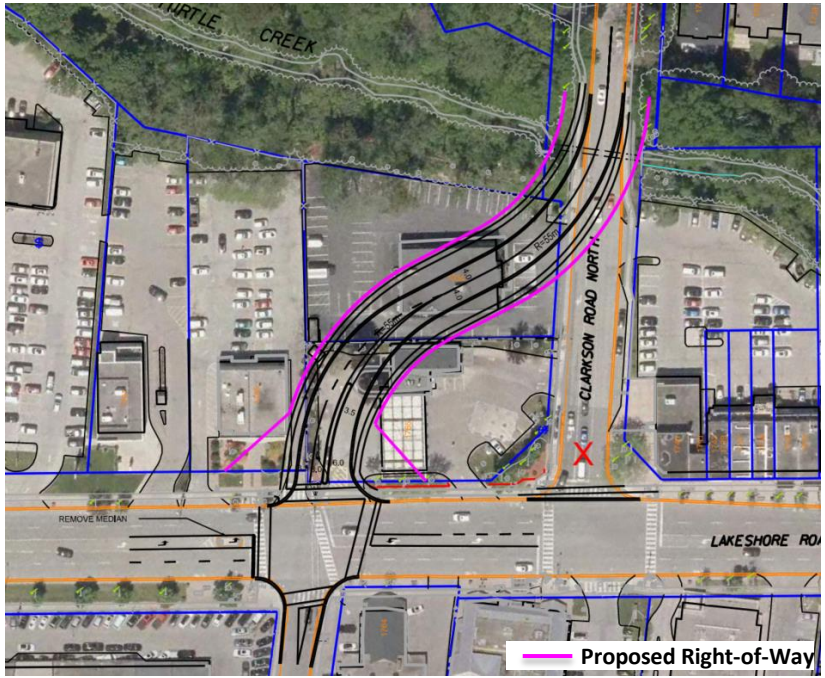
City Building

- Consistency with City's Strategic Plans and Policies
- Accommodates existing and planned development
- Impacts to community facilities (e.g., parks and recreational trails)

Engineering, Construction Complexity and Implementation

- Ease of construction including staging and traffic disruption
- Potential utility relocations
- Construction costs
- Potential for soil and water remediation
- Operation and maintenance costs

Solution 1 – Realign Clarkson Road North



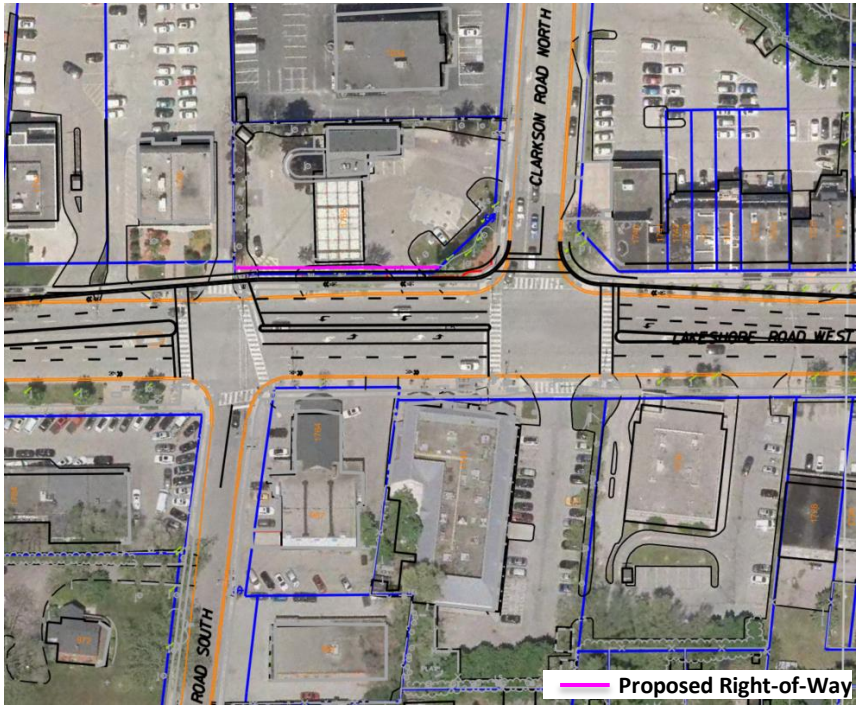
Key Advantages:

- Most desired from the design perspective, as it eliminates the offset intersections

Key Disadvantages:

- Most property impacts
- Most costly
- Access impacts for businesses on Lakeshore Road West
- Likely need for soil remediation (gas station property)

Solution 2 – Centre Median and Widen Lakeshore Road



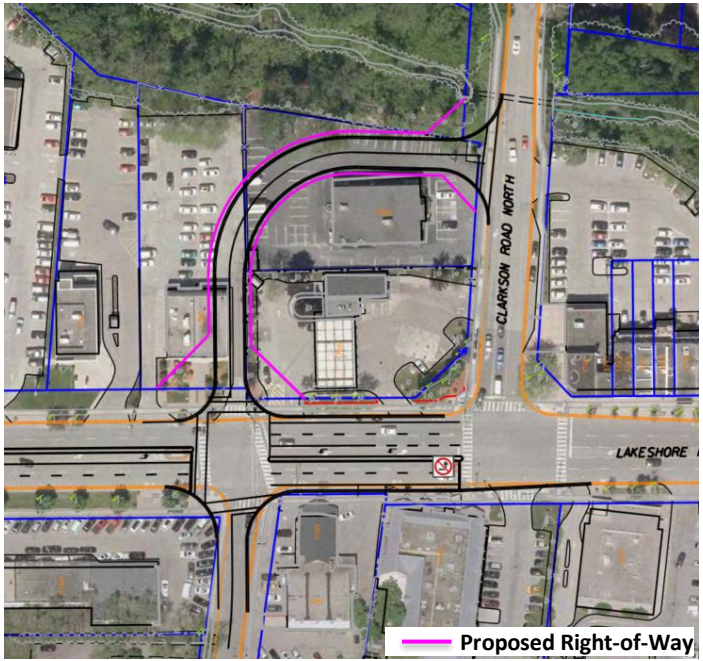
Key Advantages:

- Lesser property impacts
- Lesser construction
- Retains full movements at existing intersections
- Lesser cost

Key Disadvantages:

- Access impacts to businesses along Lakeshore Road West
- Likely need for soil remediation (gas station property)

Solution 3 – Centre Median and Eastbound Left-turn via ‘Laneway’



Key Advantages:

- Aligned with City access management plan and use of ‘laneway’

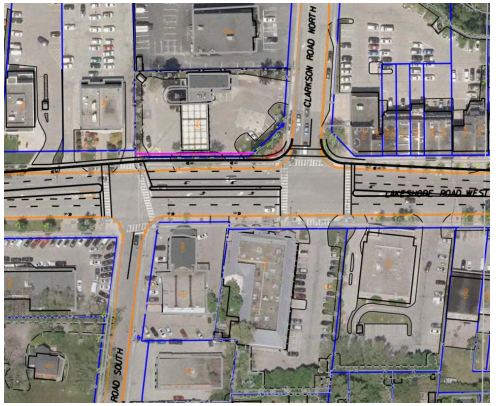
Key Disadvantages:

- Property / business impacts
- Moderate cost
- Access impacts to businesses along Lakeshore Road West
- Likely need for soil remediation (gas station property)

Evaluation of Alternative Solutions

Criteria	Do Nothing	Solution 1 Realigned Clarkson Road North	Solution 2 Centre Median and Widen Lakeshore Road West	Solution 3 Centre Left Turn Lane and 'Laneway'
Socio-Economic Environment	Least Preferred	Least Preferred	More Preferred	Less Preferred
Cultural Environment	Least Preferred	No Preference	No Preference	No Preference
Natural Environment	Least Preferred	Less Preferred	More Preferred	Least Preferred
Transportation	Least Preferred	Most Preferred	More Preferred	No Preference
Engineering, Cost, Construction Complexity and Implementation	Least Preferred	Least Preferred	More Preferred	Less Preferred
Cost (includes est. property costs)	Most Preferred	Least Preferred	Most Preferred	Least Preferred
City Building	Least Preferred	No Preference	More Preferred	Most Preferred
Overall Recommendation			Most Preferred	

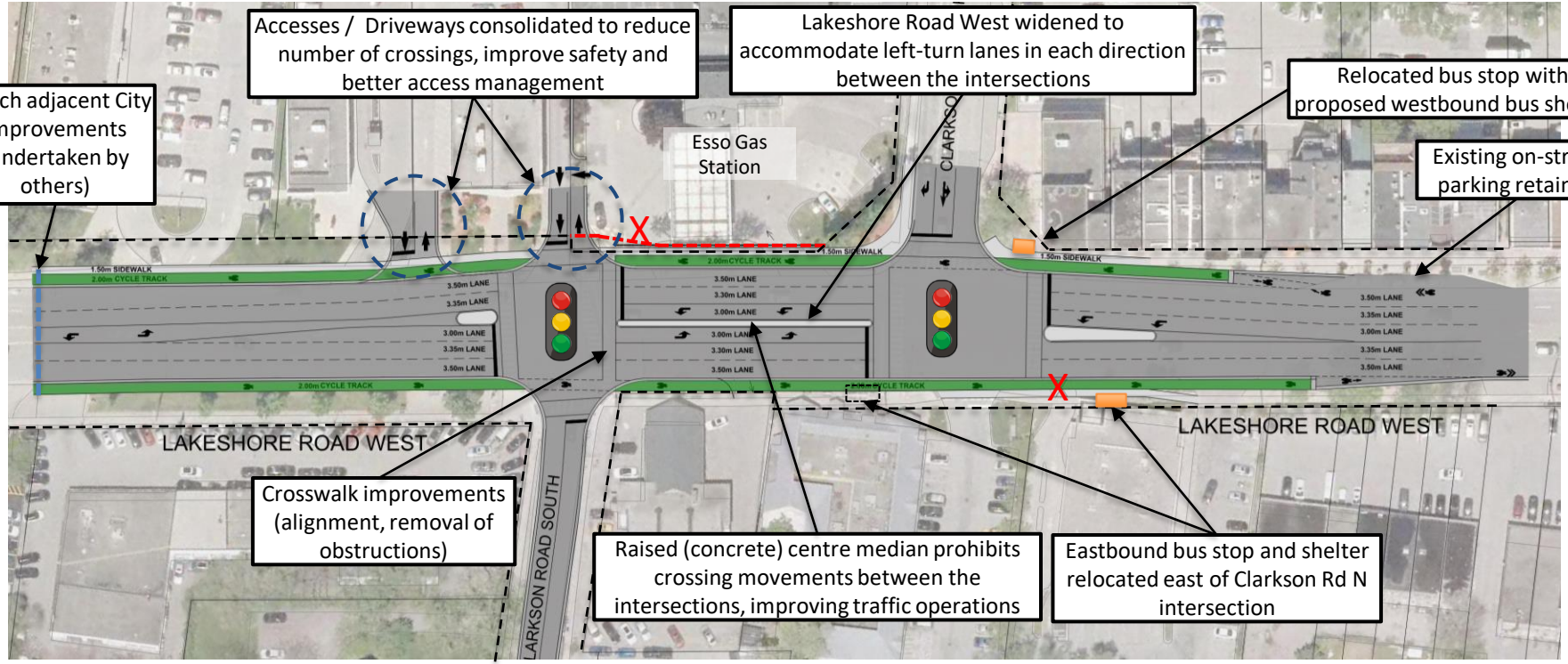
Alternative 2



Centre Median and Widen Lakeshore Road W

Alternative 2 is preferred because it improves safety and operations at the intersection with minimal property impacts and much lower construction costs, compared with the other alternatives

Preliminary Preferred Solution



Preliminary Preferred Solution (Cont'd)

Problem and Opportunity Statement

(from Introductory PIC held December 3, 2020)

- The intersections of Lakeshore Road West and Clarkson Road North / Clarkson Road South are offset by approximately 75m, resulting in two closely spaced signalized intersections
- Concerns have been raised by local residents regarding the operation of the two closely spaced intersections and interspersed commercial entrances
- There is an opportunity to review the Lakeshore Road West and Clarkson Road North / Clarkson Road South intersections and improve the operations, safety and mobility for all road users at the intersection

Proposed Improvements

- Additional left-turn queue storage between the intersections will improve **traffic operations**
- Raised centre median and the consolidation of accesses/driveways will reduce traffic conflicts and improve **safety**
- Addition of cycle tracks on Lakeshore Road West (see below) improve **safety and mobility for all**

Preliminary Proposed Cross-section: Lakeshore Road West (Right Of Way width varies)

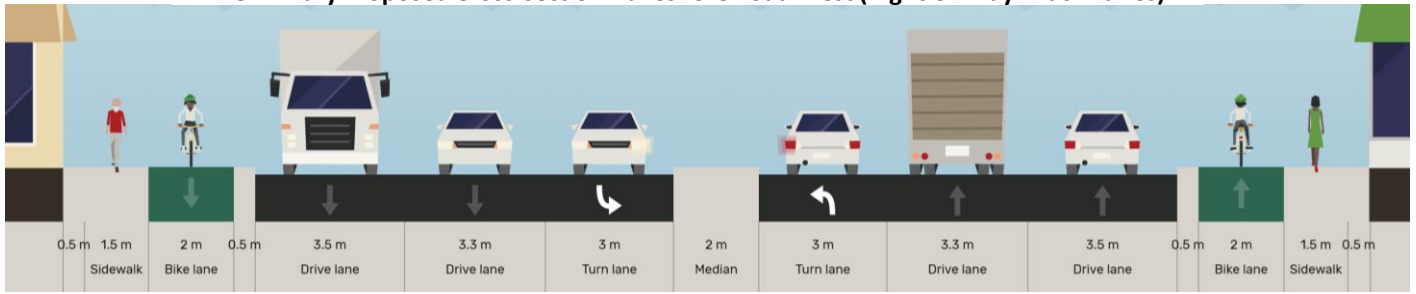
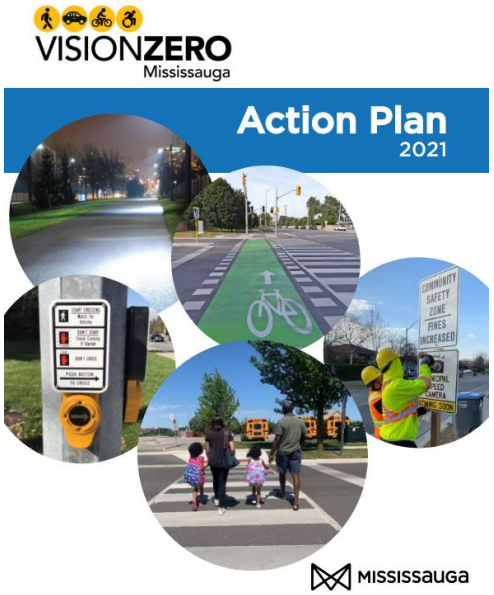


Image source: Streetmix

Vision Zero

In 2018, the City committed to Vision Zero through a Council-approved motion. This means the City is working toward a goal of ZERO fatalities and serious injuries from collisions on city streets.

The Vision Zero Action plan consists of 99 actions to help achieve this goal.



With these improvements, the following Vision Zero Actions are undertaken:

- Lane widths (i.e., narrower lane widths help improve speed compliance)
- Protected and Dedicated Cycling Infrastructure
- Vehicle Access Points (i.e., limit number of access points / conflict zones)
- Bus Stop Infrastructure (i.e., implementation of shelters)
- Sightline Improvements (i.e., improve driver visibility at intersections)

Next Steps & Project Timeline

- The City will compile the feedback received from this Public Information Centre to assist in confirming the preferred solutions
- A Project File Report will be prepared for filing and made available for a minimum 30-day public review period, prior to EA approval

Get Involved

Provide feedback about this Public Information Centre by December 10, 2021

Visit our Website:
mississauga.ca/lakeshore-clarkson

Join the Study Mailing List

Individual meetings

Call 311

Any project related questions can be directed to:

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City of Mississauga
Project Manager

Email: Rory.Osullivan@mississauga.ca