



Appendix B. Multi-Modal Network and Plans Report

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Multi-Modal Network and Plans Report

Task B

Downtown Movement Plan

City of Mississauga
December 22, 2020



Report Version Tracking

| Version | Issue Date | Revision |
|----------------|-------------------|----------------------------------------------------|
| Draft 1 | 2020-06-05 | First Draft |
| Revision 01 | 2020-08-27 | Address City's comments as of 2020-06-30 |
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Appendices

Appendix A – Future Cycling Network Improvements

Appendix B – Existing Transit Routes



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1 Introduction

The City of Mississauga has initiated the Downtown Movement Plan (D.M.P.) as a critical study that will update previous plans and identify the transportation infrastructure and policies required to support and guide the continued development of Downtown Core. As part of the Phase 1 work, a review of existing policies, plans, and studies for the Downtown Core was undertaken to consolidate and develop a guide for future transportation networks including road, active transportation, and transit for the D.M.P. Existing policies, plans, and studies include:

1. City of Mississauga Plans

- Mississauga Transportation Master Plan, 2019
- Mississauga Strategic Plan, 2009
- Mississauga Cycling Master Plan, 2018
- MiWay Five (2016-2020)

2. Downtown Core Plans

- Downtown21 Master Plan, 2010
- Downtown Mississauga Movement Plan, 2014
- Downtown Core Local Area Plan, 2020 LPAT Approved

3. Environmental Assessments

- Hurontario-Main L.R.T. Preliminary Design and Transit Project Assessment Process (T.P.A.P.), 2014
- Downtown Mississauga Road Improvement Master Plan Class Environmental Assessment Environmental Study Report, 2015
- Square One Drive Extension Municipal Class Environmental Assessment and Preliminary Design, 2017
- Living Arts Drive Extension Municipal Class Environmental Assessment, 2018
- Municipal Class Environmental Assessment Studies for the Extensions of Redmond Road, Webb Drive, The Exchange and Kariya Drive, 2020, ongoing

4. 2019 Development Charges Background Study

2 Overarching Planning Policies

2.1 Mississauga Transportation Master Plan, 2019

The City of Mississauga Transportation Master Plan (T.M.P.) aims to direct the City's investment in and stewardship of the transportation system, which is the interconnected system of:

- infrastructure such as roadways, railways, highways, bikeways, sidewalks, walkways, and trails;
- public rights-of-way, waterfronts, green spaces, and the lands adjacent to them;
- public services such as transit, municipal parking, and traffic management;
- regulations that govern service providers such as taxis, Transportation Network Companies (T.N.C.'s), and towing and delivery vehicles; and
- people who travel and engage with rules, etiquette, and on-going education.

The T.M.P.'s vision for the Downtown Core is to transform a local focal point to a regional centre. The Hurontario Light Rail Transit (L.R.T.) and Mississauga Transitway will connect businesses with employees and customers from across Mississauga and beyond. Square One will remain a regional attraction, and more people will come and go by transit with convenient connections between modes and service providers.

2.2 Mississauga Strategic Plan, 2009

The City of Mississauga Strategic Plan is supported by five Strategic Pillars of Change – Move, Belong, Connect, Prosper, and Green. The goals of this plan aim to support the following key opportunities relevant to the D.M.P.:

- Develop environmental responsibility by reducing private automobile use and developing compact mix-use development;
- Connecting the communities within Mississauga and within the Greater Golden Horseshoe to support a 24-hour city;
- Build a reliable and convenient system to make transit faster and more affordable alternative, with a transit stop within walking distance to every home and an intricate web of higher order transit;

- Increase capacity to the transportation system through strategic investment in transit, additional links in the street network and active mobility choices; and
- Direct growth by supporting transit-oriented development policies and deliberate civic actions.

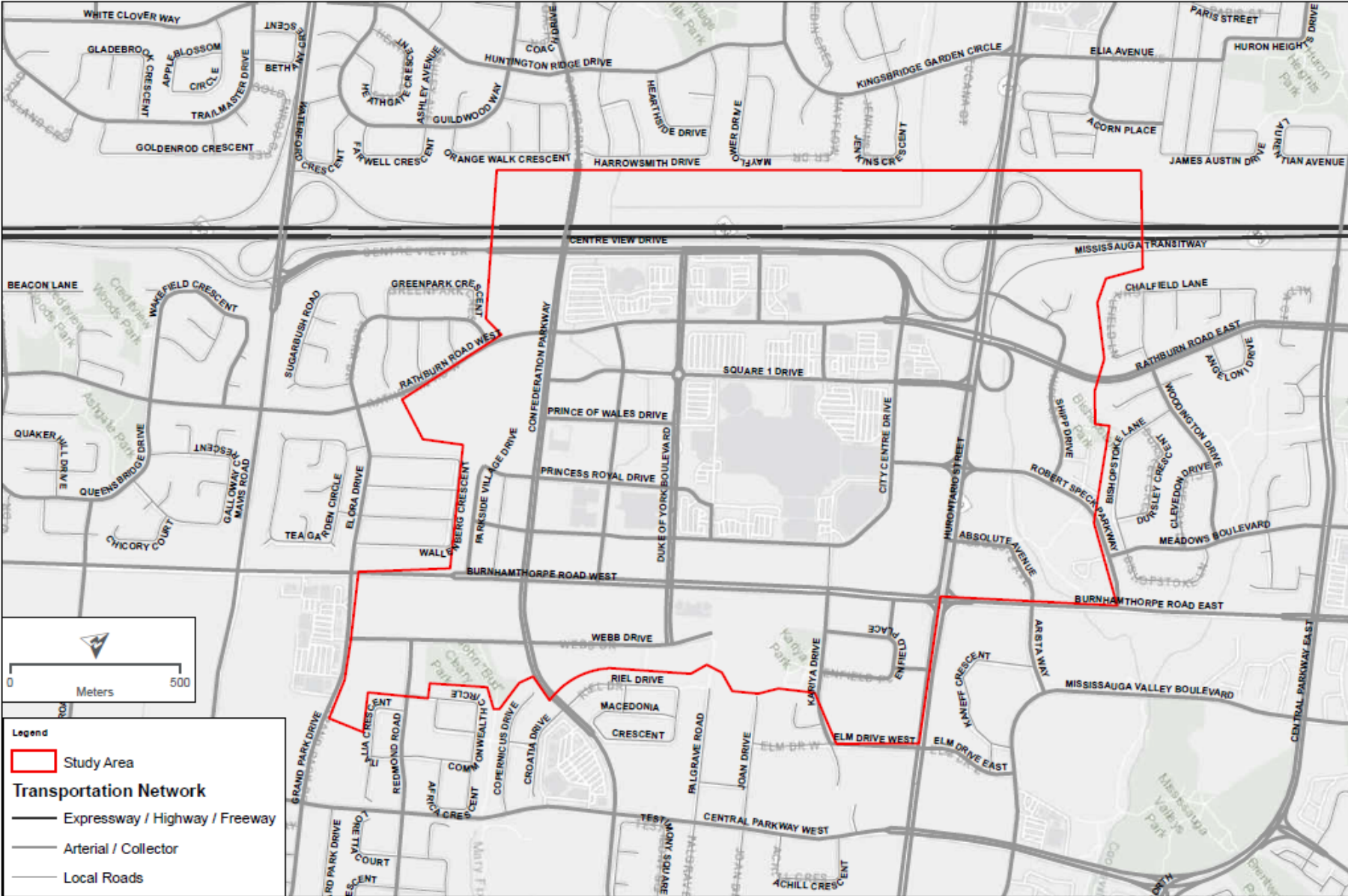
3 Road Network

3.1 Existing Road Network

Downtown Core is supported by a network of arterial, collector, and local streets. Highway 403 is a major freeway corridor along the north boundary of the study area. Access to the freeway is provided at interchanges at Mavis Road and Hurontario Street. Hurontario Street is the primary north-south arterial and Burnhamthorpe Road is the primary east-west arterial that serve the study area. **Figure 3-1** shows the current road network classification and **Figure 3-2** shows lane configuration and intersection control for the study area.

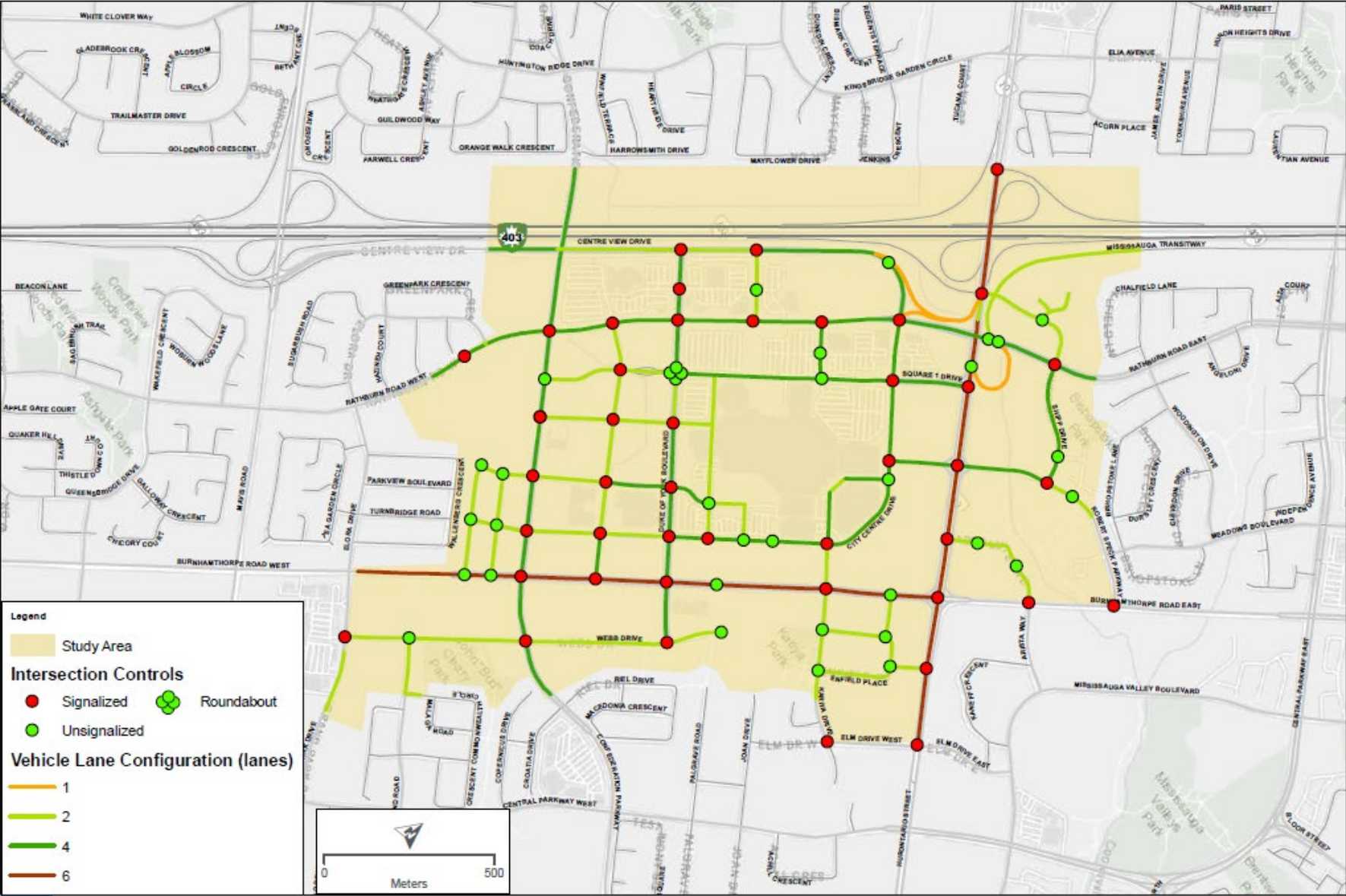
The road network has a number of discontinuous roads as illustrated in **Figure 3-3**. These discontinuities limits connections and access to/from the broader area resulting in congestion at major intersections that do provide connectivity. Highway 403, the large expanse of surface parking, and distances between buildings also act as barriers to pedestrian and cyclist connectivity.

Figure 3-4 illustrates the network constraints and challenges within the study area. The highway interchange at Hurontario Street creates congestion at Square One Drive, the primary access to the shopping centre from Highway 403. The Hurontario Street bridge over Rathburn Road is a physical barrier for active transportation, as there is only limited sidewalk access between Hurontario Street and Rathburn Road. Highway 403 also poses as a constraint as it limits access to/from the residential area to the north, with only two crossing points at Hurontario Street and Confederation Parkway.



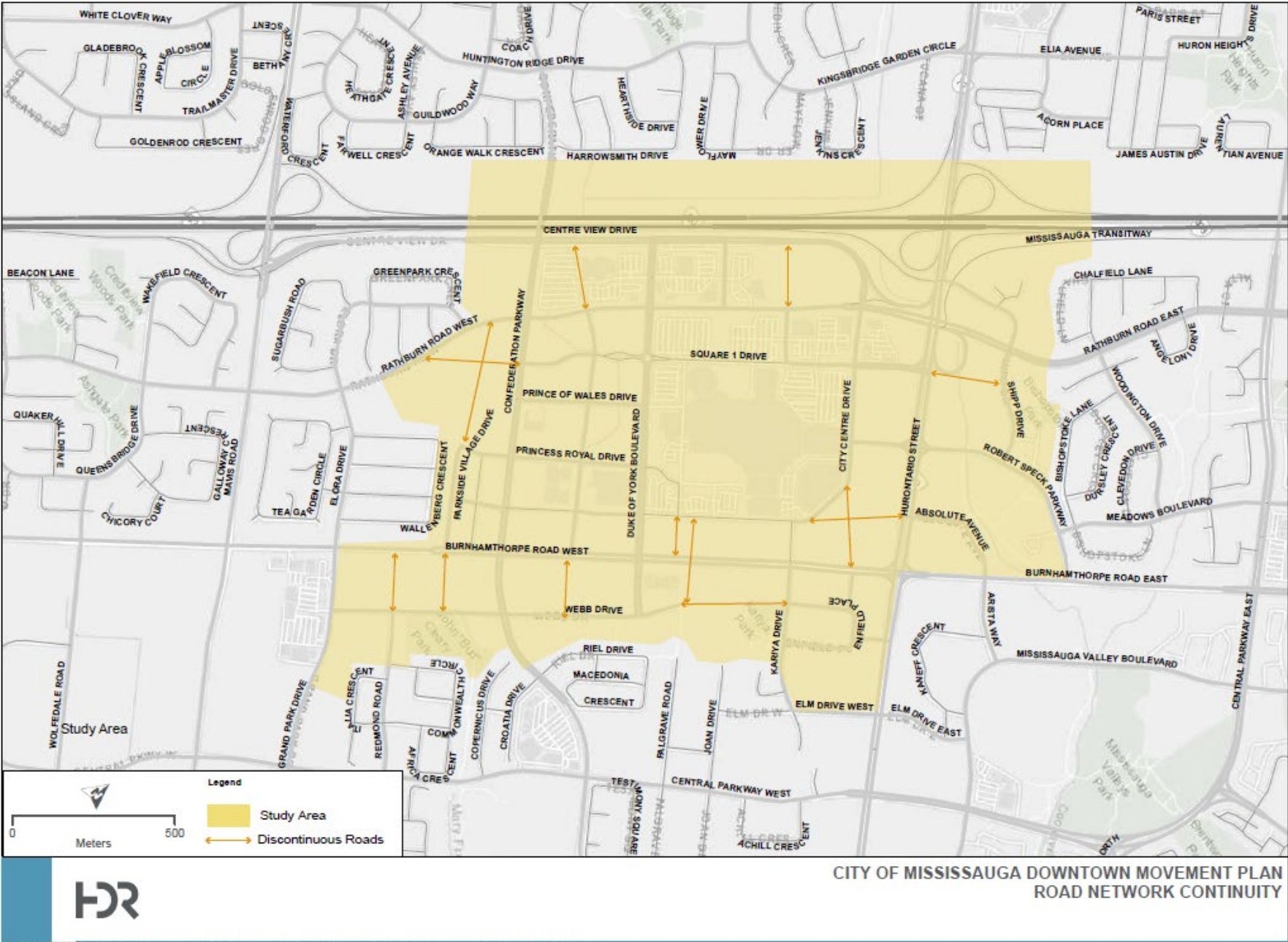
CITY OF MISSISSAUGA DOWNTOWN MOVEMENT PLAN
EXISTING ROAD NETWORK

Figure 3-1: Existing Road Network



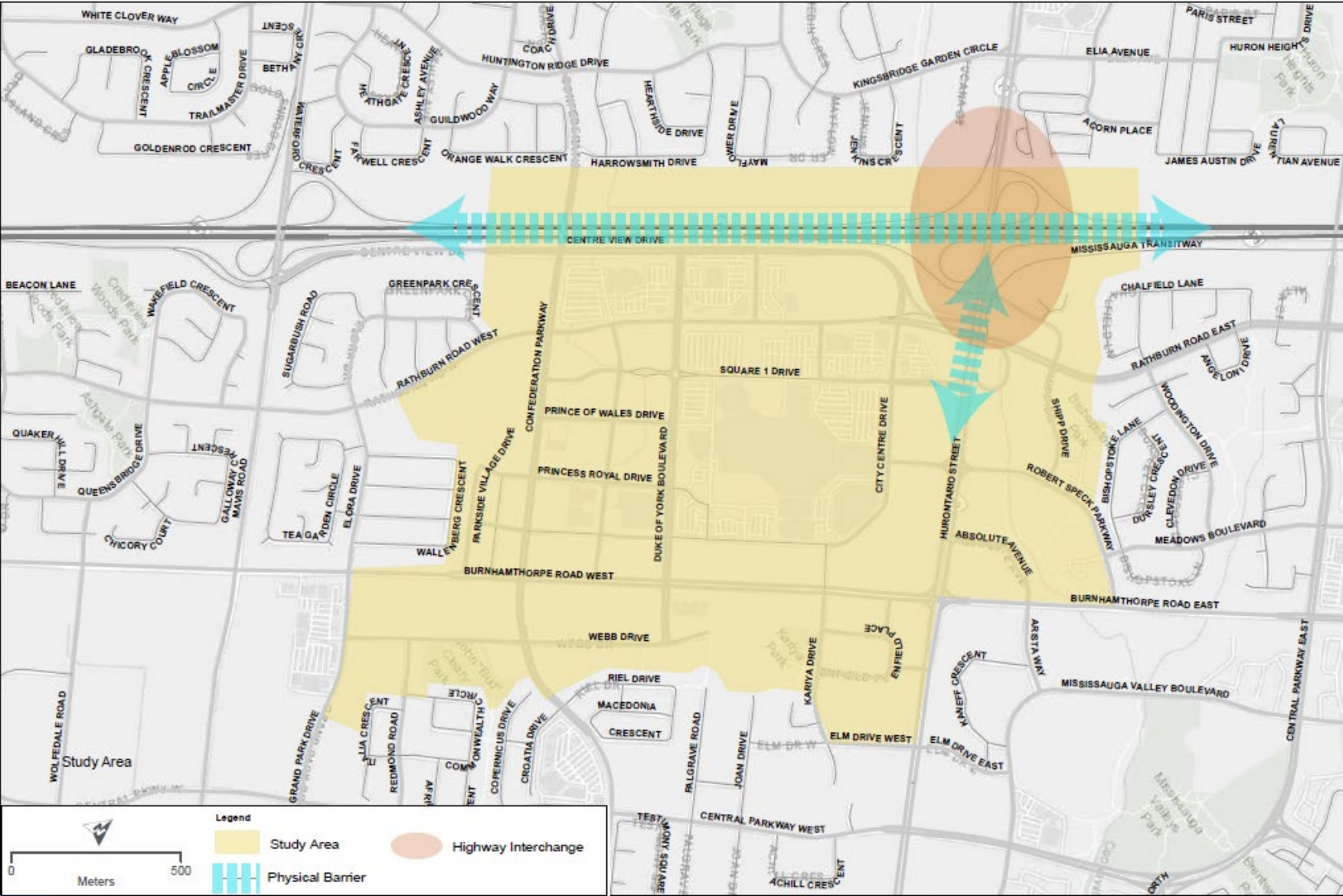
CITY OF MISSISSAUGA DMP
 VEHICLE LANE CONFIGURATION AND INTERSECTION CONTROL TYPE

Figure 3-2: Existing Lane Configuration and Intersection Control Type



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Figure 3-3: Network Continuity



CITY OF MISSISSAUGA DOWNTOWN MOVEMENT PLAN
ROAD NETWORK CONSTRAINTS

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Figure 3-4: Road Network Constraints

3.2 Future Road Network Improvements

The following plans, studies, and Mississauga's 2019 Development Charges Transportation Background Study describe and illustrate the proposed and planned future road improvements within the Downtown Core.

For the purpose of this report, **proposed** road network improvements refer to any improvements that have been identified in the Downtown21 Master Plan, Downtown Mississauga Movement Plan, and the Downtown Local Area Plan that are not also listed in the 2019 Development Charges Transportation Background Study and do not have EA status – approved, expired, or pending.

Planned road network improvements refer to the road improvements that have been identified in the 2019 Development Charges Transportation Background Study and have EA status – approved, expired, or pending.

3.2.1 Downtown Plans

DOWNTOWN21 MASTER PLAN, 2010

The Downtown21 Master Plan was prepared in April 2010 as an update to the Mississauga City Centre Master Plan, 1969, and builds on the 2009 Strategic Plan. The Downtown21 Master Plan proposed a number of new east-west and north-south streets to maximize access in and beyond the Downtown Core. **Figure 3-5** illustrates the proposed street network that provide additional local streets to create a fine grain network of development blocks that are walkable and well-connected. This future street network allows these roads to be small in scale, while maximizing accessibility for pedestrians, cyclists, and drivers. The new streets resulted in urban blocks that provide a number of alternative routing options for shorter-distance trips and provide additional pedestrian and bicycle-friendly routes, all of which help take the load off of other streets. While this finer grid network was proposed in the Downtown 21 Master Plan, the road network, as confirmed through Mississauga Official Plan Amendment No. 8 (MOPA #8) known as the Downtown Core Local Area Plan, supersedes the Downtown 21 Master Plan.

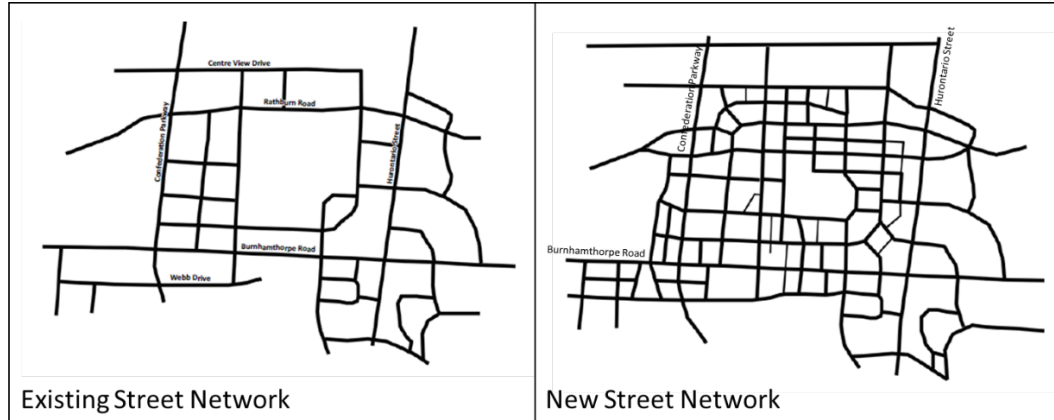


Figure 3-5: Downtown21 Proposed Street Network

DOWNTOWN MISSISSAUGA MOVEMENT PLAN, 2014

To support one of the Downtown21’s guiding principles - “Build Multi-modal Networks”, the Downtown Mississauga Movement Plan (D.M.M.P.) aims to develop the movement components and provide a “proof of concept”, demonstrating how a multi-modal transportation can be developed to serve the growth in the new urban area. **Figure 3-6** illustrates the proposed finer grid street network and transit plans. Note that the D.M.M.P. was an internal study within the City and did not go through the EA process to engage the public or stakeholders. This D.M.P. will revisit the recommendations and seek feedback from the public and relevant stakeholders.

A comprehensive transit plan was recommended as part of the D.M.M.P. Two transit hubs - The Mississauga City Centre Anchor Hub and the Main Street Transit Hub – were proposed to provide a complementary and integrated transit network to support the introduction of HMLRT and the Mississauga Transitway. It should be noted that the Main Street Transit Hub located along Burnhamthorpe Road between Duke of York Boulevard and Kariya Drive as shown in **Figure 3-6** was expected to provide a high quality environment and easy access to Main Street and other south-side developments.

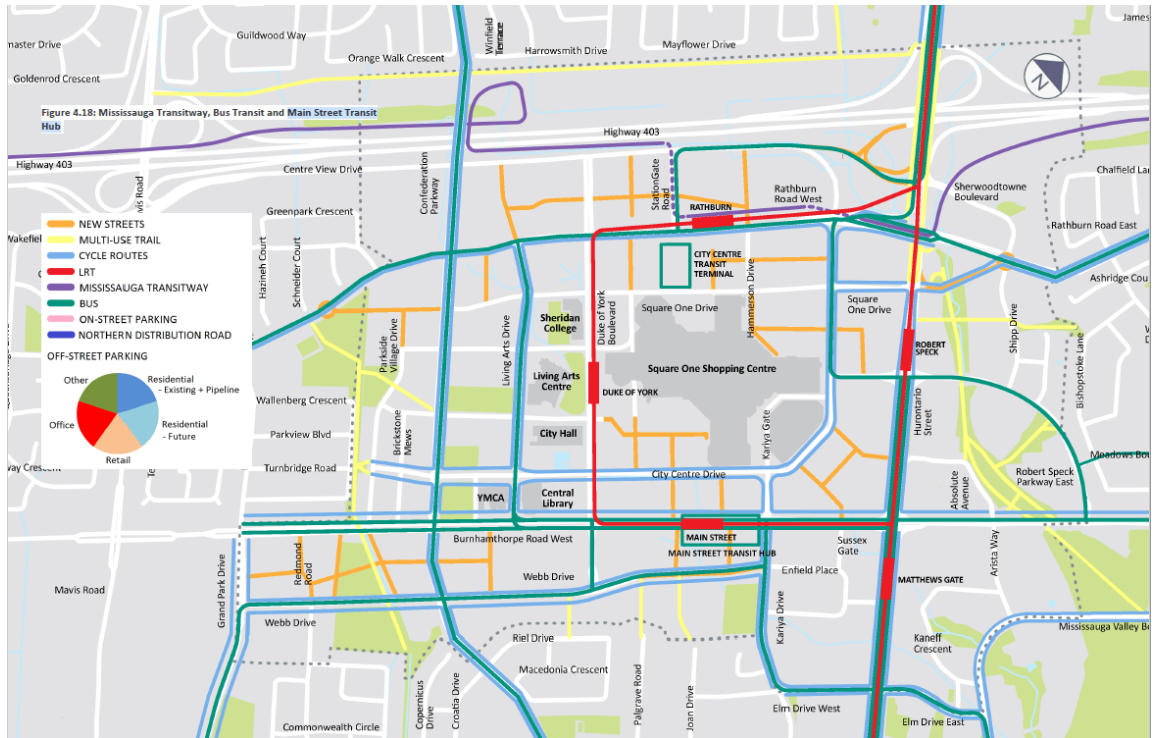


Figure 3-6: D.M.M.P. Finer Grid Street Network and Transit Plans

DOWNTOWN CORE LOCAL AREA PLAN, LPAT APPROVAL 2020

The recommendations in the Downtown Core Local Area Plan (D.L.A.P.) were developed with attention to key issues and priorities of the City and outlines specific road system policies to support the future population, employment, and land use designations within the Downtown Core. Future road improvements as proposed in the D.L.A.P. include, but are not limited to the following:

- The transit system will expand as the Downtown Core is developed.
- As part of the proposed Mississauga Bus Rapid Transit (B.R.T.) facility, the existing transit terminal may be expanded to serve future development growth and to connect with the B.R.T. facility. In the long term, an additional B.R.T. station is also proposed near Hurontario Street, between Rathburn Road West and Provincial Highway 403.
- The proposed Highway 403 North Collector (Northern Distribution Road), located north of the Downtown Core, is intended to provide access to and from the Downtown Core road network. The Centre View Drive extension is intended to provide access to eastbound Highway 403 via a link east of City Centre Drive. Future functional feasibility studies are required to review those improvements which may impact Highway 403.

Figure 3-7 illustrate the proposed road network.

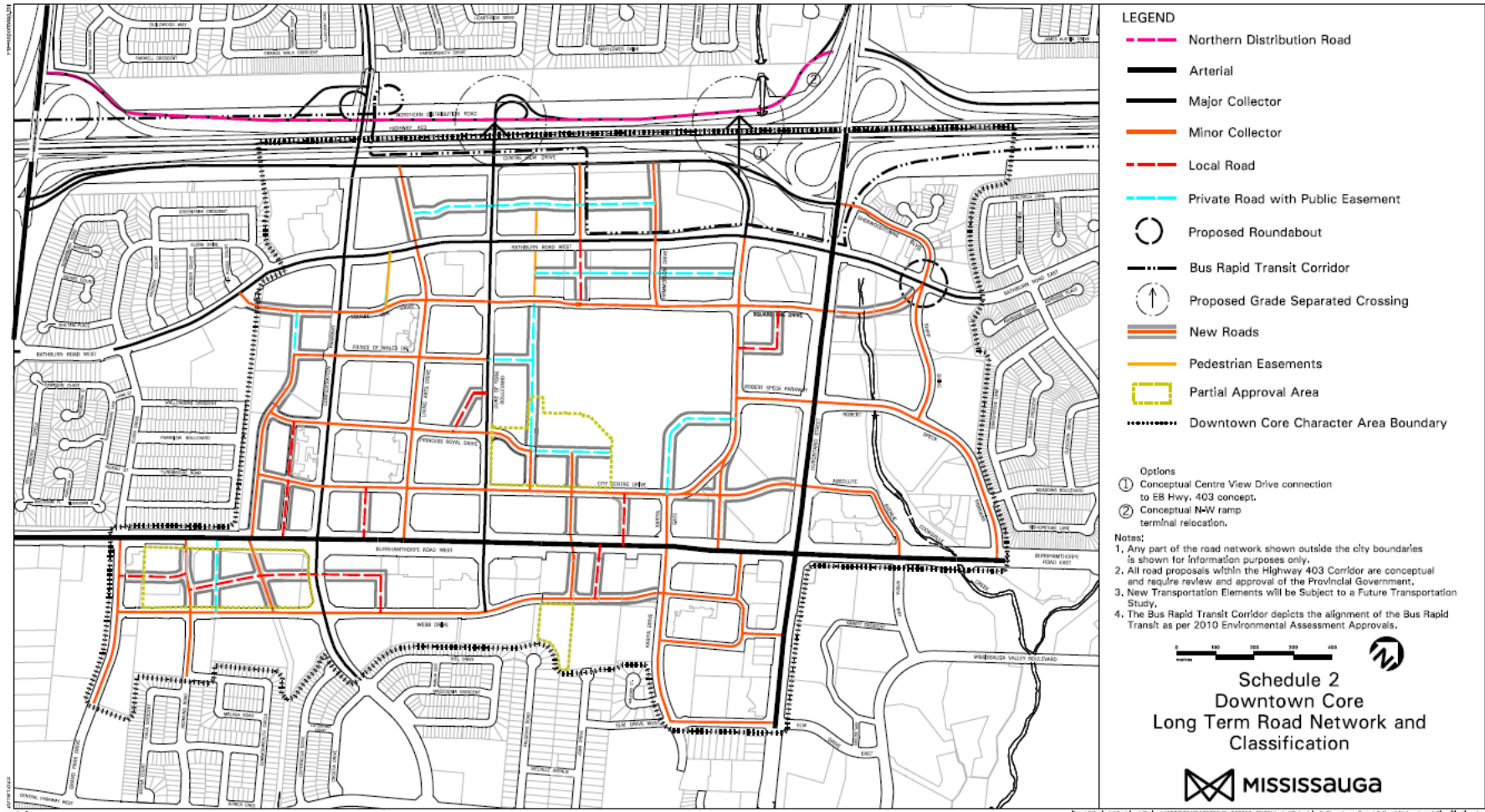


Figure 3-7: DLAP Schedule 2 – Long Term Road Network and Classification

3.2.2 Development Charges and Environmental Assessments

2019 DEVELOPMENT CHARGES

The 2019 Development Charges Update Transportation Background Study (2019 D.C.), completed in May 2019, identified future road improvements that include road widening, road extensions, and new road construction to serve growth. The 2019 D.C. lists seventeen (17) road projects with the study area as illustrated in **Figure 3-8**.

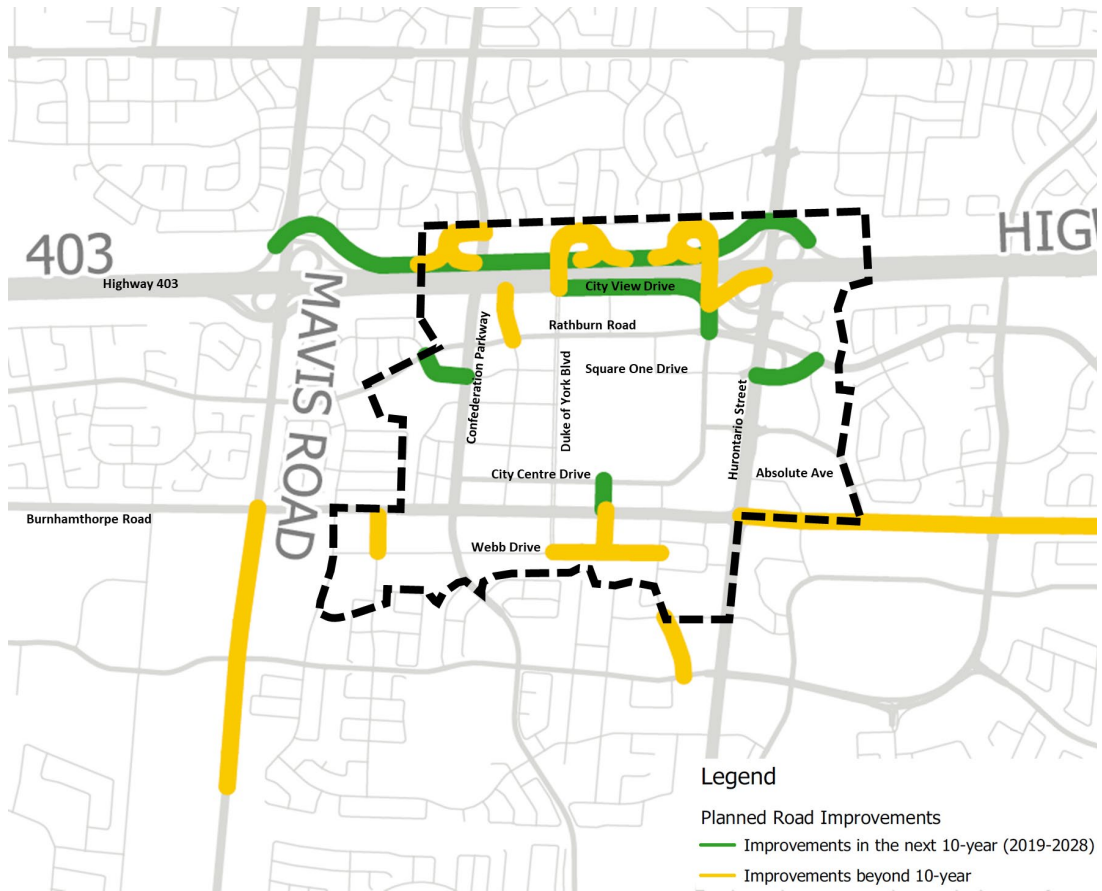


Figure 3-8: 2019 Development Charges Future Road Improvements

Source: 2019 Development Charges Update Transportation Background Study

ENVIRONMENTAL ASSESSMENTS

HURONTARIO-MAIN L.R.T. PRELIMINARY DESIGN AND TRANSIT PROJECT ASSESSMENT PROCESS (T.P.A.P.), 2014

In 2014, Metrolinx, the City of Mississauga and the City of Brampton, as project co-proponents, completed an environmental assessment for the introduction of Light Rail Transit (L.R.T.) in the Hurontario-Main Street Corridor. This L.R.T. project involves the operation of a high frequency L.R.T. service in the segment of the Hurontario-Main corridor between the Port Credit GO Station to the GO Station in Downtown Brampton.

For road elements, the T.P.A.P. recommended that

- One through lane in each direction be converted to L.R.T over most of the route length;
- Existing left-turn lanes be maintained and in some cases be lengthened to accommodate the changes in traffic flow;
- Existing Channelized right-turn lanes and associated separating islands at intersections be generally removed in accordance with the proposed complete street design approach;
- Minor streets and private accesses be operating as right-in/right-out only

Within the Downtown Core, the reduction of through lanes are shown in the **Table 3-1**. The existing roundabout at Duke of York/Square One Drive is recommended to be converted to a four way intersection.

Table 3-1: Lane Reduction due to the L.R.T.

| Hurontario Street (Intersection to Intersection) | Through Traffic Lane (each direction unless specified) | | LRT Alignment |
|-----------------------------------------------------|-----------------------------------------------------------|------------|------------------|
| | Base | LRT | |
| Central Pkwy to Square One Dr | 3 | 2 | Centre |
| Square One Dr to Hwy 403 (south) | 4 NB, 3 SB | 3 NB, 3 SB | Centre |
| Hwy 403(south) to Hwy 403 (north) | 3 NB, 3 SB | 3 NB, 4 SB | Centre |
| Downtown Mississauga Loop | Through Traffic Lane (each direction unless specified) | | LRT Alignment |
| | Base | LRT | |
| Burnhamthorpe Rd | 3 | 2 | Centre |
| Duke of York Blvd | 2 | 1 | Side |
| Rathburn Road | 2 | 2 | Side |

DOWNTOWN MISSISSAUGA ROAD IMPROVEMENT MASTER PLAN CLASS ENVIRONMENTAL ASSESSMENT ENVIRONMENTAL STUDY REPORT, 2015

The Downtown Mississauga Road Improvement Master Plan Class Environmental Assessment Environmental Study Report (E.S.R.), prepared by R.J. Burnside & Associates Limited, continues the ongoing implementation of the City's Downtown21 Master Plan and Downtown Core Local Area Plan.

The road improvements were divided into four individual projects as illustrated in **Figure 3-9** and includes Square One Drive, Princess Royal Drive, "The Exchange", and "Mercer Street". Project 1 is a section of Square One Drive. Currently, it serves as a private road access to Square One Shopping Centre. However, the City's Official Plan and the Downtown21 Master Plan proposed that Square One Drive be converted to two-way minor collector street. The proposed road improvement focuses on creating a more multi-modal street that will accommodate all modes of transportation, including walking, cycling, transit, and driving. Project 2, Project 3, and Project 4 are newly proposed city roads that will facilitate an improved pedestrian, cyclist, and vehicular environment. The recommended ultimate road improvements are illustrated in Appendix L of the E.S.R. and are listed below. Projects 1, 2, and 4 have since been completed.

- 1. Project 1 - Square One Drive:** 2 lanes, bus bays, and modified parking lanes
- 2. Project 2 - Princess Royal Drive:** 5 lanes, at Duke of York Boulevard and 4 lanes at Mercer Street
- 3. Project 3 - "The Exchange":** 2 lanes with parking lay-bys
- 4. Project 4 - "Mercer Street":** 4 lanes (curb lanes) with on-street parking during off-peak times

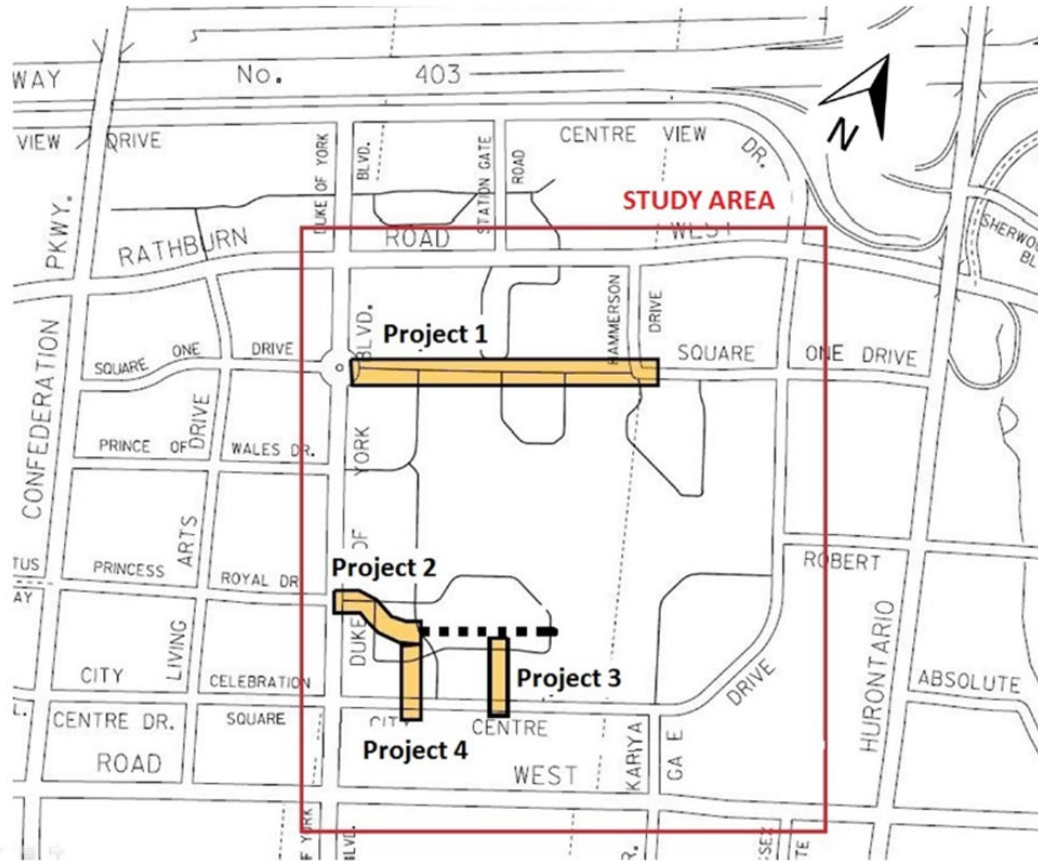


Figure 3-9: Road Improvement Projects

Source: Downtown Mississauga Road Improvement Master Plan Class Environmental Assessment Environmental Study Report 2015

SQUARE ONE DRIVE EXTENSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT AND PRELIMINARY DESIGN, 2017

After the Downtown Mississauga Road Improvement Master Plan E.S.R. was completed in 2015, a separate Environmental Assessment was undertaken to determine the feasibility of extending Square One Drive from Confederation Parkway to Rathburn Road West. The purpose of this extension would be to improve access to, from, and within Downtown Core, support multi-modal transportation and encourage walking, cycling, and transit use, create a finer grid street network with walkable blocks, new routing options for local trips, and provide better transit access. **Figure 3-10** illustrates the study area for the Square One Drive Extension.



Figure 3-10: Square One Extension Study Area

Source: *Square One Drive Extension Municipal Class Environmental Assessment and Preliminary Design 2017*

The key features of the recommended preliminary design for **Square One Drive** are, but not limited to the following:

- Extend Square One Drive from Confederation Parkway connecting to Rathburn West.
- Construct new signalized intersection at Confederation Parkway and the new Square One Extension.
- Provide two 3.35 m through lanes between Confederation Parkway and Rathburn Road West.
- Provide a continuous 3.2 m sidewalks with a 0.5 m splash pad and 1.0 m to 2.67 m streetscape corridor on the southside between

Confederation Parkway and the multi-use trail connection at Rathburn Road West.

- Provide 3.0 m to 3.5 m multi-use trail and 0.5 m splash pad on the north side between Confederation Parkway and Rathburn Road West.
- Provide 2.6 m on-street parking lane on the south side between Confederation Parkway and the Alectra Utilities entrance.
- Provide 2-lane roundabout at the intersection the new Square One Extension and Rathburn Road West.
- Install pedestrian facilities to meet current standards set by A.O.D.A. and the City of Mississauga Accessibility Design Handbook.

The key features of the recommended preliminary design for Rathburn Road West are, but not limited to the following:

- Provide four 3.5 m through lanes along Rathburn Road West.
- Re-align Rathburn Road West by shifting to the south to accommodate the new roundabout.
- Constructed a new 46 m diameter, 2-lane roundabout with 4.5 m internal lane widths.
- Provide a continuous 3.5 m multi-use trail on the south side between Confederation Parkway and the existing multi-use trail in Zonta Meadows Park.
- Provide a 1.08 m to 3.59 m streetscape corridor on the north side between Confederation Parkway and the entrance of 330/350 Rathburn Road West.
- Maintain the existing concrete sidewalk and provide a 3.55 m to 14.91 m streetscape on the north side between Confederation Parkway and the west construction limit east of Elora Drive.

Since the completion of this EA in 2017, it has been approved.

LIVING ARTS DRIVE EXTENSION MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT, 2018

The extension of Living Arts Drive was identified as a future road network improvement in the Downtown21 Master Plan, 2010. The Municipal Class

Environmental Assessment (E.A.) was undertaken by Stantec to evaluate the need to extend Living Arts Drive from Rathburn Road West to Centre View Drive in order to address the problems and opportunities within the downtown area. **Figure 3-11** illustrates the E.A. study area.

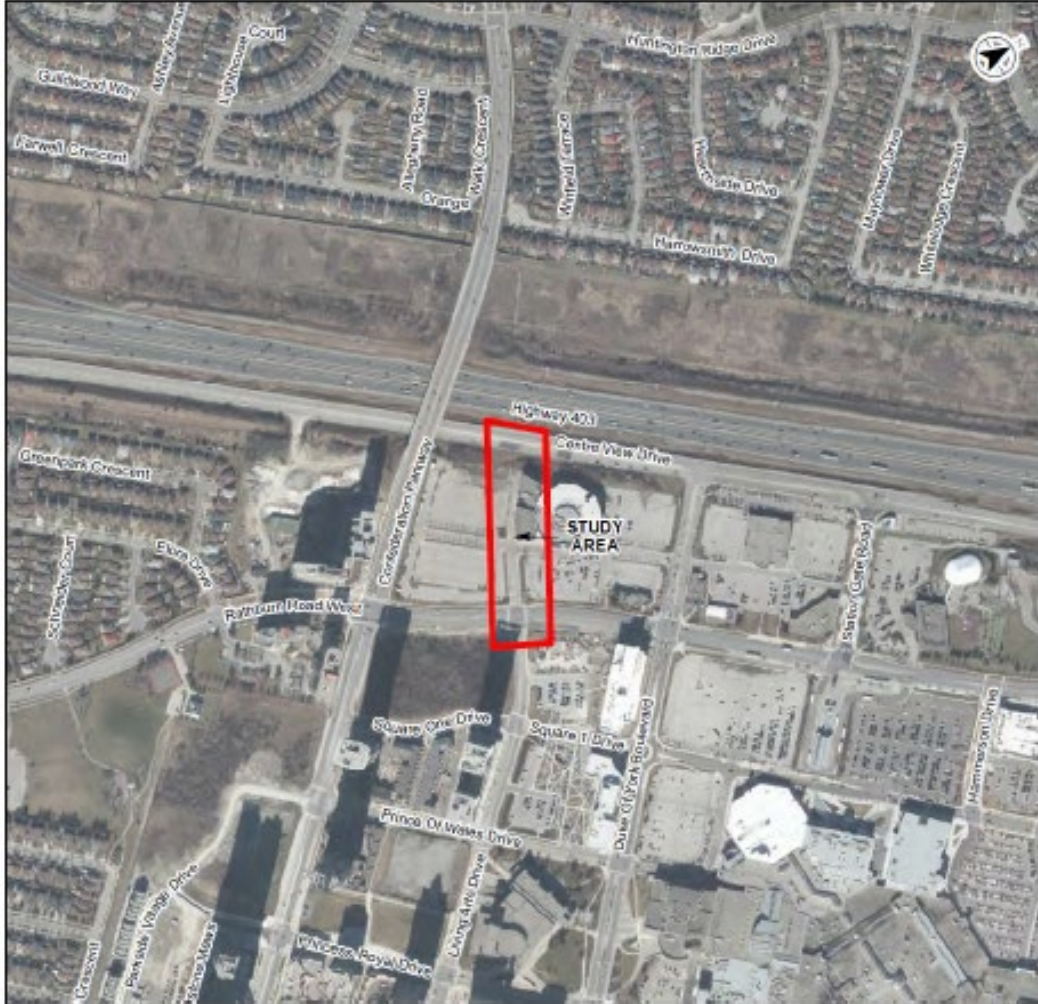


Figure 3-11: Living Arts Drive EA Study Area

Source: Living Arts Drive Extension Municipal Class Environmental Assessment 2018

Based on the E.A., it was determined that Alternative 5 – Extension of Living Arts Drive fully addresses the identified problems and opportunities by maximizing access to, from, and within the Downtown Core for all modes of transportation, contributing to a fine grain street network, and supporting a multi-modal transportation system.

The preferred solution will consist of extending Living Arts Drive from Rathburn Road West to Centre View Drive with the following elements:

- 26 m right-of-way (ROW);
- 2.5 m sidewalks on both sides;
- on-street bicycle lanes in each direction;
- a new signalized intersection with Centre View Drive; and
- a new mid-block intersection.

Since the completion of the EA in 2018, it has been approved.

MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT STUDIES FOR THE EXTENSIONS OF REDMOND ROAD, WEBB DRIVE, THE EXCHANGE AND KARIYA DRIVE, 2020

The City of Mississauga has completed four studies to plan for the transportation needs in the Downtown Core. The road improvements are divided into four individual projects as illustrated in **Figure 3-12** and includes the extension of Redmond Road, Webb Drive, The Exchange, and Kariya Drive.

1. **Project 1** – Redmond Road from Webb Drive to Burnhamthorpe Road
2. **Project 2** – Webb Drive from Duke of York Boulevard to Kariya Drive
3. **Project 3** – The Exchange from City Centre Drive to Webb Drive
4. **Project 4** – Kariya Drive from Elm Drive to Central Parkway

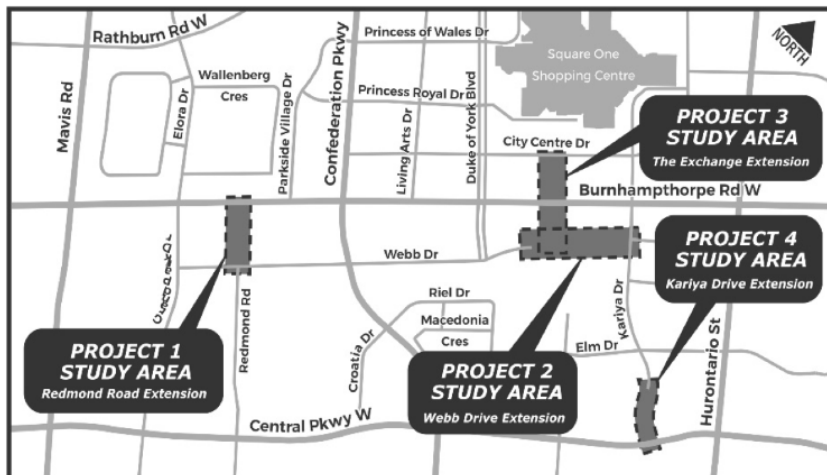


Figure 3-12: Project Study Areas

For Project No. 1, a Municipal Class Environmental Assessment (E.A.) was undertaken by W.S.P., to evaluate the need to extend Redmond Road from Webb Drive to Burnhamthorpe Road West. **Figure 3-13** illustrates the E.A. study area.

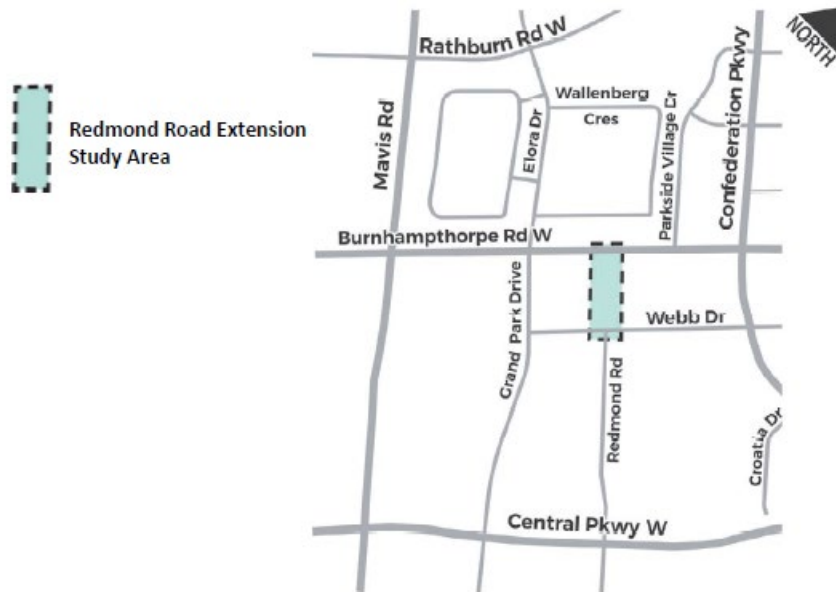


Figure 3-13: Redmond Road E.A. Study Area

Source: Redmond Road Extension Schedule B Municipal Class Environmental Assessment, 2020

Based on the E.A., it was determined that Alternative 4 – Extension of Redmond Road fully addresses the identified problems and opportunities by contributing to a fine grain street network, supporting a multi-modal transportation system, and providing a new north-south collector road within the planned “M City” community.

Two road design concepts were provided for the preferred design, which were based on the City’s Standard City Centre Cross-Section. The road right-of-way will vary from 20.6 m to 23 m. Both concepts provide 2.8 m sidewalks on both sides, on street parking on one or both sides, and landscaped amenity boulevards on both sides. **Figure 3-14** illustrates the preferred cross-sections.

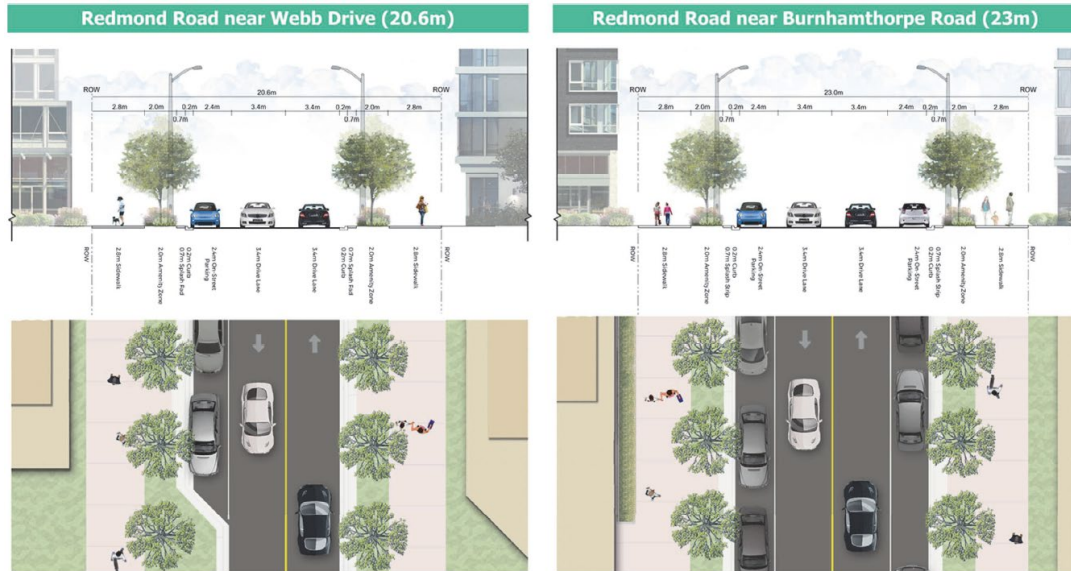


Figure 3-14: Preferred Redmond Road Cross-Section

Source: Redmond Road Extension Schedule B Municipal Class E.A. 2020

Project No. 2 is a Schedule B Municipal Class EA for Webb Drive extension. The study area is shown in Figure 3-15.

Figure 3-15: Webb Drive Road EA Study Area

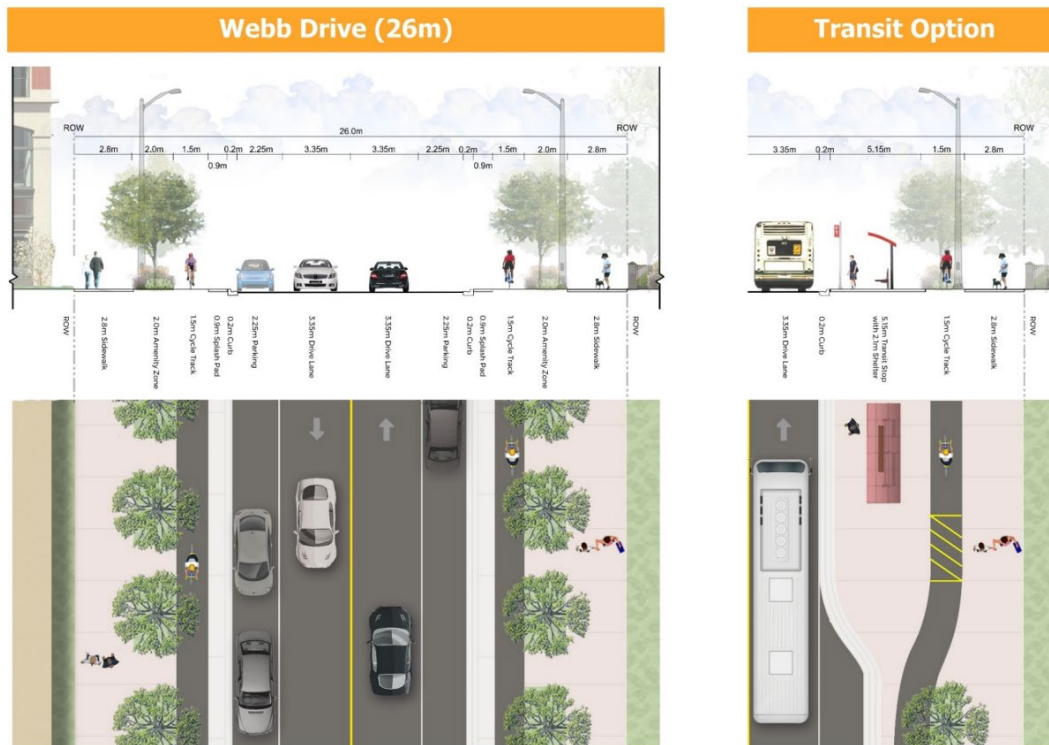


Source: Webb Drive Extension Schedule B Municipal Class Environmental Assessment, 2020

Based on this EA, Alternative 4 - Extend Webb Drive was preferred because it fully addresses the Problems and Opportunities by supporting the creation of an urban environment, creating a fine-grained downtown street network, providing redundancy in the road network, providing for future expansion of MiWay, creating smaller and more walkable blocks, and supporting a mixed-use community.

A design concept as shown in **Figure 3-16** was developed for the Preferred Planning Solution to extend Webb Drive by approximately 300 m, from its existing terminus located at Duke of York Boulevard, to a new intersection at Kariya Drive.

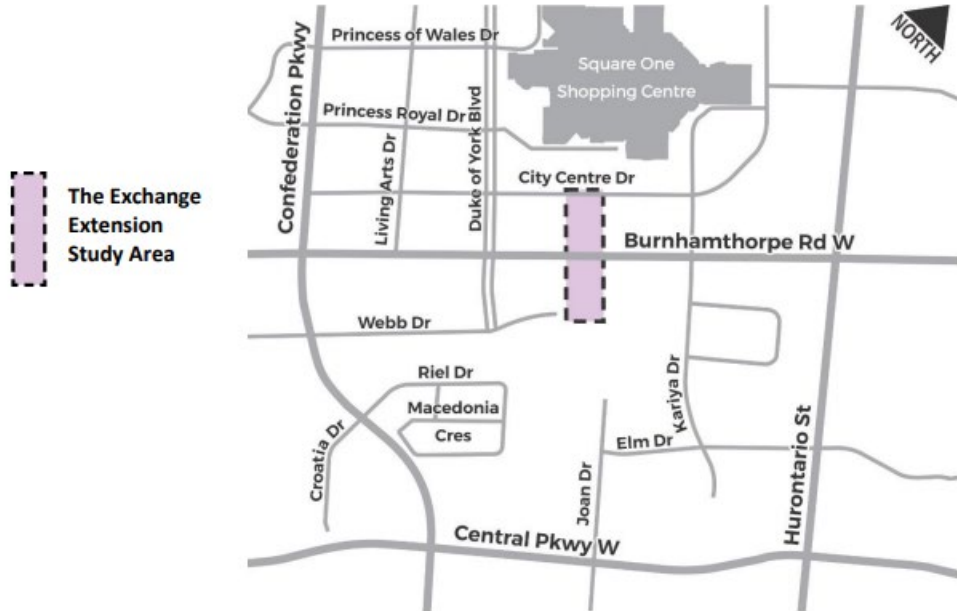
Figure 3-16: Preferred Webb Drive Cross-Section



Source: Webb Drive Extension Schedule B Municipal Class Environmental Assessment, 2020

Project No. 3 is a Schedule B Municipal Class EA for The Exchange extension. The study area is shown in **Figure 3-17**.

Figure 3-17: The Exchange Extension EA Study Area



Source: The Exchange Extension Schedule B Municipal Class Environmental Assessment, 2020

Based on this EA, Alternative 4 – Extend The Exchange was preferred because it fully addresses the Problems and Opportunities by supporting the creation of an urban neighbourhood environment, creating a fine-grained downtown street network, providing redundancy in the road network, creating smaller and more walkable blocks, and supporting a mixed-use community.

A design concept as shown in **Figure 3-17** was developed for the Preferred Planning Solution to extend The Exchange from City Centre Drive to Webb Drive.

Figure 3-18: Preferred The Exchange Cross-section



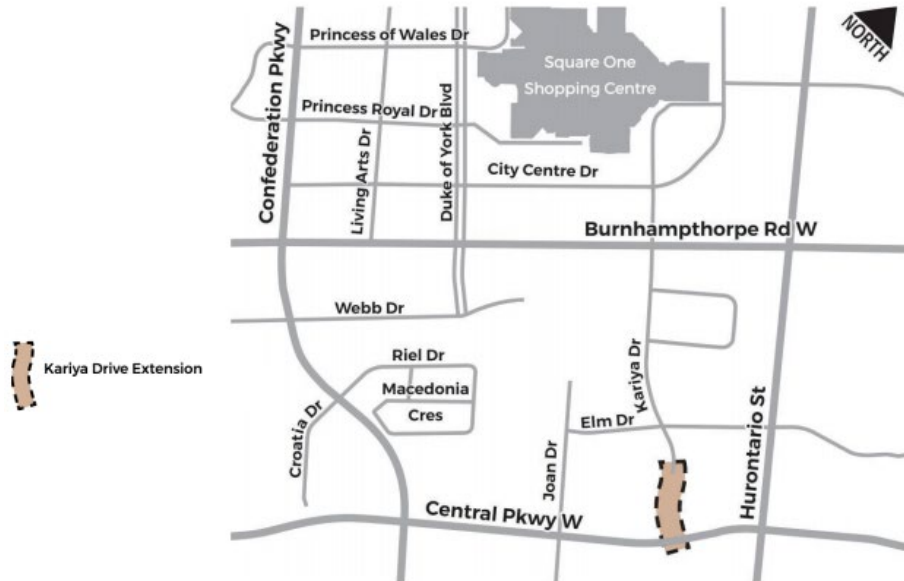
Source: The Exchange Extension Schedule B Municipal Class Environmental Assessment, 2020

Project No. 4 is a Schedule B Municipal Class EA for Kariya Drive extension. The study area is shown in **Figure 3-19**.

Based on this EA, Alternative 4 - Extension of Kariya Drive was preferred because it fully addresses the Problems and Opportunities by supporting the creation of an urban neighbourhood environment, expanding the minor collector road network to provide enhanced connectivity for all modes, providing redundancy in the road network, and creating smaller and more walkable blocks.

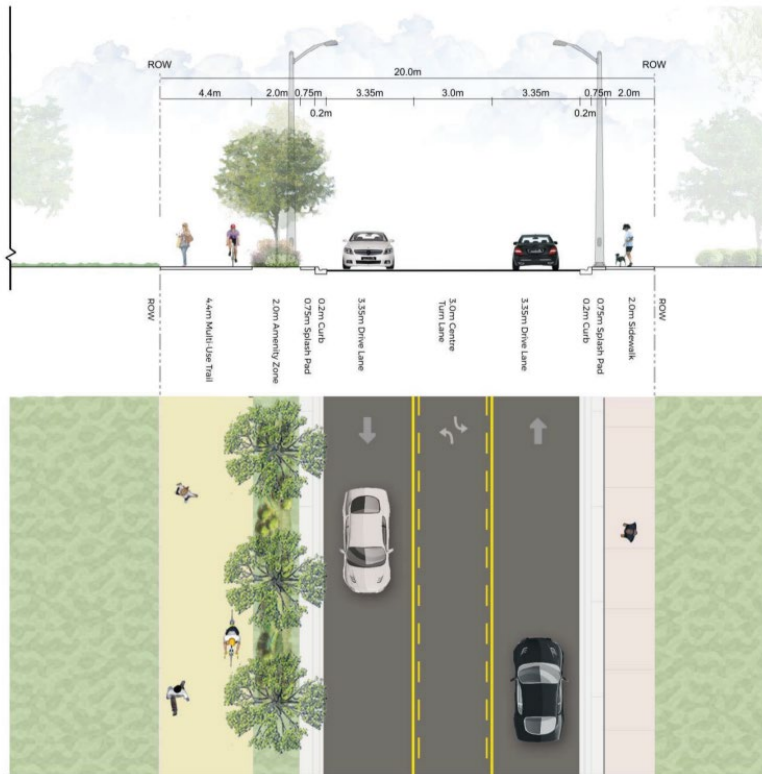
A design concept as shown in **Figure 3-20** was developed for the Preferred Planning Solution to extend Kariya Drive by about 150 m, from its existing terminus located south of Elm Drive, to a new intersection at Central Parkway West.

Figure 3-19: Kariya Drive Extension EA Study Area



Source: Kariya Drive Extension Schedule B Municipal Class Environmental Assessment, 2020

Figure 3-20: Preferred Kariya Drive Cross-Section



Source: Kariya Drive Extension Schedule B Municipal Class Environmental Assessment, 2020

3.3 Summary of Future Road Improvements

Based on the City of Mississauga’s plans and background studies, the planned and proposed future road network improvements are summarized in this section. The planned and proposed future road improvements have been categorized based by the timing of improvement (2031, 2041, or other proposed) and by status. The categories are as follows:

1. EA approved and in 2019 DC
2. EA expired/pending and in 2019 DC
3. EA not approved or no EA, but in 2019 DC
4. No EA, not in 2019 DC, but identified in other planning work

Table 3-2 gives the full list of planned and proposed future road improvements within the study area, categorized as described above. Each improvement has also been given an index number for reference on subsequent figures.

Table 3-2: Road Network Improvements

| Category | Horizon | Index # | Road Name | To | From | Road Work | Timing | In 10-Year Capital Program | Status / EA Approval | Source |
|----------|-----------|---------|--------------------------------|--------------------------------|-------------------------|----------------------------------------------|-----------------|----------------------------|-----------------------|-------------------------|
| 3 | 2031 Base | 3-1 | Webb Drive | Confederation Pkwy | Duke of York Blvd | Road reconstruction | 2021 | Yes | Not Approved | 2019 D.C. |
| 1 | 2031 Base | 1-1 | Square One Drive W | Confederation Pkwy | Rathburn Rd W | Road extension (2 lanes) | 2019, 2023-2024 | Yes | Approved | 2019 D.C. E.S.R. 2017 |
| 2 | 2031 Base | 2-1 | The Exchange | City Centre Dr | Burnhamthorpe Rd. W | Road extension (2 lanes) | 2021-2023 | Yes | Pending E.A. Approval | 2019 D.C. |
| 2 | 2031 Base | 2-2 | Webb Drive | 125m East of Duke of York Blvd | Kariya Dr | Road extension (2 lanes) | 2029-2033 | No | Pending E.A. Approval | 2019 D.C. |
| 2 | 2031 Base | 2-3 | Kariya Drive | 110m South of Elm Drive | Central Parkway W | Road extension (2 lanes) | 2029-2033 | No | Pending E.A. Approval | 2019 D.C. |
| 2 | 2031 Base | 2-4 | Redmond Rd | Burnhamthorpe Rd W | Webb Dr | Road extension (2 lanes) | 2029-2033 | No | Pending E.A. Approval | 2019 D.C. E.S.R. 2020 |
| 1 | 2031 Base | 1-2 | Living Arts Drive | Centre View Dr | Rathburn Road W | Road extension (2 lanes) | Unknown | On DC map, but not in list | Approved | E.S.R. 2018 |
| 2 | 2031 Base | 2-1 | The Exchange | Burnhamthorpe Rd W | Webb Dr | Road extension (2 lanes) | 2029-2033 | No | Pending E.A. Approval | 2019 D.C. |
| 4 | 2031 Base | 4-6 | Street O | Grand Park Dr | Redmond Road Extension | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. / M City |
| 4 | 2031 Base | 4-7 | Street P | Redmond Road Extension | Confederation Pkwy | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P./ M City |
| 4 | 2031 Base | 4-15 | Parkside Village Dr (Street M) | Burnhamthorpe Rd W | Webb Dr | Road extension (Minor collector - 2 lanes) | Unknown | No | Not Approved | D.L.A.P./ M City |
| 4 | 2031 Base | 4-16 | Street N | Burnhamthorpe Rd W | Webb Dr | New road (Private road with public easement) | Unknown | No | Not Approved | D.L.A.P./ M City |
| 4 | 2031 Base | 4-8 | Parkside Village Dr (Street G) | Parkside Village Dr | Square One Dr Extension | Road extension (Minor collector - 2 lanes) | Unknown | No | Not Approved | D.L.A.P./ Amacon Dev. |
| 4 | 2031 Base | 4-13 | Street K | City Centre Dr | Burnhamthorpe Rd. W | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P./ Block 22 Dev. |
| 4 | 2031 Base | 4-18 | Mercer Street Extension | Princess Royal Dr | Square One Dr | Road extension (Private Road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | 2031 Base | 4-19 | Parkside Village Dr | Arbutus Way | Confederation Pkwy | Road extension (2 lanes) | Unknown | No | Not Approved | D.L.A.P./ Amacon Dev |
| 3 | Proposed | 3-6 | Burnhamthorpe Rd | Hurontario St | Etobicoke Creek | Road widening (4 - 6 lanes) | 2034-2038 | No | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-3 | Centre View Dr | Duke of York Blvd | Rathburn Rd W | Road widening (4 -5 lanes) | 2025-2026 | Yes | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-2 | Square One Drive E | Hurontario St | Rathburn Rd E | Road extension (2 lanes) | 2024 | Yes | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-9 | Northern Distribution Rd | Mavis Dr | Hurontario St | New road (2 lanes) | 2025-2028 | Yes | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-10 | Centre View Dr Ramp | Centre View Dr | Hwy 403 | New ramp (1 lane) | 2029-2033 | No | Not Approved | 2019 D.C. |

| Category | Horizon | Index # | Road Name | To | From | Road Work | Timing | In 10-Year Capital Program | Status / EA Approval | Source |
|----------|----------|---------|---------------------------|----------------------------|--------------------------|---------------------------------------------|-----------|----------------------------|----------------------|---------------------|
| 3 | Proposed | 3-11 | City Centre Dr Flyover | Rathburn Dr | Northern Distribution Rd | New road (4 lanes) | 2029-2033 | No | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-12 | City Centre Dr Ramp | City Centre Dr | Northern Distribution Rd | New ramp (1 lane) | 2029-2033 | No | Not Approved | 2019 D.C. |
| 4 | Proposed | 4-1 | City Centre Dr (Street C) | Kariya Dr / City Centre Dr | Hurontario St | Road extension (Minor collector - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-2 | Centre view Dr (Street J) | Centre View Dr | Hurontario St | Road extension (Major Collector - 2 lanes) | Unknown | No | Not Approved | Downtown21 D.L.A.P. |
| 4 | Proposed | 4-3 | Street E | Living Arts Dr | East of Station Gate | New road (Private road with public easment) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-4 | Street F | West of Station Gate | City Centre Dr | New road (Private road with public easment) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-5 | Street I | City Centre Dr | Square One Dr | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 3 | Proposed | 3-13 | Confederation Pkwy Ramp | Confederation Pkwy | Northern Distribution Rd | New ramp (1 lane) | 2029-2033 | No | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-14 | Duke of York Blvd Flyover | Rathburn Rd | Northern Distribution Rd | New road (4 lanes) | 2029-2033 | No | Not Approved | 2019 D.C. |
| 3 | Proposed | 3-15 | Duke of York Blvd Ramp | Duke of York Blvd | Northern Distribution Rd | New ramp (1 lane) | 2029-2033 | No | Not Approved | 2019 D.C. |
| 4 | Proposed | 4-9 | Street H | City Centre Dr | Burnhamthorpe Rd. W | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-10 | Hammerson Dr (Street A) | City View Dr | Rathburn Rd W | Road extension (Minor collector - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-11 | Street B | Princess Royal Dr | Duke of York Blvd | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-12 | City Centre Dr (Street D) | City Centre Dr | Burnhamthorpe Rd. W | New road (Minor collector - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-14 | Street L | Burnhamthorpe Rd W | Webb Dr Extension | New road (Local road - 2 lanes) | Unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-17 | Station Gate Road | Rathburn Rd W | Square One Dr | road extension (2 lanes) | unknown | No | Not Approved | D.L.A.P. |
| 4 | Proposed | 4-20 | Street P Extension | Confederation Pkwy | Webb Dr | New road (Local road - 2 lanes) | unknown | No | Not Approved | D.L.A.P. |

The future base and other proposed future road improvements are illustrated by category in **Figure 3-21**.

The road network improvements included in the 2031 base case as reported in the table are primarily those road works which have been designated as **planned**, i.e. listed in the 2019 Development Charges and with E.A. status of approved, expired, or pending. These improvements correspond to Categories 1 and 2, with the exception of the Webb Drive reconstruction that is planned for 2021 and would not need an EA to be implemented. Some of the improvements do not have an identified timeline in the current DC report. Through discussion with the City, it is noted that those improvements will be implemented by 2031.

The 2031 “base network” also includes some local roads identified in the D.L.A.P. Those local roads have been included in active or approved applications for a Planning Act approval. The 2031 base network, including road work types, is shown in **Figure 3-22**. It should be noted that 2031 “base network” includes all the identified base case improvements, i.e. no additional road improvements are identified for the 2041 base case road network.

The road network improvements not included in the base network are those designated as **proposed**, which correspond to Categories 3 and 4, with no approved EA status or active application for a Planning Act approval to support it. These proposed road improvements, including road work types, are shown alongside the base network in **Figure 3-23**.

In addition to the road improvements, several existing roads are subject to changes due to the L.R.T. and the downtown Loop which will reduce the through lanes on Hurontario Street, Burnhamthorpe Road, Duke of York Boulevard, and Rathburn Road. The updated number of lanes are shown in **Figure 3-24** per the approved T.P.A.P..

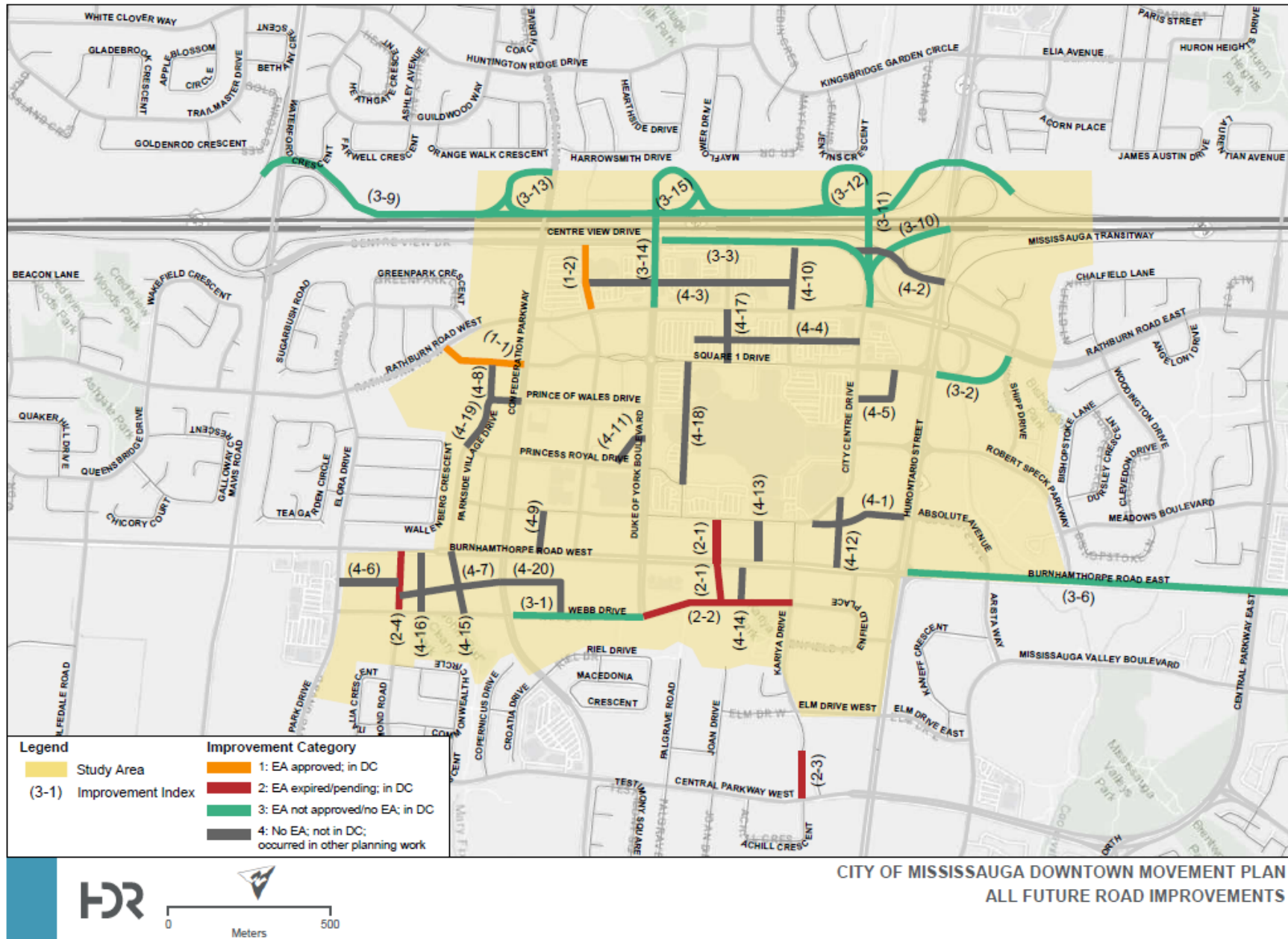


Figure 3-21: All Proposed Future Road Improvements by Improvement Category

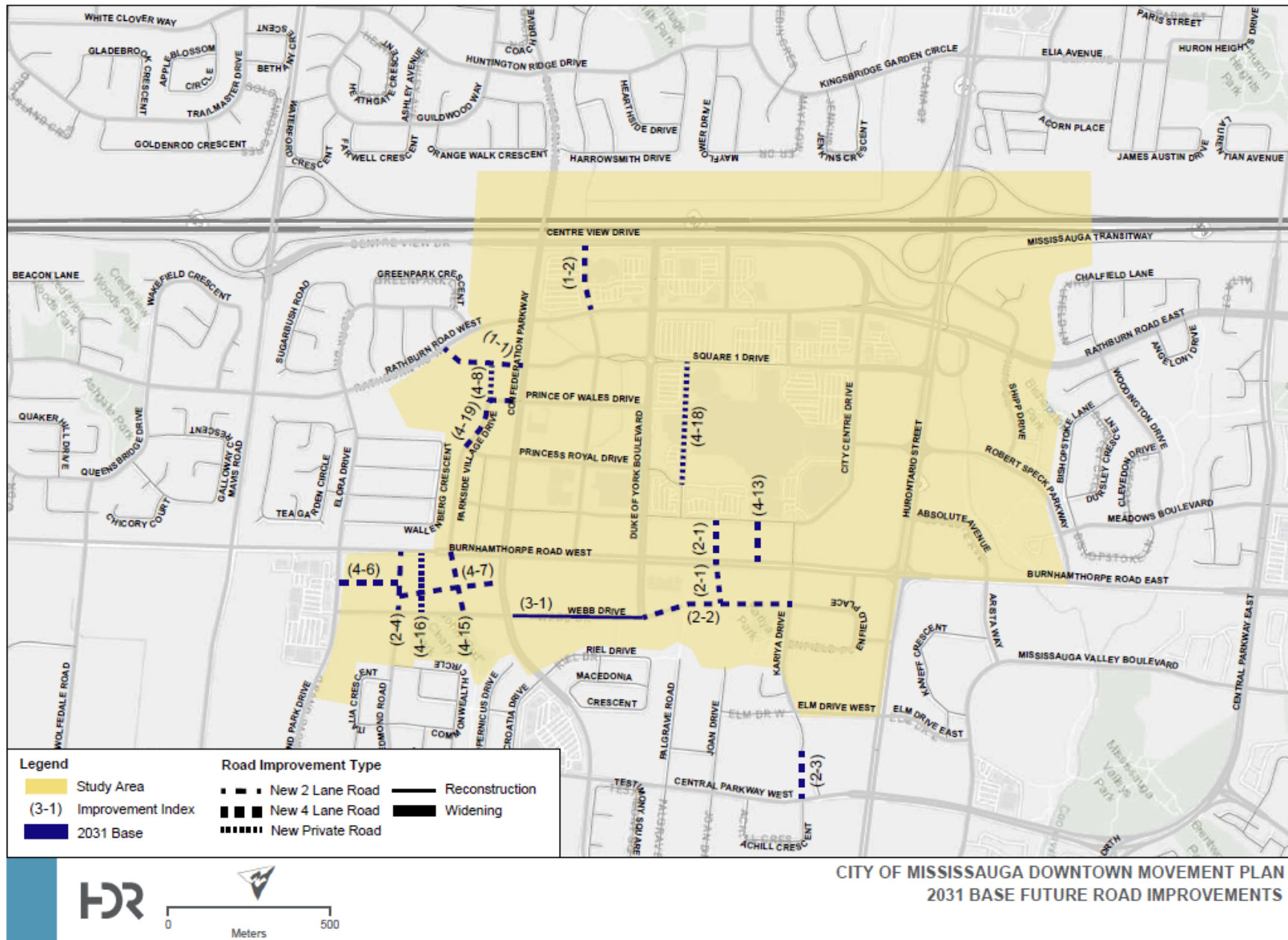


Figure 3-22: 2031 Base Future Road Network by Road Improvement Type

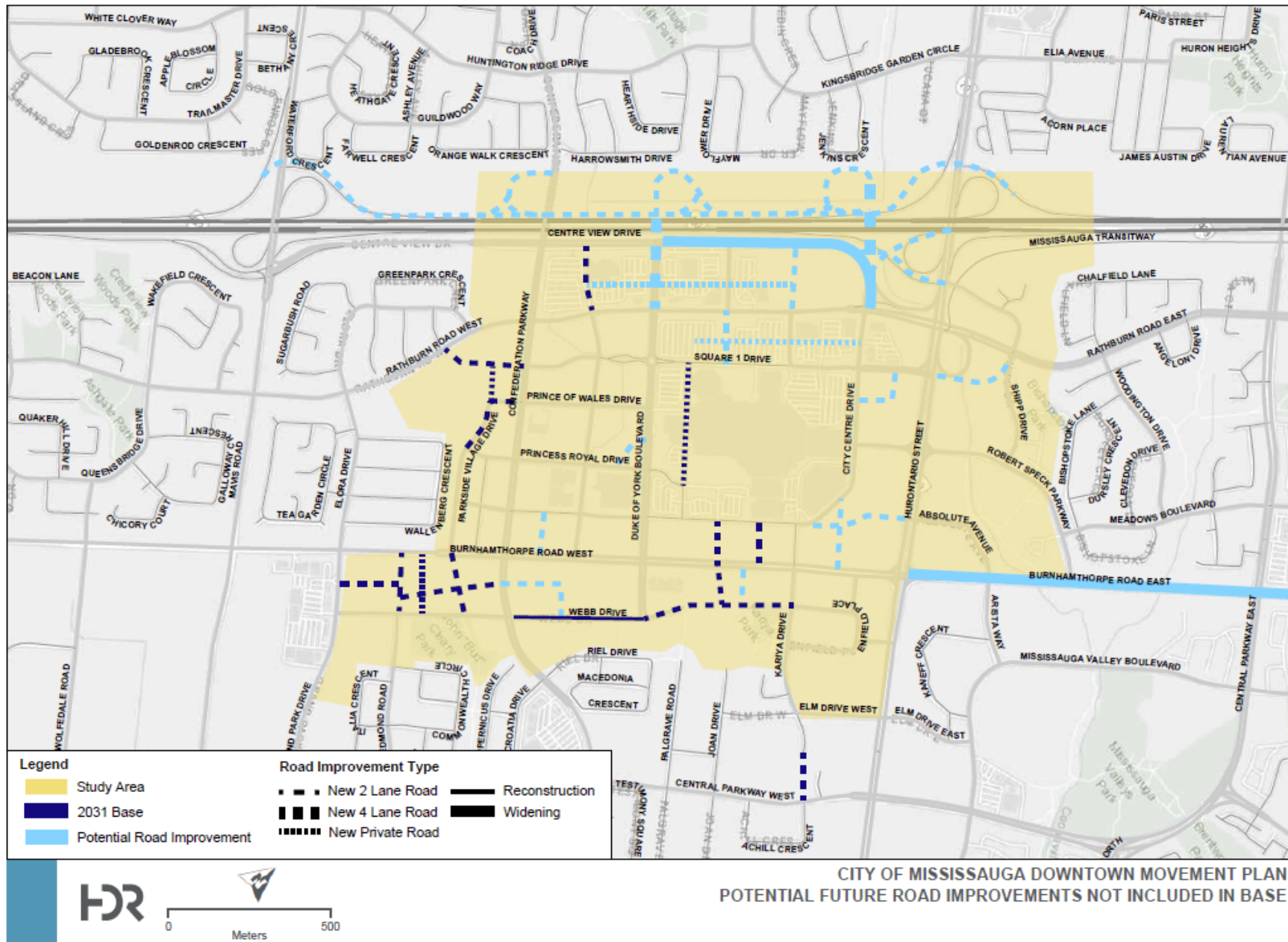


Figure 3-23: All Future Road Improvements by Road Improvement Type

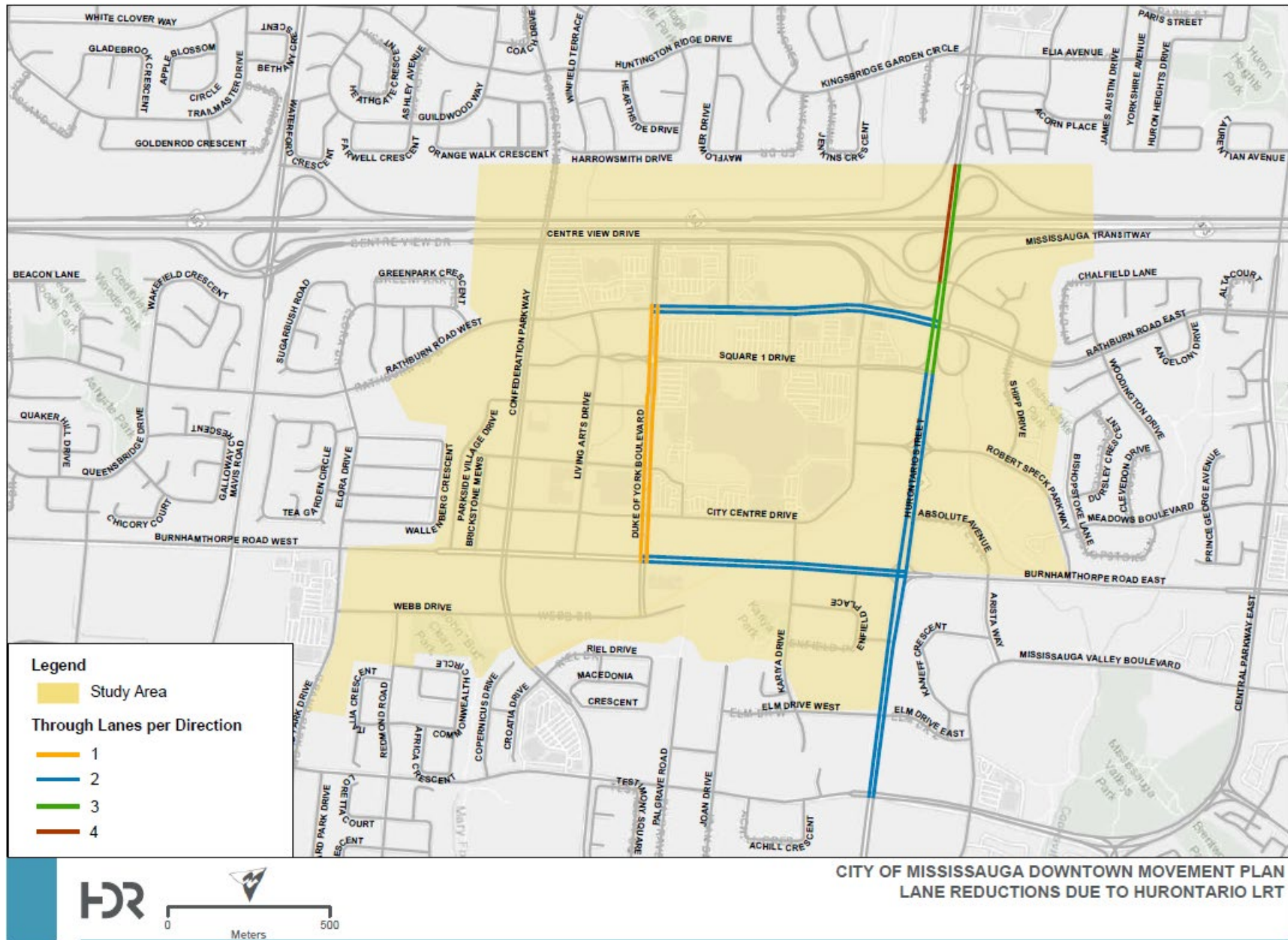


Figure 3-24: Number of Through Lanes along the Alignment of HuLRT and Downtown Loop

4 Active Transportation Network

4.1 Cycling Network

4.1.1 Existing Cycling Network

The existing cycling network is shown in **Figure 4-1**. The map identifies existing Shared Route, Bike Lane, Cycle Track, Multi-use Path, and Off-road Trail.

- Shared Routes are roadways shared between cyclists and motorists with signs and sharrow pavement markings.
- Bike Lanes are bikeways with lanes on the roadway for cyclists only, which has a painted buffer or just a lane marking to provide extra space between cyclists and other traffic lanes.
- Cycle Tracks are bike lanes that are physically separated from other traffic lanes by flexible posts, planters, parking stalls, curbs, or other barriers.
- Multi-use Paths are paved trails in the boulevard beside major roadways, shared by cyclists and pedestrians.
- Off-road trail are paved trails in park, shared by cyclists and pedestrians.

A Bicycle Level of Service (B.L.O.S.) analysis was completed as part of Phase 1 of the Downtown Movement Plan to assess the current cycling network conditions and to identify any deficiencies. The B.L.O.S. methodology measures the cyclist's experience. For example, where cyclists share the road, the wider and busier the street, and the higher the vehicular speeds, the poorer the experience for cyclists. Suboptimal cycling conditions along the following streets indicate the opportunity for infrastructure improvements to address these deficiencies:

- Living Arts Drive
- Duke of York Boulevard
- Mercer Street
- Station Gate Road
- Hammerson Drive
- Kariya Gate (Square One entrance to Enfield Place)
- Hurontario Street
- Shipp Drive
- Robert Speck Parkway
- City Centre Drive (Duke of York Boulevard to Rathburn Drive)
- Enfield Place
- Princess Royal Drive
- Prince of Wales Drive
- Square One Drive
- Rathburn Road

- Centre View Drive
- Sherwoodtowne Boulevard

Figure 4-2 illustrates the B.L.O.S. by facility under existing conditions.

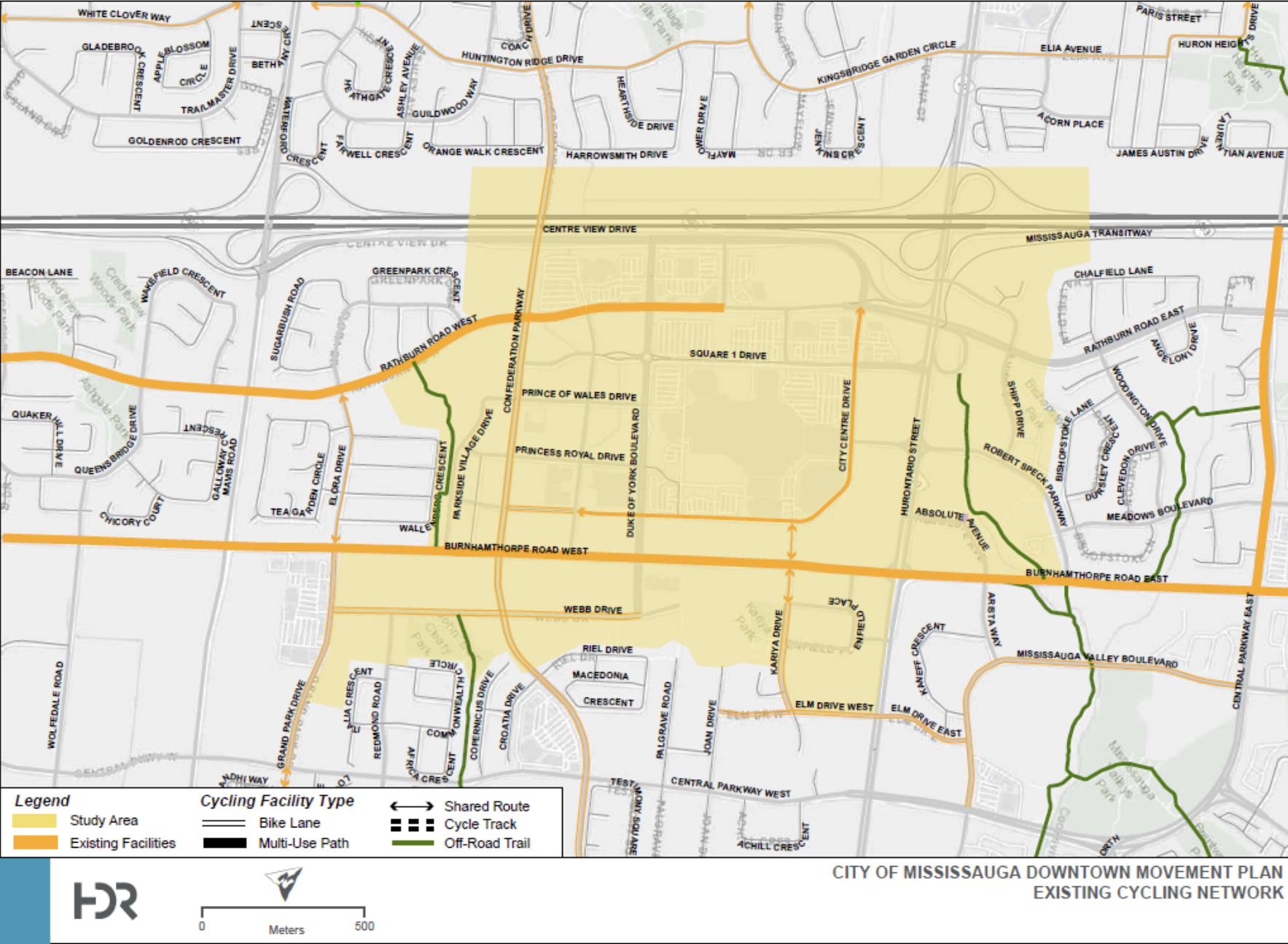
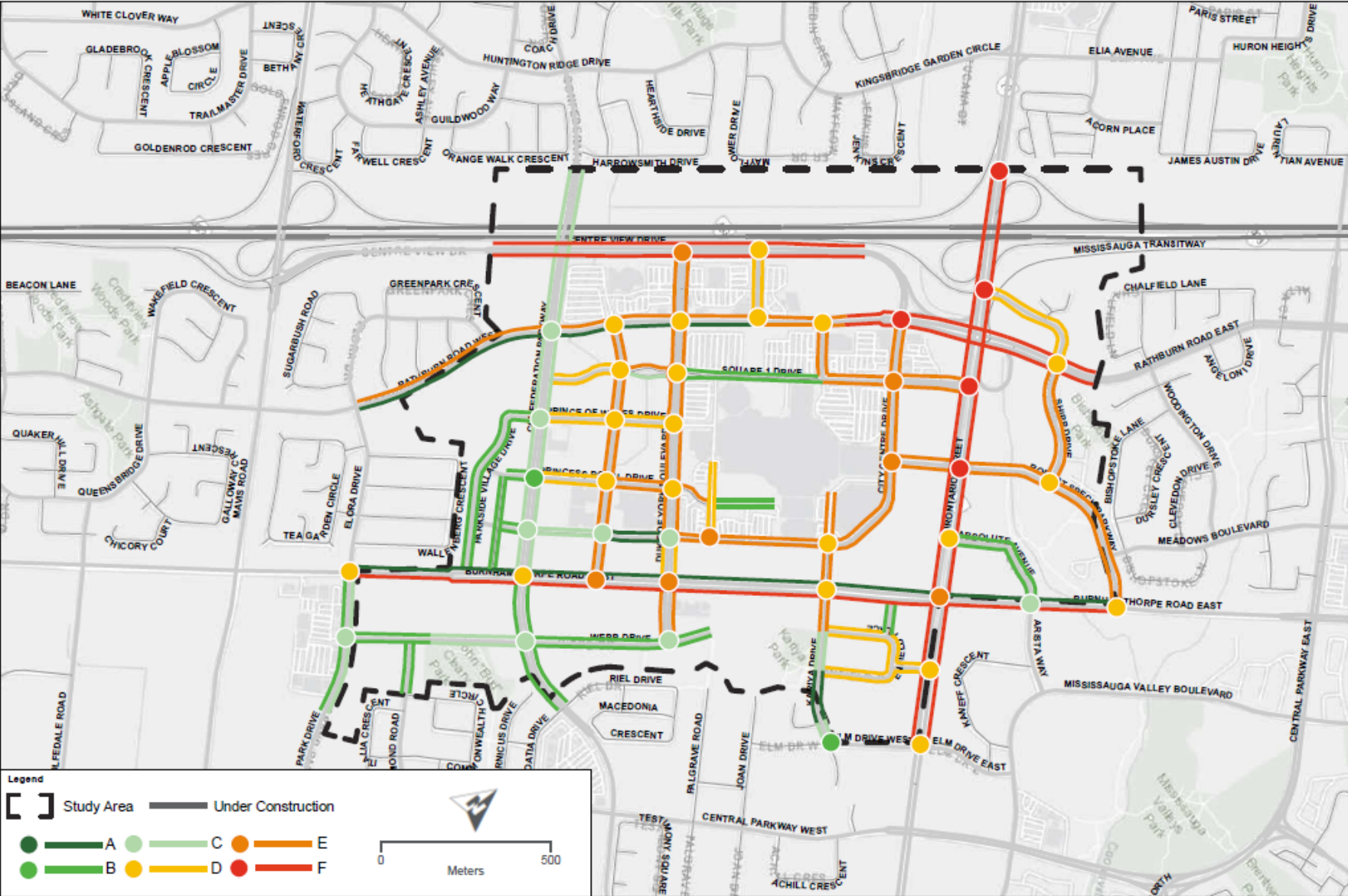


Figure 4-1: Existing Cycling Network



CITY OF MISSISSAUGA DOWNTOWN MOVEMENT PLAN
BICYCLE LEVEL OF SERVICE



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Figure 4-2: Bicycle Level of Service by Facility

4.1.2 Cycling Network Future Improvements

DOWNTOWN MISSISSAUGA MOVEMENT PLAN, 2014

The D.M.M.P. developed a user hierarchy to prioritize different modes of movement over other modes, and placed active transportation at the top of the hierarchy. The guiding principles from the D.M.M.P. pertaining to active transportation include:

- Minimize the need to travel by supporting mixed use, high density development designed to be easily accessible for pedestrians and cyclists.
- Plan Multi-Modal by recognizing the inter-relationships between modes, and the choices available to users.
- A New User Hierarchy focusing on people, not vehicles.
- Active Modes for a vibrant Urban Core where walk and bike modes are the priority (mixed use/high density, finer street grid/smaller block sizes and the creation of a walkable vibrant downtown core).
- Transportation Demand Management (T.D.M.) measures promoting transportation choices, providing incentives, and supporting the efficient use of the finite downtown transportation network.

Figure 4-3 illustrates the proposed cycling network for the Downtown Core.

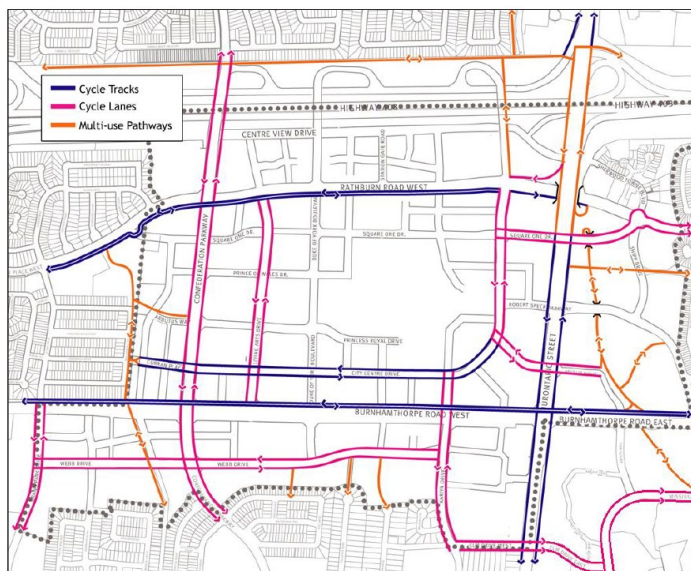


Figure 4-3: D.M.M.P. Proposed Cycling Network

MISSISSAUGA CYCLING MASTER PLAN 2018

The City of Mississauga Cycling Master Plan (2018) aims to create a place where people choose to cycle for recreation, fitness, and daily transportation needs. The four goals of the Cycling Master Plan are:

- a) Improve safety for cycling;
- b) Build a connected, convenient and comfortable cycling network;
- c) Increase the number of cycling trips in Mississauga; and
- d) Foster a culture of cycling.

As illustrated in **Figure 4-4** there are a number of proposed bike lanes and cycle tracks/separated bike lanes within the Downtown Core that will provide critical connections to existing bike lanes and multi-use trails, as well as other proposed cycling facilities.

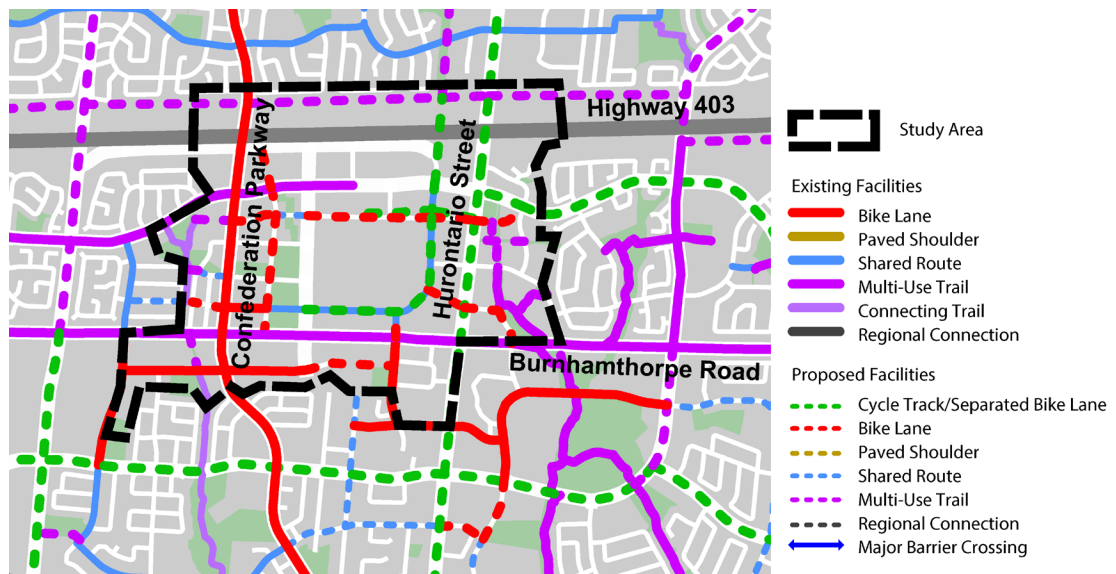


Figure 4-4: Proposed Cycling Network

The City of Mississauga Cycling Master Plan also provides a 5-year Implementation Plan for the proposed cycling network. **Figure 4-5** illustrates the planned cycling network improvements. Note that the Hurontario LRT Metrolinx project will not be occurring on Burnhamthorpe Road.

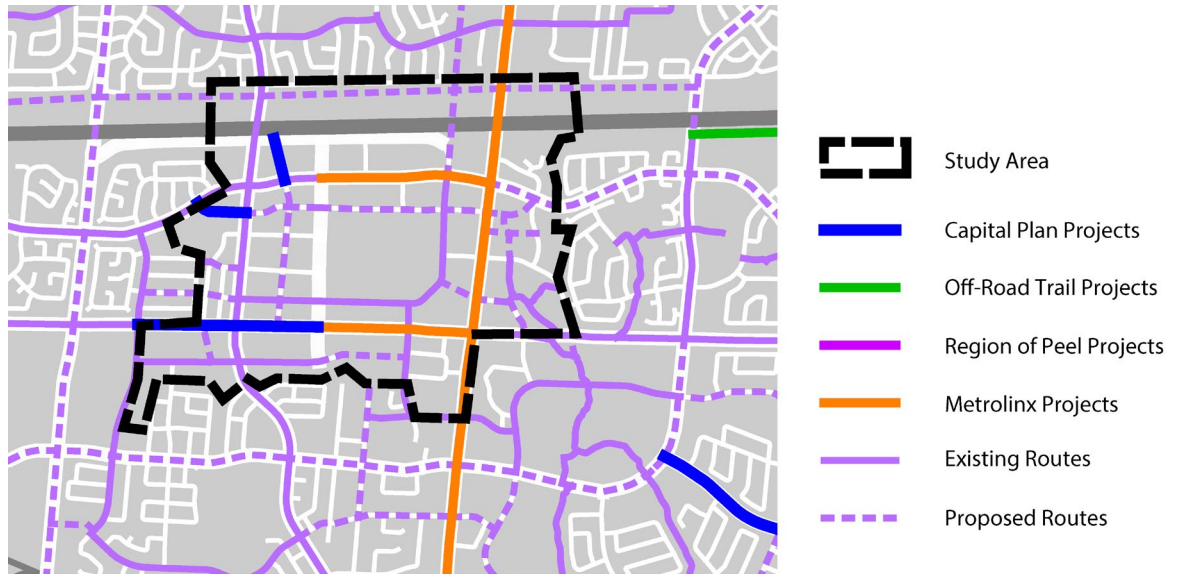


Figure 4-5: 5-Year Implementation Plan

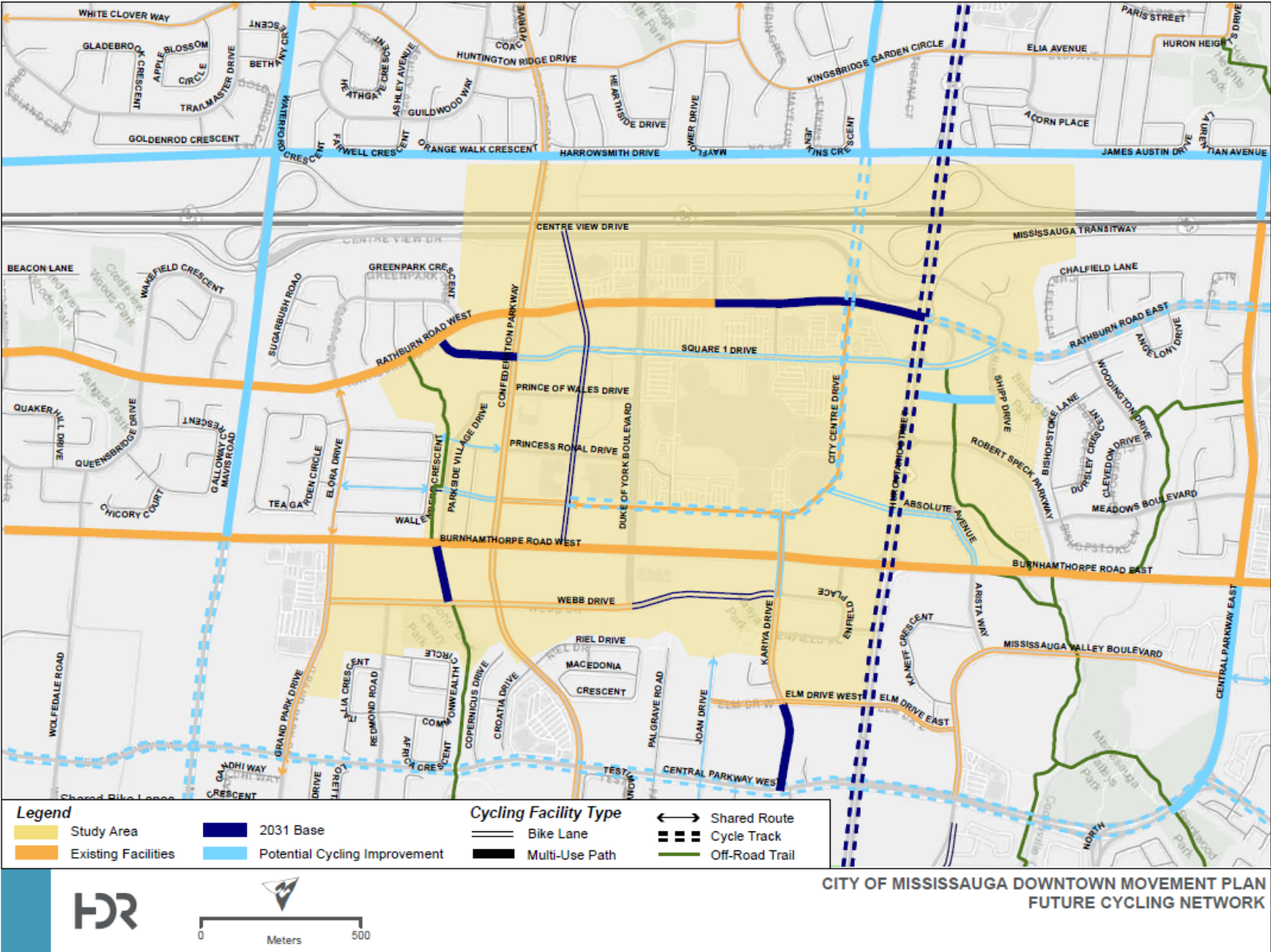
4.1.3 Summary of Future Cycling Network Improvements

Based on the City of Mississauga Cycling Master Plan, 2019 D.C., and the aforementioned E.A. studies, the future cycling network improvements have been identified as either part of the 2031 base network or potential improvements with undefined timelines. The 2031 base cycling facilities were selected based on the status and timing of future roads in the 2019 D.C. or relevant E.A. study. Although there are a number of proposed cycling facilities that are identified in the Cycling Master Plan 5-Year Implementation Plan, these facilities have no status and were categorized under Other Improvements and are listed in **Appendix A** for future consideration.

Note that the Active Transportation COVID-19 Recovery Framework has also identified a few cycling network improvements within the Downtown Core. Among those improvements, only Living Arts Drive bike lanes from Rathburn Road to Burnhamthorpe Road has been confirmed for installation and thus included in the 2031 base network.

Figure 4-6 illustrates the existing cycling facilities within and surrounding the Downtown Core, and the base cycling network improvements under the 2031 horizon year, along with potential “Other Improvements”. Note that the off-road trails reflect the existing conditions.

Appendix A provides a detailed list of cycling facility improvements.



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Figure 4-6: Planned Future Cycling Network Improvements

4.2 Pedestrian Network

4.2.1 Existing Pedestrian Network

The existing pedestrian network is shown in **Figure 4-7**. Gaps in the network are also identified.

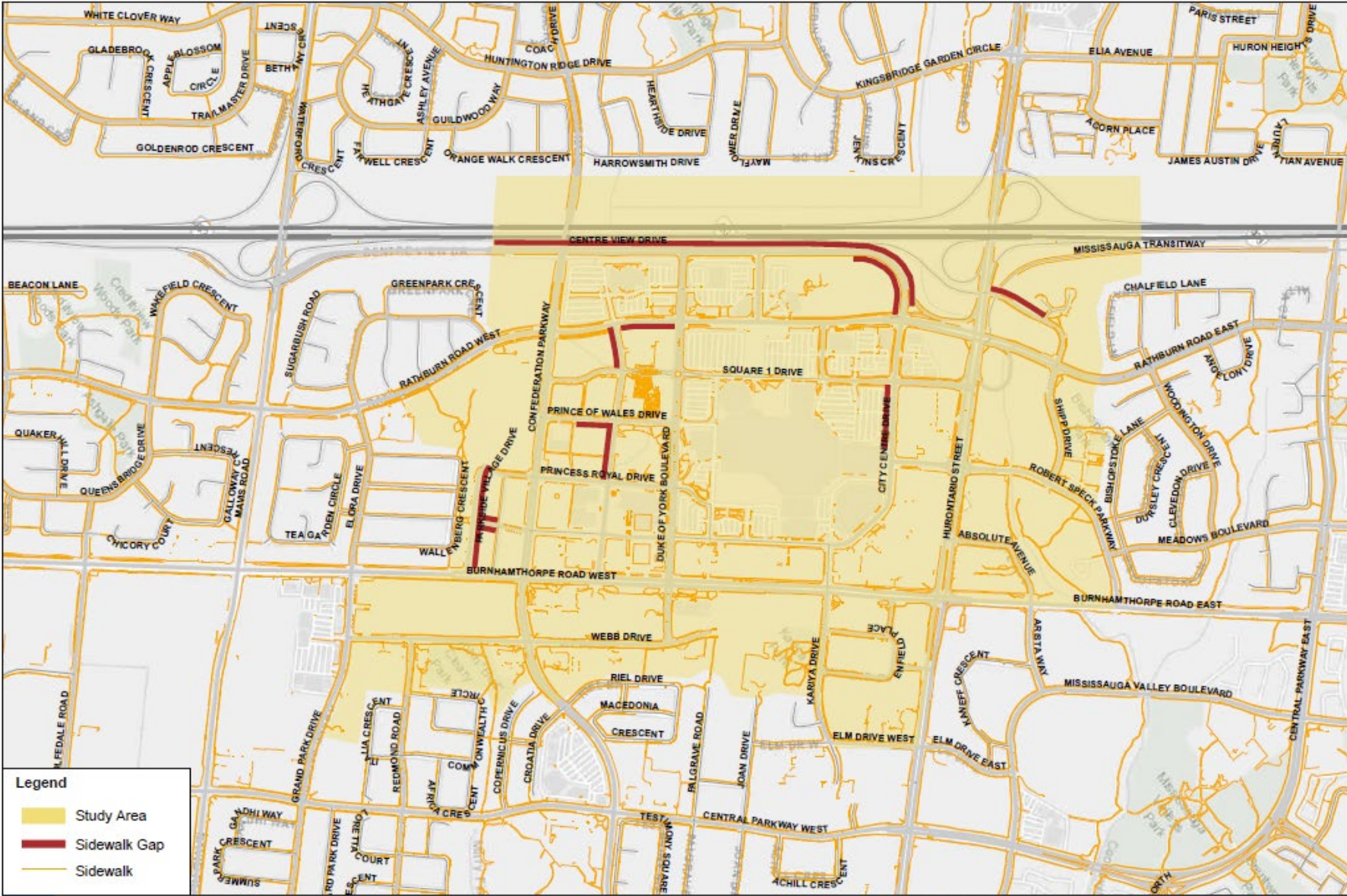
A Pedestrian Level of Service (P.L.O.S.) analysis was completed as part of Phase 1 of the Downtown Movement Plan to assess the current pedestrian network conditions and to identify any deficiencies. P.L.O.S. measures the pedestrian's experience as a user of the network. Overall, Downtown Core is well-served by pedestrian infrastructure, with major arterials, collector roads, and even local streets generally having sidewalks on both sides. However, gaps in the study area's sidewalk network were also identified, including:

- The west side of Living Arts Drive, from Rathburn Road to Square One Drive and from Prince of Wales Drive to mid block to Princess Royal Drive
- Both sides of Duke of York Boulevard, from Centre View Drive to Mid-Block Access
- The east side of Parkside Village Drive, from Burnhamthorpe Road to Confederation Parkway
- The west side of City Centre Drive, from Square One Drive south to Robert Speck Parkway
- The south side of Prince of Wales Drive, from 100 m east of Confederation Parkway to Living Arts Drive and east of Duke of York Boulevard
- The north side of Centre View Drive, from west of Confederation Parkway to east of Station Gate Road

The missing sidewalks in the study area are generally adjacent to large, undeveloped or greenfield lots, as well as surface parking. Currently there is also a gap along Webb Drive to access the Fairview Public School from the west. The planned extension of Webb Drive to Kariya Drive is an opportunity to fix this gap.

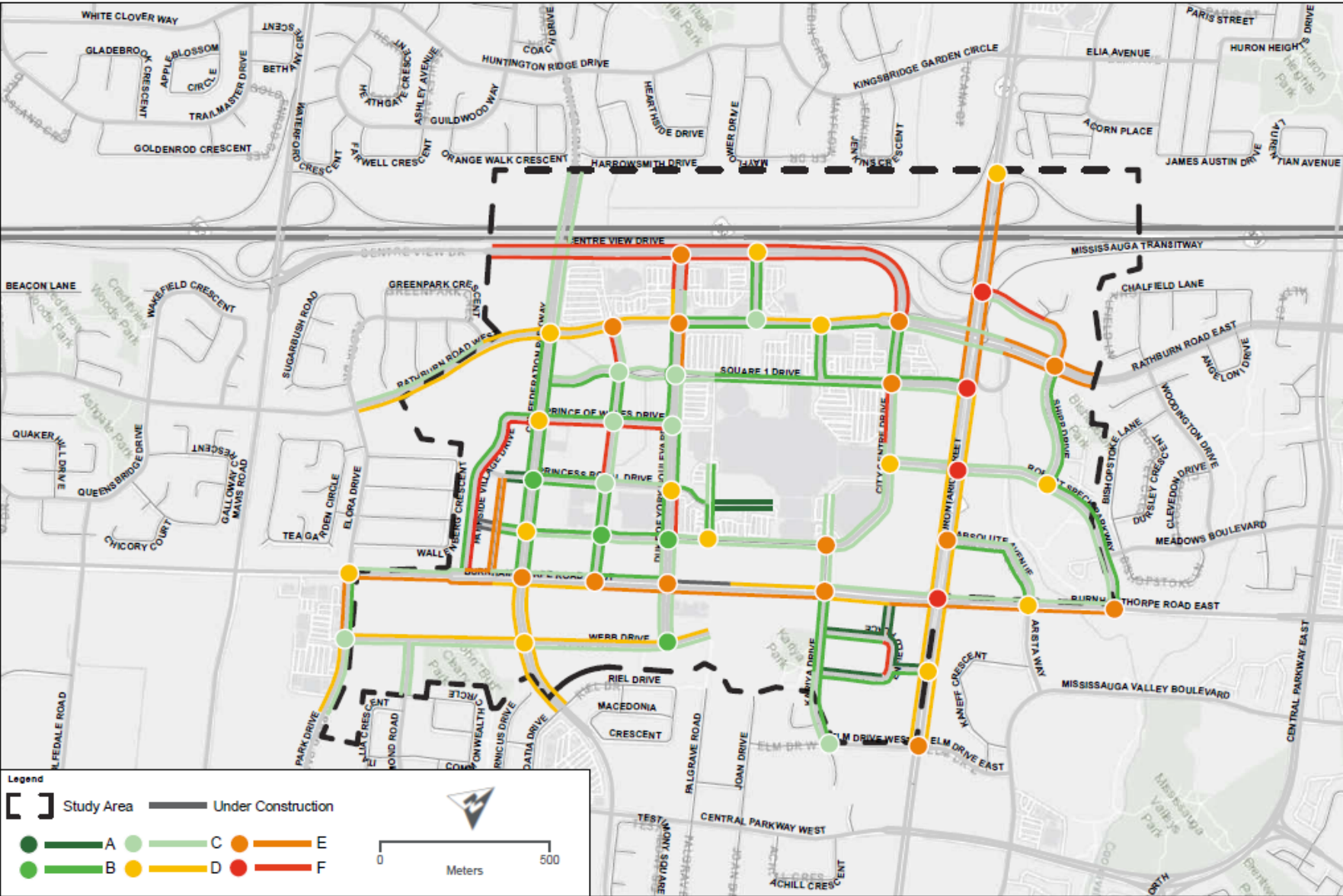
Note that private mews are not included in the pedestrian P.L.O.S analysis. But it is recognized that private mews such as the north-south walkway between Confederation Parkway and Living Arts Drive provides connection in the pedestrian network in addition to sidewalks along public roads.

Figure 4-8 illustrates the P.L.O.S. by facility under existing conditions.



CITY OF MISSISSAUGA DOWNTOWN MOVEMENT PLAN
EXISTING PEDESTRIAN NETWORK

Figure 4-7: Existing Pedestrian Network and Sidewalk Gaps



CITY OF MISSISSAUGA DOWNTOWN MOVEMENT PLAN
 PEDESTRIAN LEVEL OF SERVICE



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Figure 4-8: Pedestrian Facility Level of Service

4.2.2 Future Pedestrian Network

DOWNTOWN CORE LOCAL AREA PLAN, LPAT APPROVAL 2020

The D.L.A.P. provides a set of policies for the development of boulevards and sidewalks to support pedestrian movement, connectivity within and to adjacent communities, and promote street life. The design of boulevards in the Downtown Core will:

1. incorporate coordinated design themes, high quality materials, street trees and landscaping;
2. be designed as active, animated public spaces that seamlessly integrate with buildings and other components of the public realm to define the street space;
3. maximize opportunities to incorporate places to meet, sit and socialize; and
4. achieve pedestrian comfort, weather protection and safety, particularly at transit stops.

The proposed road network improvements identified in Section 4.3 of the D.L.A.P. report followed a hierarchy of street frontages to distinguish the function and attributes of streets in the Downtown Core – ‘A’ Streets and ‘B’ Streets. The categories differentiate the streets by their role and function, character, built form treatments, and overall design. This hierarchy supports the implementation of the urban design and public realm objectives of the Downtown21 Master Plan.

‘A’ Streets have a critical role and function in the Downtown Core. They are the most important for securing animation and character, a comfortable pedestrian environment with access to sunlight and sky views, street activity and vibrancy. Development fronting onto ‘A’ Streets will ensure a cohesive built form and streetscape treatment to achieve the highest standard in the public realm.

‘B’ Streets allow for site servicing and access, but also act to support street activity. ‘B’ Streets provide a pedestrian-friendly environment and a high-quality built form and streetscape treatment.

Figure 4-9 illustrates the proposed street frontage network. Sidewalks will be constructed in tandem with the future road network improvements and also be added as part of abutting development applications

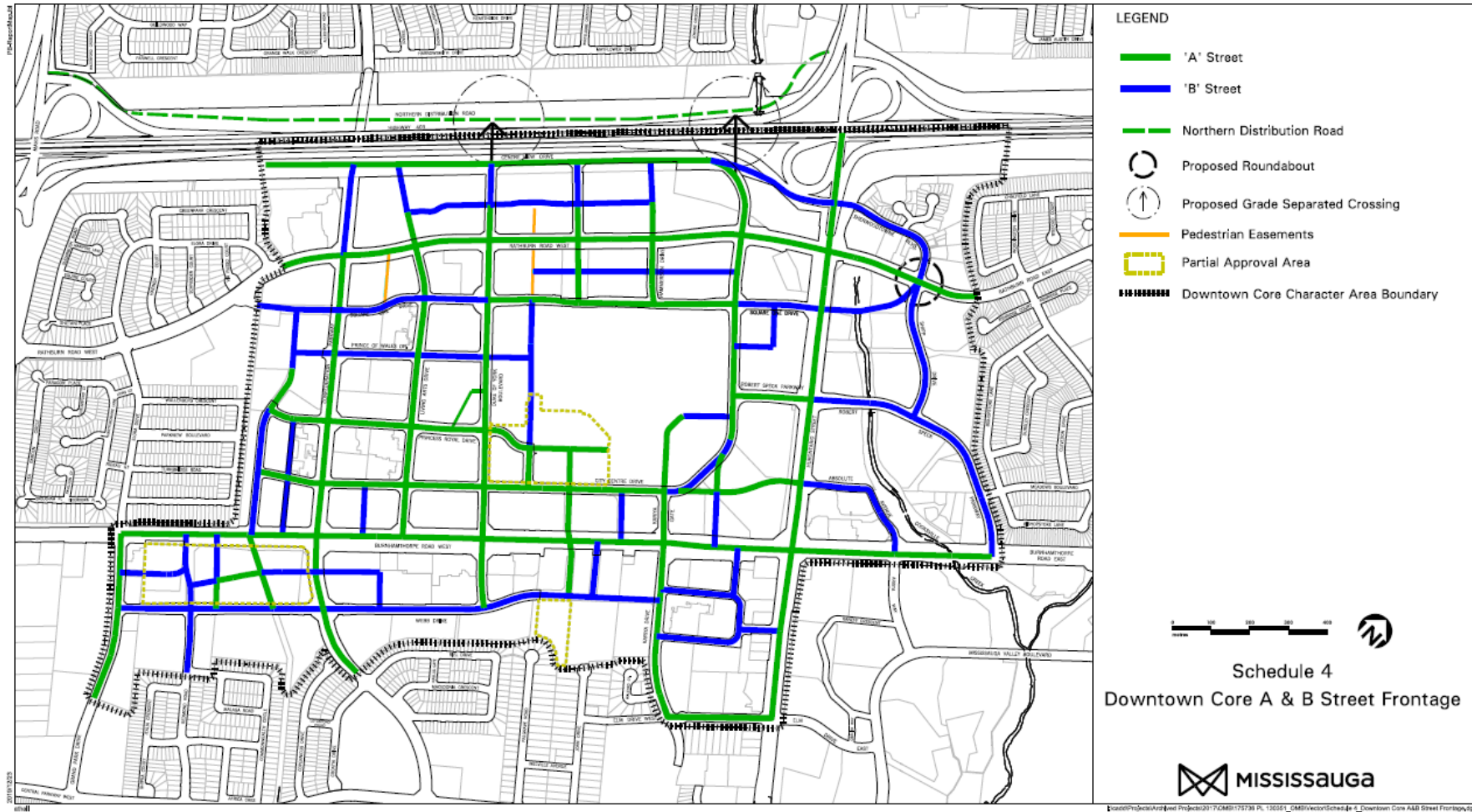


Figure 4-9: D.L.A.P. Schedule 4 – Downtown Core A & B Street Frontage

4.2.3 Summary of Future Sidewalk Network

The pedestrian network improvements, i.e. sidewalks, will be part of the planned and proposed future road network improvements discussed in **Section 3.3**. The existing sidewalk gaps in the network should be considered for future improvements too.

In addition to the public road improvements, the pedestrian network can also be improved through private roads and pedestrian easements as identified in D.L.A.P.

5 Transit Networks

5.1 Existing Transit Networks

Three transit systems serve the study area: MiWay (Mississauga Transit), Brampton Transit (Züm), and GO Transit. These transit systems provide connectivity for local residents and businesses to other routes in Peel Region and Toronto.

Figure 5-1 illustrates the existing MiWay transit network (2020) prior to COVID-19 service and route changes. **Figure 5-2** illustrates the existing GO Transit and Brampton Transit Networks.

Appendix B provides detailed tables describing the GO Transit Routes and MiWay Routes that service the study area.

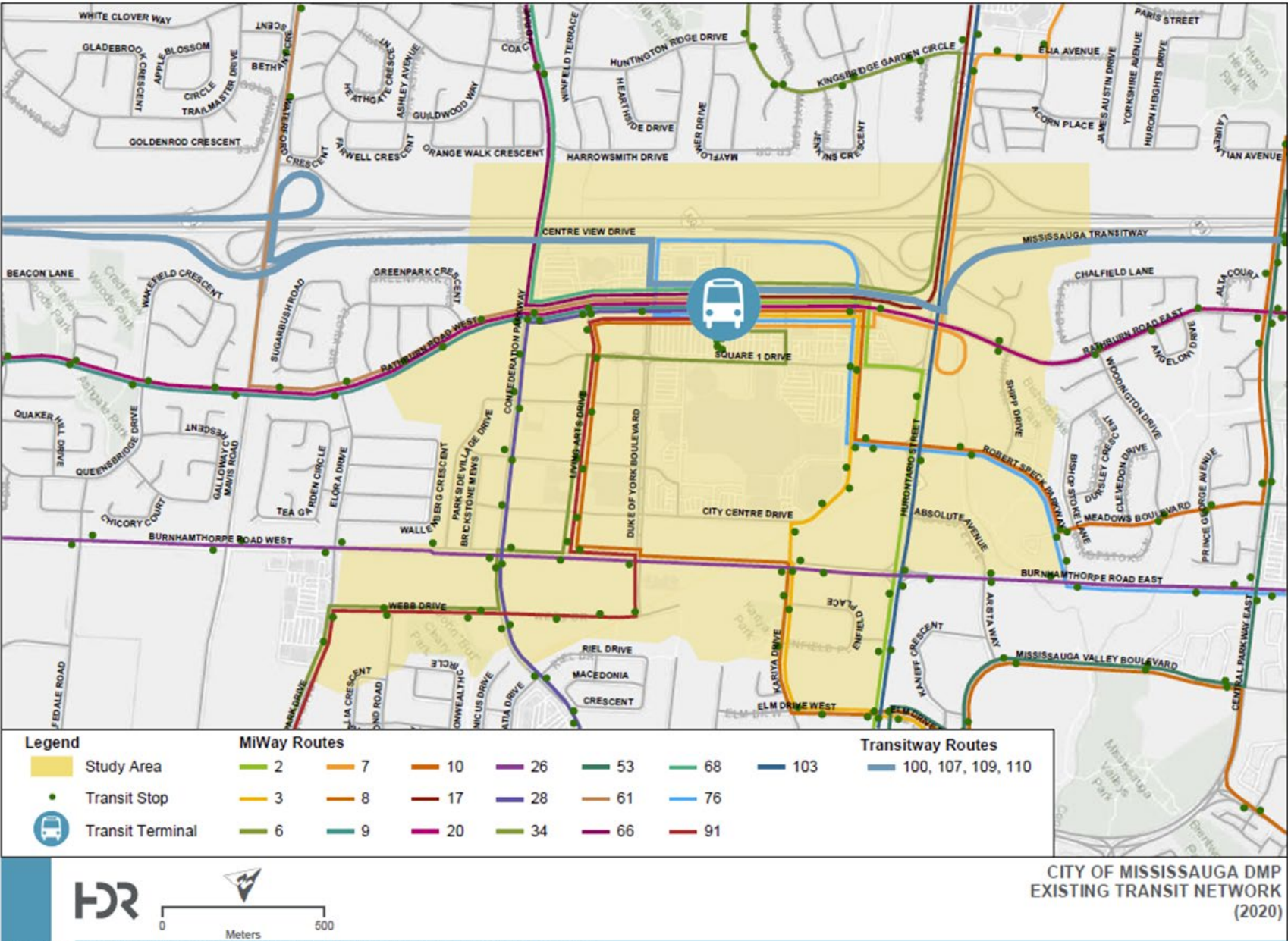


Figure 5-1: Existing MiWay Transit Services



Figure 5-2: Existing GO Transit and Brampton Transit Networks

MISSISSAUGA TRANSITWAY BRT

Initiated by Metrolinx and the City of Mississauga, the Mississauga Transitway BRT (herein referred to as the ‘Transitway’) is a dedicated bus corridor which spans 18 km from Winston Churchill Boulevard to Renforth Drive with 12 stations. The Transitway is an inter-regional transit route that was constructed as part of an initiative that will create a dedicated 100 km bus corridor from Oakville to Pickering. Although the Transitway is currently operational with a stop at City Centre Terminal, the Transitway through the downtown area is not complete and is further discussed in **Section 5.2.3**. **Figure 5-3** illustrates the current Transitway service route.

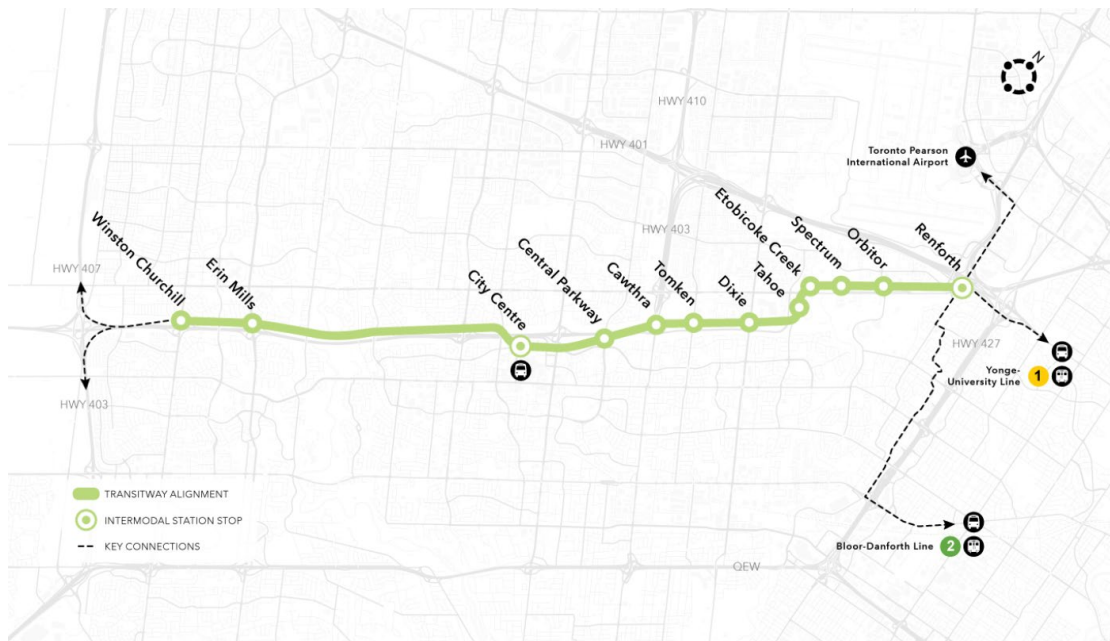


Figure 5-3: Mississauga Transitway Route

Source: Metrolinx

5.2 Future Transit Network

5.2.1 MiWay Five Transit Service Plan

The MiWay Five Transit Service Plan 2016 – 2020 was developed to move Mississauga’s transit system from a design that radiates from the Downtown Core to a grid network to allow for more frequent and direct service along the main roads.

As part of the service plan, service updates on different routes are scheduled every six to eight weeks. The goals of these updates are to:

- Enhance the grid network to provide stronger corridors;
- Provide more frequent service on main corridors;
- Provide more service outside of weekday rush hours;
- Provide more service between key destinations;
- Integrate with Mississauga Transitway;
- Provide direct connections between major transit hubs;
- Improve connections with GO stations;
- Improve service to major employment areas, colleges, and universities; and,
- Improve connections to neighbouring communities.

With the launch of MiWay Five in 2016, a service plan is developed yearly based on feedback from public information sessions and patterns in transit ridership. This analysis helps the City make adjustments to the plan every year to best serve customers.

5.2.2 MiWay Infrastructure Growth Plan

The City of Mississauga is currently undertaking the MiWay Infrastructure Growth Plan (M.I.G.P.) to develop a strategy to direct the effective allocation of transit infrastructure. The objectives of the M.I.G.P. are to:

- Develop a terminal and stop classification system and create associated standard designs to support a consistent “look and feel” for MiWay stops and terminals;
- Identify and prioritize infrastructure requirements at existing or new terminals in response to existing constraints and new networks; and
- Identify and prioritize the most beneficial transit priority applications for MiExpress routes at key intersections.

A stakeholder workshop was held in March 2020 to present the needs and challenges of the current transit network and infrastructure. Based on the materials presented at the workshop, there are no infrastructure improvements identified in the Downtown Core.

5.2.3 Proposed Transit Network Improvements

DOWNTOWN MISSISSAUGA MOVEMENT PLAN 2014

As mentioned in **Section 4.1.2**, the D.M.M.P. developed a user hierarchy to prioritize different modes of movement over other modes and identified transit as the second priority (behind Active Transportation) for users of different modes of transportation. The D.M.M.P. guiding principles pertaining to transit include:

- An Integrated Transit Network: Developing an integrated transit network, designed around Higher Order Transit (Hurontario-Main Light Rail Transit and Mississauga Transitway) and a revised local transit network.
- Transit-Oriented Development Opportunities by linking regional Higher Order Transit to regional destinations (Square One, Living Arts Centre, City Hall, Sheridan College and future office developments).
- Transportation Demand Management (T.D.M.) measures promoting transportation choices, providing incentives, and supporting the efficient use of the finite downtown transportation network.

Figure 5-4 illustrates a morning peak period route concept for local and regional bus networks in the downtown area in 2031. This route concept was developed for the Hurontario-Main L.R.T. project as a suggested modification to existing bus transit routing to provide a complementary, integrated local transit network to support the introduction of the Hurontario-Main L.R.T. and Main Street Transit Hub.

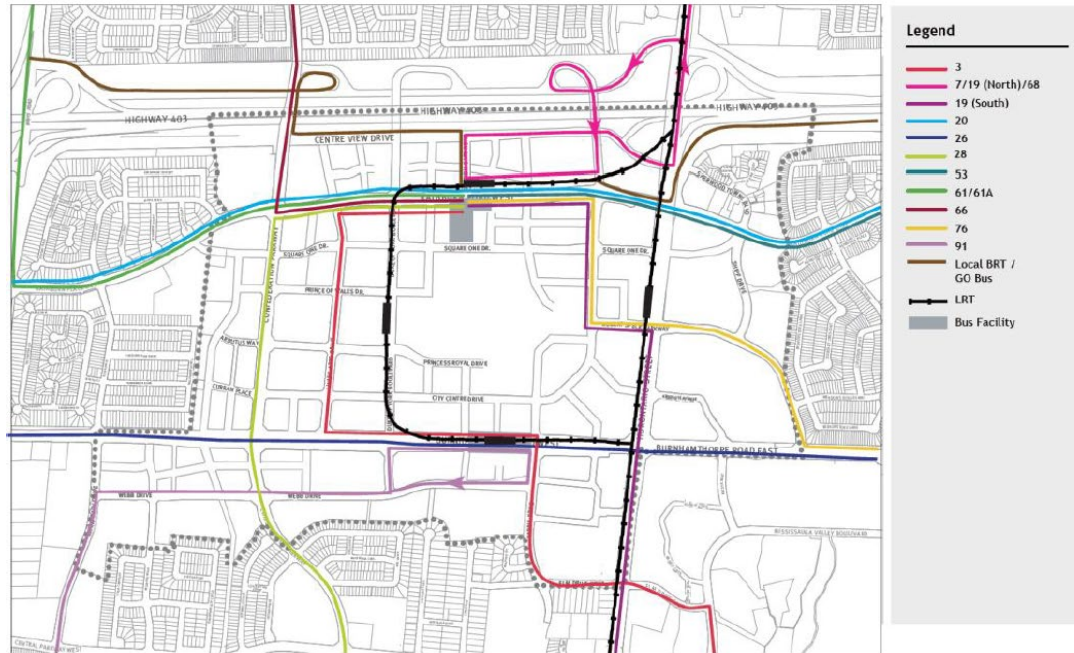


Figure 5-4: DMMP Proposed Transit Network

As mentioned in **Section 5.1**, the Transitway is subject to future improvements for the Downtown Core segment. The Downtown21 Plan showed the Transitway being extended west from Hurontario Street with a median alignment on Rathburn Road, shared with L.R.T. between City Centre Drive and Living Arts Drive. However, the D.M.M.P. noted a preference for the Transitway to have a separate alignment from the L.R.T. and general traffic through the downtown. The Hurontario-Main L.R.T. and D.M.M.P. studies developed an alignment for the Transitway based on the approved 2004 E.A. alignment. **Figure 5-5** illustrates an extraction of the 2004 EA drawings showing the origin of this route concept (in yellow).

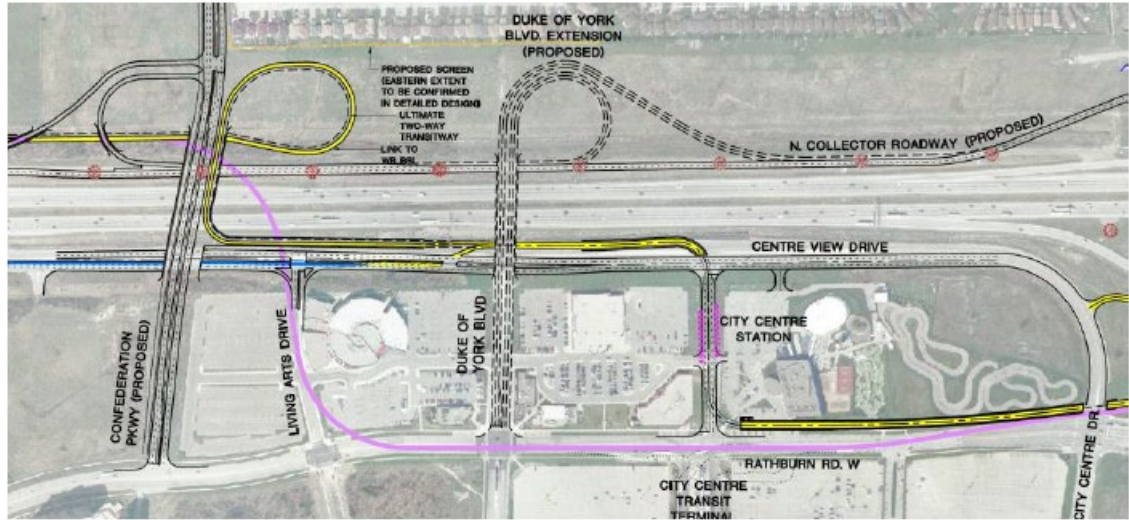


Figure 5-5: 2004 EA Route Confederation Parkway to City Centre Drive

DOWNTOWN CORE LOCAL AREA PLAN, LPAT APPROVAL 2020

The D.L.A.P. identified a Downtown Core that will be served by a higher order transit system that provides service within the Downtown with connections to other parts of the City, neighbouring municipalities, and inter-regionally as identified in Schedule 3 - Downtown Core Long Term Transit Network that is illustrated in **Figure 5-6**.

The existing transit terminal serves the Transitway; however, in the long term, an additional B.R.T. station is proposed near the intersection of Rathburn Road West and City Centre Drive. Proposed higher order transit stations within the Downtown Core are illustrated in **Figure 5-6**.

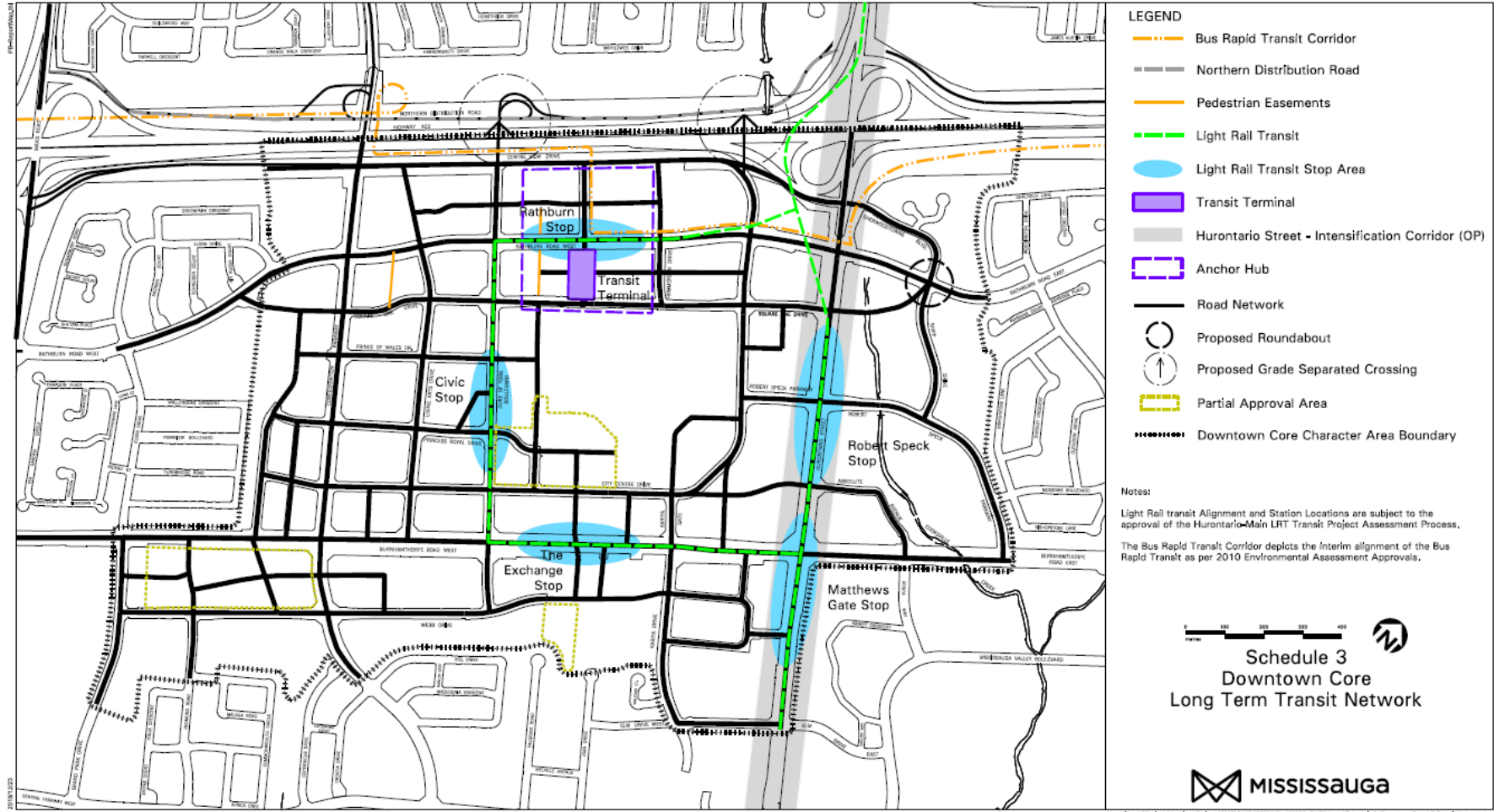


Figure 5-6: DLAP Schedule 3 – Long Term Transit Network

MIWAY FIVE 2021-2025 SERVICE PLAN

The MiWay Five 2021-2025 Service Plan is currently underway and is in the plan development stage (March – April 2020). Public Information Centres will be held once the plan is completed and final recommendations to Council will follow.

MIWAY PROPOSED 2041 DOWNTOWN TRANSIT NETWORK ROUTING

To inform longer-term transportation and land use studies such as D.M.P. MiWay has recently developed a Proposed 2041 Downtown Transit Network Routing, as shown in **Figure 5-7**, to account for proposed services changes and infrastructure projects.

The 2041 proposed transit network within Downtown Mississauga, premised on the following assumptions:

- Routing recommendations based on MiWay Five (2016-2020)
- Proposed routing recommendations based on the draft MiWay Five: Next Five (timeline TBD)
- Construction of the Burnhamthorpe Bus Bays at The Exchange
- Completion of station improvements at Central Parkway Transitway Station as per M.I.G.P.
- Completion of station improvements at Cawthra Transitway Station per M.I.G.P.
- Transit requirements as part of the Redmond/Webb/Exchange/Kariya EA
- Areas of major development taking place within/around the downtown
- Introduction of the Hurontario LRT
- Introduction of the Hurontario LRT downtown loop (via Burnhamthorpe Rd., Duke of York Blvd., & Rathburn Rd.)
- City Centre Transit Terminal remains at its current location as details of a future downtown terminal and Mississauga Transitway connection have yet to be finalized (once finalized, access routing shown on map below can be revised).

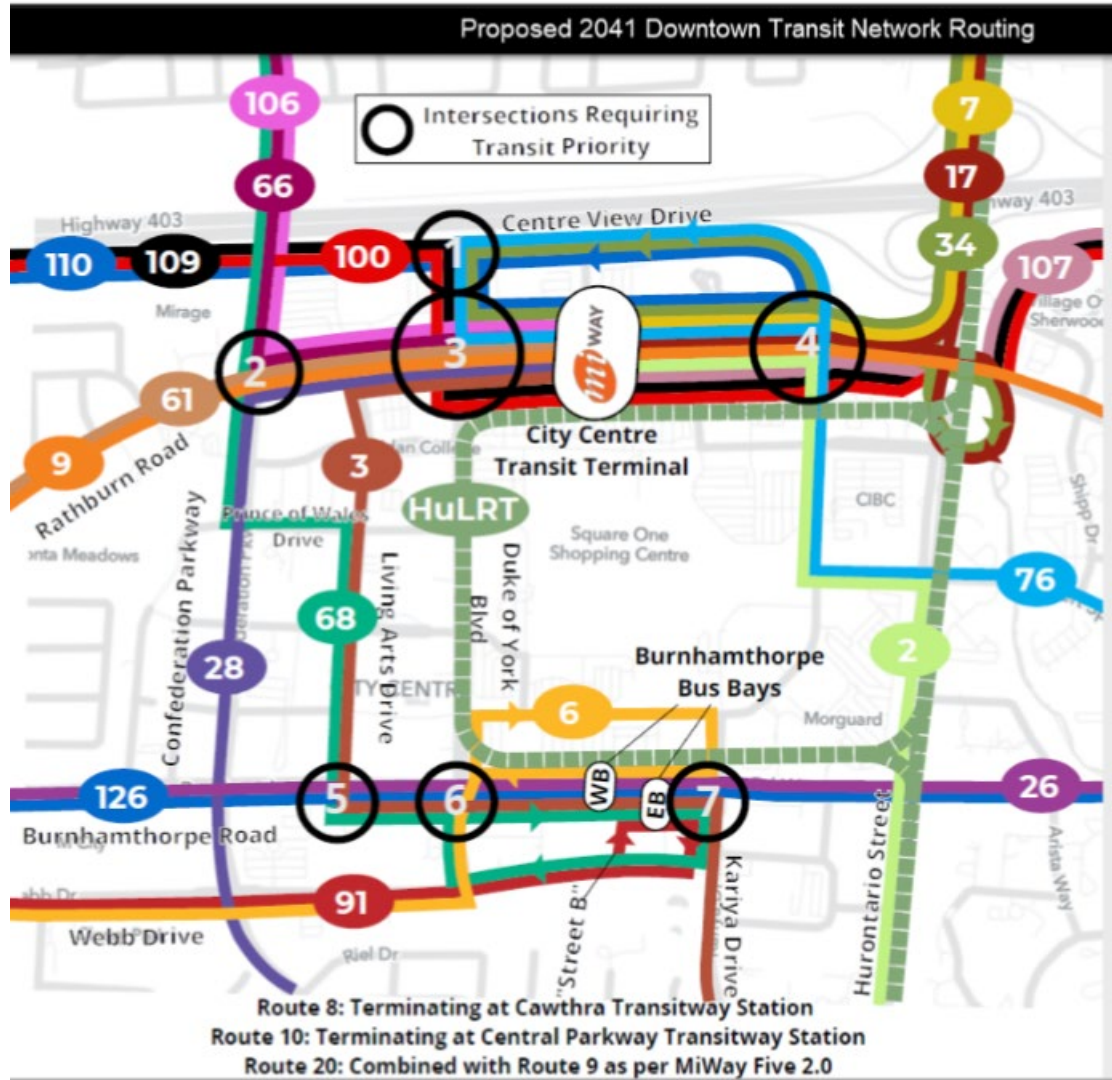


Figure 5-7: Proposed 2041 Downtown Transit Network Routing

DOWNTOWN MISSISSAUGA TERMINAL & TRANSITWAY CONNECTION (D.M.T.T.C)

An initial business case has been completed by Metrolinx considering a grade-separated transitway alignment and a new integrated MiWay/Go Terminal station. The City plans to initiate the D.M.T.T.C. study to further investigate the alignment of the Transitway and the location of the City Centre Terminal, which is not the focus of this DMP.

HURONTARIO-MAIN L.R.T. PRELIMINARY DESIGN AND TRANSIT PROJECT ASSESSMENT PROCESS (T.P.A.P.)

In 2014, Metrolinx, the City of Mississauga and the City of Brampton, as project co-proponents, completed an environmental assessment for the

introduction of Light Rail Transit (L.R.T.) in the Hurontario-Main Street Corridor. This L.R.T. project involves the operation of a high frequency L.R.T. service in the segment of the Hurontario-Main corridor between the Port Credit GO Station to the GO Station in Downtown Brampton.

For road elements, the T.P.A.P. recommended that

- One through lane in each direction be converted to L.R.T over most of the route length;
- Existing left-turn lanes be maintained and in some cases be lengthened to accommodate the changes in traffic flow;
- Existing channelized right-turn lanes and associated separating islands at intersections be generally removed in accordance with the proposed complete street design approach;
- Minor streets and private accesses be operating as right-in/right-out only.

The preferred track alignment for Mississauga Downtown Core includes a loop along Rathburn Road West, Duke of York Boulevard, Burnhamthorpe Road West as shown in **Figure 5-8**.

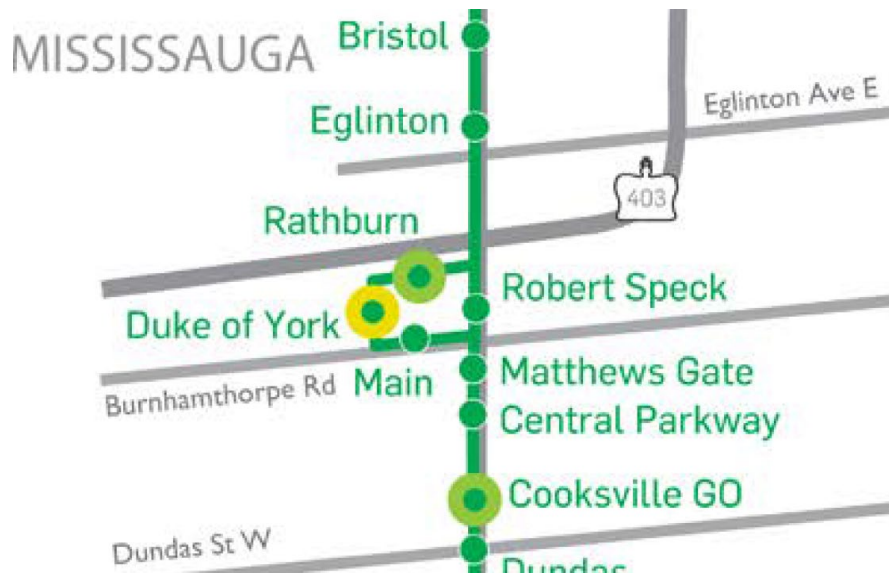


Figure 5-8: Hurontario-Main L.R.T. Preferred Track Alignment

Source: Hurontario-Main LRT Environmental Project Report 2014

METROLINX HURONTARIO LRT

Metrolinx and Infrastructure Ontario (I.O.) have initiated the 18 km Hurontario L.R.T. project, which will connect Mississauga and Brampton, and provide

links to the Milton and Lakeshore West GO lines, MiWay, Brampton Transit, Züm, and Mississauga Transitway at Square One. **Figure 5-9** illustrates the Hurontario L.R.T. route map.

Although the D.M.M.P., the D.L.A.P. and the HuLRT TPAP illustrated an L.R.T. loop through the Downtown, Metrolinx decided in 2019 to reduce the number of stops within the Downtown from three stops to one stop. As such, the Hurontario L.R.T. will provide a direct route from Hurontario Street to the Rathburn Road L.R.T. stop.

Through consultation with the Brampton Transit, it was confirmed that the existing Brampton service (Züm 502) on Hurontario Street will be replaced by the Hurontario L.R.T.



Figure 5-9: Hurontario LRT Route Map

5.3 Summary of Future Transit Network Improvements

The Hurontario L.R.T. is planned to be completed by fall 2024, which will be in the 2031 and 2041 base case networks. The Downtown Loop identified in the H.M.L.R.T. will be assessed in the 2041 scenarios. The Mississauga Transitway is partially constructed and in use. Its Downtown segment as well as the integrated Downtown Transit Terminal will be assessed in the 2041 scenarios and to be further investigated in other studies.

Figure 5-10 illustrates the major transit network improvements that will be considered in the future scenarios. **Table 5-1** summarizes the proposed modelling scenarios to assess those improvements. Transit network details, including MiWay routing options, will be developed and documented in the next phase.



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Figure 5-10: Future Higher-order Transit Network



Table 5-1: Future Transit Modelling Scenarios

| CODE | TRANSIT INFRASTRUCTURE | 2031 | 2041 | | | | |
|----------------------|----------------------------------------------------------------------------------------------------------|-----------|-----------|----------------------|----------------------|-------------------------|------|
| | | Base Case | Base Case | DT Loop ⁶ | | Transitway ⁷ | |
| | | | | LRT-L | “BRT”-L ¹ | DTTWY | TERM |
| LRT | LRT - in/out to Rathburn Rd & Station Gate Rd | X | X | | | | |
| LRT-L | LRT Loop (Burnhamthorpe / Duke of York) | | | X | | TBD by DT Loop Tests | |
| “BRT”-L ¹ | “BRT” Loop (TBD) | | | | X | | |
| TWY | Current Transitway Operations | X | X | X | X | | |
| DTTWY ² | Transitway Alignment and Station Gate Stop, no terminal consolidation | | | | | X | |
| TERM ³ | Transitway Alignment and new Transit Terminal | | | | | | X |
| BBB-NS ⁴ | Burnhamthorpe Bus Bays – Northside Camrost Solution | X | X | | | | |
| BBB-ALL ⁵ | Burnhamthorpe Bus Bays –Northside and Southside, ultimate configuration (assumed to coincide with LRT-L) | | | X | TBD | TBD by DT Loop Tests | |

¹ Details to be confirmed with the City: transit improvements might include a dedicated transitway around DT core, transit service enhancements, transit signal priority, etc.

² Downtown Transitway as per 2004/2009 EA studies.

³ Per MX IBC Alternative ‘B’ for a new Transit Terminal.

⁴ To be built by Camrost as part of the Exchange District. Note that Camrost will only build two bus bays close to the Exchange.

⁵ Per the 2014 Hurontario LRT TPAP on both sides of the street.

⁶ DT Loop scenarios to confirm whether LRT-L will be needed or a “BRT”-L would be sufficient to provide necessary ridership for the future mode share target.

⁷ After DT Loop, Transitway scenarios to test the needs for DTTWY and TERM on top of the findings of DT Loop.

6 Conclusion

Based on a comprehensive review of existing plans, studies, and the 2019 D.C. capital program, a series of maps for road, active transportation, and transit network improvement have been developed as a base to guide the development of the Downtown Movement Plan.

FUTURE ROAD NETWORK IMPROVEMENTS

The future base network includes road network improvements, which are discussed and identified in **Section 3.3**. E.A. approved and pending E.A. improvements are included in the future base road network as well as some private roads - as identified in the D.L.A.P. where a developer has submitted an application for a Planning Act approval.

Additional road improvements without approved or pending EAs (referenced as 'other improvements') are based on recommendations found from the 2019 Development Charges Transportation Background Study, the Downtown21 Plan, and the D.L.A.P.

FUTURE ACTIVE TRANSPORTATION NETWORK IMPROVEMENTS

The pedestrian network improvements, i.e. sidewalks, will be part of the planned and proposed future road network improvements. The existing sidewalk gaps in the network should be considered for future improvements. In addition to the public road improvements, the pedestrian network can also be improved through private roads and pedestrian easements as identified in D.L.A.P.

For cycling, the future base cycling network were identified based on the status and timing of future roads that are approved per relevant E.A. study or per the Active Transportation COVID-19 Recovery Framework. Although there are a number of additional cycling facility improvements that are identified in the Cycling Master Plan 5-Year Implementation Plan, these facilities have no status and were categorized under Other Improvements.

FUTURE TRANSIT NETWORK IMPROVEMENTS

The key transit infrastructure improvements for Downtown Core will be the Hurontario L.R.T. and the Downtown Transitway and Transit Terminal as identified in **Figure 5-10**.

It is also noted that the alignment of the Downtown Transitway as well as the proposed new Transit Terminal will be determined through other studies.

Appendix A – Future Cycling Network Improvements

Multi-Modal Network and Plans - Task B

Mississauga Downtown Movement Plan



Appendix B – Existing Transit Routes

Multi-Modal Network and Plans - Task B

Mississauga Downtown Movement Plan

