



Town of Caledon

Multi-Modal Transportation Master Plan

June 2024



**FUTURE
CALEDON**

In Collaboration with
R.J. Burnside & Associates Ltd.



BURNSIDE

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Executive Summary

Caledon MMTMP: Charting a New Course to 2051

The Caledon Multi-Modal Transportation Master Plan (MMTMP) is a long-range plan that coordinates mobility solutions of infrastructure, services and policies with anticipated future development. This plan is particularly important for Caledon, given the unprecedented growth that is planned for the municipality. The transportation system response to planned growth is presented in a manner that is environmentally, operationally and financially sustainable.

The plan identifies long-term needs for elements of the transportation system and determines an overall recommendation based on the vision and goals of the transportation master plan, while incorporating the various policy objectives of the municipality.

This MMTMP was integrated with the development of “Future Caledon”, the Town’s new Official Plan (OP). The Town’s OP is a comprehensive plan and policy document that dictates how land in the Town should be used and developed. It applies to all lands within the municipal boundary and the policies within it provide direction for the size and location of land uses, provision of municipal services and facilities, and preparation of regulatory by-laws to control the development and use of the land.

This study was carried out through an open public process as a Master Plan study (Approach #1) under the Municipal Class Environmental Assessment (MCEA) process to serve as direct input to any subsequent Environmental Assessment (EA) studies that may be deemed appropriate. This study satisfies Phases 1 and 2 of the five-phase MCEA process.

There were several opportunities for stakeholder and public participation and engagement throughout the study. There were a total of two (2) Technical Advisory Committee (TAC) meetings and three (3) Public Information Centre (PIC) meetings. A variety of tools were used to inform the community, including direct mail, a webpage hosted on the Town’s website, dedicated project email addresses and phone numbers, social media (Facebook, Twitter), newspaper advertisements and Town press releases. Individual letters and notices were also sent by email/mail to Indigenous communities throughout the study process. Feedback received (by email, by phone and at these events) were documented and incorporated in the study, where appropriate.

Master Plan Context

The Town of Caledon is abundant in natural heritage. Natural environment resources are important elements of Caledon that provide habitat, recreation and economic viability. The Town’s urban structure is largely shaped by several significant geographical and environmental features. The Oak Ridges Moraine (ORM) runs through much of the northeast

part of the Town and provides for important groundwater recharge for the Greater Toronto Area. The Niagara Escarpment's diverse ecosystem extends through the Town and much of the remaining land area within the Town of Caledon is located within the Greenbelt Plan Area, which was introduced in 2005 to protect the natural environment and agricultural areas.

Caledon's history is rich with Heritage buildings and landscapes with extensive listed and designated properties, heritage conservation districts and candidate cultural heritage landscapes.

The Town of Caledon will face the challenge of accommodating substantial development growth adjacent to these natural and cultural assets. The Region of Peel Official Plan Review has allocated growth in population for Caledon from 76,581 to 300,000 by the year 2051, with comparable growth in employment to 125,000 jobs. Much of this growth will be focused in the Settlement Area Boundary Expansion (SABE) in south Caledon.

Vision

The Vision developed for the MMTMP is as follows:

By 2051, the Town will have a transportation system that provides accessible, affordable, safe, and sustainable travel choices for all, and is well-integrated, effective to use, promotes healthy lifestyles, and supports economic prosperity, livable communities and climate commitments.

Objectives

The MMTMP's supporting objectives include:

- Develop a future-ready transportation plan for the Town and expand the multi-modality of the transportation system including driving, transit, walking, cycling, and other emerging mobility options;
- Provide infrastructure to support and manage future land use growth and address the needs and priorities for both rural and urban communities;
- Deliver sustainable strategies that protect natural heritage assets while reducing transportation's effects on climate change;
- Build a safe and inclusive transportation system that supports age-friendly communities and promotes healthy living; and
- Develop complementary transportation solutions that supports Provincial, Regional, and Local policies and the Town's Official Plan (OP) update.

Transportation Needs and Opportunities

Future transportation needs were assessed for all modes of municipal mobility based on policy objectives related to capacity, equity and sustainable transportation system targets. The Region of Peel Transportation Forecasting Model, which accounts for the latest population and employment growth based on a preliminary assessment of land use geographic distribution, was used to project future traffic volumes. Mobility needs and opportunities to the year 2051 include the following:

- A transportation plan to address the additional capacity and goods movement needs on collector roads and future Town arterials that will be within the planned SABE growth area and addresses traffic levels through urban areas and rural communities including Caledon Village. The plan will need to accommodate active modes with a Complete Streets approach to mobility and align with an urban form of nodes and corridors.
- A transportation plan to provide intermunicipal transit opportunities based on the MTSAs (in Bolton and Mayfield West) and along Highway 413 and introduce a fixed-route transit corridor system that maximizes the number of people residing near transit and connections to major origins and destinations.
- A transportation plan that will provide a network of cycling and pedestrian infrastructure with context sensitive solutions given roadway topography and natural and cultural heritage features. An Active Transportation Master Plan (ATMP) will provide an implementation plan that will identify new pedestrian, cyclist, and trail routes and facilities, maximize network connectivity, provide direction for connectivity to future secondary plan areas in the SABE lands and provide support and recommendations for updated operational policy and design guidelines, Travel Demand Management (TDM) measures, parking demand management measures and emerging technologies.

Evaluation of Alternative Solutions

Alternative strategies were considered that focused on 1) major roads and highways, 2) transit and active transportation and 3) a combination of road and alternative modes. Given the magnitude of planned growth, the economic objectives of the Town and climate change commitments a combination of improvements has been identified as the preferred alternative solution.

Road Network Plan

Road network improvements were developed based on the following objectives:

- **Capacity of Commuter Accommodation:** The need for public commuting by automobile includes a range of purposes such as travel to work, medical, shopping or leisure purposes from/to locations that are not adequately served by transit / active transportation and/or do not adequately serve users with mobility or other barriers to travel by other modes. Capacity improvements aim to facilitate these driving trips while minimizing congestion.
- **Accommodation of Alternative Modes of Travel:** In order for Caledon roads to provide all the necessary street elements and subsurface utilities for successful Complete Streets, the Town must acquire the necessary property and public right-of-way. This right-of-way will not only be used to facilitate mobility, but in an urbanized environment like the future SABE, the public right-of-way can be used to support an active transportation, pedestrian-oriented community.
- **Capacity for Goods Movement:** Within urbanized areas, the economic competitiveness of a municipality is affected by the efficiency and capacity of the movement of goods to / from business areas. Traffic congestion or lack of direct routes can significantly add to the cost of goods and services through transportation costs. Economic competitiveness often relies upon the connectivity between industry and transportation infrastructure including freeways, regional arterial roads and intermodal terminals. Capacity improvements aim to ensure that efficient goods movement is provided.
- **Network efficiency and connectivity:** Network efficiency and road connectivity needs commonly result from discontinuous or misaligned roadways. Misaligned intersections can contribute to poor roadway geometry and/or traffic movements that are not adequately supported by roadway conditions.
- **Community Circulation and Land Access Accommodation:** Within the Town of Caledon, new collector road networks are established by the Town's Secondary Plans. Secondary plans provide more detailed policies for the area it covers, and also establishes a collector road network within the lands. Guiding principles are provided to assist in the development of a Secondary Plan framework for the SABE.

Road improvement recommendations were summarized for the 2031, 2041, and 2051 horizon years. These road recommendations are presented in **Table ES-1, ES-2, and ES-3** respectively. The proposed ultimate (2051) road network is illustrated in **Figure ES-1**.

Table ES-1: Road Improvement Recommendations (2031)

ID	Road	From	To	Recommendation
1	Chinguacousy Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
2	McLaughlin Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes

ID	Road	From	To	Recommendation
3	Albion Vaughan Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes
4	Humber Station Road	Mayfield Road	North of King Street (Settlement Area Limits)	Urbanization and widening from 2 to 4 lanes
5	Abbotside Way	Bonnieglen Farm Boulevard	Heart Lake Road	Extension (4 Lanes)
6	Healey Road	The Gore Road	Coleraine Drive	Urbanization and widening from 2 to 4 lanes
7	Torbram Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
8	George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 Lanes)
9	Kennedy Road	Newhouse Boulevard	Old School Road	Urbanization and widening from 2 to 4 lanes

Table ES-2: Road Improvement Recommendations (2041)

ID	Road	From	To	Recommendation
10	Innis Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
11	Centreville Creek Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
12	Old School Road	Winston Churchill Boulevard	Airport Road	Urbanization and widening from 2 to 4 lanes
13	Healey Road	Airport Road	The Gore Road	Urbanization and widening from 2 to 4 lanes
14	Kennedy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
15	Caledon King Townline	King Street	Columbia Way	Urbanization and widening from 2 to 4 lanes
16	Columbia Way	Regional Road 50	Caledon King Townline	Urbanization and widening from 2 to 4 lanes

Table ES-3: Road Improvement Recommendations (2051)

ID	Road	From	To	Recommendation
17	Chinguacousy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
18	McLaughlin Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes
19	Bramalea Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes
20	Heritage Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
21	Creditview Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes
22	Heart Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes

Additional road connectivity and network studies are listed below in **Table ES-4**

Table ES-4: Additional Road Studies and Classifications

ID	Additional Study	Description	Study Classification	Lead Agency
18	Alternative Routes to Bolton and Established Communities	MTO to collaborate with the Region and the Town to extend Highway 427 to Highway 9.	Alternate Route Study	MTO
19	Mis-aligned intersections (see Appendix E)	Monitor mis-aligned intersections for future improvements	Intersection Monitoring	Town of Caledon / Region of Peel
20	Horseshoe Hill from Olde Base Line Road to Highway 9	Remove from Region's Strategic Goods Movement Network	Goods Movement Update	Region of Peel
21	Mountainview Road from Olde Base Line Road to Charleston Sideroad	Remove from Region's Strategic Goods Movement Network	Goods Movement Update	Region of Peel

Town of Caledon

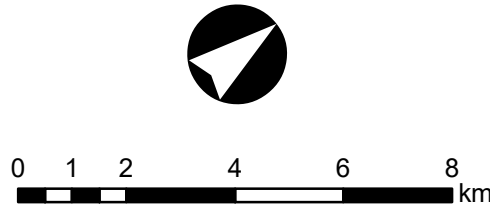
Transportation Master Plan

FIGURE ES-1

Road Network Improvements

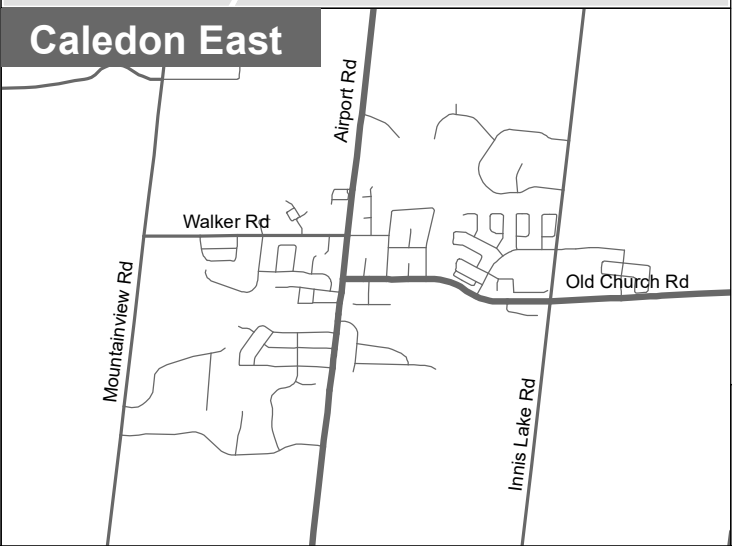
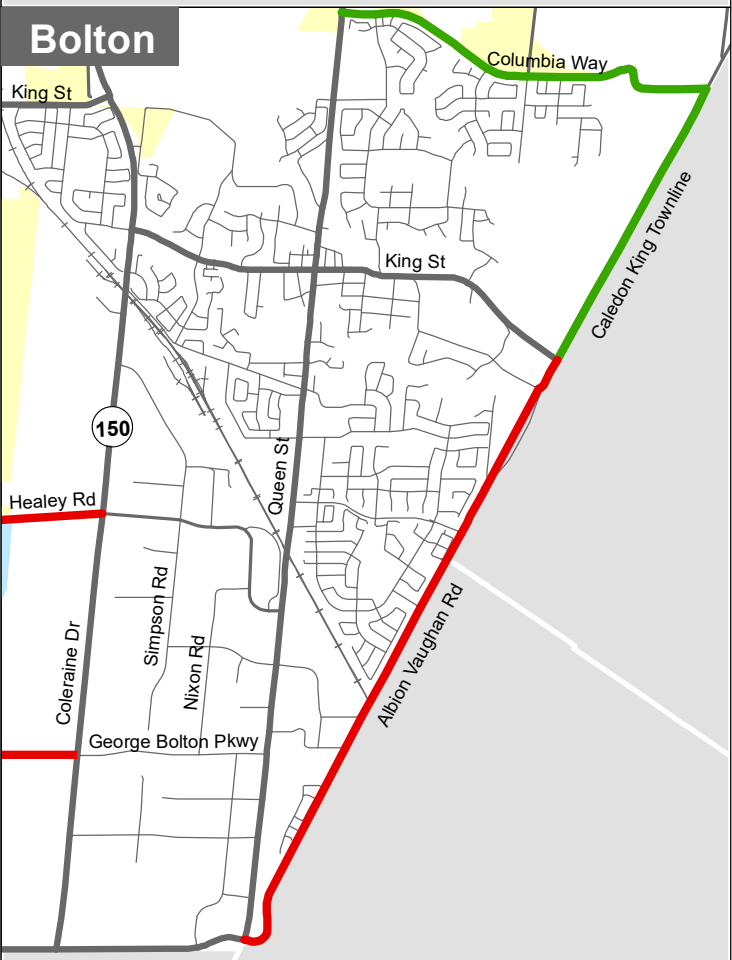
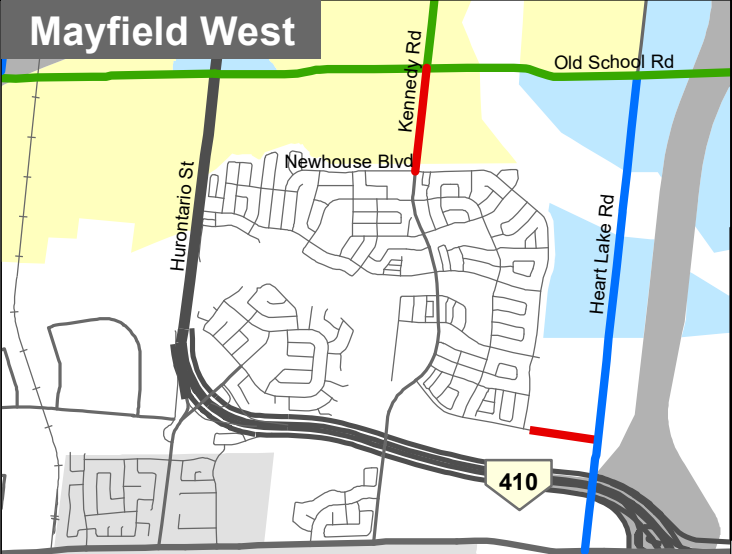
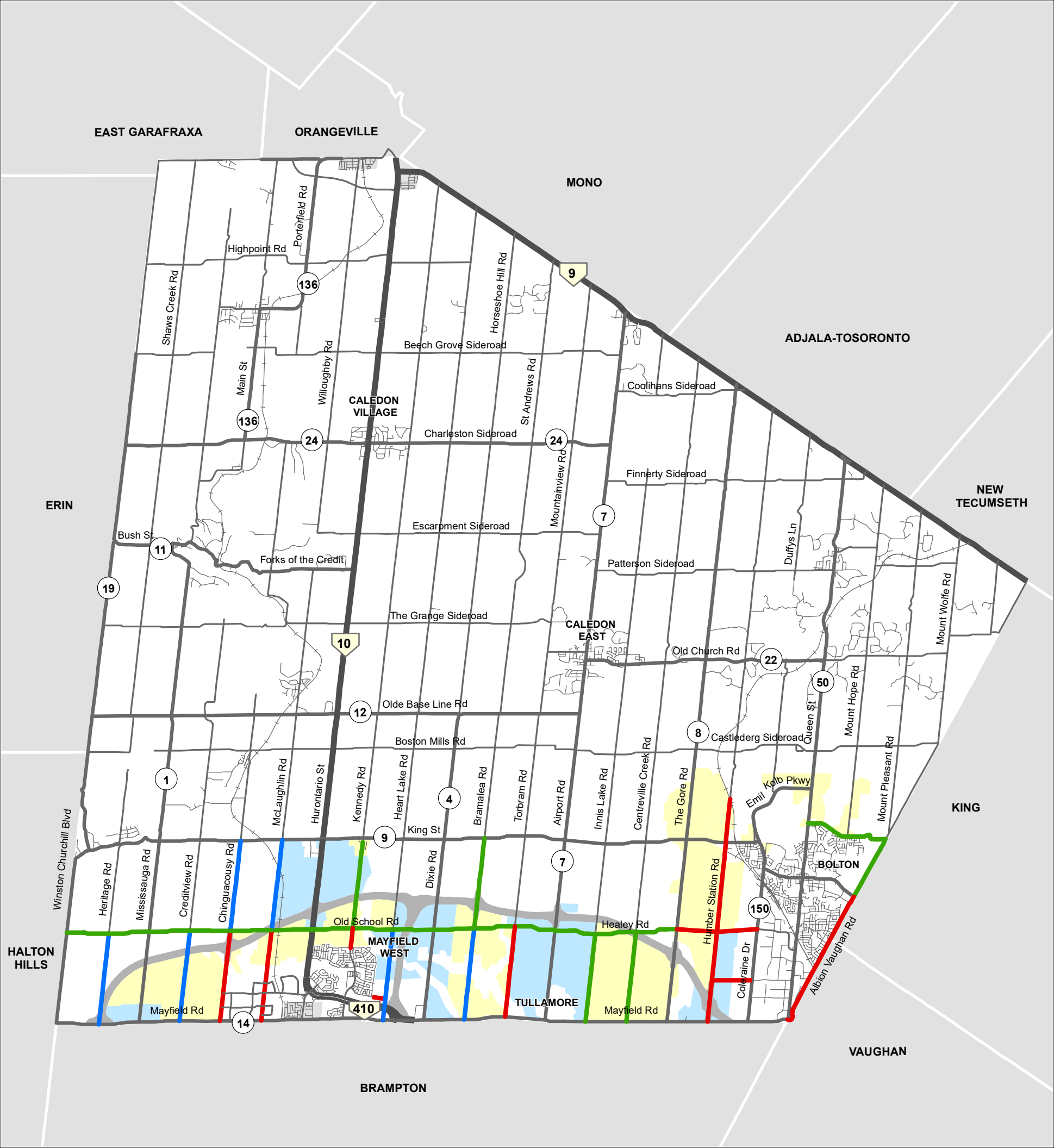
- Road Improvements (Phasing)**
- Widening to 4 lanes (by 2031)
 - Widening to 4 lanes (by 2041)
 - Widening to 4 lanes (by 2051)

- Future Land Uses**
- Community
 - Employment



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Active Transportation Plan

Active transportation strategies were developed based on the following objectives:

1. **Continuity:** Continuity within active transportation networks is important in establishing a reliable, “low-stress” active transportation network. Missing links should be identified in a network to identify and address continuity gaps.
2. **Connectivity:** Connectivity to proposed active transportation facilities in surrounding municipalities, existing and planned Regional routes and infrastructure, and key destinations should be considered in establishing a seamless inter-municipal network within and beyond Town boundaries.
3. **Policy framework for development and new infrastructure:** Opportunities will exist for the planning and implementation of active transportation infrastructure through the development review process. This will include active transportation strategies of new Secondary Plans in the SABLE area and with individual developments. A policy framework guides the continuous development of the active transportation network within the Town of Caledon.

The MMTMP recommends regularly updating the Town’s Active Transportation Plan to focus on the following objectives:

- Establish comprehensive walking and cycling networks that connect existing and new settlement areas and rural communities
- Establish a trail system that is integrated with the pedestrian and cycling network and includes connections to open spaces
- Identify opportunities and locations for safe pedestrian and cycling crossings, including strategically located grade-separated crossings
- Promotes bicycle amenities at major employment / residential / institutional developments
- Engages community groups

The Town’s AT Plan should provide a network implementation plan for facility selection, timing and costing of: paved shoulders on rural arterial and collector roads, separated facilities on urban arterial and collector roads and shared facilities on local roads and projects that enhance continuity within the Town and connectivity to adjacent municipalities. The active transportation plan is illustrated in **Figure ES-2**.

Town of Caledon

Transportation Master Plan

FIGURE ES-2

Future Active Transportation Network

Proposed Facility Type

- Multi-use Trail
- Painted Bike Lane
- Physically Separated
- Shared
- Visually Separated

Future Land Uses

- Community
 - Employment

Source: Town of Caledon ATMP



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Transit Network Plan

Given the trip characteristics, population, growth and phasing within the town's secondary plans, along with origin and destination patterns, the MMTMP recommends that the Town leverage Brampton Transit by 2035. Leveraging the existing Brampton Transit system will allow for benefits from economies of scale, fare integration and connectivity with a seamless transit service.

Beyond 2035 and following the completion of all Secondary Plans in the SABE area and the Highway 413 Environmental Assessment and Detailed Design, it is recommended that the Town revisit and undertake a transit strategy study to develop a service plan over a longer time horizon. In the meantime, it is also recommended that, as part of the secondary plan's approval process, the Town review and have developers submit and develop the transit plans, which will inform jurisdiction, implications, and connection to existing transit services, and also be reviewed by municipal partners. Transit planning can be informed by the needs and strategies at the secondary plan level, in which internal collector road networks, connections to external networks, and land use will be identified that will assess the efficiencies and merits of specific routing. Therefore, in addition to the proposed fixed-route transit corridors outlined in this MMTMP, the transit strategy study should take all transit plans from secondary plans as input for revisiting the transit plan at a larger scale to improve efficiency.

Proposed fixed-route transit corridors are illustrated in **Figure ES-3**. The fixed-route corridors serve as conceptual high-level recommendations for consideration in future studies to investigate further the feasibility of the proposed corridors, as well as internal connections to secondary plans.

Town of Caledon

Transportation Master Plan

FIGURE ES-3

Proposed Transit Network

Existing

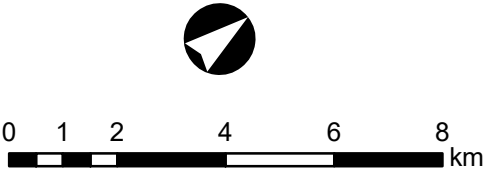
- GO Transit
- Brampton Transit
- Orangeville Transit

Future

- Proposed Corridors
- Bolton GO Rail
- Caledon GO Station
- Potential Second GO Station
- Mayfield Transit Hub
- GTA West Preferred Route

Future Land Uses

- Community
- Employment



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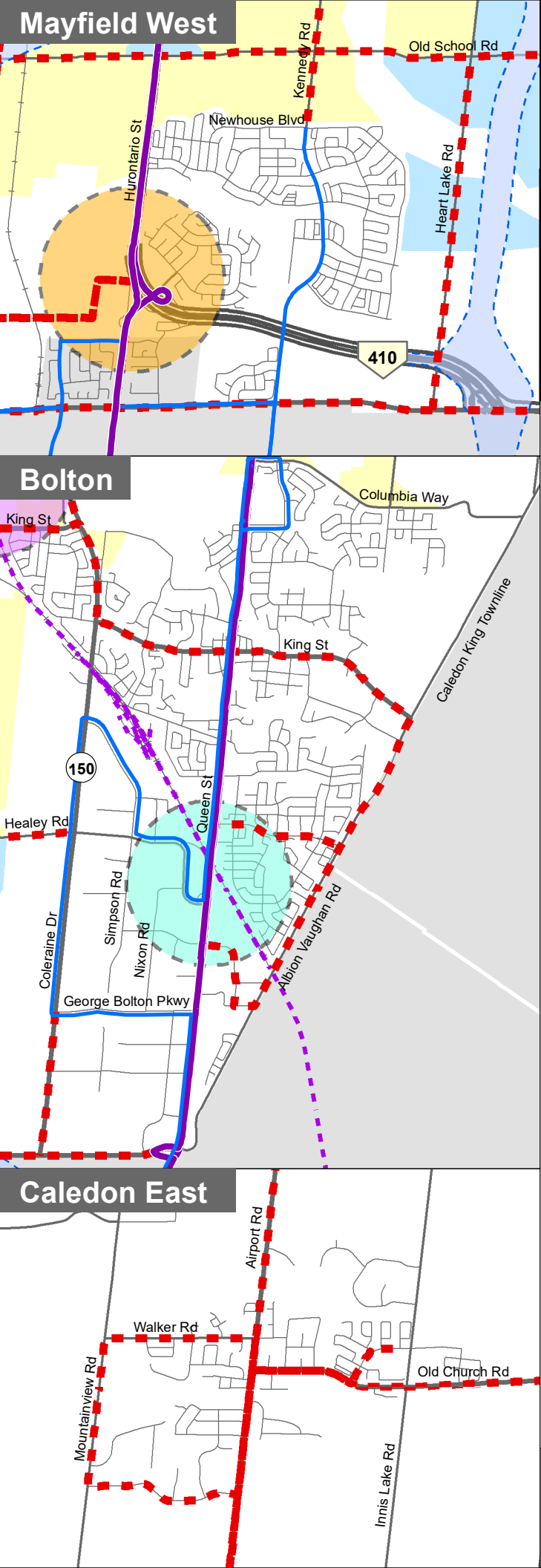
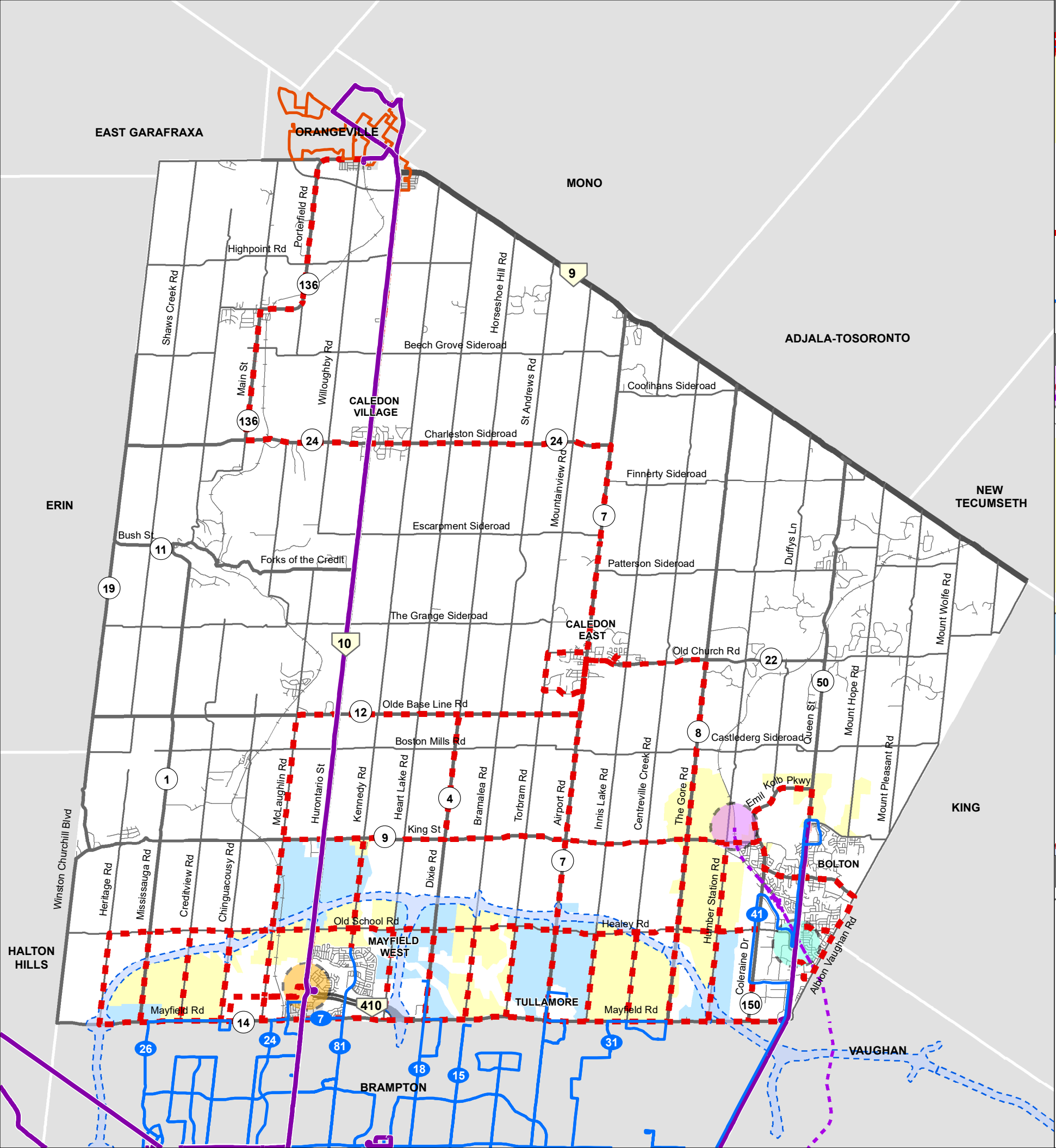


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Appendix C: Natural, Cultural and Archaeological Context

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1.0 Introduction

This chapter introduces the MMTMP including the purpose, study objectives, study approach, and consultation approach.

1.1 Study Purpose

The Town of Caledon initiated the Multi-Modal Transportation Master Plan (MMTMP) to assess future transportation needs in support of planned growth and to inform the Caledon Official Plan update. This study has been developed in parallel with the Town's new Future Caledon Official Plan (March 2024), which provides a plan and sets out policies for land development within the Town.

This document is an update to the 2017 Transportation Master Plan. It is the Town's plan to define and achieve transportation related goals to the year 2051 and meet the Town's strategic objectives.

1.2 Study Approach

1.2.1 Supporting Policies

The Town of Caledon's transportation system is integrated with adjacent municipalities, the Region of Peel, and the Province of Ontario. Due to this integration, the study approach must be aligned with key policies by the Province and the Region and consider the policies from other jurisdictions. Key provincial documents include the Provincial Policy Statement (PPS, 2020), Ministry of Transportation Ontario's (MTO's) Greater Golden Horseshoe Transportation Plan (2022), and A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2020).

The Region and the Town provide policy guidance through the Region and Town Official Plans, the Region of Peel Long Range Transportation Plan, and the Town's previous Transportation Master Plan. A summary of key documents is provided in **Appendix A**.

1.2.2 Municipal Class Environmental Assessment

This study was carried out through an open public process as a Master Plan study under the EA Act to serve as direct input to any subsequent EA studies that may be deemed appropriate. Undertakings that fall under the MCEA are defined by schedules with escalating requirements dependent on the potential for environmental impacts and level of complexity. The four different schedules are Schedule A, A+, B, and C. These schedules are outlined in **Table 1-1**.

Table 1-1: Schedules of the Class EA Process

Schedule	Summary
A	<p><u>Schedule A:</u> Projects are limited in scale, have minimal adverse environmental effects and include many municipal maintenance and operational activities. These projects are pre-approved and may proceed to implementation without following the full Class EA planning process. Schedule A projects generally include normal or emergency operational and maintenance activities.</p> <p><u>Schedule A+:</u> The purpose of schedule A+ is to ensure some type of public notification for certain projects that are pre-approved under the municipal class EA, it is appropriate to inform the public of municipal infrastructure project(s) being constructed or implemented in their area. There, however, would be no ability for the public to request a Part 2 Order. If the public has any comments, they should be directed to the municipal council where they would have more appropriately addressed.</p>
B (<\$2.4M)	<p>The proponent is required to undertake a screening process, involving mandatory contact with directly affected public and with relevant government agencies to ensure that they are aware of the project and that their concerns are addressed. If there are no outstanding concerns, then the proponent may proceed to implementation. Schedule B projects generally include improvements and minor expansions to existing facilities. However, if the screening process raises a concern which cannot be resolved, a Part II Order may be invoked; alternatively, the proponent may elect voluntarily to plan the project as a Schedule C undertaking.</p>
C (>\$2.4M)	<p>Such projects have the potential for significant environmental effects and must proceed under the full planning and documentation procedures specified in the Class EA document. Schedule C projects require that an Environmental Study Report (ESR) be prepared and filed for review by the public and review agencies. Schedule C projects generally include the construction of new facilities and major expansions to existing facilities.</p>

The scope of the study will follow Section 2.7 (Master Plans) in the Municipal Class EA guidelines, following Master Plan Approach #1. This study satisfies Phases 1 and 2 of the five-phase Municipal Class EA process.

This Master Plan can be used as the basis for and in support of future investigations for specific Schedule B and C projects, where Schedule B projects would require the filing of a project file for public review and Schedule C projects would require fulfillment of Phases 3 and 4 prior to filing an Environmental Study Report for public review.

The Town will record consultation with any subsequent applications to the Ministry of Environment Conservation and Parks associated with any substantial changes to the MMTMP or any subsequent permits. Phase 1 defines the problem and/or opportunity, whereas, Phase 2 identifies alternative solutions to the problem, considers environmental implications, and consults with the public and affected agencies. The Municipal Class Environmental Process is illustrated in **Table 1-1**.

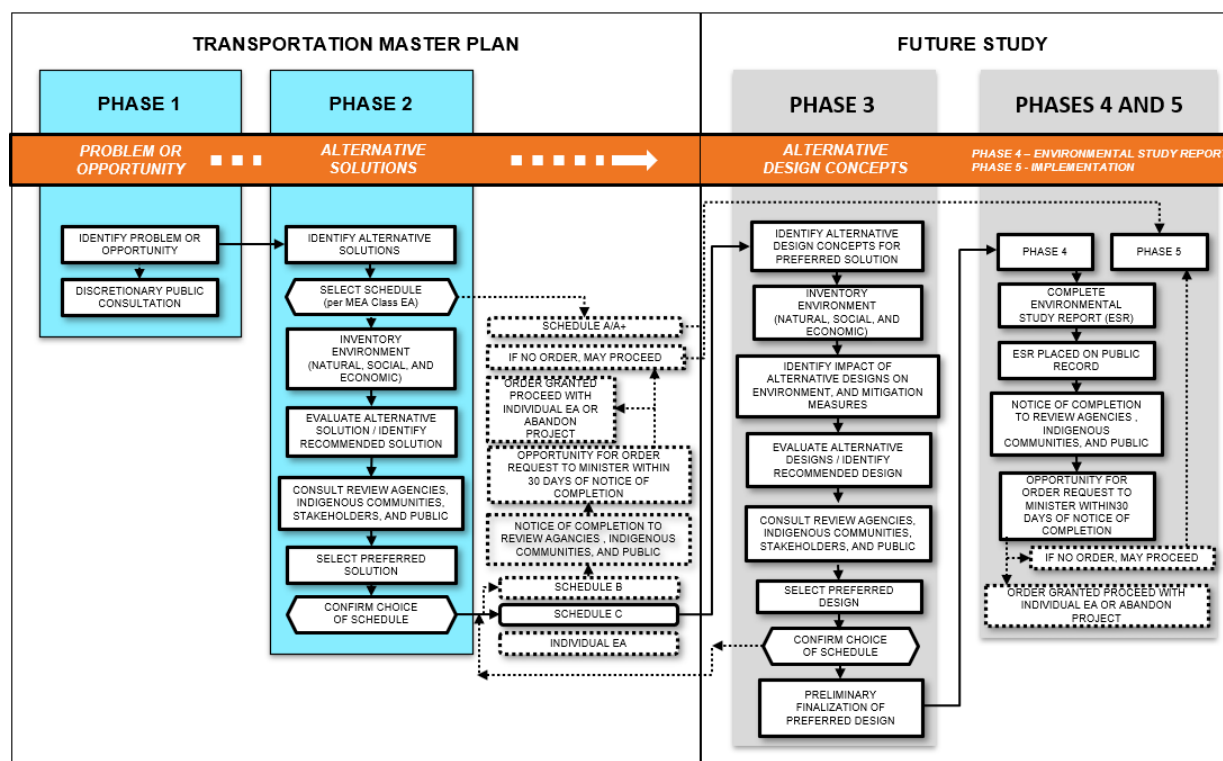


Figure 1-1: Municipal Class Environmental Process

Source: Municipal Class Environmental Assessment, Municipal Engineers Association, 2020

The MMTMP informed the Future Caledon Official Plan. It identifies transportation network plans, new infrastructure and policies affecting the transportation system, urban design and land use planning, and climate change mitigation implications. The Development Charges Act provides an opportunity for the Town to fund growth related transportation needs.

The Municipal EA process suggests that master plans should be reviewed every five years to determine the need for a comprehensive formal review and/or update. Potential changes which may trigger the need for a detailed review include:

- Major changes in the original assumptions.
- Major changes to components of the master plan.
- Significant new environmental effects.
- Major changes in proposed timing of projects within the master plan.
- Major planned or anticipated land use changes.

2.0 Stakeholder Engagement

A comprehensive consultation process was undertaken to gather community and stakeholder input within the master plan process. The following section documents the public and stakeholder consultation process. From the outset of the study, a communication plan was prepared to guide the consultation process with the following objectives:

- To ensure that town residents, the business community and other stakeholders are made aware of the importance of the transportation master plan initiative and kept informed and up to date about study components, progress and opportunities for input.
- To create meaningful and strategically appropriate opportunities for public and stakeholder engagement over the course of the study.
- To foster an environment that is conducive to substantive dialogue, a respectful, informed and productive discussion of transportation-related issues and the town's future.
- To inspire confidence in the TMP development process and in the town's implementation and management of it.
- To present a well-integrated and seamless project progression that ensures consistency of word and action, demonstrates positive momentum and minimizes contentious issues.
- To establish and reinforce realistic expectations regarding feasible transportation-related choices and the way stakeholder input will be considered/acted upon.

A variety of tools were used to inform the community, including direct mail, a webpage hosted on the town's website, dedicated project email addresses and phone numbers, social media (Facebook, Twitter), newspaper advertisements and town press releases. Notification to the public included a Notice of Commencement, two Public Open House notices, and presentations posted to the Town website.

The TMP study was initiated On March 4, 2021 through a Notice of Commencement published on the Town's website. The Town's website, <https://haveyoursaycaledon.ca/mmtmp>, also provided information about upcoming public events, council presentations, and contact information for the Town and Consultant project managers so that the public could reach the study team to provide input and comment.

2.1 Technical Agencies

Relevant technical agencies were invited to participate in the Technical Agencies Committee (TAC). The TAC consisted of town staff, staff from the Region of Peel and adjacent local municipalities, provincial ministries, transit authorities, conservation authorities, and other affected agencies. Two TAC Meetings were held on the dates below. The TAC meetings were held in a virtual format on Microsoft Teams due to considerations of provincial public measures and participant's health and safety during the COVID-19 pandemic.

- The first TAC meeting was held on January 13, 2021 and provided an overview of the Caledon MMTMP study purpose, scope, and preliminary transportation needs and opportunities. Participants were given the opportunity to indicate their interests in the project and identify additional needs and opportunities from their respective agencies.
- The second TAC meeting was held on April 12, 2022 and provided an overview of the preliminary draft recommendations and supporting strategies and policies.

A presentation was provided at each TAC meeting and was followed by a discussion period where attendees could ask questions and receive further information.

2.2 Public

Two public information centres (PICs), as required by the master plan process, were held to inform the public of the study activities and provide opportunities for the public to ask questions and obtain further information from the study team. Both PICs were held in a virtual format on Webex and Microsoft Teams, respectively, due to considerations of provincial public measures and participants' health and safety during the COVID-19 pandemic.

The first PIC was held on March 24, 2021 from 4:00 to 6:00 PM. The public information centre was the first point of contact with the general public to provide an overview of existing and planned conditions and preliminary list of transportation needs and opportunities. The public was made aware that their input on issues, concerns and opportunities would assist in the identification of projects and strategies within the alternative solutions. An overview of the alternative solutions was also provided. A formal presentation was delivered, followed by a facilitated question and answer period. The presentation was hosted on the Town of Caledon website after the meeting for the public to review and comment.

The second PIC was held on May 12, 2022 from 6:00 to 7:30 PM. Following up from the first public open house, a formal presentation was provided an overview of the preliminary preferred alternative, which included active transportation, transit and road components. Supporting strategies and policies were also presented to the public. A facilitated question and answer period immediately followed the presentation. After the meeting was adjourned, members of the public were invited to review the presentation on the Town's website for comment.

The third PIC was held on September 19, 2023 from 6:00 to 7:30 PM. This was an in-person PIC that outlined the preferred transportation solution on boards. Attendees were able to review and provide verbal feedback, which was documented by the Project Team, as well as provide their input via comment sheets.

Presentation slides or boards and comment/response summary from the PICs are included in **Appendix B**.

2.3 Indigenous Communities

Letters and notices were sent by email to Indigenous communities. MECP has developed guidance on the steps to rights-based consultation with Indigenous communities. Indigenous communities with a potential interest in the project were identified through correspondence provided to the following communities:

- Haudenosaunee Confederacy,
- Huron-Wendat Nation,
- Mississaugas of the Credit First Nation,
- Métis Nation of Ontario, and
- Six Nations of the Grand River.

A summary of communication with identified Indigenous communities was maintained by Burnside on the Project Contact List.

2.4 Official Plan Review Consultation

As part of the consultation process for the Official Plan update, the MMTMP project team presented at two Town Council meetings. At these meetings, Town Councillors were able to provide input on the new Official Plan and supporting studies, including the MMTMP helping to coordinate transportation and land use policy.

The first meeting was held as a Council workshop on October 4, 2021 starting at 10:00 AM. The MMTMP presentation outlined a summary of the study's vision, transportation needs and opportunities and preliminary plans for the road network, active transportation and transit network.

The second meeting was held during the Town's Planning and Development Committee Meeting on March 22, 2022 from 7:00 PM to 10:00 PM. The MMTMP project team presented the draft recommendations for the road network, active transportation network, and transit network. The major focus of this meeting was the transportation policies that was inputted into the new Official Plan through the MMTMP. Town Councillors were able to provide input and voice their concerns on these recommendations.

Since the second Council meeting held in March 2022, the study and associated recommendations were further refined to better align with the updates to the Official Plan. Two Councillor meetings were held (with two separate groups of Councillors) on November 8, 2023 to present and seek feedback on the recommended infrastructure plan.

2.5 Consultation Themes Summary

Themes from consultation events with the public, TAC, and Council are provided in **Table 2-1**.

Table 2-1: Themes for Key Consultation Events

Event	Date	Theme
Technical Agency Committee #1	January 13, 2021	<ul style="list-style-type: none"> Seek Town and agency input on transportation-related needs and alternative solutions Agencies and Town staff provided opportunities to synergize with their on-going studies
Public Information Centre #1	March 24, 2021	<ul style="list-style-type: none"> Seek public and stakeholder input on transportation needs and alternative solutions
Official Plan Review Workshop	October 4, 2021	<ul style="list-style-type: none"> Seek Council input on the draft transportation recommendations regarding transit corridors, active transportation corridors, and road improvements
Official Plan Review Workshop	March 22, 2022	<ul style="list-style-type: none"> Seek Council input on the ultimate 2051 road, active transportation, and transit networks and related transportation policies that was provided as input to the Official Plan Review
Technical Agency Committee #2	April 12, 2022	<ul style="list-style-type: none"> Seek agency input on the evaluation scoring and criteria and preferred transportation solution
Public Information Centre #2	May 12, 2022	<ul style="list-style-type: none"> Seek public and stakeholder input on the evaluation scoring and criteria and preferred transportation solution
Public Information Centre #3	September 19, 2023	<ul style="list-style-type: none"> Seek public and stakeholder input on Official Plan updates and the preferred transportation solution

Some of the transportation-related comments raised at stakeholder meetings are summarized below. Detailed documentation on consultation is provided in **Appendix B**.

- Consideration of low carbon emission targets
- Emphasis on a shift to more sustainable modes and away from the single-occupant automobile to accommodate the significant magnitude of growth in the Town
- Awareness of environmentally-sensitive areas and constraints
- Noted increase in active transportation use during the pandemic and the need to accommodate this growth
- Consideration and alignment with stakeholder scheduling and timelines (such as Peel's Regional Official Plan Amendment)
- Consideration for alternative routes to minimize impacts on local settlement areas
- Opportunities for transit-supportive communities where people can live and work in the same area
- Concerns expressed regarding the future capacity of Highway 10 (Hurontario Street)
- Concerns on truck routes / goods movement and the use of aggregate vehicles along Town roads

3.0 Study Context

This chapter provides a summary of the environmental context including the natural environment, archaeological and cultural environment, and socio-economic environment. The following sections also outline the existing transportation system, travel characteristics and patterns.

3.1 Environmental Context

3.1.1 Natural Environment Context

The Town of Caledon is abundant in natural heritage. Natural environment resources are important elements of Caledon that provide habitat, recreation and economic viability. They include forests, wildlife, geological formations, farms, mineral and water resources. The majority of the Town's natural resources are located within the Oak Ridges Moraine, Niagara Escarpment, and Protected Countryside, as illustrated in **Figure 3-1** and documented in **Appendix C**.

Efforts have been made to conserve and protect environmental features and properties. The Town of Caledon is subject to a variety of land use plans and policies that shape how transportation systems are to be developed within, and around, natural features. The Provincial Policy Statement, Niagara Escarpment Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Lake Simcoe Protection Plan, Growth Plan, Town and Regional Official Plans all include policies to protect significant natural features, including the following:

- Significant Wetlands;
- Significant Woodlands;
- Significant ANSIs;
- Significant Wildlife Habitat;
- Significant Valleylands;
- Habitat of Endangered and Threatened Species; and
- Fish Habitat.

With respect to lands within the Niagara Escarpment Plan, the following additional natural features are protected:

- All wetlands;
- All Life Science and Earth Science ANSIs; and
- Habitat of special concern species in Escarpment Natural and Escarpment Protection Areas.

With respect to lands within the Greenbelt Plan and ORMCP, the following additional natural features are protected:

- All wetlands;

-
- All Life Science ANSIs;
 - Habitat of special concern species;
 - Sand barrens, savannahs and tallgrass prairies; and
 - Alvars (Greenbelt Plan only);
 - Permanent and intermittent streams,
 - Kettle lakes (ORMCP),
 - Lakes and their littoral zones (Greenbelt) seepage areas and springs; and
 - Minimum vegetation protection zones.

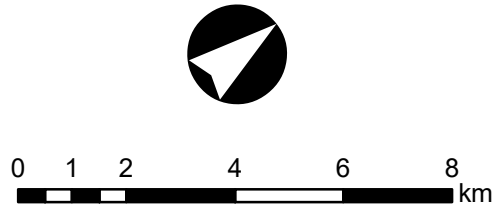
Town of Caledon

Transportation Master Plan

FIGURE 3-1

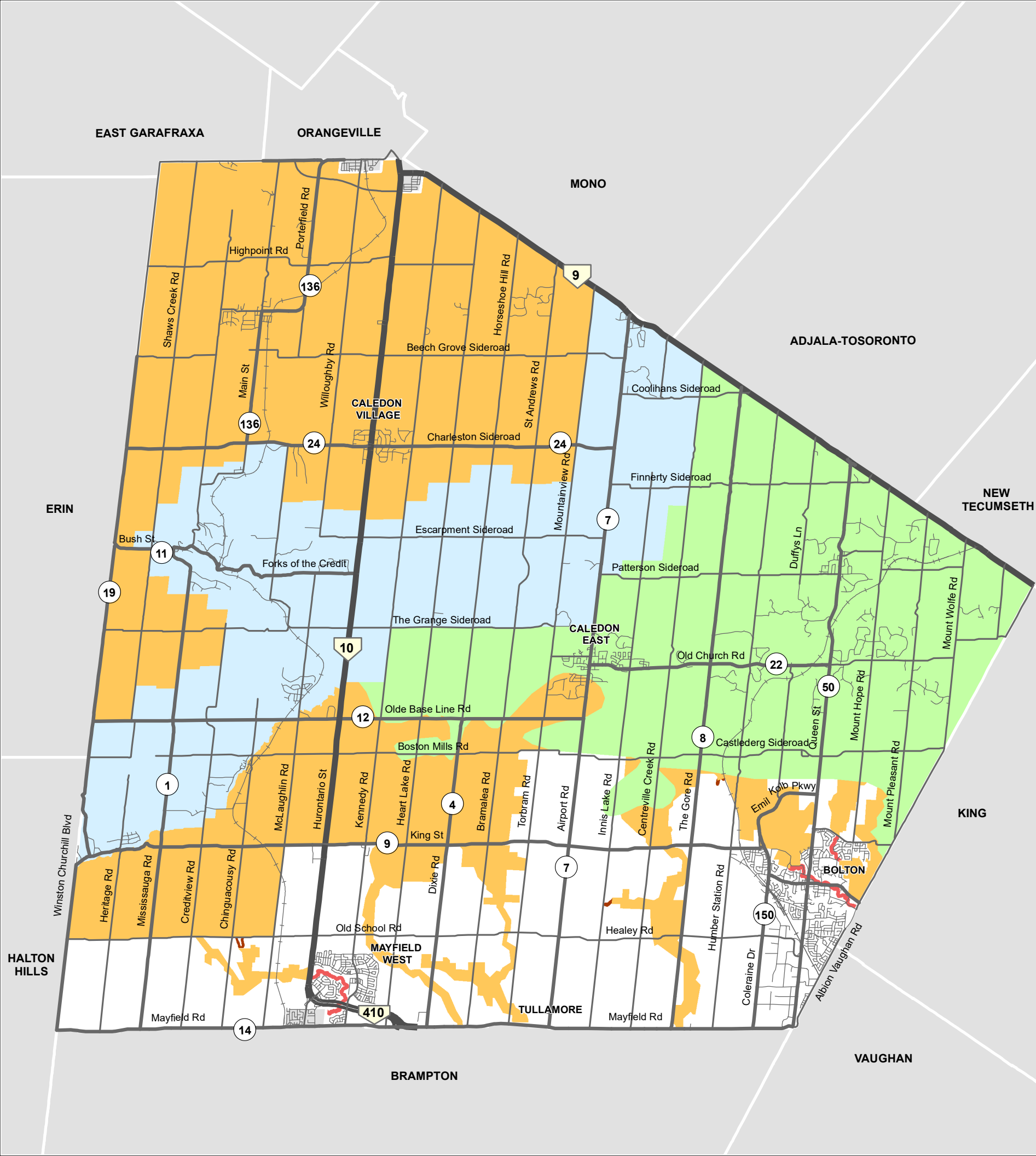
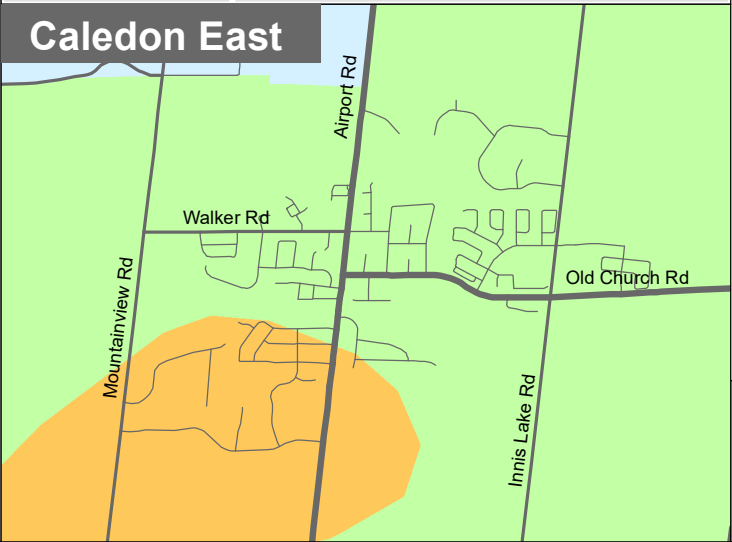
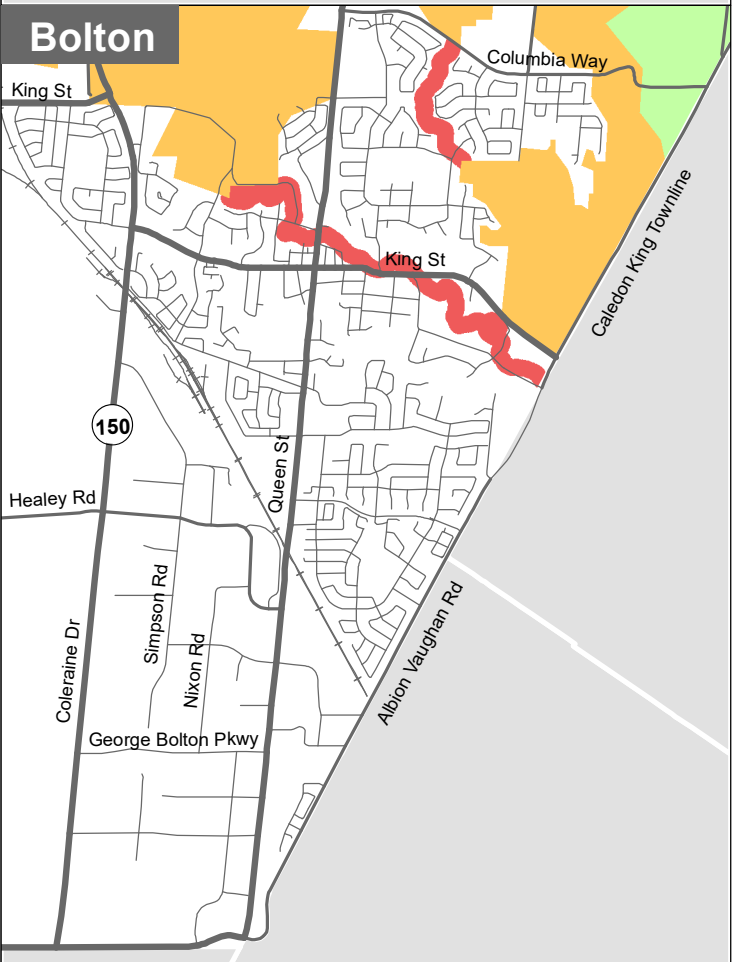
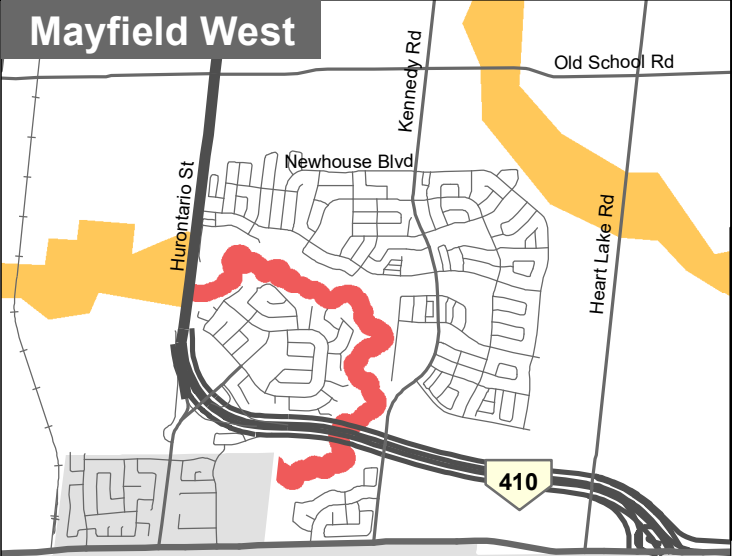
Natural Heritage Designations

- Niagara Escarpment Plan
 - Oak Ridges Moraine Conservation Plan
 - Protected Countryside
 - Urban River Valley
- Growth Plan for the Greater Golden Horseshoe**
- Natural Heritage System



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Conservation Authorities active in ensuring the conservation, restoration and responsible management of Ontario's water, land and natural habitats within Caledon include: Toronto Region Conservation Authority (TRCA) and Credit Valley Conservation Authority (CVC), Nottawasaga Valley Conservations Area (NVCA) and Lake Simcoe Region Conservation Area (LSRCA).

Protected properties are properties in public ownership that are protected for the purposes of conservation and nature-based recreation. In Caledon, these include:

Provincial Parks:

- Forks of the Credit Provincial Park

Conservation Areas owned by Credit Valley Conservation (CVC):

- The Cheltenham Badlands
- Belfountain Conservation Area
- Ken Whillans Resource Management Area
- Upper Credit Conservation Area
- Elora Cataract Trailway
- Charles Sauriol Conservation Area

Conservation Areas owned by Toronto and Region Conservation Authority (TRCA):

- Glen Haffy Conservation Park
- Albion Hills Conservation Park
- Bolton Resource Management Tract
- Palgrave Forest and Wildlife Area

3.1.2 Cultural Environment Context

Caledon's history is rich with Heritage buildings and landscapes. They provide powerful, tangible connections in which people today come in touch with the past. A detailed assessment of the archaeological and cultural environment is documented in **Appendix C** and outlined briefly below.

Heritage buildings and landscapes are often recreational destinations with the potential for tourism economic benefits. In Caledon, there are:

- 131 designated properties (Part IV, OHA)
- 968 listed properties (Section 27, OHA)
- 1 Heritage Conservation District, with 168 designated properties (Part V, OHA)
- 14 Cultural Heritage Landscapes (Town of Caledon CHL Inventory)

A Heritage Conservation District designation includes buildings, streets, landscapes and views within a specific area. The Town of Caledon has one Heritage Conservation District (HCD) in the Village of Bolton. The Village of Bolton Heritage Conservation District is Caledon's first Heritage Conservation District. Settled in 1821, Bolton is an historic 19th century mill village in

the Humber River valley. The street layout has maintained its original integrity and hosts a wide variety of commercial buildings and residences from the mid- to late-Victorian era. The District encompasses the core of the historic village and contains approximately 108 ‘contributing’ properties.

The Town is currently working on a second Heritage Conservation District in Alton.

3.1.3 Archaeological Resource Context

Archaeological resources are scarce, fragile, and non-renewable and therefore must be managed in a prudent manner if they are to be conserved. Effectiveness in incorporating archaeological resources within the overall planning and development process requires a clear understanding of their physical nature, the variety of forms they may assume, and their overall significance and value to society.

Archaeological potential is defined in the Provincial Policy Statement (2020) as:

...areas with the likelihood to contain archaeological resources.

Criteria to identify archaeological potential are established by the Province...

The Town of Caledon has created a detailed archaeological potential model for the Town within the context of developing an archaeological management plan (Town of Caledon Draft Archaeological Management Plan, March 2021). The model has been developed on a Geographic Information Systems platform to best manipulate and analyze site location attribute data. The result is a simple to use digital map of archaeological potential, which can be used by municipal staff and development proponents to determine the need for archaeological assessment in advance of land disturbing activities.

3.2 Urban Structure and Socio-Economic Context

3.2.1 Urban Structure

The Town of Caledon is the northernmost of three municipalities within Peel Region, which is a fast-growing region of Ontario with a 2021 population of approximately 1.45 million people. Caledon itself comprises approximately 55% of the total land area in Peel Region and consists of a series of urban areas and rural communities (including villages and hamlets), as summarized below, and illustrated in **Figure 3-2**.

Urban Areas

- Caledon East
- Mayfield West
- Bolton

Villages

- Alton
- Caledon Village
- Mono Mills
- Belfountain
- Cheltenham
- Palgrave

Hamlets

- Melville
- Cataract
- Terra Cotta
- Claude
- Victoria
- Campbell's Cross
- Mono Road
- Albion
- Wildfield

The Town of Caledon is primarily rural agricultural to the north, and transitions to an urban form along the southern boundary with Brampton, as well as within the Urban Areas of Mayfield West, Caledon East, and Bolton. This is illustrated in **Figure 3-5**. The Village of Palgrave is adjacent to the Palgrave Estate Residential Community, which consists of rural estate residential development across a large portion of land in the northeast part of the Town.

The Town's urban structure is largely shaped by several significant geographical and environmental features. The Oak Ridges Moraine (ORM) runs through much of the northeast part of the Town and provides for important groundwater recharge for the Greater Toronto Area. The Niagara Escarpment runs across the Town from the southwest border with Halton Region to the northeast border with Simcoe County. Additionally, much of the remaining land area within the Town of Caledon is located within the Greenbelt Plan Area, which was introduced in 2005 to protect the natural environment and agricultural areas. The Greenbelt Plan identifies large portions of land within the Town of Caledon where urbanization should not occur.

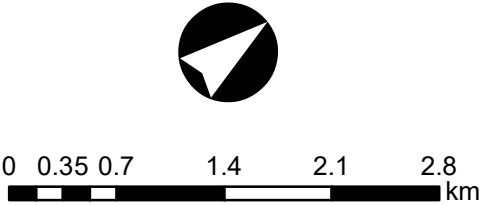
Town of Caledon

Transportation Master Plan

FIGURE 3-2

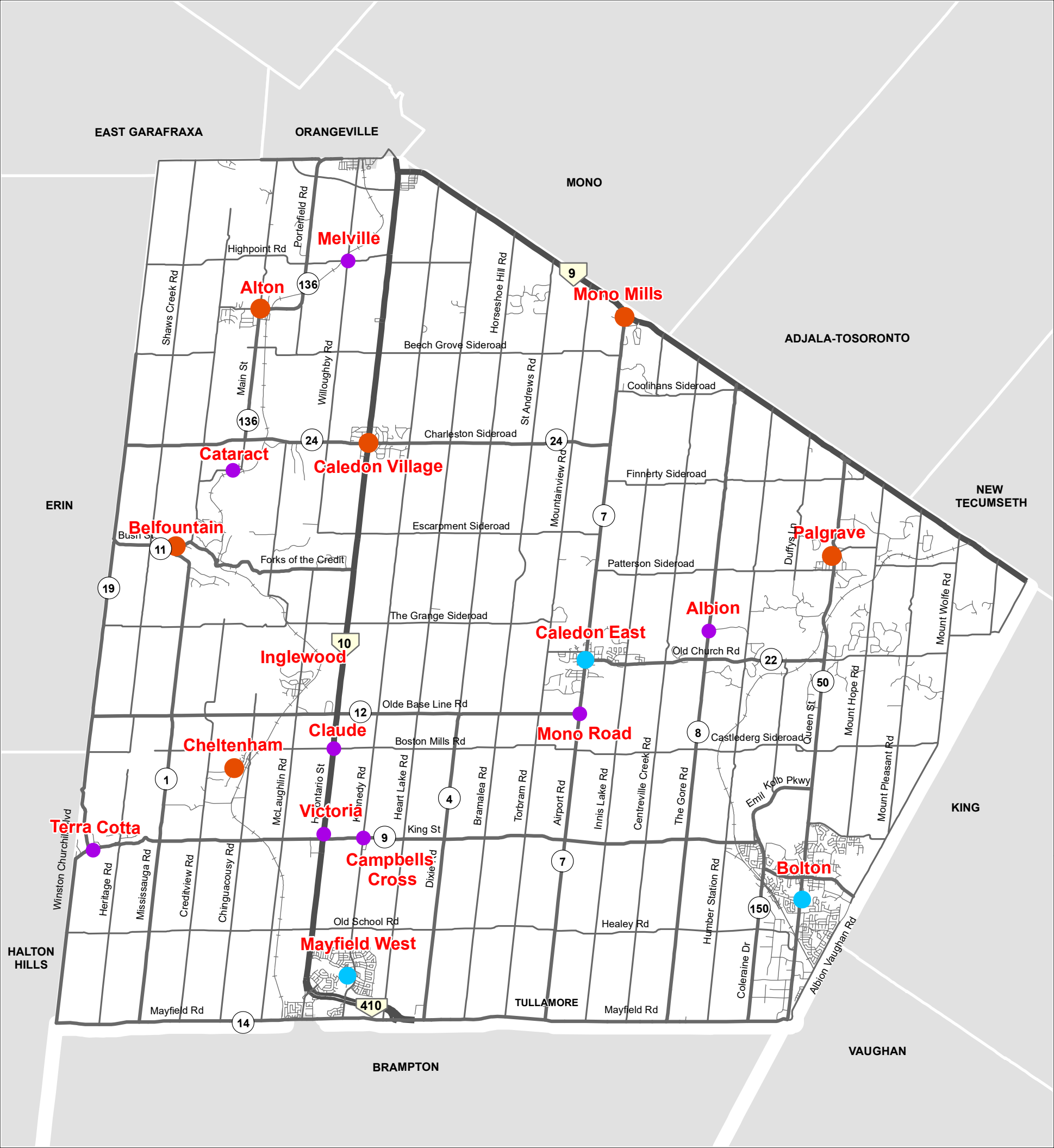
Caledon Urban Areas, Villages and Hamlets

- Urban Area
- Village
- Hamlet



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The socio-economic characteristics and needs of the municipality impact the transportation demand. These characteristics include population demographics, labour force, types of employment lands, tourist destinations and other transportation attractors, all of which influences the type and number of trips. The socio-economic context is described in greater detail below and was summarized primarily based on information contained in the Caledon 2020-2030 Economic Development Strategy. The latest (2021) statistic data was reported, where available.

3.2.2 Population and Demographics

The Town of Caledon recorded a population of 66,502 in 2016, according to Statistics Canada. The Town's population grew to 76,581 people by 2021, which accounts for approximately 5% of Peel Region's total population, despite having a land area of 688 km² (representing more than half of Peel's land area). From 2016 to 2021, the Town's population experienced a 15% increase in growth. This growth is a result of the rural nature of the Town, provincial growth plans, and linear population growth across the Greater Toronto Hamilton Area (GTHA).

3.2.2.1 Demographics

The median age of Caledon residents remained the same between 2016 to 2021 at 41 years old. During the 2011 to 2016 period, there was also a marginal increase in population for the 25-34 age group and a decline in population for the 35-44 age group. A declining core workforce (i.e., 35-44 age group) trend is important to monitor, as it may indicate a future skills shortage.

The majority of the population exists in the Urban Areas. Bolton is the largest Urban Area within the Town of Caledon, and had a 2016 population of approximately 28,000 people, which is approximately 40% of the Town of Caledon's population. Mayfield West had a 2016 population of approximately 18,000 people. Caledon East had a 2016 population of approximately 6,000 people.

Caledon's existing housing stock is predominantly single-detached dwellings, resulting in a proportion of low-density housing units that is higher than Peel Region and the Province.

3.2.2.2 Income

The median household income in Caledon in 2015 was \$113,651, which is much higher compared to the \$74,287 median income in the Province and \$86,233 median income in Peel Region. The median household income grew by 15%, an increase of \$15,149 from 2010 to 2015. This compares to the median income growth of \$7,929 in the Province overall. A high proportion (58%) of households in Caledon are deemed high-income earners (\$100,000 and over), which raises the income profile of the community.

3.2.2.3 Labour Force

Caledon has a labour participation rate of 72.1%, which is 7.4% higher than the Province, and an employment rate of 5.5%, compared to the Province at 7.4%. The higher labour participation and lower employment rate indicate a healthy labour market. However, it may also indicate a labour market with more limited job opportunities and/or people employed in any job or working more than one job.

Caledon's top four labour force industries are construction, manufacturing, retail trade, and education services. Relative to the Region and the Province, Caledon has a larger proportion of the workforce in the construction industry. A comparison of the labour force broken by industry is shown in **Figure 3-3**.

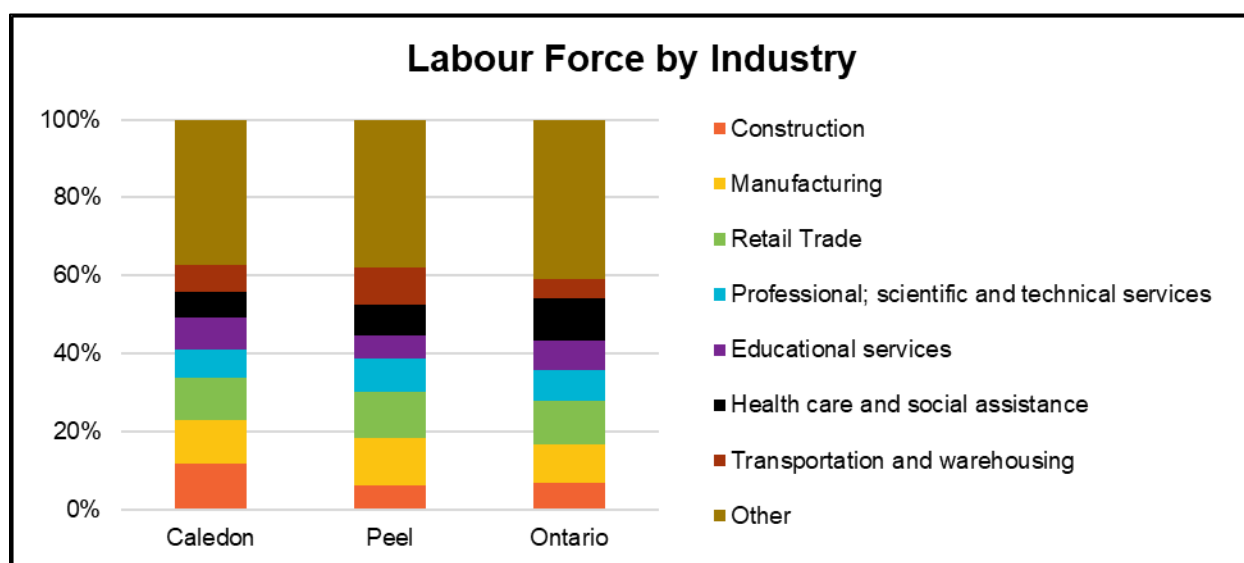


Figure 3-3: Labour Force by Industry (%) in 2016

Source: Statistics Canada, 2016 Census of Population, Caledon 2020-2030 *Economic Development Strategy*.

Note: "Other" includes Agriculture/forestry/fishing and hunting, mining, utilities, wholesale trade, information and cultural industries, finance and insurance, real estate, management of companies/enterprises, administrative and support, arts/entertainment, accommodation and food services, public administration and others.

Between 2011 and 2016, the labour force in Caledon grew by 15% (4,890 people), whereas the Region and the Province experienced a 6% and 4% growth, respectively. The industries that experienced the largest growth in net employment within Caledon are as follows:

- Construction – net growth of 1,450 people
- Retail trade – net growth of 810 people
- Accommodation and food services – net growth of 535 people

There are approximately 6,615 Caledon residents that work within the Town, most of which work in industries such as retail trade, manufacturing, and accommodation and food service sectors. There are approximately 22,110 Caledon residents that work outside of the Town and 13,110 non-residents that travel to Caledon for work. As such, Caledon is identified as a net

exporter of workers (i.e., there are more residents that leave Caledon to work than non-residents that travel to Caledon for work).

Of the residents leaving the Town for work, most work in the manufacturing, retail trade and educational service industry, among others. The manufacturing, transportation and warehousing, and construction industry are the top three sectors identified to attract the greatest number of non-residents to work in Caledon.

3.2.3 Employment

3.2.3.1 Current Employment Profile

Employment within Caledon consists of approximately 10,361 businesses, 3,237 of which are employers. The number of business employers within Caledon by industry is summarized in **Table 3-1**. The top four employer industries in Caledon are construction, transportation and warehousing, professional (scientific and technical services) and retail trade. Considering construction and retail trade also make up two out of the four top industries of Caledon's labour force (i.e., 12% in construction and 11% in retail trade), there is a potential for a high degree of self-containment (i.e. Caledon to Caledon) for home-to-work trips.

Table 3-1: Caledon 2019 Employers by Industry

Industry	Business Employers	% of Total
Construction	599	19%
Manufacturing	178	5%
Retail Trade	216	7%
Educational services	22	1%
Professional; scientific and technical services	295	9%
Transportation and warehousing	600	19%
Health care and social assistance	148	5%
Wholesale trade	151	5%
Accommodation and food services	106	3%
Public administration	1	0%
Administrative and support; waste management and remediation services	164	5%
Finance and insurance	81	3%
Other	676	21%
Total	3,237	100%

Source: Canadian Business Counts (June 2019), Caledon 2020-2030 *Economic Development Strategy*.

3.2.3.2 Aggregate Lands

With the construction industry encompassing a large portion of both the labour force and business employers of Caledon, aggregate lands (quarries and pits) serve an important role in supporting this sector. Aggregates are used for the construction of roads, subway tunnels,

homes and other structures; solid bedrock (e.g., limestone, granite, etc.) is extracted from quarries and loose material (e.g., sand, gravel, etc.) is extracted from pits.

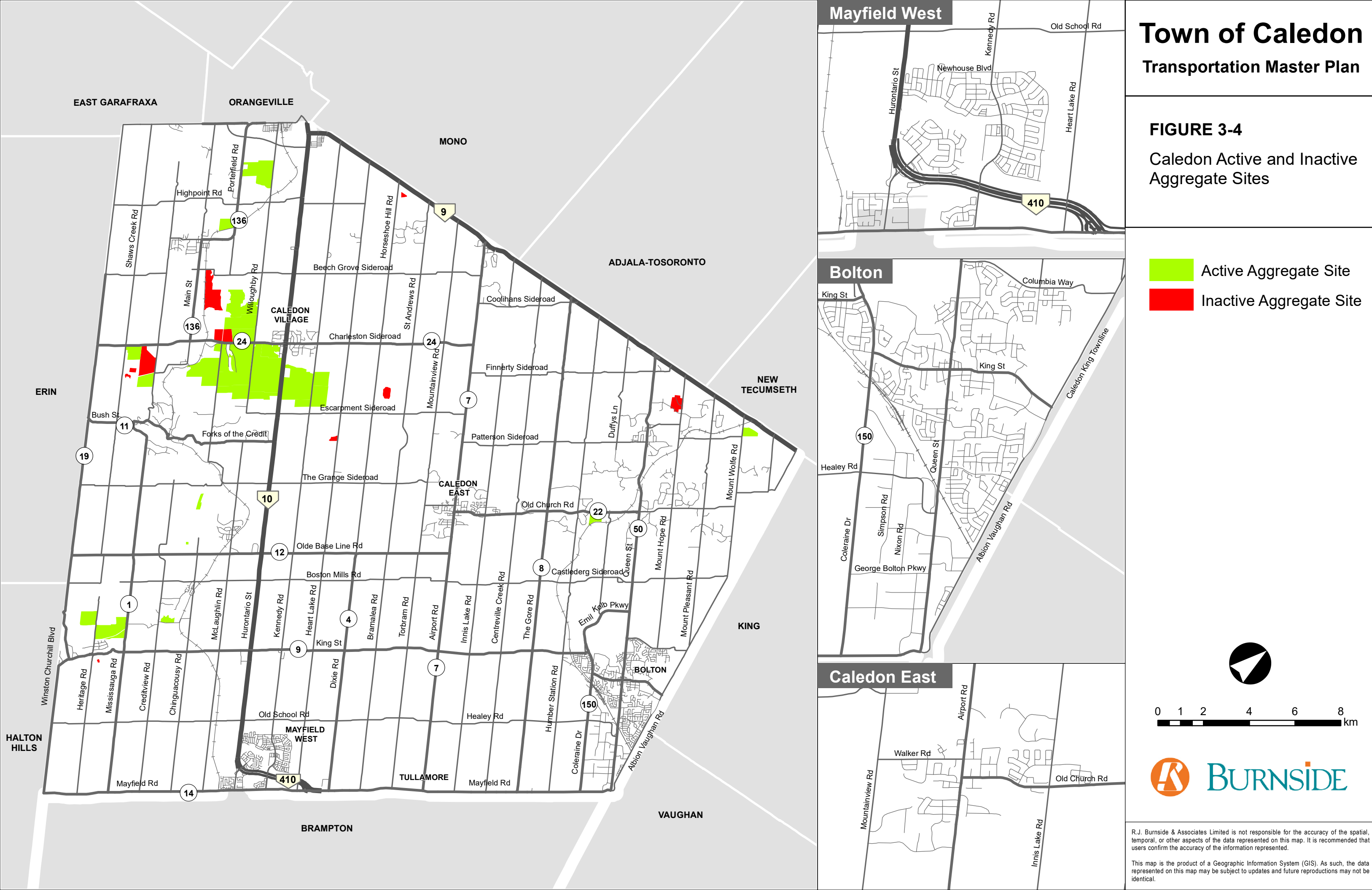
The locations of licensed and permitted pits and quarries under the Aggregate Resources Act of Ontario, as regulated by the Ministry of Natural Resources (MNR), are shown in **Figure 3-4**. These sites are up-to-date as of August 2021.

Town of Caledon

Transportation Master Plan

FIGURE 3-4

Caledon Active and Inactive Aggregate Sites



3.2.3.3 Industrial Lands

A significant portion of the existing, developed land within Caledon is designated as industrial, as shown in **Figure 3-5**. Employers in the manufacturing as well as transportation and logistics industry operate facilities on these lands.

In 2018, there were 175 manufacturing businesses within Caledon, which provided 5,275 jobs. Approximately 11% of Caledon's labour force worked in the manufacturing industry in 2016. Some of the top companies in this industry include Husky Injection Molding Systems, Mars Canada Inc., Multi Vans and Sardo Foods. The manufacturing sector in Caledon is projected to experience a growth of over 10% by 2024, resulting in 5,810 jobs.

Peel Region is home to Toronto Pearson International, Canada's largest commercial airport, along with railway networks (Canadian Pacific Railway and Canadian National Railway) travelling across the Region to provide connections across Canada and the U.S. As a result, Caledon's transportation and logistics industry is positioned to play an important role in Ontario's logistics network, with 698 transportation and logistics businesses residing in Caledon and providing 4,148 jobs in total. Top companies in this sector include Amazon, UPS, Canadian Tire distribution centre and The Harman Group (HGC).

In 2018, building permits were issued for major industrial projects including the Bolton-based Amazon Distribution Centre (which opened in 2019) and Prologis as per Caledon's 2020-2030 *Economic Development Strategy*.

Industrial lands, along with the manufacturing and transportation and logistics industry currently and will continue to play a key role in Caledon's economy.

3.2.3.4 Tourism

The tourism industry in Caledon is a growing sector that has a significant impact on the local economy. It is estimated that the Town's tourism sector has a \$15 million impact on the Region's overall Gross Domestic Product (GDP). Caledon's tourism industry attracted approximately 568,000 visitors in 2019, with top destinations (and employers) being golf clubs, conservation areas, and agri-tourism. The Town's tourism sector consists primarily of the following markets:

- **Culinary and Agri-Tourism** (e.g., Spirit Tree Estate Cidery, Downey's Farm Market, Albion Orchards & Country Market, Bolton Farmer's Market, Heatherlea Farm Shoppe, and craft breweries)
- **Arts, Culture and Heritage** (e.g., Alton Mills Arts Centre, Brampton Flight Centre, and Headwaters Arts Festival)
- **Bicycle Touring** (e.g., Caledon Trailway)
- **Soft Adventure** (e.g., Albion Hills Conservation Area)
- **Equine Tourism** (e.g., Caledon Equestrian Park)
- **Health and Wellness** (e.g., Millcroft Inn and Spa)

Town of Caledon

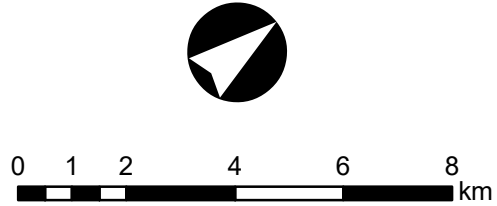
Transportation Master Plan

FIGURE 3-5

Existing Land Use Designations

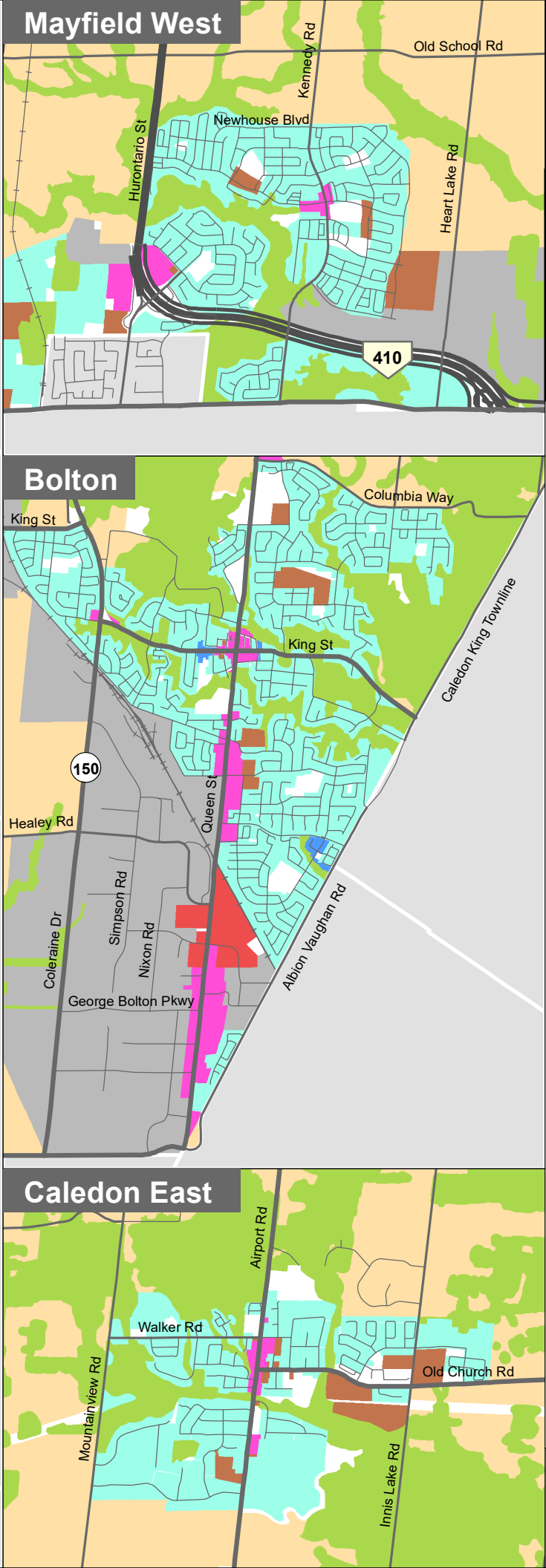
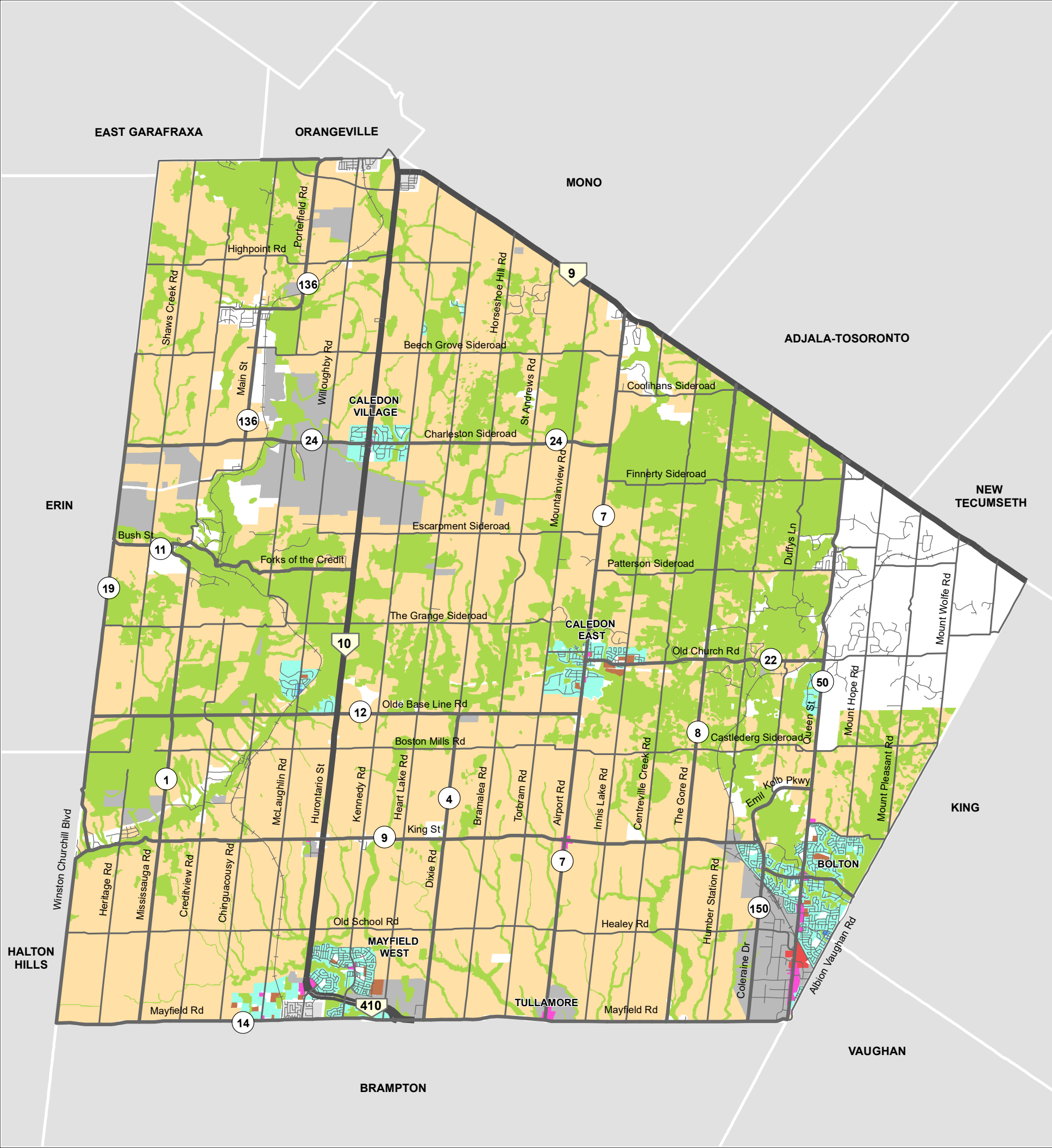
- Agricultural / Rural
- Commercial
- Environmental Policy Area
- Industrial
- Institutional
- Mixed use
- Precinct A-H
- Residential

Note: There are gaps in this data. Refer to the latest Town Official Plan for detailed land use designations.



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3.2.3.5 Agricultural Lands

The agricultural and food sector plays an integral role in Caledon's economy, as the Town has one of the largest primary goods producing sectors, with 345 farms and 46% of its land contributing to this industry. Over 565 people in Caledon are directly employed in agriculture. Land uses designated as Prime Agricultural Areas as per the Future Caledon Official Plan are shown in **Figure 3-6**. Per the Official Plan, Prime Agricultural Areas should be protected from fragmentation, development, and non-agricultural land uses, including site alteration and fill activities that are not consistent with normal farming practices, and which distort the natural landform character of the agricultural area.

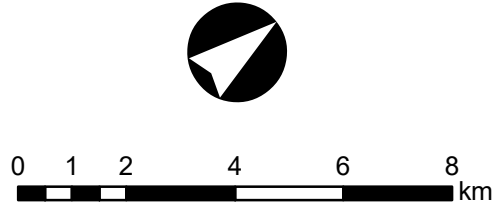
Town of Caledon

Transportation Master Plan

FIGURE 3-6

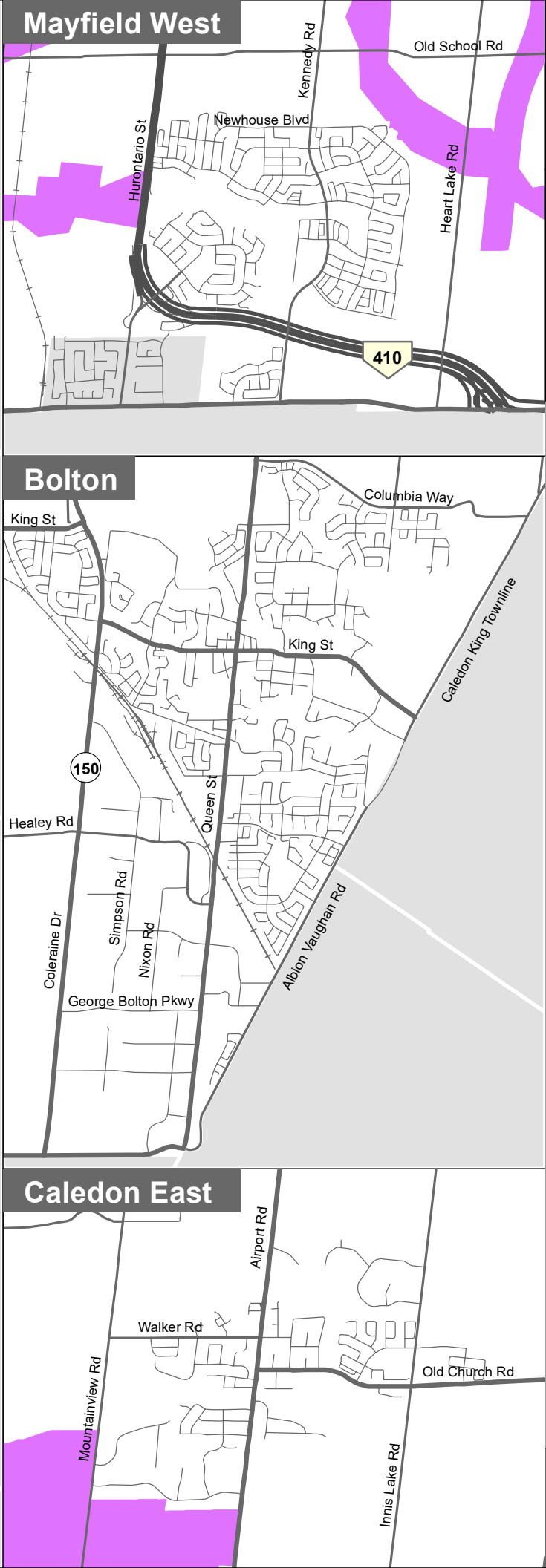
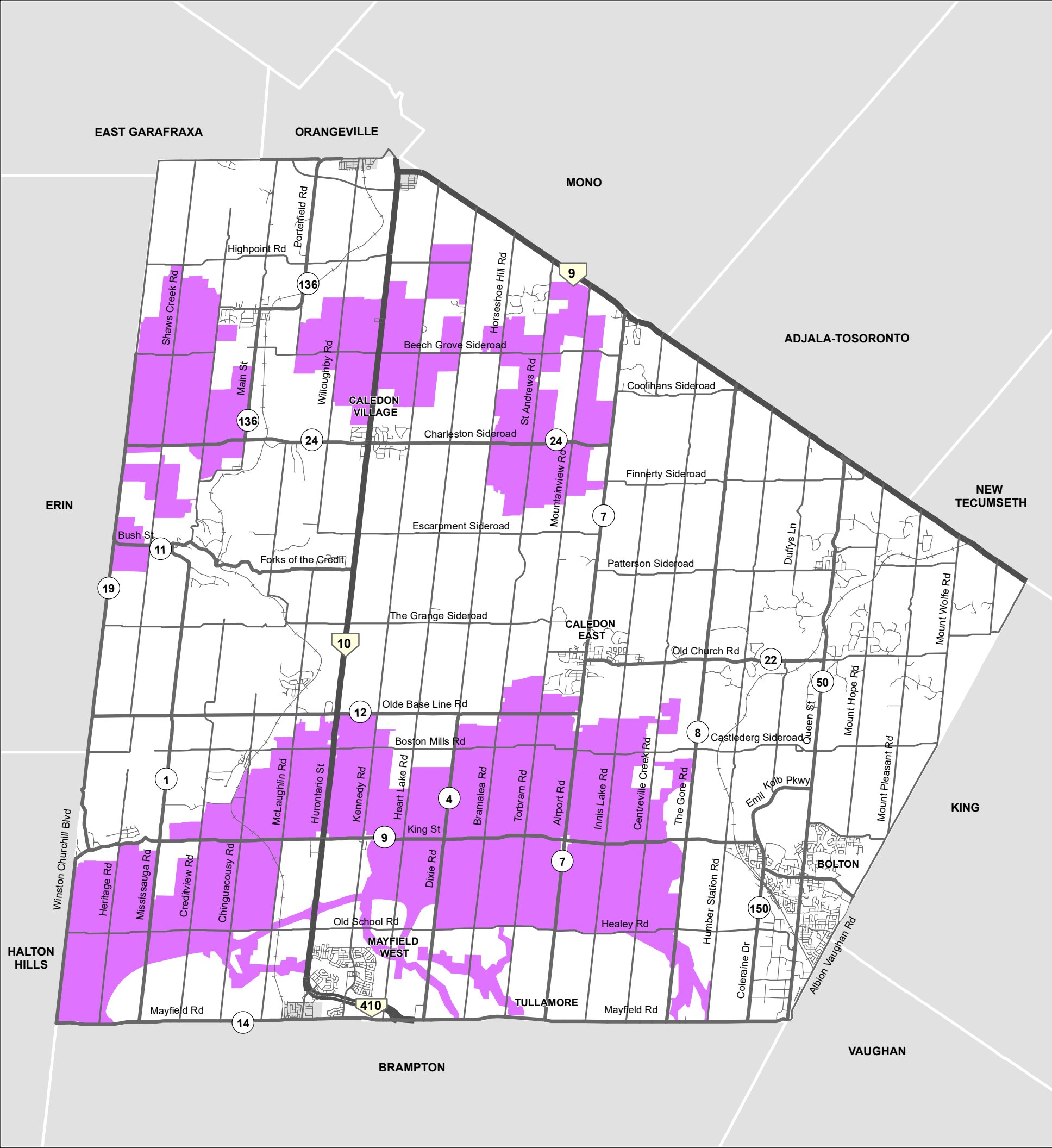
Agricultural Lands
in Caledon

 Prime Agricultural Area



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3.3 Existing Transportation System

3.3.1 Road Network

The existing road network in the Town of Caledon is comprised of provincial highways, Region of Peel arterials and Town of Caledon arterial, collector and local roadways, as shown in **Figure 3-7**.

Highways within the Town are under the jurisdiction of the Province of Ontario and summarized in **Table 3-2**. Highway 410 is an access-controlled freeway, that connects the north-south segments of Highway 410 to Hurontario Street (Highway 10). Highway 10 runs through the Town and provides north-south connectivity for both through and local traffic. Highway 9 runs along the north boundary of Caledon, which is shared with Dufferin County and Simcoe County.

All arterial roads within the Town are currently under the jurisdiction of the Region of Peel, except Albion Vaughan Road, as summarized in **Table 3-2**. Arterial roads generally function as thoroughfares, with collector roads forming smaller block grids between the arterial road system.

Table 3-2: Provincial and Regional Road Network

Highway	Direction
Provincial	
Highway 410	East-West
Hurontario Street (Highway 10)	North-South
Highway 9	East-West
Regional	
Charleston Sideroad (Regional Road 24)	East-West
Bush Street/Forks of the Credit Road (Regional Road 11)	
Old Base Line Road (Regional Road 12)	
King Street (Regional Road 9)	
Mayfield Road (Regional Road 14)	
Winston Churchill Boulevard (Regional Road 19)	North-South
Mississauga Road (Regional Road 1)	
Porterfield Road (Regional Road 136)	
Dixie Road (Regional Road 4)	
Airport Road (Regional Road 7)	
The Gore Road (Regional Road 8)	
Highway 50 (Regional Road 50)	

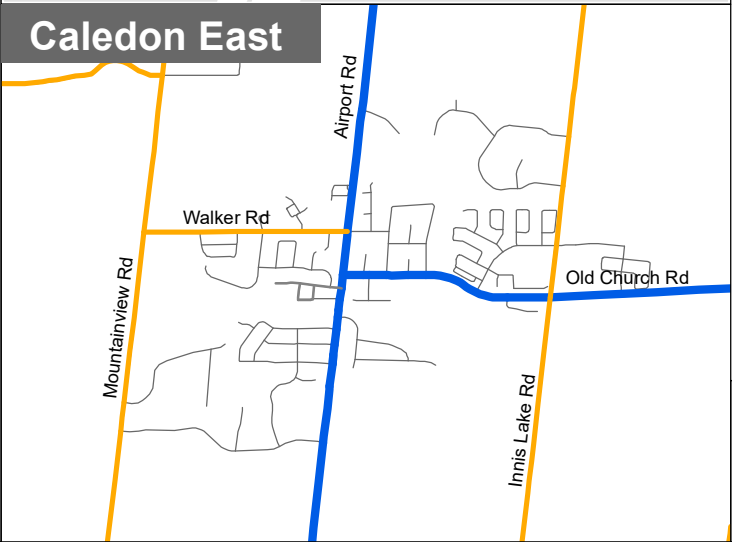
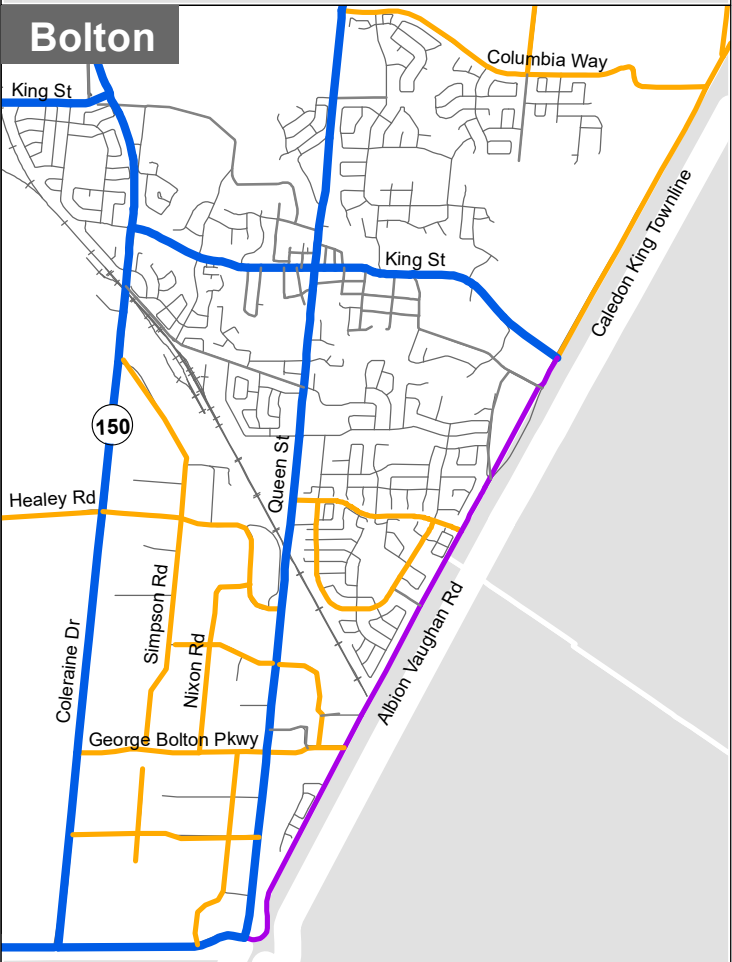
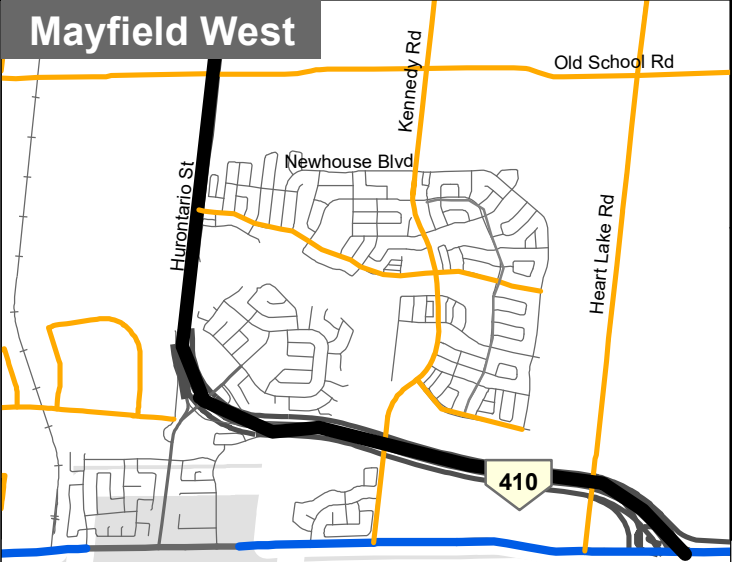
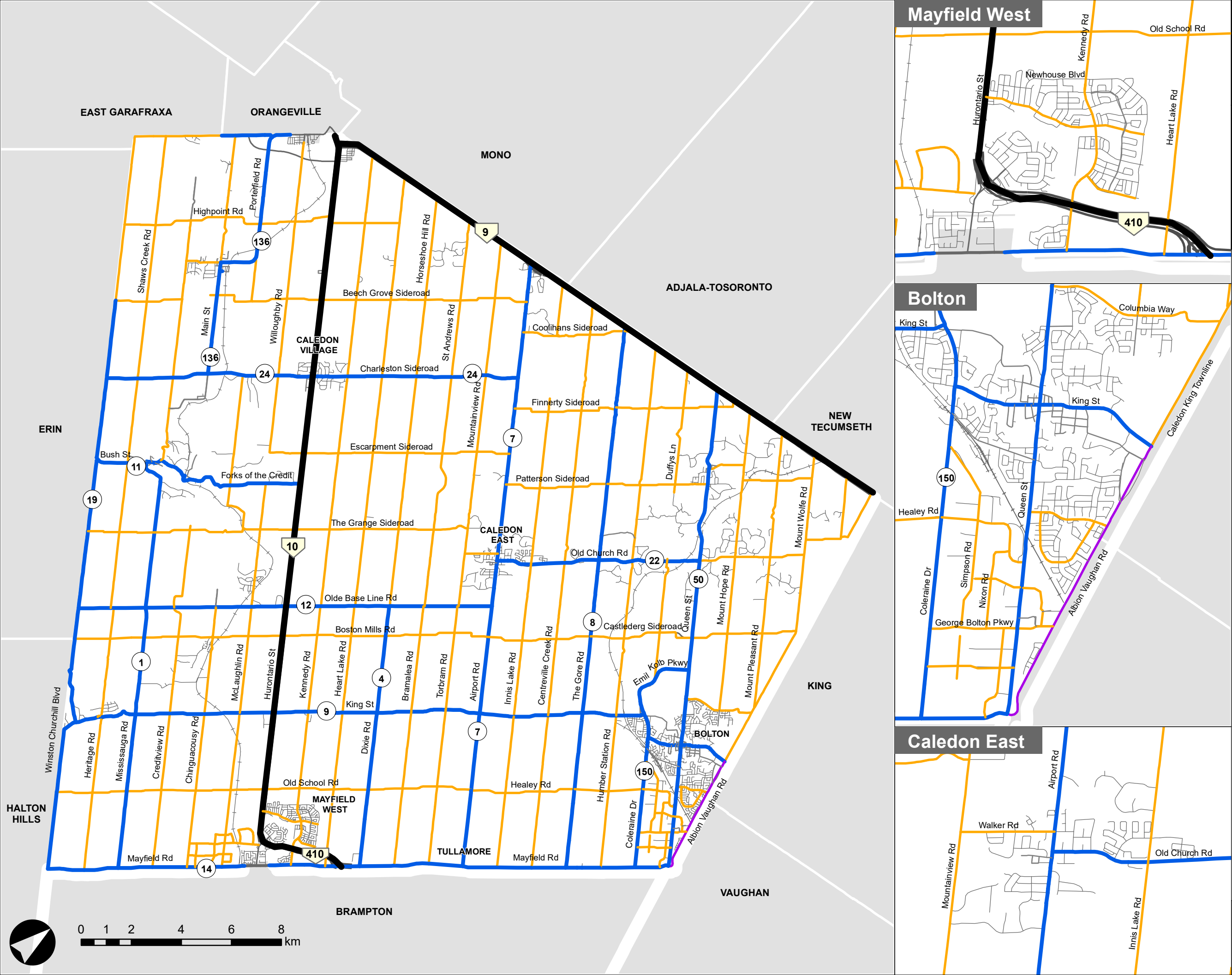
Town of Caledon roads include arterial, collector and local roads that provide circulation and land access. In rural areas, the Town road network includes a grid network of concession roads, with a 3.0 kilometre north-south spacing and a 1.4 kilometre east-west spacing.

Town of Caledon

Transportation Master Plan

FIGURE 3-7
Existing Road Network

- Provincial Highway / Freeway
- Regional Arterial
- Town Arterial
- Town Collector
- Town Local



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The Town arterial / collector road grid is historic and contains some discontinuous or misaligned roadways. Misaligned intersections can contribute to inefficient traffic movements and safety related conflicts. These inefficiencies and conflicts increase as traffic levels increase and there is greater interaction between road users.

A summary of locations for potential road alignment issues is shown in **Table 3-3**. Collision data along Peel Regional roads were reported, where available, and analyzed to inform potential issues at intersecting Town roads. Supporting documentation on road alignment issues within the Town of Caledon can be found in **Appendix E**.

Table 3-3: Summary of Road Alignment Issues

Major Road	Minor Road 1	Minor Road 2	Issue
Halls Lake Side Road	Albion Trail	19 th Sideroad	Sharp Turns and Hidden Driveways
Patterson Side Road	Humber Station Road	Humber Station Road	Offset intersection
Mayfield Road	Humber Station Road	Clarkway Drive	Offset intersection
The Gore Road	Finnerty Side Road	Finnerty Side Road	Offset intersection
Airport Road	Old School Road	Healey Road	Offset intersection
Olde Base Line Road	Mountainview Road	Torbram Road	Offset intersection
Olde Base Line Road	St. Andrews Road	Bramalea Road	Offset intersection
Olde Base Line Road	Heart Lake Road	Heart Lake Road	Offset intersection
Olde Base Line Road	Kennedy Road	Kennedy Road	Offset intersection

3.3.2 Active Transportation System

The existing active transportation network consists of pedestrian and cyclist facilities as shown in **Figure 3-8**. These facilities are managed by the Town of Caledon and Peel Region. An overview of active transportation facilities offered within the Town is summarized by kilometer in **Table 3-4** and described below. Detailed descriptions of each type of active transportation facility are provided in a subsequent section of this report.

Table 3-4: Active Transportation Facility Inventory

Type	Facility	km within Caledon
Pedestrian Facility	Sidewalks	272
	Recreational Trails	157
Pedestrian and Cyclist Shared Facility	Multi-Use Trail (MUT)	90
	In-Boulevard Multi-Use Path (MUP)	35
Cyclist Facility	Conventional Bike Lane	2

Type	Facility	km within Caledon
Cyclist and Vehicle Shared Facility	Signed Route	54
Regional Facility	Varies	33

Pedestrian Network

Sidewalks are provided along a substantial portion of local roads within Caledon Urban Areas (Mayfield West, Bolton and Caledon East). There are also sidewalks provided within select Town villages (Alton, Caledon Village, Inglewood and Palgrave), but with much less coverage compared to the urban areas.

Most trails, which include both hiking trails and unmarked dirt trails, currently form networks north of King Street. Notable trails in Caledon include the Bruce Trail, Humber Valley Heritage Trail, Oak Ridges Moraine Trail, Elora-Cataract Trail and Trans Canada Trail. Some segments of these recreational trails are roadside trails, serving to provide better connectivity.

Cycling Network

The existing cycling network consists primarily of on-road facilities, such as bicycle lanes, signed bicycle routes and paved shoulders. All roads with bicycle lanes reside within Bolton. Road segments with signed bicycle routes and paved shoulders currently serve to provide connections between urban areas, major destinations and scenic viewpoints.

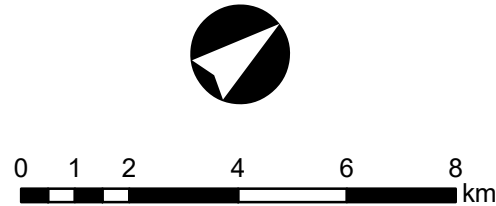
The most prominent multi-use trail within the Town is the east-west 35 km Caledon Trailway, which travels across the Town and through Caledon East; it services a variety of users, including cyclists, pedestrians, horseback riders and cross-country skiers.

Town of Caledon

Transportation Master Plan

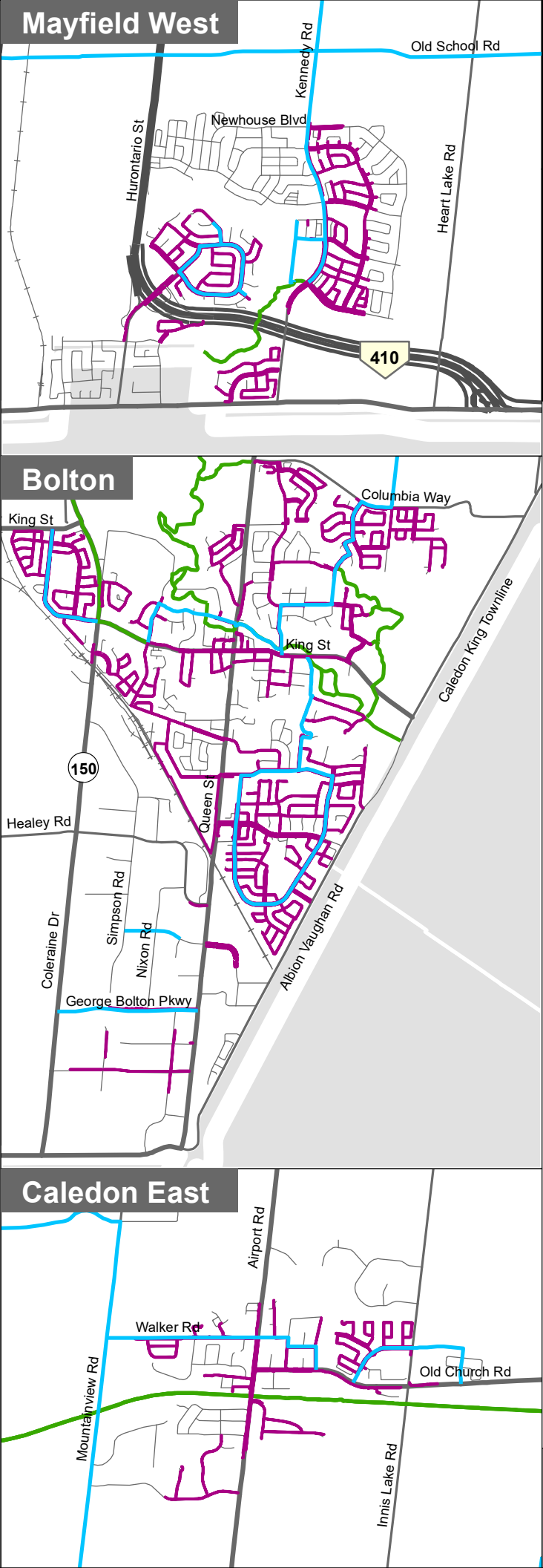
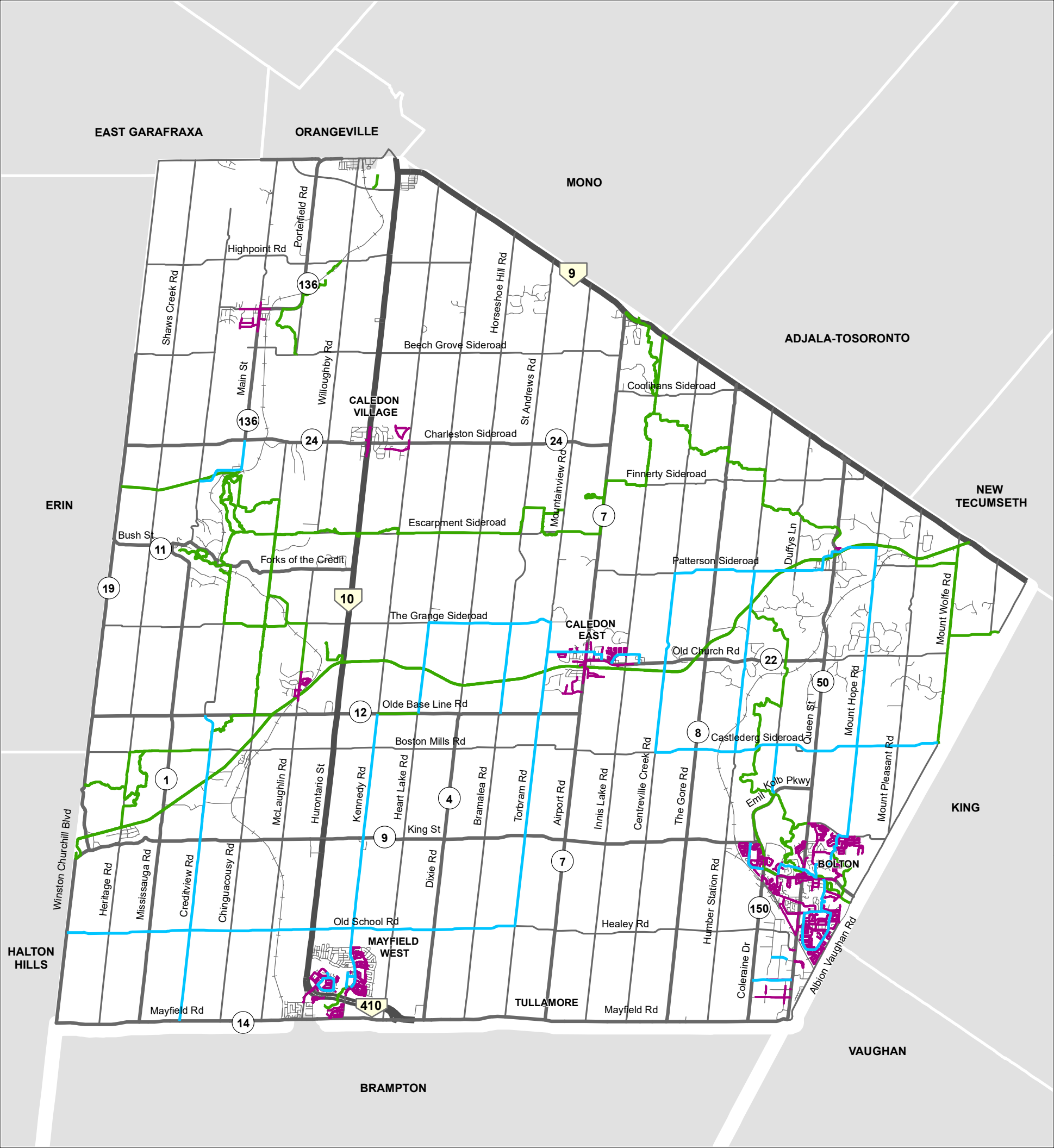
FIGURE 3-8
Existing Active
Transportation Network

- Cycling Routes
- Trails
- Sidewalk



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3.3.3 Transit Network

3.3.3.1 Fixed-Routes

Existing scheduled transit provided within the Town of Caledon is serviced by GO Transit (Metrolinx) and Brampton Transit. Current service is summarized below.

GO Transit

GO Transit operates two north-south peak service bus routes through Caledon, as summarized in **Table 3-5**.

Table 3-5: GO Transit Routes

Route Name	Days of Operation	Service Frequency	Route Description
37 Orangeville / Brampton	Weekdays	AM peak period: 60 min PM peak period: 60 min	Provides service between Hansen Blvd. @ First St. (Orangeville Mall) and Brampton GO
38 Bolton / Malton	Weekdays	AM peak period: 45 min (southbound only) PM peak period: 150 min (northbound only)	Provides service between Malton GO and Highway 50 @ Columbia Way

Brampton Transit

Brampton Transit extends its bus service north to Mayfield West and Tullamore via Route 81 and Route 30, respectively. The Brampton Transit service extension for Route 30 (Airport Road) is paid for by the Town under a cost-sharing agreement. The service frequency for these bus routes extending into Caledon, along with other Brampton Transit bus routes that service areas close to the Brampton-Caledon border (Mayfield Road), are summarized in **Table 3-6**.

Table 3-6: Brampton Transit Routes

Route Name	Days of Operation	Service Frequency	Route Description
81 Mayfield West	Weekdays	AM peak period: 45 min PM peak period: 45 min	Provides service between Sandalwood Loop and Kennedy Rd. north of Dougall Ave.
30 Airport Road	Daily	AM peak period: 10 min PM peak period: 10 min Weekday off-peak: 20 min Weekends: 30 min	Provides service between 12203 Airport Rd. (Legacy Warehouse) and Westwood Mall Terminal
7/7A Kennedy	Daily	AM peak period: 5-10 min PM peak period: 5-10 min Weekday off-peak: 15 min Weekends: 10-30 min	Provides service between Hurontario St. @ Courtneypark Dr. E. and Hurontario St. south of Mayfield Rd.
15/15A Bramalea	Daily	AM peak period: 20 min PM peak period: 15-25 min Weekday off-peak: 40-45 min Weekends: 30 min	Provides service between 11785 Bramalea Rd. (Smart Centres – Walmart Plaza) and Telford Way @ Tranmere Dr.

Route Name	Days of Operation	Service Frequency	Route Description
18 Brampton South	Daily	AM peak period: 5-15 min PM peak period: 5-10 min Weekday off-peak: 15-25 min Weekends: 10-20 min	Provides service between Dixie Rd. @ Meyerside Dr. and Inspire Blvd. east of Dixie Rd.
24 Van Kirk	Weekdays	AM peak period: 30-40 min PM peak period: 30 min (limited service) Weekday off-peak: 30-35 min	Provides service between 20 Lynch St. (Peel Memorial Hospital) and Hurontario St. south of Mayfield Rd.
26 Mount Pleasant	Monday to Saturday	AM peak period: 40 min PM peak period: 40 min Weekday off-peak: 40 min Saturdays: 40 min	Provides service between Mount Pleasant Village and Clockwork Dr. between Edenbrook Hill and Chinguacousy Rd.
31 McVean	Daily	AM peak period: 35 min PM peak period: 35 min Weekday off-peak: 35 min Weekends: 60 min	Provides service between the Gore Rd. north of Queen St. and Squire Ellis Dr. opposite Trail Rider Dr.
41 Bolton	Weekdays	AM peak period: 110 min PM peak period: 110 min Weekday off-peak: no service	Provides service along Highway 50 between Brampton and Caledon, including Columbia Way / Bolton Heights and the employment lands along Coleraine Drive

Orangeville Transit

Orangeville Transit operates bus service just outside the northern border of Caledon. Routes that are operating near the border are summarized in **Table 3-7**, including their respective service frequencies.

Table 3-7: Orangeville Transit Routes

Route Name	Days of Operation	Service Frequency	Route Description
Blue Route	Monday to Saturday	30 min during all operating times	Serves south end of the City via Orange St., Mill St., Church St., Parkview Dr., Riddell Rd., Centennial Rd. and Broadway
Orange Route	Monday to Saturday	30 min during all operating times	Serves the central portion of the City via Broadway, Diane Dr., Riddell Rd., Montgomery Blvd., Brenda Blvd., Clark St. and Third St.
Green Route	Monday to Saturday	30 min during all operating times	Serves the north end of the City via Broadway, Rolling Hills Dr., McCannell Ave., Fourth Ave., Hansen Blvd. and Blind Line

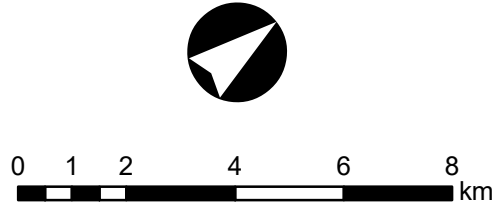
Figure 3-9 illustrates the existing scheduled transit service within the Town of Caledon. Service is not currently provided to the vast majority of the geographic area of Caledon and service is not convenient for much of the three urban centres.

Town of Caledon

Transportation Master Plan

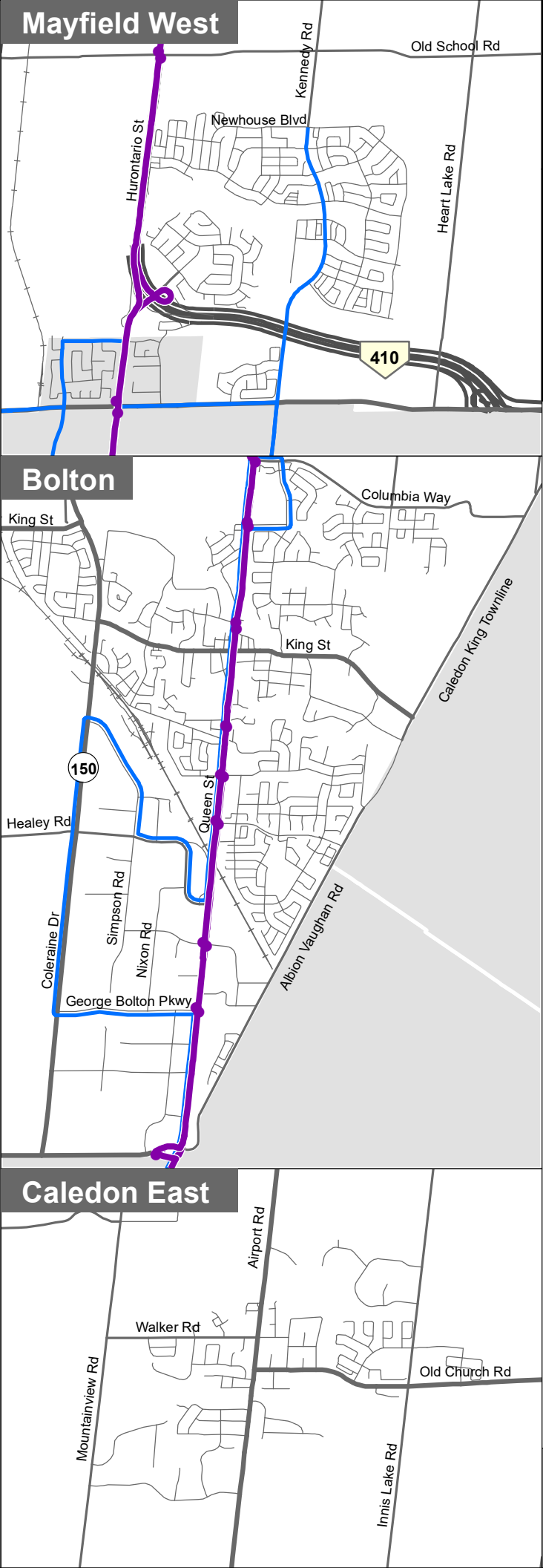
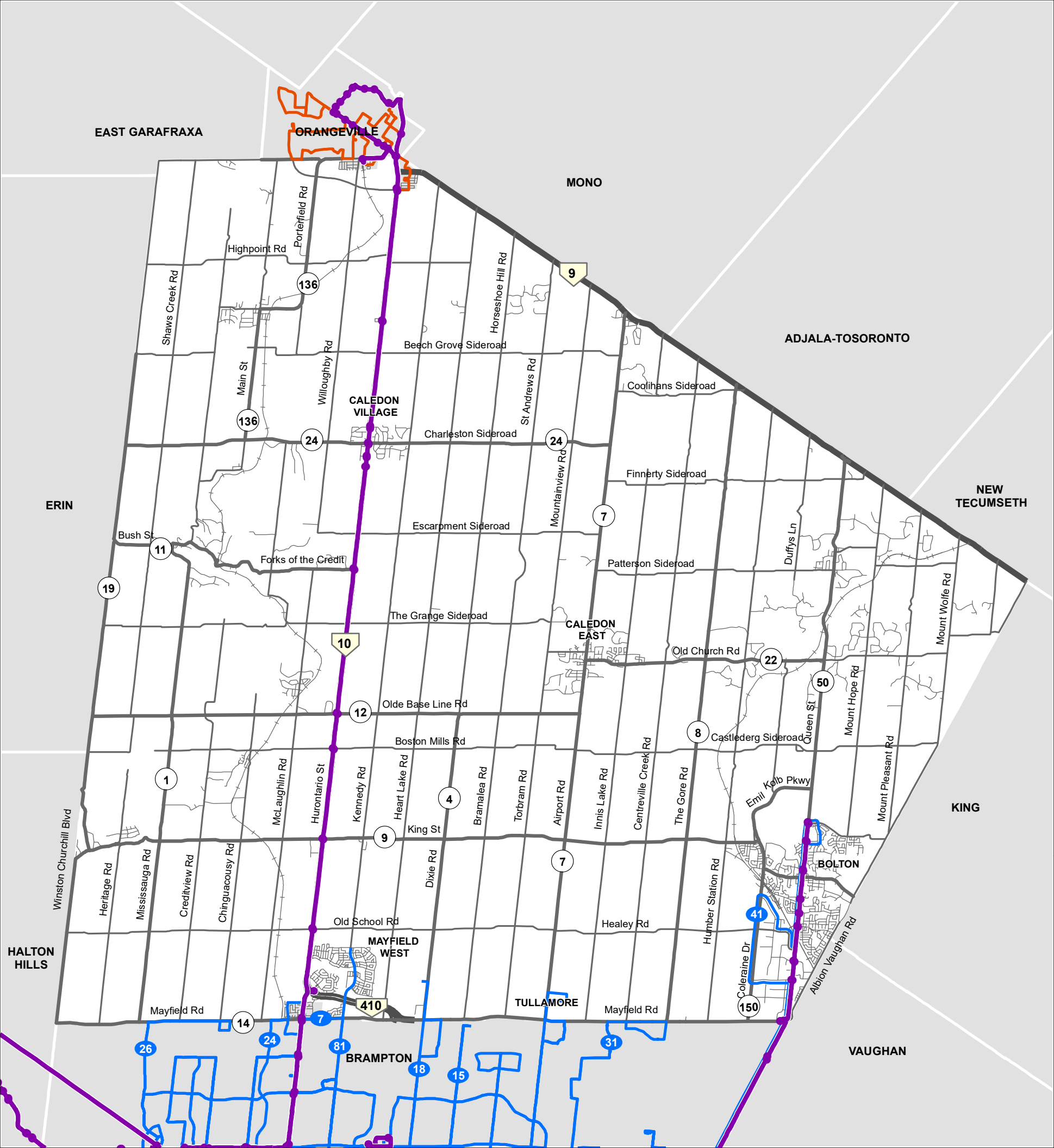
FIGURE 3-9
Existing Transit Network

- Brampton Transit
- GO Bus Transit
- Orangeville Transit



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3.3.3.2 On-Demand Transit Services

There are on-demand services that are offered within the Town, which include specialized transit to accommodate accessibility needs. Peel Region operated TransHelp service and Caledon Community Services (CCS) provide accessible transportation services within the Town, as described below. These services are an important component to a comprehensive and equitable transportation service.

TransHelp

TransHelp is an agency that provides service for people with disabilities throughout Peel Region. Eligible users include those that experience a barrier to using conventional public transit due to a physical, cognitive, visual, sensory and/or mental health disability. TransHelp operates service between 6:00 AM to 1:00 AM daily but requires an advanced booking notice of 7 days.

Caledon Community Services (CCS)

CCS is Caledon's largest human service provider. Beginning in 1989, funding from the Ministry of Health & Long-Term Care (MOHLTC) has enabled CCS to provide specialized accessible transportation options to Caledon seniors and adults with disabilities who are unable to drive. CCS is the Region of Peel's contracted TransHelp service provider in Caledon.

The CCS transportation service is provided using a shared ride model, transporting multiple clients, whose rides are subsidized by different levels of government, traveling on the same bus to different destinations. Current Client eligibility include residents who are aged 60 and over and have specified physical issues.

3.3.4 Rail Corridors

The movement of bulk commodities over a long-distance is commonly completed via rail.

Figure 3-10 illustrates two rail corridors within Caledon – the Canadian Pacific Railway (CP) to the east and the Orangeville Brampton Railway (OBRY) to the west. The OBRY has been discontinued. The rail tracks have been removed and a study is being conducted to repurpose the corridor as a multi-use recreational trail. Further details of the proposed trail network are detailed in Section 7.3.

CP is classified as a 'Class-1' railroad, which experiences higher freight volumes and covers a greater geographic region (North America-wide). There are three types of railway crossings within Caledon—at grade, rail bridge and rail underpass crossings. Two at-grade crossings along the CP network at Coleraine Drive and King Street are to be considered for grade separation.



Figure 3-10: Peel Region Rail Network

Source: Region of Peel Goods Movement Strategic Plan 2017-2021

3.4 Existing Travel Characteristics

An important starting point of transportation planning is understanding existing travel patterns and behaviour to forecast future demand and develop adequate transportation networks. This data is captured in the Transportation Tomorrow Survey (TTS), which has been a comprehensive travel survey distributed by the University of Toronto Transportation Research Institute every five years since 1986 (with the latest data released in 2016). The survey is conducted in the Greater Golden Horseshoe and the data utilized to make transportation planning and investment decisions within local, regional, provincial and transit agencies, among others.

The subsequent Sections will review the current travel patterns to better approach the challenge of shifting the mindset to more sustainable modes of transportation in Caledon. Additional analyses on travel characteristics are provided in **Appendix D**.

3.4.1 Travel Patterns

An assessment of number of trips generated by communities and rural geographic areas within Caledon as summarized in **Table 3-8**. The Bolton community generates 41% of the morning outbound trips, consistent with the percentage of population in the Town. The 50% of the morning inbound trips that are attributable to Bolton is consistent with the very high proportion of jobs in Bolton.

Table 3-8: Inbound and Outbound Trips (2016, All Modes)

Sub-Area	AM Peak Period				PM Peak Period			
	Outbound		Inbound		Outbound		Inbound	
	Trips	%	Trips	%	Trips	%	Trips	%
Bolton	13,982	41%	13,332	50%	14,460	53%	13,563	42%
Mayfield West	6,192	18%	3,944	15%	3,288	12%	5,382	17%
Caledon Village	447	1%	180	1%	314	1%	430	1%
Caledon East	5,636	17%	4,505	17%	4,848	18%	5,219	16%
Rural Caledon West	1,521	4%	1,328	5%	1,032	4%	1,556	5%
Rural Caledon East	6,226	18%	3,452	13%	3,137	12%	5,992	19%
Total	34,004	100%	26,741	100%	27,079	100%	32,142	100%

3.4.2 Trip Distribution

During the AM peak period (6:30 AM – 9:30 AM), 38% of trips stay within the Town of Caledon. Morning outbound trips destined for Brampton / Mississauga represent 27% of trips. Most other AM trip destinations are in the City of Toronto (14%) and York Region (12%).

Most morning peak period trips originating in the Town's more developed residential areas (Mayfield West, Bolton, Caledon East and Caledon Village) are external to Caledon. Trips originating in Bolton have the largest proportion (49%) of internal trips. The remaining trips

originating in Bolton are rather evenly split between Toronto, York Region and Brampton / Mississauga. A substantial proportion of trips originating in Mayfield West and Caledon East (55% and 41%, respectively) are destined for the rest of Peel Region (Brampton and Mississauga). The distribution for trips originating from sub-areas within Caledon during the morning peak period is illustrated in **Figure 3-11**.

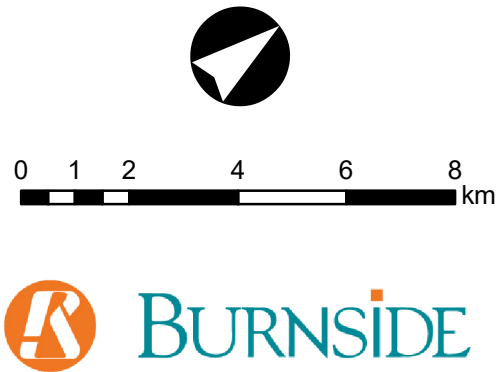
Town of Caledon

Transportation Master Plan

FIGURE 3-11
Trip Destinations by
Sub-Area

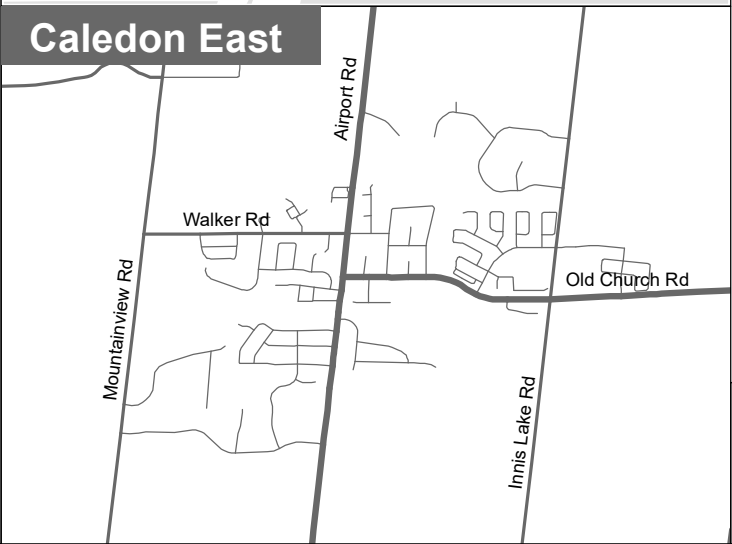
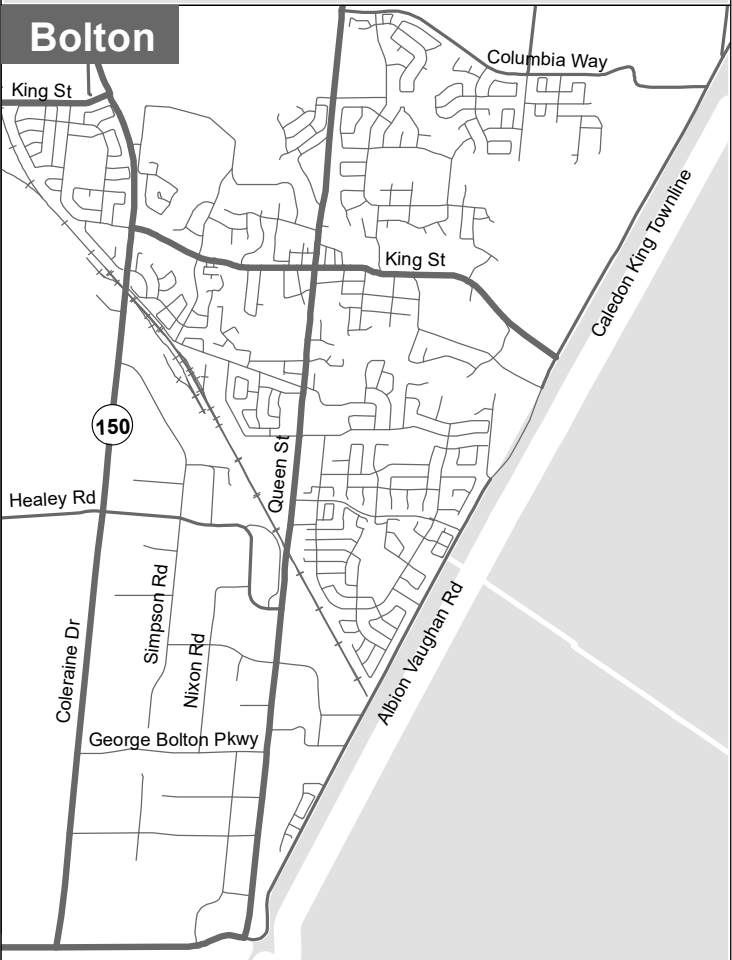
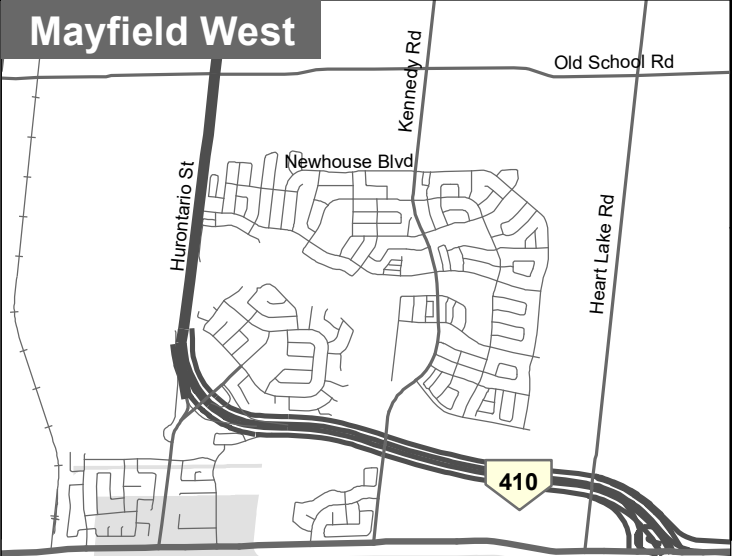
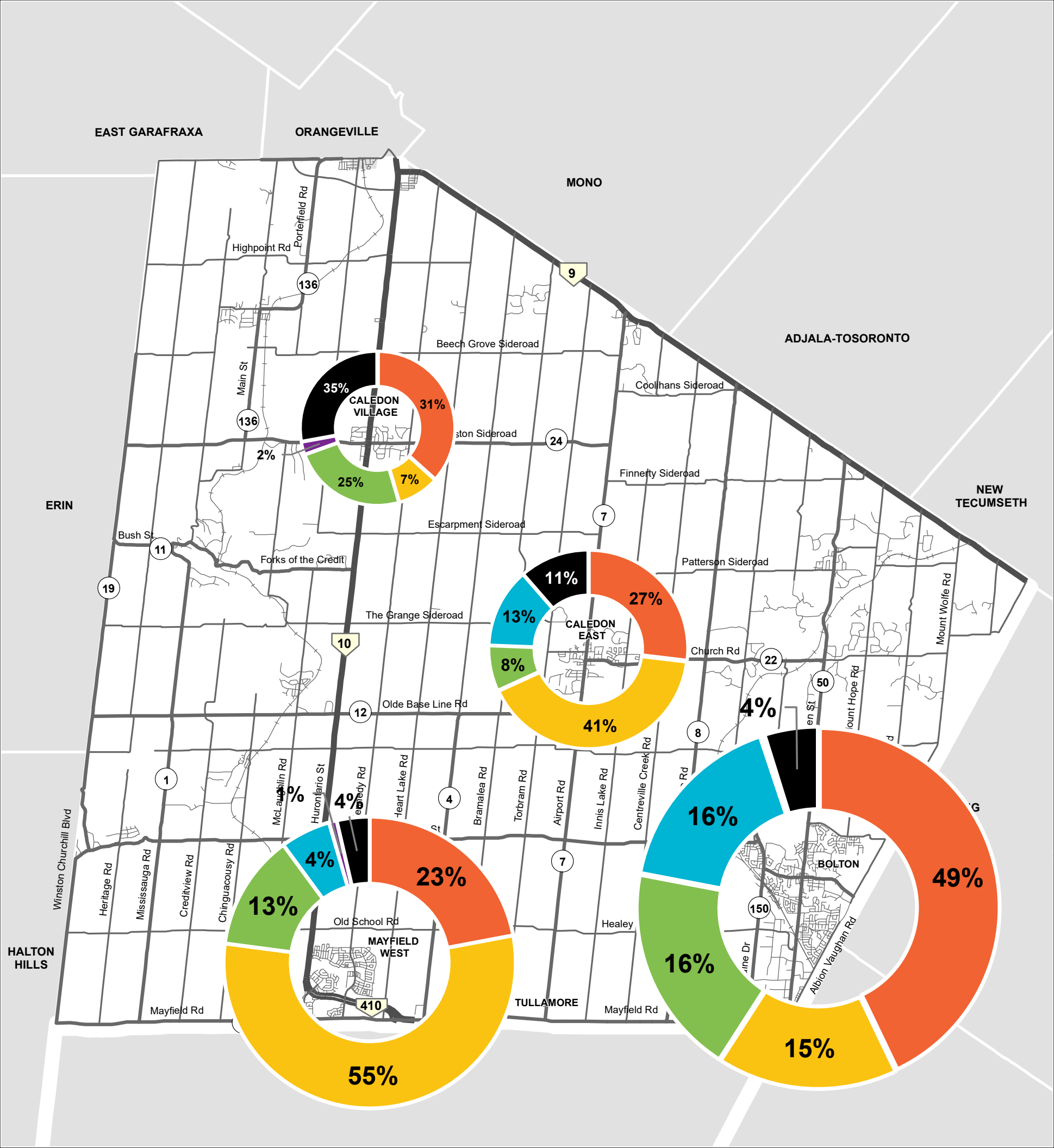
Destinations
(2016, AM Peak Period, All Modes)

- Caledon
- Brampton / Mississauga
- Toronto
- York
- Halton
- Other



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A review of internal trips within the Town indicates that the majority of trips originating within each sub-area of Caledon are internal during the morning peak period. This is particularly evident for trips originating in Bolton, where most trips (approximately 5,500) are internal to the sub-area (i.e., destined to Bolton). While travel between these major sub-areas do not appear to be significant compared to the proportion of internal sub-area trips, a decent portion of trips originating in Caledon East and Mayfield West are destined for Bolton (84 and 135 trips, respectively). The internal trip distribution by sub-area is summarized in **Table 3-9**.

Table 3-9: Internal Trip Distribution by Sub-Area (2016, AM Peak Period, All Modes)

Origin / Destination	Bolton	Mayfield West	Caledon Village	Rural Caledon West	Caledon East	Rural Caledon East	Total
Bolton	5,524	16	32	39	63	986	6,660
Mayfield West	135	735	0	455	78	0	1,403
Caledon Village	0	65	0	76	0	0	141
Rural Caledon West	245	388	7	630	92	193	1,555
Caledon East	84	0	0	45	280	0	409
Rural Caledon East	1,642	76	0	123	249	815	2,905
Total	7,630	1,280	39	1,368	762	1,994	13,073

3.4.3 Mode Splits

Trips with origins or destinations in Caledon consist largely of vehicle trips during the morning peak period. This is especially evident for external trips (i.e., those that start or end outside of the Town), which have a 95% automobile mode share.

Trips with both origin and destination in Caledon, however, have higher non-auto trip use. Approximately one-quarter of the trips internal to the Town are made via a school bus. The most prevalent active transportation mode is walking, which makes up 9% of the mode share for internal trips. Minimal cycling trips were identified during the morning peak period.

The mode share breakdown is shown in **Table 3-10**.

Table 3-10: Mode Share for Caledon Trips (2016, AM Peak Period)

Mode	Internal		External		Total	
	Trips	%	Trips	%	Trips	%
Automobile	8,445	65%	32,233	95%	40,678	87%
Local Transit	18	0%	577	2%	595	1%
GO Rail / Joint GO Rail	0	0%	136	0%	136	0%
School Bus	3,389	26%	1054	3%	4,443	9%
Walk	1,220	9%	64	0%	1,284	3%
Cycle	0	0%	0	0%	0	0%
Other (e.g., Motorcycle)	0	0%	35	0%	35	0%
Total	13,072	100%	34,099	100%	47,171	100%

3.4.4 Trip Purpose

Home-based work trips make up approximately half of the trips originating from or destined to Caledon during the morning peak period. Most of these home-based work trips start or end outside of the Town. The *Caledon 2020-2030 – Economic Development Strategy* indicated that the Town is a net exporter of workers (i.e., more people leave the Town to work than enter it for work). As such, a reduction of auto traffic would require an increase of suitable employment within Caledon to keep residents working in Caledon and/or an introduction of an efficient regional transportation system with car lot, bus, rail connectivity.

Among the trips travelling to/from Caledon, there is a fairly even split between home-based school and home-based discretionary trips (21% and 20%, respectively). These trip purpose splits remain relatively consistent with trips originating within each sub-area of the Town, although Caledon East is observed to have a much higher proportion of home-based work trips (72%) compared to the other sub-areas. A large proportion (43%) of internal Town trips consist of home-based school trips, resulting in a 26% school bus mode share as mentioned in the previous section.

The trip purpose breakdown is shown in **Table 3-11**.

Table 3-11: Caledon Trips by Purpose (2016, AM Peak Period, All Modes)

Trip Purpose	Internal		External		Total	
	Trips	%	Trips	%	Trips	%
Home-Based Work	3,145	24%	15,402	68%	18,547	52%
Home-Based School	5,612	43%	1,761	8%	7,373	21%
Home-Based Discretionary	3,511	27%	3,557	16%	7,068	20%
Non Home-Based	803	6%	1,824	8%	2,627	7%
Total	13,071	100%	22,544	100%	35,615	100%

4.0 Policy Framework and Master Plan Vision

This chapter summarizes the current planning policies that frames and creates a foundation for the study followed by the development of the vision of the MMTMP.

4.1 Overview

This Multi-Modal Transportation Master Plan is responding to the ambitious growth forecast for the Town of Caledon. This future growth is an opportunity to realize strategic Town initiatives and to develop communities consistent with the Town's planning Vision. Hence, this master plan has been developed with the guidance of policy documents from the Province, the Region, and the Town. The policy framework was categorized into four initiatives which include:

- Growth and Economic objectives,
- Climate Change Mitigation objectives,
- Community Development objectives, and
- Future-Ready objectives.

These policy aspirations help develop a vision for the plan and transportation system development over the next 30 years. A more detailed review of the policy documents is provided in **Appendix A** and includes references to the following documents:

- Provincial Policy Statement, 2020
- A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020
- Greenbelt Plan, 2017
- Niagara Escarpment Plan, 2017
- Oak Ridges Moraine Conservation Plan, 2017
- 2041 Regional Transportation Plan, 2018
- GTA West Corridor Environmental Assessment
- Peel Region Official Plan, December 2018 Consolidation
- Peel Growth Management Focus Area Policy Directions Report
- Future Caledon Official Plan, March 2024
- Caledon 2023-2035 Strategic Plan
- Caledon 2020-2030 Economic Development Strategy
- Resilient Caledon
- Caledon Fire Master Plan
- Caledon Recreation and Parks Master Plan
- Bolton Residential Expansion Area, ROPA 30
- Mayfield West Phase 2 Secondary Plan, OPA 222

4.2 Growth and Economic Objectives

4.2.1 Planned Growth

The Region of Peel Official Plan Review (Peel 2051) has been completed in accordance with the requirements of the statutory planning framework in Ontario. Of particular importance to Peel 2051 is the provincial plan to manage growth in the Greater Golden Horseshoe (the Growth Plan). The Growth Plan includes detailed policies for Settlement Area Boundary Expansions (SABE) and Official Plan reviews.

Policy 2.2.8.3 of the Growth Plan requires that the feasibility and most appropriate location for the proposed SABE areas be identified based on the comprehensive application of all the policies in the Plan. Region of Peel Council has determined that much of the Regional growth to 2051 will occur in southern Caledon. The Region has allocated future population growth up to 2051 as summarized in **Table 4-1**. Caledon's population and employment are expected to quadruple from the existing 76,581 residents (2021 Census) and an estimated 32,000 jobs.

Table 4-1: Population and Employment Growth Allocations ('000s)

Municipality	2031 Population	2041 Population	2051 Population	2031 Employment	2041 Employment	2051 Employment
Town of Caledon	112,000	201,000	300,000	52,100	82,100	125,000
City of Brampton	865,000	929,100	985,100	273,400	314,100	355,000
City of Mississauga	852,000	920,000	995,000	537,300	562,800	590,000
Region of Peel	1,829,000	2,050,100	2,280,100	862,800	959,000	1,070,000

Source: 2051 Land Needs Assessment, Peel Region

4.2.2 Settlement Area Boundary Expansion (SABE)

In support of growth plan density targets, new residential and employment lands are planned in Caledon, especially those within the vicinity of the proposed Highway 413 (also known as the GTA West corridor). Based on minimum intensification targets, it is estimated that an additional 4,300 ha of combined community and employment area is required to accommodate new growth in the Settlement Area Boundary Expansion (SABE) area of Caledon.

A conceptual SABE 2051 boundary, as developed based on technical studies, is shown in **Figure 4-1**. Region of Peel Council adopted a new Official Plan in April 2022 which includes the SABE area and associated land use designations. Caledon's Preferred SABE, endorsed by Town Council in December 2021, has some differences.

The proposed boundary and land use allocations may change, with ongoing refinement and further evaluation required. It is noted, however, that an approved Minister's Zoning Order

(MZO) was issued by the Government of Ontario for most of the land area designated as 'Mayfield West (Phase 2 Stage 2)' in the draft conceptual SABE map. This MZO allows for fast-track development in this area.

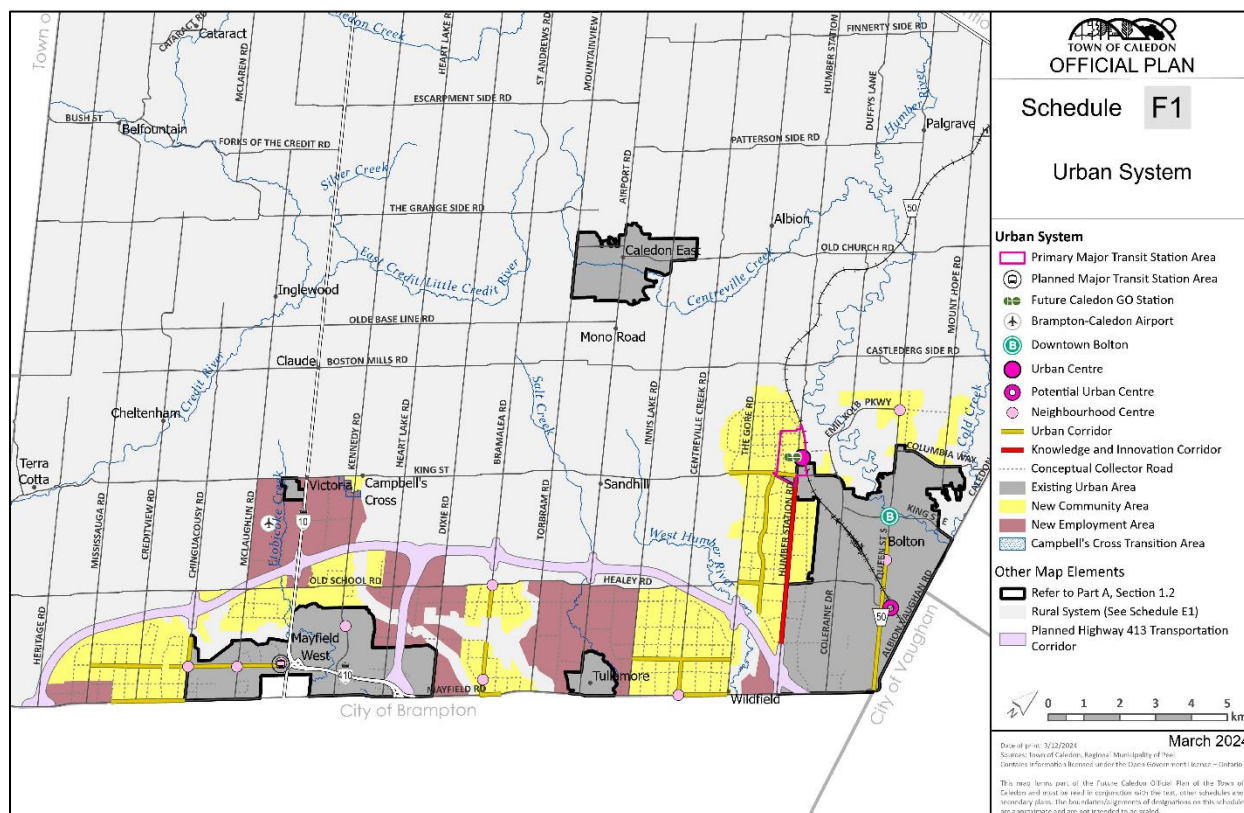


Figure 4-1: Settlement Area Boundary Expansion

Source: Future Caledon Official Plan (March 2024)

The projected allocation of population and employment growth within Caledon between 2021 and 2051 is illustrated in **Figure 4-2** and **Figure 4-3**, respectively.

Town of Caledon

Transportation Master Plan

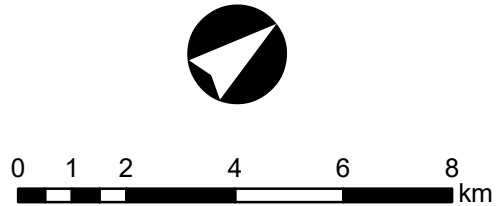
FIGURE 4-2

Population Growth
2021 - 2051

Population Growth 2021 - 2051

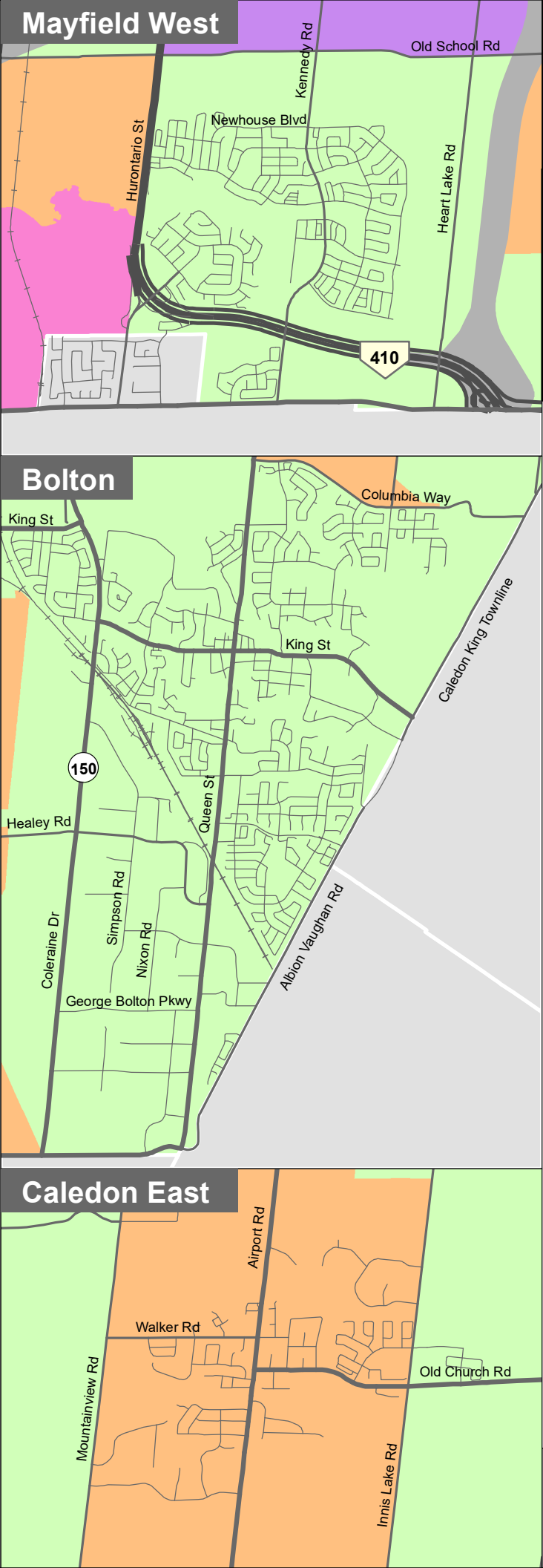
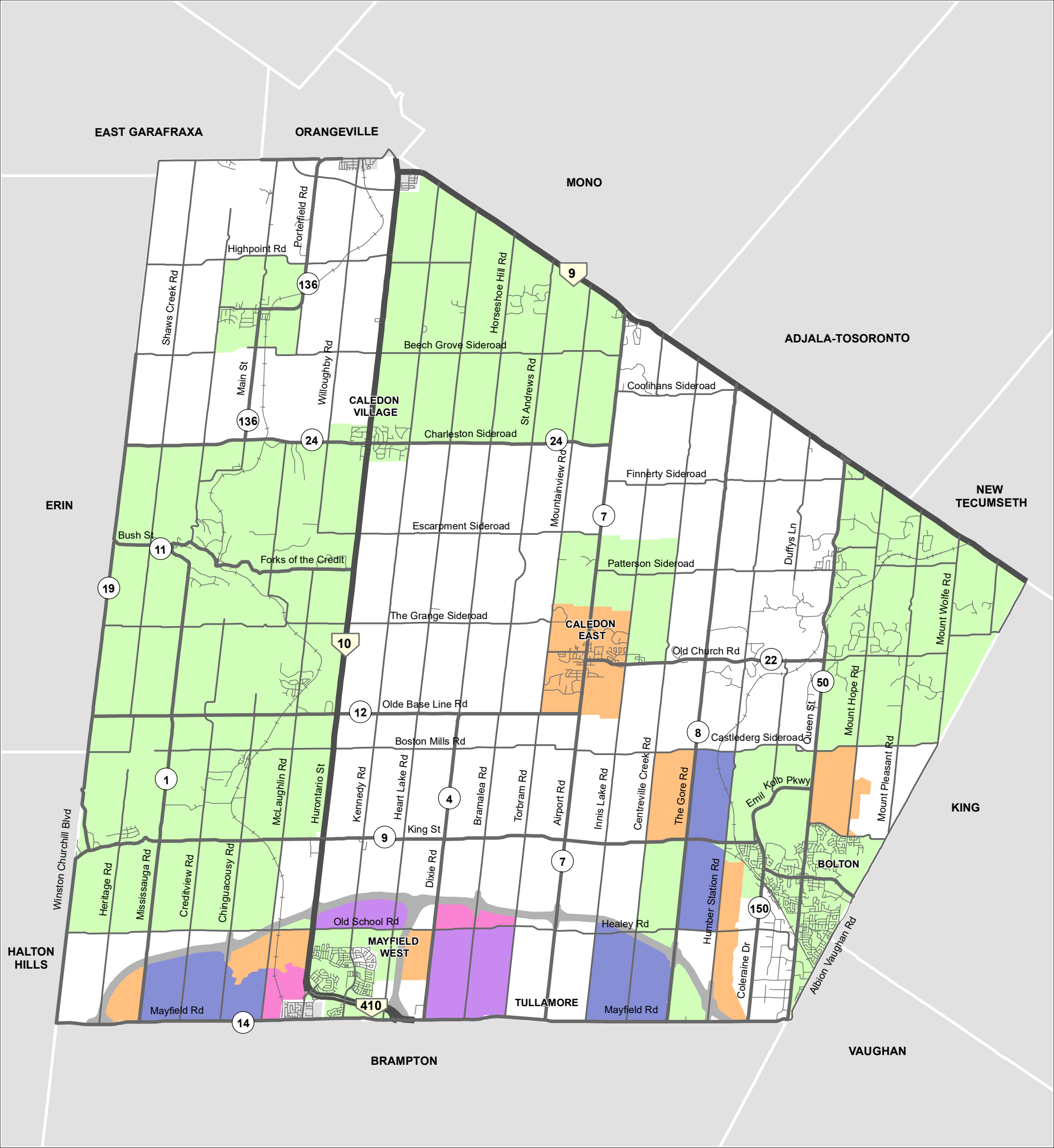
- < 3,000
- 3,000 - 6,000
- 6,000 - 9,000
- 9,000 - 12,000
- > 12,000

* Note: Draft land use allocations provided by Peel Region (May 2021)



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This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.



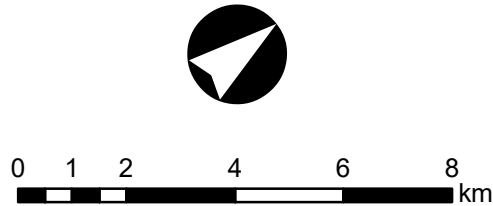
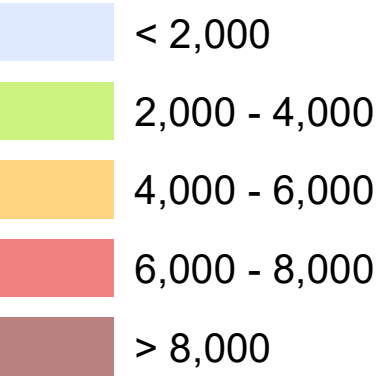
Town of Caledon

Transportation Master Plan

FIGURE 4-3

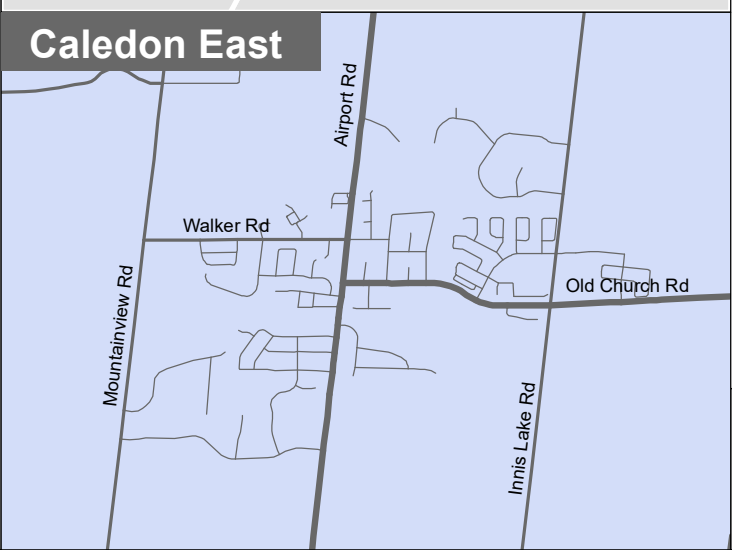
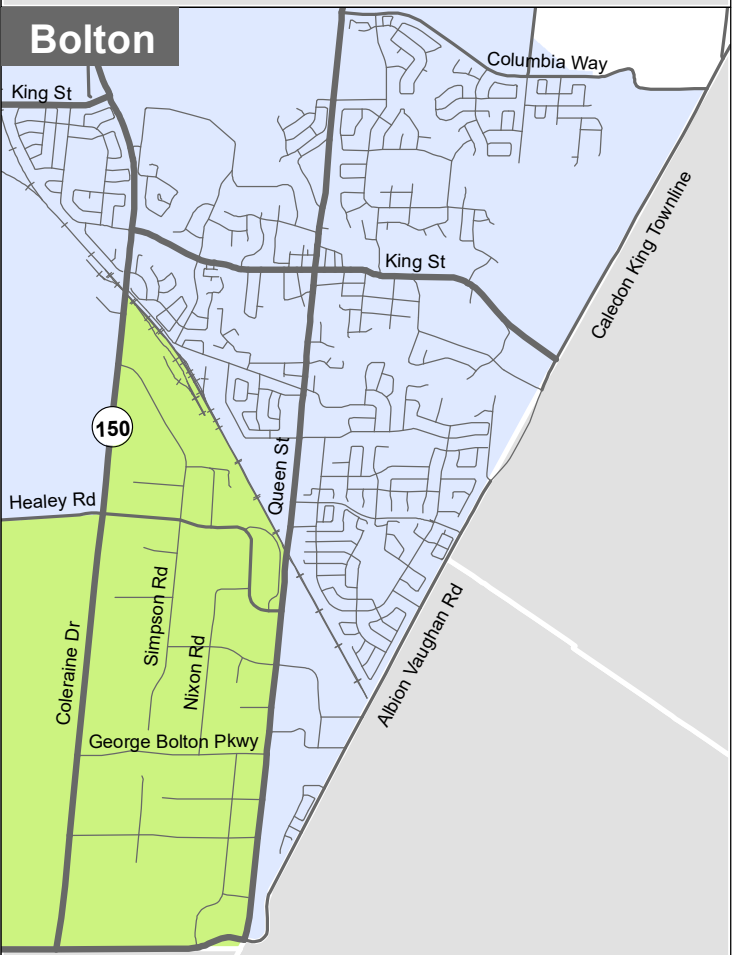
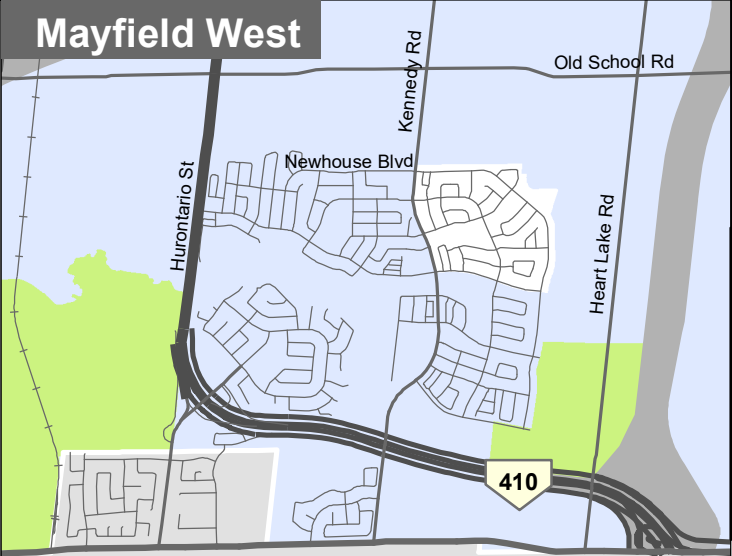
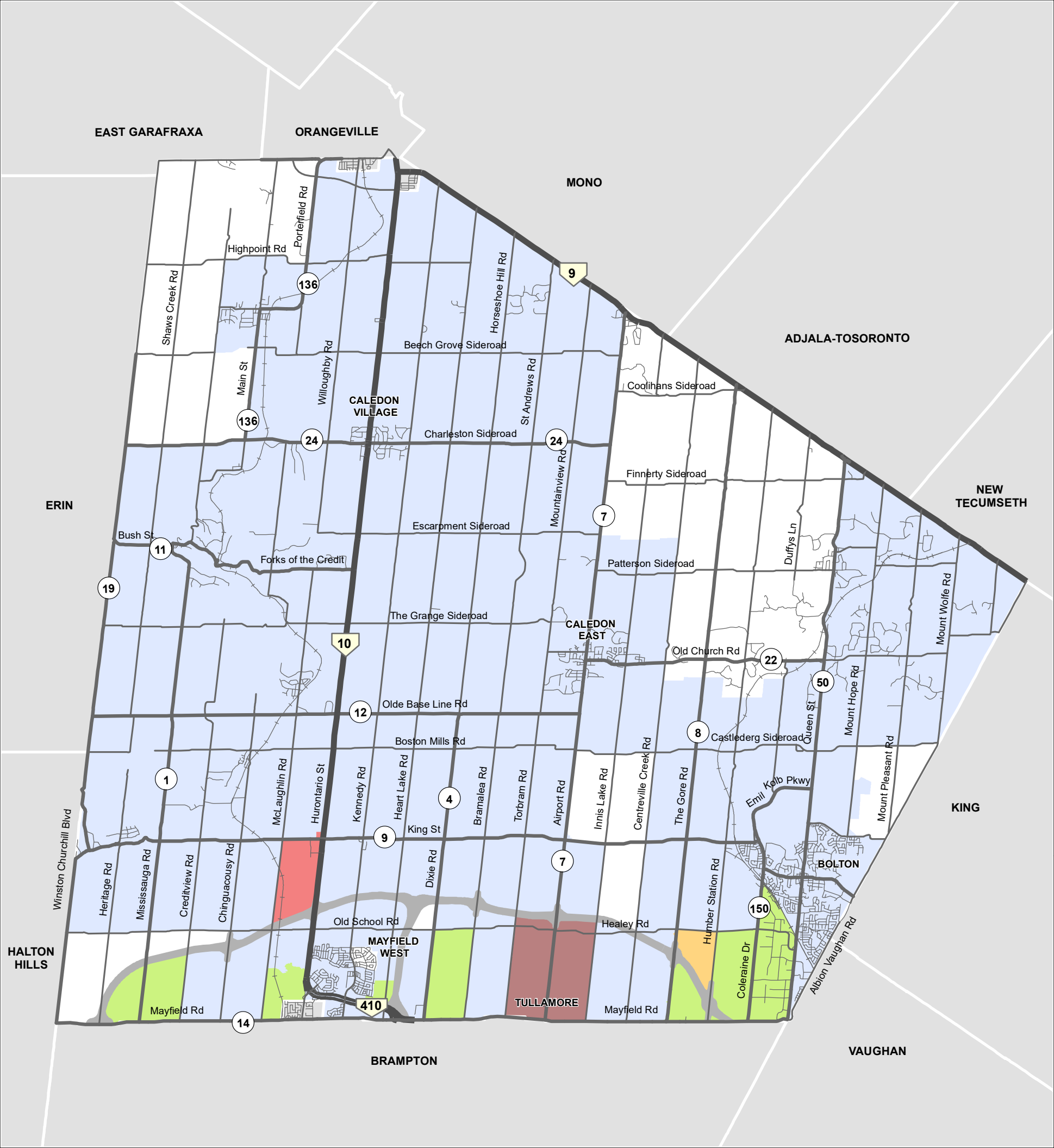
Employment Growth
2021-2051

Job Growth 2021-2051



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This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.



4.2.3 Provincially Significant Employment Zone (PSEZ)

Within the SABE area there are established industrial areas in Bolton. The westerly expansion of these employment lands has been recognized by the Province of Ontario as a designated Provincially Significant Employment Zone (PSEZ) in the Province's *Growth Plan* (2019). These lands were identified for job creation and economic development for the purpose of long-term planning. The PSEZ within Caledon is in the Bolton area as illustrated in **Figure 4-4**. According to *A Place to Grow* (August 2020), PSEZs can consist of employment areas as well as mixed-use areas that contain a significant number of jobs.

A Place to Grow details new policies that protect employment areas critical to the local and provincial economy. These policies provide municipalities with flexibility to change the use of lands from employment areas to other uses, while ensuring key employment areas are protected for the long-term.

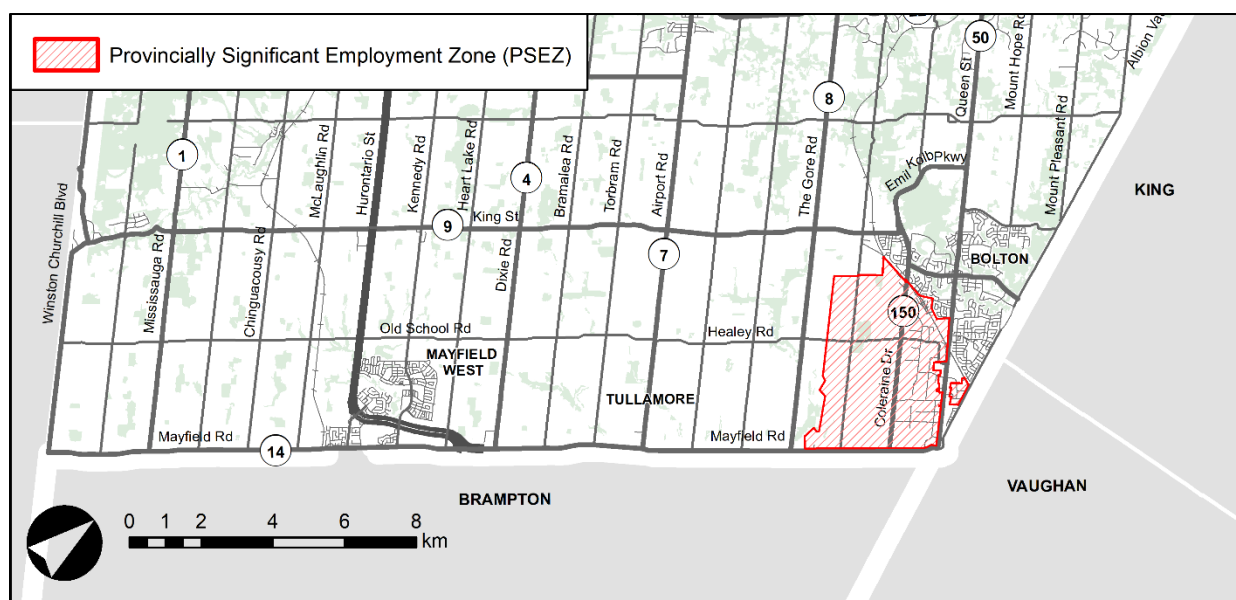
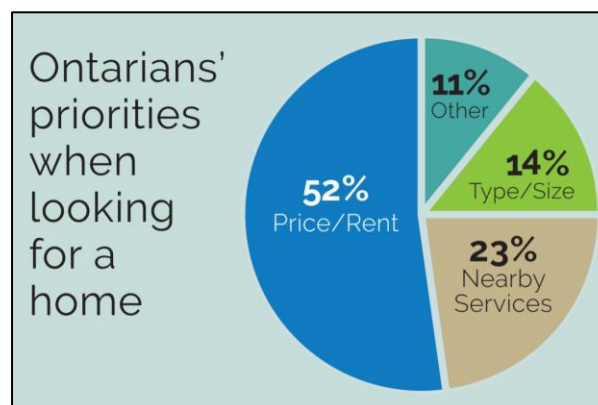


Figure 4-4: Provincially Significant Employment Zone (PSEZ) in Caledon

Source: <https://www.ontario.ca/page/provincially-significant-employment-zones>

4.2.4 Affordable Housing

The vision of Ontario's Housing Supply Action Plan (May 2019) is to allow all Ontarians to "find a home that meets their needs and their budget". Offering more options for housing to a wider income range will help improve the economy by supporting local business owners and their employees. A survey conducted by the Province indicated that the majority of people prioritize affordability when looking to purchase a home, followed by access to nearby services (i.e., transit, schools and other services).



Source: Ontario housing supply consultation, 2019

The plan to boost the housing supply in Ontario will need to be supported by more infrastructure, in good repair. This is complimented by investments in improved transportation networks and transit-oriented development.

4.2.5 Economic Strategies and Priorities

Actions within Caledon 2020-2030 *Economic Development Strategy* align with four strategic priorities, as summarized in **Table 4-2**.

Table 4-2: Caledon 2020-2030 Economic Development Strategy Priorities

	Objective
Priority I: Support an Entrepreneurial and Small Business Economy	Provide entrepreneurs with the tools and resources to succeed in an increasingly integrated regional, provincial and global economy.
Priority II: Focus on Business Retention and Growth	Work with and for our local businesses to generate new investment and innovation in the Caledon economy.
Priority III: Improve Quality of Place	Create a network of vibrant, attractive urban/rural communities in our urban core, villages and hamlets that respects Caledon's rural heritage but is responsive to the planned growth of the Town.
Priority IV: Enhance Investment Readiness	Provide the structure and policies to effectively target investment attraction and diversification of the local economy.

The major expectations and outcomes of the strategy are to:

- Grow the diversity of the Town's business and industrial activity, taking into consideration the limits on employment land and impact on the community;
- Balance the anticipated population growth with an increase in the non-residential tax base;
- Assess the opportunities for growth and urban renewal in the commercial cores;
- Increase the economic viability of the town of Caledon in the short and long term; and
- Inform the development of annual work plans for the Economic Development and Tourism Division as well as other departments within the Town.

Input from Economic Development indicated that a specific need related to transportation is the provision of affordable transportation options, such as local transit, to connect employees with jobs in Caledon. This level of connectivity will help make employment lands and businesses more viable and would also help transportation efficiencies associated with shorter more self-contained trips.

4.3 Climate Change Mitigation Objectives

4.3.1 Climate Change Emergency

The Town of Caledon recognizes that if no action is taken to address climate change, the Town will see higher risks of damage to infrastructure due to flooding and other extreme weather, increased health impacts, poor air quality, and damage to crops and livestock. To mitigate and significantly reduce the risk of experiencing these catastrophic impacts, the Town of Caledon Council declared a climate change emergency on January 28, 2020 and directed Town staff to report back on the actions that are required by the Town and community to reduce local GHG emissions.

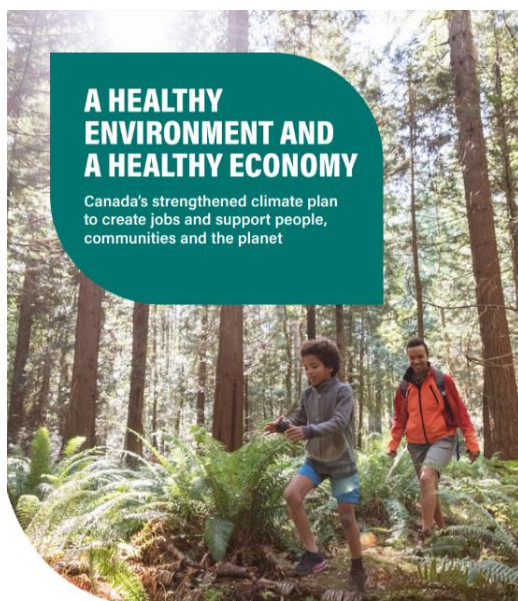
The Town committed to a greenhouse gas emissions reduction target that is in line with limiting global warming to 1.5-degree Celsius based on findings and recommendations by the Intergovernmental Panel on Climate Change (IPCC). The IPCC stated that human activities have caused approximately 1-degree Celsius of global warming above pre-industrial levels and will worsen over the next few decades. Climate change is an urgent crisis that requires radical changes to our society and economic systems in order to limit warming to no more than 1.5C above pre-industrial levels to reduce the risk of catastrophic climate impacts. Even if we meet the 1.5C warming threshold, climate impacts are already expected, including increases in severe storms, sea level rise, extreme heat, flooding, drought, species and habitat loss, loss of crop yields, and spread of disease.

The IPCC stated that limiting global warming to 1.5-degree Celsius as opposed to 2-degree Celsius could reduce the number of people both exposed to climate-related risks and susceptible to poverty by up to several hundred million by 2050.

On June 28, 2020, Town Council adopted a community greenhouse gas (GHG) emissions reduction target of net zero by 2050 as part of the ongoing Resilient Caledon Plan, aligning with the 1.5-degree Celsius warming scenario.

The federal government and other municipalities within Ontario have also committed to a net zero target including the City of Toronto, City of Hamilton, and the City of Guelph.

4.3.2 Federal Climate Change Commitments



Environment and
Climate Change Canada

Environnement et
Changement climatique Canada

Canada

In December 2020, the Government of Canada introduced A Healthy Environment and a Healthy Economy, a climate plan that builds off the 2016 Pan-Canadian Framework on Clean Growth and Climate Change (PCF). This plan aims to exceed its 2030 Paris Agreement emission reduction target and aims for a net-zero emission future by 2050.

A major component to this updated plan is making clean, affordable transportation and power available in every Canadian community. The commitments made by the Government of Canada include expanding the supply of clean electricity, investing in next-generation clean energy and technology, encouraging cleaner modes of transportation such as zero-emission vehicles, transit, and active transportation.

Federal targets on zero-emission vehicles include:

- 10% of light-duty vehicle sales are zero-emission by 2025,
- 30% of light-duty vehicle sales are zero-emission by 2030, and
- 100% of light-duty vehicle sales are zero-emission by 2035.

Action items related to this component include the following:

- Invest an additional \$287 million over two years to continue the Incentives for Zero-Emission Vehicles (iZEV) program until March 2022,
- Include a 100-percent tax write off for commercial light-duty, medium-duty, and heavy-duty zero-emission vehicles,
- Develop a national active transportation strategy and explore ways to deliver more active transportation options, and
- Develop a plan to electrify public transit systems and provide permanent public transit funding.

4.3.3 Zero Emissions Vehicle Infrastructure Program

The Zero Emissions Vehicle Infrastructure Program is a federal initiative to support the growth of localized charging and hydrogen refuelling opportunities for Canadians. The 5-year program costs \$280 million and ends in 2024. This program subsidizes up to 50% of the costs of electric vehicle and hydrogen refuelling stations. Eligible areas include public parking areas such as libraries and retail, on-street parking, workplaces, multi-unit residential buildings, and areas for commercial and public fleets.

4.4 Community Development Objectives

Community development objectives for the Caledon MMTMP are guided by the Town's strategic planning documents, including the Official Plan, Resilient Caledon, Council Strategic Plan, and Economic Development Strategy. The MMTP also aligns with Provincial policies as outlined in the Provincial Policy Statement, A Place to Grow, and Metrolinx's 2041 Regional Transportation Plan.

4.4.1 Future Caledon Official Plan

This Multi-Modal Transportation Master Plan is a companion document of the Future Caledon Official Plan. Future Caledon was prepared to support the Town's long-term environmental, social and economic prosperity through climate change mitigation and adaption, protection of agricultural and environmentally sensitive lands, preserving our rural communities, responsible urban growth management, and equity and inclusion for all.

4.4.2 Policy for Nodes and Corridors

The urban structure concept of nodes and corridors has been presented in provincial policy documents including the Ministry of Transportation (MTO) Transit Supportive Guidelines (2012). The designation of nodes and corridors can "help to direct and focus growth to support the clustering of uses and activities and enable the creation of a more efficient transit network". It also identifies the opportunities for alternative modes of travel:

- "Linking new streets to existing streets in adjacent developments can improve connectivity and transit service efficiency".
- "Space collectors at intervals of 400 m or less in designated nodes and corridors in order to facilitate higher levels of walking and cycling"
- "Walkable neighbourhoods typically have a higher number of intersections per hectare (iph). Achieving an intersection density of 0.6 iph or higher in nodes and corridors will help create multiple options for moving between destinations, enhancing connections between transit services and nearby uses"
- "Minimize block lengths to promote greater connectivity and enhance the walkability of neighbourhoods. Generally, residential blocks should be less than 250 m along their longest side, with maximum block lengths of 120 m in mixed-use activity nodes and corridors."

The MTO Transit Supportive Guidelines supports grid network "The local street and block pattern should be designed as an interconnected grid network aimed at maximizing connectivity for all travel modes and minimizing travel distances to surrounding streets, uses and open spaces".

These concepts are supported by the Council-adopted Peel Regional Official Plan (ROP) which provides direction and policies for the Regional Urban Structure. The Growth Management section (Section 5.5 of the ROP) includes the following statements:

- “Accommodate intensification within urban growth centres, intensification corridors, nodes, and major transit station areas and any other appropriate areas within the built-up area.
- Require the area municipalities to develop intensification strategies that, among other things, identify intensification areas to support a mix of residential, employment, office, institutional and commercial development where appropriate, and to ensure development of a viable transit system.
- Encourage the area municipalities to require development around major transit station areas within the designated greenfield to achieve a minimum density of 100 residents and jobs per hectare.
- Direct the area municipalities to incorporate official plan policies to plan for complete communities within designated greenfield areas that create high quality public open spaces with site design and urban design standards that support opportunities for transit, walking and cycling.”

These concepts are further supported by the Future Caledon Official Plan which states that “the Town will work collaboratively with the Region of Peel, Metrolinx, Province, neighbouring municipalities and other appropriate jurisdictions to promote transit stations and terminals in urban nodes and corridors, as identified in this Plan.”

4.5 Future-Ready Objectives

MTO’s 2022 Greater Golden Horseshoe transportation plan (“Connecting the GGH”) outlines the need to create a more resilient network harnessing new technology and innovations that can be designed for an unknown future. One of the primary goals of MTO’s GGH transportation plan is “Actions to be Future Ready” which includes electric vehicle production and leveraging automated vehicle technologies.

Global trends and mobility technologies that are disrupting typical transportation planning practices have been evolving and will continue to evolve over the next few decades. While transportation plans need to forecast into the future to adequately plan the transportation system, flexibility and resilience needs to be imbedded within the plan. The implementation plan outlined in the MMTMP should still be able to provide a robust transportation system even if these global trends and mobility technologies deviate from the assumed future outlook.

Deviations are usually caused by various shocks and stresses on the transportation system. A recent example of a shock is the COVID-19 pandemic. As a result of this pandemic, trip-making behaviours were severely altered. Decreased trip-making for both discretionary and non-discretionary trips caused traffic volumes and transit usage to decrease while trends like working from home and e-commerce increased. At the later stages of the pandemic, traffic volumes returned closer to normal levels, however transit usage struggled to fully recover.

Other transportation and travel trends that the GTHA is experiencing near the later stages of the pandemic or is anticipated to experience post-pandemic include the following:

- There has been a reduction in the use of other shared transportation modes such as carpooling and ride-hailing due to perceived health risks.
- Perceived health risks from shared transportation modes may exacerbate the use of the personal vehicles.
- The emerging trend of “working from home” from primarily knowledge workers, most prevalent near the peak of the pandemic, may persist post-pandemic.
- The trip purpose for regional transit may shift away from essential, commuter trips to non-essential trips like for leisure and sporting events, local tourism, airport travel.
- Rising housing prices during the pandemic and other factors caused relocation of many residents away from urban centres to more suburban municipalities. This relocation may lead to lengthier trip distances and commute times which have negative environmental consequences. Increased auto dependence and rising fuel prices during the beginning of 2022 have increased the need for alternate, affordable, and sustainable modes of transportation.

Transportation shocks within this plan’s horizon include the adoption of emerging technologies such as autonomous and electric vehicles, extreme climate change, and economic trends that can alter trip making behavior of people and goods such as fuel prices, inflation, and supply chain disruptions. A future-ready transportation system ensures that the system can absorb these potential shocks and adapt using a multi-modal transportation approach supported by growth management and land use planning.

4.6 Sustainable Mode Share Objectives

The Region of Peel’s 2019 *Long Term Transportation Plan* (LRTP) targets a region-wide sustainable mode share of 50% by 2041. Sustainable mode share includes carpooling, walking, transit, biking and other non-single occupancy vehicle trips (e.g., school bus, taxis, etc.). The 2041 sustainable target mode share for Caledon is 32%, which is 3% higher than the 2011 sustainable mode share for the AM peak period. This target non-auto mode split corresponds to the following breakdown shown in **Table 4-3**.

However, these objectives were established before the Region of Peel allocated land uses to the Town of Caledon by 2051 through the Municipal Comprehensive Review (MCR); it is anticipated that a higher transit modal share will be required for development of the SABE and a population of 300,000 for the Town of Caledon. Therefore, the target 2051 mode splits as shown in the table were developed as part of this MMTMP based on a benchmarking exercise of municipalities that currently have a population density comparable to SABE.

Table 4-3: Caledon Mode Share Target Breakdown

Mode of Travel	2011 ²	2041 Vision ²	2051 Vision
Driving	71.0%	68.1%	60%
Walking	3.5%	3.6%	6%
Cycling	0.0%	0.8%	1%

Mode of Travel	2011 ²	2041 Vision ²	2051 Vision
Transit	2.0%	2.5%	6%
Carpool	8.2%	9.9%	13%
Other ¹	15.3%	15.1%	14%
Sustainable Transportation	29.0%	31.9%	40%

Note: 1. "Other" modes include motorcycle and school bus.

2. Source: Region of Peel's 2019 Long Term Transportation Plan (LRTP)

4.7 MMTMP Vision and Objectives

By 2051, the Town will have a transportation system that provides **accessible**, **affordable**, **safe**, and **sustainable** travel choices for all, and is well-integrated, effective to use, promotes healthy lifestyles, and supports economic prosperity, livable communities and climate commitments. The MMTMP's objectives include:

1. Develop a future-ready transportation plan for the Town and expand the multi-modality of the transportation system including driving, transit, walking, cycling, and other emerging mobility options.
2. Provide infrastructure to support and manage future land use growth and address the needs and priorities for both rural and urban communities.
3. Deliver sustainable strategies that protect natural heritage assets while reducing transportation's effects on climate change.
4. Build a safe and inclusive transportation system that supports age-friendly communities and promotes healthy living.
5. Develop complementary transportation solutions that support Provincial, Regional, and Local policies and the Town's Official Plan (OP).

5.0 Road Needs and Opportunities

This chapter outlines the existing and future travel demand modelling to identify road capacity needs, transportation needs and opportunities of other elements of the transportation system such as transit and active transportation.

5.1 Role of the Road Network

The Town road network provides access to land, accommodates circulation of people and goods by vehicles (including transit) and provides rights-of-way for other infrastructure including utilities and active transportation (e.g., sidewalks, multi-use trails, etc.). Road capacity needs and opportunities reflect the level of efficiency and convenience necessary for public commuting, supporting public transit and accommodating goods movement.

5.1.1 Capacity for Commuter Accommodation

The need for public commuting by automobile includes a range of purposes such as travel to work, medical, shopping or leisure purposes from/to locations that are not adequately served by transit / active transportation and/or do not adequately serve users with mobility or other barriers to travel by other modes.

Traffic congestion, where vehicles cannot travel at their free flow speed, occurs as vehicle volumes approach the throughput capacity of roadways causing a reduction in speed. Insufficient road capacity, relative to traffic volumes can cause traffic congestion which can have economic, social, and environmental impacts.

Economic impacts from traffic congestion include loss of time for productive activity. Social impacts from traffic congestion can include driver frustration and can contribute to what is commonly referred to as “road rage.” Congestion can increase time spent in vehicles and less time for family, leisure and physical activity.

Environmental impacts from traffic congestion include the impacts to air quality due to the use of non-optimal speeds in relation to fuel economy. Non-optimal speeds are variable between vehicle manufacturers however, in general, optimal speeds can be between 50 km/hr and 90 km/hr. Lower speeds can cause decreased fuel economy and increase emissions per kilometre travelled. Roadway congestion can also impact the quality of transit service especially if transit vehicles are mixed with traffic.

5.1.2 Capacity for Goods Movement

Within urbanized areas, the economic competitiveness of a municipality is affected by the efficiency and capacity of the movement of goods to / from business areas. Traffic congestion or lack of direct routes can significantly add to the cost of goods and services through transportation costs. Economic competitiveness often relies upon the connectivity between industry and transportation infrastructure including freeways, regional arterial roads and intermodal terminals.

An estimated \$1.8 billion worth of commodities (product or raw material) travel to, from, and through Peel every day by various modes including trucking, rail, air, marine, or pipeline. Goods movement is a pillar of the regional economy. In addition, goods-movement related industries have contributed \$49 billion of GDP to Peel Region's economy.

The Town of Caledon Economic Development Strategy presents an action plan to support economic growth in the Town. It recognizes the need for key transportation infrastructure such as the GTA-West Transportation Corridor (also referred to Highway 413). The strategy expects "that the expeditious approval and development of Highway 413, will result in 118,000 jobs in Caledon by 2041". It acknowledges the need for serviced "industrial areas and business parks, with a mixture of heavy industrial and light industrial land uses; warehousing and distribution facilities; small and medium scale office buildings".

5.1.3 Accommodation of Alternative Modes of Travel

A Complete Streets approach to road design considers the needs of motorists, pedestrians, cyclists, and transit riders of all ages and abilities. Provincial, Regional and Town policy support the planning and design of Town of Caledon's streets consistent with Complete Streets principals in support of all transportation modes and strongly consider the needs of utility and maintenance providers within the public right-of-way. For Caledon roads to provide all the necessary street elements and subsurface utilities for successful Complete Streets, the Town must acquire the necessary property and public right-of-way.

5.1.4 Community Circulation and Land Access Accommodation

Within the Town of Caledon, new collector road networks are established by the Town's Secondary Plans. Secondary plans provide more detailed policies for the area it covers, and they also establish a collector road network within the lands.

Historically, the Town of Caledon directed most of their new population and employment growth in Caledon to the Urban Areas of Bolton, Caledon East and Mayfield West. The future growth allocation approach focuses development in the south of Caledon, away from sensitive environmental areas and heritage settlements, minimizes interference with agricultural activity and concentrates new demands for services in locations where this demand can be most readily met. Secondary planning areas are illustrated in Figure F3 of the Future Caledon Official Plan.

Planning for the future, the Town's previous "tri-nodal" growth management is evolving. While major arterials currently exist through the planned growth areas in south Caledon, new collector road networks will need to be introduced through future secondary plans. Given current spacing of the road grid and existing property block sizes in the future growth areas, there is a need for a denser road network to provide the circulation and land access required. There are alternative approaches to define a finer road grid and solutions will need to be context specific.

5.2 Existing Road Capacity Needs and Opportunities

Traffic volumes, as provided by the Town, were used to provide an understanding of existing traffic conditions. Peak direction volumes are illustrated in **Figure 5-1**. The vast majority of Town roads operate with estimated peak direction volumes of less than 850 vehicles. The three Town road segments below are shown to experience high volumes and some degree of recurring congestion:

- Kennedy Road between Mayfield Road and Dougall Avenue,
- Albion Vaughan Road between Morra Avenue and north of Queensgate Boulevard, and
- Albion Trail between Mount Wolfe Road and 1 km north of Mount Wolfe Road.

Town of Caledon

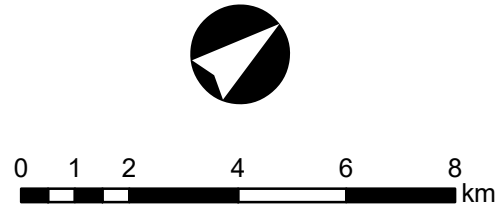
Transportation Master Plan

FIGURE 5-1
Existing Traffic
Volumes

Peak Direction Volume

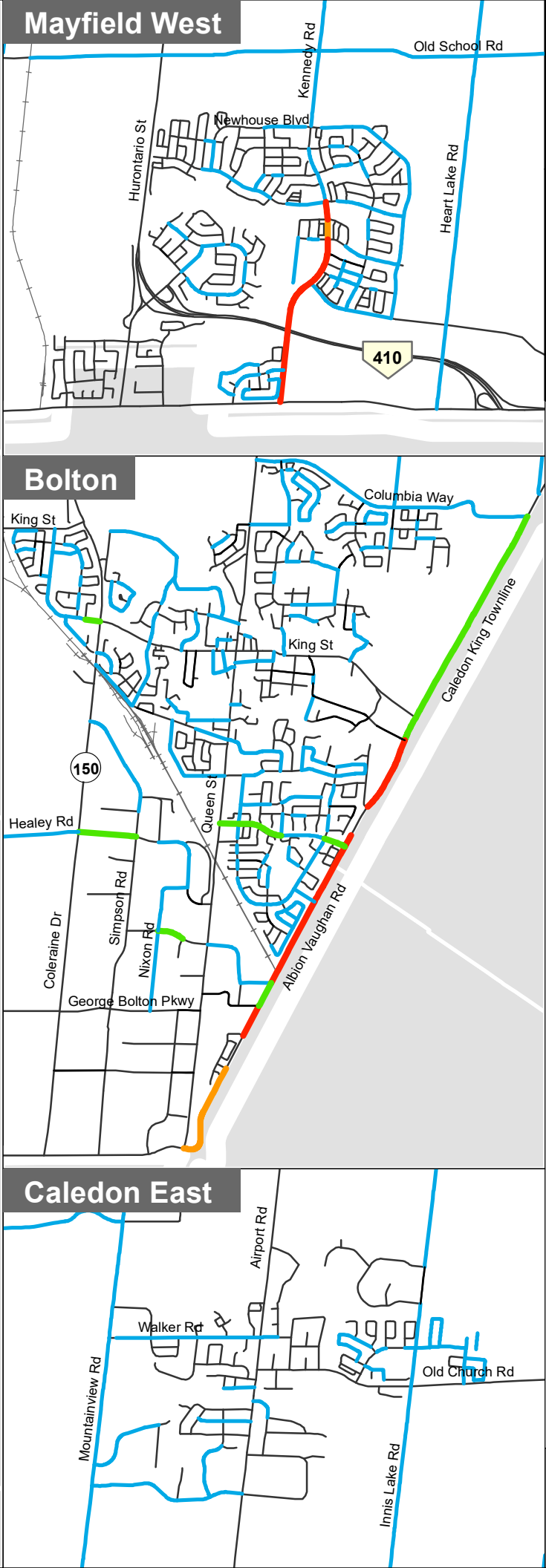
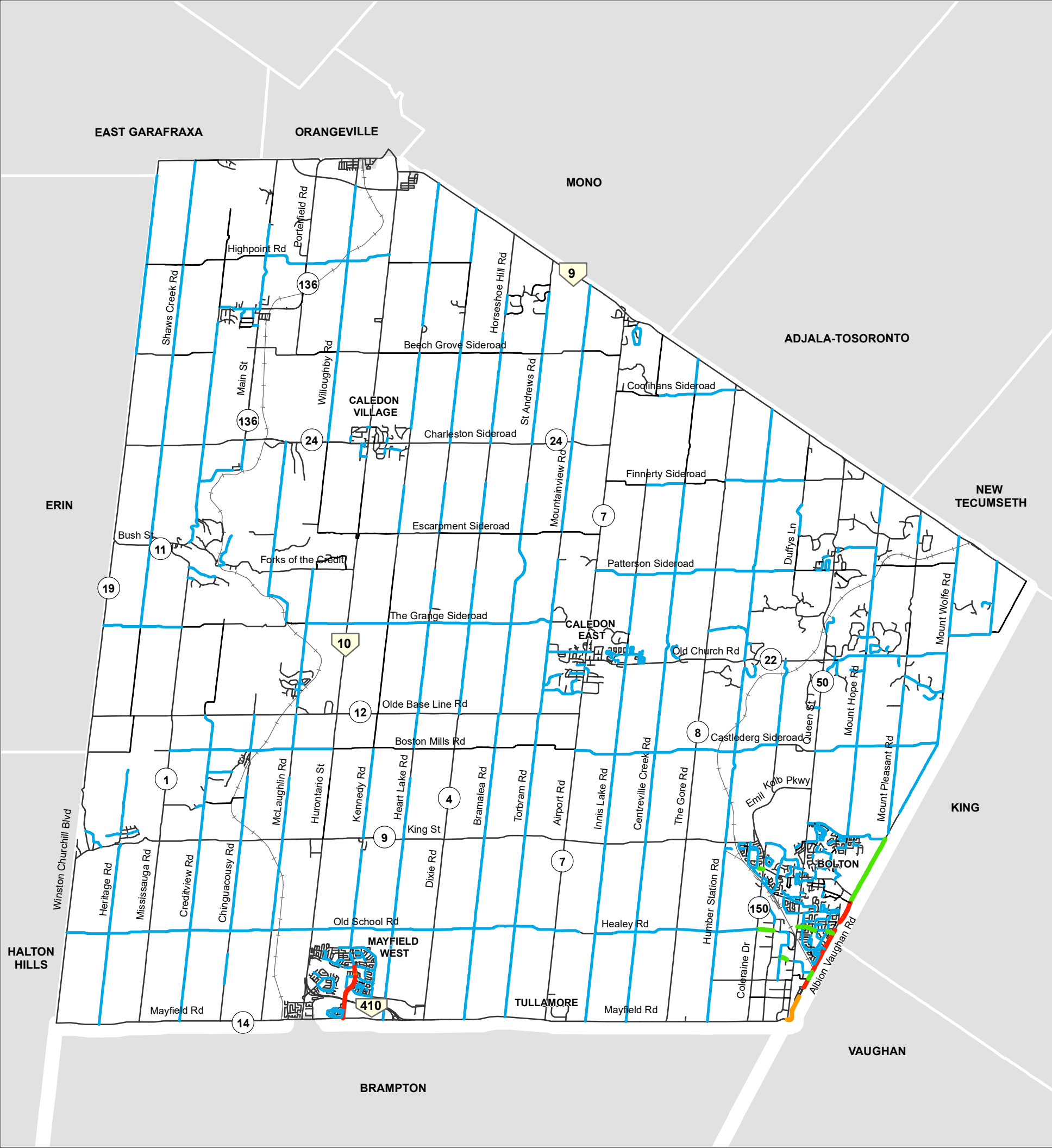
- No Data
- < 500
- 500 - 750
- 750 - 850
- > 850

Note: Year of data varies between 2017 - 2022



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5.3 Future Road Capacity Needs and Opportunities

5.3.1 Population and Employment Growth

The Town of Caledon MMTMP has been undertaken concurrently with Region of Peel's Growth Management Strategy and the Region of Peel's Settlement Area Boundary Expansion (SABE) study. The draft 2041 and 2051 population and employment allocations for the Town of Caledon, City of Brampton, and City of Mississauga are summarized in **Table 4-1**.

5.3.2 Future Road Capacity Needs

An assessment of future road capacity needs was conducted and summarized below.

5.3.2.1 Road Capacity Improvements

The Region of Peel Transportation model was used to project future traffic volumes on Provincial, Regional and Town roads. The model contains future population and employment allocation assumptions.

As a part of the Region's Growth Management Strategy, the Region, in consultation with the Town of Caledon, City of Brampton, and City of Mississauga, developed the preferred population and employment land use allocations with consideration for growth identified through the Provincial Growth Plan and the Region's Land Needs Assessment which determines the amount of land required to accommodate the future land uses. The preferred land use allocations were incorporated into the model by Regional staff and use for this study.

By 2051, several road segments are expected to have per lane traffic volumes consistent with recurring congestion. Additional capacity constraints are anticipated on north-south major roads south of Old School Road given the change in nature of these streets (close intersection spacing, turning movements, transit operations and pedestrian activity) and related reduction in capacity. Congestion on Mayfield Road will require an alternative continuous east-west road, such as along Old School Road / Healy Road. Based on future congested road segments, road capacity improvements are warranted as summarized in **Table 5-1**.

However, as mentioned, this Transportation Master Plan supports and serves as the basis for more detailed investigations to confirm the improvements required as part of future Environmental Assessment and Secondary Plan studies.

Table 5-1: Proposed Town Road Improvements

Road	From	To	Recommendation	Year	Status ¹	Highway 413 Interchange Located Along Road Segment
Chinguacousy Road	Mayfield Road	Mayfield West Phase 2 Limit	Widening from 2 to 4 lanes	2031	Committed	No
McLaughlin Road	Mayfield Road	Mayfield West Phase 2 Limit	Widening from 2 to 4 lanes	2031	Committed	No
	Mayfield West Phase 2 Limit	Old School Road	Widening from 2 to 4 lanes	2031	Planned	No
Albion Vaughan Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	2031	Committed	No
Chinguacousy Road	Mayfield West Phase 2 Limit	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	Yes
Humber Station Road	Mayfield Road	North of King Street (Settlement Area Limits)	Widening from 2 to 4 lanes	2031	Proposed	Yes
Abbotside Way	Bonnieglen Farm Boulevard	Heart Lake Road	Extension (4 lanes)	2031	Committed	No
Healey Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes	2031	Proposed	No
Torbram Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	No
George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 lanes)	2031	Proposed	No
Kennedy Road	Newhouse Boulevard	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	No
Innis Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2041	Proposed	No
Centreville Creek Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2041	Proposed	No
Old School Road	Winston Churchill Boulevard	Airport Road	Widening from 2 to 4 lanes	2041	Proposed	No
Healey Road	Airport Road	The Gore Road	Widening from 2 to 4 lanes	2041	Proposed	No
Kennedy Road	Old School Road	King Street	Widening from 2 to 4 lanes	2041	Proposed	No
Caledon King Townline	King Street	Columbia Way	Widening from 2 to 4 lanes	2041	Proposed	No
Columbia Way	Regional Road 50	Caledon King Townline	Widening from 2 to 4 lanes	2041	Proposed	No
Bramalea Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	2041	Proposed	Yes
Heart Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No
Chinguacousy Road	Old School Road	King Street	Widening from 2 to 4 lanes	2051	Proposed	Yes
McLaughlin Road	Old School Road	King Street	Widening from 2 to 4 lanes	2051	Proposed	No
Heritage Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No
Creditview Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No

Note: 1. Proposed improvements refer to projects that are currently undergoing studies, planned improvements refer to those with approved studies but are not budgeted, and committed improvements refer to projects that have been budgeted as part of the Caledon capital plan or development charges study.

5.3.2.2 Highway 427 Extension

The Town of Caledon, with Regional Council support, have requested that the Province of Ontario protect for the lands required to extend Highway 427 to Highway 9 and beyond. The northerly extension of the Highway 427 had already been justified by MTO in the 1990s. Given the need for intermunicipal travel and goods movement, protection of established communities from increasing truck traffic, and the high traffic volumes on Highway 50, it is recommended that the Ministry of Transportation Ontario (MTO) reinvestigate the opportunity to extend Highway 427 from Major Mackenzie Drive to Highway 9 and beyond.

5.4 Good Movement Needs and Opportunities

Employment zones, major terminals and resource lands are important elements of the economic engine of the Region and are key traffic generators. An efficient transportation system is critical for business competitiveness and access for employees and customers.

The planned growth in Caledon provides an opportunity to improve coordination between land use planning, economic development, and infrastructure investments to support investment and job creation over the longer-term. Key employment areas for consideration are summarized below.

5.4.1 Goods Movement Hub Trip Generators

As stated in the Future Caledon Official Plan, the Town recognizes the importance of goods movement on the overall transportation system. The Official Plan also states: “Safe and efficient movement of goods and services within and through the Town is essential for sustained economic growth and in attracting and retaining a wide range of industries and businesses”. There are a few major goods movement hubs in and around Peel Region; however, all are situated south of the Town of Caledon; there will be a need for efficient high-capacity connections to the goods movement hubs identified below.

Canada’s two major rail operators, Canadian Pacific (CP) and Canadian National (CN), own approximately 52,000 route kilometres coast-to-coast. Railway operations have been more focused on long-distance train movements of goods. Approximate volume of goods at each of the two intermodal yards are shown in **Table 5-2**.

Table 5-2: Approximate Volume of Goods by Intermodal Terminal

Terminal	Volume (TEUs/Day)	Volume
CN Brampton Intermodal Terminal	7,700	160 trucks/hour 8-9 trains per day
CP Vaughan Intermodal Terminal	3,600	1,800 containers per day

The intermodal yards are situated south and southwest of Caledon and accessible via the provincial freeway network. The CN intermodal yard is situated north of Highway 407 and west of Highway 427 in Brampton, 10 kilometres from Caledon and 12 kilometres from the Bolton Industrial area. The CP intermodal yard is situated west of Highway 427, approximately 4 kilometres from the Bolton Industrial area.

With the anticipated 2051 population in the Town of Caledon of 300,000 people, growing customer demands and needs, and the proximity of the intermodal yards, truck traffic is expected to grow significantly over the next few decades.

5.4.2 Goods Movement Employment Area Destinations

The Bolton Industrial Area supports major businesses and approximately 13,000 jobs. Current major employers include Husky Injection Molding Systems, Verdi Alliance Group of Companies, Canadian Tire Distribution Centre, MARS, and Delgant Limited. The Bolton area and western expansion is part of a Provincially Designated Employment Zone as previously shown in **Figure 4-4**. As such, the area is seen as an area of high economic output. It is identified by the province as “strategically located to provide stable, reliable employment across the region”.

Pits and quarries also contribute significant truck traffic within the Town of Caledon. The availability of accessible clean aggregate will be critical to the anticipated growth in Caledon over the next 30 years. There are currently an estimated 19 pits and quarries in the Caledon. There are many pit and quarry operations south and west of Caledon Village and the transportation by truck of aggregates (e.g., sand, gravel, clay, bedrock) from these pits and quarries can cause concerns related to community disruption and safety. Directing trucks to routes that are away from sensitive areas will help address concerns related to transportation of aggregates. Aggregate sites are shown in **Figure 3-4**.

In 2019, the Toronto Pearson International Airport handled 465,606 tonnes of air cargo and frequently processes over 45% of Canada’s air cargo. The Greater Toronto Airports Authority, Pearson Airport’s operator, expects cargo volumes to increase to 958,000 tonnes by year 2037. In the freight industry, air travel is primarily used for high-value and/or time-sensitive cargo such as courier shipments and perishables. The Pearson airport is strategically located by Highway 407, 427, 401, and 410 which assists in the efficiency of goods movement delivery; hence there is a need for the Town of Caledon to have good higher capacity connections to the Provincial freeway network.

5.4.3 Goods Movement Residential Area Destinations

Trends in consumer needs also include the need for quick delivery of consumer goods and flexible return policies which have increased the need for complex supply chain strategies and local distribution points. In Canada, total retail sales grew by just 1.3% between January 2020 to January 2021 (in part attributed to the COVID-19 pandemic), however, sales in retail e-commerce grew 111% during this same time period.

E-commerce trips contribute to delivery traffic on collector and local roads. These trips will require consideration of traffic circulation and curbside management within new communities.

5.4.4 Municipal Goods Movement Initiatives

The Region of Peel has historically led stakeholders, in goods movement strategies, including the Peel Goods Movement Strategic Plan and Strategic Goods Movement Network. Peel Region's Goods Movement Strategic Plan (2017 – 2021) outlines the actions required to plan for a safe, convenient, and efficient goods movement transportation system that supports the economy. The plan contains the 6 goals identified in **Table 5-3**.

Table 5-3: Regional Goods Movement Strategic Plan Goals

Goals	Description
Community and Environmental Sustainability	Manage and mitigate adverse community impacts of goods movement operations and support environmental stewardship.
Safety	Improve the safety and resiliency of the goods movement network and its users.
Economic Competitiveness	Sustain and promote investments in the multimodal goods movement system for continued economic efficiency, growth, and regional competitiveness.
Innovation and Technology	Use advanced technology, innovation, and accountability in the operation and maintenance of the goods movement system.
Performance Management	Ensure timely, accountable and transparent plan implementation and performance evaluation.
System Performance	Enhance goods movement mobility through reduced delay, increased reliability and efficiency.

In addition, Smart Freight Centre (SFC) was established by the Region of Peel, McMaster University, University of Toronto, and York University, with the goal of coordinating transportation infrastructure, land development, regulation, technology tools, and resources to improve goods movement activities. This will be accomplished through evidence-based research on regionally significant goods movement issues and projects in the Region and the Greater Toronto Hamilton Area (GTHA).

5.4.5 Town of Caledon Goods Movement Policies

Town of Caledon policies balance the support of goods movement with the needs of the transportation system and local communities. To ensure that trucks use arterials (mainly Regional Roads) as their primary route, the movement of trucks in the Town is regulated by traffic by-laws which restricts heavy truck movements to certain parts of the arterial road network and regulates vehicle weights relative to the carrying capacity of roads and bridges.

Regional arterials are designed to accommodate the loading and structural requirements of trucks and operate at higher speeds making them more suitable for the goods movement network. Town roads serve more as connectors for trucks to connect to these Regional arterial roads, subject to the loading restrictions of the roadway design. Most truck traffic should aim to travel on Regional arterials. Local roadways prohibit truck traffic unless it is local delivery and in

the absence of alternative acceptable routing. This ensures that trucks minimize their impact to the residential communities. Truck restrictions on Regional roads are shown in **Figure 5-2**. The Town roads that are designated as truck routes as part of the Region of Peel Strategic Goods Movement Network (SGMN) are summarized in **Table 5-4**.

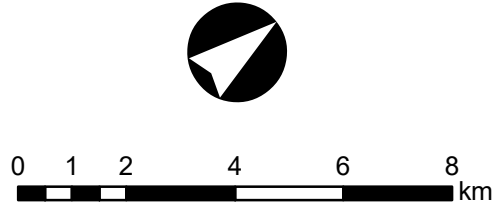
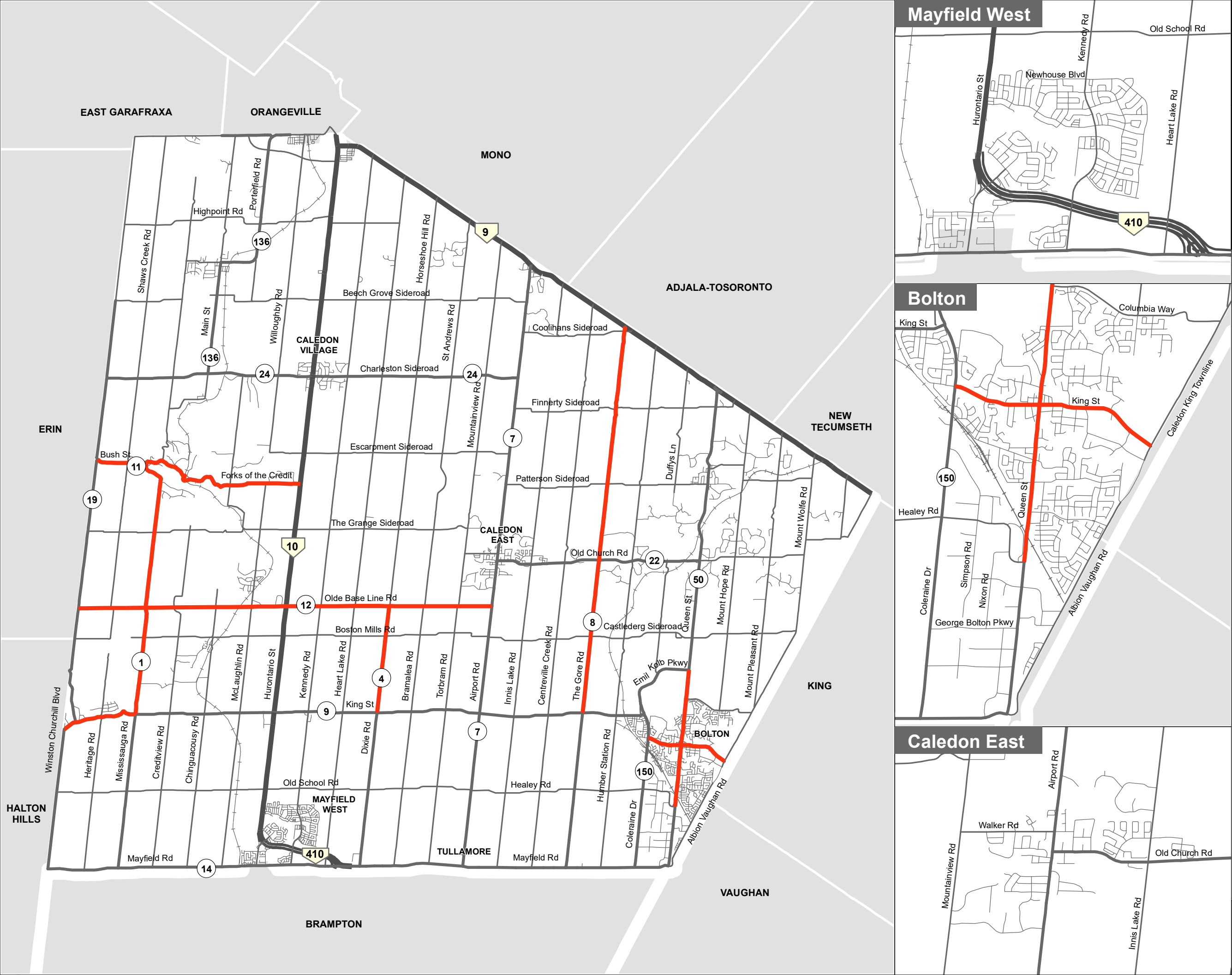
Although these routes have been identified by the Region in the past, the Town of Caledon does not have a set of criteria to designate truck routes and therefore, does not support these classifications. Horseshoe Hill and Mountainview Road are not supported as truck routes given the road geometry. Evaluation criteria should include elements such as engineering feasibility, rehabilitation costs, and consider other elements of the roadway (e.g. Cycling facilities).

Town of Caledon

Transportation Master Plan

FIGURE 5-2
Truck Restrictions on
Regional Roads
within Caledon

Trucks Prohibited



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Table 5-4: Town Truck Routes

Road	From	To	Peel Truck Network
Dufferin Rd 109	Caledon East Garafraxa Road	Hurontario St (Highway 10)	Primary Truck Route
Horseshoe Hill Road	Olde Base Line Road	Highway 9	Primary Truck Route
Mountain View Road	Olde Base Line Road	Charleston Sideroad (Regional Road 24)	Connector Truck Route

5.5 New Road Needs and Opportunities

With significant population and employment planned for the SABE, the Town will identify and undertake a series of Secondary Plans to guide its development. Typically, a secondary plan will provide more detailed policies for the area it covers, such as public spaces, parking, and urban design. A finer-grained road network will be developed for the Secondary Plans. The layout and design of the collector and local road networks within the future Secondary Plans should consider a framework for land access and circulation. Collector roads form the basic linear structural framework that communities are fashioned around. Their distribution, frequency, location, segment length, and degree of connection will establish the fundamental design elements that distinguish one community from another. The network of collector roads also establishes the primary transit, cycling, and pedestrian routes for a community. This section offers guidance for future consideration.

5.5.1 Road Pattern Alternatives

Historically, there have been two main types of street layouts: grid networks and curvilinear networks. Most curvilinear networks implement loops and cul-de-sacs that would feed into collector streets. Grid networks consist of street orientations that are in right angles and have rectangle formation. An example of a grid network, curvilinear network, and cul-de-sac is shown in **Figure 5-3**.

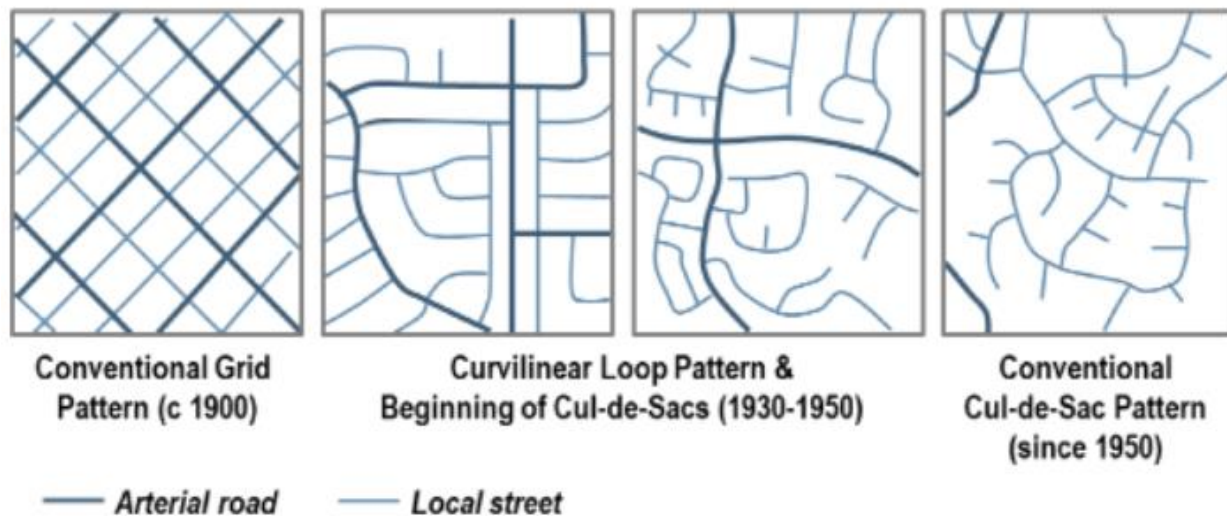


Figure 5-3: Comparison of Street Layouts

5.5.1.1 Curvilinear Street Networks

Curvilinear street networks with loops and cul-de-sacs were seen beneficial to noise reduction, traffic calming, and increased privacy. This type of network was perceived at the time by designers and developers to be able to slow vehicular traffic by the winding nature of the collector streets and non-continuous routes via the loops and cul-de-sacs reduced non-local traffic and noise from vehicles. The principle of having more discontinuous local streets feed into curvilinear collector streets also allowed for more privacy, which was once a preference to homebuyers and thus developers.

5.5.1.2 Grid Street Networks

Grid networks support walking and cycling and efficient transit service. Curvilinear road networks usually lack direct walking or cycling routes and street connections. Curvilinear road networks rely on an additional layer of off-road walking and cycling connections which can be added to discontinuous streets, however, discontinuous road networks can lead to unexpected desire paths (i.e. informal pathways created by pedestrians, bikers, and animals and represent routes more desirable to travelers). Grid networks are more suited in serving the pedestrian and cyclist in terms of connectivity, which is usually referred to as these neighbourhoods having better “walkability and cyclability”.

Although it is important to note that connectivity does not always correlate to perceived walkability and cyclability. Even if there are high levels of connectivity and high intersection density, if paths are not friendly to walk or bike through, less people to interact with, or if there are certain paths that are difficult to navigate or cross, the perceived level of walkability and cyclability decreases. Choosing to walk or cycle is influenced by connected and safe active transportation networks and attractive community spaces.

5.5.1.3 Transit Accessibility

Connected street networks with high intersection densities are more supportive of transit, as more users can walk directly to a transit stop. In other words, long road segments and less intersection density would lead to fewer people having direct access to the transit stop. Alternatively, the use of collector streets looping within a subdivision disadvantage the overall connectivity of the transit network, as buses would not be able to directly pass through the subdivision.

5.5.2 Street Spacing and Intersection Density

Intersection density or street spacing can impact the level of connectivity for driving, walking, cycling, and transit. Intersection density is an objective indicator of assessing a community's built environment. High intersection density allows the street network to be more walkable with higher connectivity and shorter road segments which can also impact the directness of accessing transit stops.

Higher intersection densities can also provide more impedance to vehicles assuming these intersections are stop control or signalized. Lower intersection densities lead to longer road segments which can facilitate the movement of vehicles.

Currently in Southern Caledon, the spacing between the future SABE lands is approximately 3.0 kilometers between major east-west roads and is approximately 1.4 kilometres between major north-south roads as shown in **Figure 5-4**.

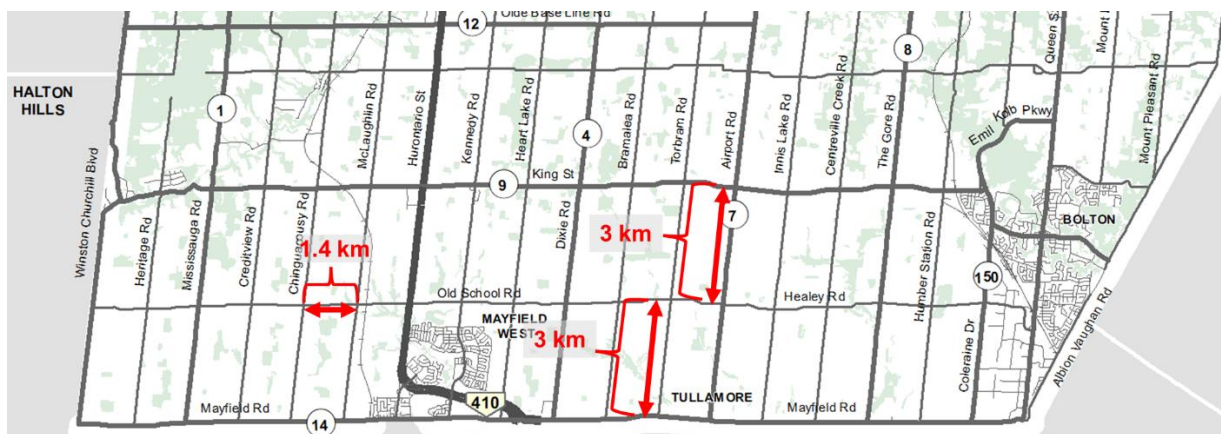


Figure 5-4: Network Spacing in Southern Caledon

In the City of Brampton, the spacing between major arterial roads is closer to one kilometre or more with a collector road located approximately mid-way. The spacing between major north-south roads is approximately one kilometre with a collector road located approximately mid-way.

5.5.3 East-West Major Route (Old School Road / Healey Road)

Old School Road and Healey Road is the only continuous east-west corridor within the SABE area. There is a need for additional capacity (above and beyond Highway 413) in order to facilitate traffic circulation and connectivity in the SABE between residential and employment areas and support active transportation and transit trips.

Currently, Old School Road and Healey Road are geographically located near the upper limits of SABE as previously shown in **Figure 4-1**. There is an opportunity to introduce new major east-west corridor(s) as an alternative to Old School Road and Healey Road.

5.5.4 Street Hierarchy and Character

A street network can perform most efficiently and safely if roads are designated and operated to serve their intended purpose. Street networks should consider primary uses for all road users. These uses can include traffic-through movements, walking, socializing, circulation, connectivity, freight movement, cycling, parking and loading, and access to properties. Based on the intended uses, road users and corresponding posted speeds, and other road design elements should be identified and established.

The Town's Road network is currently classified in the Official Plan as Town arterials, collectors, and local roads. There is an opportunity to identify and design roads based on their role in the network hierarchy and the roadway environment characteristics. Context sensitive "Complete Streets" designs represent more functionally appropriate roadways. Consideration could be given to network planning criteria shown in **Table 5-5**.

Table 5-5: Possible Goals of the Network and Suggested Target Indicators

Goals of the Network	Suggested Target Indicators
Promote Walkability	Higher intersection densities Shorter road segments Decreased spacing Higher km of active transportation infrastructure (e.g., Sidewalks, off-road trails)
Promote Connectivity	Higher intersection densities Shorter road segment length Higher population that is 400-m away from a transit stop
Promote Sociability	Increased number of mixed-use, institutional, or commercial land-uses Increased number of open and civic spaces Higher km of active transportation infrastructure (e.g., Sidewalks, off-road trails)
Reduce Traffic Infiltration and Road Construction costs	Higher # of loops and cul-de-sacs Lower # of streets (arterial or collectors) that can access the subdivision or community

5.5.5 Major Corridors

Consistent with the concept of nodes and corridors, the Future Caledon Official Plan designates of Urban Centres, Neighbourhood Centres and Urban Corridors.

Urban Corridors are defined as vibrant and prominent streets, serving as destinations and connections. Urban Corridors support intensification and are well served by transit and as such, Urban Corridors are proposed to be developed based on the following principles:

- Serve as a place for movement, living, and commerce that are intrinsically linked to the mobility systems that connect people and places,
- Provide appropriate transition to lower scale residential areas to mitigate adverse impact to sensitive land uses, and
- Provide a link to Major Transit Station Areas and high-order transit corridors.

5.5.6 Planning and Design Guideline Recommendations

This section provides design guidelines for the key components of Collector Roads when viewed as a “corridor” within the network of a broader community.

The items below can be considered by the Town as guidelines for new collector roads specifically in SABLE and BRES areas. The collector roads shall:

1. Articulate an overall vision for the Collector Road network to direct decisions regarding urban structure in Community Design Plans, Secondary Plans, and other planning exercises. This vision should address the full family of Collector Roads in accordance with their varying planned functions and adjacent land use context.
2. Lay out the community with frequent connections of Collector Roads to Arterial roads in order to increase route choices, to reduce requirements for “backtracking”, to not “load up” individual collectors, and to create large development blocks well served by collectors. Locate these intersections between 250m to 400m apart to enable efficient traffic flow along an arterial road and to allow back-to-back left-turn lanes on an arterial road where required. Lesser spacings may be appropriate when collector roads form a three-way junction (“t-intersection”) at arterial roads. Accordingly, existing concession blocks in SABLE area are expected to have about 3 north-south and 5 east-west collectors. Conceptual collector road spacing is illustrated in **Figure 5-5**.

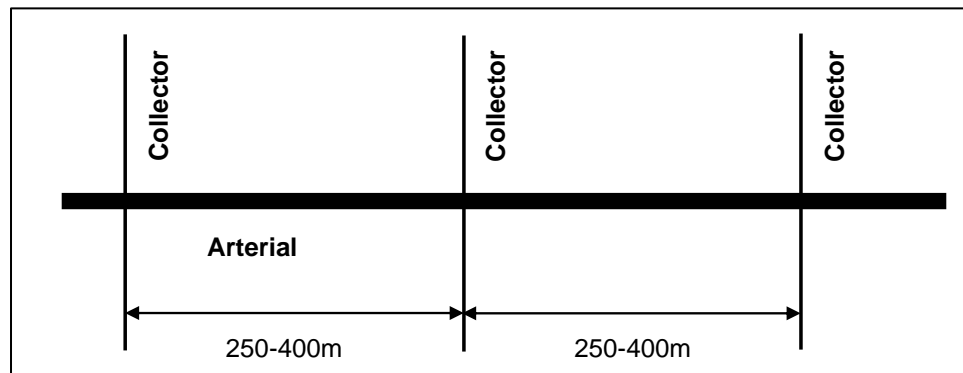


Figure 5-5: Conceptual Collector Road Spacing

3. Create a connected network of street and block patterns with relatively frequent Local Road intersections with Collector Roads to promote accessibility, connectivity and continuity along and across the Collector Road corridor.
4. To achieve a highly urbanized corridor, design blocks with intersecting side streets every 50m to 100m along the Collector Road. In Greenfield areas, blocks between 150 and 250m in length may be appropriate.
5. Design the system of Collector Roads to provide direct and continuous routing options for transit and cycling, and pedestrians, linking major recreation amenities, commercial areas, and employment areas, and connecting multi-use pathways.
6. Design the network so that all buildings will be within 400m walking distance of public transit.
7. Use the Collector Road pattern to establish the solar orientation of a neighbourhood such that the number of buildings with south-facing windows is maximized and energy consumption is reduced in winter months.
8. Where multi-use pathways need to cross Collector Roads, locate the crossing points at controlled locations, preferably intersections, to provide safe crossings. Where paths need to cross at mid-block locations, consider stop controls or pedestrian activated signals.
9. Design the intersection of Collector Roads and Arterial Roads as distinctive neighbourhood entry points, possibly including medians and special landscaping treatments.
10. A conceptual layout of roads in the SABLE area is illustrated in **Figure 5-6**. Note that this network is highly conceptual and its feasibility, including environmental impacts, is to be determined as part of secondary plans. Opportunities for active transportation connections within environmentally-sensitive areas may also be investigated as part of future studies.

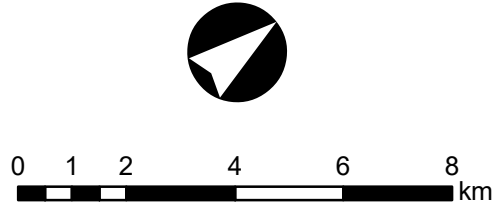
Town of Caledon

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FIGURE 5-6

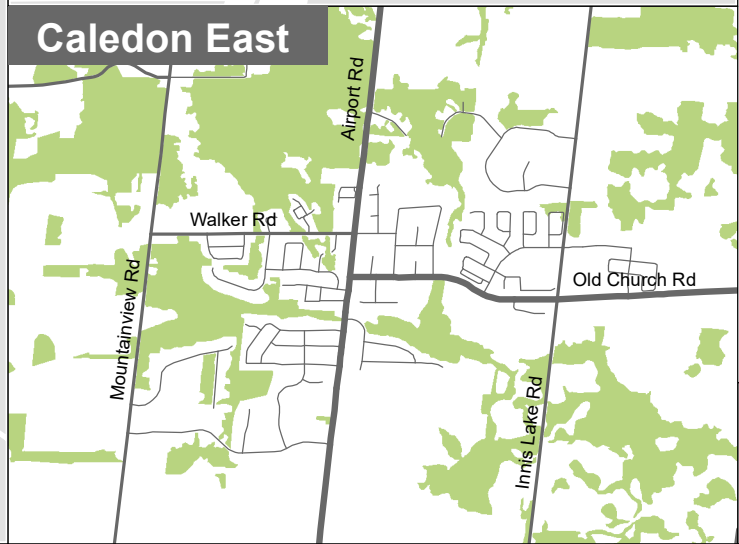
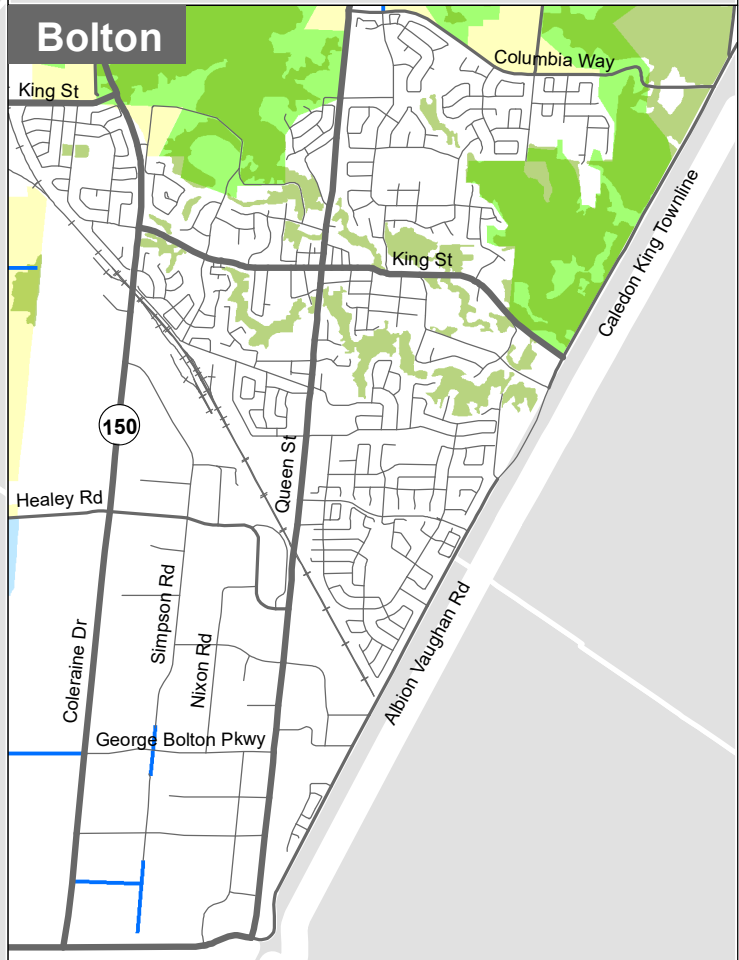
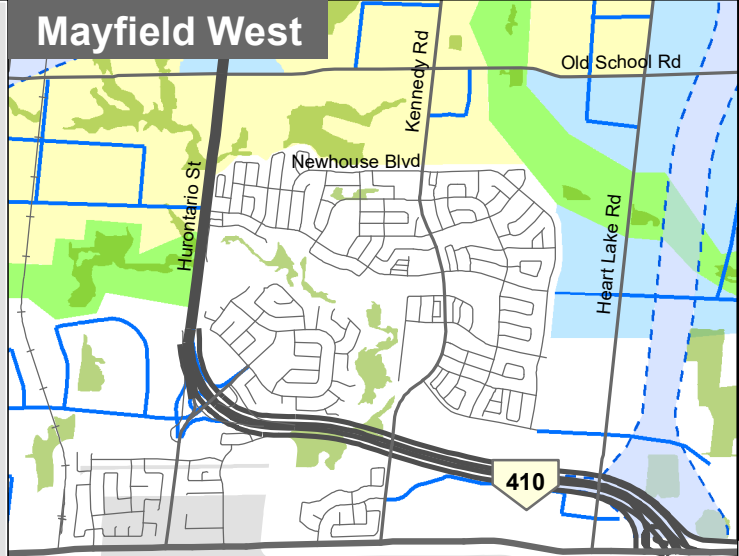
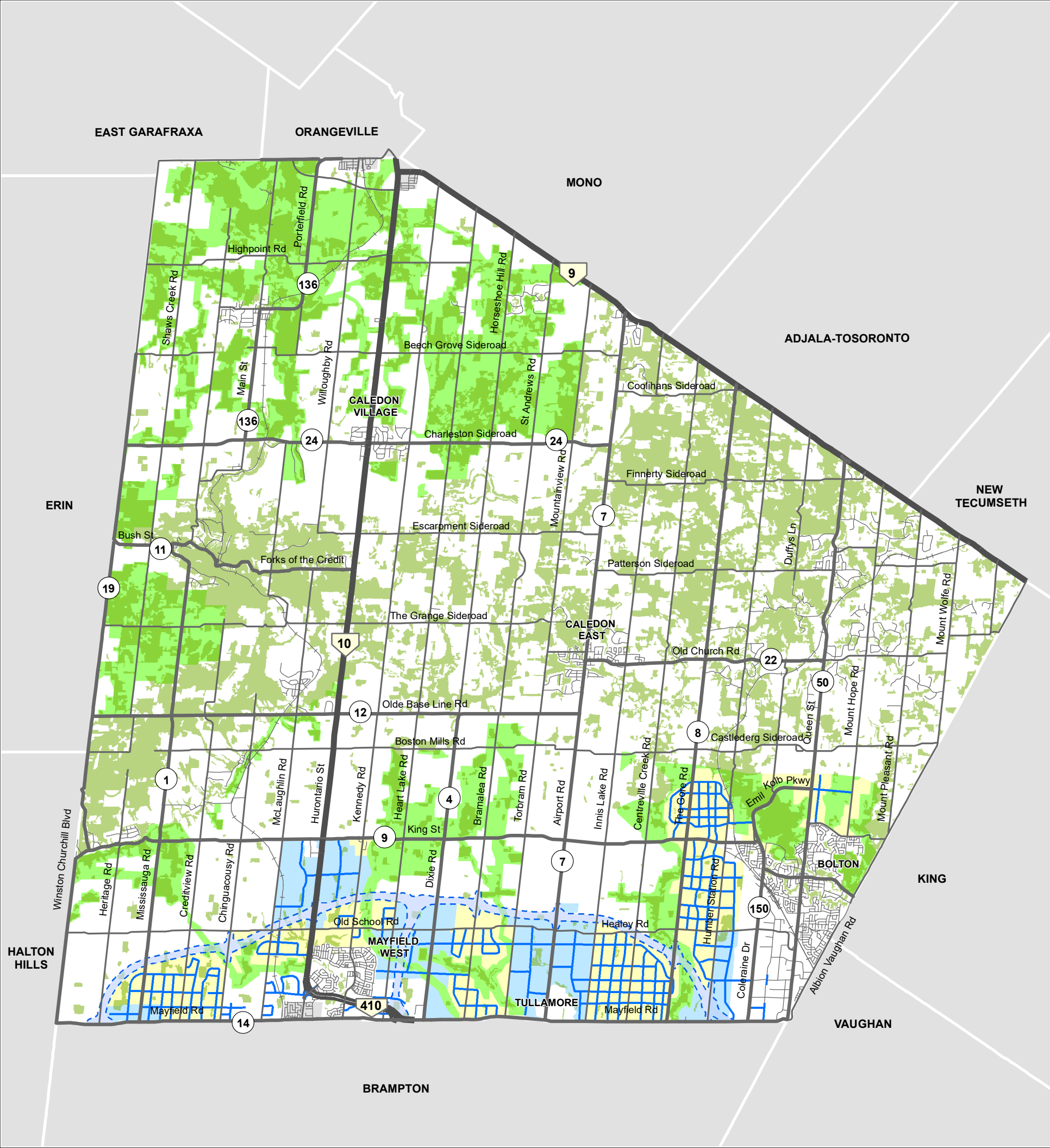
Conceptual Collector Road Layout

- Conceptual SABE Collector Roads
- SABE Community Area
- SABE Employment Area
- Highway 413 Preferred Route
- Natural Heritage System (NHS) Greenbelt
- Woodlands



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6.0 Transit Needs and Opportunities

This chapter identifies the role of transit, long-term transit objectives, transit guidelines and proposes a recommended transit plan.

6.1 Role of Transit

Transit is a vital component of the multimodal transportation system. With strategic planning and prioritization of transit, it can become an attractive alternative to the automobile and promote the use of sustainable modes of transportation. Transit also serves to move a high volume of people for travel, which helps alleviate congestion along roads to accommodate future growth.

The development of a transit system that addresses needs with respect to future growth is consistent with Provincial, Regional and Town policy. With extensive development planned for Caledon, there is an opportunity for a new transit system for Caledon to provide connectivity within the Town, to adjacent municipalities, such as Brampton and York Region, and existing and future transit facilities and hubs.

Within the context of this MMTMP, the purpose of transit is to perform three primary functions: develop a liveable community, address mobility needs and support sustainability objectives, as described below.

6.1.1 Transit in Development of a Livable Community

A livable community can be defined as providing safe and healthy neighborhoods, sustainable employment, adequate housing and community services, sense of community and neighborhood-based cultural and recreational opportunities. Transit can be integral to making communities more livable by providing access to goods and services while supporting complementary community goals. Currently, regularly scheduled transit is not provided for the majority of Caledon. There are needs for transit to support new neighbourhoods and communities with the significant growth planned in the SABE lands. In addition, a key component in supporting sustainable communities and attaining non-auto mode share targets includes serving the commuter population in Caledon, who make consistent daily trips, with a reliable transit system.

6.1.2 Transit Addressing Mobility Needs

Future transportation should strive to improve accessibility for all people in the Town of Caledon. To establish mobility needs and transit service capture, the following key user groups were identified and considered as part of the development of this transit study.

Commuters

Regular commuters travelling to work are a major target user group in establishing the transit system. Transit is typically the most common travel mode for commuters in urban centres. With increased travel demand and congestion, transit can become the preferred mode of travel due to its cost-effectiveness and time savings. Commuters also typically make consistent, daily weekday trips and addressing their mobility needs would play a major factor in increasing the sustainable mode share. Affordable and reliable alternative transportation is key in helping workers commute to work, but also for employers that have identified a need for these services to connect to an available labour force.

Seniors and People with Disabilities

Some member of the community may be unable or have difficulty operating motor vehicles and therefore require accessible and economically viable alternatives for transportation. TransHelp, Peel Region's specialized transit service, served 538,000 passengers (2018) that were captive to non-auto driver modes according to the Canadian Urban Transit Association (CUTA).



The Underserved Residential Population

Existing transit within Caledon (Brampton Transit and GO Transit) only covers roughly 45 km of the road network within the Town. Approximately 35% (roughly 24,000 people) of the Town's population reside within 800 metres (10 min walk) of scheduled transit service (including GO Bus), indicating that the existing scheduled transit service does not provide a viable alternative to the automobile for the vast majority of residents. The lack of proximity to transit service will be considered as part of the assessment of future transit opportunities.

Students

There is a substantial demand for transportation options to accommodate students, as home-based school trips make up approximately 20% of trips during the morning peak period in Caledon and approximately one-quarter of internal Town trips are made via a school bus. Transit connections should be considered to further facilitate travel between local residential neighbourhoods and schools. The STOPR (Student Transportation of Peel Region) arranges school bus service for students that satisfy a minimum distance requirement to travel to school, which varies between 1.0 km and 3.8 km, depending on their grade. However, for students residing in communities that are not served by public transit, the minimum distance requirement to be eligible is 3.2 km. Most schools within Caledon reside in the southern area near Mayfield

West and Bolton. However, there are no local transit services that provide direct service between residential neighbourhoods and schools within these communities.

6.1.3 Transit in Support of Sustainability Objectives

Town Council adopted a community greenhouse gas (GHG) emissions reduction target of net zero by 2050 as part of the Resilient Caledon Community Climate Change Action Plan. This plan had identified transportation-related action items to achieve this target. Specific action items that pertain to the transit system are summarized below.

Action 13.1: Expand opportunities for low-carbon transit and car-sharing in built-up areas and plan for transit in new communities.

- Expand bus service density, coverage, and scheduling.
- Establish a policy to purchase electric vehicles for transit.
- Explore on-demand transit opportunities using zero-emissions vehicles and prioritize low-carbon opportunities where possible.
- Encourage the uptake of car-share and car co-operative programs as well as increased carpooling.

Action 13.2: Develop a municipal Green Fleet Strategy to convert the Town's fleet to zero emissions.

- Provide support for maintenance, operations, and staff training for new fleet vehicles.
- Establish a policy for replacing fleet vehicles with low-carbon options.
- Evaluate the infrastructure requirements to support a low-carbon vehicle fleet.

The Town objectives also recognized the Region of Peel's 2020-2030 *Climate Change Master Plan* (CCMP), developed in support of the Climate Change Statement of Commitment, which was endorsed by Regional Council in 2017. One of the primary outcomes of the Region's CCMP is to reduce emissions; more specifically, corporate greenhouse gas emissions should be reduced by 45% by 2030, relative to 2010 levels. Among the 11 actions identified to support this target reduction in emissions, the two primary actions that pertain to the transportation system are summarized below:

Support Sustainable Transportation for Commuting

The *Sustainable Transportation Strategy* envisions a 50% sustainable mode share for region-wide peak trips by 2040. The Region can support this vision through internal promotion, as well as implementation of programs and initiatives that promote active transportation, ridesharing, electric vehicles, and remote working (i.e., telecommuting). This vision is also complimented by the Region's continued support for urban densification in its Official Plan.

The following activities were established in support of this action:

- Apply the Sustainable Transportation Strategy to mode shifting;
- Implementation of remote working initiatives; and
- Expand infrastructure to support low and zero-emission vehicle (ZEV) adoption.

Green the Fleet

With the transportation sector accounting for more than one third of Peel's community GHG emissions, implementation of the Region's Green Fleet Strategy (GFS) and Town's GFS, which was endorsed by Council in September 2021, is important. Current regional fleet vehicles will continue to reduce their GHG Emissions by increasing the use of ethanol and bio-diesel and transitioning to electric vehicles as technologies become available.

6.2 Planned and Proposed Transit Improvements

The Town, Metrolinx and Province have already identified the need and are planning for several transit services that will accommodate travel to/from Caledon for the future. These planned transit projects are detailed below.

6.2.1 Hurontario Priority Bus Corridor

As per the Metrolinx 2041 Regional Transportation Plan (RTP), the future Frequent Rapid Transit Network (FRTN) will consist of Priority Bus corridors, Bus Rapid Transit (BRT), Light Rail Transit (LRT), subway, and 15-minute GO Regional Express Rail (RER) corridors.

The RTP designated Hurontario (Main) Street north of Downtown Brampton to Mayfield West Community as a Priority Bus corridor ('p' on **Figure 6-1**), which is a practical and cost-effective way of providing fast, frequent and reliable transit service to more people without the need for a dedicated right-of-way.

It is recognized that this corridor may serve as a major north-south transit spine with the potential to link several east-west rapid transit routes along the corridor as well as the Hurontario LRT ('o' on **Figure 6-1**), offering better inter-municipal and inter-regional travel.

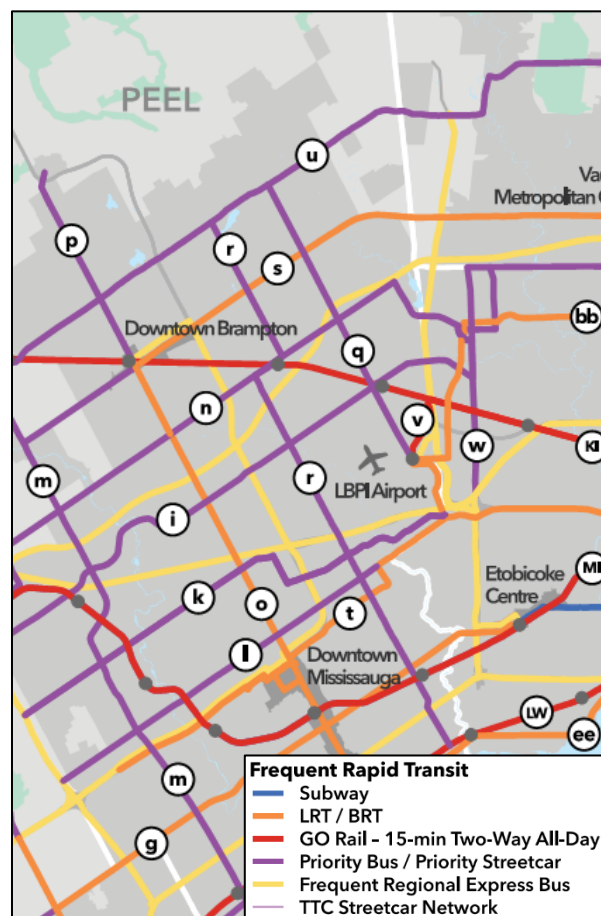


Figure 6-1: Frequent Rapid Transit Network

Source: Metrolinx 2041 Regional Transportation Plan

6.2.2 Caledon GO Station and Rail Line to Bolton

There is a need for higher-order transit to support growth in southern Caledon. The *Bolton Community Rail Feasibility Study* completed by MMM Group in 2010 assessed the technical requirements to implement a commuter rail service connecting the west side of Toronto to Vaughan and Caledon.

The study determined that introducing the service is feasible, which supports the vision outlined in the provincial government's *MoveOntario 2020* plan, as well as Metrolinx's *2041 Regional Transportation Plan*. As per *The Big Move*, the Bolton commuter corridor had been identified to operate rail service every 30 minutes or better during peak periods, and hourly or better service during counter-peak and off-peak times. The Province of Ontario's 2022 Greater Golden Horseshoe Transportation Plan also identified the need for the Province to work with Metrolinx and the Town to monitor transit demand and advance the business case for passenger rail service to Caledon as an action item to improve transit connectivity.

The proposed location of the Caledon GO Station is Humber Station Road and King Street, as shown in **Figure 6-2**. The Caledon GO Station area has been designated as a planned MTSA by the Region.

A second potential GO Station / MTSA was identified along Highway 50 / Queen Street as part of the ongoing Bolton Secondary Plans Review Study and is illustrated in **Figure 6-3**. This second GO Station was identified as a need to support a new transit-oriented community through intensification in the form of high density mixed-use and residential areas to optimize the use of existing infrastructure and services. The station will be further assessed as part of the secondary plan process.

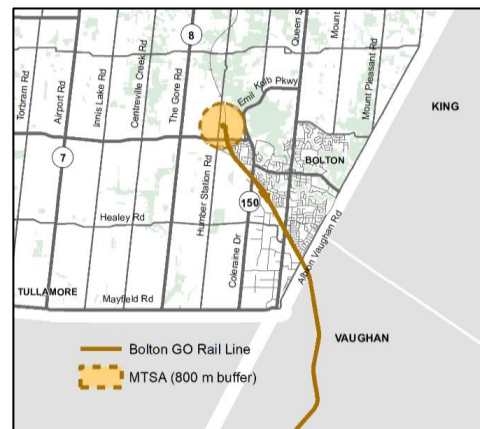


Figure 6-2: Proposed Caledon GO Station

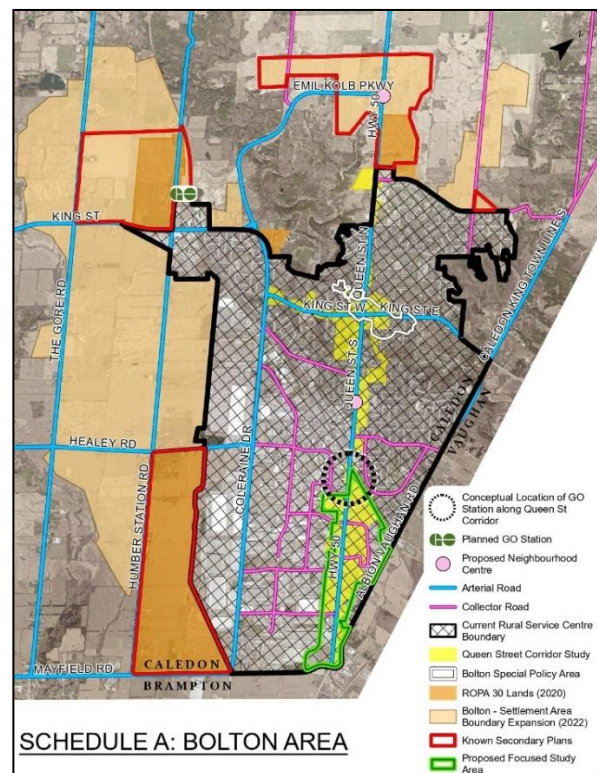


Figure 6-3: Potential Second GO Station

Source: Bolton Secondary Plan Review

6.2.3 Mayfield West Secondary Plan

The Mayfield West Community (Stages 1 & 2) Secondary Plan (MW2) is being developed as a transit-oriented community, which will accommodate a population of approximately 17,500 people. The Transit Hub has also been designated in the Mayfield West community near Highway 410 / Hurontario Street to serve Caledon and the catchment/influence areas. This development forms a key component of the MTSA considered in Mayfield West.

As part of the Development Staging and Sequencing Plan (DSSP) for the Mayfield West Stage 2 Secondary Plan Area (MW2), potential phased transit routing options were established. The proposed transit service in Mayfield West is expected to be delivered by extending or re-routing existing Brampton Transit routes.

A transit hub is also proposed in the Mayfield West community near Highway 410 at the future Spine Road. This planned transit hub is being developed in coordination with the approved Mayfield West Community (Stages 1 & 2) Secondary Plan (MW2). The surrounding area is identified as a planned Major Transit Station Area (MTSA), which is delineated as an 800 metre (10-minute walk) buffered area around a transit station or stop those services or will service transit corridors. These areas are protected for the purposes of developing high-density, mixed-use and transit-supportive neighbourhoods, which supports access to employment, housing, local amenities and recreational activities.

6.2.4 Highway 413 Transit

Highway 413 is a 59 km, 4 to 6-lane, 400-series highway and transit corridor that is proposed to travel through York, Peel and Halton Regions. The corridor is expected to have 11 interchanges and provide connections to Highways 400, 427, 410, 401 and 407 ETR. The preferred route, as shown in **Figure 6-5**, is proposed to extend from Highway 400 in Vaughan to the Highway 401 / 407 interchange near Milton. The transit corridor is expected to provide separated, exclusive access alongside the highway for public transit such as buses or light rail transit. Highway 413 represents a unique opportunity of a high-speed transit corridor through the future urban (SABE) area.

6.2.5 Transit Feasibility Study

A Transit Feasibility Study (TFS) was conducted for the Town of Caledon by Steer in 2019, which identified the need and demand for local transit services, the associated level of service and investment required, and opportunities for fixed route and on-demand service. The study considers existing travel patterns within Caledon and to/from surrounding municipalities, forecasted population and employment growth to 2041, and public consultation feedback to inform transit needs. The recommended type of transit service (i.e., fixed-route or demand-response) was examined based on estimated passenger volumes and geographic considerations.

As part of the study, a long list of 26 transit service options were developed. An assessment of all potential routes were conducted using quantifiable evaluation metrics developed based on goals for transit service that align with the Town's strategic directions and Council Work Plan. A prioritization hierarchy for proposed routes was established as a result of the assessment. Recommendations from the Transit Feasibility Study were considered as input in developing the future transit network for the Town, recognizing that some recommended routes were identified to overlap with other higher-performing options.

6.3 Transit Plan Development

6.3.1 Transit System Objectives

To develop a transit system that is a viable alternative mode of travel to the automobile, the following key factors were considered in identifying transit needs and opportunities to inform the recommended solution for Caledon.

- **Proximity** to a higher order transit station or a conventional transit stop based on the density of population and jobs in its vicinity;
- **Connectivity** of the transit system between key trip origins and destinations;
- **Serviceability** (scheduled service hours of operation and reliability);
- **Frequency** (headway) of service along transit routes, and
- **Travel time** (operating speed, number of stops, dwell time) along transit routes.

6.3.2 Proximity in High Density Areas

Considering significant growth and development planned as part of the Settlement Area Boundary Expansion (SABE), there is a need to provide transit service for southern Caledon, including existing and future urbanized lands in Bolton. To provide service accessibility similar to other well-served communities, east-west and north-south transit corridors should be planned for 10-minute access (i.e. within 800 metres of future high-density population and employment areas for fixed routes).

6.3.3 Connectivity to Key Origins and Destinations

Connectivity across a transit system is important as it ensures that travel needs (i.e., major origin-destination pairs) are met. Providing transit connectivity may take the form of connections between communities and existing/planned transit facilities and hubs within Caledon and neighbouring municipalities (Brampton and York Region), as well as connections between residential areas and major employment lands, schools, recreational facilities, carpool and commuter lots, etc. **Figure 6-4** depicts the locations of these points of interest. The transit plan was developed to assure connectivity to/from these major trip attractors/generators.

Town of Caledon

Transportation Master Plan

FIGURE 6-4

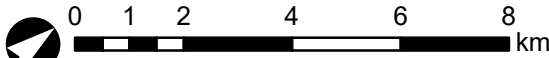
Key Origins and Destinations
in Caledon

Points of Interest

- Elementary / Middle School
- Secondary School
- Brampton Caledon Airport
- Arts and Culture
- Commuter / Carpool Lot
- Conservation Area
- Government
- Health Care
- Library
- Seniors Residence/Housing
- Shopping Centre
- Social Services
- Sports and Recreation
- Child Care Centre

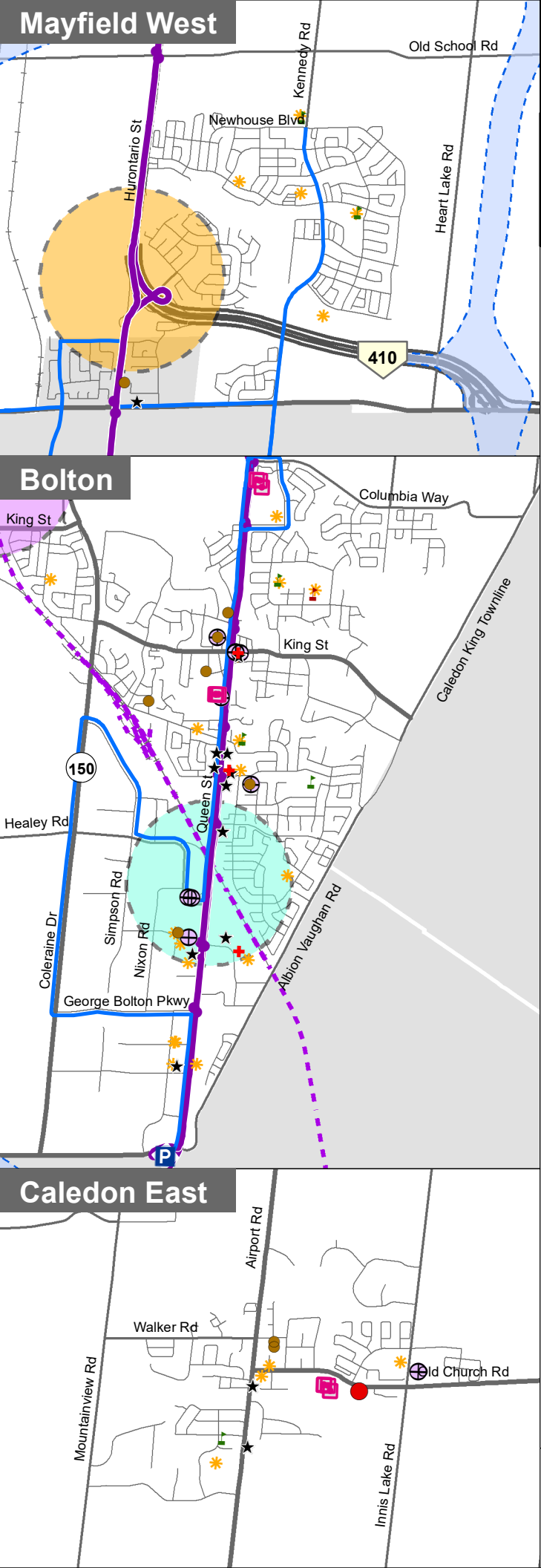
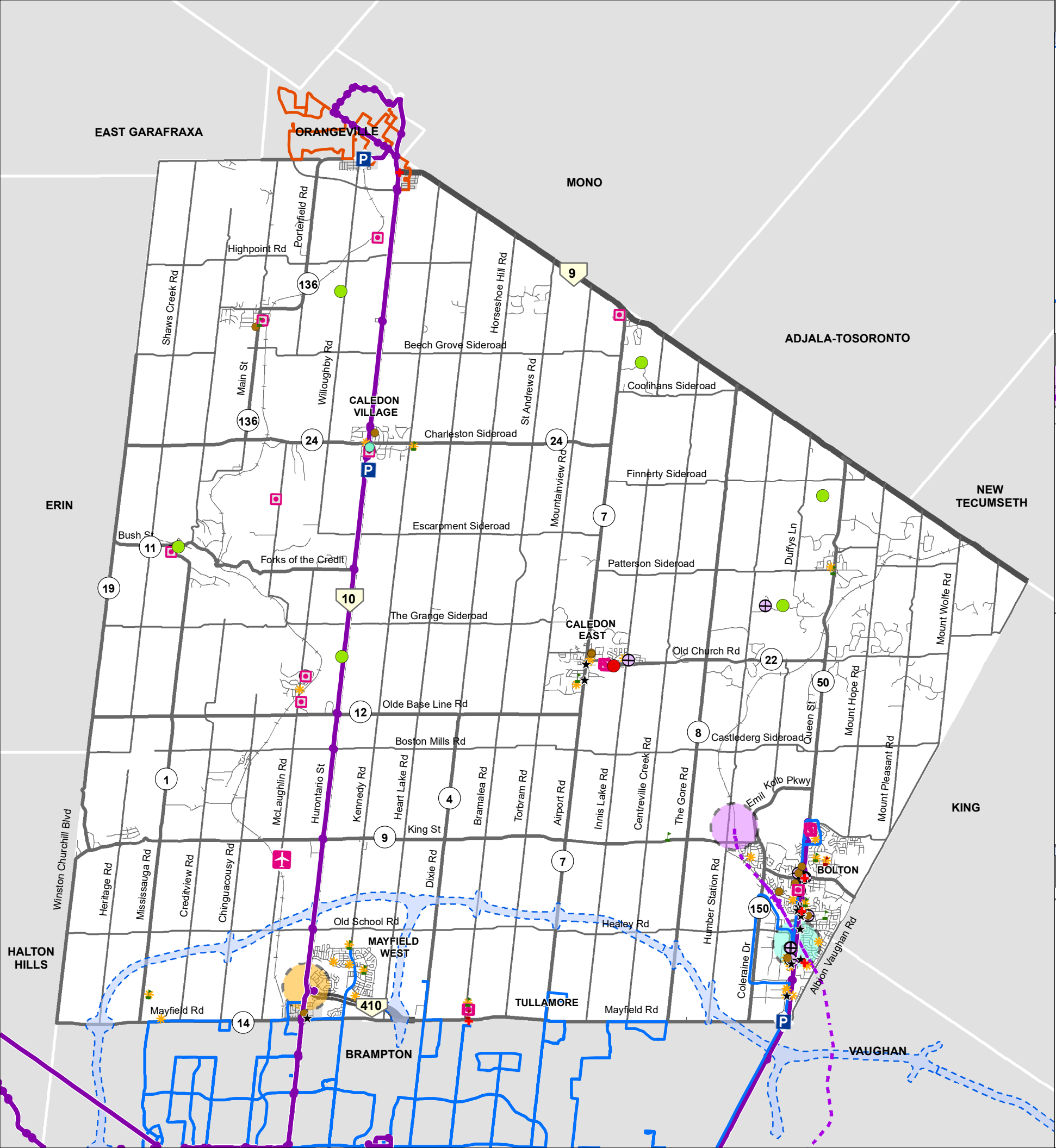
Existing / Proposed Transit

- Caledon GO Station
- Potential Secondary GO Station
- Mayfield Transit Hub
- GTA West Preferred Route
- Bolton GO Rail
- Brampton Transit
- GO Transit
- GO Bus Stop
- Orangeville Transit



R.J. Burnside & Associates Limited is not responsible for the accuracy of the spatial, temporal, or other aspects of the data represented on this map. It is recommended that users confirm the accuracy of the information represented.

This map is the product of a Geographic Information System (GIS). As such, the data represented on this map may be subject to updates and future reproductions may not be identical.



6.4 Transit Service Models

6.4.1 Fixed Route Transit Categories

Inter-Municipal Service

Inter-municipal routes provide connections between urban centres, major destinations, and/or major transfer stations within Caledon and other municipalities. These routes generally prioritize directness of travel, offering minimal stop locations, and operate along the provincial highway network and/or major arterials. The provision for inter-municipal service (via the proposed Caledon GO Rail Line, Highway 413, Mayfield West-Brampton Priority Bus Corridor, along with proposed transit to connect to these facilities) is important in accommodating travel demand and achieving long-term transit mode share objectives.

Inter-Community (Intra-Municipal) Service

Inter-community routes are similar to inter-municipal routes in that they generally operate along provincial highways and/or major arterials. They may also serve to include a feeder function with a local transit service area. Serving internal Town trips travelling between communities (Mayfield West, Bolton, Caledon Village, Caledon East) is important in accommodating this future demand, providing access and providing connectivity throughout the Town.

Local Service

Local routes can operate along arterial, collector and local roads. Their primary purpose is to provide internal community circulation, typically within a lower demand area. These routes are designed to maximize proximity to transit services for residents, which typically results in more circuitous and less direct routes. It will be important to establish transit use as a viable option early in the development of the residential areas within Mayfield West and the Bolton Residential Expansion Areas as these communities grow. Similarly, a transit study will be necessary as the SABE lands develop. As such, local service will be integral in facilitating internal travel within these communities and proximity to transit.

6.4.2 Fixed Route Service Levels

Transit level-of-service (LOS) will influence convenience and demand for use. Transit LOS standards can vary by category of transit service: inter-municipal service, inter-community service and local service as summarized below:

A benchmarking review of fixed route transit service standards was undertaken to generate guidelines for future service in Caledon. **Table 6-1** provides example guidelines for the frequency of service, hours of service and stop spacing.

Table 6-1: Level-of-Service (LOS) Guidelines

LOS Criteria	Guidelines		
Frequency of Service			
General Guidelines	Clock-face headways should be used for routes operating with headways greater than 10 min, provided that it does not incur unwarranted additional running / layover time and operating costs. Clock-face headways allow the scheduled stop times to repeat each hour, which help transit users remember the bus schedule.		
	For routes that meet at a GO Station (i.e., proposed Caledon GO Station), headways should be scheduled such that transit users are provided a minimum transfer time of 5 min before boarding and after alighting the scheduled GO train/bus.		
	On-demand considered in interim to assess needs, with local fixed route recommended as the Town transitions to a fixed-route transit system.		
Route Headways (min)	Inter-Municipal	Inter-Community	Local
	<i>Weekday Peak:</i> 30 <i>Off-Peak:</i> 60	<i>Weekday Peak:</i> 60 <i>Off-Peak:</i> On-Demand in interim, subject to further study	<i>Weekday Peak:</i> 30 <i>Off-Peak:</i> On-Demand in interim, subject to further study
Hours of Service			
General Guidelines	Shorter headways should correspond to peak period times. Demand-based transit can also be considered during off-peak times (i.e., weekend / holiday service).		
Route Service Hours	<i>Weekday Peak:</i> 7:00 AM – 9:00 AM 3:00 PM – 6:00 PM	<i>Off-Peak:</i> 9:00 AM – 3:00 PM 6:00 PM – 2:00 AM	
Proximity			
General Guidelines	Transit users are generally willing to walk 400 m (or approximately 5 min) to access a local transit stop and 800 m to access a higher order service (inter-municipal and inter-community). The location of inter-municipal and inter-community route stops should be spaced further apart to prioritize lower travel times, whereas local route stops should be closer together to prioritize convenient access for residents.		
Route Stop Spacing	Inter-Municipal	Inter-Community	Local
	1,000 m	600-800 m	400 m

Source: Niagara Transit Service Delivery and Governance Strategy, Dillon January 2017

The overall transit user experience is also an important element in the programming of public transit and increasing ridership. Transit networks should be designed to attract as many customers as possible, including both captive and choice customers, as it can directly influence mode choice. The guidelines summarized in **Table 6-2** were established with the goal of improving transit user experience through the accommodation of amenities, services, and integration with other modes. These guidelines are recommended for incorporation as part of the existing and future Town transit system.

Table 6-2: Transit User Experience Guidelines

	User Amenities	User Experience Services	Integration with Other Modes
Description	Through the provision of passenger amenity standards, a quantitative/qualitative scale for the provision of amenities will ensure an appropriate standard throughout the transit system. As a general standard, cleanliness and an appropriate level of upkeep needs to be maintained for all amenities.	Transit-related customer service improvements include the provision of services and/or facilities that enhance the transit customers experience when using transit. This is an important element for encouraging transit ridership, especially for choice transit customers.	Transit service cannot be looked at in isolation. Integrating transit with other travel modes is essential to the success of a transit system. This includes providing convenient access to bus stops and transit terminals for pedestrians and cyclists.
Guidelines	<p>Bus Stop Amenities</p> <ul style="list-style-type: none"> Seats and benches High-capacity, heated shelters Litter and recycling receptacles, possibly coordinated with street furniture Lighting, where appropriate, or located in close proximity to well-lit areas Posted maps, up-to-date schedules and wayfinding signage <p>In-Vehicle Amenities</p> <ul style="list-style-type: none"> Automated next-stop displays Low-floor and multiple door boarding / alighting Stop request buttons and cords that can be reached from a seated position In-vehicle maps / traveler information “Plush” seats WiFi Charger plug-ins 	<ul style="list-style-type: none"> Implementation of Intelligent Transportation Systems (ITS) such as automatic vehicle location (AVL) systems and global positioning systems (GPS) on buses to allow users to make more informed travel choices Real-time communication of service (e.g., time of bus arrival) to customers through electronic displays at bus stops, on buses and at stations Real-time route tracking through mobile and/or web-based applications 	<ul style="list-style-type: none"> Pedestrian and cycling enhancements and provision of sidewalks at approaches near new and existing transit station areas and stops Provision of bike racks on buses Provision of secure bicycle parking / storage at transit stops and stations Clearly delineated pedestrian and cycling routes and accesses that connect to transit facilities Consideration of park and ride lots at major transit nodes such as near downtown cores, shopping malls, etc.

6.4.3 On-Demand Transit

Much like existing ride-sharing services, on-demand transit offers a flexible and cost-efficient alternative to traditional fixed-route mass transit. It allows riders to book their trip via an app, which uses an algorithm to program the most fast and fuel-efficient route for the bus driver to pick-up and drop-off passengers. The fleet for on-demand transit can consist of small/medium vehicles such as buses, taxis and vans. Tech companies specializing in the development of on-demand transit apps include Pantonium, Rideco, Spare and more.

Demand-responsive transit can achieve better fuel and cost economy as it would require a much smaller bus fleet with efficient routing. Additionally, hybrid on-demand routes that make scheduled stops at major destinations, such as senior homes, may also be considered.

Since the onset of the stay-at-home orders and social distancing regulations due to the COVID pandemic, a few municipalities within Ontario have taken the opportunity to fast-track or expand their on-demand transit. The City of Belleville, for example, contracted Pantonium to develop an on-demand transit app as a pilot in 2018 that allows travellers to book a trip on the City's late-night Route 11 bus, specify desired pick-up time, pick-up and drop-off locations, and wait-time tolerances. The on-demand transit service uses a dynamic routing system, so riders can be picked up and dropped off at a location of their preference, if it resides within the designated Route 11 zone.

An on-demand transit system is particularly effective for rural, low-to-medium-density areas that have a lower demand for transit, which is consistent with existing rural areas of Caledon. The Town's 2019 TFS identified seven demand-responsive services, which are primarily intended to facilitate travel within and between rural areas / villages of Caledon. On-demand transit can also be considered as an alternative to a proposed local community service and/or service interim demand if build-out of the lands are required to justify service provision.

6.5 Alternative Mobility and Transit Opportunities

Other alternative mobility and transit opportunities, including innovative transit and ridesharing, were investigated and summarized for the Town's consideration below.

Mobility as a Service (MaaS)

The concept of Mobility as a Service (MaaS) aims to integrate different transport services into one on-demand mobility service. Services can include, but are not limited to, transit, ride/car/bike-sharing, taxi and/or private automobile.

In particular, MaaS would help facilitate first- and last-mile connections with public transit. It provides the public the means to plan, access and pay for a complete origin-destination trip.

The approach addresses transportation services as a system, which ultimately provides a more convenient and attractive option to the use of a private vehicle, reducing congestion on the road network. Improvements to MaaS is conducive to achieving a higher sustainable mode share as

identified in the Region's LRTP. It is also integral in supporting transit use as it ensures safe access to transit stops.

MaaS has not been implemented in Canada, but has been piloted in cities such as Helsinki, Finland, and Gothenburg (Sweden). The challenges associated with implementing MaaS include, but are not limited to:

- The lack of a consumer protection framework enacted or proposed in Canada, which would ensure performance standards that allow for safe and reliable service across the different travel modes;
- The need for data protection and security measures for users; and
- Contractual arrangements to address data sharing between transport operators and other organizations.

Ride-Hailing Service

MaaS is currently being offered via the incorporation of ride-hailing services such as Uber, Lyft and bikeshare services in travel applications such as Google Maps. Within Caledon, ride-hailing is offered by Uber and Taxi services, providing residents with a demand-responsive transportation option. Taxi vehicle licensing, driver permits, and brokerages are currently administered and regulated by the Town of Caledon.

Up Hail, a web application to compare taxi and rideshare fares, gives Caledon a "Hail Score" (i.e. a metric to inform how rideshare and taxi-friendly a city is) of 5/10, indicating poor level of service. In comparison, the City of Toronto has a score of 8/10. The City of Brampton and Mississauga have scores of 7/10 and 6/10, respectively. The "Hail Score" rating system is shown in **Table 6-3**.

Table 6-3: Hail Score Criteria

Hail Score	Criteria
1	City has limited public transit options.
2	City has multiple public transit options including trains and buses.
3	City has no transit options, but taxi services.
4	City has taxi and public transit services.
5	City has 1 on-demand private car service with 1 tier of service.
6	City has 1 on-demand with 2 tiers.
7	City has 1 on-demand service with 2 or more tiers.
8	City has 2 or more on-demand services.
9	City has 1 rideshare service.
10	City has 2 or more rideshare services.

Both Uber and Lyft estimate rideshare fares based on an upfront, "base" fee plus an additional demand-based fee. The base rate is determined by the time and distance of a trip; a flat fee may be added depending on the city (to support operational, regulatory and safety costs). A comparison of rideshare "base" rates for neighbouring municipalities around Caledon are provided in **Table 6-4**, which shows very little difference in fares.

Table 6-4: Rideshare Base Fares Comparison

Ride Within	Base Fare (\$)			Cost per Kilometre (\$/km)		
	Taxi	Uber ²	Lyft ³	Taxi	Uber ²	Lyft ³
Caledon	\$3.25	\$2.50	\$2.75	\$2.82	\$1.31	\$1.22
Brampton	\$3.25	\$2.50	\$2.75	\$2.82	\$1.31	\$1.22
Mississauga	N/A	\$2.50	\$2.75	N/A	\$1.31	\$1.22
Oakville	\$3.25	\$2.50	\$2.75	\$2.82	\$1.31	\$1.22
Burlington	N/A	\$2.50	\$2.75	N/A	\$1.46	\$1.22
York	\$3.25	\$2.50	\$2.75	\$2.82	\$1.31	\$1.22
Toronto	\$3.25	\$2.50	\$2.75	\$2.82	\$1.31	\$1.22

Notes: 1. Source: uphail.com
 2. Uber rates correspond to 'Economy Personal Ride' option
 3. Lyft rates correspond to 'The Low Cost Lyft' option

The primary factor that controls the variation in rideshare prices between the municipalities above is demand and supply. Depending on the ratio of riders and available drivers, rideshare prices can experience a temporary surge to rebalance the market. The Uber app was used to compare the estimated total price range for trips within high-density urban centres of surrounding municipalities during peak rideshare travel periods to better inform rideshare usage and driver availability. The summary is provided in **Table 6-5**.

Table 6-5: Uber Total Price Range Comparison

Municipality	Price Range ¹
Caledon	N/A
Brampton	\$17-23
Mississauga	\$16-21
Oakville	\$17-22
Burlington	\$16-21
York	\$17-23
Toronto	\$18-23

Note: 1. The trip inputted using the Uber app reflects the average distance of an UberX ride, which is approximately 8-11 km per trip. The scheduled time of the ride was set to Friday after 5 PM, which is typically when demand peaks.

Given the price of current ride hailing services, the density / proximity of drivers and the hail score, ride-hail is not a competitive and reliable option for many commuters to facilitate regular commuting patterns (e.g., travel to work).

Within Canada, the Town of Innisfil was the first to initiate a partnership with Uber to provide an on-demand transportation service in place of a local transit system. Currently, a \$4 discount is offered for any ride that starts or ends in Innisfil and a \$6 flat rate is applied for trips travelling to/from the train station, a major employment area and carpool lot. This program has been successful, with significant ridership (86,000 rides in 2018); however, with increased use, the costs to the Town of Innisfil also increased as a result. With most of the revenue from the program going to Uber and fixed per-capita costs, Innisfil was forced to introduce a trip cap and is now considering options for a fixed transit system that will be complimented by Uber instead.

However, with the implementation of proposed fixed-route transit, ride-hail should be considered in coordination with transit to facilitate first- and last- mile connections.

6.6 Transit-Oriented Development

Transit-oriented development (TOD) is part of the provincial government's plan to build new, sustainable transit. It involves structuring higher density housing and jobs near or at transit stations along a major corridor. There are opportunities for the Town to establish transit-oriented development policies through the Multi-Modal Transportation Master Plan.

There are three proposed Major Transit Station Areas (MTSAs) within the Town of Caledon: two located within Bolton (for the future GO rail line to Caledon) and one located in Mayfield West near the future Spine Road and Highway 410 interchange. These transit hubs present an opportunity to develop complete transit-oriented communities. According to the provincial *A Place to Grow* (August 2020), MTSAs are areas that cover approximately 500 to 800 metre radius (i.e., about a 10 minute walk) to a transit station. The purpose of establishing a MTSA is to protect the area, delineate boundaries, provide minimum densities, prioritize and define the types of transit stations, and establish a framework to guide implementation planning.

Node-focused guidelines, as detailed in MTO's *Transit-Supportive Guidelines*, would support the objectives of the MTSA in coordinating compact, mixed use development to support transit ridership. The downtown core of Toronto is a prime example area that accommodates a wide range of transit-supportive land uses, such as schools, workplaces, homes and retail stores. While various nodes can be characterized by an overarching land use, the provision of mixed uses should be encouraged to better accommodate transit user demand across the system.

Major existing or planned transit routes (e.g., The Gore Road, King Street) within or near these MTSAs present opportunities to achieve 'mainstreet' type environments, which should align with **corridor-focused** guidelines as per MTO's *Transit-Supportive Guidelines*. Similar to the characteristics of transit-supportive nodes, transit-supportive corridors aim to create higher density and mixed uses in the surrounding area, typically designated as a 400-800 m (5-10 minute) walk from focal points along a corridor. Development is structured such that it provides linkages between transit nodes along the corridor. Land use strategies encourage the use of transit through the intensity of development and discourage the use of automobile-oriented developments such as drive-throughs and retail plazas.

6.7 Summary of Transit Opportunities

Transit services are typically operated by a municipality for areas within its jurisdiction to facilitate travel within communities and provide connections to key destinations. Given the trip characteristics, population, growth and phasing within the town's secondary plans, along with origin and destination patterns, the MMTMP recommends that the Town leverage Brampton Transit by 2035. Leveraging the existing Brampton Transit system will allow for benefits from economies of scale, fare integration and connectivity with a seamless transit service. Beyond 2035 and following the completion of all Secondary Plans in the SABE area and the Highway

413 Environmental Assessment and Detailed Design, it is recommended that the Town revisit and undertake a transit strategy study to develop a service plan over a longer time horizon.

The Town of Caledon transit system will have needs similar to other urbanized municipalities providing regular reliable fixed routes. The service will be key for connecting urban destinations in a reliable and predictable manner, supporting businesses, addressing residents' barriers to travel, and achieving long-term transit mode share objectives. The potential route strategy was developed by identifying transit corridors that maximize the number of people residing near transit and connections to major origins and destinations.

Given the future population and density within southern Caledon, the Town has an opportunity to provide continuous fixed route transit, linking homes and jobs, and concentrating densities and mixed land uses around transit stations. Transit routes and stops can be established along existing major roadways and new potential corridors. The Ministry of Transportation Ontario (MTO) Transit-Supportive Guidelines (2012) provides guidance on linking transit service and land use; it identifies a target transit service that accommodates communities within an 800-metre radius (or a 10-minute walk). Opportunities for fixed-route corridors, as summarized in **Table 6-6** and illustrated in **Figure 6-5** were recommended as a result of the evaluation to identify sufficient transit coverage. The identification of specific transit routes will be subject to Secondary Plan Studies that will identify collector road systems within the SABLE area and regularly updated studies that will assess the efficiencies and merits of specific routing. It is expected that the proposed corridors will meet long-term mode share targets, as a significant proportion of the Town's population will be serviced by these transit corridors.

Table 6-6: Proposed Fixed-Route Transit Corridors

Transit Corridor(s) / Routes	Justification
Planned Transit Routes (2019 Transit Feasibility Study)	
Mayfield West / Bolton	Connects Mayfield West, Bolton and future SABLE lands Connects planned Mayfield West MTSA, GO Transit / planned priority bus corridor on Hurontario Street, Brampton Transit Leverages Mayfield Road as a future rapid transit corridor
Mayfield West Local A	Serves residents of the Mayfield West Secondary Plan area Connections to planned Mayfield West MTSA, Brampton Transit services and GO service
Mayfield West Local B	Serves residents of the Mayfield West Secondary Plan area Connections to planned Mayfield West MTSA, Brampton Transit services and GO service
Caledon East / Caledon Village / Orangeville	Serves travel between Caledon East, Caledon Village and Orangeville Connection to GO service
Mayfield West / Caledon East / Bolton	Serves travel between Mayfield West, Caledon East and Bolton Connections to planned Mayfield West MTSA, Bolton MTSA, planned GO station, planned priority bus corridor along Hurontario Street, Brampton Transit services and GO service
Caledon East Local	Serves residents in Caledon East and provide connections to Caledon Town Hall, community centre and Caledon East Park.
Caledon East / Tullamore / Brampton	Serves travel between Caledon East, Tullamore and Brampton Connections to future employment areas within SABLE lands and Highway 413
Proposed Transit Corridors	
Emil Kolb Parkway / Queen Street south of Emily Kolb Parkway	Serves residents in north Bolton Connections to planned GO station and key points of interests along Highway 50

Transit Corridor(s) / Routes	Justification
King Street and Queensgate Boulevard, east of Queen Street, and Albion Vaughan Road	Serves residents in east Bolton
McEwan Drive	Connections to the major shopping centre (Walmart, Canadian Tire) along McEwan Drive
Coleraine Drive, south of George Bolton	Serves the existing industrial employment lands
King Street and Queensgate Boulevard, east of Queen Street, and Albion Vaughan Road	Serves residents in east Bolton
McLaughlin Road / Olde Base Line Road near Inglewood	Serves residents in Inglewood Facilitates travel between Caledon East, Mayfield West and planned SABE lands Connects to the Inglewood community centre / library
Charleston Sideroad / Main Street / Porterfield Road	Serves residents in Caledon Village, Alton and Orangeville Connections to Orangeville Transit and GO bus service
Roads within SABE Lands	Facilitates travel from/to and within planned SABE lands and Brampton
King Street east of McLaughlin	Provides a continuous and direct transit route to facilitate travel to/from the planned SABE community lands near Bolton Connections to proposed north-south routes within SABE lands

Town of Caledon

Transportation Master Plan

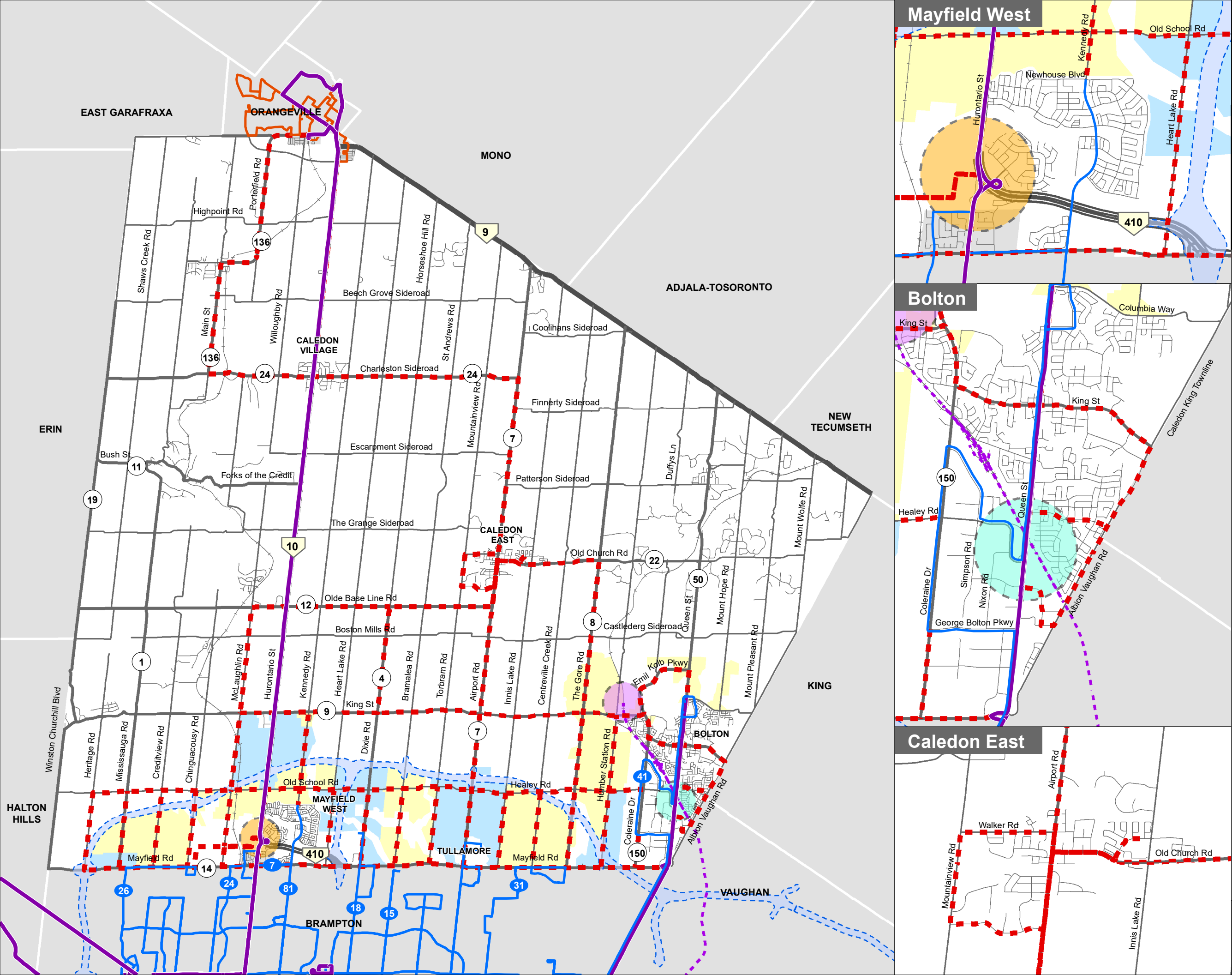
FIGURE 6-5
Transit Network Opportunities

- Existing**
- GO Transit
 - Brampton Transit
 - Orangeville Transit
- Future**
- Proposed Corridors
 - Bolton GO Rail
 - Caledon GO Station
 - Potential Second GO Station
 - Mayfield Transit Hub
 - GTA West Preferred Route
- Future Land Uses**
- Community
 - Employment



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Current travel trends indicate that the majority of external Town trips are destined to / originate from Brampton and Mississauga. With the north-south corridors within SABLE lands proposed to accommodate transit, it is recommended that the Town expand the partnership and collaborate with the City of Brampton to extend routes into Caledon, particularly the north-south routes that could be implemented in coordination with or as an extension of Brampton Transit routes. Brampton Transit Route 25, 3, 34 and 502 ZUM, for example, are already proposed to be extended to service the Mayfield West expansion area as identified in the Development Staging and Sequencing Plan (DSSP) for the Mayfield West Phase 2 Secondary Plan Area (MW2).

The identification of specific transit routes will be subject to Secondary Plan Studies that will identify collector road systems within the SABLE area and regularly updated studies that will assess the efficiencies and merits of specific routing.

7.0 Active Transportation

This chapter identifies active transportation needs and opportunities, a high-level implementation plan and guidelines for facility selection.

7.1 Role of Active Transportation Systems

Promotion of self-propelled modes of transportation that uses human energy such as walking, cycling, skating, jogging, rolling and skiing, referred to as active transportation (AT), provides social benefits. Active transportation helps to promote a healthy lifestyle, contribute to sustainable transportation and reduce the impact on the environment. Active transportation is explicitly supported in the Provincial Policy Statement and is supported as an important component of multimodal transportation systems.

Walking and cycling are the predominant modes of active transportation within Caledon. Future Caledon anticipates active transportation as a fundamental part of the transportation system. There are opportunities, particularly within the Settlement Area Expansion Boundary, to integrate active transportation into the urban form. Active transportation connections will be critical to achieving Future Caledon's objectives of developing "15-minute" communities.

7.2 Planned Active Transportation Infrastructure

7.2.1 Caledon 2017 Transportation Master Plan

The Town's previous 2017 Transportation Master Plan (TMP) developed future pedestrian and cycling network plans with the overall intent to allow Caledon residents and visitors to walk, bike and use other non-vehicular travel modes safely and efficiently.

Long-term network plans were developed in consideration of relevant plans / policies, the Town's Settlement Nodes (i.e., Urban Areas, Villages, Hamlets) and key destinations both within and outside of Caledon. Caledon staff, the Mayor/Council and the local cycling community were also consulted in determining desirable cycling routes. The proposed pedestrian network provides opportunities for personal travel and recreation via sidewalks, walkways and trails. The future pedestrian network was developed to address existing network gaps for walking and align with established plans / policies.

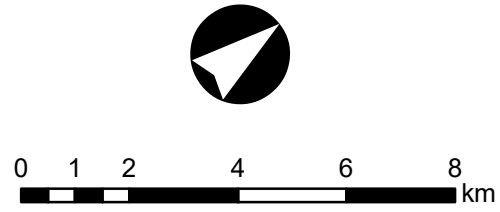
The active transportation network as recommended from the Town's 2017 Transportation Master Plan is illustrated in **Figure 7-1**.

Town of Caledon

Transportation Master Plan

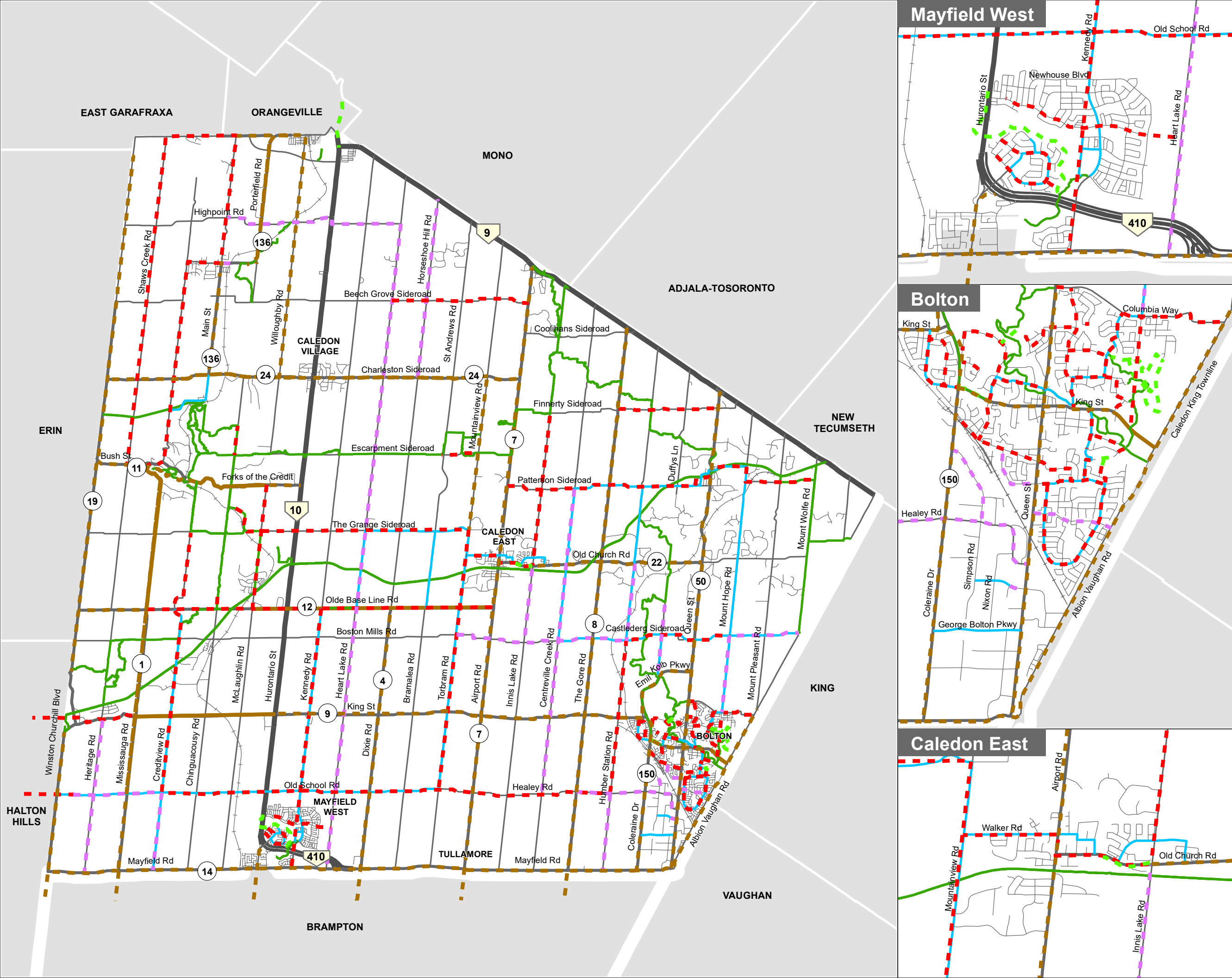
FIGURE 7-1
Previous (2017) Active
Transportation
Recommendations

- Proposed**
- Multi-Use Route
 - Separated On-Road
 - Shared On-Road
 - Regional
- Existing**
- Cycling Route
 - Trails
 - Regional



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7.2.2 Region of Peel Active Transportation Implementation Plan

The Region of Peel's 2018-2022 Active Transportation Implementation Plan (ATIP) was developed in support of the Region's Sustainable Transportation Strategy (STS). It provides strategies that expand on existing programs and describes new strategies to support active transportation across the Region.

In support of the STS, Pedestrian Improvement Corridors, as summarized in **Table 7-1** and illustrated in **Figure 7-2**, were identified to improve walkability along Regional roads. The location of these corridors was determined based on the Region's Road Characterization Study, their proximity to key destinations such as schools and transit hubs (to support first/last mile), and whether the STS mode share target analysis demonstrated a mode shift to walking to be more feasible in that area.

Table 7-1: Pedestrian Improvement Corridors within Caledon

Street	From	To	Road Characterization
Mayfield Road	McLaughlin Road	Highway 410	Suburban / Commercial
King Street	Coleraine Drive	Albion Vaughan Road	Suburban / Commercial
	Winston Churchill Boulevard	Heritage Road	Rural main Street
Highway 50	Columbia Way	130 m south of Bolton Heights Drive	Suburban / Commercial
	Patterson Side Road	Zimmerman Drive	Rural Main Street
Old Church Road	Airport Road	Innis Lake Road	Rural Main Street
Airport Road	Cranston Drive	Leamster Trail	Rural Main Street
	Highway 9	Mill View Court	Suburban / Commercial
Bush Street	Mississauga Road	Old Main Street	Suburban / Commercial
Charleston Sideroad	Kevinwood Drive	Kennedy Road	Rural Main Street
Main Street & Queen Street	450 m north of Beech Grove Sideroad	Porterfield Road	Rural Main Street



Figure 7-2: Pedestrian Improvement Areas

Source: Region of Peel 2018-2022 Active Transportation Implementation Plan

A series of upgrades and enhancements are planned to be implemented along these pedestrian improvement corridors. The type of upgrades will vary by corridor, given the roadway context and property considerations, but may include the following elements:

- Constructing any missing sidewalk links.
- Widening of sidewalks in some locations to provide additional clear width in areas of heavy pedestrian demand, or incorporating streetscaping and amenities such as trees, benches, planters or shrubs.
- Context specific upgrades to major intersections, which may include narrowing lanes approaching the intersection to slow vehicles, reducing corner radii, investigating the removal of right turn channels, Accessibility for Ontarians with Disabilities Act (AODA) upgrades such as the addition of missing curb ramps or tactile plate, adding audible pedestrian signals, signal timing adjustments to improve pedestrian level of service (LOS).
- Upgrades to minor intersections which may include AODA upgrades such as adding missing curb ramps and tactile plates and adding audible pedestrian signals.
- Introduction of additional mid-block crossings, potentially with median islands.

7.3 Active Transportation Needs and Opportunities

Since the development of the active transportation plan in the 2017 TMP, other planning initiatives have prompted a review of the 2017 TMP previously planned pedestrian and cycling networks. Consideration has been given to the needs associated with growth in the Town to 2051 and the Settlement Area Boundary Expansion (SABE) and additional opportunities identified by the Town. Active transportation needs and opportunities have been reassessed to address the following:

- Road user needs,
- Continuity and connectivity, and
- Policies for development and new infrastructure.

7.3.1 Road User Needs

Alternative forms of bicycle facility may be categorized into three functional categories reflecting the purpose and cyclist experience, as described in **Table 7-2**. They are commonly attributable to route characteristics. Distinguishing the preferences of distinct user groups allows for better prioritization of the active transportation facility type.

Table 7-2: Road User Categories

Form of Facility (Purpose / Experience)	Route Characteristics	Preferred Bicycle Facilities
Recreational		
Recreational riders typically bike for the purpose of enjoyment or exercise. They are usually less experienced and therefore have a lower comfort level when it comes to biking along high-speed or high-volume roads.	Quiet neighbourhoods (i.e., local roads) Low-volume and low-speed roads Trail connections	Dedicated bicycle lane Multi-use trail Paved shoulders (along rural roads)
Touring		
Experienced, or 'touring', riders typically take longer routes with scenic views. These trips usually take place between urban areas and/or key destinations, which may also require route planning beforehand. This user group generally consists of more experienced cyclists who do not mind travelling along high-speed roads.	Longer (i.e., less direct) routes Scenic viewpoints / key destinations Connections between Caledon cycling club meet-up points	Dedicated bicycle lane or paved shoulder on high-speed and/or high-volume roads Signed route on low-speed or low-volume roads Multi-use trail
Commuter		
Commuter, or 'utilitarian' riders make destination-oriented trips, typically for work, school or errands. They usually prefer direct routes to minimize travel time.	Major roadways (preferably with minimal signalized / stop-controlled intersections) Direct routes	Dedicated bicycle lane or paved shoulder on high-speed and/or high-volume roads Signed route on low-speed or low-volume roads

It is important to note that these serve as guidelines only and a more detailed analysis is required on a corridor-level to identify the appropriate level of separation and facility type that matches the context of the road and/or recommend unique mitigation actions, if required. For instance, other factors that determine the appropriate bicycle facility include the volume of buses and/or larger trucks expected to use adjacent travel lanes, on-street parking, pedestrian activity, intersection frequency, traffic operations, right-of-way (ROW) widths, and more.

7.3.2 Continuity and Connectivity

Continuity is important in establishing a reliable, “low-stress” active transportation network. Missing links should be identified in a network to identify and address continuity gaps.

Connectivity to proposed active transportation facilities in surrounding municipalities, existing and planned Regional routes and infrastructure, and key destinations should be considered in establishing a seamless inter-municipal network within and beyond Town boundaries.

Among Caledon’s neighbouring municipalities, the City of Brampton and York Region are the two most prominent origin or destination for external Town trips. As such, active transportation plans or studies for surrounding municipalities, including the City of Brampton 2019 *Active Transportation Master Plan* (ATMP), York Region 2016 *Pedestrian and Cycling Plan*, City of Vaughan 2020 *Pedestrian and Bicycle Master Plan*, and Town of Orangeville 2019 *Cycling Trails Master Plan* should be reviewed to assure connectivity between jurisdictions.

Settlement Area Boundary Expansion – Collector Road Connections

The Settlement Area Boundary Expansion (SABE) lands represent an additional 6,000 ha of urban expansion in Caledon (above and beyond the planned Mayfield West and Bolton Expansion Area) and 220,000 additional people in south Caledon. This development presents opportunities to protect and plan for continuous active transportation corridors, to connect the SABE lands with the Mayfield West and Bolton communities.

The SABE area can incorporate opportunities for local community cycling and pedestrian routes integrated into east-west and north-south collector road networks through the development of secondary plans. Consideration, however, should be given to linking these routes between secondary plans to allow for longer recreational and commuter travel.

New collector roads and/or separated facilities south of Old School Road connecting the urban expansion areas can facilitate safe and efficient commuter travel.



Source: By Richard Peace; Published: September 15, 2011 at 3:53 pm (<https://www.bikeradar.com/news/bike-lanes-profitable-says-dutch-report/>)

Rural Route Paved Shoulders

Given the rural nature of most of the Town collector road system, the option of implementing paved shoulder bicycle routes can be a reasonably cost-effective solution to provide connections between communities and key destinations. They can accommodate commuter and recreational cycling for experienced cyclists.

A paved shoulder on a designated bike route may include a buffer zone to provide greater separation between motorists and cyclists. Many Ontario municipalities have begun implementing paved shoulder bicycle facilities, including Grey County and Oxford County.

Through consultation with Town Council, it was recognized that paved shoulders can provide other transportation related benefits including accommodation of farm equipment. There was a desired raised by members of Council to maximize the use of paved shoulders where feasible.

Rail Corridors

Many jurisdictions have repurposed unused rail corridors as rail trails to act as key active transportation routes. Rail trails accommodate pedestrians and cyclists of all skill levels as they are far removed from road traffic. To become public recreational trails, rail tracks are typically removed and re-paved with appropriate signage. Rail trails within Ontario include the K&P Rail Trail, Lang Hastings Rail Trail, Elora Cataract Rail Trail and more.

The 35 km Caledon Trailway path, running east-west to the north of King Street and extending north of Olde Baseline Road, is an example of a successful rail trail corridor within the Town. A study is being conducted to repurpose the disused Orangeville Brampton Railway (OBRY) corridor as a multi-use recreational trail.

Scenic Cycling Route

The Scenic Cycling Route, as recommended in the 2017 TMP, is shown in **Figure 7-3**. The proposed route provides connections between communities, conservation areas and scenic areas / viewpoints. It is recommended that the scenic route be revisited as part of the ATMP and include a connection to Caledon East to provide access to parking facilities, the Town Hall and Caledon East park.

Inter-municipal Connectivity

In 2018, the Region of Peel developed the Active Transportation Implementation Plan. Active transportation plans have also been developed or updated for adjacent municipalities, which should be considered to provide intermunicipal connections.

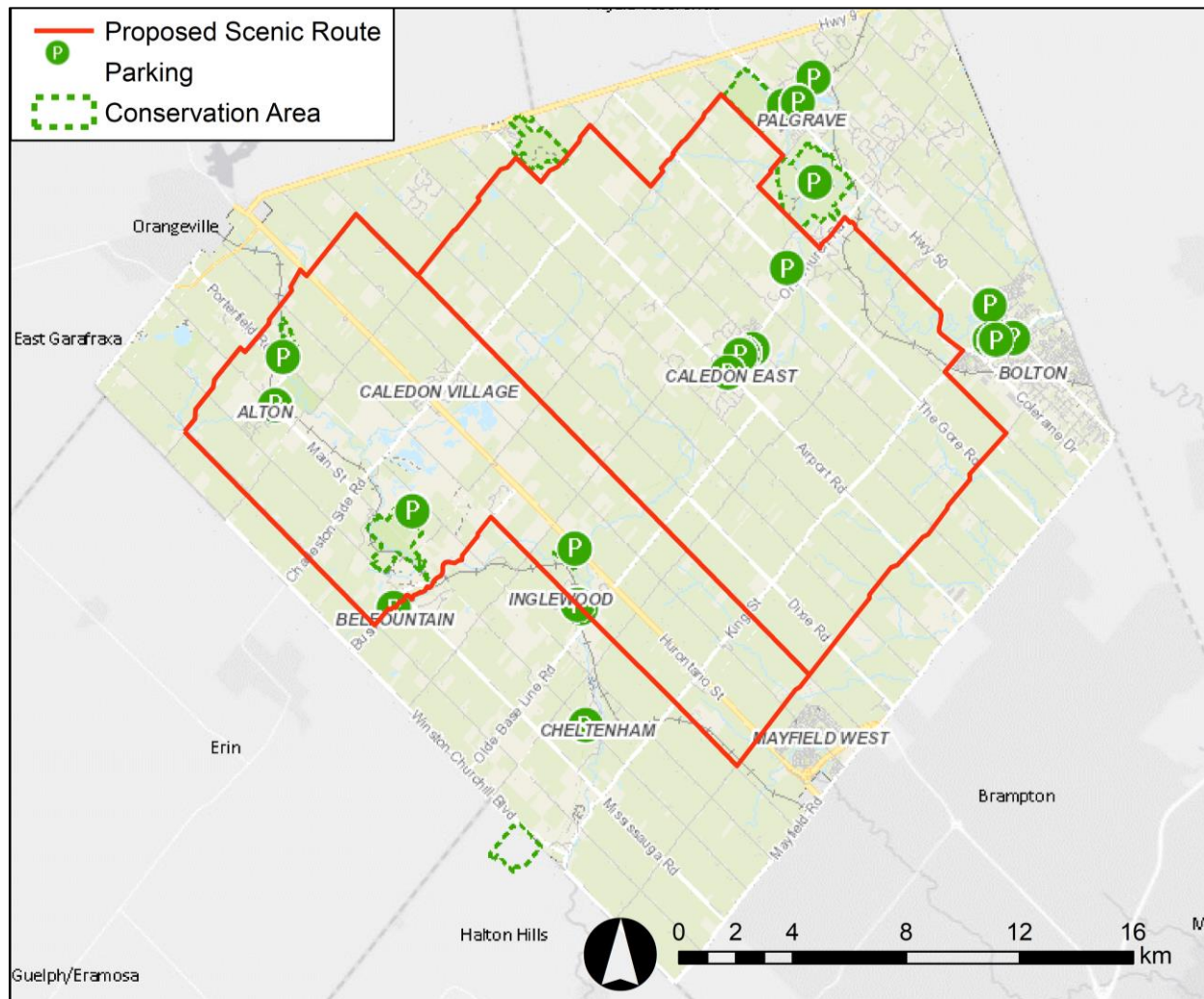


Figure 7-3: Scenic Route Recommendation

7.3.3 Policies for Development and New Infrastructure

Opportunities will exist for the planning and implementation of active transportation infrastructure through the development review process. This will include active transportation strategies of new Secondary Plans in the SABE area and with individual developments. As such, guiding policies will assist in establishing effective pedestrian and cycling connections. The following policies are proposed:

- The construction and reconstruction of new streets will apply complete streets design principles to support the integration of pedestrian and bicycle users, and enhanced streetscaping;
- Provisioning for safe and convenient active transportation facilities such as sidewalks along both sides of the road, cycling infrastructure and trails as needed, and bicycle parking for all development applications;
- Establishing Site Plan control requirements to improve pedestrian, cycling and trail connections at and surrounding development sites;
- Building safe active transportation facilities within and that connect between settlement areas and rural communities;
- Designing pedestrian infrastructure to remain consistent with Accessibility for Ontarians with Disabilities Act standards to achieve a barrier-free network accessible for all ages and abilities;
- Providing a degree of separation for bicycle facilities where applicable;
- Providing bike parking and storage facilities at transit terminals and MTSAs;
- Providing safe pedestrian and cycling facilities connecting to and in the vicinity of transit stops and stations;
- Provisioning for active transportation facilities as part of development applications, and when designing and constructing/reconstructing roads, bridges, intersections, etc., while also considering the impact to vulnerable road users, the character of the community and surrounding land uses and design;
- Adopting requirements for minimum bicycle parking spaces, bicycle storage facilities and other active transportation amenities, such as showers and change rooms, in conjunction with all high/medium density residential developments, employment nodes and other appropriate locations; and
- Ensuring that active transportation facilities meet or exceed industry safety standards, and are supported through appropriate design, signage and consistent safety enforcement.

7.4 Recommended Active Transportation Network

The Town initiated an Active Transportation Master Plan (ATMP) in April 2022, which aims to promote active transportation, trail development, and utilization to create a livable and sustainable community. The plan provides a framework to develop an active transportation network in a cost-effective manner that will connect, integrate, enhance and expand on our existing facilities.

The study consists of a comprehensive review of pedestrian, cycling and trail-related policies and plans. The goals established for the ATMP are as follows:

- Capture a vision for the future of accessible, safe, and connected active transportation throughout the Town of Caledon.
- Identify system and connection gaps in the existing active transportation network.
- Identify and prioritize the implementation of a trails system, routes and facilities to support a network of active transportation opportunities for people of all ages and abilities.
- Build on the Multi-Modal Transportation Master Plan by using the latest approaches to active transportation planning.
- Reflect the unique character and values of the Town of Caledon through engagement and outreach with the community.

The ATMP recommends a network of year-round active transportation features that will be safe and comfortable for all ages and abilities of people walking and cycling. The proposed active transportation improvements are illustrated in **Figure 7-4**.

Public engagement and consultation formed a key component of the ATMP. The community engagement process consisted of two Public Information Centres (PICs) held throughout the course of the study to gather public input to better understand the current barriers to, and opportunities for, active transportation throughout Caledon. In addition, two Technical Advisory Committee (TAC) meetings were held to seek input from municipalities, agencies and other stakeholders.

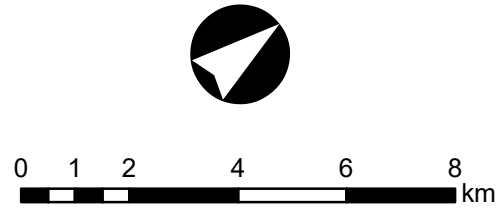
Town of Caledon

Transportation Master Plan

FIGURE 7-4
Proposed Active
Transportation
Network

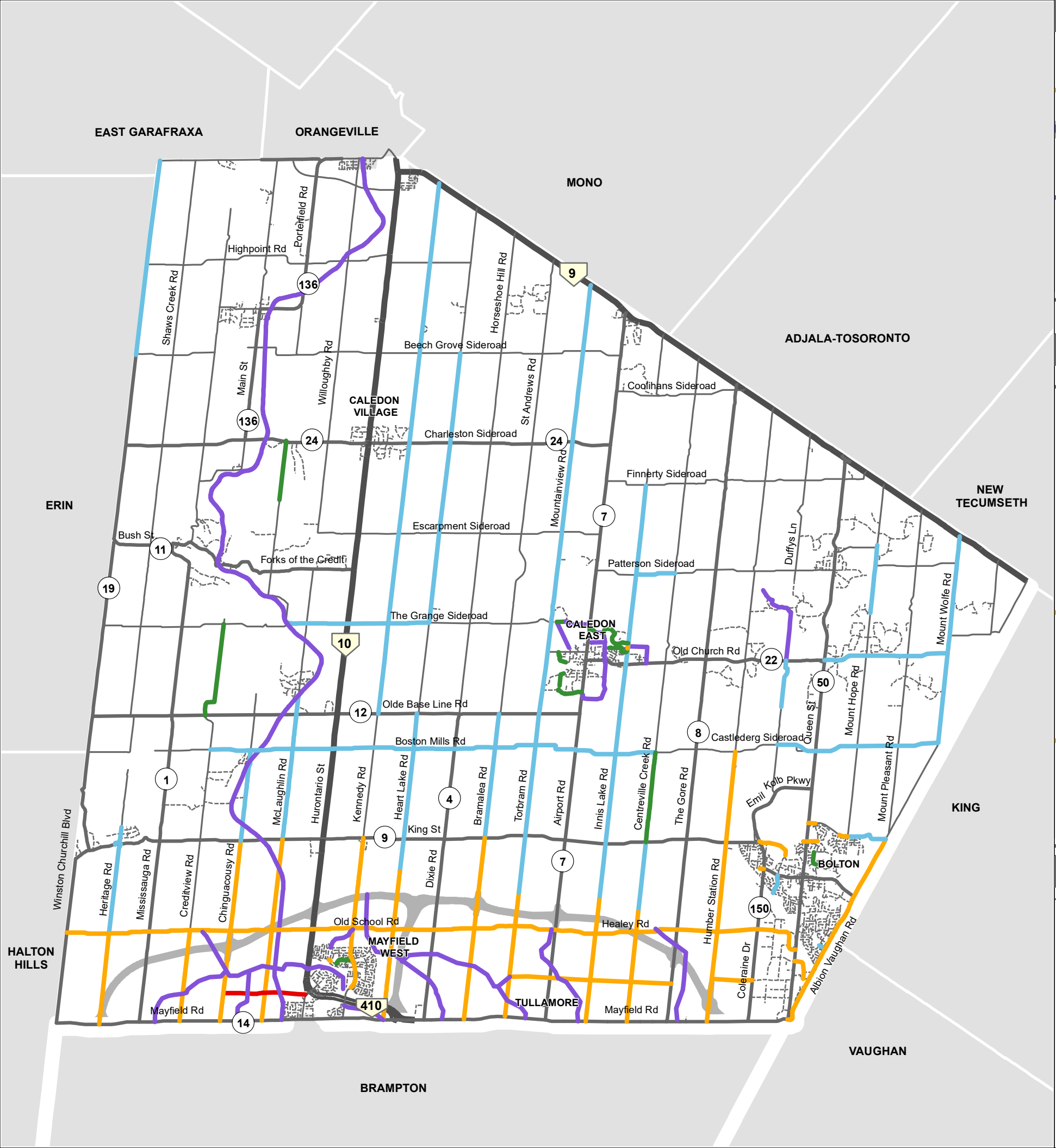
- Proposed Facility Type**
- Multi-use Trail
 - Painted Bike Lane
 - Physically Separated
 - Shared
 - Visually Separated

Source: Town of Caledon ATMP



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7.5 Monitoring and Facility Selection

Within the urban context, the requirement for safer, physically separated bicycle lanes are a function of both high posted speed limits and/or high daily traffic volumes. While projected traffic and posted speed limits provide guidance, it is the actual volumes and operating speeds along the corridor that affect safety and comfort for cyclists. As such, traffic counts and surveyed 85th percentile operating speeds better inform the design condition and are typically used instead of posted speeds to assess cycling facilities especially in rural areas.

While many roads within the Town are currently operating with AADT volumes less than 6,000 vehicles, with the exception of a few road segments within Bolton and Mayfield West, the future allocated population and employment growth is expected to add significant traffic along these roads and continued monitoring of the AADT is required to determine the desirable cycling facility on a corridor basis.

8.0 Alternative Solutions

This chapter identifies the four alternative solutions, evaluation criteria, preferred alternative solution, and climate change implications.

8.1 Identification of Alternative Solutions

Alternative 0 – “Do Nothing” Scenario: Maintaining the status quo is an alternative that the Town can consider. It reflects the transportation plan to 2031 from the 2017 Caledon Transportation Master Plan. It would not explicitly address the transportation needs associated with the Region of Peel Municipal Comprehensive Review (MCR) and the additional related growth from 220,000 to 300,000 residents. This scenario would require a ***low (or no) increase in funding*** for capital investment and operations.

Alternative 1 – Major Roads and Highway (Inter-Regional) Focused: In addition to meeting the growth needs to 2041 from the 2017 TMP, the Town would develop additional road infrastructure in support of the growth to 2051. Given the magnitude of growth from the MCR and the needs of efficient goods movement for employment areas, this alternative relies on other parties and partners to lead initiatives, including Highway 413 and the implementation of the Caledon GO Rail Station.

Alternative 2 – Transit / Active Transportation / TDM (Self-Containment) and New Technologies Focused: In addition to meeting the growth needs to 2041 from the 2017 TMP, the Town would develop additional transit and active transportation infrastructure and services in support of the growth to 2051 to influence commuter travel to shorter trips. Given the magnitude of growth from the MCR and the needs of efficient goods movement for employment areas, this alternative relies on other parties and partners to lead initiatives, including Highway 413 and the early implementation of the Caledon GO Rail Station. This alternative will strive to achieve much higher levels of service for transit, walking and cycling through increased connectivity and density of service and related policies.

Alternative 3 – Balanced (Combined) Transportation Scenario: In addition to meeting the growth needs to 2041 from the 2017 TMP, the Town would develop a combination of additional road, transit and active transportation infrastructure and services in support of the growth to 2051. Given the magnitude of growth from the MCR and the needs of efficient goods movement for employment areas, this alternative relies on other parties and partners to lead initiatives, including Highway 413 and the implementation of the Caledon GO Rail Station. This alternative will strive to achieve higher levels of service for transit, walking and cycling through increased connectivity and density of service and related policies. This alternative will also incorporate solutions to incorporate the benefits of new technologies affecting transportation.

Table 8-1: Identification of Alternative Solutions

Transportation Initiative	Alternative 0 “Do Nothing” Scenario	Alternative 1 “Road Network” Scenario	Alternative 2 “Sustainable Modes” Scenario	Alternative 3 “Combined” Scenario
Provincial Highway and Regional Improvements: Planned improvements: <ul style="list-style-type: none"> Highway 413 (MTO): Construction of new freeway Mayfield Road between Chinguacousy Road to West of Mississauga Road: Widening from 5 to 6 lanes Mississauga Road between Mayfield Road to Old School Road: Widening from 2 to 4 lanes The Gore Road between Mayfield Road to Healey Road: Widening from 2 to 4 lanes A2 between Mayfield Road to Highway 50: Construction of new road 	✓	✓		✓
Town Road Capacity Improvements – Committed (Approved, Budgeted) <ul style="list-style-type: none"> Chinguacousy Road between Mayfield Road and Northern Limits of Mayfield West: Widening from 2 to 4 lanes McLaughlin Road between Mayfield Road and North Limits of Mayfield West: Widening from 2 to 4 lanes Abbotside Way between Bonnieglenn Farm Boulevard and Heart Lake Road: Extension (4 lanes) Albion Vaughan Road between Mayfield Road and King Street: Widening from 2 to 4 lanes 	✓	✓		✓
Town Road Capacity Improvements – Planned (Approved, Not Budgeted) <ul style="list-style-type: none"> McLaughlin Road between Northern Limits of Mayfield West and Old School Road: Widening from 2 to 4 lanes 	✓	✓		✓
Town Road Capacity Improvements – Proposed through this study <ul style="list-style-type: none"> Chinguacousy Road between Northern Limits of Mayfield West and King Street: Widening from 2 to 4 lanes Humber Station Road between Mayfield Road and North of King Street (Settlement Area Limits): Widening from 2 to 4 lanes Old School Road / Healey Road between Winston Churchill Boulevard and Coleraine Drive: Widening from 2 to 4 lanes Torbram Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes George Bolton Parkway between West of Coleraine Drive and Humber Station Road: Extension (4 lanes) Kennedy Road between Newhouse Boulevard and King Street: Widening from 2 to 4 lanes Innis Lake Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes Centreville Creek Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes Bramalea Road between Mayfield Road and King Street: Widening from 2 to 4 lanes Caledon King Townline between King Street and Columbia Way: Widening from 2 to 4 lanes Columbia Way between Regional Road 50 and Caledon King Townline: Widening from 2 to 4 lanes Heart Lake Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes McLaughlin Road between Old School Road and King Street: Widening from 2 to 4 lanes Heritage Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes Creditview Road between Mayfield Road and Old School Road: Widening from 2 to 4 lanes 		✓		✓
Active Transportation Improvements <ul style="list-style-type: none"> Implementation of the Town-wide Active Transportation Master Plan (ATMP) initiated in 2022 			✓	✓
Transit Improvements <ul style="list-style-type: none"> Expand Public Transit Service 			✓	✓

8.2 Evaluation Criteria

Evaluation criteria and sub-criteria have been developed for the alternative solutions based on typical requirements of the Municipal Class EA process. Indicators are measure of these criteria that reflect insights on qualitative measures or available quantitative data. The criteria and indicators were informed by public input and are listed in **Table 8-2**.

Table 8-2: Evaluation Criteria and Indicators

Criteria	Sub-Criteria	Criteria Indicator(s)
Transportation Service	Road Connectivity and Efficiency	Degree to which alternative: <ul style="list-style-type: none"> Improves connectivity between urban centres Addresses roadside safety issues Maintains sufficient capacity to meet traffic demands Improves traffic flow, circulation and safety at intersections and property accesses
	Mobility Choice and Transit Accessibility	Degree to which alternative: <ul style="list-style-type: none"> Increases communities served by non-auto modes Improves access to transit and ride-hail service information Allows more frequent and convenient transit and ride-hail service Allows more affordable transit and ride-hail services
	Active Transportation Accommodation	Degree to which alternative: <ul style="list-style-type: none"> Supports complete streets and/or shared streets in urban areas Improves safety for cyclists on Town roads Improves cyclist / pedestrian connectivity between destinations
Climate Change Objectives	Sustainable and Active Travel Modes	Degree to which alternative: <ul style="list-style-type: none"> Increases the share of sustainable and active travel modes, particularly in urban areas Delivers travel demand management and education programs Expands and enhances active transportation infrastructure to promote walking and cycling in urban areas as a means of travel between them Expand opportunities for low-carbon transit and car-sharing in built-up areas and plan for transit in new communities.
	Air Quality and GHG Emissions	Degree to which alternative: <ul style="list-style-type: none"> Promotes the use of zero-emissions vehicles in Caledon Supports the Town's vision to reach net-zero emissions
Natural Environment	Impacts to designated natural areas	Potential impacts to: <ul style="list-style-type: none"> National or Provincial Parks, Niagara Escarpment Plan Areas Areas of Natural or Scientific Interest (ANSI) Provincially or Locally Significant Wetlands Hazard Lands County Forest and Park Lands and Special Policy Areas / Karst
	Impacts to Source Water Protection Features	Potential impacts to: <ul style="list-style-type: none"> Wellhead Protection Areas and Intake Protection Zones Significant Ground Water Recharge Areas Highly Vulnerable Aquifers

Criteria	Sub-Criteria	Criteria Indicator(s)
	Impacts to terrestrial environment	Potential impacts to: <ul style="list-style-type: none"> Existing vegetation Wildlife, wildlife habitats and terrestrial Species at Risk
	Impacts to aquatic environment	Potential impacts to: <ul style="list-style-type: none"> Existing watercourses Aquatic habitats and Species at Risk
Socio– Economic and Cultural Environment	Supports Established Communities / Development Objectives	Degree to which alternative: <ul style="list-style-type: none"> Protects established residential communities Promotes opportunities for development consistent with the Official Plan
	Supports Economic Development Objectives	Degree to which alternative: <ul style="list-style-type: none"> Promotes tourism Supports existing businesses / employers Attracts future businesses / employers
	Impact to areas archaeological potential and cultural heritage features	Degree to which alternative: <ul style="list-style-type: none"> Relative estimate of areas of high archaeological potential Potential to impact cultural heritage features
	Supports Healthy Living	Degree to which alternative: <ul style="list-style-type: none"> Encourages walking and cycling
Cost	Capital Cost	Degree to which alternative requires: <ul style="list-style-type: none"> Capital investment for construction and engineering support (Qualitative estimate) Capital investment for acquisition of property, fleet and equipment (Qualitative estimate)
	Operating and maintenance Cost	Degree to which alternative requires: <ul style="list-style-type: none"> Additional staff resources Outsourced contract services Funding for operations and maintenance of all modes of travel and support systems (Qualitative estimate)

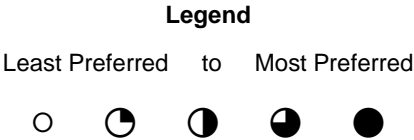
8.3 Evaluation Summary

An evaluation of the alternative solutions was undertaken based on the evaluation criteria and associated measures that addressed: public concerns, Town of Caledon sustainability and climate change mitigation objectives and typical measures associated with the environmental assessment process. The evaluation was undertaken in consultation with the public through input at public information centres and stakeholder surveys. A summary of the evaluation is illustrated in **Table 8-3**. This evaluation uses pie charts to represent the scenario that is least preferred to most preferred as it relates to the evaluation criteria.

Table 8-3: Evaluation of different alternatives.

Transportation Initiative	Alternative 0 “Do Nothing” Scenario	Alternative 1 “Road Network” Scenario	Alternative 2 “Sustainable Modes” Scenario	Alternative 3 “Combined” Scenario
Transportation Service	○	◐	◑	●
Road Operations: Safety / Connectivity / Efficiency	<ul style="list-style-type: none"> Limited connectivity within new urban areas Future congestion 	<ul style="list-style-type: none"> Improved connectivity within new urban areas Limited congestion 	<ul style="list-style-type: none"> Limited connectivity within new urban areas Future congestion 	<ul style="list-style-type: none"> Improved connectivity within new urban areas Limited congestion
Transit: Accessibility / Mobility Choice	<ul style="list-style-type: none"> Does not address vision, need and opportunity especially with regard to accessibility and affordability 	<ul style="list-style-type: none"> Does not address vision, need and opportunity especially with regard to accessibility and affordability 	<ul style="list-style-type: none"> Increases mobility options for all road users 	<ul style="list-style-type: none"> Increases mobility options for all road users
Active Transportation Accommodation	<ul style="list-style-type: none"> Limited public right-of-way to accommodate Complete Streets efficiently Road system does not provide protection for all road users 	<ul style="list-style-type: none"> Road system does not provide safe protection for all road users Road system does not promote walking and cycling for healthy lifestyles and non-discretionary trips 	<ul style="list-style-type: none"> Limited public right-of-way to accommodate Complete Streets efficiently Provides the necessary protection for all road users adding safety Promotes the use of active transportation modes by adding comfort to all road users 	<ul style="list-style-type: none"> Public right-of-way is sufficient to accommodate Complete Streets efficiently Provides the necessary protection for all road users adding safety Promotes the use of active transportation modes by adding comfort to all road users
Natural Environment	◐	◐	◐	◐
Designated Natural Areas, Source Water features, Terrestrial & Aquatic Environment: Potential for Impacts	<ul style="list-style-type: none"> Potential Impacts associated with maintenance requirements 	<ul style="list-style-type: none"> Potentially higher impacts to natural environment including Designated Natural Areas, Source Water features, Terrestrial & Aquatic Environment compared to Do Nothing 	<ul style="list-style-type: none"> Potentially slightly higher impacts to natural environment including Designated Natural Areas, Source Water features, Terrestrial & Aquatic Environment compared to Do Nothing 	<ul style="list-style-type: none"> Potentially higher impacts to natural environment including Designated Natural Areas, Source Water features, Terrestrial & Aquatic Environment compared to Do Nothing
Climate Change Objectives	◑	◐	◐	◐
Sustainable and Active Transportation Modes	<ul style="list-style-type: none"> Delivers less travel demand management since last TMP because SmartCommute is now cancelled Does not expand opportunities for low-carbon transit and car-sharing 	<ul style="list-style-type: none"> Promotes travel demand management, but would be without the active transportation network to support Expand opportunities for low-carbon transit and car-sharing in built-up areas and plan for transit in new communities. 	<ul style="list-style-type: none"> Promotes travel demand management with an attractive active transportation network Expand opportunities for low-carbon transit and car-sharing in built-up areas and plan for transit in new communities. 	<ul style="list-style-type: none"> Promotes travel demand management with an attractive active transportation network Expand opportunities for low-carbon transit and car-sharing in built-up areas and plan for transit in new communities.
Air Quality and GHG Emissions	<ul style="list-style-type: none"> Does not promote the use of zero emissions vehicles in Caledon Congestion will increase GHG emissions and GHG emissions per capita 	<ul style="list-style-type: none"> Promotes the use of zero emission vehicles in Caledon Increased roadway supply can potentially cause more driving and more emissions 	<ul style="list-style-type: none"> Promotes the use of zero emission vehicles in Caledon Congestion will increase GHG emissions and GHG emissions per capita 	<ul style="list-style-type: none"> Promotes the use of zero emission vehicles in Caledon Increased roadway supply can potentially cause more driving and more emissions

Transportation Initiative	Alternative 0 “Do Nothing” Scenario	Alternative 1 “Road Network” Scenario	Alternative 2 “Sustainable Modes” Scenario	Alternative 3 “Combined” Scenario
		<ul style="list-style-type: none">Lowered congestion causes less emissions from vehicle acceleration and deceleration		<ul style="list-style-type: none">Lowered congestion causes less emissions from vehicle acceleration and deceleration
Socio-Economic and Cultural Environment:	○	◐	◐	●
Supports Communities and Economic Development Objectives:	<ul style="list-style-type: none">Transportation network does not support planned community growth in SABE and Designated Greenfield AreasTransportation network does not support access to employment lands for jobsTransportation network does not support enhancing business growth, investment, and innovation	<ul style="list-style-type: none">Transportation network partially supports planned community growth in SABE and Designated Greenfield Areas with more road infrastructureTransportation network partially supports access to employment lands for jobsTransportation network partially supports enhancing business growth, investment, and innovationMobility choice, affordability, and accessibility is not enhanced to support new community or employment lands or businesses	<ul style="list-style-type: none">Transportation network partially supports planned community growth in SABE and Designated Greenfield Areas with more mobility choiceTransportation network partially supports access to employment lands for jobsTransportation network partially supports enhancing business growth, investment, and innovationLimited support to new community and employment lands due to majority of trips lacking efficient connectivity with lack of new roadway infrastructure	<ul style="list-style-type: none">Transportation network fully supports planned community growth in SABE and Designated Greenfield Areas with more road infrastructureTransportation network fully supports access to employment lands for jobsTransportation network fully supports enhancing business growth, investment, and innovation
Impacts to Areas of High Archaeological Potential and Cultural Heritage Features:	<ul style="list-style-type: none">Potential Impacts associated with maintenance requirements	<ul style="list-style-type: none">Potentially higher impacts to areas of high archaeological potential and cultural heritage features compared to “Do Nothing”	<ul style="list-style-type: none">Potentially slightly higher impacts to areas of high archaeological potential and cultural heritage features compared to “Do Nothing”	<ul style="list-style-type: none">Potentially higher impacts to areas of high archaeological potential and cultural heritage features compared to “Do Nothing”
Supports Healthy Living:	<ul style="list-style-type: none">Does not encourage further walking or cycling	<ul style="list-style-type: none">Does not encourage further walking or cycling	<ul style="list-style-type: none">Encourages further walking or cycling by developing a safe environment for all road users	<ul style="list-style-type: none">Encourages further walking or cycling by developing a safe environment for all road users
Financial Environment	●	○	◐	○
Cost Assessment	<ul style="list-style-type: none">Minimal impact as planned roads would be budgeted	<ul style="list-style-type: none">Estimated Capital Cost: \$452MRelatively high increase in operating costs due to additional road projects	<ul style="list-style-type: none">Estimated Capital Cost: \$270M - \$290MRelatively moderate increase in operating costs for new AT facilities	<ul style="list-style-type: none">Estimated Capital Cost: \$722M - \$742MRelatively highest increase in operating costs for new AT facilities
Overall Assessment	Not preferred	Not preferred	Not preferred	Recommended



8.4 Preferred Alternative Solution

Alternative 3, a combined multi-modal transportation scenario was preferred. This scenario focuses on providing a transportation network that focuses on road improvements and the development of active transportation infrastructure and transit service along key corridors. This multi-modal transportation network will be able to accommodate the planned population and employment growth within the Town of Caledon, support the Town's economic strategies and priorities, while aligning with the Town's Climate Change commitments and community development objectives.

This proposed transportation network is anticipated to have impacts to significant groundwater recharge areas (SGRA), highly vulnerable aquifers (HVA), provincially significant wetlands (PSW) and water crossings but the magnitude of impact is expected to be minimized through future studies.

9.0 Recommended Alternative

This chapter provides a summary of the preferred alternative solution including active transportation and road network improvements, key transit corridors, and a road classification update. Policies developed to support the recommended solutions and Town objectives include a Complete Streets and Speed policy, as detailed in **Appendix F** and **Appendix G**, respectively.

9.1 Road Network Plan

The proposed road network improvements are summarized below.

9.1.1 Capacity of Commuter and Alternate Mode Accommodation

Road improvement recommendations are summarized **Table 9-1**. The planned number of through lanes for Town roads for the 2031, 2041, and 2051 horizon years are shown in **Figure 9-1**. Phasing of these improvements will be verified through the Growth Management Strategy and Phasing Plan (for 2041 and 2051).

Table 9-1: Road Improvement Recommendations

ID	Road	From	To	Recommendation	Phasing
1	Chinguacousy Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2031
2	McLaughlin Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2031
3	Albion Vaughan Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes	2031
4	Humber Station Road	Mayfield Road	North of King Street (Settlement Area Limits)	Urbanization and widening from 2 to 4 lanes	2031
5	Abbotside Way	Bonnieglenn Farm Boulevard	Heart Lake Road	Extension (4 Lanes)	2031
6	Healey Road	The Gore Road	Coleraine Drive	Urbanization and widening from 2 to 4 lanes	2031
7	Torbram Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2031
8	George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 Lanes)	2031
9	Kennedy Road	Newhouse Boulevard	Old School Road	Urbanization and widening from 2 to 4 lanes	2031
10	Innis Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2041
11	Centreville Creek Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2041

ID	Road	From	To	Recommendation	Phasing
12	Old School Road	Winston Churchill Boulevard	Airport Road	Urbanization and widening from 2 to 4 lanes	2041
13	Healey Road	Airport Road	The Gore Road	Urbanization and widening from 2 to 4 lanes	2041
14	Kennedy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes	2041
15	Caledon King Townline	King Street	Columbia Way	Urbanization and widening from 2 to 4 lanes	2041
16	Columbia Way	Regional Road 50	Caledon King Townline	Urbanization and widening from 2 to 4 lanes	2041
17	Heart Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2051
18	Chinguacousy Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes	2051
19	McLaughlin Road	Old School Road	King Street	Urbanization and widening from 2 to 4 lanes	2051
20	Bramalea Road	Mayfield Road	King Street	Urbanization and widening from 2 to 4 lanes	2051
21	Heritage Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2051
22	Creditview Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2051
23	Heart Lake Road	Mayfield Road	Old School Road	Urbanization and widening from 2 to 4 lanes	2051

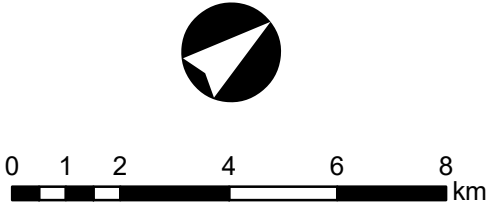
Town of Caledon

Transportation Master Plan

FIGURE 9-1

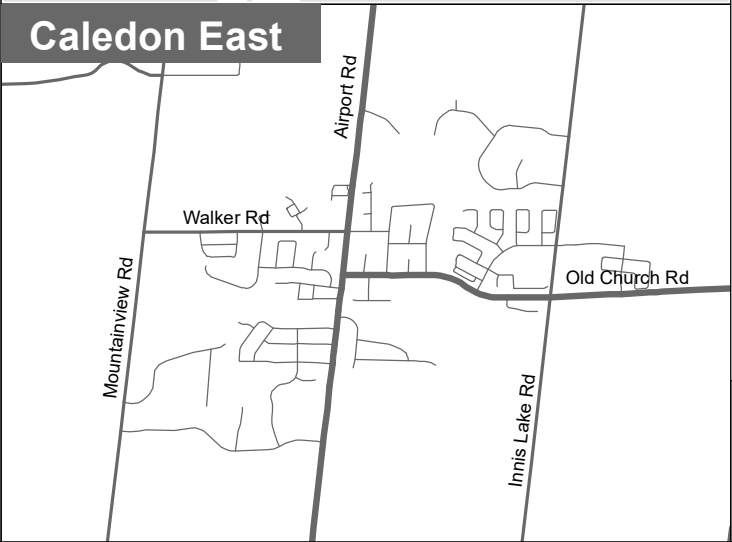
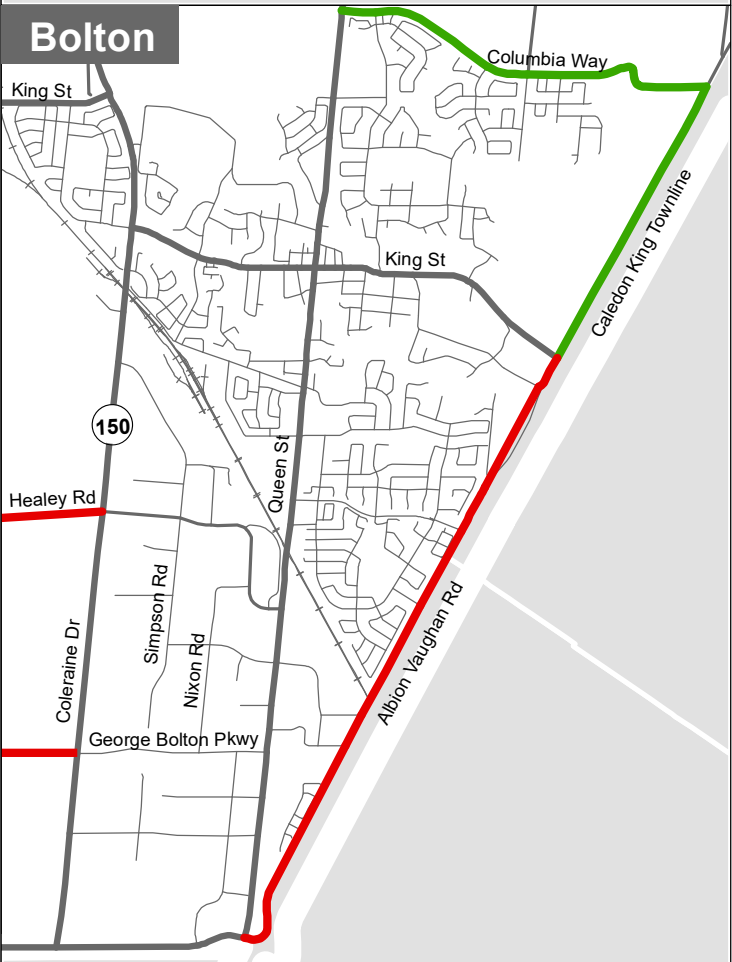
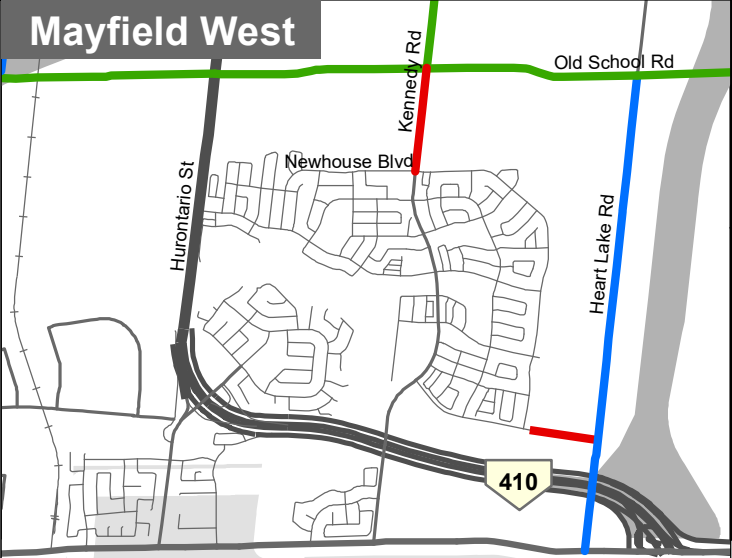
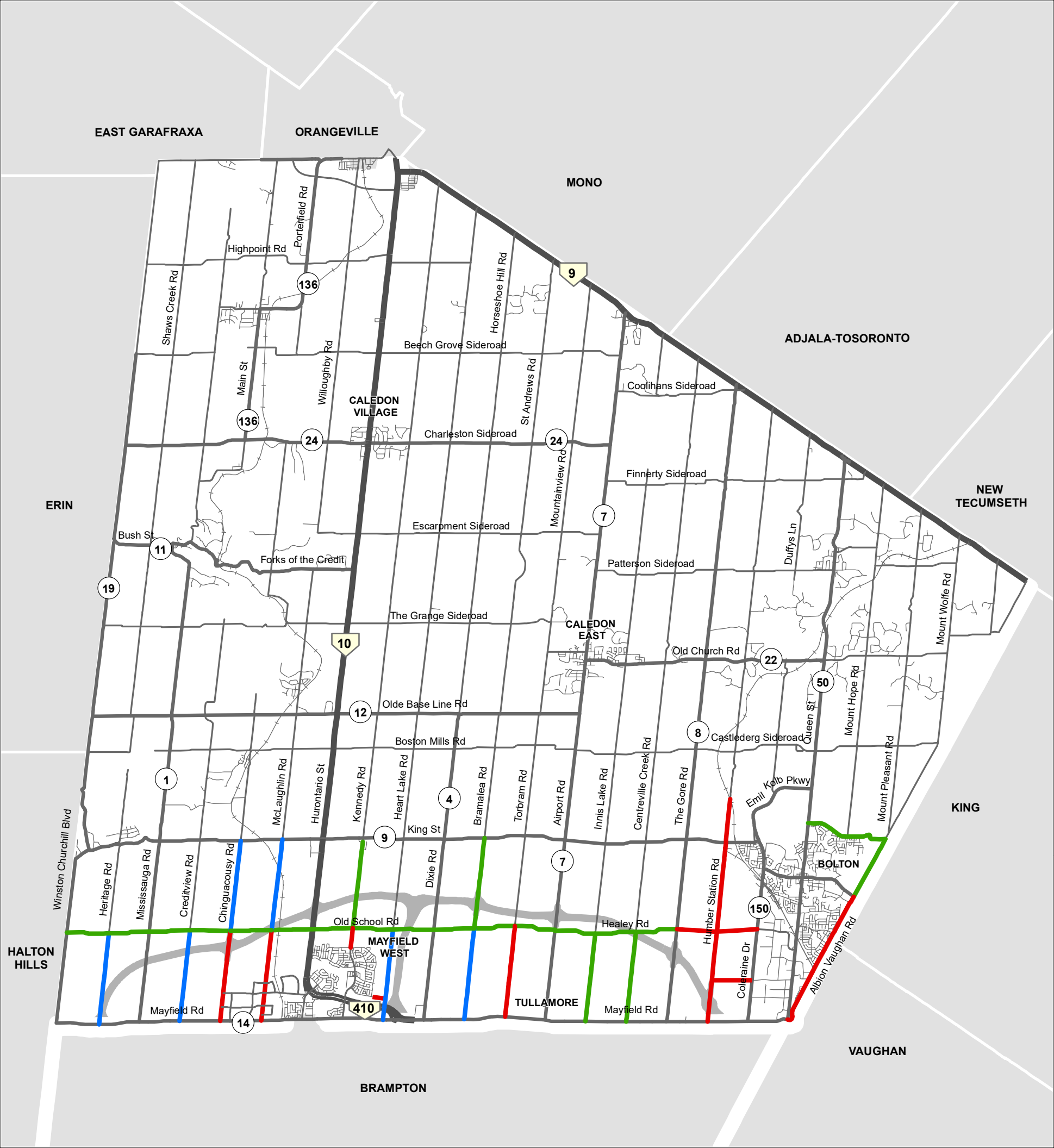
Proposed Travel Lanes
for Town Roads by 2051

- Road Improvements (Phasing)**
- Widening to 4 lanes (by 2031)
 - Widening to 4 lanes (by 2041)
 - Widening to 4 lanes (by 2051)



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9.1.2 Capacity for Network Efficiency

Additional road studies were identified to improve network efficiency.

There are limited opportunities for inter-municipal north-south through traffic through Caledon and no full access-controlled freeways. As a result, higher traffic levels including truck traffic are experienced through established communities. Studies to explore alternate routes around established communities are classified as “Alternate Route Study”.

Misaligned intersections within the future urban areas that will experience the highest level of exposure to conflicts and have the highest opportunity for improvement should be considered in future road reconstruction projects. Through these future road reconstruction projects, these intersections should explore aligning these off-set intersections. These types of projects are classified as “Off-set Intersection Study”.

Other misaligned intersections beyond the urban boundary should be monitored and considered in any future safety studies. These types of projects are classified as “Intersection Monitoring”.

Traffic calming measures should be explored by the Region of Peel along Airport Road through Caledon Village. This study is classified as “Traffic Calming Measures”.

Removal of two corridors identified in the Region of Peel’s Strategic Goods Movement Corridor is important as these corridors are not designed for heavy truck traffic. These recommendations are classified as “Goods Movement Needs”.

All additional studies are summarized in **Table 9-2**.

Table 9-2: Additional Road Studies and Classifications

ID	Additional Study	Description	Study Classification	Lead Agency
18	Alternative Routes to Bolton and Established Communities	MTO to collaborate with the Region and the Town to extend Highway 427 to Highway 9.	Alternate Route Study	MTO
19	Mis-aligned intersections (see Appendix E)	Monitor mis-aligned intersections for future improvements	Intersection Monitoring	Town of Caledon / Region of Peel
20	Horseshoe Hill from Olde Base Line Road to Highway 9	Remove from Region’s Strategic Goods Movement Network	Goods Movement Update	Region of Peel
21	Mountainview Road from Olde Base Line Road to Charleston Sideroad	Remove from Region’s Strategic Goods Movement Network	Goods Movement Update	Region of Peel

9.1.3 Community Circulation and Land Access Accommodation

Network planning factors include mobility and transportation mode, livability, and land value. This study offers considerations as it related to mobility with discussions regarding road design and traffic volumes, transit accessibility, and walkability and comfort. This study also offers

considerations as it related to livability with discussions regarding sociability and social interactions. There is limited discussion in this study regarding real estate and land value as it relates to network planning as it moves further away from transportation planning. However, is still an important area to explore further especially understanding developer needs as it reacts to consumer trends. The goals and indicators of the network are summarized in **Table 9-3**.

Table 9-3: Possible Goals of the Network and Target Indicators

Goals of the Network	Suggested Target Indicators
Promote Walkability	Higher intersection densities Shorter road segments Decreased spacing Higher km of active transportation infrastructure (e.g., Sidewalks, off-road trails)
Promote Connectivity	Higher intersection densities Shorter road segment length Higher proportion of population living within 400 m of a transit stop
Promote Sociability	Increased number of mixed-use, institutional, or commercial land-uses Increased number of open and civic spaces Higher km of active transportation infrastructure (e.g., Sidewalks, off-road trails)
Reduce Traffic Infiltration and Road Construction costs	Higher # of loops and cul-de-sacs Lower # of streets (arterial or collectors) that can access the subdivision or community

Other important considerations include:

- Future roads in SABE should consider a street hierarchy and use these existing road classifications in the Town's Official Plan and Complete Street Guidelines as guidance.
- The Secondary Plans should also identify one or two alternative east-west major arterials that connect through SABE lands as an alternative to Old School Road and Healey Road which are currently situated near the upper limits of the SABE lands.
- Pedestrian facilities should be spaced so block lengths in less dense areas (suburban or general urban) do not exceed 200 metres. (preferably 70 to 130 metres) and relatively direct routes are made available. In the densest urban areas (urban centers and urban cores), block length should not exceed lower.

9.2 Active Transportation Plan

Active transportation strategies were developed based on the following objectives:

1. **Continuity:** Continuity within active transportation networks is important in establishing a reliable, "low-stress" active transportation network. Missing links should be identified in a network to identify and address continuity gaps.
2. **Connectivity:** Connectivity to proposed active transportation facilities in surrounding municipalities, existing and planned Regional routes and infrastructure, and key destinations

should be considered in establishing a seamless inter-municipal network within and beyond Town boundaries.

3. **Policy framework for development and new infrastructure:** Opportunities will exist for the planning and implementation of active transportation infrastructure through the development review process. This will include active transportation strategies of new Secondary Plans in the SABE area and with individual developments. A policy framework guides the continuous development of the active transportation network within the Town of Caledon.

The MMTMP recommends regularly updating the Town's Active Transportation Plan. The Town's first AT Plan initiated in February 2022. The Town's AT Plan should focus on the following objective:

- Establish comprehensive walking and cycling networks that connect existing and new settlement areas and rural communities
- Establish a trail system that is integrated with the pedestrian and cycling network and includes connections to open spaces
- Identify opportunities and locations for safe pedestrian and cycling crossings, including strategically located grade-separated crossings
- Promotes bicycle amenities at major employment / residential / institutional developments
- Engages community groups

The Town's AT Plan should focus on a network that generally provides the following facility selection:

- Paved shoulders on rural arterial and collector roads
- Separated facilities on urban arterial and collector roads
- Shared facilities on local roads
- Projects that enhance continuity within the Town and connectivity to adjacent municipalities

9.3 Transit Network Plan

The Town's transit network plan has been developed based on the following objectives:

- Proximity to a higher order transit station or a conventional transit stop based on the density of population and jobs in its vicinity;
- Connectivity of the transit system between key trip origins and destinations;
- Serviceability (scheduled service hours of operation and reliability);
- Frequency (headway) of service along transit routes, and
- Travel time (operating speed, number of stops, dwell time) along transit routes.

Given the trip characteristics, population, growth and phasing within the Town's secondary plans, along with origin and destination patterns, the MMTMP recommends that the Town leverage Brampton Transit by 2035. Leveraging the existing Brampton Transit system will allow for benefits from economies of scale, fare integration and connectivity with a seamless transit service.

Beyond 2035 and following the completion of all Secondary Plans in the SABE area and the Highway 413 Environmental Assessment and Detailed Design, it is recommended that the Town revisit and undertake a transit strategy study to develop a service plan over a longer time horizon. In the meantime, it is also recommended that, as part of the secondary plan's approval process, the Town review and have developers submit and develop the transit plans, which will inform jurisdiction, implications, and connection to existing transit services, and also be reviewed by municipal partners. Transit planning can be informed by the needs and strategies at the secondary plan level, in which internal collector road networks, connections to external networks, and land use will be identified that will assess the efficiencies and merits of specific routing. Therefore, in addition to the proposed fixed-route transit corridors outlined in this MMTMP, the transit strategy study should take all transit plans from secondary plans as input for revisiting the transit plan at a larger scale to improve efficiency.

Proposed fixed-route transit corridors are illustrated in **Figure 6-5**. The fixed-route corridors serve as conceptual high-level recommendations for consideration in future studies to investigate further the feasibility of the proposed corridors, as well as internal connections to secondary plans.

9.4 Road Classification

Transportation policies were recently updated in the Town Official Plan update ("Future Caledon"). The MMTMP recommends the following "Road Classifications" and "Road Right-of-Way" schedules for the next Town OP update.

9.4.1 Road Classification Criteria

Road classifications are related to land use planning and therefore should be applied to the next Official Plan update, but also be considered in tandem with Transit, Active Transportation and roadway safety for each road classification category.

Provincial Highways

- Are roadways under Provincial jurisdiction.
- Are roadways intended to serve large volumes of inter-regional and long-distance traffic at high speeds.
- Are roadways of high-speed design with uninterrupted flow, with access only achieved through grade separated interchanges, designated by the Ministry of Transportation as Controlled Access Highways.
- Direct access to a controlled access highway will not be permitted and all developments located adjacent to a Provincial Highway will require approval from the Ministry of Transportation.

Regional Arterials

- Are roadways under Regional jurisdiction.
- Serve moderate to high volumes of medium to long distance inter and intra-regional traffic at moderate speeds and will provide access to major attraction centres and facilitate access to or from highways.
- Generally experience average daily traffic of over 8,000 vehicles.
- Are primary truck and goods movement routes.
- Will generally have a 30 to 50 metre road allowance width with a 2 to 6 lane capacity and limited property access.
- Are designed with a high degree of access control to abutting properties.
- On-street parking will be discouraged.
- Will generally be designed to accommodate street furniture and the highest degree of separation for cycling facilities, where appropriate.

Town Arterials

- Are roadways under Town jurisdiction.
- Serve moderate to high volumes of medium to long distance inter and intra-regional traffic at moderate speeds and will support the Regional road system.
- Generally experience average daily traffic of over 8,000 vehicles.
- Direct property access will generally be discouraged.
- Will generally have a 30 to 36 metre road allowance with a 2 to 4 lane capacity and limited property access.
- On-street parking will be discouraged.
- Will generally be designed to accommodate the highest degree of separation for cycling facilities, where appropriate.

Major Collectors

- Are roadways under the Town's jurisdiction.
- Serve moderate volumes of short distance traffic between local and arterial roads at moderate speeds.
- Generally experience average daily traffic between 5,000 to 8,000 vehicles.
- Generally have a maximum of four travel lanes.
- Will serve as truck and goods movement routes along industrial roads. Otherwise, through traffic will generally be discouraged from using these roadways.
- Direct property access will generally be discouraged.
- Will generally have a 20 to 30 metre road allowance with a 2 to 4 lane capacity.
- On-street parking may be permitted.
- Will generally be designed to accommodate the highest degree of separation for cycling facilities, where appropriate.

Minor Collectors

- Are roadways under the Town's jurisdiction.
- Serve low to moderate volumes of short distance traffic between local and arterial roads at moderate speeds.
- Generally experience average daily traffic between 1,000 to 5,000 vehicles.
- Generally have a maximum of two travel lanes.
- Through traffic will be discouraged from using these roadways.
- Provide individual property access with some limitations.
- Will generally have a 20 to 26 metre road allowance with a 2 to 4 lane capacity.
- On-street parking may be permitted.
- Will generally be designed to accommodate some degree of separation for cycling facilities, where appropriate.

Local Roads

- Are roadways under the Town's jurisdiction.
- Serve local traffic only and provide connections to collector roadways at low speeds.
- Generally experience average daily traffic of less than 1,000 vehicles.
- Through traffic will be discouraged from using these roadways.
- Provide direct property access.
- Will generally have a 17 to 20 metre road allowance with a 2 lane capacity.
- On-street parking may be permitted.
- Where designated rights of way and environmental conditions permit, sidewalks will be provided on both sides of the road.

The Town's road classification is illustrated in **Figure 9-2**. It is noted that all roads anticipated to be urbanized are classified as Town Arterials. Urban and rural street typologies may fall under this classification. However, this Transportation Master Plan proposes cross-sections on a high-

level (i.e., by corridor) and the extent to which a segment is to be urbanized based on settlement area boundaries relies on future Environmental Assessment (EA) studies.

9.4.2 Road Right-of-Way Policies and Schedule

The Town aims to achieve the midblock right-of-way widths and provide the appropriate number of lanes to support the road classifications as set out in this Plan. Necessary right-of-way widths will be acquired through the Secondary Plan process and/or conditions of approval for subdivisions, severance, or site plans, or through purchase, expropriation, gift, bequeathment or other appropriate means. These right-of-way widths are not intended to specify that such roads will necessarily be widened, or intersections be improved. Furthermore:

- Any road that has less than the right-of-way width requirements identified in the Official Plan will be considered for widening pursuant to the relevant sections of the Planning Act, dealing with road widenings as a condition of development approvals.
- Intersection road allowances may be required in excess of the designated road allowances to provide for daylight triangles, lane channelization, or traffic control devices.
- Road widenings in excess of road allowance requirements may be required along roads to provide lands for environmental considerations, culvert accommodation, cut and fill requirements, bridges, utilities, landscape features, overpasses and for auxiliary turn lanes to provide better access and improve traffic operations.
- In cases where a road widening is obtained by dedication through the development process, land will generally be obtained in equal amounts from both sides of the roadway. However, under certain circumstances, including where there are physical constraints, such as environmental features or cemeteries, or where other policy objectives are relevant, such as heritage conservation, off-set or single-sided road allowance widenings may be considered.
- Where existing developments, road alignments, or topography make it impractical to obtain desired road widenings, road improvements may be designed within the existing right-of-way.

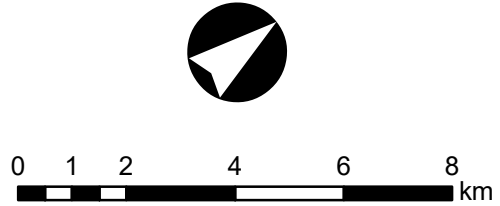
The Town's road rights-of-way is illustrated in **Figure 9-3**.

Town of Caledon

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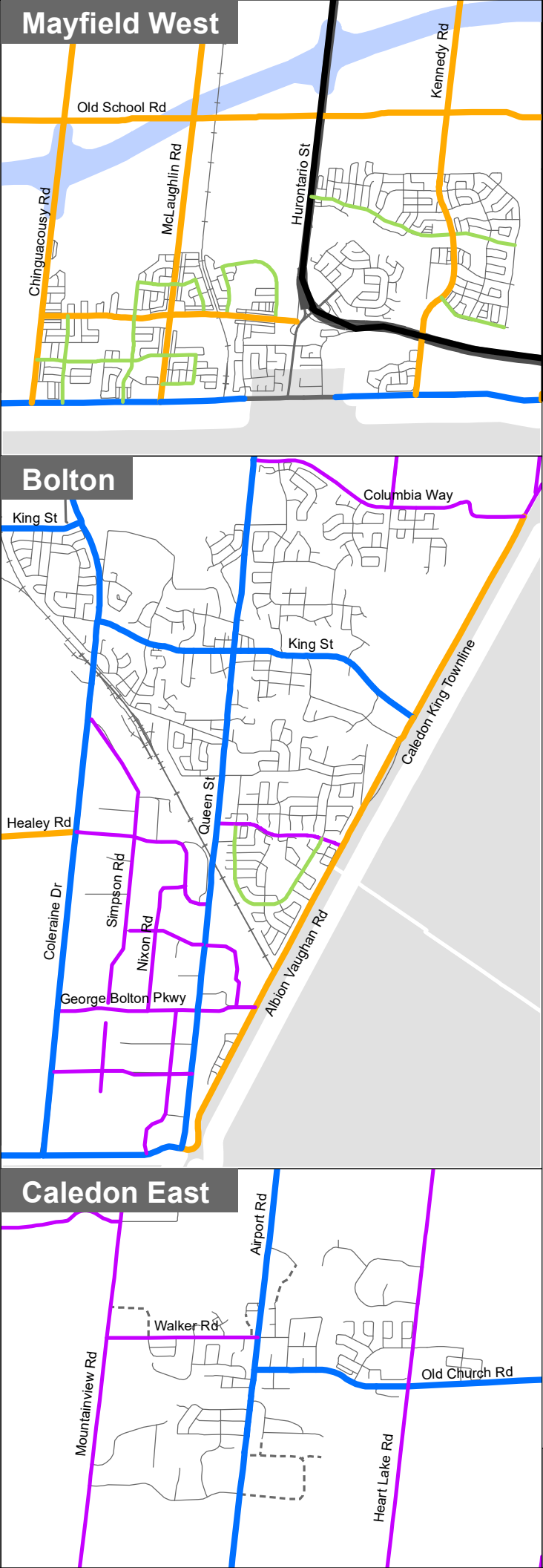
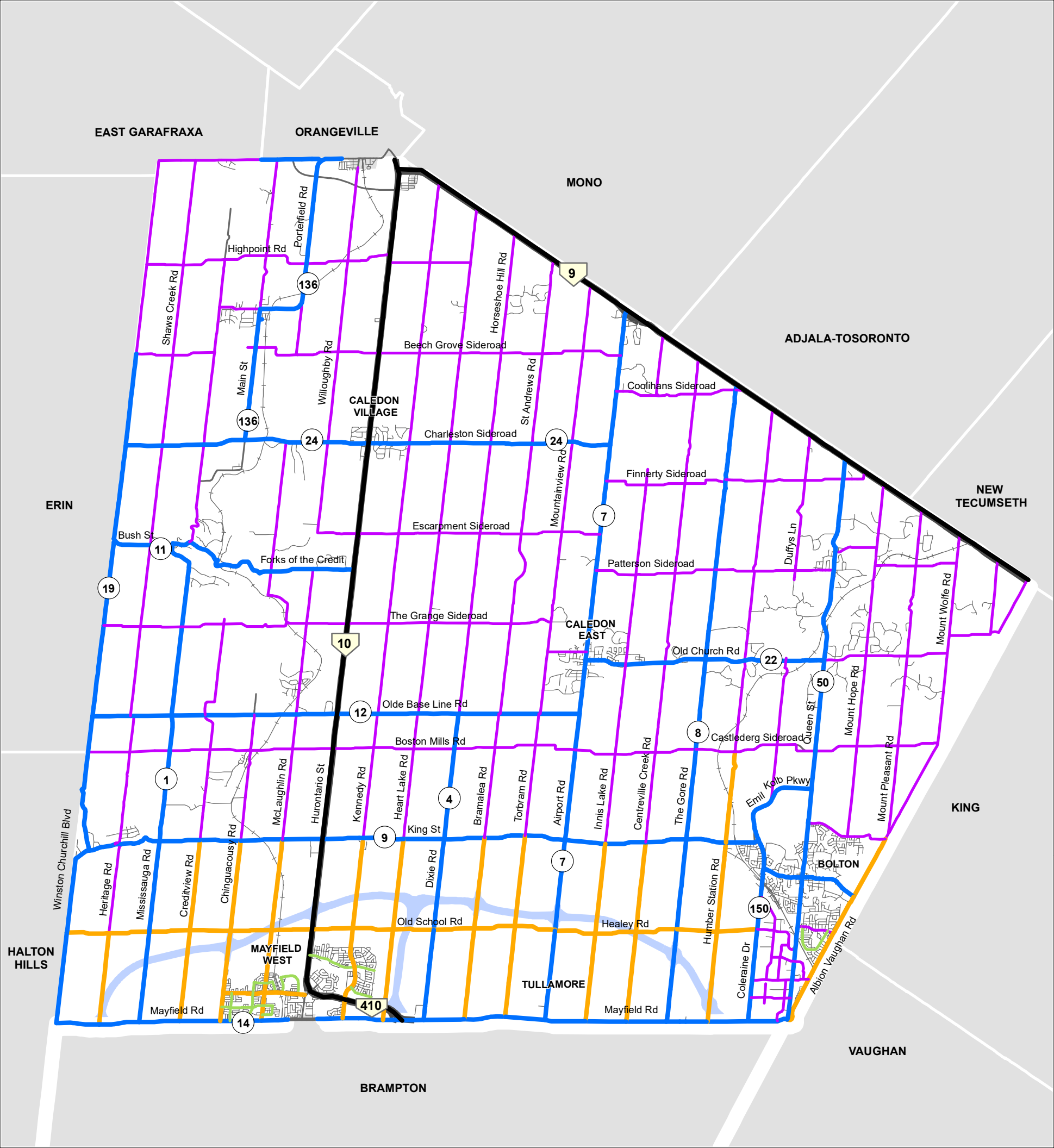
FIGURE 9-2
Road Classifications

- Provincial Highway / Freeway
- Regional Arterial
- Town Arterial
- Major Collector
- Minor Collector
- Local
- GTA West Corridor



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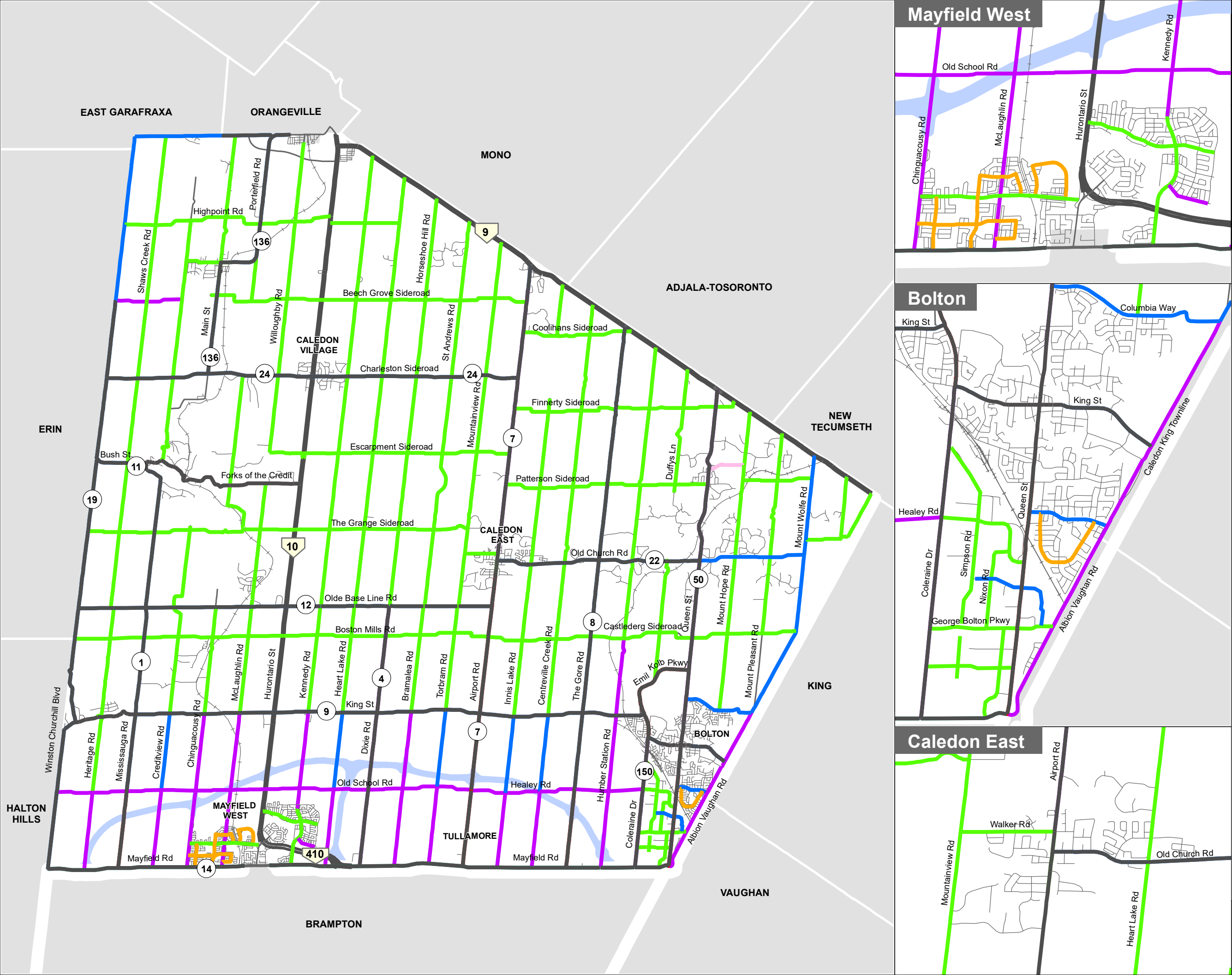
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Town of Caledon

Transportation Master Plan

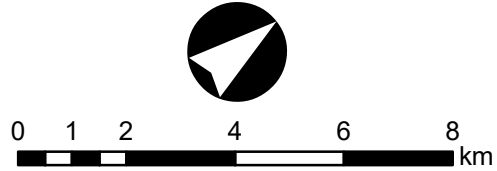
FIGURE 9-3
Right of Way (ROW) Widths



ROW Width (m)

- 20
- 22
- 26
- 30
- 36
- Regional Roads
- GTA West Corridor

* Note: ROW widths along Regional roads are based on the Region's 2019 Long Range Transportation Plan. Refer to Region for latest Regional Road ROWs.



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10.0 Climate Change Implications

10.1 What is Climate Change?

Climate scientists have agreed that concentrations of greenhouse gases (GHGs) in the atmosphere have been steadily increasing over the past century as a result of human activity, primarily the burning of fossil fuels. When fossil fuels, such as oil and gas, are burned to power our buildings, vehicles, and industrial activities, they release greenhouse gas emissions into the atmosphere.

These GHGs warm the atmosphere by absorbing and emitting solar radiation, causing a greenhouse effect that traps heat close to the surface of the Earth. While some of these GHGs exist naturally, their concentrations in the atmosphere have increased dramatically over a relatively short time frame, causing Earth's average temperatures to increase, weather systems to become more extreme, and ecological systems to degrade.

The Intergovernmental Panel on Climate Change (IPCC) stated that human activities have caused approximately 1-degree Celsius of global warming above pre-industrial levels and will worsen over the next few decades. Climate change is an urgent crisis that requires radical changes to our society and economic systems in order to limit warming to no more than 1.5°C above pre-industrial levels to reduce the risk of catastrophic climate impacts.

10.2 Climate Change and the EA Process

The Provincial government has taken steps by ensuring that climate change is considered in the Environmental Assessment Process by incorporating certain considerations in the EA program's Guides and Codes of Practice. The Guide sets out the Ministry of Environment Conservation and Parks' expectation for considering climate change in the preparation, execution and documentation of environmental assessment studies and processes. The guide provides examples, approaches, resources, and references to assist proponents with consideration of climate change in EA.

10.3 Town of Caledon Climate Change Needs

A baseline GHG emissions inventory was developed for the year 2016 which was the most recent year for which census and other data were available for the Town's Community Climate Change Action Plan (Resilient Caledon). In 2016, Caledon's total GHG emissions were 520,000 tCO₂e. More than half of Caledon's emissions were from transportation, including commuters travelling out of town for work, and commercial vehicles and trucks.

If strategies are not undertaken to mitigate climate change, transportation emissions are expected to increase over the next 30 years due to the anticipated growth of 300,000 people and 125,000 jobs in the Town of Caledon by the 2051 horizon year. According to the United States Environmental Protection Agency, a typical passenger vehicle emits about 4.6 metric tons of carbon dioxide per year. The average passenger vehicle emits about 404 grams of CO₂ per mile. Strategies in the MMTMP should aim to reduce the use and reliance of the gas-powered personal automobile.

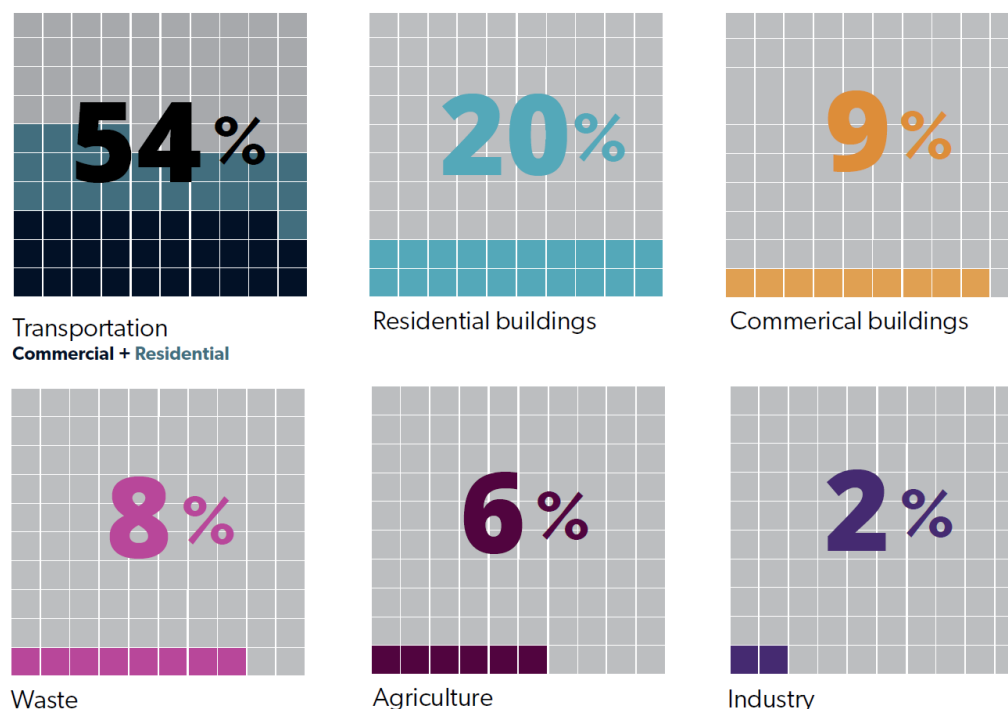


Figure 10-1: Baseline GHG Emissions (2016)

Source: Resilient Caledon - Community Climate Change Action Plan (2021)

Between 2021 to 2050, Caledon's population is expected to increase by more than 300%. If no additional climate actions are taken by any level of government, the Town's emissions model shows that Caledon's emissions will increase by 119%. By 2050, approximately 63% of the Town's emissions will increase from transportation due to this increase in population and employment and are projected to increase the most quickly (+130%).

10.4 Resilient Caledon Action Plan

On June 28, 2020, Town Council adopted a community greenhouse gas (GHG) emissions reduction target of net zero by 2050 as part of the ongoing Resilient Caledon Plan, aligning with the 1.5-degree Celsius warming scenario.

The Resilient Caledon Plan identified additional actions based on best practice research, reviews of past and current actions being implemented in the Town, and consultations with the

Climate Change Task Force and public. The resulting emissions modelling showed that these additional actions would reduce GHG emissions by 77% compared to the 2016 base year. According to the modelling, a significant portion of the reduction in GHG emissions is attributed to the conversion of vehicles from traditional combustion engines to electric motors, as well as supporting sustainable modes of travel, such as active transportation and transit, in existing and new communities.

These actions were grouped in five key sections which include Smart Growth, Sustainable Communities, Agriculture and Natural Systems, Low Carbon Transportation, and Resilient Infrastructure and Energy.

10.5 Climate Change and the MMTMP

Considerations

The MMTMP evaluated four different high-level alternative solutions. The evaluation criteria included the solution's impact to climate change and the natural environment. A detailed natural heritage assessment is provided in **Appendix C**.

Although the transportation improvements associated with this master plan's preferred solution will result in effects to the climate (e.g., due to increased greenhouse gas emissions) and impact the natural environment within the Town of Caledon, climate change was considered throughout the process, with the preferred solution developed to minimize GHG emissions.

Preferred Alternative Solution Mitigation Strategies

A multi-modal approach has been undertaken to develop the preferred alternative solution in collaboration with Resilient Caledon, the Town's climate change action plan. This multi-modal approach ensures that emissions and negative effects to air quality are minimized. This solution includes the following:

- Road capacity improvements manages average speeds of vehicles a level that minimizes GHG emissions by reducing congestion on key major corridors. This will be confirmed through Schedule B or C environmental assessments.
- Active transportation network plan that provides varying levels of protection for pedestrians and cyclists depending on the context to lessen the reliance of the personal automobile.
- Identification of key transit corridors that connects communities within Caledon ranging from smaller hamlets to larger and denser urban areas to lessen the reliance of the personal automobile.
- The promotion of electric vehicle charging stations so that if the trip is made by a personal vehicle, there is support for the vehicle to be electric which lowers GHG emissions per capita.

Summary and Next Steps

This Multi-Modal Transportation Master Plan satisfies Phase 1 and Phase 2 of the Municipal Class Environmental Process. Alternative solutions were identified, and a preferred alternative

solution was selected based on an evaluation criterion which involved both natural heritage and climate change objectives. As part of this study's policy framework, the Town of Caledon's existing climate change community action plan, Resilient Caledon, was incorporated. The recommendations of the MMTMP supports the Resilient Caledon Climate Change Action Plan and the Town's community greenhouse gas (GHG) emissions reduction target of net zero by 2050 through the support for alternative modes of transportation and electric vehicles. An inventory of natural heritage assets was also conducted to understand the extent of the impacts to the natural environment.

Climate change considerations and implications have been documented and assessed through this study. Additional project-specific studies that involve Phase 3 to Phase 5 of the Municipal Class EA process in the Town of Caledon should further consider impacts to the climate and use the information provided in the MMTMP as a foundation.

11.0 Cost Estimates and Monitoring

This chapter provides an estimate of capital cost investments required to implement projects proposed as part of the Alternative 3 “Combined” preferred scenario and identifies funding opportunities, and an implementation and monitoring plan.

11.1 Capital Costs

11.1.1 Road Projects

The capital costs associated with planned and proposed road improvements, including widening and new construction projects, are summarized in **Table 11-1**. It is estimated that short-term (by 2031) and medium-term (by 2041) projects will cost \$270 million and \$281 million, respectively. Long-term (2051 or beyond) projects are estimated to cost \$175 million.

Recognizing that all the road widening projects are proposed along future Town Arterials it is recommended that urbanization (e.g., construction of curb and gutters) of each corridor be included as part of its respective construction year. Urbanization costs have also been incorporated in the estimate.

11.1.2 Active Transportation Projects

Costs associated with proposed active transportation improvements within the Town will be completed as part of the Town’s Active Transportation Master Plan (ATMP), which was initiated in early 2022. It is expected that the construction of planned road reconstruction projects includes recommended active transportation facilities as best practice.

Table 11-1: Road Project Capital Costs

Road	From	To	Recommendation	Corridor Length (km)	Capital Cost
2031					
Chinguacousy Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
McLaughlin Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
Albion Vaughan Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	4.8	\$ 96,140,000
Humber Station Road	Mayfield Road	Limit of Settlement Area (north of King Street)	Widening from 2 to 4 lanes	7.6	\$ 61,180,000
Abbotside Way	Bonniglen Farm Boulevard	Heart Lake Road	Extension (4 lanes)	0.5	\$ 3,738,000
Healey Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes	2.7	\$ 21,735,000
Torbram Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.2	\$ 25,760,000
George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 lanes)	1.3	\$ 6,728,000
Kennedy Road	Bonniglen Farm Boulevard	Old School Road	Widening from 2 to 4 lanes	0.65	\$ 5,233,000
Subtotal					\$ 270,424,000
2041					
Innis Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3	\$ 24,150,000
Centreville Creek Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
Old School Road	Winston Churchill Boulevard	Airport Road	Widening from 2 to 4 lanes	16.6	\$ 133,630,000
Healey Road	Airport Road	The Gore Road	Widening from 2 to 4 lanes	4.1	\$ 33,005,000
Kennedy Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
Caledon King Townline	King Street	Columbia Way	Widening from 2 to 4 lanes	2.2	\$ 17,710,000
Columbia Way	Regional Road 50	Caledon King Townline	Widening from 2 to 4 lanes	2.8	\$ 22,540,000
Subtotal					\$ 280,945,000
2051					
Chinguacousy Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
McLaughlin Road	Old School Road	King Street	Widening from 2 to 4 lanes	3.1	\$ 24,955,000
Bramalea Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	6.2	\$ 49,910,000
Heritage Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.1	\$ 24,955,000

Road	From	To	Recommendation	Corridor Length (km)	Capital Cost
Creditview Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3	\$ 24,150,000
Heart Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	3.2	\$ 25,760,000
Subtotal					\$ 174,685,000

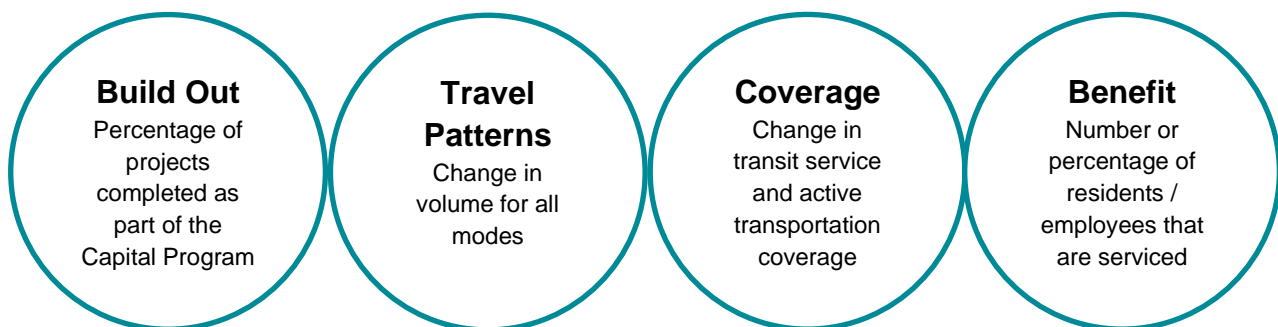
Source: Caledon Growth Management and Phasing Plan Study (2023)

11.2 Implementation and Monitoring Plan

This MMTMP provides a strategy for the implementation of transportation facilities and recommends relevant policies to support Town goals and objectives. Phasing of proposed projects were identified for the short, medium and long term. Implementation and timing of projects should be confirmed through subsequent corridor-specific studies and a further assessment to balance capital costs and funding strategies.

The MMTMP is recommended for review every five years as part of the Official Plan review as prescribed from the Planning Act. This allows for an ongoing review and assessment of the implemented programs and services for effectiveness, and appropriate adjustments to be made to account for changing land use assumptions, for example.

A monitoring program is recommended to track travel pattern and land use changes, which will rely on data collection and reporting programs. The objectives of the monitoring program can include a review of the following.



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Town of Caledon Multi-Modal Transportation Master Plan

Appendix A

Policy Objectives and Background

Appendix A | Policy Objectives and Background

Date: March 29, 2024 **Project No.:** 300051561.0000

Project Name: Caledon Multimodal Transportation Master Plan

Submitted To: Town of Caledon

Submitted By: R.J. Burnside & Associates / MHBC

1.0 Provincial Policies and Initiatives

The Town’s Multi-Modal Transportation Master Plan is founded upon a review of the existing provincial, regional and local policies as a basis for future development and growth, as well as change in the community. The most relevant policies are summarized below setting a policy framework that builds upon existing practices to appropriately tailor recommendations to the Town’s unique context.

1.1 Provincial Policy Statement, 2020

The Provincial Policy Statement (PPS), 2020 was issued under Section 3 of the *Planning Act*, and last revised in March 2020. The PPS provides a vision for land use planning in Ontario that encourages an efficient use of land, resources, and public investment in infrastructure. The *Planning Act* directs those municipal decisions affecting planning matters “shall be consistent with” the PPS.

Section 1.5 of the PPS provides specific direction for the planning and development of public spaces, recreation, parks, trails, and open space, including the following transportation related policies:

Healthy, Active Communities (1.5.1)

- Plan public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity.
- Plan and provide for a full range and equitable distribution of publicly accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and, where practical, water-based resources.

Section 1.6 of the PPS provides specific direction for the planning and development of infrastructure and public service facilities, including the following transportation related policies:

Transportation Systems (1.6.7)

- Provide for transportation systems which are safe, energy efficient, facilitate the movement of people and goods, and are appropriate to address projected needs.
- Make efficient use of existing and planned infrastructure, including the use of transportation demand management strategies, where feasible.
- Provide for a multimodal transportation system, which maintains connectivity within and among transportation systems and, where possible, improves connections which cross jurisdictional boundaries.
- Promote a land use pattern, density, and mix of uses that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.

Transportation and Infrastructure Corridors (1.6.8)

- Plan for and protect corridors and rights-of-way for infrastructure, including transportation, transit and electricity generation facilities and transmission systems to meet current and projected needs.
- Protect major goods movement facilities and corridors for the long term.
- Prevent development in planned corridors that could preclude or negatively affect the use of the corridor for the purpose for which it was identified.
- Encourage the preservation and reuse of abandoned corridors for purposes that maintain integrity and continuous linear characteristics of the corridor, wherever feasible.
- Consider the Wise Use and Management of Resources when planning for corridors and rights-of-way for significant transportation and infrastructure facilities.

1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020

A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2020 (“Growth Plan”) provides a framework for implementing the Provincial government’s vision for building stronger, prosperous communities by better managing growth within the Greater Golden Horseshoe. A Place to Grow was prepared and approved under the Places to Grow Act, 2005, and was updated in May 2019 and August 2020. The Planning Act requires that decisions affecting a planning matter conform with the policies of the Growth Plan.

Guiding principles (1.2.1) of the Growth Plan related to transportation are as follows:

- “Prioritize intensification and higher densities in strategic growth areas to make efficient use of land and infrastructure and support transit viability.
- Improve the integration of land use planning with planning and investment in infrastructure and public service facilities, including integrated service delivery through community hubs, by all levels of government.”

The Growth Plan provides specific policies and directives regarding transportation, infrastructure, land use planning, and urban form which are to be considered by municipalities. Schedule 3 of the Growth Plan provides population and employment forecasts for the year 2051, which are then guided by policies contained within the Growth Plan for where and how

growth should occur. For Peel Region, Schedule 3 identifies a forecasted population of 2,280,000 and forecasted employment of 1,070,000 in 2051.

Section 3 of the Growth Plan provides direction and policies regarding planning for infrastructure to support forecasted growth, including the following transportation related policies:

Integrated Planning (3.2.1)

- “Infrastructure planning, land use planning, and infrastructure investment will be coordinated to implement the Growth Plan.
- Planning for new or expanded infrastructure will occur in an integrated manner, including long-range scenario-based land use planning, environmental planning, and financial planning, and will be supported by relevant studies and should involve providing sufficient infrastructure capacity in strategic growth areas.
- Municipalities will assess infrastructure risks and vulnerabilities, including those caused by the impacts of a changing climate, and identify actions and investments to address these challenges.”

Transportation – General (3.2.2)

- “Transportation system planning, land use planning, and transportation investment will be coordinated to implement the Growth Plan.
- The transportation system within the Greater Golden Horseshoe will be planned and managed to:
 - Provide connectivity among transportation modes for moving people and moving goods;
 - Offer a balance of transportation choices that reduces reliance upon the automobile and promotes transit and active transportation;
 - Be sustainable and reduce greenhouse gas emissions by encouraging the most financially and environmentally appropriate mode for trip-making and supporting the use of zero- and low-emission vehicles;
 - Offer multimodal access to jobs, housing, schools, cultural, and recreational opportunities, and goods and services;
 - Accommodate agricultural vehicles and equipment, as appropriate; and,
 - Provide for the safety of system users.
- Municipalities will develop and implement transportation demand management policies in official plans or other planning documents or programs.”

Moving People (3.2.3)

- “Public transit will be the first priority for transportation and infrastructure planning and major transportation investments.
- All decisions on transit planning and investment will be made according to the following criteria:
 - Prioritizing areas with existing or planned higher residential or employment densities to optimize return on investment and the efficiency and viability of existing and planned transit service levels;

- Increasing the capacity of existing transit systems to support strategic growth areas;
- Expanding transit service to areas that have achieved, or will be planned to achieve, transit-supportive densities and provide a mix of residential, office, institutional, and commercial development wherever possible;
- Facilitating improved linkages between and within municipalities from nearby neighbourhoods to urban growth centres, major transit station areas, and other strategic growth areas;
- Increasing the modal share of transit; and,
- Contributing towards the provincial greenhouse gas emissions reductions targets.
- Municipalities will ensure that active transportation networks are comprehensive and integrated into transportation planning to provide:
 - Safe, comfortable travel for pedestrians, bicyclists, and other users of active transportation; and,
 - Continuous linkages between strategic growth areas, adjacent neighbourhoods, major trip generators, and transit stations, including dedicated lane space for bicyclists on the major street network, or other safe and convenient alternatives.”

Moving Goods (3.2.4)

- “The first priority of highway investment will be linking major goods movement facilities and corridors, international gateways, and employment areas to facilitate efficient goods movement.
- Municipalities will provide for the establishment of priority routes for goods movement, where feasible, to facilitate the movement of goods into and out of employment areas and other areas of significant commercial activity to provide alternate routes connecting to the provincial network.”

Additionally, Schedule 6 of the Growth Plan, ‘Moving Goods’ identifies the built-up and designated greenfield areas across the GTHA and identifies both existing major highways and conceptual highway extensions. Within Caledon, Schedule 6 identifies the conceptual location of a new east-west highway traveling from Guelph to Vaughan, known as Highway 413 or the GTA West Corridor.

Public Open Space (4.2.5)

- “Municipalities, conservation authorities, non-governmental organizations, and other interested parties are encouraged to develop a system of publicly-accessible parkland, open space, and trails, including in shoreline areas, within the GGH that:
 - clearly demarcates where public access is and is not permitted;
 - is based on a co-ordinated approach to trail planning and development; and
 - is based on good land stewardship practices for public and private lands.”

Provincially Significant Employment Zones

In addition to the above noted transportation policies, the Growth Plan also sets out policies that protect employment areas critical to the local and provincial economy, known as Provincially Significant Employment Zones (PSEZ’s). Within the Town of Caledon, the existing employment

lands in southwest and southeast Bolton are identified as PSEZ Zone 15. PSEZ's can consist of employment areas as well as mixed-use areas that contain a significant number of jobs.

1.3 Greenbelt Plan, 2017

The Greenbelt Plan, 2017, was enacted under the Greenbelt Act, 2005, and identifies areas for protection, including the agricultural land base and the ecological and hydrological features, as well as areas and functions occurring on the landscape. The Greenbelt Plan also encompasses lands within the Niagara Escarpment Plan Area and Oak Ridges Moraine Plan Area and identifies the associated ecological protections and policies.

Section 4.2 of the Greenbelt Plan provides direction for the development of infrastructure within the Greenbelt and within the Protected Countryside area.

Parkland, Open Space and Trail Policies (3.3.2)

- “Encourage the development of a trail plan and a co-ordinated approach to trail planning and development in the Greenbelt to enhance key existing trail networks and to strategically direct more intensive activities away from sensitive landscapes.”

Municipal Parkland, Open Space and Trail Strategies (3.3.3)

- “Provide for a full range of publicly accessible, built and natural settings for recreation, including facilities, parklands, open space areas, trails and water-based activities.
- Include the following considerations in municipal trail strategies:
 - Preserving the continuous integrity of corridors (e.g. abandoned railway rights-of-way and utility corridors);
 - Planning trails on a cross-boundary basis to enhance interconnectivity where practical;
 - Incorporating the existing system of parklands and trails where practical;
 - Restricting trail uses that are inappropriate to the reasonable capacity of the site (notwithstanding the ability to continue existing trails/uses);
 - Providing for multi-use trail systems which establish a safe system for both motorized and non-motorized uses.”

General Infrastructure Policies (4.2.1)

- “Planning, design, and construction practices shall minimize, wherever possible, the amount of Greenbelt traversed and/or occupied by such infrastructure.
- Planning, design and construction practices shall minimize, wherever possible, the negative impacts on and disturbance of the existing landscape, including, but not limited to, impacts caused by light intrusion, noise and road salt.
- Existing capacity and co-ordination with different infrastructure services shall be optimized so that the rural and existing character of the Protected Countryside will be accommodated.
- New or expanding infrastructure shall avoid key natural heritage features, key hydrologic features or key hydrologic areas unless need has been demonstrated and it has been established that there is no reasonable alternative.

- Where infrastructure does cross the Natural Heritage System or intrude into or result in the loss of a key natural heritage feature, key hydrologic feature or key hydrologic areas, including related landform features, planning, design and construction practices shall minimize negative impacts on and disturbance of the features or their related functions and, where reasonable, maintain or improve connectivity.
- New or expanding infrastructure shall avoid specialty crop areas and other prime agricultural areas in that order of priority, unless need has been demonstrated and it has been established that there is no reasonable alternative.”

1.4 Niagara Escarpment Plan, 2017

The Niagara Escarpment cuts through the Town of Caledon from southwest to northeast, and is a United Nations designated World Biosphere Reserve containing an environmentally significant landform. The Niagara Escarpment Plan, 2017 (NEP) serves as a framework of objectives and policies to balance the development, protection, and enjoyment of this important natural resource.

Part 2 of the NEP identifies specific development criteria for lands within the NEP area, including the following related to transportation:

Infrastructure (2.12)

- “Infrastructure shall be planned in an integrated fashion, to obtain the most value out of existing infrastructure and to ensure that the most sustainable infrastructure alternatives have been identified.
- Infrastructure shall be sited and designed to minimize the negative impact on the Escarpment environment.
- Infrastructure shall avoid Escarpment Natural Areas, unless the project has been deemed necessary to the public interest after all other alternatives have been considered.
- Infrastructure should avoid prime agricultural areas wherever possible. Where infrastructure is proposed in a prime agricultural area, only linear facilities shall be permitted, and the proponent shall demonstrate, through an agricultural impact assessment or equivalent analysis as part of an environmental assessment, how prime agricultural areas will be protected or enhanced, including an examination of alternative locations that would better protect the agricultural land base.”

1.5 Oak Ridges Moraine Conservation Plan, 2017

The Oak Ridges Moraine runs through much of the northeast corner of the Town of Caledon, providing an important groundwater recharge function for the GTA. The Oak Ridges Moraine Conservation Plan, 2017 (ORMCP) provides land use and resource management planning direction on how to protect the Moraine’s ecological and hydrological features and functions.

Part 4 of the ORMCP identifies specific land use policies for lands within the ORMCP, including the following related to transportation:

Infrastructure (41)

- “An application for the development of infrastructure in or on land in a Natural Linkage Area shall not be approved unless:
 - The need for the project has been demonstrated and there is no reasonable alternative; and,
 - It is demonstrated that:
 - The area of construction disturbance will be kept to a minimum;
 - Right of way widths will be kept to the minimum that is consistent with meeting other objectives such as stormwater management and erosion and sediment control, and locating as much infrastructure uses within a single corridor as possible.
- An application for the development of infrastructure in or on land in a prime agricultural area shall not be approved unless:
 - the need for the project has been demonstrated and there is no reasonable alternative that could avoid the development occurring in a prime agricultural area; and,
 - an agricultural impact assessment or equivalent analysis carried out as part of an environmental assessment, is undertaken that demonstrates that there will be no adverse impacts to the prime agricultural area or that such impacts will be minimized and mitigated to the extent possible.
- An application for the development of infrastructure in or on land in a Natural Core Area shall not be approved unless the applicant demonstrates that:
- the project does not include and will not in the future require a highway interchange or a transit or railway station in a Natural Core Area; and
- the project is located as close to the edge of the Natural Core Area as possible.”

1.6 2041 Regional Transportation Plan, 2018

The 2041 Regional Transportation Plan (RTP) was adopted by Metrolinx in March of 2018 as an update to the previous Regional Transportation Plan released in 2008 (‘The Big Move’). The RTP builds upon the Growth Plan, and intends to build an integrated transportation system for the GTHA that is comprehensive, connected, accessible, sustainable, and focused on people. Throughout the GTHA, the RTP identifies a comprehensive transportation development plan consisting of 1800 kilometers of rapid transit, 1000 kilometers of cycling infrastructure, and 1000 lane kilometers of high occupancy vehicle and transit lanes.

The RTP identifies five key strategies to guide transportation development in the GTHA to 2041, as follows:

- Strategy 1 – Complete the delivery of current regional transit projects;
- Strategy 2 – Connect more of the region with frequent rapid transit;
- Strategy 4 – Integrate transportation and land use;
- Strategy 5 – Prepare for an uncertain future.

1.7 GTA West Corridor Environmental Assessment

The GTA West Corridor is a planned four-to-six lane 400-series highway intended to connect the City of Guelph to the City of Vaughan, with parts of the corridor traveling within the City of Brampton and Town of Caledon. The Ontario Ministry of Transportation (MTO) is currently conducting an Environmental Assessment (EA) of the GTA West Corridor in order to study long-term transportation problems and opportunities, and analyze the agricultural, environmental, community, land use, transportation, an economic impact of the proposed corridor.

On August 7, 2020, the Province confirmed the preferred route for the GTA West Corridor across Peel Region, York Region, and Halton Region. The preferred route within Caledon is planned to travel east-west between Old School Road and King Street, south of Bolton.

The Province intends to continue with preliminary design and consultation throughout 2021 and 2022. The Environmental Assessment for the GTA West Corridor is expected to be complete by the end of 2022.

Peel Region Council voted against the proposed GTA West Corridor during the regional council meeting on March 11, 2021. However, the Town of Caledon remains supportive of the project.

2.0 Regional Policy Summary

The Caledon MMTMP has also been developed within the context of in effect and ongoing land use and transportation planning initiatives by the Region of Peel. The following is a summary of the municipal plans and policies that have informed the development of the MMTMP.

2.1 Peel Region Official Plan, December 2018 Consolidation

The Peel Region Official Plan (ROP) was adopted by Regional Council in July 1996, and provides Regional Council with a long-term policy framework to support planning decisions across Peel Region.

The ROP sets the Regional context for detailed planning for the three municipalities that comprise Peel Region by protecting the environment, managing resources and directing growth. The ROP also sets the basis for providing Regional services in an efficient manner, and outlines strategies to guide growth and development in the Region to 2031. The current office consolidation of the Peel Region Official Plan incorporates all modifications, subsequent approvals, and approved amendments up to and including December 2018. On November 30, 2020, ROPA 30 was approved by oral decision of the LPAT regarding the Bolton Residential Expansion Area. While not yet consolidated with the Regional Official Plan, ROPA 30 as amended is included within this summary.

The overall goals of the Regional Official Plan are as follows:

- To create healthy and sustainable Regional communities;

- To recognize, respect, preserve, restore and enhance the importance of ecosystem features, functions and linkages, and enhance the environmental well-being of air, water, land resources and living organisms;
- To recognize the importance of a vital, competitive and diverse economy and a sound tax base, and manage and stage growth in accordance with the financial goals and overall fiscal sustainability of the Region; and,
- To support growth and development which takes place in a sustainable manner.

Chapter 2 of the ROP provides direction and policies for the natural environment within the Region, including the following specifically related to transportation:

Oak Ridges Moraine - Transportation, Utilities, and Infrastructure (2.2.9.3)

- Transportation, utility, and infrastructure uses are prohibited in all land use designations and key natural heritage features and hydrologically sensitive features unless the requirements of the ORMCP have been addressed.
- In planning for the Regional transportation and road network, consideration will jointly with the Town of Caledon be given to restrictions on haulage routes for transportation of chemicals and volatile materials in wellhead protection areas and in areas of high aquifer vulnerability.

Greenbelt - Infrastructure (2.2.10.5)

- “All existing, expanded and new infrastructure will be permitted that is subject to and approved under the Canadian Environmental Assessment Act, the Environmental Assessment Act, the Planning Act, the Aggregate Resources Act, the Telecommunications Act, or by the National or Ontario Energy Boards, or which receives a similar environmental approval, within the Protected Countryside of the Greenbelt provide it:
 - Supports agriculture, recreation and tourism, rural settlement areas, resource use or the rural economic activity that exists and is permitted within the Greenbelt; or,
 - Serves the significant growth and economic development expected in southern Ontario beyond the Greenbelt by providing the appropriate infrastructure connections among urban growth centres and between these centres and Ontario’s borders.
- The location and construction of infrastructure and expansions, extensions, operations and maintenance of infrastructure within the protected countryside of the Greenbelt shall be subject to the following:
 - Minimize through planning, design, and construction practices the amount of the Greenbelt traversed or occupied by such infrastructure and the negative impacts and disturbance of the existing landscape;
 - Optimize, where possible, existing capacity and coordination with different infrastructure services so that the rural and existing character of the Protected Countryside and the overall urban structure for southern Ontario are supported and reinforced;
 - Avoid key natural heritage features or key hydrologic features unless need has been demonstrated and it has been established that there is no reasonable alternative; and,

- Where infrastructure does cross the Natural Heritage System, planning, design, and construction practices shall minimize negative impacts and disturbance on the features or their related functions and, where reasonable, maintain or improve connectivity.”

Chapter 5 of the ROP provides direction and policies for the Regional Urban Structure, including the following specifically related to transportation:

Growth Management (5.5)

- “Accommodate intensification within urban growth centres, intensification corridors, nodes, and major transit station areas and any other appropriate areas within the built-up area.
- Require the area municipalities to develop intensification strategies that, among other things, identify intensification areas to support a mix of residential, employment, office, institutional and commercial development where appropriate, and to ensure development of a viable transit system.
- Encourage the area municipalities to require development around major transit station areas within the designated greenfield to achieve a minimum density of 100 residents and jobs per hectare.
- Direct the area municipalities to incorporate official plan policies to plan for complete communities within designated greenfield areas that create high quality public open spaces with site design and urban design standards that support opportunities for transit, walking and cycling.”

Chapter 5.9 of the ROP provides specific direction and policies to guide the transportation system in Peel Region, including the following key policies:

General Transportation Objectives (5.9.1)

- “To achieve the safe, convenient and efficient movement of people and goods in the Region and support the same within the GTHA in cooperation with area municipalities, the Province, the Federal government and the private sector.
- To develop and promote a sustainable, safe, efficient, effective and integrated multi-modal transportation system.
- To promote and encourage the increased use of public transit and other sustainable modes of transportation.
- To optimize the use of the Region’s transportation infrastructure and services.
- To maximize the capacity of the transportation system by focusing on moving people and goods rather than on moving vehicles.
- To minimize adverse environmental and human health impacts caused by transportation and support transportation alternatives that foster improved health and well-being in the Region.
- To support a transportation system that enhances the economic vitality and growth in the Region.
- To ensure that practices and performance measures are in place to maintain a safe and efficient Regional transportation network.

- To support the integration of transportation planning, transportation investment and land use planning.”

General Transportation Policies (5.9.2)

- “In planning for the development, optimization and/or expansion of new or existing Regional transportation corridors:
 - Support opportunities for multi-modal use, where feasible;
 - Prioritize transit, carpooling, active transportation and goods movement needs over those of single-occupant vehicles; and,
 - Consider the separation of modes within corridors, where appropriate.
- Identify, in cooperation with the area municipalities and the Province, transportation improvements require to support future development or redevelopment, and determine region-wide impacts through comprehensive transportation studies.
- Work with the area municipalities, adjacent municipalities, other levels of government and non-governmental agencies to develop and implement Transportation Demand Management programs to reduce trip distance and time and increase the modal share of alternatives to single-occupant automobiles.
- Where appropriate, examine the feasibility of using hydro corridors and of preserving and reusing abandoned corridor as future transportation facilities.
- Promote the use of innovative technologies to improve the efficiency, reliability and safety of the Regional transportation system.”

Transportation Demand Management (5.9.9)

- “Encourage area municipalities to:
 - Promote land use and site design which foster the use of sustainable modes of transportation;
 - Promote infrastructure to encourage teleworking;
 - Promote a balance of jobs and housing in communities to reduce the need for long distance commuting.
- Encourage area municipalities to develop parking management strategies that make more efficient use of parking resources and that encourage the use of sustainable modes of transportation.”

Active Transportation (5.9.10)

- “Support the use of Regional roads and other Regional land as part of a safe, attractive, and accessible active transportation network.
- Work with the area municipalities to integrate pedestrian and bicycle networks into transportation planning to:
 - Provide safe, attractive and accessible travel for pedestrians and bicyclists with existing and new development; and,
 - Provide linkages between intensification areas, adjacent neighbourhoods and transit stations.”

At the end of this study, the new Region of Peel Official Plan, April 2022 was adopted by Regional Council on April 28, 2022 and is currently awaiting Provincial approval. After a review of the new Region of Peel Official Plan, the policy framework of the MMTMP remained unchanged.

2.2 Peel Growth Management Focus Area Policy Directions Report

The Growth Management Focus Area Policy Direction Report was released by Peel Region in May of 2020 as part of the Region's Official Plan Review process. The Growth Management Focus Area Directions Report was an exercise in determining an allocation of population, housing, and employment growth to 2041 among the local municipalities.

By 2041, per the 2019 Growth Plan, Peel Region is forecasted to have a population of 1.97 million people and 0.97 million jobs. For designated greenfield areas, the Regional growth scenarios and allocation work identifies a minimum density of 65 people and jobs per hectare. For intensification, Peel Region assumes a 58% intensification rate between 2021 and 2041 to support the endorsed municipal allocation of growth.

To accommodate planned growth in Peel Region, the Directions Report identifies the need for an additional 740 hectares of designated greenfield area for new community areas, and 560 hectares of designated greenfield area for new employment areas. Of Peel Region's allocated growth, Caledon is planned to accommodate population growth of approximately 90,970 people between 2016 and 2041, with employment growth of 52,640 in that same period to 2041. It is noted that since the completion of this report, the Province has released the 2020 Growth Plan with revised population and employment targets to 2051. The revised 2051 targets are planned to be incorporated into the ongoing Regional Official Plan Review throughout 2021.

3.0 Town of Caledon Policy Summary

The Caledon MMTMP has also been developed within the context of in effect and ongoing land use and transportation planning initiatives by the Town of Caledon. The following is a summary of the municipal plans and policies that have informed the development of the MMTMP.

3.1 Future Caledon Official Plan, March 2024

The Future Caledon Official Plan sets out the principles, goals, objectives, and policies intended to guide the development of sustainable and distinctive new community and employment areas. The Official Plan also provides the framework under Section 11 for developing a transportation system throughout the Town, to ensure high quality mobility options to users of all ages, abilities, and income levels.

The planning objectives of the Official Plan related to transportation are reiterated as follows:

- “Develop a transportation system that supports multimodal connections between the Town, the Region of Peel and the rest of the Greater Toronto and Hamilton Area;

- Develop a low carbon and environmentally sustainable transportation system that supports the climate change objectives and policies of this Plan and allows for safe, convenient, economical, equitable, and efficient movement of people of all ages and abilities, goods and services;
- Reduce automobile dependency, and encourage and support sustainable mobility options such as public transit, active transportation, and car-sharing/carpooling;
- Optimize and expand the use of the Town's existing transportation infrastructure and services to achieve financial and environmental sustainability while managing congestion;
- Ensure that development supports the efficient provision of public transit and active transportation to promote healthy lifestyles;
- Develop a Caledon transit network and work cooperatively with appropriate jurisdictions and agencies to improve transit connections in the Town, especially with inter-regional and higher order transit, and encourage transit-supportive development, where appropriate;
- Work with the Region to develop a strategic goods movement network to ensure efficient movement of goods and services within and through the Town;
- Develop a transportation system that minimizes the impact of heavy truck and commuter traffic on residential areas;
- Ensure the design and location of new and expanded transportation infrastructure minimizes, to the greatest extent possible, impacts to environmental features and areas, hazard features and cultural heritage resources;
- Develop and implement traffic calming measures to accommodate all types of movement and ensure the road network is safe for all users;
- Work with all levels of government, stakeholders and agencies to manage existing and future congestion through the development and implementation of transportation demand management strategies; and,
- Establish a connected and continuous grid system for the street network to support convenient and efficient travel by all modes of transportation."

3.2 Caledon 2023-2035 Strategic Plan

The Town of Caledon 2023-2035 Strategic Plan is a collectively built plan that is informed by input from the community, Council and staff. The plan aims to provide an overarching strategy to fulfill the vision of offering "the best of rural and urban life for everyone."

The plan is governed by four priority areas, including enhanced transportation and mobility, environmental leadership, community vitality and livability, and service excellence and accountability.

Actions associated with the "enhanced transportation and mobility" priority are as follows:

- Complete the Active Transportation Master Plan and Multi-Modal Transportation Master Plan to map out long-term investments required to diversify our transportation options.

- Collaborate with the Province, Metrolinx and municipal partners to complete a business case for two stations along the Caledon-Vaughan Go Rail service to be operating in Caledon prior to 2040.
- Complete a Town-wide transit strategy and expand public transit service partnerships to increase the number of residents with access to public transit.
- Deliver annually a capital road, bridge and culvert program that ensures that the entire Caledon transportation network is in a good state of repair.
- Commence construction of the Highway 410/10/Tim Manley Interchange modifications to alleviate congestion and improve safety in the Mayfield West area.
- Complete the George Bolton Extension to improve traffic flow in the Bolton Business park area.
- Expand the use of traffic calming and speed management measures across the Town to maximize road safety.
- Complete construction on Works Yard 3 in order to meet current and projected demands on the Operations team.
- Develop and implement a parking strategy for Southfield Village to reduce the challenges with on-street and illegal parking.
- Complete the design to convert the Orangeville to Brampton rail corridor into a multi-use railway

3.3 Caledon 2020-2030 Economic Development Strategy

The Town of Caledon's ten-year Economic Development Strategy "Caledon 2020-2030" was adopted by Council on April 28, 2020. The purpose of the Economic Development Strategy is to provide a framework for creating a vibrant community and a strong business and entrepreneurial ecosystem while continuing the Town's overall investment readiness.

The Town of Caledon is strategically located within the GTHA with access to extensive regional transportation infrastructure, greenfield development opportunities, and proximity to a skilled workforce to create an urban environment appealing to future investors, workers, and visitors of the Town. In light of this, the Economic Development Strategy identifies four priorities for Caledon from 2020-2030 as follows:

1. Support an Entrepreneurial and Small Business Economy
2. Focus on Business Retention and Growth
3. Improve Quality of Place
4. Enhance Investment Readiness

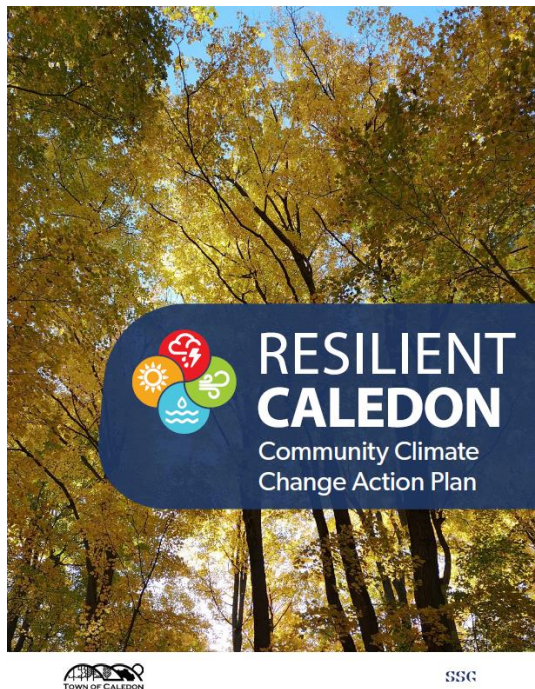
The Economic Development Strategy recognizes that transportation is a key area of strength for the Town of Caledon, which is directly related to the transportation, warehousing, and construction sectors. A strong regional transportation infrastructure provides access from the

Town to skilled labour, post-secondary institutions and a diverse employment market to attract a variety of industries.

The Economic Development Strategy also recognizes that gaps in public transportation infrastructure provide a challenge for short and long-term population and employment growth within the Town. As a result, Caledon is investing in targeted initiatives to improve servicing and transit infrastructure, as well as investing in planned communities for growth such as Bolton, Caledon East, and Mayfield West.

Caledon 2020-2030 endorses the development of and investment in the Town's urban and village cores, enabling opportunities for higher density residential, mixed-use and office style development, co-working spaces, destination retail and quality public spaces. The Town is actively pursuing intensification and incentives for private sector investment to close the gap in tax assessment ratios and contribute to higher employment densities.

3.4 Resilient Caledon



The Town of Caledon developed Resilient Caledon which was approved by Council on April 27, 2021. This action plan provides a roadmap to reduce emissions by 36% below 2016 emissions levels by 2030 and achieve net zero greenhouse gas (GHG) emissions by 2050. The Plan also addresses climate adaption and will increase the resiliency of the Town to current and future climate impacts.

Resilient Caledon is a community plan meaning it has been developed with input from Caledon residents, businesses, farmers, youth, and expert stakeholders including the Region of Peel and its local municipalities, conservation authorities, and the provincial and federal government. As a community plan, all stakeholders understand that for the Town of Caledon to achieve its net zero target, all stakeholders must take action.

3.5 Fire Master Plan

The Fire Master Plan was developed at the request of Council to provide a strategic framework for the delivery of fire protection services within the Town of Caledon over the next 10-year community planning horizon. The Fire Master Plan is accompanied by a Community Risk Assessment (C.R.A) that has been prepared to respond to the requirements of Ontario Regulation 378/18 Community Risk Assessment enacted on July 1, 2019. This regulation identifies the need for and importance of implementing risk mitigation and risk reduction

strategies. Fire suppression services continue to be a necessary service, however historical evidence and current industry best practices fully support the need to enhance community fire safety through the delivery of more proactive fire prevention initiatives and public education programming.

3.6 Caledon Recreation and Parks Masterplan

The Town's Recreation and Parks Masterplan was completed in March 2010, and provides guidance and direction for the planning of Caledon's recreation and parks system, including recommendations for improving services and facilities.

A number of recommendations are included within the Recreation and Parks Masterplan related to trails and pathways, including the following:

- "At the time of the next Official Plan Review and Update process, continue to encourage a target of 0.8 kilometres of primary trail per 1,000 population.
- Incorporate elements of active transportation and opportunities to enhance trail connectivity in the design of new subdivisions, while examining ways to enhance active transportation linkages in existing urban areas.
- Design new and existing trails to function as multi-seasonal facilities providing year-round transportation choices. The types of permitted uses will have to be established on a trail-by-trail basis in order to match usage to environmental conditions."

3.7 Bolton Residential Expansion Area, ROPA 30

The Bolton Residential Expansion Study was initiated by the Town of Caledon in 2015 to determine where to accommodate the planned 2031 population assigned for Bolton by Peel Region. On November 30, 2020 an oral settlement was reached at the Local Planning Appeal Tribunal to approve the proposed Regional Official Plan Amendment 30 (ROPA 30).

ROPA 30 establishes an expansion to the Bolton Rural Service Centre and an update policy framework to guide planning and development within the Residential Expansion Settlement Area (RESA). The expansion of the current Bolton Rural Service Centre boundary will accommodate approximately 11,100 people and 3,600 jobs to the year 2041 and includes boundary expansions on the south west and north of the existing Bolton boundary.

With regard to transportation, ROPA 30 identifies that the Town of Caledon must plan for a range of transportation options, including transit service, active transportation, and carpooling prior to adopting a secondary plan to implement the settlement area boundary expansion.

3.8 Mayfield West Phase 2 Secondary Plan, OPA 222

The Mayfield West Phase 2 Secondary Plan was initiated by the Town of Caledon in 2008, and adopted by Council in November 2015. On May 25, 2017, the Ontario Municipal Board approved OPA 222 following a series of appeals. The Province additionally issued a Municipal Zoning Order on July 13, 2020 for the Phase 2 Stage 2 lands.

OPA 222 establishes goals, objectives and policies to govern the development and redevelopment of land in southern Caledon, and places emphasis on building more compact, transit-supportive communities in designated greenfield areas. The OPA 222 lands are intended to accommodate a population of 10,348 people and 3,799 jobs.

With regard to transportation, OPA 222 identifies the need for a Transportation Hub to be developed along the west side of Hurontario Street. Transportation infrastructure in the Plan Area is to be developed as multi-modal transportation corridors that safely, conveniently and efficiently accommodate a blend of vehicular, transit, bicycle and pedestrian movement.

Appendix B

Stakeholder Consultation and Emerging Technology Survey

Appendix B | Stakeholder Consultation and Emerging Technology Survey

Date: June 25, 2024 **Project No.:** 300051561.0000

Project Name: Caledon Multimodal Transportation Master Plan

Client Name: Town of Caledon

Submitted By: R.J. Burnside & Associates Ltd.

1.0 Stakeholder Engagement Approach

A comprehensive consultation process was undertaken to gather community and stakeholder input within the master plan process. The following section documents the public and stakeholder consultation process. From the outset of the study, a communication plan was prepared to guide the consultation process with the following objectives:

- To ensure that town residents, the business community and other stakeholders are made aware of the importance of the transportation master plan initiative and kept informed and up to date about study components, progress and opportunities for input.
- To create meaningful and strategically appropriate opportunities for public and stakeholder engagement over the course of the study.
- To foster an environment that is conducive to substantive dialogue, a respectful, informed and productive discussion of transportation-related issues and the Town's future.
- To inspire confidence in the TMP development process and in the Town's implementation and management of it.
- To present a well-integrated and seamless project progression that ensures consistency of word and action, demonstrates positive momentum and minimizes contentious issues.
- To establish and reinforce realistic expectations regarding feasible transportation-related choices and the way stakeholder input will be considered/acted upon.

A variety of tools were used to inform the community, including direct mail, a webpage hosted on the Town's website, dedicated project email addresses and phone numbers, social media (Facebook, Twitter) and newspaper advertisements. Notification to the public included a Notice of Commencement, three Public Open House notices, Notice of Opportunity for Study Input, Notice of Study Completion, and presentation materials posted to the Town website.

The TMP study was initiated on March 4, 2021 through a Notice of Commencement published on the Town's website. The Town's website, <https://haveyoursaycaledon.ca/mmtmp>, also provided information about upcoming public events, council presentations, and contact

information for the Town and Consultant project managers so that the public could reach the study team to provide input and comment.

The Notice of Study Completion was issued and published on the Town's website on June 26, 2024, upon which a 30-day public review period began.

2.0 Public Information Centres

Two public information centres (PICs), as required by the master plan process, were held to inform the public of the study activities and provide opportunities for the public to ask questions and obtain further information from the study team. Both PICs were held in a virtual format on Webex and Microsoft Teams, respectively, due to considerations of provincial public measures and participants' health and safety during the COVID-19 pandemic.

The first PIC was held on March 24, 2021 from 4:00 to 6:00 PM. The public information centre was the first point of contact with the general public to provide an overview of existing and planned conditions and preliminary list of transportation needs and opportunities. The public was made aware that their input on issues, concerns and opportunities would assist in the identification of projects and strategies within the alternative strategies. An overview of the alternative strategies was also provided. A formal presentation was delivered, followed by a facilitated question and answer period. The presentation was hosted on the Town of Caledon website after the meeting for the public to review and comment.

The second PIC was held on May 12, 2022 from 6:00 to 7:30 PM. Following up from the first PIC, a formal presentation was provided on an overview of the preliminary preferred alternative, which included travel demand management, active transportation, transit and road components. Supporting strategies and policies were also presented to the public. A facilitated question and answer period immediately followed the presentation. After the meeting was adjourned, members of the public were invited to review the presentation on the Town's website for comment.

The third PIC was held on September 19, 2023 from 6:00 to 7:30 PM. This was an in-person PIC that outlined the preferred transportation solution on boards. Attendees were able to review and provide verbal feedback, which was documented by the Project Team, as well as provide their input via comment sheets.

Presentation slides or boards and comment/response summary from the PICs are included in **Attachment 1**.

3.0 Technical Agencies

Relevant technical agencies were invited to participate in the Technical Agencies Committee (TAC). The TAC consisted of town staff, staff from the Region of Peel and adjacent local municipalities, provincial ministries, transit authorities, conservation authorities, and other affected agencies. Two TAC Meetings were held on the dates below. The TAC meetings were

held in a virtual format on Microsoft Teams due to considerations of provincial public measures and participant's health and safety during the COVID-19 pandemic.

- The first TAC meeting was held on January 13, 2021 and provided an overview of the Caledon MMTMP study purpose, scope, and preliminary transportation needs and opportunities. Participants were given the opportunity to indicate their interests in the project and identify additional needs and opportunities from their respective agencies.
- The second TAC meeting was held on April 12, 2022 and provided an overview of the preliminary draft recommendations and supporting strategies and policies.

A presentation was provided at each TAC meeting and was followed by a discussion period where attendees could ask questions and receive further information.

Technical agency consultation and TAC meeting minutes are included in **Attachment 2**.

A draft version of the Town's MMTMP was circulated on June 3, 2022 to all TAC members for review and comment. The report was recirculated on December 15, 2023 for final review and comment, as updates were made to address comments from the previous circulation and align with the timeline of the Official Plan update. The comments received during the circulation periods, along with responses from the Project Team, are provided in **Table B-1**.

Table B-1: Technical Advisory Committee (TAC) Comments and Responses

Commenter	Comment	Project Team Response
Peel Region	On page i of the executive summary, paragraph 2, instead of "recommended solution" we suggest "an overall recommendation" as solution may be too definitive and the recommendation would still go through more detailed processes such as EA, DD, etc.	Noted, the final report has been updated.
Peel Region	In light of Caledon's New Urban Area Phasing related to significant changes in new provincial direction re planning, can Caledon document/acknowledge that data/modelling has changed from what was used for the MMTMP? And can Caledon touch on how it plans to adapt the MMTMP in the years to come to reflect the changes?	The Town can confirm that the recommendations and timing are well aligned with the new provincial direction regarding planning and consistent with the Town's growth management and phasing study. Based on the timing and prioritization, the Town will plan for more detailed processes for implementing the recommendations (i.e., through Environmental Assessment and Detailed Design).
Credit Valley Conservation	Thank you for providing the Master Plan report dated December 2023 and appendices. We have reviewed the information and have no comments at this stage.	Noted, thank you for your review.
Toronto and Region Conservation Authority (TRCA)	Staff have completed the review of this submission and have no objection in principle to the preferred alternative; however, staff encourages the Town to consult TRCA at early stages of separate projects to ensure proper scoping of the projects with necessary studies and requirements if the projects are located within the TRCA jurisdiction.	Noted, thank you.
Toronto and Region Conservation Authority (TRCA)	It is not clear to staff whether this circulation is associated with the Notice of Study Completion for this Master Plan Study. Please clarify. If not, with future submission, please provide responses to TRCA's comments (November 15, 2022 - attached) and how these comments have been addressed.	Comments previously provided by TRCA are documented and addressed as part of this Appendix.
Toronto and Region	Staff reiterates consultation with TRCA in future regarding TRCA areas of interest (minimizing impacts to the natural environment, mitigating, remediating and	Agreed, thank you. Environmental impacts will be assessed in greater

Commenter	Comment	Project Team Response
Conservation Authority (TRCA)	compensating for the negative effects of the project on the natural environment.) Staff reiterates the commitment to address impacts on natural environment (including the form and function of biodiversity habitat and their survival) and guidance for subsequent infrastructure planning processes need to be included in EAs for future projects.	detail as part of subsequent project-specific studies, at which point TRCA will be engaged as required.
Toronto and Region Conservation Authority (TRCA)	Staff reiterates all linear facilities/infrastructure proposed to follow existing or future road alignments and be assessed as part of the EAs for their associated future roads and is good planning in the best interest of the Town.	Agreed, thank you.
Toronto and Region Conservation Authority (TRCA)	Permits in accordance with the Conservation Authorities Act are required from TRCA prior to project construction.	Noted, thank you.
Toronto and Region Conservation Authority (TRCA)	<p>In developing, evaluating and selecting alternatives, staff require the LCP policies be considered. TRCA staff recommends the preferred alternative meets the policies of Section 7. In particular, impacts to and opportunities for the following should be addressed:</p> <ol style="list-style-type: none"> 1. Flooding, erosion or slope instability 2. Existing landforms, features and functions 3. Aquatic and terrestrial habitat and functions, including connectivity 4. TRCA property and heritage resources 5. Environmental best management practices that support climate change mitigation and adaption 6. Community and public realm benefits <p>TRCA requires that the preferred alternative considers avoiding, minimizing, mitigating and compensating impacts to the ecosystem, and avoid, mitigate or remediate hazards, in that order. In order to fulfil requirements of Ontario</p>	Agreed, thank you. Environmental impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged as required.

Commenter	Comment	Project Team Response
	Regulation 166/06 at the detailed design stage, staff also requires that the preferred alternative meets LCP policies in Section 8.	
Toronto and Region Conservation Authority (TRCA)	In the Final MMTMP please ensure that the proposed roads should be designed to avoid an increase of flooding risk on adjacent properties and loss of flood storage capacity of the valley system.	Agreed, thank you. Environmental impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged as required.
Toronto and Region Conservation Authority (TRCA)	As a watershed management agency, TRCA has established stormwater management objectives for each watershed within its jurisdiction. The Final MMTMP needs to acknowledge the TRCA stormwater management criteria document and it should be used in the design of the project. Please refer to TRCA's Stormwater Management Criteria for further information.	Agreed, thank you. Environmental impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged and their supporting guidelines/criteria be reviewed, as required.
Toronto and Region Conservation Authority (TRCA)	Please note that there are proposed roads that will cross several watercourses. As such, the MMTMP needs to indicate that the TRCA watercourse crossing guidelines will be used in the design of these watercourse crossings. Please refer to TRCA's Crossings Guideline for Valley and Stream Corridors for further information.	Agreed, thank you. Environmental impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged and their supporting guidelines/criteria be reviewed, as required.
Toronto and Region Conservation Authority (TRCA)	Natural environment resources are an important element of the Town and provides habitat, recreation, and economic viability. The project area includes an abundance of natural areas that provide habitat to a variety of wildlife. Please ensure habitat connectivity is considered and new opportunities are identified to preserve and enhance existing corridors and connections through the planning and design of new transportation infrastructure. These may include but are not limited to ecological passages and/or critter crossings through roadway design.	Agreed, thank you. Environmental impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged and their supporting guidelines/criteria be reviewed, as required.
Toronto and Region Conservation	The TRCA Trail Strategy (2019) outlines TRCA's plan to work with partners to complete, expand, manage, and celebrate a connected trail network in our regional greenspace system. It serves as a framework to protect potential trail alignments, and to guide the planning, development, and management of trails. The TRCA Trail	Noted, thank you.

Commenter	Comment	Project Team Response
Authority (TRCA)	Strategy (2019) is a high - level masterplan that serves as a reference for TRCA and municipal partners to identify conceptual opportunities to connect gaps in existing regional level trails. Conceptual alignments shown in the TRCA Trail Strategy (2019) are subject to factors including, but not limited to, feasibility, constructability, technical study, planning evaluation, permitting and approvals. For further information regarding the TRCA's Trail Strategy, please refer to Link.	
Toronto and Region Conservation Authority (TRCA)	Figure 2-8: "Existing Active Transportation Network" identifies and includes multi-use recreational paths in the existing Active Transportation Network. Based on the graphic, the trails are represented as existing; however, there are still sections of the Humber Trail that are either informal or not yet completed. Staff recommend reviewing the alignments shown to confirm what is existing and what is proposed as part of the Existing AT Network.	This figure has been updated in the final report. The assessment of the active transportation network was conducted as part of the Town's Active Transportation Master Plan. Mapping has been updated in this Transportation Master Plan to align.
Toronto and Region Conservation Authority (TRCA)	It appears that some of the multi-use recreational trails represented in Figure 2-8 follow the same conceptual alignments proposed in the TRCA Trail Strategy. These conceptual alignments are supported in principle, but are subject to further study to evaluate feasibility.	Agreed, thank you.
Toronto and Region Conservation Authority (TRCA)	TRCA staff note that all linear facilities are proposed to follow existing or future road alignments. For those facilities proposed to follow future roads, TRCA staff note that the watermain and sewer alignments are interdependent components of the future road alignments. It is the opinion of TRCA staff that the watermain and sewers should be assessed as part of the EAs for their associated future roads, with the schedule determined by the project component of greatest complexity (likely that of the road). It is the opinion of TRCA staff that this is both good planning in the best interests of Caledon as per many policy directions for coordinated land use and infrastructure planning and is the intention of the MCEA document. For example, the net effects analysis for these new roads would be incomplete without consideration of the impacts from the water and wastewater infrastructure that will be bound to the same alignment. In addition, the sewer or watermain design may face unforeseen and expensive mitigation challenges because while the alignment was ideal for the road, it may not have been ideal for the watermain or sewer. As	Agreed, thank you. Environmental and utility impacts will be assessed in greater detail as part of subsequent project-specific studies, at which point TRCA will be engaged, as required.

Commenter	Comment	Project Team Response
	such, TRCA staff recommend further consideration for the co - location of all infrastructure.	
Zelinka Priamo Ltd.	We note that that under Table ES-1 and throughout the Draft MMTMP, for George Bolton Parkway there is a Road Improvement Recommendation (2031) for “Extension (4 lanes)” from “West of Coleraine Drive” to “Humber Station Road”. Figure 5-6 Conceptual Collector Road Layout shows the existing 2 lane portion of George Bolton Parkway, west of Coleraine Drive adjacent to the BoltCol lands as a “Conceptual SABE Collector Road”. We request clarification that the intention is that the “Conceptual SABE Collector Road” is only for the new portion that would be extended west to Humber Station Road and that the existing 2 lane portion is intended to be 4 lanes;	The “Conceptual SABE Collector Road” refers to the new segment of the George Bolton Parkway (GBP) that would be extended west to Humber Station Road. The number of lanes for GBP (existing + extended) between Coleraine Drive and Humber Station Road will be confirmed through an EA.
Zelinka Priamo Ltd.	For Figure 4-2 Population Growth 2021-2051, we request clarification as to the Population Growth “3,000 – 6,000” indicated for a portion of the lands bounded by Healey Road, Coleraine Drive, Mayfield Road and Humber Station Road, which are within the Provincially Significant Employment Zone as shown on Figure 4-4 and are planned for employment uses (and not residential) as shown on Figure 4-1	The Town can confirm that the lands bounded by Healey Road, Coleraine Drive, Mayfield Road and Humber Station Road are planned for employment uses and not for residential uses.
Zelinka Priamo Ltd.	We note that there is a “Conceptual SABE Collector Road” that extends from Mayfield Road partly through the BoltCol Lands, connecting to the extension of George Bolton Parkway within lands to the west of the BoltCol Lands. We request clarification that the intention for this “Conceptual SABE Collector Road” is for a location west of the BoltCol Lands as an extension of the A2 Arterial in Brampton, in accordance with OPA 271 where there is no conceptual collector road within the BoltCol Lands	The preferred location of A2 extension determined as part of the Transportation Network Feasibility Study for Option 6 and Triangle lands, is through the lands west of Clarkway Tributary. The Town can confirm that the conceptual northerly extension of A2 arterial does not pass through the BoltCol Lands in accordance with OPA 271.
City of Brampton	Figure 5-2 (Truck Restrictions) shows a truck restriction on The Gore Road south of Mayfield in the City of Brampton. Clarification is requested whether this restriction was included intentionally or whether this is a mapping error and should be removed. No other City of Brampton restrictions are being shown on the Figure.	This is a mapping error and has been removed from the figure as the intent is to show truck restrictions on regional roads in Caledon.

Committer	Comment	Project Team Response
City of Brampton	In Section 5.5.2 Street Spacing and Intersection Density it states: “In the City of Brampton, the spacing between major east-west roads is approximately 800 metres with a collector road located approximately mid-way. The spacing between major northsouth roads is approximately one kilometre with a collector road located approximately midblock.” Could Town staff define what is meant by “major east-west roads”. Spacing between major arterials in the City of Brampton is closer to one kilometer or more unless the Town is considering collector roads such as Walness or Vodden to be major east-west corridors.	Your understanding is correct, and Walness or Vodden are examples of major east-west corridors. The text has been changed to “In the City of Brampton, the spacing between major arterial roads is closer to one kilometre or more with a collector road located approximately mid-way.”
City of Brampton	Under section 9.4.1 Road Classification Criteria, consider expanding to include the type of pedestrian infrastructure for each road typology.	Noted, thank you.

4.0 Indigenous Communities

Individual letters and notices were sent by email/mail to Indigenous communities throughout the study process. MECP has developed guidance on the steps to rights-based consultation with Indigenous communities. Indigenous communities with a potential interest in the project were identified through correspondence provided to the following communities:

- Haudenosaunee Confederacy,
- Huron-Wendat Nation,
- Mississaugas of the Credit First Nation,
- Métis Nation of Ontario, and
- Six Nations of the Grand River.

Following the Notice of Opportunity for Study Input email sent on June 3, 2022, follow-up phone calls were made with the Indigenous Communities. It was requested in the follow-up call that the community provide their comments, if any, by June 17, 2022. The responses are summarized below:

- Haudenosaunee Confederacy (June 9, 2022): On June 9, 2022, HDI requested via email for funding for the review of the MMTMP. HDI had been engaged at all mandatory stages of the MCEA process. The Town will address funding for review by HDI when specific projects come forward for final approval and implementation,
- Huron-Wendat Nation (June 8, 2022): no response; Burnside left a voice message,
- Mississaugas of the Credit First Nation (June 9, 2022): On June 3, 2022, it was requested via email that a copy of the EA be provided for review and that the Mississaugas of the Credit First Nation be involved in Archaeological Studies if any are being done. On June 8, 2022, Burnside responded via email that the MMTMP does not include an Archaeological Assessment, as it would be a separate study but this will be included as a commitment in the MMTMP document.
- Métis Nation of Ontario: On March 23, 2021, the MNO noted via a call that if the proponent does not receive response from MNO staff within two weeks, MNO has no further comments, and
- Six Nations of the Grand River (June 8, 2022): no response; Burnside left a voice message.

Attachment 3 provides documentation of communications with identified Indigenous communities.

5.0 Emerging Technology Survey

A survey was sent to a variety of jurisdictions regarding emerging mobility technologies. These questions were divided into three sections which included:

- Section I: Emerging Technology Policies, Regulation, and Readiness,
- Section II: Agency Programs and Technology Inventory, and

- Section III: Agency Perception on AV or Connected Vehicle Technology and Working from Home.

A summary of the responses is provided below sorted by the question and frequency of each response. Some long-form responses were slightly altered for clarity and reporting purposes such as expanding on acronyms.

5.1 Emerging Technology Policies, Regulation, and Readiness

Please describe the degree to which the following statements apply.

	None	Somewhat	A lot
MaaS or AV Policy Development has been discussed with agency staff.	1	4	1
MaaS or AV Policy Development has been discussed with elected officials.	3	3	0
It is clear which department is responsible for MaaS or AVs, Connected Vehicles.	2	1	3
My Agency treats MaaS or AVs, Connected Vehicles as a mechanism to make broad policy changes beyond transportation.	4	1	1
My Agency has included MaaS, AV/Connected Vehicles as a topic in past transportation studies for further exploration.	2	2	2
My Agency has a clear plan for MaaS or AVs.	4	1	1

Does your Agency allow ride-sharing services such as Uber and Lyft?

	Unsure	Yes, with regulation.	Yes, without regulation.
Responses	1	4	1

Can you describe any ride-share or AV/Connected Vehicle regulations that are currently in place at your Agency?

Jurisdiction	Description of Regulations
City of Toronto	Private Transportation Company and Vehicle-for-Hire Bylaw
City of Peterborough	Peterborough Police Services Board regulates Licensed Transportation Network Company Firms (TNCs) - ride share and taxi vehicles

Which department is responsible for the planning and implementation of MaaS or AVs/Connected vehicles?

Jurisdiction	Department
--------------	------------

City of Brantford	Public Works/ Engineering Department
Regional Municipality of York	Planning Department Public Works/ Engineering Department
Town of Whitby	Public Works/ Engineering Department; Public Works, Transportation
City of Toronto	Public Works/ Engineering Department
Town of Halton Hills	There are no clear departments with this responsibility.
City of Peterborough	Transportation Department has responsibility for planning, Police regulate ride sharing services

What emerging technology partnerships are your Agency involved with (ex. Municipal Alliance for Connected and Autonomous Vehicles in Ontario)

The responses include:

- Municipal Alliance of Connected and Automated Vehicles Organization from the Ontario Goods Roads Association
- iCity Centre for Automated and Transformative Transportation Systems from the University of Toronto
- Autonomous Vehicle Innovation Network (AVIN)
- ITE Readiness Group
- Organizations through Transportation Association of Canada (TAC) and Intelligent Transportation Systems (ITS) Canada

5.2 Agency Programs and Technology Inventory

What Intelligent Transportation Systems (ITS) or Emergency Technologies does your Agency currently implement or plan to implement?

	No Planned Implementation	Current Implementation	Planned Implementation
Dynamic Messaging Signs	3	2	0
Bike Share Programs	3	2	0
Bluetooth or GPS Traffic Data Collection Programs	0	3	2
Open Data Portal	3	2	0
Smart Parking	4	1	0
Smart Signals	0	1	4
Transit Signal Priority	2	2	1
Truck Priority at Intersections	4	0	1
On-demand Transit	2	1	2
Electric Vehicle Charging Stations	0	4	2

Please elaborate on any emerging technology or Intelligent Transportation Systems programs.

The responses include:

- AVIN shuttle bus deployment
- Automated trail and bike count stations
- Electric vehicle charging stations at various locations
- ITS program for Transit System using CAD/AVL system for real time bus arrivals being implemented
- On Demand Transit pilot being implemented in Winter 2021
- Smart Signal System (Adaptive Traffic Signal Control System) pilot is underway
- 2 EV charging stations installed at City Parking Garage (in addition to other private installations)
- Miovision camera technology at signalized intersections being used for detection and data collection

Describe, if any, current or planned on-demand transit plans that your Agency is responsible for.

The responses include:

- Unsure - would be led by TTC. I am not aware of any current plans.
- YRT launched Mobility on Request transit service in York Region in 2019 and has expanded the program's service area each year since
- Starting pilot of On-demand transit in winter 2021 to supplement fixed route transit system

Has your Agency considered parking zoning by-law amendments requiring EV charging stations for new developments?

	Yes	No
Responses	3	1

Other responses included:

- May be considered in update to zoning by-law pending recommendations from ongoing Transportation Master Plan
- Zoning by-laws are the jurisdiction of the local municipalities and not regional government

Does your Agency plan to convert its fleet to electric vehicles in the future?

	Yes	No
Responses	5	0

Another response included:

- An Alternative Fuels study is being initiated this fall to assess the costs and implications of converting the transit fleet to zero emission vehicles

5.3 Agency Perception on AV or Connected Vehicle Technology and Working from Home

What concerns may your Agency staff or Elected Officials have on AV or Connected Vehicle technology?

Responses	Frequency of Responses
Privacy and security concerns	4
Litigation concerns	2
Loss of job concerns	2
Consumer adoption	5
Increased reliance on the automobile	4
None of the above	4

Other responses included:

- Safety if vehicles are not operated or designed properly
- Traffic impacts if adoption by single occupant drivers is frequent as opposed to transit or ride-sharing purposes
- Increased GHG emissions if AVs are not electric or sustainably fueled
- Parking and curb lease models in a shared fleet model
- Road safety and security
- Undermining of traditional transit ridership and revenues

What benefits have been discussed within your Agency staff or from Elected Officials with the adoption of AV or Connected Vehicle technology?

Responses	Frequency of Responses
Social equity	4
Environmental sustainability	2
Road safety	2
Integrated mobility	5
Transportation system efficiency	4
None of the above	4

Other responses included:

- Economic development

The COVID-19 pandemic has temporarily shifted the majority of work to a working-from-home (WFH) structure. After the pandemic, will your Agency allow flexibility in working-from-home?

Responses	Frequency of Responses
-----------	------------------------

No working-from-home	0
Hybrid office structure (some in-office, some WFH)	4
WFH with no limitations	0

Other responses included:

- To be determined, most likely hybrid
- It is expected that some flexibility will be provided in the longer term, but no policy decisions have been made yet

Attachment 1

Notice of Study Commencement

Public Information Centre (PIC) Advertisements

Public Information Centre (PIC) Comment / Response Summaries

PUBLIC NOTICE

NOTICE OF COMMENCEMENT AND PUBLIC INFORMATION CENTRE # 1

Multi-Modal Transportation Master Plan

The Town of Caledon has initiated a Multi-Modal Transportation Master Plan (MMTMP) for the municipality. Consistent with the Phases 1 and 2 of the Municipal Class Environmental Assessment process, the first Public Information Centre is being held to inform the public about the steps involved in this work and to gather feedback on the alternative solutions being considered.

We want to hear from you! You are invited to attend a Public Information Centre on Wednesday March 24, 2021 and provide your input. The key component of the MMTMP is to set out a long-term transportation vision for the Town to address mobility needs to 2051+ and beyond. The plan recommendations will also feed into Town's Official Plan.

Your attendance at this meeting is important to help the study team identify transportation related opportunities, challenges and improvements to develop and evaluate transportation solutions for the municipality.

Due to continuing efforts to contain the spread of COVID-19 and to protect individuals, the public information centre will be held virtually.

DATE: MARCH 24, 2021

TIME: 4 – 6 P.M.

The Public Information Centre will provide a brief presentation followed by a question and answer session. All interested parties are invited to attend the public meeting and provide their input to the study team.

To listen to the Meeting, you may call 1-833-311-4101, Meeting Access Code: 132 551 5606. You can also participate in the meeting live from the Town's website. Details are available at caledon.ca/notices

If you are unable to attend the meeting, all consultation materials will be uploaded onto the study webpage. This can be accessed from caledon.ca/notices. Should you wish to submit additional questions or comments to the study team, please contact one of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Project and notice information will be made accessible upon request in accordance with the Accessibility Standard for Information and communication under the *Accessibility for Ontarians with Disabilities Act, 2005*.

Please note information will be collected in accordance with the *Freedom of Information and Protection of Privacy Act*. With the exception of personal information, all comments will become part of the public record.

This Notice First Issued on March 04, 2021



6311 Old Church Road
Caledon, ON L7C 1J6
www.caledon.ca
T. 905.584.2272 | 1.888.225.3366 | F. 905.584.4325

PUBLIC NOTICE



NOTICE OF PUBLIC INFORMATION CENTRE #2

Multi-Modal Transportation Master Plan

The Town of Caledon (Town) is undertaking a study to develop a Multi-Modal Transportation Master Plan (MMTMP) for Caledon. The MMTMP will expand upon the 2017 Transportation Master Plan (TMP), the Province and the Region's plans and initiatives to address mobility needs to 2051, which is consistent with the new Official Plan planning horizon (currently under development).

The MMTMP is a long-term strategy that guides the planning, policies, and infrastructure needs of the Town's multi-modal transportation system to accommodate future growth and development.

The Study will inform the process of creating a transportation system that meets the varying needs for different residential areas and businesses through creation of a vision and goals for all modes of travel. The aim of the MMTMP will be to ensure that by 2051, the Town will manage future transportation demand with a well-connected, convenient, reliable, safe, and accessible network and provides a diversity of travel choices that supports livable communities and complete streets. The Study will identify active transportation system constraints and opportunities. It will define required infrastructure to ensure the continued safe and efficient movement of people and goods to year 2051 and will form the basis to guide future transportation decisions for the development of streets, trails/paths and transit service to fully align with the Town's vision and goals.

PROCESS

The Study is being carried out in accordance the requirements of Phases 1 and 2 of the *Municipal Class Environmental Assessment* (October 2000, as amended in 2007 and 2011), which is approved under the *Ontario Environmental Assessment Act*. The MMTMP Study will consider and evaluate solutions to determine an efficient, environmentally, and economically sustainable, and efficient transportation network.

PUBLIC CONSULTATION

We want to hear from you, as your involvement is key to the success of the MMTMP. If you have interests or concerns related to transportation in the Town, we encourage you to become involved.

An on-line Public Information Centre (PIC) will be hosted on the Town's website to gather input from the public. The on-line PIC will be held on **May 12, 2022 at 6:00 PM**. If you wish to participate in the on-line PIC, please visit <https://haveyoursaycaledon.ca/mmtmp>. The meeting link will be posted prior to the meeting.

A copy of all presentation and engagement materials from this PIC will be made available on the study website after the PIC event. The Town encourages the public to visit the study website to provide feedback on the PIC by **May 27, 2022** by email to the project team.

If you or someone you know has issues accessing the presentation and engagement material or if you would like to be added to the Project Contact List, please contact either of the following Project Team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon
6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
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Project and notice information will be made accessible upon request in accordance with the Accessibility Standard for Information and Communication under the Accessibility for Ontarians with Disabilities Act, 2005. Information will be collected in accordance with the Municipal Freedom of Information and Protection of Privacy Act. With the exception of personal information all comments will become part of the public record.
This Notice First Issued on April 28, 2022.



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Size: 1/4 Vertical

Color: Yes

Date: April 28, 2022

Distribution: Caledon Citizen

Department: Transportation

Account# 02-09-500-22138-000-69001

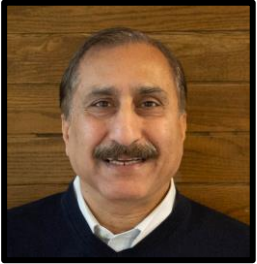
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Caledon Multi-Modal Transportation Master Plan

Public Information Centre #1

March 24, 2021

Project Management Team



Kant Chawla, M.Plg., MCIP, RPP

Town Project Manager

Senior Planner, Transportation

Town of Caledon Policy & Sustainability Division



Ray Bacquie, P.Eng., MBA

Consultant Project Manager

Sr. V.P., Transportation Planning and Engineering,

R.J. Burnside & Associates



Jennifer Vandermeer, P.Eng.

Consultant Environmental and Consultation Lead

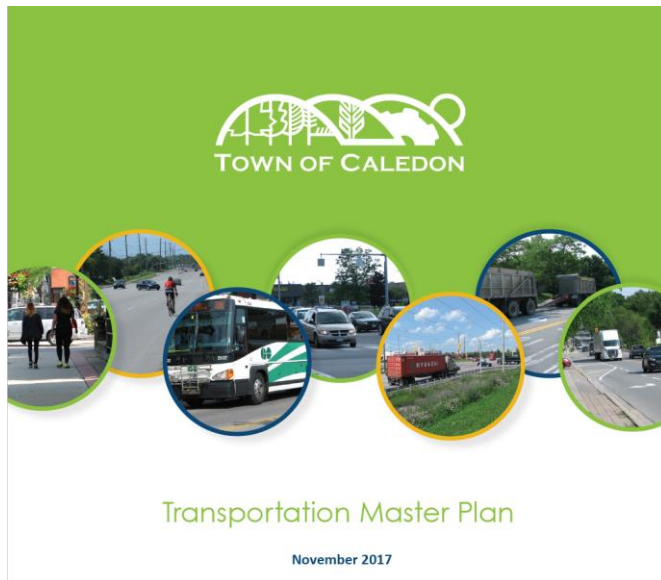
Senior Environmental Coordinator

R.J. Burnside & Associates

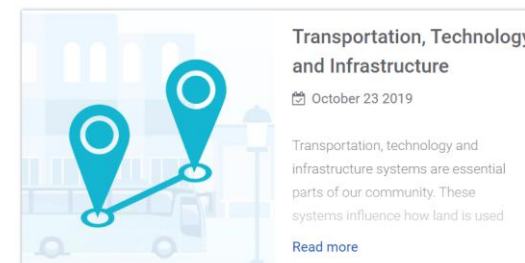
Study Objectives

To plan for future growth, the Town of Caledon will need to:

- Update the last Transportation Master Plan to identify needs and solutions to the year 2041 or 2051
- Plan for the Peel Region Settlement Area Boundary Expansion (SABE) strategies
- Integrate a Caledon Transit Strategy with planned growth
- Identify any systemic changes needed for the expected unprecedented growth for the Town
- Provide policy and infrastructure input to the Town Official Plan Update



The Official Plan Review



Study Guiding Documents

Documents guiding this study include:

- Provincial Studies
 - Development and environmental policies
 - Metrolinx Regional Plan identifies region-wide initiatives
 - GTA-West Corridor EA defines a future transportation spine
- Region of Peel
 - Settlement Area Boundary Expansion studies and forecasts
 - Policy for roadway design and goods hubs and corridors
 - The LRTP identifies modal targets and infrastructure
- Town of Caledon
 - 2017 Caledon TMP, Bolton TMP and Mayfield West Studies
 - Official Plan background studies
 - Caledon Transit Feasibility Study

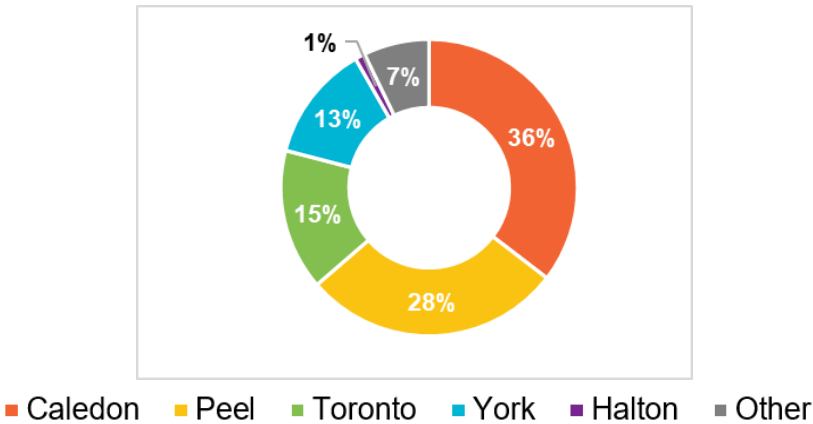


Background Considerations

Current travel characteristics include:

- Trip Generation
 - Approximately 30,000 outbound peak period trips
 - 47% of trips are to/from Bolton
- Trip Patterns (Origin-Destination)
 - 36% of Caledon trips are internal
 - External trips are oriented to the south and east
- Modal Split
 - Most travel is from auto-based trips
 - Mode share has remained constant

Trip Destinations from Caledon



Trip Mode to/from Caledon AM Period

Mode	AM Peak Period			
	Outbound		Inbound	
	Trips	%	Trips	%
Automobile	27,140	94%	19,999	93%
Local Transit	390	1%	284	1%
GO Rail / Joint GO Rail	269	1%	0	0%
Walk	1,078	4%	1,107	5%
Cycle	11	0%	0	0%
Other	0	0%	35	0%
Total	28,888	100%	21,425	100%

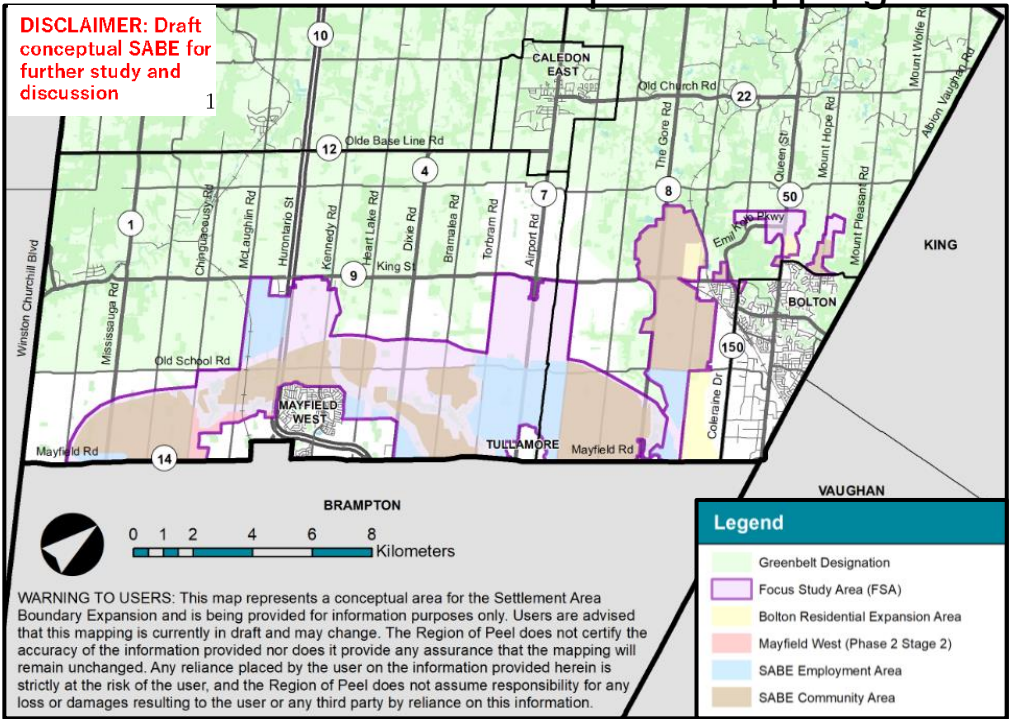
Source: Transportation Tomorrow Survey

Background Considerations

Land use considerations include:

- Population / Employment Forecasts
 - Population/employment to double by 2041
 - Growth to 2051 to be determined
- Settlement Area Boundary Expansion (SABE)
 - Provincial policy: expand outside Greenbelt
 - SABE concept presented to Peel Council

SABE: Draft Conceptual Mapping



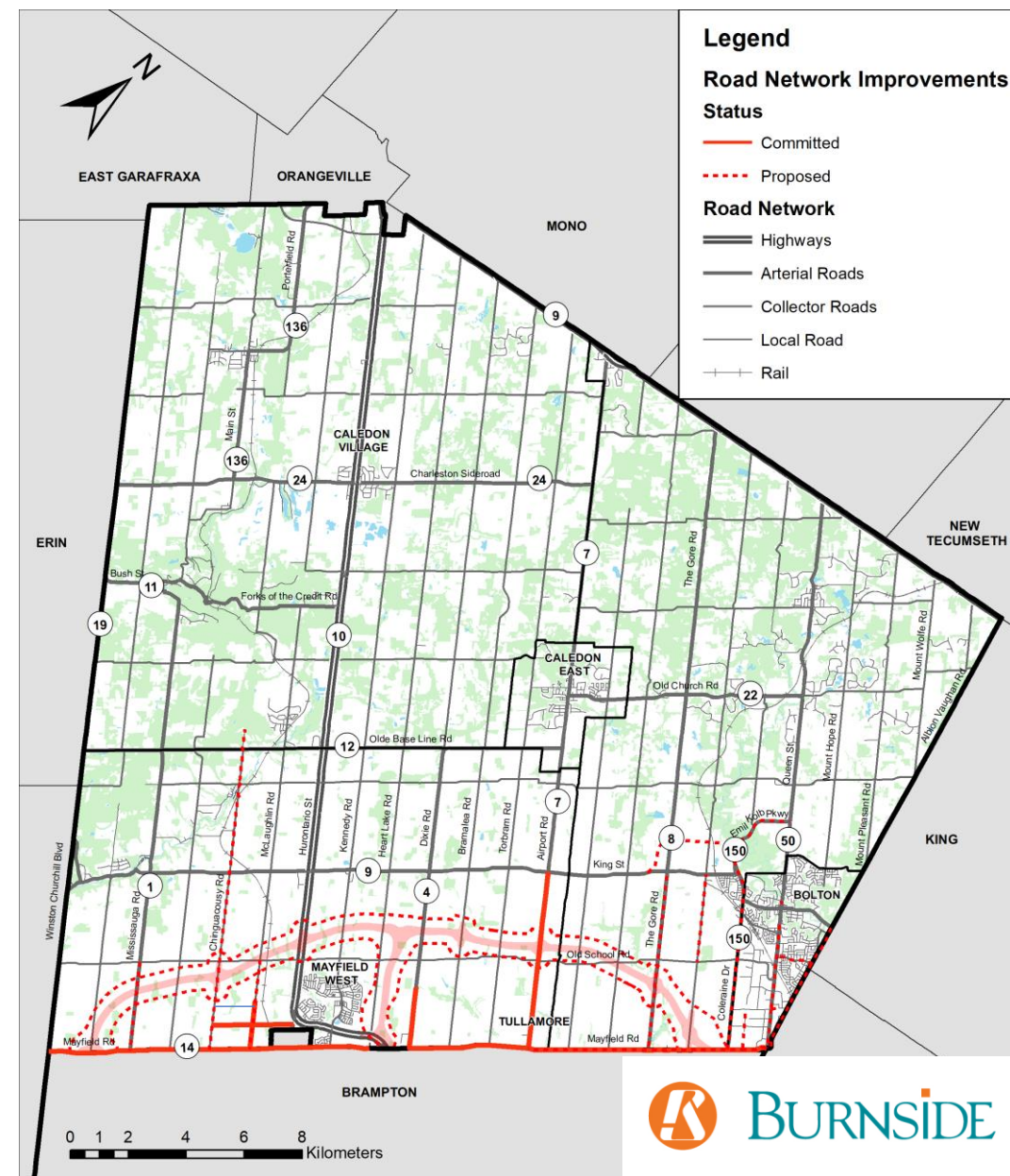
Source: Peel Council Agenda December 10, 2020

	2021 (Peel 2020 Estimate)		2031 Peel Mid Year Forecasts		2041 Peel Council Endorsed		2051 <i>Proposed Draft Allocation</i>	
Municipality	Population	Employment	Population	Employment	Population	Employment	Population	Employment
Peel Region	1,490,000	820,000	1,640,000	870,000	1,970,000	970,000	2,280,000	1,070,000
Town of Caledon	81,000	26,700	108,000	46,000	160,000	80,000	300,000	125,000

Transportation Analysis

Planned and Proposed Road Improvements:

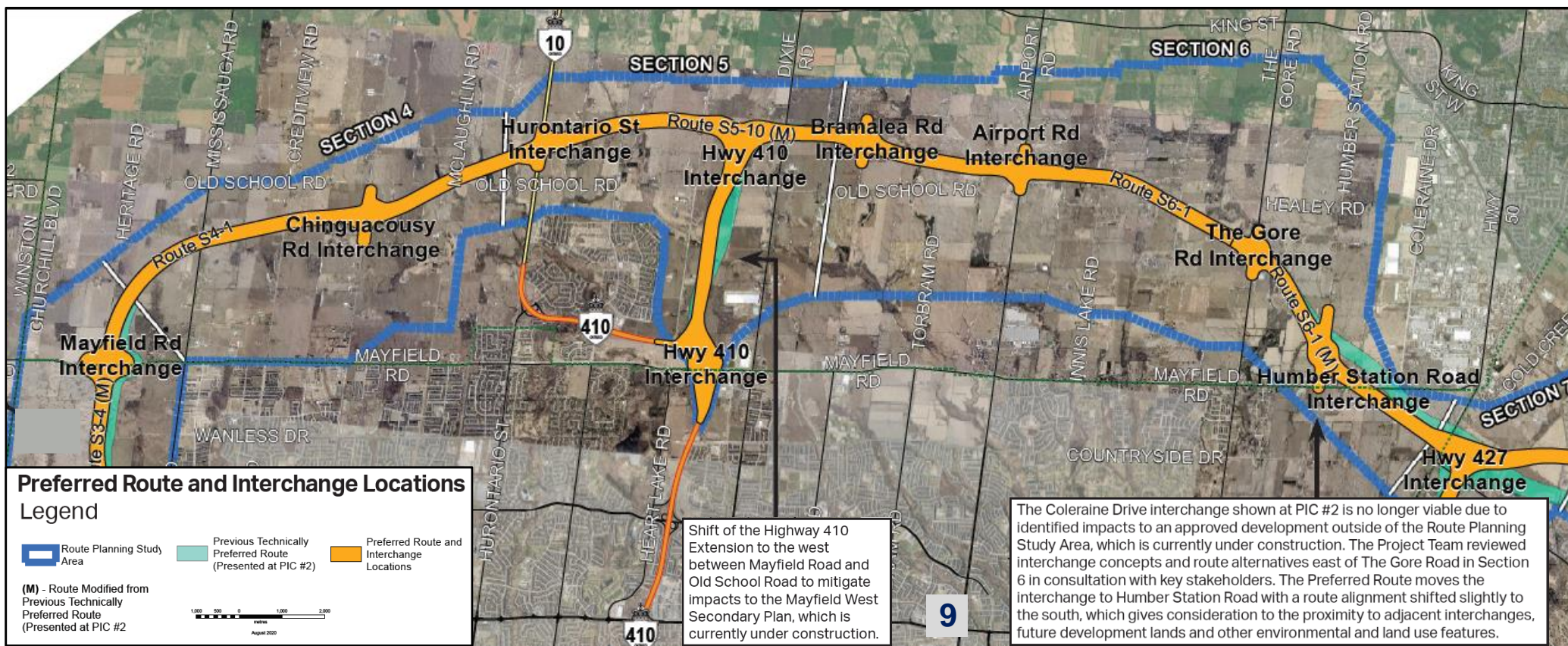
- Programmed road improvements to 2031
 - Mayfield Road Widening
 - Airport Road Widening (to King Street)
 - McLaughlin Road Widening
 - New A2 Arterial (West of Coleraine Drive)
 - Tim Manley Boulevard / Spine Road (Mayfield West)
- Additional proposed / planned road improvements
 - GTA-West Transportation Corridor
 - Highway 427 extension to Major Mackenzie Drive
 - Chinguacousy Road Widening
 - The Gore Road Widening
 - Bolton Area road improvements



Transportation Analysis

GTA West Corridor:

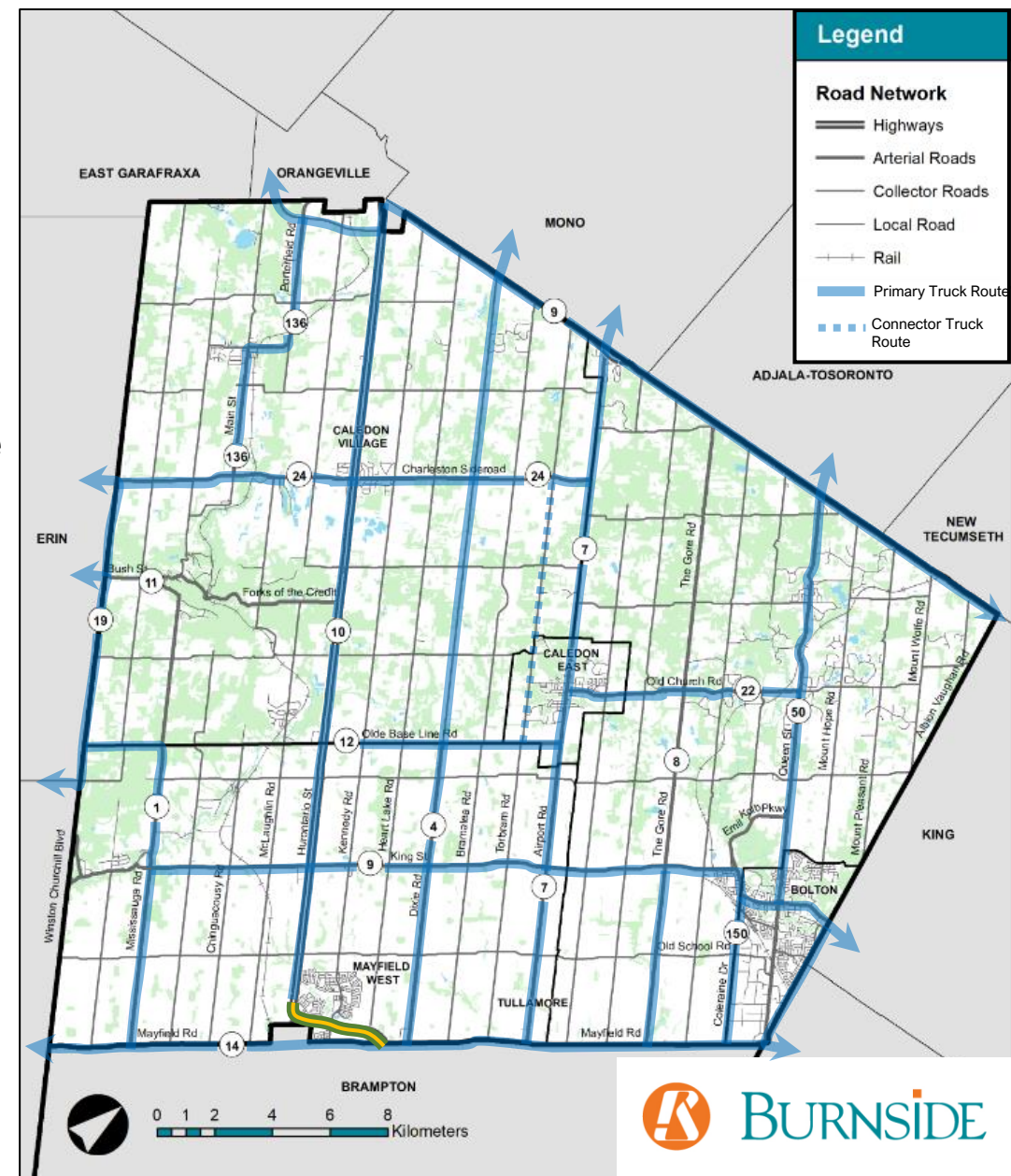
- The Province has Confirmed the Preferred Route for the GTA West Multimodal Transportation Corridor
- It will include a four-to-six lane 400-series highway and separate infrastructure dedicated for transit



Transportation Analysis

Road and Goods Movement Network:

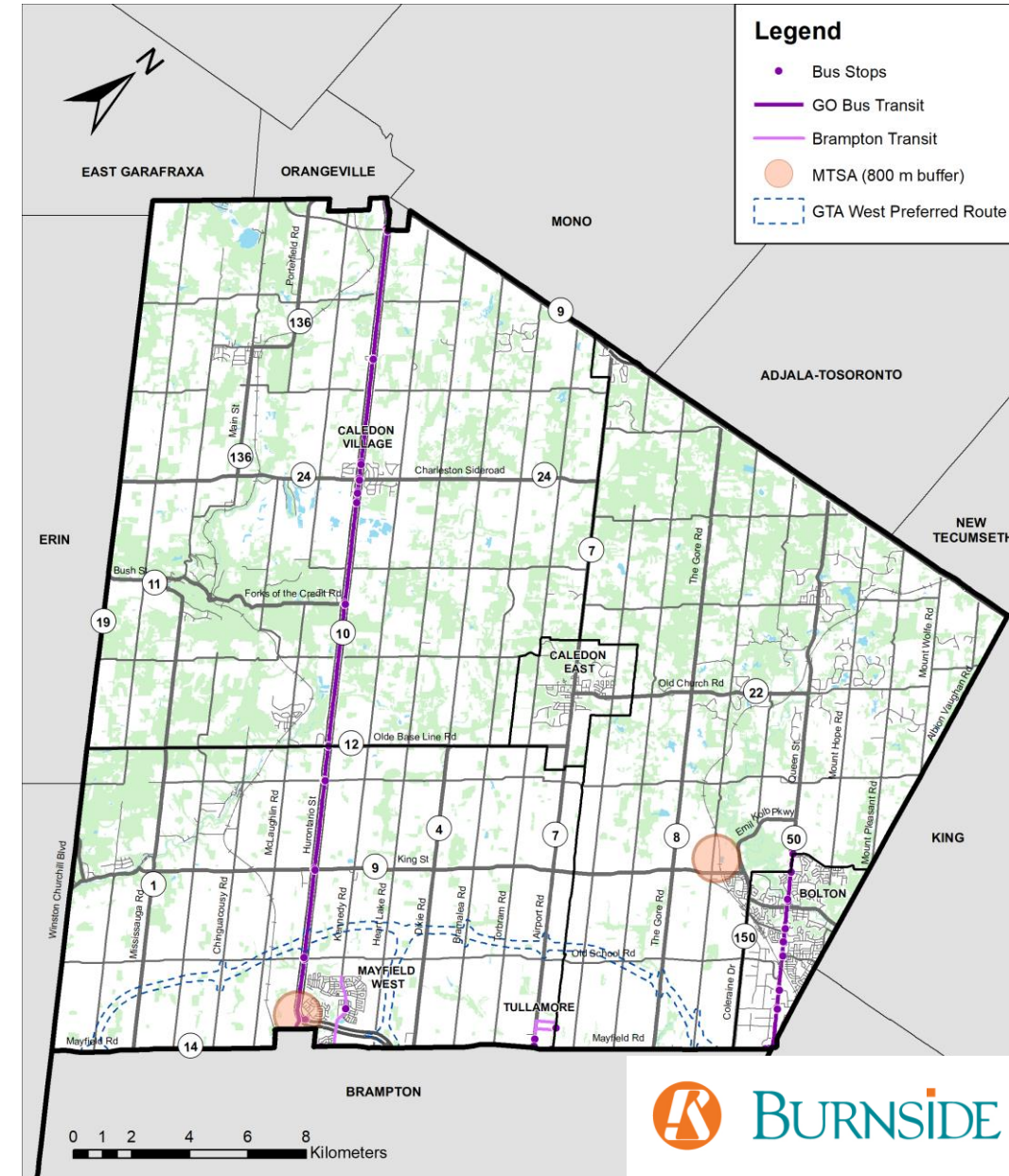
- Roads Connections of Freight Transportation
 - Goods moved in Peel include: mixed freight, electronics, automobile parts, pharmaceuticals and machinery
 - Provincial Highways and arterial roads are the backbone of Peel's freight transportation system
 - Multiple north-south goods movement corridors exist
 - GTA West Corridor will represent a key goods movement connection through south Caledon
- Rail Connections of Freight Transportation
 - Intermodal containers are transferred from rail cars to trucks, or vice versa at rail intermodal terminals,
 - Intermodal terminals:
 - CN in Brampton 10 km south of Caledon
 - CP in Vaughan 5 km southeast of Caledon



Transportation Analysis

Transit Service and Future Opportunities:

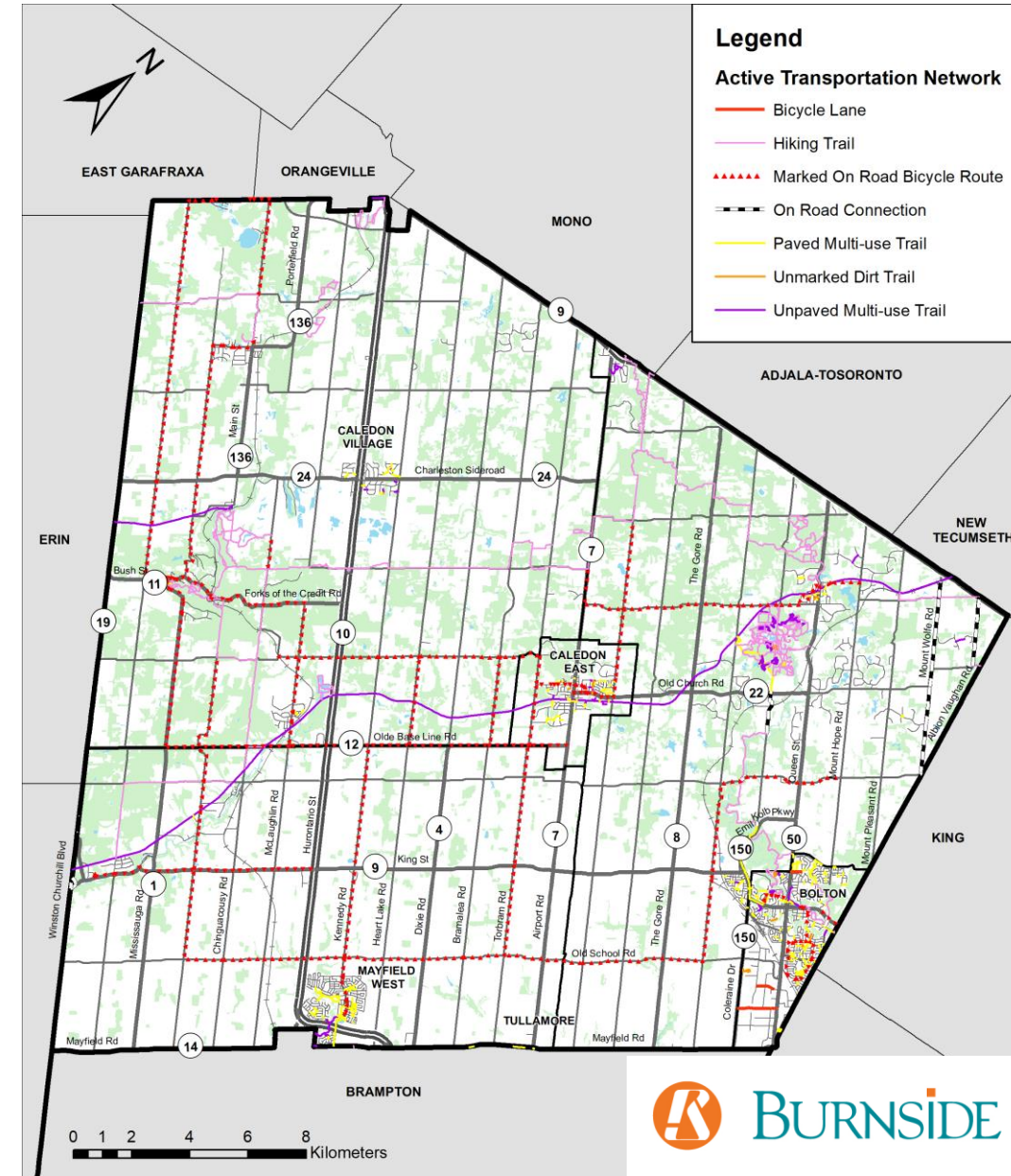
- Current Schedule transit service routes
 - Mayfield West (#81), Tullamore (#30): Brampton Transit
 - Bolton Settlement Area: Voyago Transit
 - Highway 50 and Highway 10: GO Transit Bus Service
- Current On-Demand transit service
 - Peel TransHelp
 - Caledon Community Services Transportation
 - Taxi and Ride-hail (e.g. Uber)
- Additional proposed / planned transit
 - Major Transit Station Areas (MTSA)
 - Bolton GO Rail Station
 - Potential future Town of Caledon Transit Service



Transportation Analysis

Active Transportation Facilities and Plans:

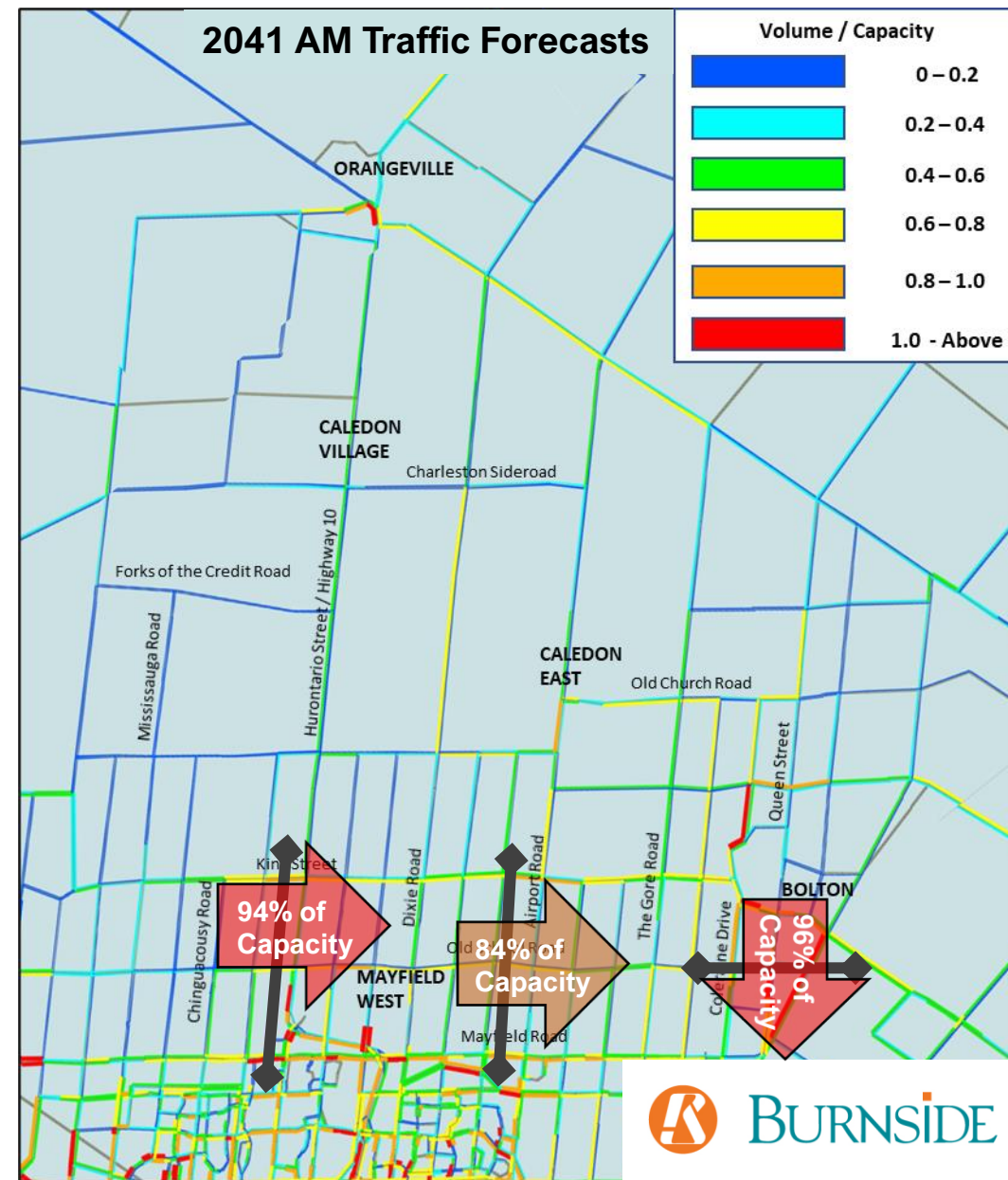
- Existing active transportation facilities:
 - In community sidewalks, trails and multi-use paths
 - Inter-community trails and signed bike routes
- Planned and proposed active transportation facilities:
 - Active transportation connections in new communities
 - New signed walking routes and regional facilities
 - New separated on-road cycling routes
 - New shared on-road cycling routes
 - New Regional on-road cycling routes
 - Scenic cycling routes



Transportation Needs

Future Traffic Capacity Needs:

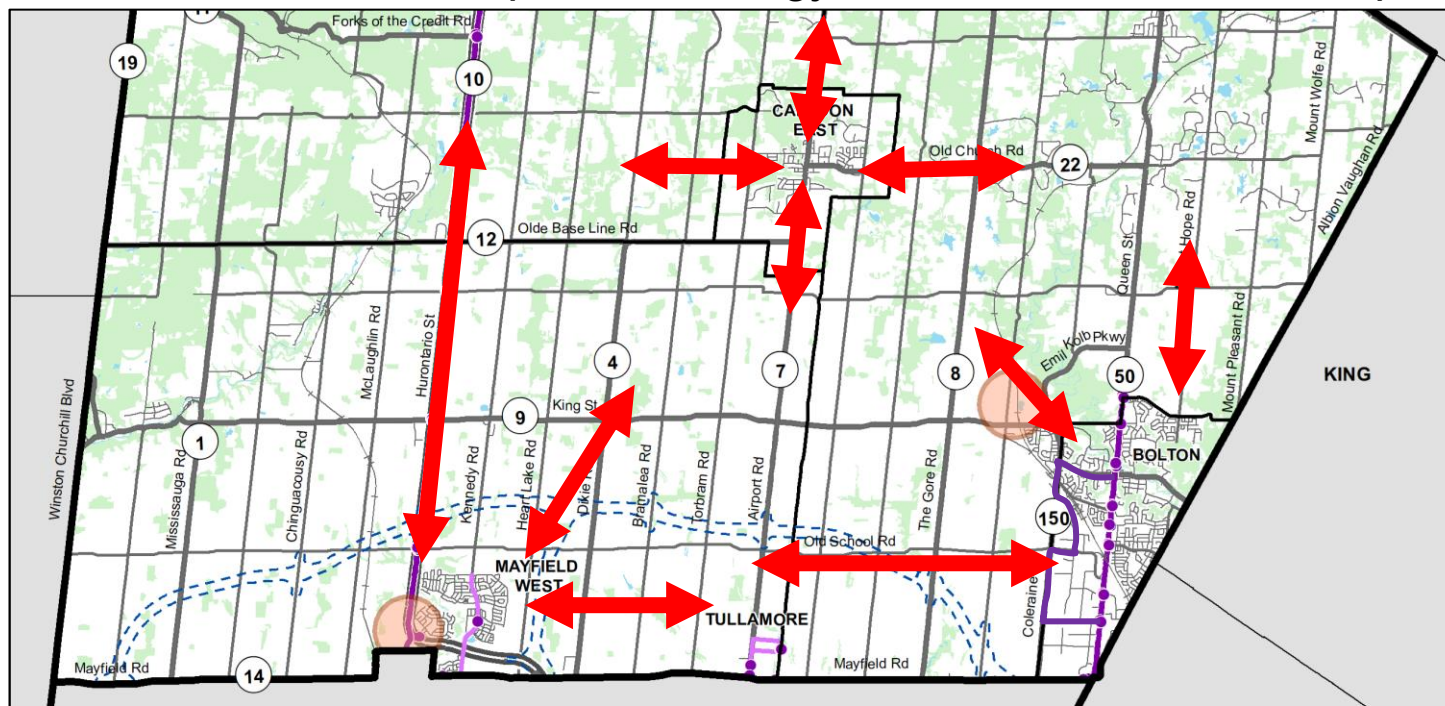
- 2041 Forecasts with Planned Road Improvements:
 - Need for significant additional east-west capacity
 - Need for north-south capacity through Bolton
 - Demand will reach capacity:
 - Albion Vaughan Road
 - Highway 50 in Bolton
 - Sections of Mayfield Road
 - Need for east-west goods movement options
- 2051 Traffic Growth:
 - The Peel SABE will allow for new communities across south Caledon south of the GTA-West
 - SABE will add 60,000 outbound peak period trips
 - These new neighbourhoods are expected to add east-west and internal vehicle trips



Transportation Needs

Future Transit Mobility Needs:

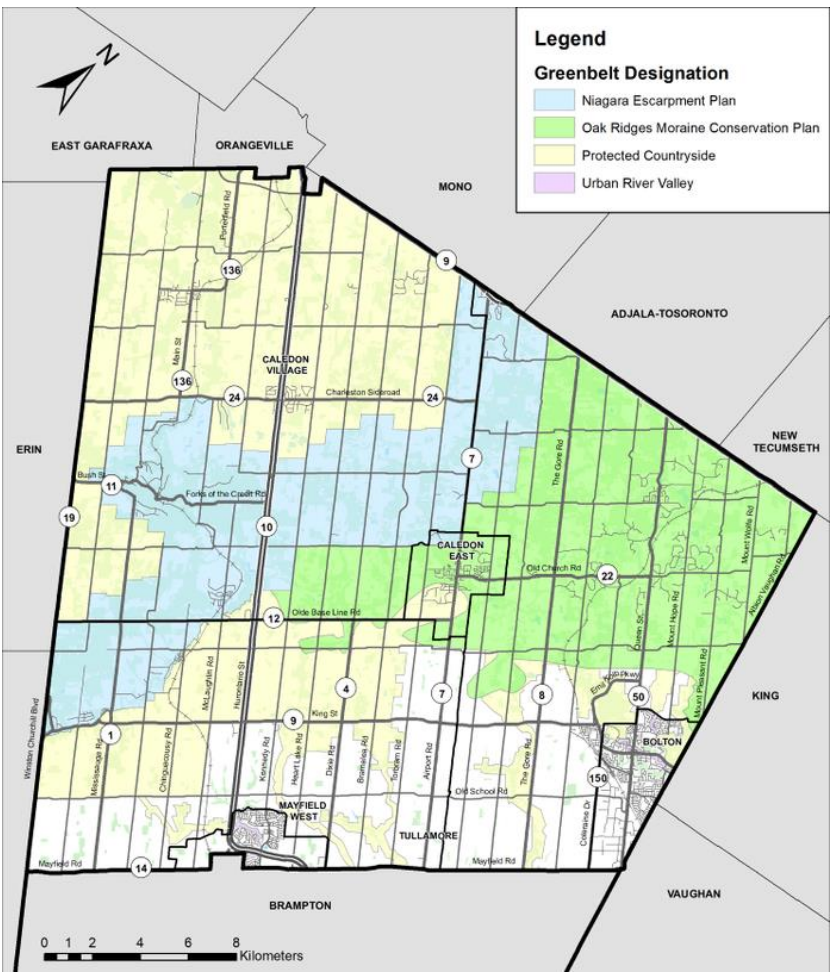
- The following transit needs have been identified:
 - 59% of Caledon residents are more than 800 m from scheduled transit service
 - There is no current transit service for the lands of future communities within the SABLE area
 - CCS and TransHelp capacity will need to increase meet growth in population and service demand
 - The Town Economic Development Strategy identified the need for improved transit



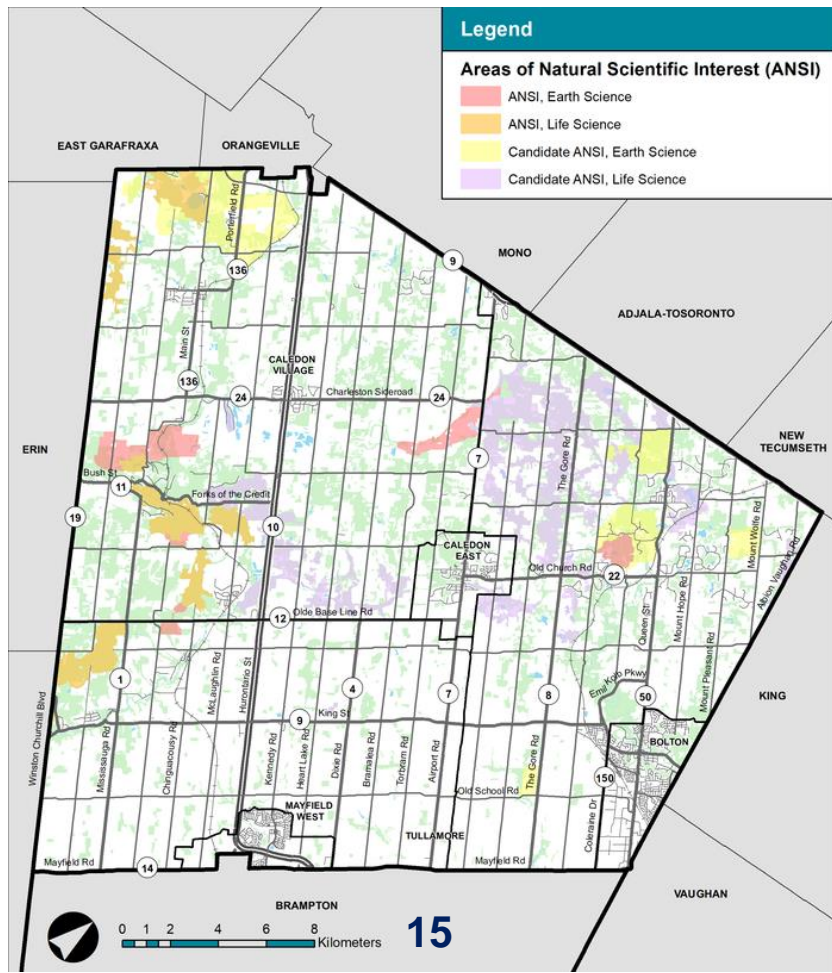
Implications of Environmental Features

Natural heritage features will be protected as assets and assessed as travel barriers:

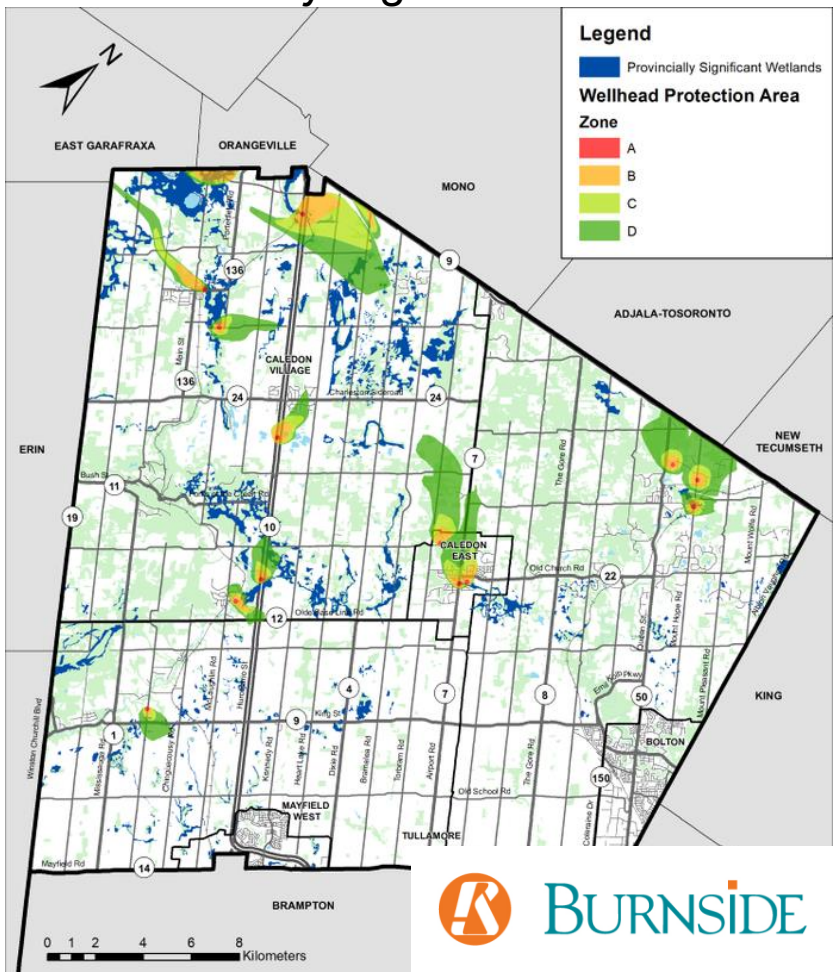
Conservation Plans



Areas of Natural Scientific Interest



Provincially Significant Wetlands



Implications of Cultural Features

The evaluation of alternatives strategies will value the Town's cultural heritage features, which include:

- 298 designated properties
- 968 listed properties
- 1 Heritage Conservation District
- 10 Cultural Heritage Landscapes

The Town is undertaking an Archaeological Management Plan (AMP), which will model and map prehistoric and historic archaeological potential across the Town. The findings of the AMP will be used to guide the evaluation of alternative strategies.



Bolton's Historical Core, Queen Street Bridge



Farmsteads of Former Chinguacousy Township, 1488 Old School Road, 'Sharpe Schoolhouse

Multi-Modal Transportation Vision

To support growth and address transportation needs in a sustainable manner, the Town of Caledon Vision for a future transportation system will strive to achieve:

- Mobility for All: Transit is a viable and convenient option for all, and the frequency and proximity of service is sufficient to achieve future mode share targets.
- Managed Growth: A balanced transportation system will be developed to support Town economic development objectives and implemented to meet the needs of the ambitious Regional growth plans.
- Environmental Resilience: Transportation solutions have regard for the natural heritage assets of Caledon and alternatives to auto driver mode will effectively reduce climate impacts.
- Financial Sustainability: The capital costs for transportation improvements are planned concurrent with development and ongoing operating costs can be adequately funded.
- Future Ready: The transportation strategy will be ready for new technologies and trends

Preliminary Assessment of Needs and Opportunities:

Analysis of road capacity, traffic safety and operations, transit mobility and active transportation accessibility identified the following needs / opportunities:



TRAFFIC CAPACITY

- Need for the capacity of the GTA-West or another major east-west Corridor
- Widening north-south roads in Bolton
- Expansion area collector road system
- Need for east-west goods movement



OPERATIONS & SAFETY

- Address misaligned intersections
- Traffic calming for villages and hamlets
- Access strategy for new developments
- Road / Rail crossing treatments
- Parking strategies on town roads



TRANSIT & MOBILITY

- Town-wide system of scheduled routes
- GO Rail Station / Mayfield West MTSA
- Transit Oriented Development
- Increased on-demand transit capacity
- Ride-hail and new technology policies



ACTIVE TRANSPORTATION

- Expansion area cycling connectivity
- Expansion area pedestrian policies
- Complete street guidelines and related road right-of-way designations

Development of Alternative Strategies

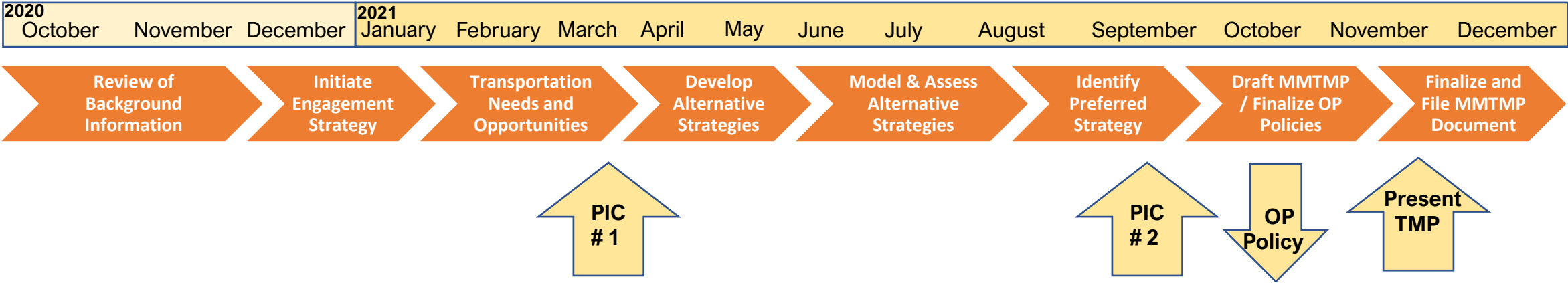
Strategies will be developed to support growth and address needs. Alternatives will have different emphasis of mode of travel and financial investment:

- Alternative 0: “Do Nothing”
- Alternative 1: Roads and Highway Focused Strategy
- Alternative 2: Transit and Travel Demand Management Focused Strategy
- Alternative 3: Balance of Roads and Alternative Modes Strategy

Study Next Steps

Confirm, develop and evaluation alternative strategies:

- Summarize stakeholder input from Public Information Centre (PIC) #1
- Develop alternative strategies with specific improvement projects
- Preliminary evaluation and costing of alternative strategies and related projects
- PIC #2 to receive public input on the preliminary preferred recommended strategy
- Council / Committee Presentation(s)



How can you get involved?

This study follows the Class EA Process; stakeholder input is an integral part:

- Public Information Centre (PIC) #1 (Today) – comments today or following the meeting
- Fill out stakeholder surveys on-line (Spring/Summer)
- Public Information Centre (PIC) #2 (September) – comments at or following the PIC
- Monitor Study Progress - <https://future.caledon.ca/multi-modal-transportation-master-plan>
Comments to the team throughout the course of the study

Kant Chawla, Senior Policy Planner
905.584.2272 x. 4293
kant.chawla@caledon.ca

Ray Bacquie, Consultant Project Manager
905.821.5891
CaledonMMTMP@rjburnside.com

Multi-Modal Transportation Master Plan Public Information Centre Meeting #2

Presentation by:

Arash Olia, Manager, Transportation Engineering

Ray Bacquie, Senior Vice-President, R.J. Burnside & Associates Ltd.



**May 12, 2022
6:00 PM – 7:30 PM**



Project Team

Town of Caledon

Arash Olia, Ph.D., P.Eng.

Manager, Transportation Engineering
Engineering Services Department
Town of Caledon

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Overview

- Study Approach and Consultation
- Study Purpose, Vision, and Objectives
- Summary of Phase 1
- Alternative Strategies and Evaluation
- Summary of Recommended TMP Strategy
- Next Steps and Input

Study Approach and Consultation

Phase 1
Problem Or
Opportunity

- Identify Natural, Social and Cultural Heritage Assets
- Assess Existing and Future Needs and Opportunities
 - Road, transit, active transportation and safety needs
 - Future needs and opportunities

Public Information Centre # 1

Phase 2
Alternative
Solutions

- Identify and Analyze Alternative Solutions (Strategies)
- Evaluation and Selection of Preferred Alternative
- Preferred Transportation System Solution (Strategy)

Public Information Centre # 2

**We are
Here**

- Document Transportation Master Plan Report

Future Phases
Not within this
study

- **Phase 3:** Alternative Design Concepts for Preferred Solution
- **Phase 4:** Schedule C Environmental Study Report
- **Phase 5:** Implementation

Continuous Collaboration

The Transportation Master Plan is being carried out in accordance with the Municipal Class Environmental Assessment (MCEA) process.

Purpose and Vision

- The Town of Caledon is experiencing steady growth with increasing demands on the transportation system.
- **Purpose:** The MMMTP is a long-term strategy that guides the planning, policies, and infrastructure needs of the Town’s multi-modal transportation system **to accommodate future growth and development.**
- **Vision:** By 2051, the Town will have a transportation system that provides **accessible, affordable, safe, and sustainable** travel choices for all, and is well-integrated, effective to use, promotes healthy lifestyles, and supports economic prosperity, livable communities and climate commitments.

Objectives and Strategic Directions

Population

76,580 → 300,000
2021 2051

Employment

26,700 → 125,000
2021 est. 2051

1. Develop a future-ready transportation plan for the Town and expand the multi-modality of the transportation system including driving, transit, walking, cycling, and other emerging mobility options.
2. Provide infrastructure to support and manage future land use growth and address the needs and priorities for both rural and urban communities.
3. Deliver sustainable strategies that protect natural heritage assets while reducing transportation's effects on climate change.
4. Build a safe and inclusive transportation system that supports age-friendly communities and promotes healthy living.
5. Develop complementary transportation solutions that supports Provincial, Regional, and Local policies and the Town's Official Plan (OP) update.

Phase 1 Summary

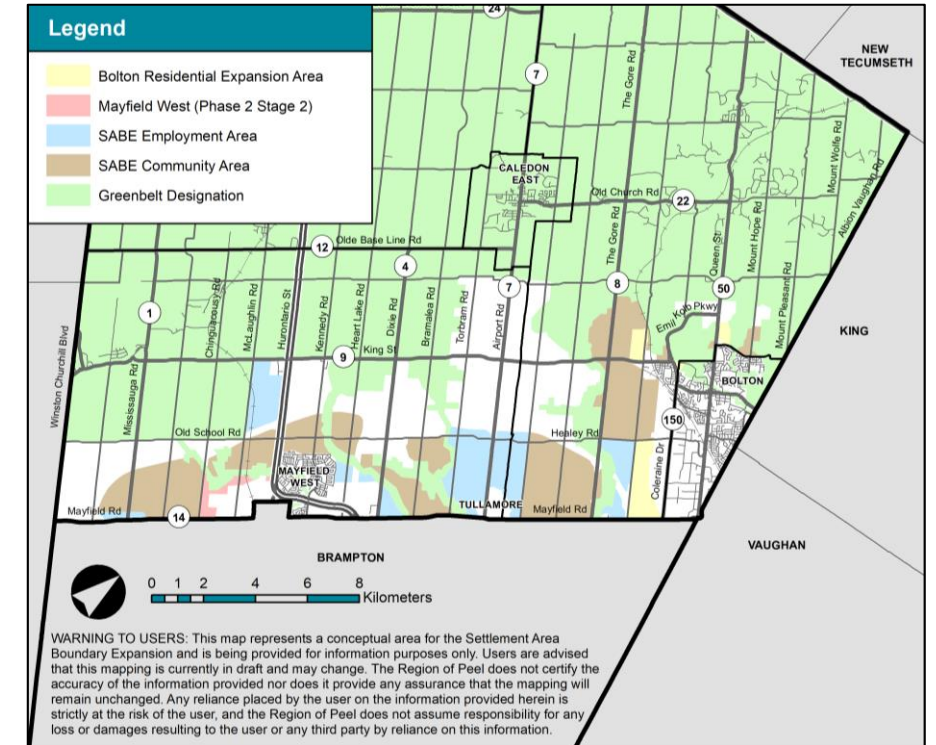
Study Context and Objectives

- Transportation System Inventory
- Natural Heritage Environmental Scan
- Understanding of Social, Cultural, and Equity Objectives

Transportation Needs and Opportunities

- Road Capacity Needs and Opportunities
- Transit Needs and Opportunities
- Active Transportation Needs and Opportunities
- Town Road Safety Needs and Opportunities

Development and Evaluation of Alternative Strategies



Settlement Area Boundary Expansion (SABE) Lands

Preliminary Assessment of Needs and Opportunities

Road Capacity

- Need for additional lane capacity on existing north-south and east-west roads within future SABE area
- Need for a study/studies to develop additional collector roads to connect east-west through SABE
- Need for detailed safety reviews of misaligned intersections and monitoring of certain intersections

Active Transportation Needs and Opportunities

- Need for additional connectivity and continuity within the Town's AT network and through the SABE area
- Opportunities for new trail spine routes utilizing new continuous corridors
- Opportunities to connect to adjacent municipalities

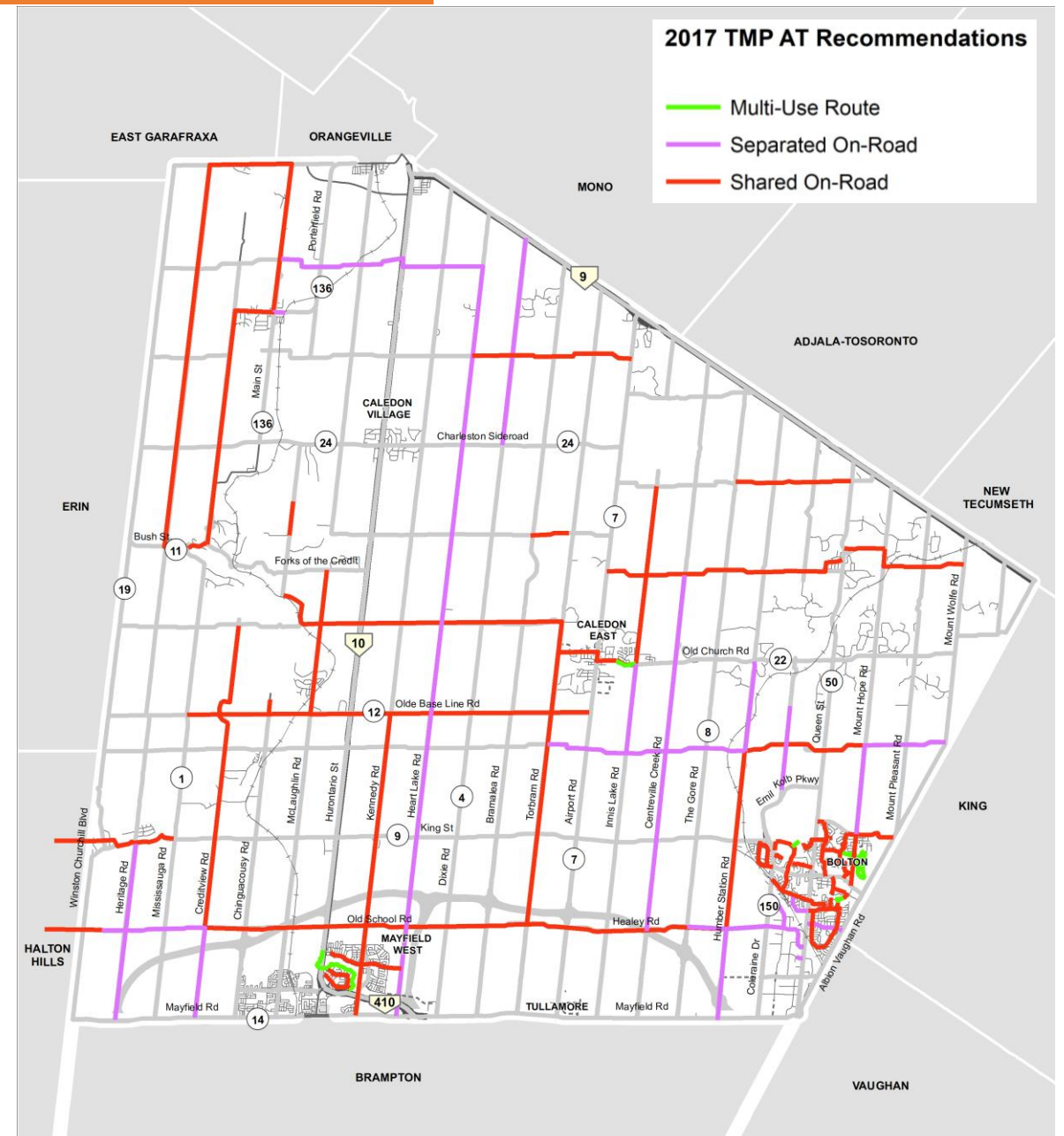
Transit

- Need for expanded Town-managed transit service to address sustainability and equity objectives
- Need for transit routing to be coordinated with secondary plan road development and population density

Alternate Strategies and Evaluation

Alternative Strategies	Goal
Do Nothing	A transportation strategy that reflects the 2017 Caledon TMP that addresses transportation needs to 2031
Road Network Approach	Develop additional road infrastructure in support of growth to 2051 to address capacity and connectivity needs
Sustainable Approach	Develop active transportation and transit and focus only on sustainable modes of travel
Combined Approach	Invest in capital road improvements and implement active transportation and transit network improvements

Scenario 1: Do Nothing (“Business-As-Usual”)



Scenario 2: Road Network Approach



2017 TMP Road Recommendations

- New Road
- Widening (2 to 4 lanes)

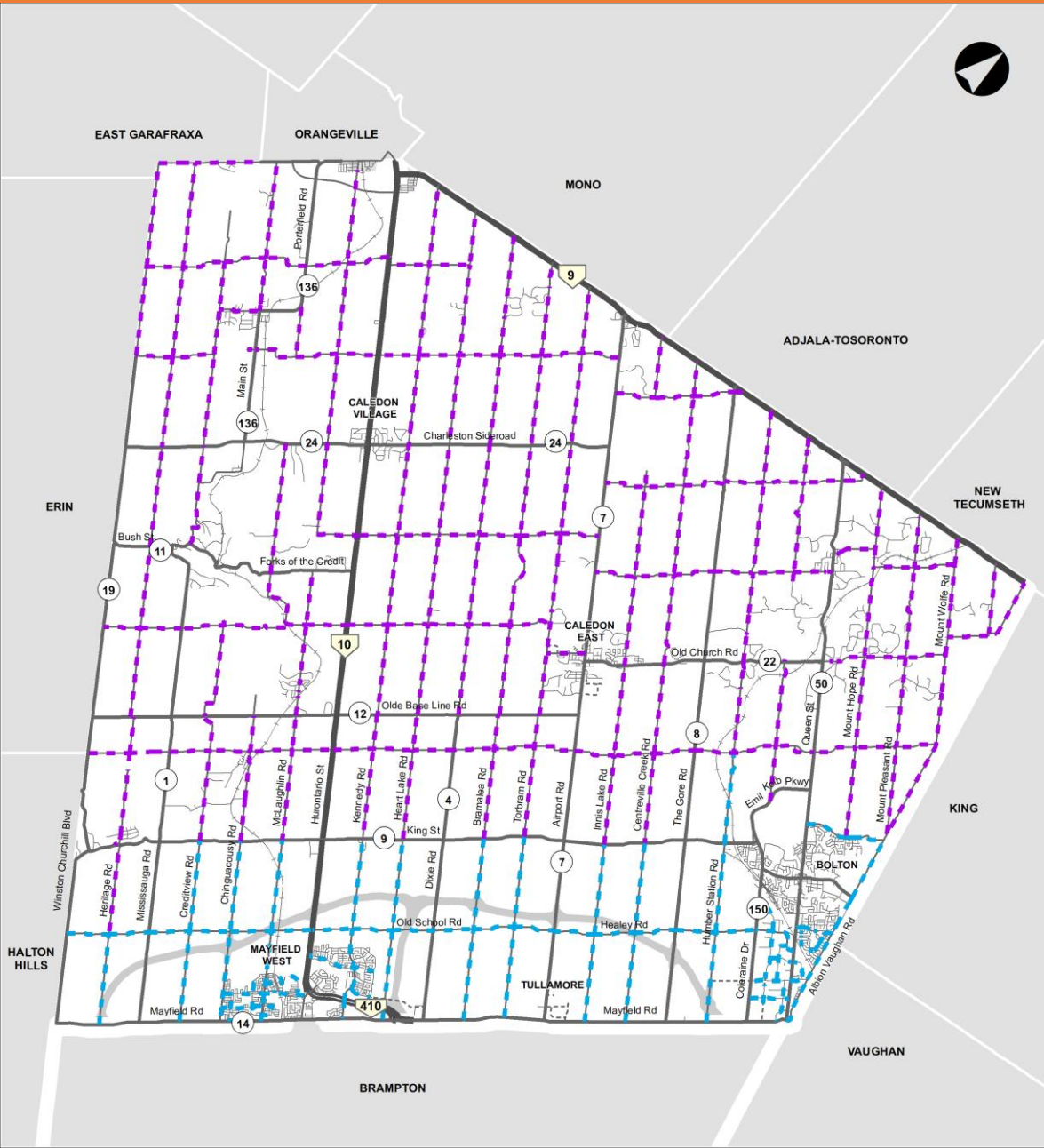
2022 Lane Widening Recommendations By 2051

- Widening (2 to 4 lanes)

Proposed Road Network

- Build on Regional and Provincial plans
- Urbanize 4-lane cross section for all roads within southern Caledon
- Study of new collector roads within southern Caledon through the Secondary Plan process
- Incorporate a “Complete Streets” approach which is designed for all road users

Scenario 3: Sustainable Approach



2022 TMAP AT Recommendations

By 2051

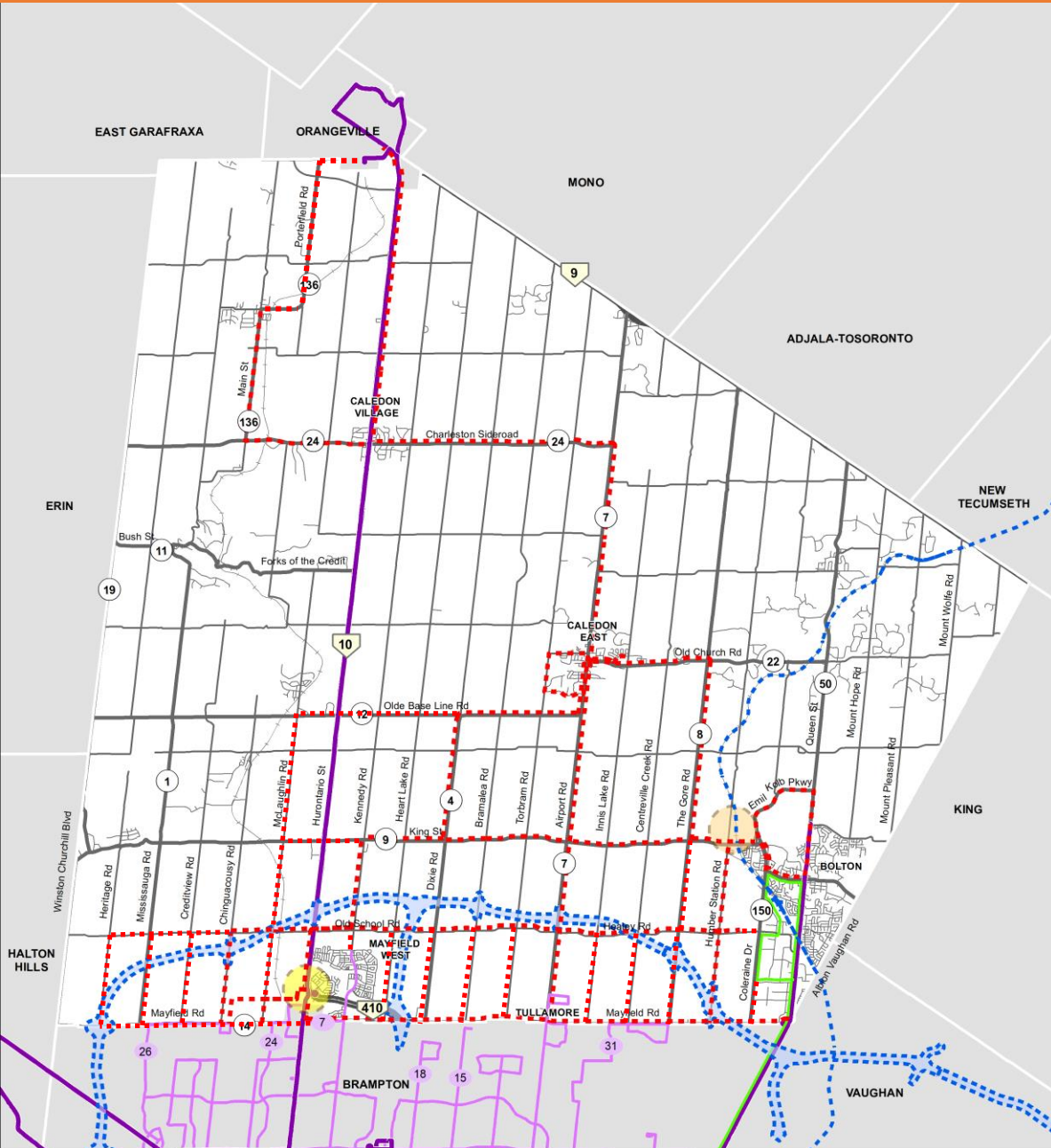
- Paved Shoulder
- Separated Facility
- Shared Facility

Proposed Active Transportation Network

- Paved shoulders on rural collector roads
- Separated facilities on arterials and urban collector roads
- Shared facilities on local roads
- Projects that enhance continuity within the Town and connectivity to adjacent municipalities

** In February 2022, the Town initiated a Town-Wide Active Transportation Master Plan, which will “ground-proof” the proposed routes and alignments*

Scenario 3: Sustainable Approach



Existing Transit Network

- Bolton Line
- GO Transit
- Brampton Transit

MTSA

- Caledon GO Station (Priority MTSA)
- Mayfield Transit Hub

Proposed Transit Network

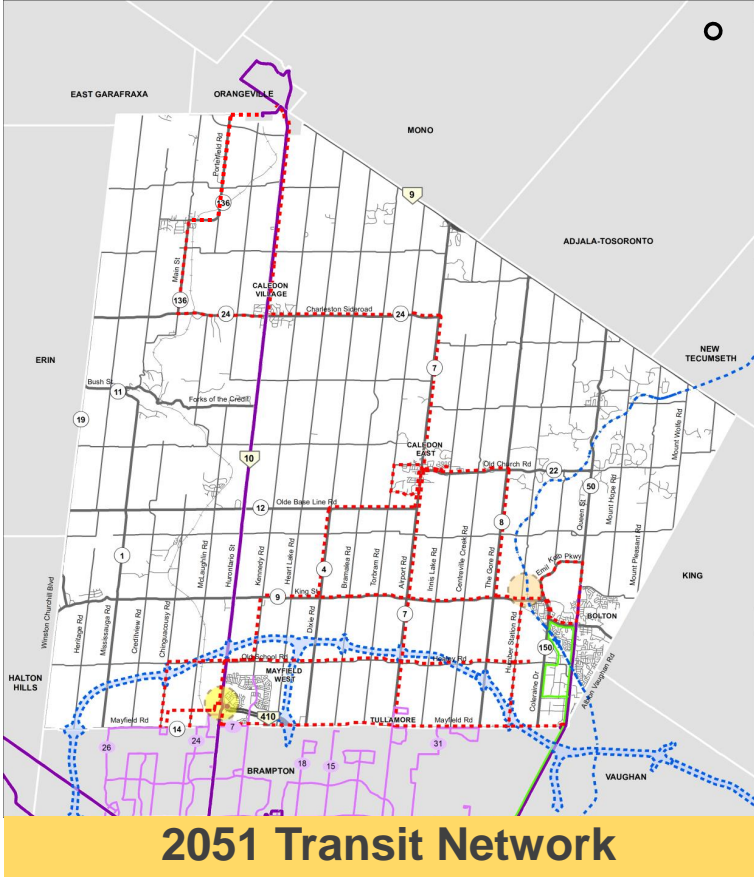
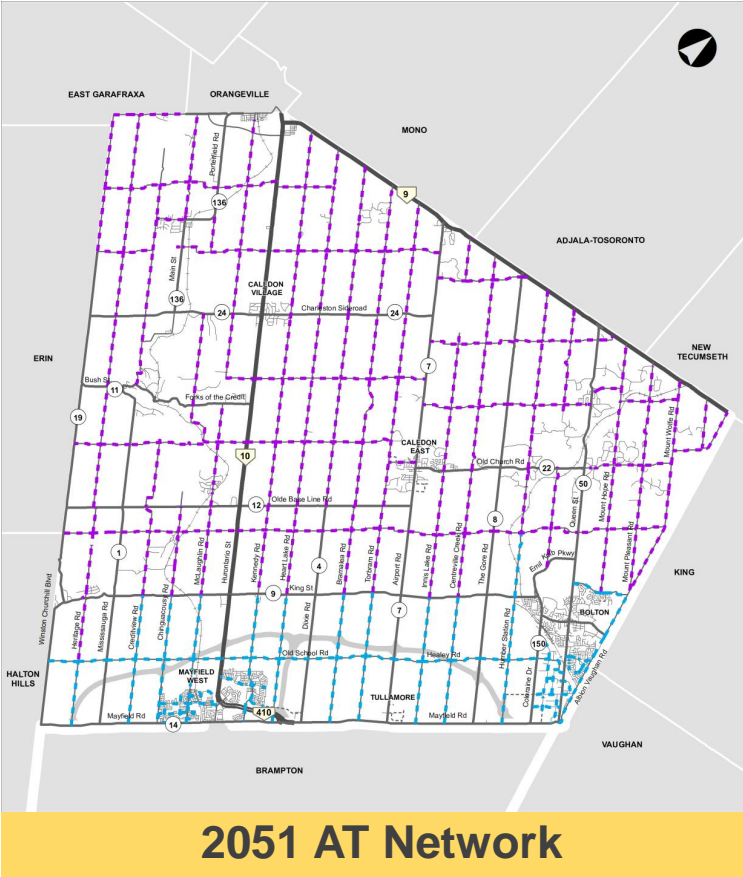
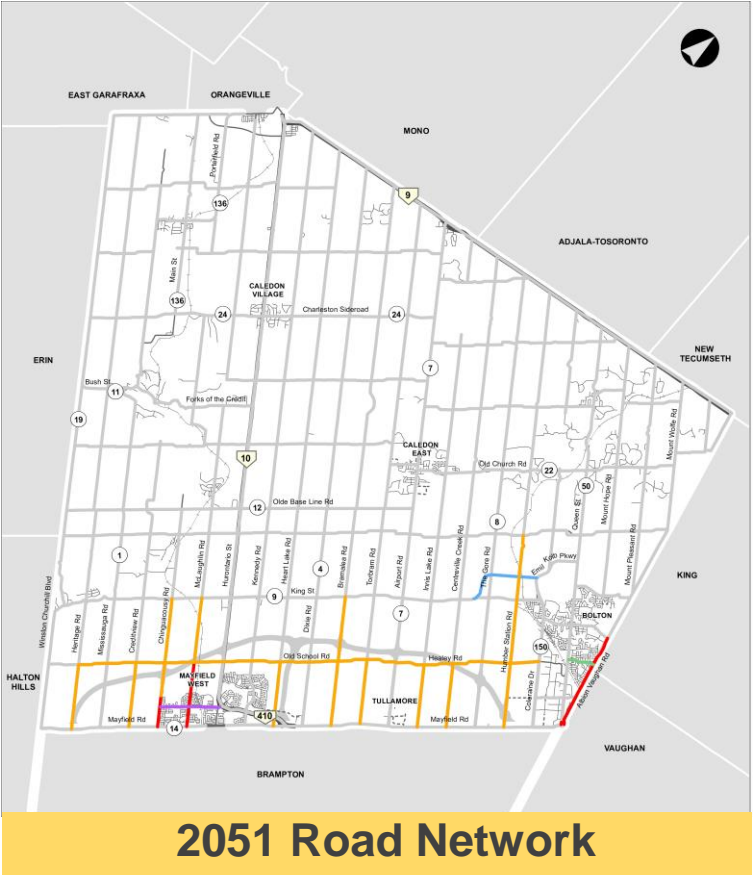
- - -
- - - Local Transit

Proposed Transit Network by 2051

- Priority Areas or Corridors
 - Caledon GO Station (Primary MTSA)
 - Mayfield West Transit Hub (Planned MTSA)
 - Bolton
 - Tullamore
 - Bolton Residential Expansion Areas
 - Settlement Area Boundary Expansion
- Transit Needs
 - Transit Strategy Study to establish governance structure and develop a 5-year service plan
 - Connectivity within the Town and to surrounding municipalities and the regional network
 - Accessible and reliable transit services

Scenario 4: Combined Approach

Combined approach includes the Roads, Active Transportation, and Transit networks from Scenario 1, 2, and 3



Evaluation Matrix Criteria

Transportation Service

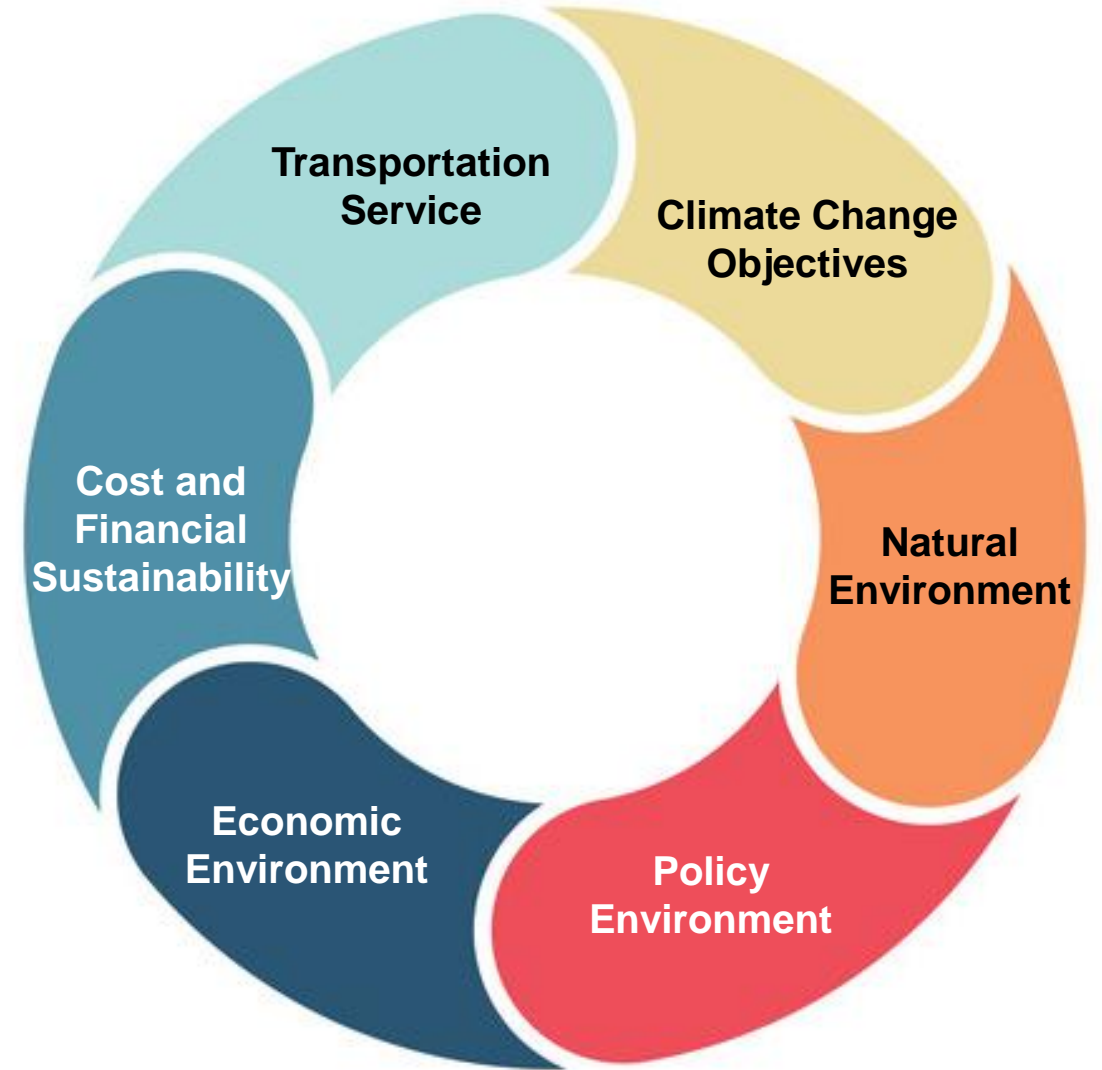
- Ensure sufficient roads capacity to accommodate future growth
- Encourage increased walking and cycling, transit, and reducing single occupant vehicle (SOV) trips
- Improves network connectivity and accessibility
- Promotes sustainable travel choices
- Minimizes travel delay at key intersections

Climate Change Objectives

- Addresses sustainable transportation objectives and climate commitments
- Supports clean energy initiatives

Natural & Cultural Environment

- Minimizes impact on natural environment areas, natural resources, and air quality
- Minimizes impact on cultural properties



Evaluation Matrix Criteria

Cost and Financial Sustainability

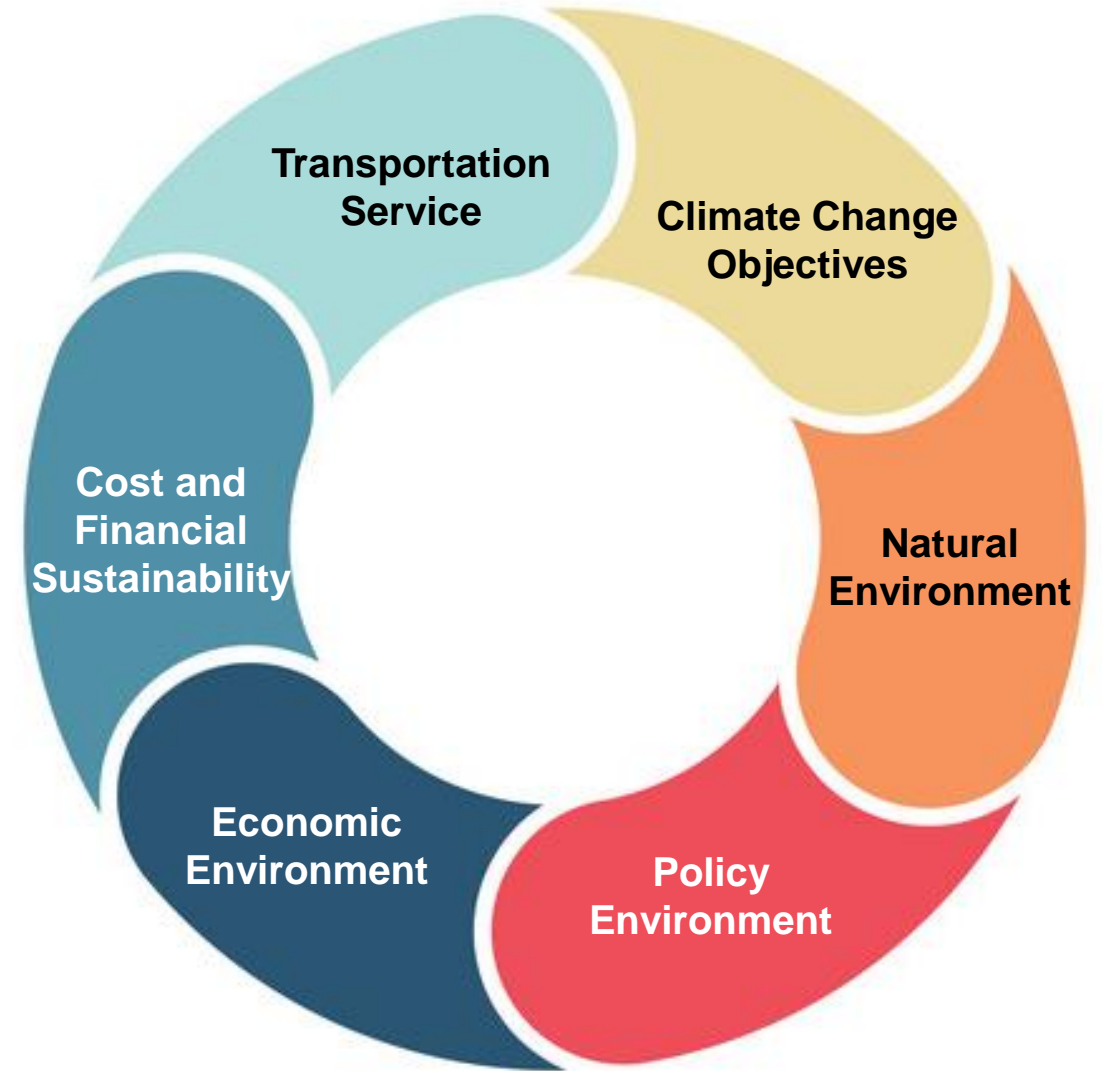
- Minimizes capital and maintenance costs and impacts to the residential tax base

Economic Environment

- Supports the existing and future business community
- Maximizes land development potential and provides opportunities for planned growth

Policy Environment

- Ensures compatibility with Provincial and Regional Plans and Policies
- Supports the Town's growth objectives, including the Official Plan
- Meet's the Region's Long Range Transportation Plan and Official Plan objectives



Evaluation of Alternatives



	Scenario 1: Do Nothing	Scenario 2: Road Network	Scenario 3: Sustainable Modes	Scenario 4: Combined
Transportation Service				
Climate Change Objectives				
Natural Environment				
Policy Environment				
Cultural and Economic Environment				
Cost Environment				
Overall				Recommended

Operational Strategies

Parking Strategies

- Monitor parking utilization as the SAGE lands become more densified
- Consider on-street/off-street parking pricing structure
- Develop Wayfinding/signage and Online User Information
- Policy to incorporate electric vehicle charging in new developments
- Develop a Town-Wide Parking Management Strategy

Electric Vehicle Charging

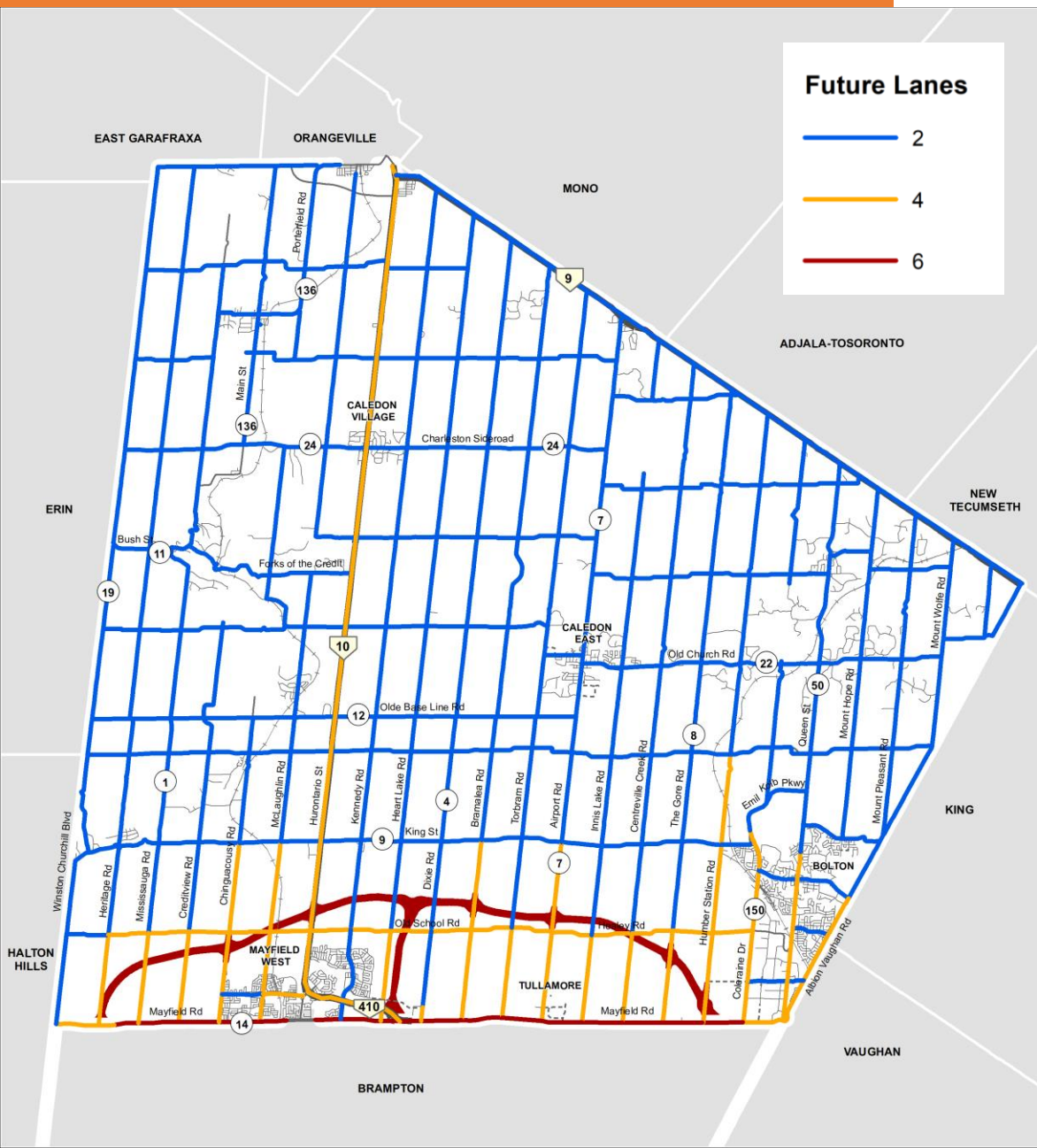
- Provide public electric vehicle charging stations as communities become more densified

Emerging Technologies

- Continue to develop the Town's Open Data Portal
- Coordinate with the Region of Peel in the form of Working Groups or Technical Committees to leverage future use of autonomous vehicles and other emerging mobility technologies and to be future-ready

Summary of the Recommended TMP Strategy

Road Network Summary



Proposed Road Network

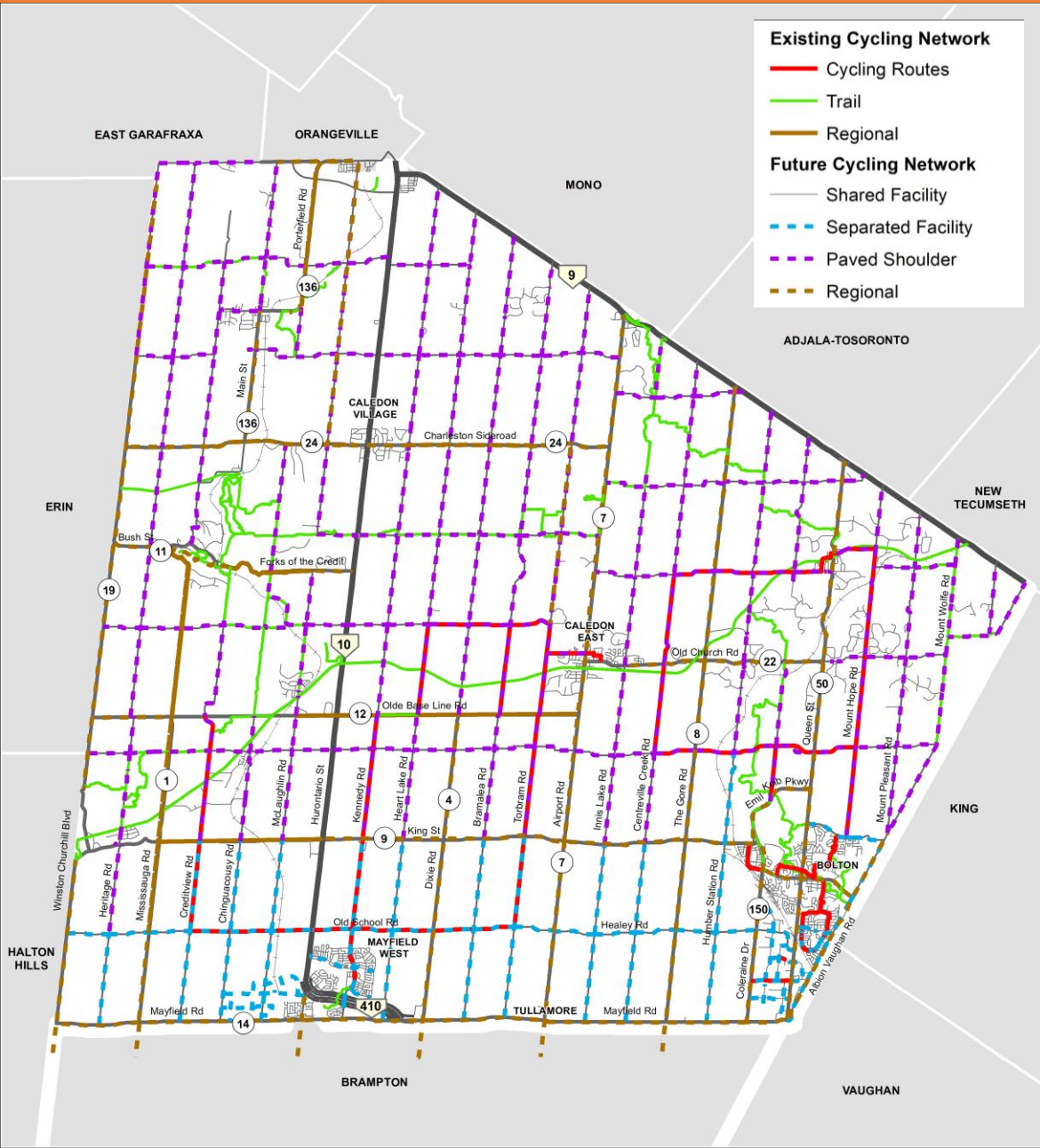
- Build on Regional and Provincial plans
- Urbanized 4-lane cross section for all roads within southern Caledon
- Study of new collector roads within southern Caledon through the Secondary Plan process
- Incorporated a “Complete Streets” approach which is designed for all road users

Policy Updates

- Future collector roads should be assessed as part of the secondary or block plan process to connect to the Town's collector and arterial road network to minimize traffic volumes on local streets
- Revised road classifications from the previous Official Plan policies and complete street typologies will reflect the Town's future diverse urban and rural land use contexts

Road Class (Previous)	Road Class (New)
High Capacity Arterial	Regional Arterial
Medium Capacity Arterial	Town Arterial
Low Capacity Arterial	Major Collector
Collector	Minor Collector
Local	Local

Active Transportation Summary



Proposed Active Transportation Network

- Paved shoulders on rural arterial and collector roads
- Separated facilities on urban arterial and collector roads
- Shared facilities on local roads
- Projects that enhance continuity within the Town and connectivity to adjacent municipalities

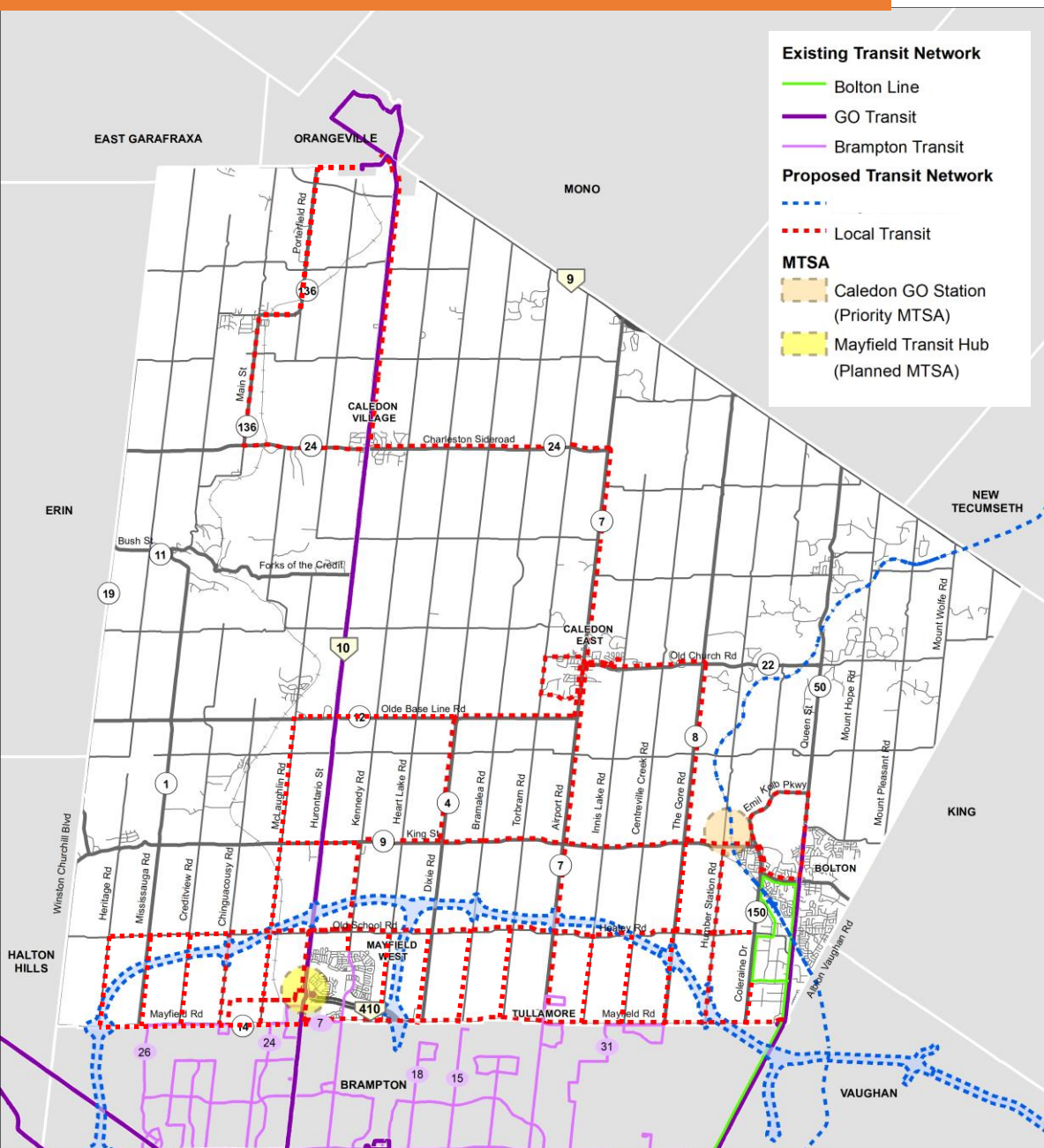
Policy Updates

Policies that introduce a regularly updated Town Active Transportation Master Plan that:

- Establishes **comprehensive walking and cycling networks** that connect existing and new settlement areas and rural settlement areas
- Establishes a **trail system** that is integrated with the pedestrian and cycling network and includes connections to open spaces
- Identifies opportunities and locations for safe **pedestrian and cycling crossings**, including strategically located grade-separated crossings
- Promotes bicycle amenities at major developments
- Engages community groups

*In February 2022, the Town initiated a
Town-Wide Active Transportation Master Plan*

Transit Network Summary



Proposed Transit Network

- Priority Areas or Corridors
 - Caledon GO Station (Primary MTSA)
 - Mayfield West Transit Hub (Planned MTSA)
 - Bolton
 - Tullamore
 - Bolton Residential Expansion Areas
 - Settlement Area Boundary Expansion
- Transit Needs
 - Transit Strategy Study to establish governance structure and develop a 5-year service plan
 - Connectivity within the Town and to surrounding municipalities and the regional network
 - Accessible and reliable transit services

Policy Updates

- Policies that guide the development of transit for interim and long-term needs:
 - **Interim:** Town to leverage the transit provider in Bolton and Brampton Transit for service expansions where needed.
 - **Long-Term:** Implement Town-authorized or Town-operated transit system. The Town should initiate a Transit Strategy Study to develop 5-year service plan and establish governance structure.

Key Transportation-Related Policy Updates

Traffic Calming Policies

- New traffic calming policy and speed management section added that aims to:
 - Leverage the existing Traffic Calming policy for retrofitting (reactive measures)
 - Achieve traffic calming through roadway design for future developments (proactive measures)
 - Reduce driver speeds and design streets that provide safe mobility for users of all ages and abilities
 - Develop and implement traffic calming measures without adversely impacting walking, cycling and transit use

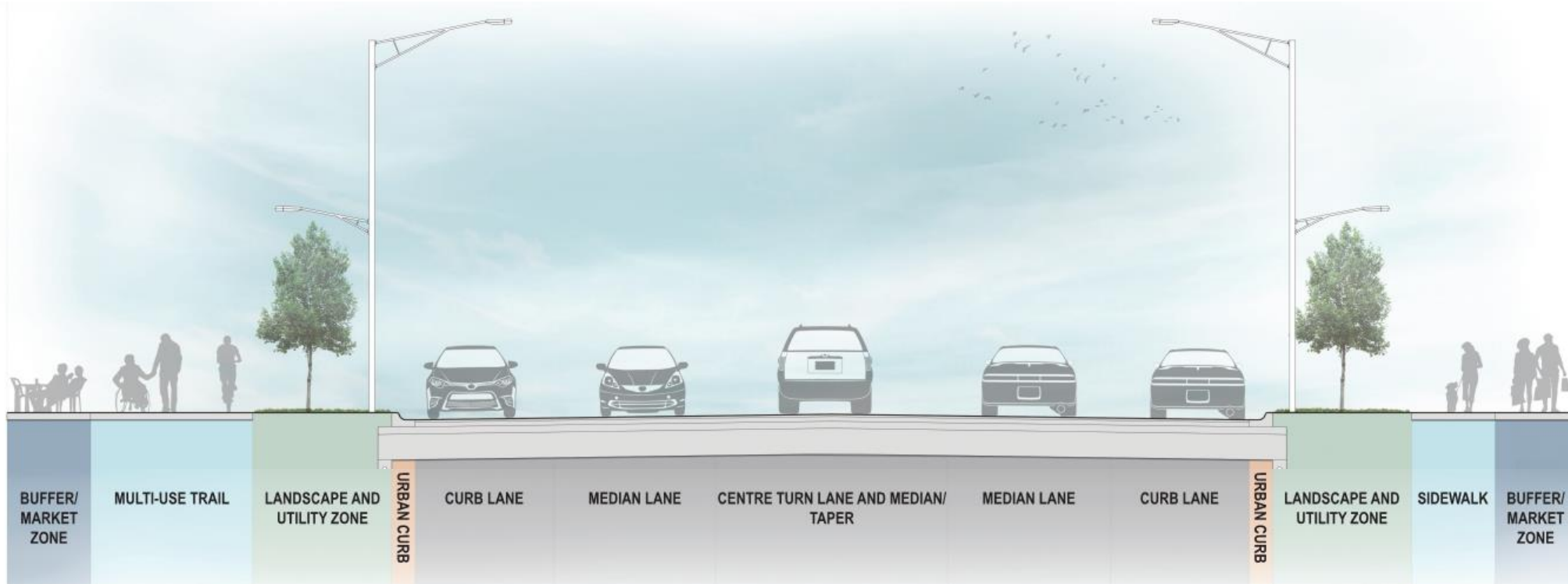
Implementation & Monitoring Policies

- Updates to the Implementation and Monitoring policy section to ensure Official Plan transportation objectives are met through:
 - Periodic updating of studies
 - Monitoring of programs and priorities
 - Funding commitments

Complete Street Guidelines

Update complete street guidelines to include best practices for cyclists and pedestrians

Proposed Commercial Collector Street Typology:



★ Future urbanized roads should include space for a “market zone” to create pedestrian-friendly environments

Next Steps

- **Public Comments following this PIC:** 2 weeks to provide comments on the MMTMP
- **Report and presentation to Council:** June 20 for consideration followed by a 30-day review period

Information will be available on the project website

[*haveyoursaycaledon.ca/mmtmp*](https://haveyoursaycaledon.ca/mmtmp)

How to provide input?

Consult with the project team:

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Questions?

Caledon Multi-Modal Transportation Master Plan

Public Information Centre (PIC) #1

Summary of Comments / Questions and Project Team Responses

This Q&A Sheet is based on the questions brought forward by PIC #1 participants (via WebEx) and answers provided by the Project Team.

Question / Comment	Project Team Response
<p>What impact will the Highway 427 extension have on this project?</p>	<p>The Highway 427 extension has been studied over several years. This Multi-Modal Transportation Master Plan (MMTMP) study will assess future horizon years and determine how future growth in Caledon will be accommodated. With this, the MMTMP study will consider the effects of this highway extension by modelling traffic conditions. The MMTMP study is still in its early stages of development, but the Project Team will strive to anticipate, forecast and assess needs following future land development and committed network improvements.</p>
<p>Concerns expressed regarding the construction along Coleraine Drive. What studies had been conducted to inform this work?</p>	<p>The construction along Coleraine Drive was the result of studies conducted that identified traffic constraints at the four corners of Bolton, as well as anticipated growth in Bolton. Coleraine Drive is important in carrying through traffic in Bolton and offloading truck volumes.</p> <p>A study is was conducted by the Region of Peel and York Region, with consultation from the Town of Caledon and the City of Brampton, that identified a new north-south road connection (Arterial A2) between Mayfield Road and Regional Road 50 at Major Mackenzie Drive. As part of this work, Coleraine Drive will be improved and realigned to allow access to/from the future Highway 427 extension. This new road connection is currently in the final stages of the Environmental Assessment (EA) process. The construction tender for this project will be released soon. The budget for this project has also been approved.</p>

Question / Comment	Project Team Response
Concerns expressed regarding the future capacity of Highway 10 (Hurontario Street) and Charleston Sideroad, both of which appear to be busy roads today but are forecasted to operate with low traffic (or a volume-to-capacity (v/c) ratio that is less than 0.6).	Traffic forecasts were completed using the Region of Peel forecasting model during the peak periods. Since highways are free-flow and have less friction compared to other roads, the volume-to-capacity (v/c) ratio is lower. In addition, most of the future growth is anticipated to occur in Caledon south around Mayfield West and Bolton. The Project Team will investigate this further to confirm.
What kind of relationship do you anticipate with the Ministry of Transportation (MTO) in order to slow traffic down on Highway 10?	The Project Team is still in the early stages of identifying issues and developing strategies, but the team acknowledges that this is an issue to be addressed. The Project Team will review previous studies and address these issues.
Will there be any in-person meetings where the public will be able to meet to ensure resident needs vs. trucking needs are addressed?	The intention is to have surveys available in the future for the public to comment on their specific needs Kant Chawla's (Town of Caledon) contact information is also available on the project website (https://future.caledon.ca/multi-modal-transportation-master-plan) if anyone wishes to reach out with concerns/questions. This MMTMP study involves a multi-modal strategy so the needs of all will be addressed, including those that walk and cycle.
How current are the traffic statistics? Is the data broken down by heavy trucks (particularly gravel trucks), light trucks and personal vehicles?	Truck percentages are provided as part of Automatic Traffic Recorder (ATR) counts and can be incorporated in the review. However, needs specifically related to heavy truck demand has not yet been identified. that the Town of Caledon is also partnering with Region of Peel to address the needs of aggregate trucks.
Are these statistics available to the public?	Regarding the availability of this data, the Project Team will investigate this for the next public meeting and/or post supplementary materials provided on the project website.
Concerns expressed regarding the large growth forecasts for the Town of Caledon. Will this require most of the Whitebelt lands to be developed? How	Much of the Whitebelt lands are being developed to avoid environmentally constrained areas (e.g., Greenbelt, Oak Ridges Moraine, etc.). As a result, there will be much

Question / Comment	Project Team Response
critical is the GTA West corridor in handling future transportation needs?	<p>greater east-west travel demand, so the high-capacity corridor of GTA West is important in accommodating this.</p> <p>Region of Peel has identified over 4000 hectares of residential and employment lands to meet the target in growth. Most of this future development will be south of the GTA West corridor. The Region will showcase this work in June for public engagement.</p>
Will traffic calming zones be extended to other north-south corridors of concern (i.e., Mount Wolfe Road, St. Andrews Road, Airport Road and The Gore Road)?	<p>The Project Team will look at these corridors in greater detail. The MMTMP study is in its early stages; the needs of the Town are currently being summarized (i.e., traffic volumes, capacity, transit accessibility, etc.). Traffic speed and volume data have been collected for rural roads, but a more comprehensive review of needs will need to be completed. This will be investigated further prior to identifying recommended solutions.</p>
Where is the expanded population of the Town of Caledon anticipated to travel for their services and what routes will they take? Will there be walkable neighbourhoods?	<p>The MMTMP study can make recommendations for transit-oriented development and communities can be contacted to inform these decisions. This will be planned out in greater detail as the MMTMP study progresses.</p>
Concerns expressed regarding the lower taxes collected from pit owners and the damage gravel trucks are causing to roads and buildings. There is an interest in knowing the vehicular breakdown in the traffic study to gain a better understanding the type of vehicles causing transportation issues on roads.	<p>Acknowledged. This will be investigated in greater detail by the Project Team during the course of the MMTMP study based on available data.</p>
Can more information in general be provided about the	<p>The Town already anticipates that trucks will impact the road structure. The scope of this MMTMP study may be expanded if this issue is not addressed. In addition, an</p>

Question / Comment	Project Team Response
aggregate vehicles, given the high impact they have?	action item as set out from the Peel Region Goods Movement Strategic Plan (2017-2021) is to understand and manage aggregate movements and its impact on communities.
Will the needs assessment result in requirement specifications being published before alternative strategies are analyzed?	The Project Team will use the Caledon webpage to provide more details on the needs assessment. The Project Team will also be reaching out to the public in the spring or summer via a survey, which will help to gather feedback on public needs and in turn inform the alternative strategies and evaluation of alternative solutions. This survey will be available to the public prior to the second PIC in September, where the alternative solutions considered by the Project Team will be presented to the public for feedback.
Residents are concerned about health issues associated with traffic, so it is requested that statistics and reports be shared.	Acknowledged.
Does the Transportation Plan assess adverse health effects as a result of vehicular traffic?	<p>The Project Team is considering the effects of traffic emissions as part of the modelling exercise that will be done. The model will provide estimates of fuel consumption and emissions; this will be presented in tandem with other strategies such as resilience to climate change initiatives and efforts to support the electric vehicle fleet. Emissions will be forecasted, and mitigation opportunities will be identified. These will be included as part of future presentations.</p> <p>Public health is identified as a co-benefit to the Climate Change Plan as well as enhancing the active transportation network. The Town of Caledon's Climate Change Team will be involved in the MMTMP study.</p> <p>Town council is also supporting transit initiatives, which will help reduce adverse health effects associated with high vehicular traffic.</p>
Does the anticipated design of neighbourhoods inform the	The MMTMP study is still in its early stages of development, but it is anticipated that there will be opportunities to create

Question / Comment	Project Team Response
Transportation Plan? If not, what informs the Transportation Plan?	truly active communities. More studies will be completed at a community-level as well following the completion of the MMTMP. The associated infrastructure will be built over a longer period of time.
Will emission estimates be provided? Will there be testing of noise and air pollutants?	<p>Testing of emissions is typically done at specific sites. However, it is acknowledged that this is a long-term plan with substantial change that is expected to occur.</p> <p>As part of the Climate Change Plan, baseline emissions were reviewed with most recent data collected in 2016, so there is an understanding of the Town's baseline conditions. The baseline conditions were used to forecast future conditions, which includes two scenarios: "Business as Usual" scenario, which accounts for budgeted improvements and "Low Carbon" scenario, which identifies additional improvements required to meet council-endorsed net zero emissions. The federal government will also be updating their climate change plans and heavy trucks may be addressed as part of those studies.</p> <p>Noise pollutants is dealt with on a Secondary Plan level. As part of the Secondary Plan process, noise issues are assessed to inform buffering, setbacks, etc.</p>
Aggregate vehicles and other heavy trucks will not be electric anytime soon, so older trucks will continue to be on the roads for a long time.	Acknowledged. This will be recognized in the modelling work completed as part of the MMTMP study.
Will requirement specifications cover both functional (i.e. capacity and sustainability) and non-functional (i.e. emissions) requirements? Will there be a form of benchmarking undertaken to compare with other global initiatives?	<p>As part of the Climate Change Plan, best practices were reviewed internationally to determine what has been done. Modelling work for greenhouse gas (GHG) emissions have also followed internationally accepted standards.</p> <p>In evaluating alternative strategies, emission estimates and GHG impacts will be considered to achieve Town of Caledon targets.</p>

Question / Comment	Project Team Response
<p>Will the Transportation Plan account for emissions and noise pollutants, particularly if this is a long-term plan?</p>	<p>Noise and air pollutants will be incorporated into the evaluation criterion. This MMTMP study will also work hand-in-hand with Resilient Caledon initiatives.</p>
<p>Concerns expressed regarding the need to maintain ongoing communication for this project to allow for public input.</p>	<p>Acknowledged. The Project Team will strive to share information and keep the public and stakeholders involved moving forward. The Future Caledon website will also be used as a means of sharing information and the Project Team will ensure that this information is up to date.</p> <p>Relevant links to studies will also be posted to the project website (https://future.caledon.ca/multi-modal-transportation-master-plan)</p>

Caledon Multi-Modal Transportation Master Plan

Public Information Centre (PIC) #2

Summary of Comments / Questions and Project Team Responses

This Q&A Sheet is based on the questions brought forward by PIC #2 participants (via Microsoft Teams) and answers provided by the Project Team.

Question / Comment	Project Team Response
<p>Given the magnitude of future growth in the Town, when will more transit be introduced?</p>	<p>It is difficult to say with the level of growth that is anticipated, but transit is typically introduced when a business case justifies its implementation (i.e., when the cost investment is justified by anticipated transit ridership) and is approved by Council. Ideally, transit will be provided once new roads are built within communities and expanded early within the development process.</p> <p>It is also noted that this Multi-Modal Transportation Master Plan (MMTMP) serves as a high-level policy document which sets the strategy for transit, with recommendations subject to Council approval. In addition, the MMTMP is proposing that a transit strategy study be initiated, which will detail service coverage, timing and operations.</p>
<p>When will the Caledon GO Train service be available?</p>	<p>GO Train service to Caledon has been included in the Ministry of Transportation (MTO) Greater Golden Horseshoe (GGH) Plan. No timing commitment was identified as part of the document; however, the importance of early implementation of the Caledon GO station is recognized and encouraged as part of the MMTMP. As part of the GGH Plan, MTO will also be working with the Town to move the business case for Caledon rail service forward, with the intention of implementing service as soon as possible.</p>
<p>When can we provide comments on the MMTMP?</p>	<p>Once the MMTMP document has been posted on the website (which is anticipated to be in July), a 30-day review period will follow. The public will be able to provide input during this time.</p>

Welcome

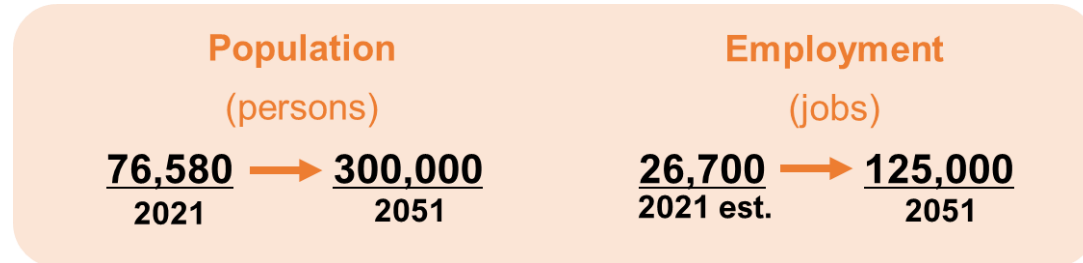
Town of Caledon Multi-Modal Transportation Master Plan (MMTMP)

Public Meeting
September 19, 2023



Study Overview & Purpose

The Town of Caledon (Town) is experiencing steady growth with increasing demands on the transportation system.



The Town initiated a Multi-Modal Transportation Master Plan (MMTMP) in 2020 with the purpose of establishing a **long-term strategy** that guides the planning, policies, and infrastructure needs of the Town's multi-modal transportation system to **accommodate future growth and development**.

Vision Statement

By 2051, the Town will have a transportation system that provides **accessible, affordable, safe, and sustainable** travel choices for all, and is well-integrated, effective to use, promotes healthy lifestyles, and supports economic prosperity, livable communities and climate commitments.

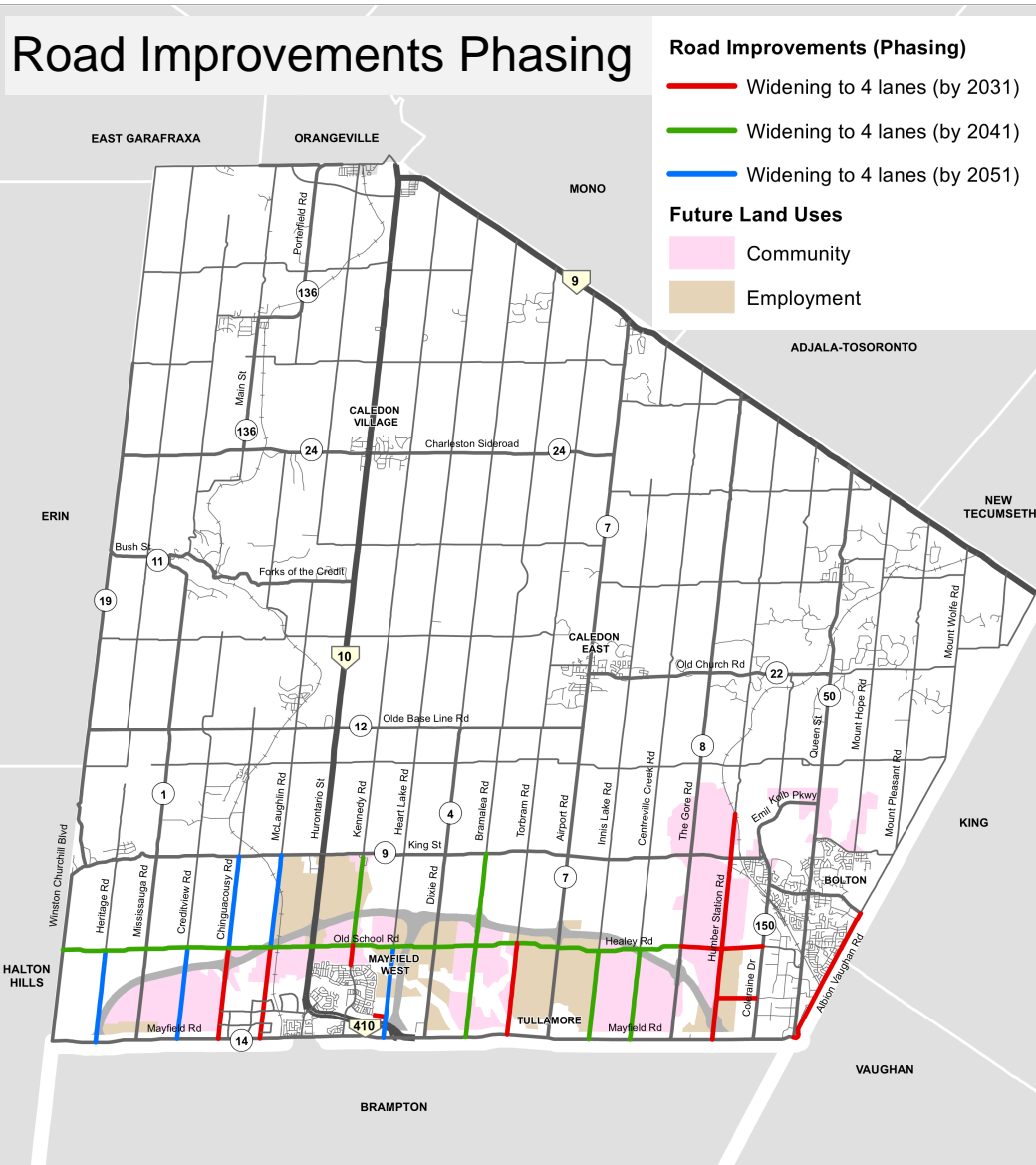
Alternative Solutions and Preferred Solution

The following **four alternative solutions** were established and assessed against transportation service, climate change, natural environment, socio-economic/cultural environment, and cost criteria to determine the preferred solution.

Alternative Solutions	Description / Goals	Transportation Improvements
Do Nothing “Business-as-Usual”	A transportation strategy that reflects the 2017 Caledon Transportation Master Plan that addresses transportation needs to 2031	<ul style="list-style-type: none"> • Carry forward with previously recommended improvements only • No additional improvements
Road Network Approach	Develop additional road infrastructure in support of growth to 2051 to address capacity and connectivity needs	<ul style="list-style-type: none"> • Carry forward with previously recommended improvements • Urbanize 4-lane cross section for all roads within southern Caledon • Study of new collector roads within southern Caledon through the Secondary Plan process • Incorporate a “Complete Streets” approach which is designed for all road users
Sustainable Approach	Develop active transportation and transit and focus only on sustainable modes of travel	<ul style="list-style-type: none"> • Carry forward with previously recommended improvements • Incorporate improvements identified in the Town Active Transportation Master Plan (ATMP) • Caledon GO Station (Primary MTSA) • Mayfield West Transit Hub (Planned MTSA) • Implement transit priority corridor network • Transit Needs • Transit Strategy Study to establish governance structure and develop a 5-year service plan
Preferred Solution		
Combined Approach	Invest in capital road improvements and implement active transportation and transit network improvements	<ul style="list-style-type: none"> • Includes road, active transportation and transit network improvements from all three alternative solutions above

Recommended Road Improvements

Road Improvements Phasing



Proposed Road Network

- Build on Regional and Provincial plans
- Urbanized 4-lane cross section for all roads within southern Caledon
- Study of new collector roads within southern Caledon through the Secondary Plan process
- Incorporated a “Complete Streets” approach which is designed for all road users

Policy Updates

- Future collector roads should be assessed as part of the secondary or block plan process to connect to the Town’s collector and arterial road network to minimize traffic volumes on local streets
- Revised road classifications from the previous Official Plan policies to reflect the Town’s future diverse urban and rural land use contexts
- Speed policy established based on guidelines to promote safety, efficiency and consistency

Road Class (Previous)

High Capacity Arterial
Medium Capacity Arterial
Low Capacity Arterial
Collector
Local

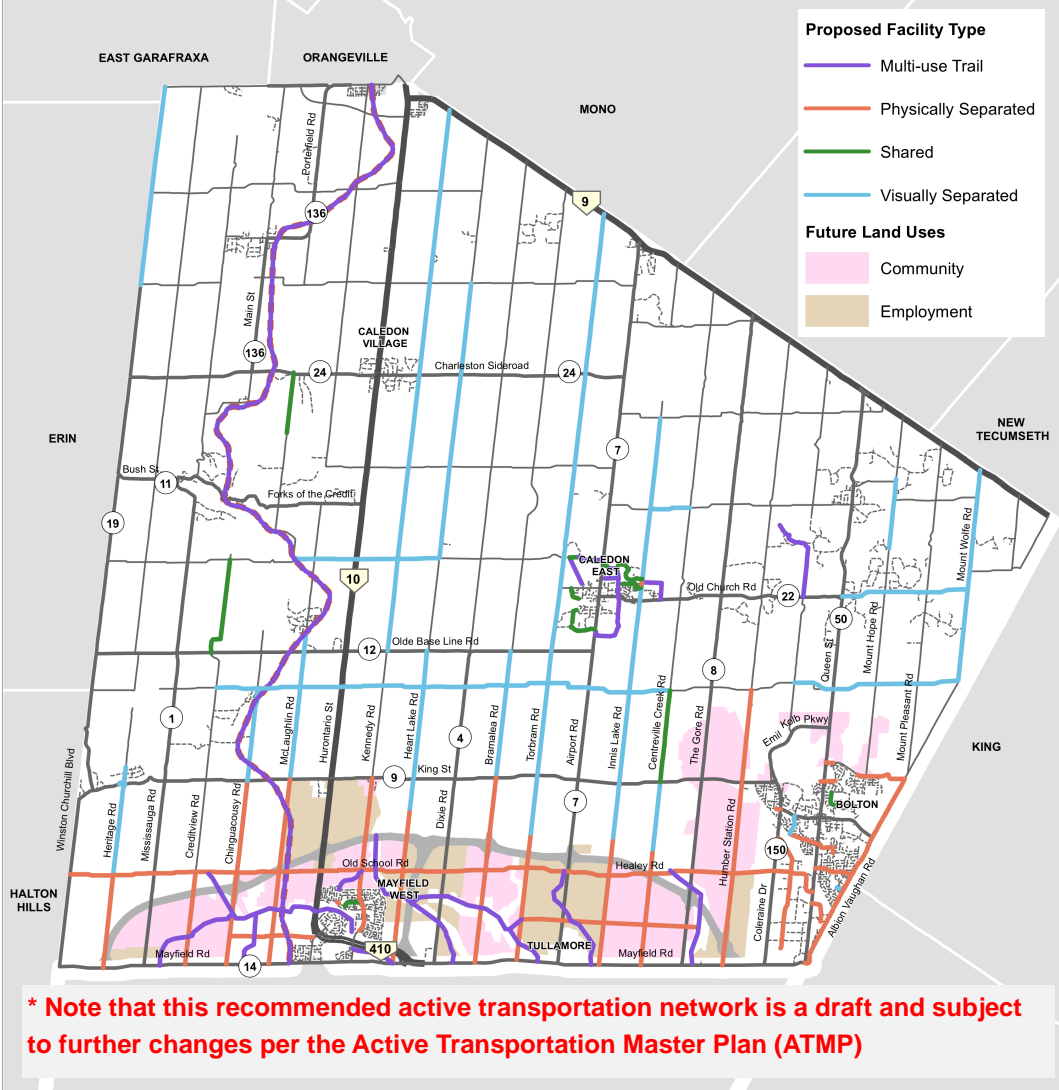


Road Class (New)

Regional Arterial
Town Arterial
Major Collector
Minor Collector
Local

Recommended Active Transportation Improvements

Ultimate (2051) Active Transportation Network



Proposed Active Transportation Network

- Implementation of the Town-wide Active Transportation Master Plan (ATMP) initiated February 2022

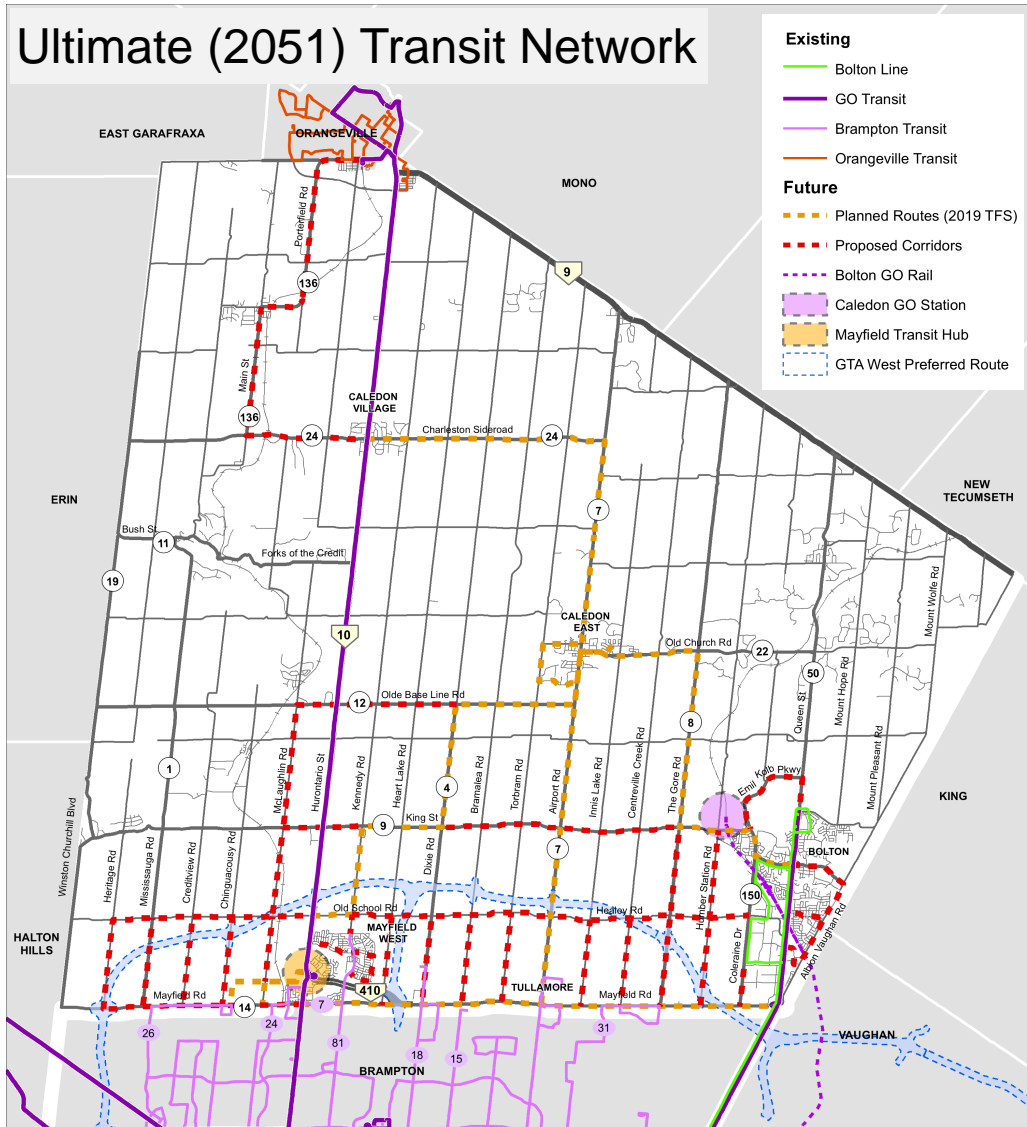
Policy Updates

Policies that introduce a regularly updated Town Active Transportation Master Plan that:

- Establishes **comprehensive walking and cycling networks** that connect existing and new settlement areas and rural settlement areas
- Establishes a **trail system** that is integrated with the pedestrian and cycling network and includes connections to open spaces
- Identifies opportunities and locations for safe **pedestrian and cycling crossings**, including strategically located grade-separated crossings
- Promotes bicycle amenities at major employment / residential developments
- Engages community groups

Recommended Transit Improvements

Ultimate (2051) Transit Network



Proposed Transit Network

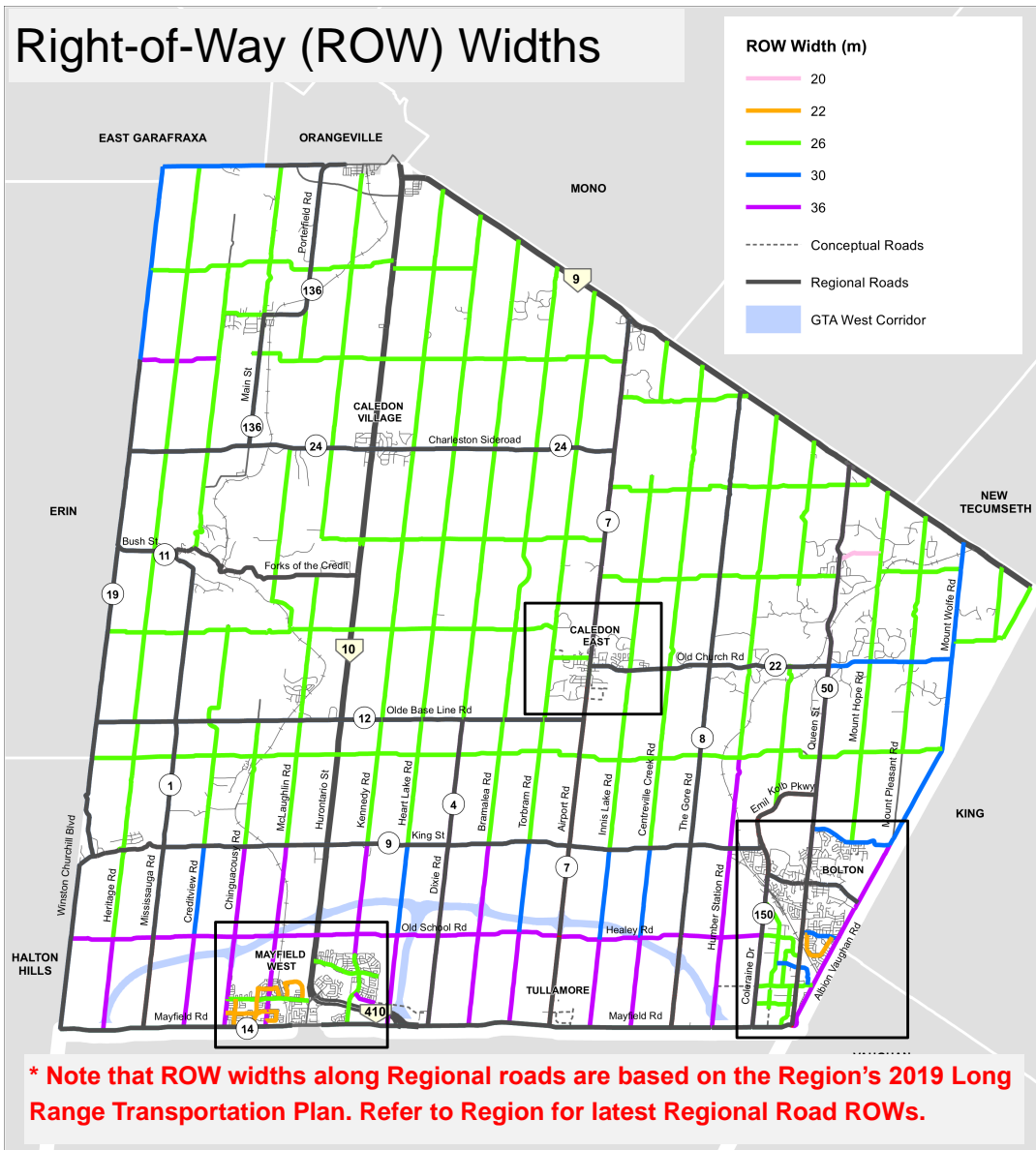
- Priority Areas or Corridors
 - Caledon GO Station (Primary MTSA)
 - Mayfield West Transit Hub (Planned MTSA)
 - Bolton
 - Tullamore
 - Bolton Residential Expansion Areas
 - Settlement Area Boundary Expansion
- Transit Needs
 - Transit Strategy Study to establish governance structure and develop a 5-year service plan
 - Connectivity within the Town and to surrounding municipalities and the regional network
 - Accessible and reliable transit services

Policy Updates

- Policies that guide the development of transit for interim and long-term needs:
 - **Interim:** Town to leverage the transit provider in Bolton and Brampton Transit for service expansions where needed.
 - **Long-Term:** Implement Town-authorized or Town-operated transit system. The Town should initiate a Transit Strategy Study to develop 5-year service plan and establish governance structure.

Typical Road Rights-of-Way (ROW)

Right-of-Way (ROW) Widths



The Town aims to achieve the midblock right-of-way widths as shown in the map to support future road improvements and align with the Complete Streets Typologies in the table below

Street Typologies	Primary Purpose	ROW Width
Neighbourhood Residential Street	<ul style="list-style-type: none"> Provide access to adjacent development. Provide connections within neighbourhoods. 	20 m
Rural Street	<ul style="list-style-type: none"> Accommodate longer distance travel between settlement areas Provide access to adjacent uses including the movement of agricultural equipment Accommodate transit 	26 m
Industrial / Employment Street	<ul style="list-style-type: none"> Provide access for employees to their place of work Serve employment lands that may have a high volume of truck traffic that require access to the regional road system Accommodate transit 	26 m
Neighbourhood Connector Street	<ul style="list-style-type: none"> Provide local access Connect neighbourhoods Accommodate transit 	26 m
Downtown Commercial Street	<ul style="list-style-type: none"> Provide access to adjacent mixed uses Accommodate significant volumes of traffic, pedestrians, cyclists and transit 	30 m
Urban Collector Street	<ul style="list-style-type: none"> Provide access between neighbourhoods Provide access to the network of Town, Regional and Provincial roads Accommodate transit 	30 m
Urban Arterial Street	<ul style="list-style-type: none"> Provide access between neighbourhoods Provide access to the network of Town, Regional and Provincial roads Accommodate transit 	36 m

Caledon Multi-Modal Transportation Master Plan

Public Information Centre (PIC) #3

Summary of Comments / Questions and Project Team Responses

This Q&A Sheet is based on the questions brought forward by PIC #3 participants in-person and via email.

Question / Comment	Project Team Response
<p>A developer reviewed and expressed concerns regarding the proposed rights-of-way (ROW) and its alignment with the Town's new Official Plan (OP) direction, Urban Design Guidelines and evolving Green Development Standards. A ROW review package was submitted for the Project Team's consideration and review.</p>	<p>As part of the MMTMP, typical ROW were developed for midblock road segments. These ROW are high-level and are subject to more detailed, corridor-specific review as part of the secondary plan process, environmental assessments, etc. In this regard, the full designated ROW may not be required; however, it is important that the public ROW be protected for future transportation system improvements, including pedestrian, cycling, transit and vehicular facilities.</p> <p>The Project Team does, however, appreciate all the work that went into developing the ROW review package and recommends that the Town consider these guidelines as part of site-specific review and/or future studies.</p>
<p>The school boards should plan for the school bus needs associated with population growth.</p>	<p>Noted, thank you. District school boards will be engaged as development occurs.</p>

Attachment 2

Agency Consultation

Technical Advisory Committee (TAC) Minutes

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:40 AM
To: Frank.Dieterman@infrastructureontario.ca; lisa.myslicki@infrastructureontario.ca; Sara.Dibe@metrolinx.com; Nicholas.Day@metrolinx.com; Annette.Lister@metrolinx.com; laurie.miller@ontario.ca; maria.jawaid@ontario.ca; karla.barboza@ontario.ca; Lukasz.Grobel@ontario.ca; Philip.Morse@ontario.ca; Robin.Kortright@ontario.ca; jin.wang@ontario.ca; Fahmi.Choudhury@ontario.ca; Michael.Casey@ontario.ca; michael.baran@ontario.ca; regional.clerk@peelregion.ca; Roman.Kuczynski@peelregion.ca; Adrian.Smith@peelregion.ca; Pegah.Tootoonchian@peelregion.ca; Tara.Buonpensiero@peelregion.ca; Joy.Simms@peelregion.ca; Sabbir.Saiyed@peelregion.ca; Tina.Detaramani@peelregion.ca; Joe.Avsec@peelregion.ca; richa.dave@peelregion.ca; regionalclerk@york.ca; Mehrak.Hakimi@york.ca; steve.mota@york.ca; Ahmad.Subhani@york.ca; Aurelia.Capone@halton.ca; mdunne@dufferincounty.ca; info@dufferincounty.ca; clerks@simcoe.ca; info@simcoe.ca; julie.scruton@simcoe.ca; chris.doherty@simcoe.ca; donnab@wellington.ca; DZehr@regionofwaterloo.ca; cityclerksoffice@brampton.ca; Henrik.Zbogar@brampton.ca; Brian.Lakeman@brampton.ca; Kumar.Ranjan@brampton.ca; Bishnu.Parajuli@brampton.ca; David.Stowe@brampton.ca; clerks@vaughan.ca; sandra.volante@vaughan.ca; Selma.Hubjer@vaughan.ca; tsciotto@king.ca; clerks@king.ca; wpinkney@king.ca; mdavy@king.ca; suzannej@haltonhills.ca; Jessica Kennedy; sgreatrix@orangeville.ca; ClerksOffice@townofmono.com; info@townofmono.com; dgouldbrown@adjtos.ca; choran@newtecumseth.ca; dburton@newtecumseth.ca; dmurnaghan@newtecumseth.ca; lisa.campion@erin.ca; Tyler.Slaght@cvc.ca; Jakub.Kilis@cvc.ca; SVarzgani@trca.on.ca; SBevan@trca.on.ca; Adam.miller@trca.ca; Quentin.hanchard@trca.ca; lbull@nvca.on.ca; admin@downtownbolton.ca; info@caledonchamber.com; bgilhespy@brucetrail.org; info@ecocalledon.org; hvtrail@gmail.com; pres@oakridgestrail.org; caledoncyclingclub@gmail.com; info@hikeontario.com; krystina.koops@dpcdsb.org; brian_costigan@cpr.ca
Cc: Kant Chawla
Subject: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

The Public Information Centre will be held virtually. See attached Notice for all details.

Date: March 24, 2021

Time: 4:00 – 6:00 p.m.

Should you wish to submit questions or comments to the study team, please contact one of the study project managers:

Kant Chawla, MP, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Sylvia Waters

From: Jennifer Vandermeer
Sent: Thursday, March 04, 2021 11:40 AM
To: eanotification.cregion@ontario.ca
Cc: Kant Chawla; Ray Bacquie; Caledon MMTMP
Subject: Town of Caledon, MEA Class EA, Multi-Modal Transportation Master Plan
Attachments: 051561_EA ProjectInfoForm.xlsx; 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Please find attached the EA Project Information Form and Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan for the Town of Caledon.



Jennifer Vandermeer, P.Eng.
Senior Environmental Coordinator

R.J. Burnside & Associates Limited
292 Speedvale Avenue West, Unit 20, Guelph, ON N1H 1C4
Office: 800-265-9662 **Direct:** 226-486-1559
www.rjburnside.com

COVID 19: We remain open for business

The health and safety of our employees and clients is of paramount importance. Most of our staff are working remotely and continue to serve clients using our well established collaborative technology platforms. For our full COVID 19 response please [click here](#).

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Thank you.

	Class EA/Streamlined EA	Proponent Name	Proponent Contact	Project Name	Project Schedule	Project Type	Project Location	MOECC Region	Project Initiation Date
1	CO - Remedial flood and erosion control projects								
2	GO Transit - Class EA								
3	Hydro One - Minor transmission facilities								
4	MEA - Class EA for municipal infrastructure projects	Town of Caledon	Kant Chawla Kant.Chawla@caledon.ca	Caledon Multi-Modal Transportation Master Plan	Master plan	Master plan	Caledon, Town of	Central	3/3/2021
5	Ministry of Infrastructure - Public work								
6	MNDM - Activities of the Ministry of Northern Development and Mines under the Mining Act								
7	MNRF - Provincial parks and conservation								
8	MNRF - Resource stewardship and facility								
9	MTO - Provincial transportation facilities								
10	O. Reg. 101/07 - Waste management projects								
11	O. Reg. 116/01 - Electricity projects								
12	OWA - Waterpower projects								

Sylvia Waters

From: Sylvia Waters
Sent: Wednesday, March 17, 2021 1:56 PM
To: necgeorgetown@ontario.ca; info@brucetrail.org; info@caledonchamberofcommerce.ca; valeriep@haltonhills.ca; clerksdept@orangeville.ca; tbarresi@king.ca; clerks@king.ca; Regionalclerk@halton.ca.
Cc: Kant Chawla
Subject: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

The Public Information Centre will be held virtually. See attached Notice for all details.

Date: March 24, 2021

Time: 4:00 – 6:00 p.m.

Should you wish to submit questions or comments to the study team, please contact one of the study project managers:

Kant Chawla, MP/ig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Sylvia Waters

From: Ray Bacquie
Sent: Friday, March 26, 2021 10:29 AM
To: Julie Scott
Cc: Jim Firth; Jennifer Vandermeer; Sylvia Waters
Subject: RE: Caledon - Multi Modal Transportation Master Plan

Hello Julie,

Good to hear from you, I hope your are doing well.

We will definitely add you to the email list. As you may know we had a public meeting on Wednesday; the presentation material should be on the Town web site shortly. We are developing and evaluating alternative strategies over the next few months and expecting to complete the plan by the end of the year. Feel free to reach out if you have specific questions.

Regards,
Ray

Ray Bacquie, P. Eng., MBA
Senior Vice President, Transportation

R.J. Burnside & Associates Limited | www.rjburnside.com
Office: +1 800-265-9662 **Direct:** +1 905-821-5891

From: Julie Scott <jscott@cfcrozier.ca>
Sent: Thursday, March 25, 2021 4:23 PM
To: Ray Bacquie <Ray.Bacquie@rjburnside.com>
Cc: Jim Firth <jfirth@cfcrozier.ca>
Subject: Caledon - Multi Modal Transportation Master Plan

Hi Ray,

It's been a while! I hope you are doing well!

We have been retained as the civil and transportation engineers for a 370 ac project located at Mayfield & Airport in Caledon. The site is included in the Settlement Boundary Area Expansion that the Region is currently undergoing. I understand you are the PM for the Multi Modal Transportation Master Plan in Caledon. It would be great if we could be kept in the loop as the Master Plan progresses – is there an email list (or something similar) we can be added on?

Hopefully we can catch up soon! Thanks for your help with this,

Julie Scott P.Eng. | Project Manager
211 Yonge Street, Suite 301 | Toronto, ON M5B 1M4
T: 416.477.3392



Crozier Connections: [f](#) [t](#) [in](#)

Sylvia Waters

From: Jennifer Vandermeer
Sent: Friday, May 14, 2021 4:03 PM
To: Sylvia Waters
Subject: FW: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

For EA File – Agency Correspondence

From: Shirin Varzgani <Shirin.Varzgani@trca.ca>
Sent: Friday, March 26, 2021 9:59 AM
To: Kant Chawla <Kant.Chawla@caledon.ca>
Cc: Ray Bacquie <Ray.Bacquie@rjburnside.com>; Jennifer Vandermeer <Jennifer.Vandermeer@rjburnside.com>; Chadwick Tennakoon <Chadwick.Tennakoon@caledon.ca>
Subject: RE: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Thanks so much, Kant, I will send out TRCA response to the Notice of Commencement for the above-noted project soon.

Also, please note that typically we do not provide comments on the PIC materials but we require it for our records.

Thank you and regards,
Shirin

From: Kant Chawla <Kant.Chawla@caledon.ca>
Sent: March 26, 2021 9:01 AM
To: Shirin Varzgani <Shirin.Varzgani@trca.ca>
Cc: Ray Bacquie <Ray.Bacquie@rjburnside.com>; Jennifer Vandermeer <Jennifer.Vandermeer@rjburnside.com>; Chadwick Tennakoon <Chadwick.Tennakoon@caledon.ca>
Subject: RE: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Hello Shirin, thank you for your email. Apologies, we could not post the PIC presentation material as yet. We will do the needful soon.

However, please find attached the presentation for your review. Please let me know if you have any questions/comments. We would appreciate your thoughts/comments by April 9th.

Regards,
Kant

Kant Chawla, MPlg, MCIP, RPP
Senior Policy Planner | Policy, Heritage & Design
Planning Department

Office: 905.584.2272 x.4293
Email: kant.chawla@caledon.ca



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Town of Caledon | www.caledon.ca | www.visitcaledon.ca | [Follow us @YourCaledon](#)

From: Shirin Varzgani <Shirin.Varzgani@trca.ca>

Sent: Thursday, March 25, 2021 5:23 PM

To: Kant Chawla <Kant.Chawla@caledon.ca>

Subject: RE: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hi Kant,

I was checking the website today, it appears the materials have not been posted on the website yet? Please clarify how I can access the PIC material.

Thank you kindly,

Shirin Varzgani, MIP, MES (PI.)

Planner

Infrastructure Planning and Permits | Development and Engineering Services

T: (416) 661-6600 ext. 5785

E: shirin.varzgani@trca.ca

A: 101 Exchange Avenue, Vaughan, ON, L4K 5R6 | trca.ca



From: Kant Chawla <Kant.Chawla@caledon.ca>

Sent: March 4, 2021 2:19 PM

To: Shirin Varzgani <Shirin.Varzgani@trca.ca>

Subject: RE: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Thank you Shirin for your email ! The materials will be posted after the PIC meeting is done on 24th.

Kant Chawla, MPlg, LLB, RPP

Senior Policy Planner | Policy, Heritage & Design
Planning Department

Office: 905.584.2272 x.4293

Email: kant.chawla@caledon.ca



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Town of Caledon | www.caledon.ca | www.visitcaledon.ca | Follow us @YourCaledon

From: Shirin Varzgani <Shirin.Varzgani@trca.ca>

Sent: Thursday, March 04, 2021 2:13 PM

To: Kant Chawla <Kant.Chawla@caledon.ca>

Subject: FW: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Hi Kant,

When will the consultation material for the above-noted project be posted on the Town's website?

Thanks,

Shirin Varzgani, MIP, MES (PI.)

Planner

Infrastructure Planning and Permits | Development and Engineering Services

T: (416) 661-6600 ext. 5785

E: shirin.varzgani@trca.ca

A: 101 Exchange Avenue, Vaughan, ON, L4K 5R6 | trca.ca



Sylvia Waters

From: Harvey, Joseph (MHSTCI) <Joseph.Harvey@ontario.ca>
Sent: Tuesday, April 06, 2021 4:57 PM
To: Caledon MMTMP
Cc: Barboza, Karla (MHSTCI); Hatcher, Laura (MHSTCI); kant.chawla@caledon.ca
Subject: File 0013783: Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 2021-04-06_Multi-ModalTMP-MHSTCI-Ltr.pdf

Ray Bacquie,

Please find attached MHSTCI's comments on the above referenced undertaking. Contact Laura Hatcher with any questions or concerns.

Regards,

Joseph Harvey

On behalf of

Laura Hatcher
Heritage Planner
Heritage Planning Unit
laura.e.hatcher@ontario.ca

**Ministry of Heritage, Sport,
Tourism and Culture Industries**

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Tel: 437.239.3404

**Ministère des Industries du Patrimoine,
du Sport, du Tourisme et de la Culture**

Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Tél: 437.239.3404



April 6, 2021

EMAIL ONLY

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
CaledonMMTMP@rjburnside.com

MHSTCI File : 0013783
Proponent : The Town of Caledon
Subject : Notice of Study Commencement - Master Plan
Project : Multi-Modal Transportation Master Plan
Location : The Town of Caledon

Dear Ray Bacquie:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of Study Commencement for this project. MHSTCI's interest in this master plan relates to its mandate of conserving Ontario's cultural heritage, which includes archaeological resources, built heritage resources and cultural heritage landscapes.

MHSTCI understands that master plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Municipal Class Environmental Assessment (MCEA) outlines a framework for master plan and associated studies which should recognize the planning and design Process of this Class EA and should incorporate the key principles of successful environmental assessment planning identified in Section A.1.1. The master planning process will, at minimum, address Phases 1 and 2 of the Planning and Design Process of the MCEA.

This letter provides advice on how to incorporate consideration of cultural heritage in the above-mentioned master planning process by outlining the technical cultural heritage studies and the level of detail required to address cultural heritage in master plans. In accordance with the MCEA, cultural heritage resources should be identified early in the process in order to determine known and potential resources and potential impacts.

Master Plan Summary

The Town of Caledon has initiated a Multi-Modal Transportation Master Plan (MMTMP) for the Municipality, consistent with the Phases 1 and 2 of the Municipal Class Environmental Assessment processes.

Identifying Cultural Heritage Resources

MHSTCI understands that the final public notice for the master plan could become the notice of completion for the Schedule B and C MCEAs within it and that this approach would likely result in extensive documentation should the master plan include numerous Schedule C MCEA undertakings. In regards to cultural heritage resources the Master Plan Document should;

- identify existing baseline environmental conditions,
- identify expected environmental impacts and,
- Include measures to mitigate potential negative impacts.

Archaeological Resources

Any undertakings as part of the master plan should be screened using the MHSTCI [Criteria for Evaluating Archaeological Potential](#) and [Criteria for Evaluating Marine Archaeological Potential](#) to determine if an archaeological assessment is needed. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licensed under the Ontario Heritage Act and submitted for MHSTCI review prior to the completion of the master plan.

Built Heritage Resources and Cultural Heritage Landscapes

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase and will be summarized in the EA Report. This study will:

1. Describe the existing baseline cultural heritage conditions within the study area by identifying all known or potential built heritage resources and cultural heritage landscapes, including a historical summary of the study area. MHSTCI has developed screening criteria that may assist with this exercise: [Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes](#).
2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the final EA report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will need to be undertaken and included in the final EA report. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MHSTCI for review and make it available to local organizations or individuals who have expressed interest in review.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, community heritage registers, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Assessment Reporting

Technical cultural heritage studies are to be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed. Please advise MHSTCI whether any technical heritage studies will be completed for this master plan and provide them to MHSTCI before issuing a Notice of Completion.

Thank you for consulting MHSTCI on this project. Please continue to do so through the master plan process. Contact Laura Hatcher with any questions or concerns.

Sincerely,

Joseph Harvey
On behalf of

Laura Hatcher
Heritage Planner
Heritage Planning Unit
laura.e.hatcher@ontario.ca

Copied to: Kant Chawla, Senior Policy Planner, Town of Caledon

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the Standards and Guidelines for Consultant Archaeologists.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

**Ministry of Heritage, Sport,
Tourism and Culture Industries**

Programs and Services Branch
401 Bay Street, Suite 1700
Toronto, ON M7A 0A7
Tel: 437.239.3404

**Ministère des Industries du Patrimoine,
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Direction des programmes et des services
401, rue Bay, Bureau 1700
Toronto, ON M7A 0A7
Tél: 437.239.3404



April 6, 2021

EMAIL ONLY

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
CaledonMMTMP@rjburnside.com

MHSTCI File : 0013783
Proponent : The Town of Caledon
Subject : Notice of Study Commencement - Master Plan
Project : Multi-Modal Transportation Master Plan
Location : The Town of Caledon

Dear Ray Bacquie:

Thank you for providing the Ministry of Heritage, Sport, Tourism and Culture Industries (MHSTCI) with the Notice of Study Commencement for this project. MHSTCI's interest in this master plan relates to its mandate of conserving Ontario's cultural heritage, which includes archaeological resources, built heritage resources and cultural heritage landscapes.

MHSTCI understands that master plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. The Municipal Class Environmental Assessment (MCEA) outlines a framework for master plan and associated studies which should recognize the planning and design Process of this Class EA and should incorporate the key principles of successful environmental assessment planning identified in Section A.1.1. The master planning process will, at minimum, address Phases 1 and 2 of the Planning and Design Process of the MCEA.

This letter provides advice on how to incorporate consideration of cultural heritage in the above-mentioned master planning process by outlining the technical cultural heritage studies and the level of detail required to address cultural heritage in master plans. In accordance with the MCEA, cultural heritage resources should be identified early in the process in order to determine known and potential resources and potential impacts.

Master Plan Summary

The Town of Caledon has initiated a Multi-Modal Transportation Master Plan (MMTMP) for the Municipality, consistent with the Phases 1 and 2 of the Municipal Class Environmental Assessment processes.

Identifying Cultural Heritage Resources

MHSTCI understands that the final public notice for the master plan could become the notice of completion for the Schedule B and C MCEAs within it and that this approach would likely result in extensive documentation should the master plan include numerous Schedule C MCEA undertakings. In regards to cultural heritage resources the Master Plan Document should;

- identify existing baseline environmental conditions,
- identify expected environmental impacts and,
- Include measures to mitigate potential negative impacts.

Archaeological Resources

Any undertakings as part of the master plan should be screened using the MHSTCI [Criteria for Evaluating Archaeological Potential](#) and [Criteria for Evaluating Marine Archaeological Potential](#) to determine if an archaeological assessment is needed. If the EA project area exhibits archaeological potential, then an archaeological assessment (AA) should be undertaken by an archaeologist licensed under the Ontario Heritage Act and submitted for MHSTCI review prior to the completion of the master plan.

Built Heritage Resources and Cultural Heritage Landscapes

A Cultural Heritage Report: Existing Conditions and Preliminary Impact Assessment will be undertaken for the entire study area during the planning phase and will be summarized in the EA Report. This study will:

1. Describe the existing baseline cultural heritage conditions within the study area by identifying all known or potential built heritage resources and cultural heritage landscapes, including a historical summary of the study area. MHSTCI has developed screening criteria that may assist with this exercise: [Criteria for Evaluating for Potential Built Heritage Resources and Cultural Heritage Landscapes](#).
2. Identify preliminary potential project-specific impacts on the known and potential built heritage resources and cultural heritage landscapes that have been identified. The report should include a description of the anticipated impact to each known or potential built heritage resource or cultural heritage landscape that has been identified.
3. Recommend measures to avoid or mitigate potential negative impacts to known or potential built heritage resources and cultural heritage landscapes. The proposed mitigation measures are to inform the next steps of project planning and design.

Where a known or potential built heritage resource or cultural heritage landscape may be directly and adversely impacted, and where it has not yet been evaluated for Cultural Heritage Value or Interest (CHVI), completion of a Cultural Heritage Evaluation Report (CHER) is required to fully understand its CHVI and level of significance. The CHER must be completed as part of the final EA report. If a potential resource is found to be of CHVI, then a Heritage Impact Assessment (HIA) will need to be undertaken and included in the final EA report. Our Ministry's [Info Sheet #5: Heritage Impact Assessments and Conservation Plans](#) outlines the scope of HIAs. Please send the HIA to MHSTCI for review and make it available to local organizations or individuals who have expressed interest in review.

While some cultural heritage landscapes are contained within individual property boundaries, others span across multiple properties. For certain cultural heritage landscapes, it will be more appropriate for the CHER and HIA to include multiple properties, in order to reflect the extent of that cultural heritage landscape in its entirety.

Community input should be sought to identify locally recognized and potential cultural heritage resources. Sources include, but are not limited to, municipal heritage committees, community heritage registers, historical societies and other local heritage organizations.

Cultural heritage resources are often of critical importance to Indigenous communities. Indigenous communities may have knowledge that can contribute to the identification of cultural heritage resources, and we suggest that any engagement with Indigenous communities includes a discussion about known or potential cultural heritage resources that are of value to them.

Environmental Assessment Reporting

Technical cultural heritage studies are to be undertaken by a qualified person who has expertise, recent experience, and knowledge relevant to the type of cultural heritage resources being considered and the nature of the activity being proposed. Please advise MHSTCI whether any technical heritage studies will be completed for this master plan and provide them to MHSTCI before issuing a Notice of Completion.

Thank you for consulting MHSTCI on this project. Please continue to do so through the master plan process. Contact Laura Hatcher with any questions or concerns.

Sincerely,

Joseph Harvey
On behalf of

Laura Hatcher
Heritage Planner
Heritage Planning Unit
laura.e.hatcher@ontario.ca

Copied to: Kant Chawla, Senior Policy Planner, Town of Caledon

It is the sole responsibility of proponents to ensure that any information and documentation submitted as part of their EA report or file is accurate. MHSTCI makes no representation or warranty as to the completeness, accuracy or quality of the any checklists, reports or supporting documentation submitted as part of the EA process, and in no way shall MHSTCI be liable for any harm, damages, costs, expenses, losses, claims or actions that may result if any checklists, reports or supporting documents are discovered to be inaccurate, incomplete, misleading or fraudulent.

Please notify MHSTCI if archaeological resources are impacted by EA project work. All activities impacting archaeological resources must cease immediately, and a licensed archaeologist is required to carry out an archaeological assessment in accordance with the *Ontario Heritage Act* and the Standards and Guidelines for Consultant Archaeologists.

If human remains are encountered, all activities must cease immediately and the local police as well as the Registrar, Burials of the Ministry of Government and Consumer Services must be contacted. In situations where human remains are associated with archaeological resources, MHSTCI should also be notified to ensure that the site is not subject to unlicensed alterations which would be a contravention of the *Ontario Heritage Act*.

Sylvia Waters

From: Microsoft Outlook
To: info@caledonchamber.com
Sent: Friday, March 05, 2021 11:50 AM
Subject: Undeliverable: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

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Diagnostic information for administrators:

Generating server: YTXPR0101MB0814.CANPRD01.PROD.OUTLOOK.COM
Receiving server: YTXPR0101MB0814.CANPRD01.PROD.OUTLOOK.COM

info@caledonchamber.com

3/5/2021 4:49:58 PM - Server at YTXPR0101MB0814.CANPRD01.PROD.OUTLOOK.COM returned '550 5.4.312 Message expired, DNS query failed(ErrorRetry)'

3/5/2021 4:39:58 PM - Server at caledonchamber.com (0.0.0.0) returned '450 4.4.312 DNS query failed [Message=ErrorRetry] [LastAttemptedServerName=caledonchamber.com] [TO1CAN01FT017.eop-CAN01.prod.protection.outlook.com](ErrorRetry)'

Original message headers:

ARC-Seal: i=1; a=rsa-sha256; s=arcselector9901; d=microsoft.com; cv=none;

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s=arcselector9901;
h=From:Date:Subject:Message-ID:Content-Type:MIME-Version:X-MS-Exchange-SenderADCheck;
bh=jwVdmGGcXSvZ4KtVgRcjU60Nf9hRmdFlvrKY4NtTn4=;

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Sylvia Waters

From: Baran, Michael (MNRF) <michael.baran@ontario.ca>
Sent: Thursday, March 04, 2021 11:40 AM
To: Caledon MMTMP
Subject: Automatic reply: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Follow Up Flag: Follow up
Flag Status: Flagged

Michael Baran is no longer working at the Niagara Escarpment Commission. Please forward your email to necgeorgetown@ontario.ca or telephone 905-877-5191 for assistance.

Sylvia Waters

From: Milne, Graham <Graham.Milne@halton.ca>
Sent: Thursday, March 04, 2021 11:57 AM
To: Caledon MMTMP; 'Kant.Chawla@caledon.ca'
Subject: RE: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Follow Up Flag: Follow up
Flag Status: Flagged

Please change your contact for Halton Region. It should be coming to Regionalclerk@halton.ca.

Thank you,

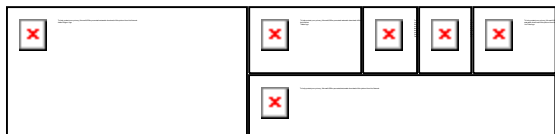
Graham Milne

Regional Clerk

Office of the Regional Clerk
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Halton Region

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From: Caledon MMTMP <CaledonMMTMP@rjburnside.com>

Sent: Thursday, March 04, 2021 11:40 AM

To: Frank.Dieterman@infrastructureontario.ca; lisa.myslicki@infrastructureontario.ca; Sara.Dibe@metrolinx.com; Nicholas.Day@metrolinx.com; Annette.Lister@metrolinx.com; laurie.miller@ontario.ca; maria.jawaid@ontario.ca; karla.barboza@ontario.ca; Lukasz.Grobel@ontario.ca; Philip.Morse@ontario.ca; Robin.Kortright@ontario.ca; jin.wang@ontario.ca; Fahmi.Choudhury@ontario.ca; Michael.Casey@ontario.ca; michael.baran@ontario.ca; regional.clerk@peelregion.ca; Roman.Kuczynski@peelregion.ca; Adrian.Smith@peelregion.ca; Pegah.Tootoonchian@peelregion.ca; Tara.Buonpensiero@peelregion.ca; Joy.Simms@peelregion.ca; Sabbir.Saiyed@peelregion.ca; Tina.Detaramani@peelregion.ca; Joe.Avsec@peelregion.ca; richa.dave@peelregion.ca; regionalclerk@york.ca; Mehrak.Hakimi@york.ca; steve.mota@york.ca; Ahmad.Subhani@york.ca; Capone, Aurelia <Aurelia.Capone@halton.ca>; mdunne@dufferincounty.ca; info@dufferincounty.ca; clerks@simcoe.ca <clerks@simcoe.ca>; info@simcoe.ca; julie.scruton@simcoe.ca; chris.doherty@simcoe.ca; donnab@wellington.ca; DZehr@regionofwaterloo.ca; cityclerksoffice@brampton.ca; Henrik.Zbogor@brampton.ca; Brian.Lakeman@brampton.ca; Kumar.Ranjan@brampton.ca; Bishnu.Parajuli@brampton.ca; David.Stowe@brampton.ca; clerks@vaughan.ca; sandra.volante@vaughan.ca; Selma.Hubjer@vaughan.ca; tsciotto@king.ca; clerks@king.ca <clerks@king.ca>; wpinkney@king.ca; mdavy@king.ca; suzannej@haltonhills.ca; Jessica Kennedy <jkennedy@eastgarafraxa.ca>; sgreatrix@orangeville.ca; ClerksOffice@townofmono.com; info@townofmono.com;

dgouldbrown@adjtos.ca; choran@newtecumseth.ca; dburton@newtecumseth.ca; dmurnaghan@newtecumseth.ca; lisa.campion@erin.ca; Tyler.Slaght@cvc.ca; Jakub.Kilis@cvc.ca; SVarzgani@trca.on.ca; SBevan@trca.on.ca; Adam.miller@trca.ca; Quentin.hanchard@trca.ca; lbull@nvca.on.ca; admin@downtownbolton.ca; info@caledonchamber.com; bgilhespy@brucetrail.org; info@ecocalledon.org; hvtrail@gmail.com; pres@oakridgestrail.org; caledoncyclingclub@gmail.com; info@hikeontario.com; krystina.koops@dpcdsb.org; brian_costigan@cpr.ca

Cc: Kant Chawla <Kant.Chawla@caledon.ca>

Subject: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

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On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

The Public Information Centre will be held virtually. See attached Notice for all details.

Date: March 24, 2021

Time: 4:00 – 6:00 p.m.

Should you wish to submit questions or comments to the study team, please contact one of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Sylvia Waters

From: Microsoft Outlook
To: sgreatrix@orangeville.ca
Sent: Thursday, March 04, 2021 11:40 AM
Subject: Undeliverable: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon



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CaledonMMTMP

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Sylvia Waters

From: Suzanne Jones <suzannej@haltonhills.ca>
Sent: Thursday, March 04, 2021 11:41 AM
To: Caledon MMTMP
Subject: Automatic reply: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Follow Up Flag: Follow up
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Suzanne Jones has retired and is no longer working for the Town of Halton Hills. Please direct all inquiries to Valerie Petryniak, Town Clerk and Director of Legislative Services at valeriep@haltonhills.ca.

Sylvia Waters

From: Tania Sciotto <tsciotto@king.ca>
Sent: Thursday, March 04, 2021 11:40 AM
To: Caledon MMTMP
Subject: Automatic reply: 51561-Agency/Organization-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Follow Up Flag: Follow up
Flag Status: Flagged

Thank you for your email. I am currently out of the office on maternity leave until June 2022.

In my absence, please contact Teresa Barresi at tbarresi@king.ca

Thank you and have a wonderful day!



Minutes of Meeting

Meeting Date: January 13, 2021 **Project No.:** 300051561.0000
Project Name: Caledon Multi-Model Transportation Master Plan
Meeting Subject: TAC Agency Kick-Off
Meeting Location: Online
Date Prepared: January 14, 2021

Those in attendance were:

Cristina Guido (CG)	Caledon – Climate Change	Cristina.Guido@caledon.ca
Ben Roberts (BR)	Caledon – Economic Development	Ben.Roberts@caledon.ca
Sandra Dolson (SD)	Caledon – Economic Development	Sandra.Dolson@caledon.ca
Andrew Pearce (AP)	Caledon – Engineering	Andrew.Pearce@caledon.ca
Drew Haines (DH)	Caledon – Engineering	Drew.Haines@caledon.ca
Arash Olia (AO)	Caledon – Engineering	Arash.Olia@caledon.ca
Ryan Grodecki (RG)	Caledon – Engineering	Ryan.Grodecki@caledon.ca
Dave Pelayo (DP)	Caledon – Fire and Emergency	Dave.Pelayo@caledon.ca
Erin Britnell (EB)	Caledon – IT & Climate Change	Erin.Britnell@caledon.ca
Brian Baird (BB)	Caledon – Operations	Brian.Baird@caledon.ca
Sylvia Kirkwood (SK)	Caledon – Planning	Sylvia.Kirkwood@caledon.ca
Marisa Williams (MW)	Caledon – Planning	Marisa.Williams@caledon.ca
Bailey Loverock (BL)	Caledon – Planning	Bailey.Loverock@caledon.ca
Kant Chawla (KC)	Caledon – Planning	Kant.Chawla@caledon.ca
Ohi Izirein (OI)	Caledon – Planning	Ohi.Izirein@caledon.ca
Henrik Zbogor (HZ)	City of Brampton	Henrik.Zbogor@brampton.ca
Brian Lakeman (BL)	City of Brampton	Brian.Lakeman@brampton.ca
Kumar Ranjan (KR)	City of Brampton	Kumar.Ranjan@brampton.ca
David Stowe (DS)	City of Brampton	David.Stowe@brampton.ca
Selma Hubjer (SH)	City of Vaughan	Selma.Hubjer@vaughan.ca

Tyler Slaght (TS)	CVC	Tyler.Slaght@cvc.ca
Jakub Kilis (JK)	CVC	Jakub.Kilis@cvc.ca
Wayne Pinkney (WP)	King Township	wpinkney@king.ca
Sara Dibe (SD)	Metrolinx	Sara.Dibe@metrolinx.com
Andrew Hannaford (AH)	MHBC	AHannaford@mhbcplan.com
Dana Anderson (DA)	MHBC	DAnderson@mhbcplan.com
Lukasz Grobel (LG)	MTO	Lukasz.Grobel@ontario.ca
Philip Morse (PM)	MTO	Philip.Morse@ontario.ca
Roman Kuczynski (RK)	Peel Region	Roman.Kuczynski@peelregion.ca
Adrian Smith (AS)	Peel Region	Adrian.Smith@peelregion.ca
Pegah Tootoonchian (PT)	Peel Region	Pegah.Tootoonchian@peelregion.ca
Tara Buonpensiero (TB)	Peel Region	Tara.Buonpensiero@peelregion.ca
Joy Simms (JS)	Peel Region	Joy.Simms@peelregion.ca
Ray Bacquie (RB)	R.J. Burnside	Ray.Bacquie@rjburnside.com
Henry Centen (HC)	R.J. Burnside	Henry.Centen@rjburnside.com
Jennifer Vandermeer (JV)	R.J. Burnside	Jennifer.Vandermeer@rjburnside.com
Nansen Feng (NF)	R.J. Burnside	Nansen.Feng@rjburnside.com
Xinli Tu (XT)	R.J. Burnside	Xinli.Tu@rjburnside.com
Delton Zehr (DZ)	Region of Waterloo	DZehr@regionofwaterloo.ca
Shirin Varzgani (SV)	TRCA	SVarzgani@trca.on.ca
Suzanne Bevan (SB)	TRCA	SBevan@trca.on.ca
Mehrak Hakimi (MH)	York Region	Mehrak.Hakimi@york.ca

Those absent were:

Alexandra Service (AS)	Caledon – Climate Change	Alexandra.Service@caledon.ca
Parm Chohan (PC)	Caledon – Communications	Parm.Chohan@caledon.ca
Tony Maxwell (TM)	Caledon – Communications	Tony.Maxwell@caledon.ca
Darryl Bailey (DB)	Caledon – Fire and Emergency	Darryl.Bailey@caledon.ca
Bishnu Parajuli (BP)	City of Brampton	Bishnu.Parajuli@brampton.ca
Brian Costigan (BC)	CPR	brian_costigan@cpr.ca
Dorothy DiBerto (DD)	CVC	Dorothy.DiBerto@cvc.ca
Mark Davy (MD)	King Township	mdavy@king.ca
Nicholas Day (ND)	Metrolinx	Nicholas.Day@metrolinx.com
Annette Lister (AL)	Metrolinx	Annette.Lister@metrolinx.com
Robin Kortright (RK)	MTO	Robin.Kortright@ontario.ca

Jin Wang (JW)	MTO	jin.wang@ontario.ca
Fahmi Choudhury (FC)	MTO	Fahmi.Choudhury@ontario.ca
Michael Casey (MC)	MTO	Michael.Casey@ontario.ca
Sabbir Saiyed (SS)	Peel Region	Sabbir.Saiyed@peelregion.ca
Tina Detaramani (TD)	Peel Region	Tina.Detaramani@peelregion.ca
Joe Avsec (JA)	Peel Region	Joe.Avsec@peelregion.ca
Richa Dave (RD)	Peel Region	richa.dave@peelregion.ca
Julie Scruton (JS)	Simcoe County	julie.scruton@simcoe.ca
Chris Doherty (CD)	Simcoe County	chris.doherty@simcoe.ca
Timothy Oketch (TO)	Timcon Engineering	TOketch@timcon-eng.com
Chad Horan (CH)	Town of New Tecumseth	choran@newtecumseth.ca
Dan Burton (DB)	Town of New Tecumseth	dburton@newtecumseth.ca
Dan Murnaghan (DM)	Town of New Tecumseth	dmurnaghan@newtecumseth.ca
Steve Mota (SM)	York Region	steve.mota@york.ca
Ahmad Subhani (AS)	York Region	Ahmad.Subhani@york.ca

The following items were discussed

Action by

1. Introduction

1.1 Purpose

Kant Chawla (KC) from Caledon identified that the purpose of this Technical Advisory Committee (TAC) meeting is to introduce the Caledon Multi-Modal Transportation Master Plan (MMTMP) project and seek input from TAC agencies.

2. Guiding Documents, Previous Studies / Policy Context

2.1 2017 Caledon Transportation Master Plan (TMP)

Ray Bacquie (RB) from R.J. Burnside noted that the Town of Caledon (Town) completed a Transportation Master Plan (TMP) in 2017 that projected future conditions up to 2031. Given recent provincial announcements and population/employment forecasts, 2041 and 2051 future forecasts will be included in the Caledon MMTMP. The Town's Official Plan update and Settlement Area Boundary Expansion (SABE) work is occurring in parallel. The MMTMP will be building off of the 2017 TMP. Caledon currently does not have its own transit operating system, but the need for a future transit system will be considered in the MMTMP.

The following items were discussed	Action by
<p>2.2 Guiding Documents</p> <p>RB noted documents identifying environmental constraints (e.g. NEC, Oak Ridges Moraine), transportation plans specific to Caledon (e.g. GTA West Corridor Study), SABE strategies, and other studies that feed directly into the study. The Region's Long Term Transportation Plan (LRTP) was completed subsequent to the Caledon 2017 TMP and will provide guidance.</p>	
<p>2.3 Comments/Questions</p> <p>Cristina Guido (CG) from Caledon's Energy and Environment Department: One of the five pillars in the Climate Change Plan update is low carbon emissions, which should be considered in the study. CG can share this document with KC.</p> <p>Brian Lakeman (BL) from the City of Brampton: Brampton will be updating their TMP in the Spring. Brampton is also currently updating their Official Plan, which is expected to be substantially different from the existing plan in terms of focusing population and employment growth. Brampton is also conducting a secondary plan exercise in the north-west part of the City, which may impact the Town. BL to reach out to the Policy Planning Team and provide more information on these studies.</p> <p>Ben Roberts (BR) from Caledon's Economic Development Department: One of the actions identified as a part of the completed economic development strategies is continued implementation of the Transit Feasibility Study to ensure connections between labour and industrial areas. BR noted that the GO rail transportation hub will be important in the future on an economic development perspective.</p> <p>Dave Peloya (DP) from Caledon's Fire and Emergency Department: The Fire Master Plan includes a station location study that identifies how transportation may impact services. The study is available on the website. DP can also provide this document to KC.</p> <p>David Stowe (DS) from Brampton Transit: This year, Brampton will begin the process of updating their 5 Year Business Plan and Transit Strategy. Synergies can be made between these initiatives and the Caledon's MMTMP study.</p>	<p>CG</p> <p>BL</p> <p>DP</p>

The following items were discussed	Action by
<p>Selma Hubjer (SH) from the City of Vaughan: Vaughan is updating their TMP in support of the growth management strategy. However, no consultations have occurred yet due to changes in the growth plan and updates on population/employment forecasts. Consultation will begin shortly and Caledon will be engaged in the process.</p> <p>Tara Buonpensiero (TB) from Peel Region can provide additional info on the scope and status of SABE work.</p> <p>Pegah Tootoochain (PT) from Peel Region's Strategic Initiatives Group: The Vision Zero document would need to be considered. It was adopted in 2018 and has a 2018-2022 timeline. It is understood that the plan is region-wide and that local municipalities and local services (e.g. police, fire, etc.) meet regularly to discuss various aspects of the plan. PT can provide further clarification in regard to the engagement strategy for neighbouring municipalities used to develop the plan and/or connect Burnside to specific leads.</p>	TB
<p>3. Urban Structure Considerations</p>	
<p>3.1 Growth</p> <p>RB noted that the Town currently has population/employment growth focused in Bolton, Mayfield West and Caledon East. Secondary plans have been developed for Bolton and Mayfield. The Bolton Residential Expansion Study (BRES) considered several options of residential allocation and a recent LPAT decision will provide clarification. Much of Caledon East has been built out. Due to environmental constraints, most growth is allocated to the south.</p>	
<p>3.2 Travel Patterns</p> <p>RB noted that there is a strong pull of traffic from Caledon to Mississauga, Brampton and Toronto. There has also been growth in inter-boundary travel (i.e. trips to/from York Region). The Burnside team will consider how origin-destination trips may change in the future.</p>	
<p>3.3 Mode Split Targets</p> <p>RB noted that master plans have ambitious non-auto mode share targets. However, the need of the TMP is to link these targets to required transit service levels and development densities. Benchmarking will be conducted to determine what Caledon can achieve in terms of mode split. The intention is to link modal split</p>	

The following items were discussed	Action by
<p>targets and various scenarios to level of service. Note that the transit hub in Bolton will have a major impact on this. Note that the transit hub/GO rail station in Bolton and the delay in the advent of GO rail services to Bolton will have a major impact on achieving the desired mode split targets. However, given that the timing of the station is not within the 2041 horizon year, it will be a challenge to achieve modal split targets unless higher provincial priority is given to this opportunity.</p> <p>Expediting the Hurontario Corridor Bus priority extension project from Brampton northerly to Mayfield West Community (FRTN # 64) within the Metrolinx Plan is also critical in immensely helping to achieve some mode split levels the Region of Peel has envisaged in their transportation strategy.</p>	
<p>3.4 Population / Employment Forecasts</p> <p>RB noted that Peel's background studies indicate a future population forecast of 300,000 in Caledon by 2051, which is almost double that of the 2041 population (160,000) and quadruple the current population. This level of unprecedented growth will require significant increase in services.</p>	
<p>3.5 Comments/Questions</p> <p>Sylvia Kirkwood (SK) from Caledon: The population/employment forecasts for specific areas in Caledon are proposed at this point, as there was no formal approval for them.</p> <p>BR: There will be a substantial amount of growth on the industrial side. Since the Town is heavily reliant on auto travel, it is important to consider a more efficient and effective way to move region-wide. Given the amount of goods movement and that the GTA West corridor may not be implemented, a local solution should be considered to prevent gridlock.</p> <p>Adrian Smith (AS) from Peel Region: The 300,000 population forecast by 2051 is still under discussion, but it does reflect the growth allocation for Caledon. It would require a multi-modal transportation strategy.</p>	
<p>CG: The Climate Change Plan update completed emissions modelling as a part of forecasting work. Transportation was identified as the Town's largest source of emissions. Transportation-related emissions will increase by 130% in a "Business-As-Usual" scenario</p>	CG

The following items were discussed	Action by
<p>from 2016-2050. The “Business-As-Usual” scenario accounts for transportation improvements identified in TMPs and feasibility studies. This includes commercial and residential transportation. It is important that Caledon meets the council endorsed target of net zero emissions. CG can provide details of the modelling results and scenarios.</p>	
<p>4. Transportation Analysis Considerations</p>	
<p>4.1 Transportation Considerations</p> <p>RB noted that committed road connections will be considered, along with the future A2 corridor, that extends from Brampton to the Caledon boundary, which is currently being planned. The level of transit required to achieve certain levels of service as well as TDM strategies will also be considered.</p>	
<p>4.2 Comments/Questions</p> <p>BL: Brampton has an Active Transportation Master Plan undertaken in late 2019. BL to send for Town’s consideration.</p> <p>AS: A challenge with the study is the amount of change and growth that Caledon would experience within the planning horizon years and the interrelationship between the transportation study and land use. A lot of work has yet to be done for land use, urban structure, nodes, and distribution of land use and density. The analysis needs to be strategic as it will be challenged. RB acknowledged the challenge and noted that the team will hopefully get input from the SABE study and hopefully not need to assume land use allocation. We will identify key corridors, along with their roles and functions, will be identified.</p> <p>KC: In regard to transportation modelling, the assumption is that population and employment forecasts are incorporated in the model (except to 2051). The study will have to be integrated with all the initiatives.</p> <p>PT: Announcements pertaining to priority transit, what this breakdown looks like and how these key characteristics can be applied to the Town should be considered. Peel Region strives to incorporate overlaps between provincial priorities and modal split objectives as well as work with local municipalities.</p>	<p>BL</p>

The following items were discussed	Action by
<p>Kumar Ranjan (KR) from Brampton Transit: Brampton is in the final stages of a TPAP for a major transit facility near Highway 50 and Major Mackenzie. KR to share information on the TPAP work.</p>	KR
<p>5. Environmental Features</p> <p>5.1 Constraints</p> <p>RB noted that environmental constraints will be reviewed in parallel with Official Plans and the team is aware of policies related to the Greenbelt, Oak Ridges Moraine, etc.</p> <p>Suzanne Bevan (SB) from the Toronto and Region Conservation Authority (TRCA): Natural hazard areas (e.g. erosion) should be flagged as well.</p> <p>RB noted that most environmental constraints will be mapped, and others will be acknowledged in policies.</p>	
<p>6. Development of Alternative Strategies</p> <p>6.1 Non-Auto Mode Share Strategy</p> <p>RB noted the need to find a strategy that meets economic objectives and supports land use projects for the Town. The alternative strategies phase of the process will be used to articulate the different mode share targets and services needed to achieve those targets. Given the ambitious non-auto mode share targets identified in the LRTP, it is proposed that low, medium and high mode share scenarios be developed. The low mode share scenario reflects growth that is currently occurring (i.e. same mode share forecasted to 2041 and potentially even 2051). The high mode share scenario will be consistent with the Peel LRTP. Benchmarking of densities and extent of service from other jurisdictions with mode shares Caledon is striving for will be conducted.</p> <p>6.2 Comments/Questions</p> <p>BR: Tourism and the use of active transportation has seen growth during the pandemic, as people are seeking locations to hike, bike, etc. It is important to have this connectivity between nodes, villages and urban centres.</p> <p>PT asked if modelling work will be conducted to understand the type of infrastructure required to achieve connectivity and active</p>	

The following items were discussed	Action by
<p>transportation requirements. RB noted that there is a mode share component in the Four Stage Transportation Model process; however, it is quite labour extensive to calibrate the mode split.</p> <p>PT: The LRTP's 50% sustainable mode share is a region-wide average and is broken down for each local municipality. It is acknowledged that these numbers were identified in 2019 and may see some change.</p> <p>Roman Kuczynski (RK) from Peel Region: The Caledon model is not sophisticated enough to model all the different modes. It is primarily built based on assumptions, which can be changed. It is hard to model active transportation; however, Peel is currently developing a new activity based transportation model. The current model is primarily used to forecast traffic along roads.</p> <p>RB: The goal is to estimate or assess the viability of different modal targets especially for transit. This can be done by identifying the level of service that is provided in other jurisdictions with similar urban structure that are achieving a particular modal share. Ray noted that key elements of transit service will likely include connections from Bolton to southern Peel (e.g. the airport area and transit hub and Toronto business areas) and connections from Mayfield West into Brampton (e.g. Hurontario LRT and GO station).</p> <p>Arash Olia (AO) from Caledon: The modal split for Caledon is 32% non-SOV mode share based on the LRTP. RB noted that the high mode share scenario will reflect this 32%, the low mode share scenario will reflect the existing modal split, and the medium mode share scenario will be an in-between. RB also noted benchmarking ranges will be established to determine the level of service for each scenario.</p> <p>KC noted that it is difficult to provide an extensive answer at this stage for the mode share strategy. The mode split model is difficult to assemble and modal split targets are policy driven. There will be more modelling meetings in the future to determine mode splits that are achievable and sustainable.</p> <p>RB noted that if Metrolinx and the Region have ambitious mode share targets, but Caledon is providing the service, this will be a challenge to fund operations since transit does not financially support itself.</p>	

The following items were discussed	Action by
<p>RK: The 32% modal split for Caledon includes all non-single vehicle trips (e.g. carpooling, transit) for planning horizon years. Telecommuting may continue in the post-COVID world, which could amount to a significant portion of trips. RB noted that governments have not been big supporters of telecommuting in the past and the impact of people working from home on economic development should be considered.</p>	
<p>7. Schedule and Stakeholder Engagement</p>	
<p>7.1 Timeline</p> <p>RB noted that the study should be completed by the end of 2021, with a presentation to the Town and Council to take place in November.</p> <p>Jennifer Vandermeer (JV) from R.J. Burnside: The first Public Information Centre (PIC) is expected to take place in March 2021, however the exact timing has not been defined yet. The Notice of Study Commencement and PIC#1 will be combined. The Town's future online engagement platform (Future Caledon) will be used as the primary means of facilitating the PIC. It would be an online video with a voiceover slide presentation that will solicit feedback from the public and stakeholders. Another PIC will take place in September (format TBD depending on the level of engagement from the first PIC). It is preferable to touch base with TAC members in advance of PICs at minimum and separate meetings may be set up in between PICs to discuss specific topics.</p>	
<p>7.2 Comments/Questions</p> <p>Joy Simms (JS) from Peel Region: The ROPA timelines may shift. There will be regional council meeting on January 14th to revisit the December 10th document. A planning committee will also be set up by the end of February to discuss focus areas of ROPA.</p> <p>JS noted there is a council endorsed scenario for 2041. RB noted that the team can begin forecasting to 2041.</p> <p>AS: Peel is always updating growth forecasts with the latest information, including distribution and timing of developments. Peel will share any updates with Caledon along with those working on the SABE.</p>	<p>Peel</p>

The following items were discussed		Action by
8.	Final Remarks	
8.1	A copy of the slide presentation will be provided to all attendees with the minutes of meeting. Comments are welcome within a week of distribution of the minutes.	Burnside Everyone

The preceding are the minutes of the meeting as observed by the undersigned. Should there be a need for revision, please advise Burnside within seven days of issuance. In the absence of notification to the contrary, these minutes will be deemed to be an accurate record of the meeting.

Minutes prepared by:

R.J. Burnside & Associates Limited

Xinli Tu
Transportation Planner
XT:

Distribution:

All Attendees

All Invitees absent from meeting

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210113 - 051561 TAC Meeting 1
1/22/2021 3:10 PM



Minutes of Meeting

Meeting Date: April 12, 2022 **Project No.:** 300051561.0000

Project Name : Caledon Multi-Modal Transportation Master Plan (MMTMP)

Meeting Subject: Technical Advisory Committee (TAC) Meeting #2

Meeting Location: Microsoft Teams

Date Prepared: April 12, 2022

Those in attendance were:

Arash Olia (AO)	Town of Caledon	Arash.Olia@caledon.ca
Jillian Britto (JB)	Town of Caledon	Jillian.Britto@caledon.ca
Imran Salam (IS)	Town of Caledon	Imran.Salam@caledon.ca
Andrew Pearce (AP)	Town of Caledon	Andrew.Pearce@caledon.ca
Ben Roberts (BR)	Town of Caledon	ben.roberts@caledon.ca
Brian Baird (BB)	Town of Caledon	brian.baird@caledon.ca
Catherine McLean (CL)	Town of Caledon	Catherine.McLean@caledon.ca
Jason Schildroth (JS)	Town of Caledon	Jason.Schildroth@caledon.ca
Drew Haines (DH)	Town of Caledon	drew.haines@caledon.ca
Katelyn Tozer (KT)	Town of Caledon	katelyn.tozer@caledon.ca
Rita Juliao (RJ)	Town of Caledon	Rita.Juliao@caledon.ca
Sabrina Davidson (SDa)	Town of Caledon	Sabrina.Davidson@caledon.ca
Sandra Dolson (SDo)	Town of Caledon	sandra.dolson@caledon.ca
Smit Patel (SP)	Town of Caledon	Smit.Patel@caledon.ca
Steven Burke (SB)	Town of Caledon	Steven.Burke@caledon.ca
Erin Britnell (EB)	Town of Caledon	Erin.Britnell@caledon.ca
Curtis Beyer (CB)	MTO	Curtis.Beyer@ontario.ca
Emma Harvey-Hurst (EM)	MTO	Emma.Harvey-Hurst@ontario.ca
Hosseini Hosseini (HH)	MTO	Hosseini.Hosseini@ontario.ca
Wes Lau (WL)	MTO	Wes.Lau@ontario.ca
Jonathan McGarry (JM)	MTO	Jonathan.McGarry@ontario.ca

Graham Routledge (GR)	MTO	Graham.Routledge@ontario.ca
Sara Dibe (SDi)	Metrolinx	Sara.Dibe@metrolinx.com
Shirin Varzgani (SV)	TRCA	Shirin.Varzgani@trca.ca
Susan Bevan	TRCA	Suzanne.Bevan@trca.ca
Tara Buonpensiero (TB)	Region of Peel	tara.buonpensiero@peelregion.ca
Richa Dave (RD)	Region of Peel	richa.dave@peelregion.ca
Wayne Koethe (WK)	Region of Peel	wayne.koethe@peelregion.ca
Dylan Prowse (DP)	Region of Peel	dylan.prowse@peelregion.ca
Sabbir Saiyed (SS)	Region of Peel	sabbir.saiyed@peelregion.ca
Brian Lakeman (BL)	City of Brampton	Brian.Lakeman@brampton.ca
Bishnu Parajuli (BP)	City of Brampton	Bishnu.Parajuli@brampton.ca
David Stowe (DS)	City of Brampton	David.Stowe@brampton.ca
Kumar Ranjan (KR)	City of Brampton	Kumar.Ranjan@brampton.ca
Bobb Compton (BC)	City of Brampton	Compton.Bobb@brampton.ca
Robert Di Profio (RDP)	York Region	Robert.DiProfio@york.ca
Mehrak Hakimi (MH)	York Region	Mehrak.Hakimi@york.ca
Christopher Tam (CT)	City of Vaughan	Christopher.Tam@vaughan.ca
Ray Bacquie (RB)	R.J. Burnside & Associates Limited (Burnside)	Ray.Bacquie@rjburnside.com
Gordon Hui (GH)	R.J. Burnside & Associates Limited (Burnside)	Gordon.Hui@rjburnside.com
Xinli Tu (XT)	R.J. Burnside & Associates Limited (Burnside)	Xinli.Tu@rjburnside.com

The following items were discussed

Action by

1. Background / Content

- 1.1 RB from Burnside provided a presentation on the long-term transportation infrastructure recommended as part of the Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) and an overview of the final steps of the MMTMP process.
- 1.2 The following topics were discussed:
- Study Approach and Consultation
 - Study Purpose, Vision, and Objectives
 - Summary of Phase 1
 - Alternative Strategies and Evaluation
 - Summary of Recommended TMP Strategy
 - Next Steps and Input

The following items were discussed	Action by
<p>2. Proposed Road Network Improvements (Slide 11 and 20)</p> <p>2.1 Phasing and Connectivity</p> <p>BR (Caledon): Road widening improvements were recommended for 2051. How is this road network approach going to fit into the planning realm in terms of what is going to be required as it pertains to connectivity?</p> <p>RB (Burnside): We are dealing with growth that is challenging as the rate of growth is dramatic in the Town's greenfield areas. Growth has been allocated through the Municipal Comprehensive Review (MCR) process. We have also worked hand-in-hand with Official Plan (OP) policies that identified the need for east-west collector roads, which should be developed at the Secondary Plan level. It is difficult to project travel patterns out to 2051 and predict road links without details of the land use and trade-offs for natural heritage features within the Secondary Area Boundary Expansion (SABE) lands. Therefore, it is important that Secondary Plan studies follow this master plan.</p> <p>2.2 Alternative Routes</p> <p>SS (Peel): This study should provide support, at a high-level, for alternative routes around Caledon Village due to traffic concerns along Highway 10 and Charleston Sideroad.</p> <p>The Region is looking to transform Airport Road through Caledon East into a commercial main street with less traffic and lower speeds. This study should provide support, at a high-level, for alternative routes around Caledon East.</p> <p>2.3 Highway 427 Extension</p> <p>SS (Peel): Regional and Town Councils have passed council resolutions supporting the extension of Highway 427 to Highway 9 which would relieve traffic along Airport Road and serve as a goods movement corridor. This study should continue to provide support for the Highway 427 extension.</p> <p>2.4 GTA West</p> <p>SS (Peel): A scenario with and without GTA West should be considered.</p>	

The following items were discussed	Action by
<p>RB: The MMTMP builds on Provincial and Regional Plans. The GTA West is part of the Greater Golden Horseshoe Transportation Plan. The Town should make sure that its future transportation network is able to effectively accommodate the highway. If, for whatever reason, this projected is cancelled, then the Town should amend the MMTMP by doing a study to assess the impacts of such changes on Town Roads. The MMTMP should also be updated every 5 years.</p>	
<p>3. Proposed Active Transportation Network (Slide 12 and 21)</p>	
<p>3.1 Costs</p> <p>BB (Caledon): Are costs being considered? More specifically, does Council understand the costs associated with paved shoulders?</p> <p>RB: We recognize that there are cost challenges associated with paved shoulders. The Town's Active Transportation Master Plan (ATMP) will investigate these corridors in greater detail, along with the associated costs and operational concerns.</p>	
<p>3.2 ATMP Timing</p> <p>RD (Peel): What is the anticipated timing of the ATMP?</p> <p>AO (Caledon): It is anticipated to be completed by Q3 or Q4 of 2023.</p>	
<p>3.3 Safety</p> <p>BR (Caledon): For active transportation facilities proposed in industrial areas, separation of uses is important for safety. Extending the seasonality of active transportation facilities should also be considered given snowy / icy conditions in the winter and the need for pedestrians to access these facilities.</p>	
<p>4. Proposed Transit Network (Slide 13 and 22)</p>	
<p>4.1 General Comment</p> <p>TB (Peel): The Bolton GO and Highway 413 corridor should be considered an inter-regional rather than regional facility.</p> <p>RB: Acknowledged. This will be corrected.</p>	Burnside
<p>4.2 Transit to Support Economic Development</p> <p>BR (Caledon): On an economic development perspective, transit should be developed to facilitate the movement of employees to their</p>	

The following items were discussed	Action by
<p>jobs as efficiently as possible, in which case it is important to have that inter-regional connection in place as there are employment forces that require regional rather than local infrastructure.</p> <p>RB: We touch on this in our background papers and analysis. Ensuring that employers and employees can use transit to get to work as a result of financial barriers is specific to the origin of the MMTMP vision. We can make sure to highlight this for future studies going forward.</p> <p>SS (Peel): There is an opportunity for Caledon to ensure that people live and work in the same community, which would support transit. The MMTMP should strengthen the need and push for the Caledon GO Station, along with encouraging intelligent transportation systems (ITS) and the use of technology to improve the future transportation network.</p>	
<p>4.3 Mayfield Road</p> <p>KR (Brampton): Considering Caledon is scaling up in growth and beginning to develop a transit system, are there any plans along Mayfield Road (recognizing that it is under Brampton's jurisdiction), especially since it may be a higher-order transit corridor in the future?</p> <p>RB: Mayfield Road was not envisioned as a high-order transit corridor, but rather a high frequency bus route corridor. For the SABE lands, it is important to have penetration within the blocks between Old School Road and Mayfield Road. Mayfield Road is recognized as an important east-west corridor; any collector roads within SABE lands would also provide an east-west connection. We anticipate that GTA West would also provide higher speed movement. We will take this as feedback; detailed assessment of Mayfield Road may not be included in this study but can be incorporated to provide guidance for future studies.</p> <p>BL (Brampton): Brampton is currently in the process of updating their OP. Mayfield Road will be shown as a rapid transit corridor as a recommendation for the long-term, subject to further study. The specific service type (e.g., ZUM express) is to be confirmed.</p> <p>SS (Peel): There is an opportunity to promote Mayfield Road as a multimodal corridor that can facilitate truck traffic, given its 50 metre right-of-way (ROW). A multi-use path (MUP) can also be provided along both sides.</p>	

The following items were discussed	Action by
<p>4.4 Transit Connections</p> <p>KR (Brampton): The Hurontario Light Rail Transit (LRT) will also be extended to Steeles Avenue and the Brampton GO Station. Assuming these projects will materialize, what are the Town's plans to connect to these facilities, along with the Mount Pleasant GO Station?</p> <p>RB: We recognize that these are all important connections, including the extension of transit along Hurontario Street to the Mayfield West Major Transit Station Area (MTSA). The Brampton GO Station and planned Caledon GO Station (in Bolton) are also recognized as important transit connection stations for the western and eastern portion of Caledon, respectively.</p> <p>BR (Caledon): Has connectivity between MTSA's been reviewed?</p> <p>RB: Humber Station Road and the GTA West are recognized as important corridors to provide that connectivity.</p>	
<p>5. Evaluation of Alternatives (Slide 17)</p>	
<p>5.1 Climate Change Objectives</p> <p>KT (Caledon): What metrics were used to evaluate the objectives, particularly climate change. Why did the Sustainable Modes alternative score lower in climate change objectives than the Combined Modes alternative?</p> <p>RB: Regarding the Sustainable Modes and Do Nothing scenarios, the magnitude of growth and traffic conditions are sufficiently poor such that there would be increased greenhouse gas emissions (GHGs) as a result of traffic congestion. The combined approach aims for road conditions that facilitate optimal speeds that minimize vehicular congestion. Higher levels of self-containment travel within the Town as a result of the combined approach would also contribute to lower GHGs.</p> <p>KT: Was the assessment and evaluation more of a qualitative or quantitative (model-based) process?</p> <p>RB: It was a combination of both, along with best practices. There is a component of the EMME travel demand model that estimates fuel consumption. Burnside can conduct a model run to support the evaluation; however, the difficulty with this approach is that the modelling inputs and platforms used for this study and the Town's</p>	<p>Burnside</p>

The following items were discussed	Action by
<p>Resilient Caledon study are different, which may lead to varying results.</p>	
<p>5.2 Combined Approach</p> <p>CT (Vaughan): Some advice based on Vaughan's experience—If the balanced approach is deemed appropriate as the preferred alternative and there is a desire or goal to use sustainable modes, there should be a measured approach to providing road capacity considering that there is a substantial amount of growth projected; however, since the density within SABE lands is relatively high compared to other suburban areas of Caledon, it is prudent to provide sustainable modes beyond driving. If more capacity is provided, more people will feel encouraged to drive.</p>	
<p>6. Addition Comments / Questions</p>	
<p>6.1 Consideration for Employment Lands</p> <p>SS (Peel): There should be consideration for how the Town's employment lands will be served through the multimodal network, especially with respect to the road, transit and cycling network.</p>	
<p>6.2 Truck Parking</p> <p>SS (Peel): Truck parking should be addressed as part of this MMTMP. This study should also support the development of Peel Enterprise Zones for goods movement.</p>	
<p>6.3 Steering Committee</p> <p>SS (Peel): Steering Committee meetings between the Region and local municipalities should start again.</p>	
<p>6.4 Goods Movement</p> <p>BL (Brampton): What were the conclusions that came out the goods movement strategy for this MMTMP?</p> <p>RB: The Region's goods movement network is well-established and vetted through the public process. This MMTMP uses the Peel's goods movement initiative as an input to the study rather than an output or recommendation. The fundamental principle is that main goods movement routes should be on regional and provincial facilities. This MMTMP would re-iterate this strategy.</p>	

The following items were discussed		Action by
	BR (Caledon): It is important to establish separation between trucks and automobile traffic to assure better connections with the 400-series highways, as well as the CN and CP rail network.	
6.5	Traffic Flow BR (Caledon): Traffic signals are a deterrent to moving traffic. Roundabouts should be considered where possible	
6.6	Deadline to Submit Comments AO: The next Public Information Centre (PIC) is scheduled for May 12 th . The MMTMP will be going to Council on June 20 th , which will then be followed by 30 days of public review. RB: Please submit any comments over the next couple of weeks if you would like your comments to be addressed as part of the next PIC.	

The preceding are the minutes of the meeting as observed by the undersigned. Should there be a need for revision, please advise Burnside within seven days of issuance. In the absence of notification to the contrary, these minutes will be deemed to be an accurate record of the meeting.

Minutes prepared by:

R.J. Burnside & Associates Limited

Xinli Tu, E.I.T.
Transportation Planner
XT

Distribution:

All Invitees

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Attachment 3

Indigenous Community Consultation

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:42 AM
To: jocko@sixnationsns.com
Cc: hdi2@bellnet.ca; williams.todde@gmail.com; Kant Chawla
Subject: 51561-Haudenosaunee Confederacy-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Hello, Hohahes, Leroy Hill, Secretary to Haudenosaunee Confederacy Chiefs Council

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

At this time, R.J. Burnside & Associates Limited is requesting on behalf of the Town of Caledon, that your community leaders advise if the community is interested in participating in the project and/or provide any comments/concerns with the proposed project.

Input and comments received from Indigenous communities, the public and agencies will be incorporated into the planning of this project. Your input and questions are encouraged. To provide the study team with your comments or for further project information, please contact either of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Your participation in this Master Plan EA study is much appreciated.

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 4:07 PM
To: Maxime Picard; melanievincent21@yahoo.ca
Cc: Kant Chawla
Subject: RE: 51561-Huron-Wendat Nation-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Good afternoon Maxime,

On behalf of the Town of Caledon, thank-you for your acknowledgement of receipt of the Notice of Commencement / Public Information Centre 1. We are not planning any archaeological studies as part of the Master Plan process. Please let us know if you have any other questions about the study or if you would like us to keep Huron-Wendat Nation on our Project Contact List to be kept informed as the study progresses.

Best regards,
Jennifer
(for the Caledon Multi-Modal TMP Study Team)

From: Kant Chawla <Kant.Chawla@caledon.ca>
Sent: Thursday, March 04, 2021 1:25 PM
To: Jennifer Vandermeer <Jennifer.Vandermeer@rjburnside.com>
Subject: FW: 51561-Huron-Wendat Nation-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

Jenn, would you respond or do you want me send an email ? We are not planning any archaeological studies within TMP process.

From: Maxime Picard <maxime.picard@cnhw.qc.ca>
Sent: Thursday, March 04, 2021 12:57 PM
To: Caledon MMTMP <CaledonMMTMP@rjburnside.com>; melanievincent21@yahoo.ca
Cc: Kant Chawla <Kant.Chawla@caledon.ca>
Subject: RE: 51561-Huron-Wendat Nation-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the contents to be safe.

Good afternoon Kant,

This is to acknowledge reception of your email and notification on the Multi-Modal Transportation Master Plan.

Could you please let us know if any archaeological studies are planned as part of the process ?

Thanks and best regards,

Maxime Picard

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:42 AM
To: Maxime Picard; melanievincent21@yahoo.ca
Cc: Kant Chawla
Subject: 51561-Huron-Wendat Nation-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Hello, Mr. Maxime Picard, Coordinator of Projects, Huron-Wendat Nation,

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

At this time, R.J. Burnside & Associates Limited is requesting on behalf of the Town of Caledon, that your community leaders advise if the community is interested in participating in the project and/or provide any comments/concerns with the proposed project.

Input and comments received from Indigenous communities, the public and agencies will be incorporated into the planning of this project. Your input and questions are encouraged. To provide the study team with your comments or for further project information, please contact either of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
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Ray Bacquie, P.Eng. MBA
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T 905-821-5891
CaledonMMTMP@rjburnside.com

Your participation in this Master Plan EA study is much appreciated.

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:42 AM
To: Fawn Sault
Cc: Megan DeVries; Kant Chawla
Subject: 51561-MCFN-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Hello, Ms. Fawn Sault, Consultation Manager, Mississaugas of the Credit First Nation,

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

At this time, R.J. Burnside & Associates Limited is requesting on behalf of the Town of Caledon, that your community leaders advise if the community is interested in participating in the project and/or provide any comments/concerns with the proposed project.

Input and comments received from Indigenous communities, the public and agencies will be incorporated into the planning of this project. Your input and questions are encouraged. To provide the study team with your comments or for further project information, please contact either of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Your participation in this Master Plan EA study is much appreciated.

Sylvia Waters

From: Consultations <Consultations@metisnation.org>
Sent: Thursday, March 04, 2021 11:42 AM
To: Caledon MMTMP
Subject: Automatic reply: 51561-MNO-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon

This is an automatically generated response from consultations@metisnation.org. Please do not reply to this e-mail address.

The MNO is adjusting standard work practices due to the Covid-19 outbreak and to better enable staff to work remotely. **Please note that the MNO's Lands, Resources and Consultations (LRC) Branch will no longer review hard copy consultation notices mailed to MNO offices.** The LRC Branch will review all electronic notices and process them in accordance with our standard operating procedures. All consultation notices must be sent electronically to consultations@metisnation.org.

The Métis Nation of Ontario's LRC Branch acknowledges your information notice. The MNO reserves the right to request additional information, meetings and consultations in respect of the project should the MNO deem it to be necessary.

For additional information pertaining to consulting with Ontario Métis please visit the MNO web site at: <http://www.metisnation.org/programs/lands,-resources--consultations/duty-to-consult>.

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:42 AM
To: consultations@metisnation.org
Cc: Kant Chawla
Subject: 51561-MNO-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Hello, Métis Nation of Ontario,

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

At this time, R.J. Burnside & Associates Limited is requesting on behalf of the Town of Caledon, that your community leaders advise if the community is interested in participating in the project and/or provide any comments/concerns with the proposed project.

Input and comments received from Indigenous communities, the public and agencies will be incorporated into the planning of this project. Your input and questions are encouraged. To provide the study team with your comments or for further project information, please contact either of the study project managers:

Kant Chawla, MPlg, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Your participation in this Master Plan EA study is much appreciated.

Sylvia Waters

From: Caledon MMTMP
Sent: Thursday, March 04, 2021 11:42 AM
To: Robin Linn
Cc: Lonny Bomberly; dlaforme@sixnations.ca; Kant Chawla
Subject: 51561-Six Nations of the Grand River-Notice of Commencement and Public Information Centre 1, Multi-Modal Transportation Master Plan, Town of Caledon
Attachments: 051561_Caledon MMTMP NOCm PIC1 FINAL Letter size.pdf

Hello, Ms. Robbin Vanstone, Lands and Resources, Six Nations of the Grand River,

On behalf of the Town of Caledon, please see the attached Notice of Commencement and Public Information Centre 1 for the Multi-Modal Transportation Master Plan.

At this time, R.J. Burnside & Associates Limited is requesting on behalf of the Town of Caledon, that your community leaders advise if the community is interested in participating in the project and/or provide any comments/concerns with the proposed project.

Input and comments received from Indigenous communities, the public and agencies will be incorporated into the planning of this project. Your input and questions are encouraged. To provide the study team with your comments or for further project information, please contact either of the study project managers:

Kant Chawla, MPig, MCIP, RPP
Senior Policy Planner | Transportation
Town of Caledon
T 905-584-2272 x 4293
kant.chawla@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
T 905-821-5891
CaledonMMTMP@rjburnside.com

Your participation in this Master Plan EA study is much appreciated.

Sylvia Waters

From: Avid Banihashemi
Sent: Friday, June 03, 2022 10:55 AM
To: communications@hdi.land
Cc: jocko@sixnationsns.com; info@hdi.land; 1749resource@gmail.com; janicewilliams@hdi.land; williams.todde@gmail.com; Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP
Subject: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input
Attachments: 051561_NoticeOfOpportunity-CaledonMMTMP.pdf

Good morning,

On behalf of the Town of Caledon (Town), please see the attached Notice of Opportunity for Study Input for the Town's Multi-Modal Transportation Master Plan (MMTMP).

The Project Team would be happy to answer your questions or to discuss any concerns you may have. If you have questions or comments, please contact either of the following project team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon
6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
Arash.Olia@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, ON L5N 8R9
T 905-821-5891
CaledonMMTMP@rjburnside.com

Best regards,
Avid



Avid Banihashemi
Environmental Project
Manager

R.J. Burnside & Associates Limited
292 Speedvale Avenue West, Unit 20, Guelph, Ontario N1H
1C4
Office: +1 800-265-9662 Direct Line: +1 226-486-1562
www.rjburnside.com



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Sylvia Waters

From: Avid Banihashemi
Sent: Friday, June 03, 2022 10:55 AM
To: mario.grosLouis@cnhw.qc.ca
Cc: Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP; louis.lesage@cnhw.qc.ca; melanievincent21@yahoo.ca
Subject: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input
Attachments: 051561_NoticeOfOpportunity-CaledonMMTMP.pdf

Good morning,

On behalf of the Town of Caledon (Town), please see the attached Notice of Opportunity for Study Input for the Town's Multi-Modal Transportation Master Plan (MMTMP).

The Project Team would be happy to answer your questions or to discuss any concerns you may have. If you have questions or comments, please contact either of the following project team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon
6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
Arash.Olia@caledon.ca

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Mississauga, ON L5N 8R9
T 905-821-5891
CaledonMMTMP@rjburnside.com

Best regards,
Avid



Avid Banihashemi
Environmental Project
Manager

R.J. Burnside & Associates Limited
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Thank you.

Sylvia Waters

From: Abby LaForme <Abby.LaForme@mncfn.ca>
Sent: Friday, June 03, 2022 2:00 PM
To: Avid Banihashemi
Cc: Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP; Adam LaForme
Subject: RE: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input

Good Afternoon Arash,

Thank you for reaching out to MCFN DOCA for Consultation. I would like to request a copy of the Environmental Assessment to review and also would like to mention MCFN would like to participate in Archaeological Studies if any are being done. Please contact Adam LaForme for MCFN DOCA, FLR participation.

Thank you

Abby LaForme,
Acting Consultation Coordinator



Mississaugas of the Credit First Nation (MCFN)
Department of Consultation & Accommodation (DOCA)
4065 Highway 6, Hagersville, ON N0A 1H0
Ph: (905) 768 – 4260
Email: Abby.LaForme@mncfn.ca

From: Avid Banihashemi <Avid.Banihashemi@rjburnside.com>
Sent: Friday, June 3, 2022 10:55 AM
To: Abby LaForme <Abby.LaForme@mncfn.ca>
Cc: Sylvia Waters <Sylvia.Waters@rjburnside.com>; Ray Bacquie <Ray.Bacquie@rjburnside.com>; Arash Olia <Arash.Olia@caledon.ca>; Caledon MMTMP <CaledonMMTMP@rjburnside.com>; MCFN.Consultation <MCFN.Consultation@mncfn.ca>; DOCA Admin <DOCA.Admin@mncfn.ca>; Adam LaForme <Adam.LaForme@mncfn.ca>
Subject: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input

Good morning Abby,

On behalf of the Town of Caledon (Town), please see the attached Notice of Opportunity for Study Input for the Town's Multi-Modal Transportation Master Plan (MMTMP).

The Project Team would be happy to answer your questions or to discuss any concerns you may have. If you have questions or comments, please contact either of the following project team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon

6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
Arash.Olia@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, ON L5N 8R9
T 905-821-5891
CaledonMMTMP@rjburnside.com

Best regards,
Avid



Avid Banihashemi
Environmental Project
Manager

R.J. Burnside & Associates Limited
292 Speedvale Avenue West, Unit 20, Guelph, Ontario N1H
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If you have received this communication in error please notify the sender at the above email address and delete this email immediately.
Thank you.

Sylvia Waters

From: Avid Banihashemi
Sent: Friday, June 03, 2022 10:55 AM
To: Consultations
Cc: Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP
Subject: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input
Attachments: 051561_NoticeOfOpportunity-CaledonMMTMP.pdf

Good morning Jessie,

On behalf of the Town of Caledon (Town), please see the attached Notice of Opportunity for Study Input for the Town's Multi-Modal Transportation Master Plan (MMTMP).

The Project Team would be happy to answer your questions or to discuss any concerns you may have. If you have questions or comments, please contact either of the following project team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon
6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
Arash.Olia@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, ON L5N 8R9
T 905-821-5891
CaledonMMTMP@rjburnside.com

Best regards,
Avid



Avid Banihashemi
Environmental Project
Manager

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Office: +1 800-265-9662 Direct Line: +1 226-486-1562
www.rjburnside.com



**** CONFIDENTIALITY NOTICE ****

Sylvia Waters

From: Avid Banihashemi
Sent: Friday, June 03, 2022 10:55 AM
To: Robin Vanstone
Cc: Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP; lonnybomberry@sixnations.ca; dlaforme@sixnations.ca
Subject: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input
Attachments: 051561_NoticeOfOpportunity-CaledonMMTMP.pdf

Good morning Robbin,

On behalf of the Town of Caledon (Town), please see the attached Notice of Opportunity for Study Input for the Town's Multi-Modal Transportation Master Plan (MMTMP).

The Project Team would be happy to answer your questions or to discuss any concerns you may have. If you have questions or comments, please contact either of the following project team members:

Arash Olia, Ph.D., P.Eng.
Manager, Transportation Engineering
Town of Caledon
6311 Old Church Road
Caledon, Ontario L7C 1J6
T 905-584-2272 x 4073
Arash.Olia@caledon.ca

Ray Bacquie, P.Eng. MBA
Consultant Project Manager
R. J. Burnside & Associates Limited
6990 Creditview Road, Unit 2
Mississauga, ON L5N 8R9
T 905-821-5891
CaledonMMTMP@rjburnside.com

Best regards,
Avid



R.J. Burnside & Associates Limited
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Office: +1 800-265-9662 Direct Line: +1 226-486-1562
www.rjburnside.com



**** CONFIDENTIALITY NOTICE ****

Sylvia Waters

From: Avid Banihashemi
Sent: Wednesday, June 08, 2022 4:30 PM
To: Abby LaForme
Cc: Sylvia Waters; Ray Bacquie; Arash Olia; Caledon MMTMP; Adam LaForme
Subject: RE: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input

Good afternoon Abby,

Thank you for your email in response to Notice of Opportunity for Study Input for Town of Caledon Multi-Modal Transportation Master Plan (MMTMP).

MMTMP does not include an Archeological Assessment, since this is a high-level planning document. However, any planned infrastructure that would potentially impact any significant archaeological resources would require a separate study. This will be included as a commitment in the MMTMP document.

We would be happy to share the draft MMTMP report for your review once available, prior to filing the Study.

Kindly please let me know if you have any further questions or comments.

Warm regards,
Avid

Avid Banihashemi
Environmental Project Manager

R.J. Burnside & Associates Limited | www.rjburnside.com
Office: +1 800-265-9662 **Direct:** +1 226-486-1562

Sylvia Waters

Subject: FW: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input

From: Janice Williams <janicewilliams@hdi.land>

Sent: Thursday, June 09, 2022 1:34 PM

To: Avid Banihashemi <Avid.Banihashemi@rjburnside.com>

Cc: williams.todde@gmail.com; Sylvia Waters <Sylvia.Waters@rjburnside.com>; Ray Bacquie <Ray.Bacquie@rjburnside.com>; Arash Olia <Arash.Olia@caledon.ca>; Caledon MMTMP <CaledonMMTMP@rjburnside.com>; Tracey General <traceyghdi@gmail.com>; Aaron Detlor <Aarondetlor@gmail.com>; Brian Doolittle <ganowa@me.com>

Subject: Re: Town of Caledon Multi-Modal Transportation Master Plan (MMTMP) - Notice of Opportunity for Study Input

Sge:no/Hello Avid,

Nya:weh/Thank-you for the notification sent to Haudenosaunee Development Institute (HDI) regarding the Town of Caledon Multimodal Transportation Master Plan project. At this time, we have significant concerns with respect to the proposed project. Particularly with the Town of Caledon not submitting an application and fee with HDI so that we may review the project. How are we to provide feedback and consider engagement when we have no funds to review and/or comment on the Master Plan project?

It is necessary that the Town of Caledon provides a completed application so we can participate meaningfully on this project which is going to impair and interfere with our rights. Please see the provided instructions to our application process. Again, this application process provides initial funding for our team to begin to review the documents internally and recognize how this project impacts and interferes within our treaty rights.

As for the application process, you are able to access this information on the link below:

[Development - Haudenosaunee Confederacy](#)

Click on the PDF file download and complete the application. Once this is completed, please mail off to:

Haudenosaunee Development Institute

16 Sunrise Court - Suite 600

P.O.Box 714

Ohswegen, Ontario

N0A 1M0

Once the appropriate measures have been followed through, we will discuss how and when we can participate meaningfully. Until then, we ask this proposed project to halt any further.

Nya:weh/Thank-you,

Raechelle Williams

HDI Environmental Supervisor

Haudenosaunee Development Institute

16 Sunrise Court, Suite 402B Ohswegen, ON

P.O. Box 714

Ph: 519-445-4222

(Direct): 519-802-9402



Appendix C

Natural, Cultural and Archaeological Context

Appendix C | Natural, Cultural and Archaeological Context

Date: May 31, 2022 **Project No.:** 300051561.0000
Project Name: Caledon Multimodal Transportation Master Plan
Submitted To: Town of Caledon
Submitted By: R.J. Burnside & Associates / MHBC

1.0 Natural Heritage

The Town of Caledon is abundant in natural heritage. Environmental features, protected properties and natural features have been identified based on a review of available provincial and municipal databases, including the following existing data sources:

- Town of Caledon Official Plan (Consolidated 2018)
- Region of Peel Official Plan (2018)
- Niagara Escarpment Plan (NEP)
- Oak Ridges Moraine Conservation Plan (ORMCP)
- Lake Simcoe Protection Plan (LSPP)
- Greenbelt Plan
- Growth Plan for the Greater Golden Horseshoe
- Land Information Ontario (LIO)
- Make a Map: Natural Heritage Areas
- Source Protection Information Atlas
- Natural Heritage Information Centre (“NHIC”) database
- Ministry of the Environment, Conservation and Parks (MECP): Source Water Protection Atlas

- Toronto Region Conservation Authority (TRCA) and Credit Valley Conservation Authority (CVC), Nottawasaga Valley Conservations Area (NVCA) and Lake Simcoe Region Conservation Area (LSRCA) online mapping

The following sections document the existing natural features of significance and their implications for the development of transportation facilities.

1.1 Protected Properties

Protected properties are properties in public ownership that are protected for the purposes of conservation and nature-based recreation. In Caledon, these include:

Provincial Parks:

- Forks of the Credit Provincial Park

Conservation Areas owned by Credit Valley Conservation (CVC):

- The Cheltenham Badlands
- Belfountain Conservation Area
- Ken Whillans Resource Management Area
- Upper Credit Conservation Area
- Elora Cataract Trailway
- Charles Sauriol Conservation Area

Conservation Areas owned by Toronto and Region Conservation Authority (TRCA):

- Glen Haffy Conservation Park
- Albion Hills Conservation Park
- Bolton Resource Management Tract
- Palgrave Forest and Wildlife Area

These lands are owned and/or operated by Ontario Parks, CVC or TRCA, as indicated above. Any new or expanded transportation infrastructure in, or directly adjacent to, these areas will require consultation with the applicable landowner. Many of these areas are maintained for their natural heritage significance and environmental protection measures may be required. Other publicly owned protected properties include trails owned by the Bruce Trail and Trans-Canada Trail.

1.2 Natural Heritage Systems

The Town of Caledon is subject to a variety of land use plans and policies that shape how transportation systems are to be developed within, and around, natural features. The Provincial Policy Statement, Niagara Escarpment Plan, Greenbelt Plan, Oak Ridges Moraine Conservation Plan, Lake Simcoe Protection Plan, Growth Plan, Town and Regional Official Plans all include policies to protect significant natural features, including the following:

- Significant Wetlands;
- Significant Woodlands;
- Significant ANSIs;
- Significant Wildlife Habitat;
- Significant Valleylands;
- Habitat of Endangered and Threatened Species; and
- Fish Habitat.

With respect to lands within the Niagara Escarpment Plan, the following additional natural features are protected:

- All wetlands;
- All Life Science and Earth Science ANSIs; and
- Habitat of special concern species in Escarpment Natural and Escarpment Protection Areas.

With respect to lands within the Greenbelt Plan and ORMCP, the following additional natural features are protected:

- All wetlands;
- All Life Science ANSIs;
- Habitat of special concern species;
- Sand barrens, savannahs and tallgrass prairies;
- Alvars (Greenbelt Plan only);
- Permanent and intermittent streams;
- Kettle lakes (ORMCP);
- Lakes and their littoral zones (Greenbelt) seepage areas and springs; and
- Minimum vegetation protection zones.

With respect to lands within the LSPP, the following additional natural features are protected:

- Natural areas abutting Lake Simcoe (none of which are present in the Town of Caledon).

Although policies exist to protect these features, not all have been identified. For example, habitats of species at risk are not always known. However, most of the listed features are protected within Natural Heritage Systems identified through the various provincial plans and upper and lower tier municipal Official Plans. A Natural Heritage System is a network of interconnected natural features designed to identify and protect features at the landscape scale. The various Natural Heritage Systems developed under provincial and municipal plans are

intended to protect the significant natural features listed above, even where all have not been specifically identified.

New and expanded infrastructure is typically permitted within designated Natural Heritage Systems and associated land use designations, in conjunction with approvals under the Environmental Assessment Act. Under the Niagara Escarpment Plan, only infrastructure deemed necessary to the public interest is permitted within the Escarpment Natural Area designation and only when all other alternatives have been considered. Other provincial plan and official plan policies include similar requirements. Most of the Town of Caledon's Natural Heritage policies and mapping mirror that of the various other provincial Plans. The Town's Natural Heritage System is illustrated in **Figure C-1**.

Greenbelt and Natural Escarpment Plan designation areas are illustrated in **Figure C-2** and **Figure C-3**, respectively. In addition to the Natural and Protection areas, **Figure C-3** identifies recreation areas, rural areas and mineral resource extraction areas.

Figure C-4 defines the Oak Ridges Moraine Plan designated areas. The plan has implications for much of eastern Caledon north of Bolton and immediately west of Caledon East.

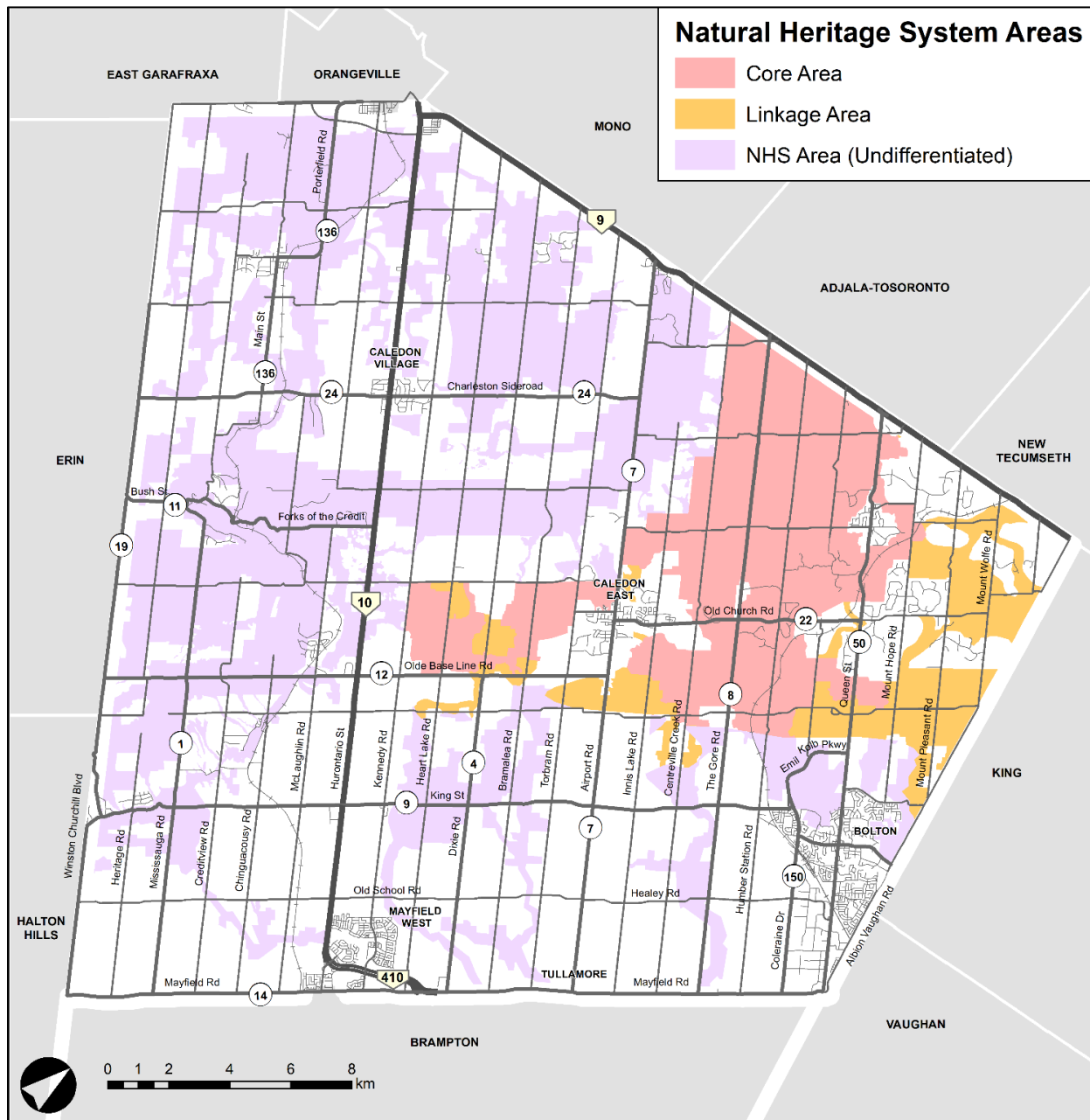


Figure C-1: Natural Heritage System Areas

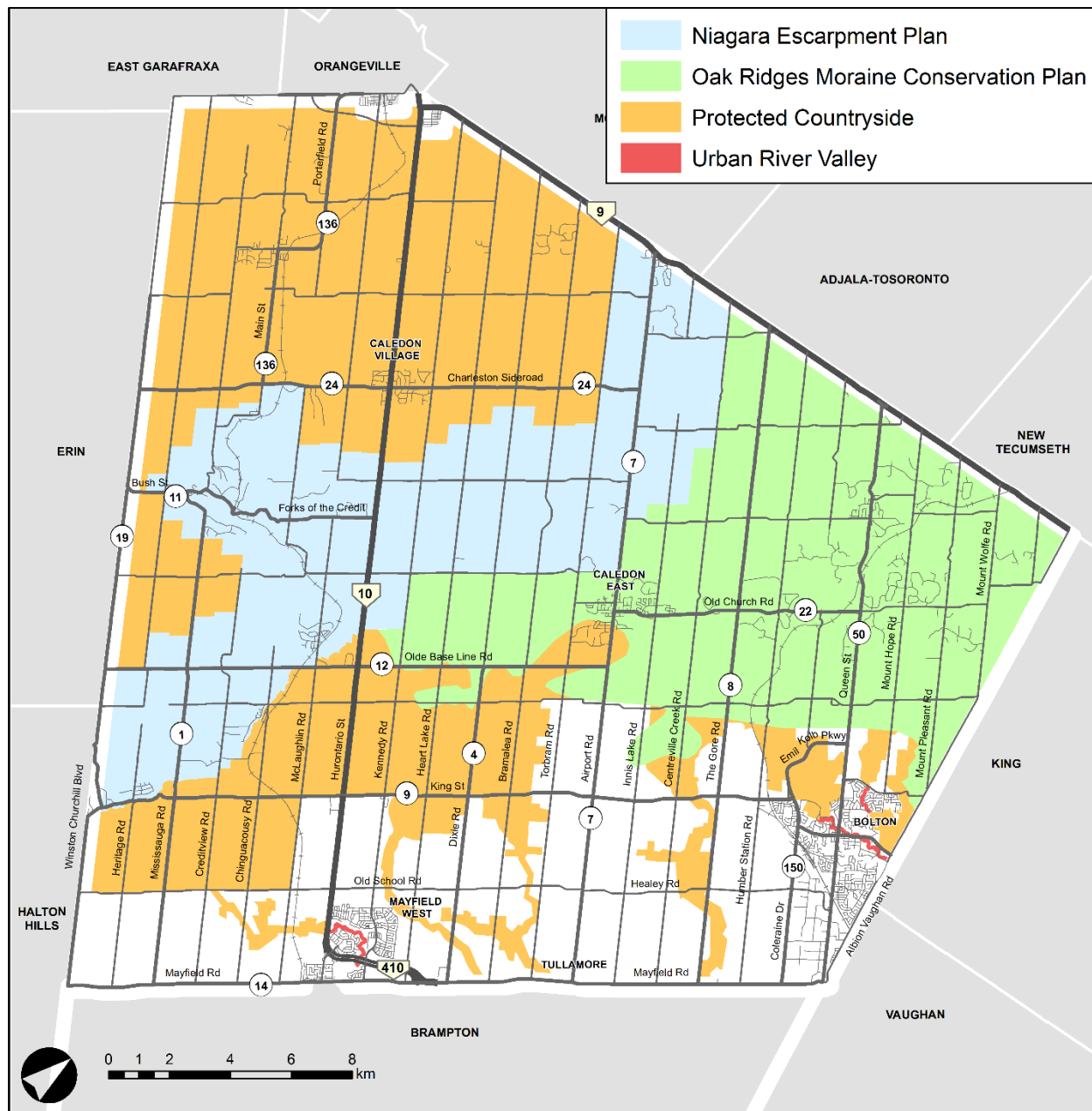


Figure C-2: Greenbelt Plan Areas

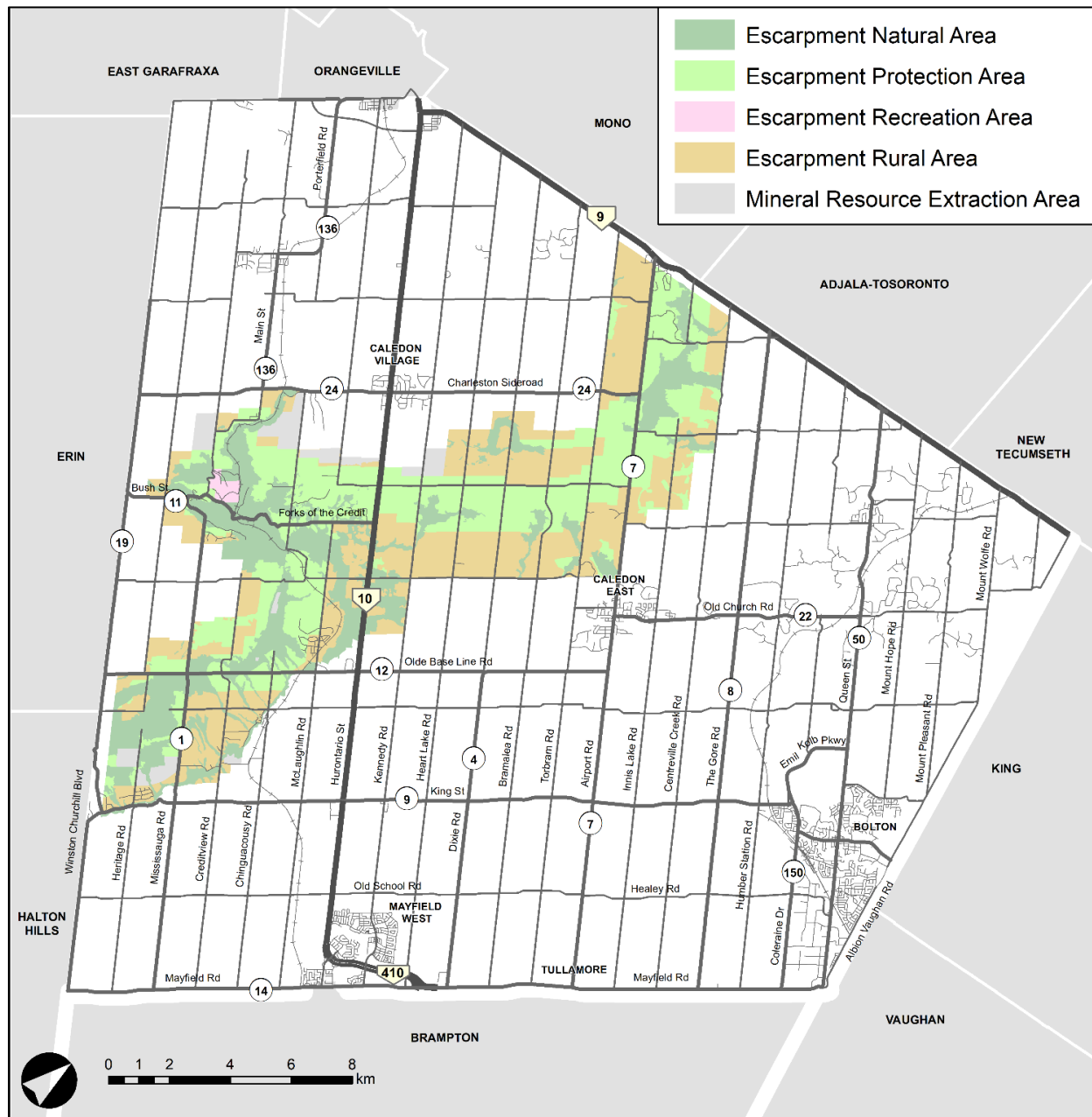


Figure C-3: Niagara Escarpment Plan Designation

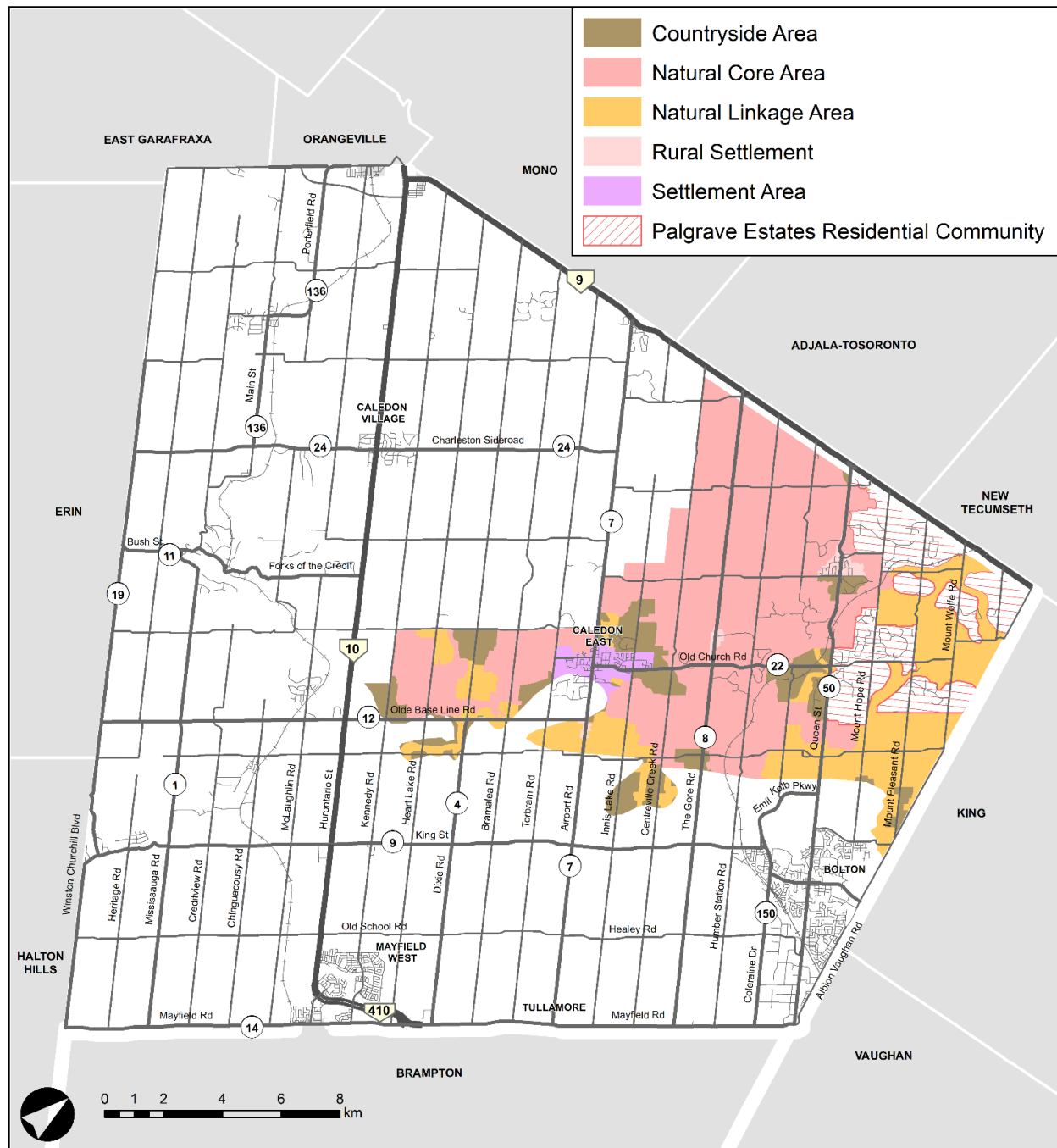


Figure C-4: Oak Ridges Moraine Conservation Plan Designations

1.3 Select Key Natural Features

As noted in the previous section, not all natural features have been identified and mapped. Some select natural features are described in the following sections where mapping exists. Many of these are located within Natural Heritage Systems described in the previous Section. Other natural features may exist beyond the Natural Heritage Systems and will be identified through field studies carried out during detailed planning and design exercises.

1.3.1 Areas of Natural and Scientific Interest (ANSI)

ANSIs are areas of land and water containing unique natural landscapes or features. These features have been scientifically identified by the Province of Ontario as having life or earth science values related to protection, scientific study or education.

Both Earth Science and Life Science ANSIs are identified in Caledon. Earth science ANSIs are geological in nature and contain significant examples of bedrock, fossils, landforms or ongoing geological processes. Life science ANSIs represent biodiversity and natural landscapes. They include specific types of forests, valleys, prairies, wetlands, native plants, native animals and their supportive environments. Life science ANSIs contain relatively undisturbed vegetation and landforms and their associated species and communities. ANSI of provincial and regional significance present in the Town, include:

ANSIs - Life Science:

- Alton Branch Swamp (Regional)
- Caledon Lake Forests (Provincial)
- Credit Forks (Provincial)
- Credit Forks Lowland (Provincial)
- Dufferin Lake (Provincial)
- Inglewood Forest (Regional)
- Terra Cotta Forest (Provincial)

ANSI - Earth Science:

- Badland Topography of Queenston Shales (Provincial)
- Caledon Meltwater Deposits (Provincial)
- Credit Valley Quarry (Provincial)
- Mono Mills - Caledon Meltwater Channels (Provincial)
- Palgrave Moraine (Provincial)
- Paris Moraine East of Credit Forks (Regional)

These are illustrated in **Figure C-5**.

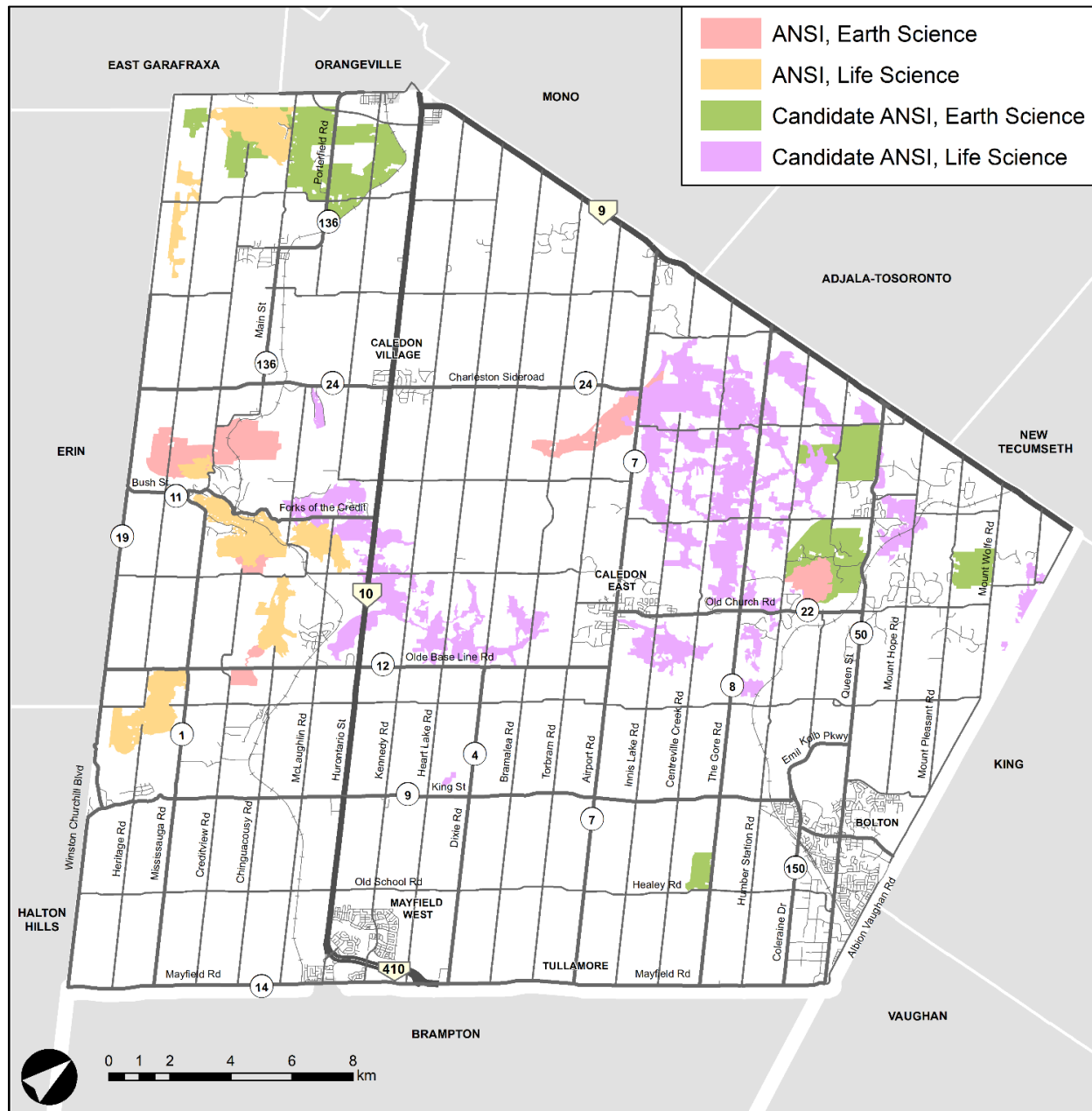


Figure C-5: Areas of Natural and Scientific Interest

1.3.2 Wetlands

Provincially Significant Wetlands and other wetlands have been mapped by the province and are illustrated in **Figure C-6**.

Wetlands are protected through policies of the various provincial plans and Official Plans in effect. Wetlands are also regulated through the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulations administered by Conservation Authorities.

In the Town of Caledon, the Toronto Region Conservation Authority (TRCA) and Credit Valley Conservation (CVC) regulate the majority of hazard lands within the Town of Caledon while the Nottawasaga Valley Conservation Authority (NVCA) and Lake Simcoe Region Conservation Authority (LSRCA) have jurisdiction over a comparatively small areas in the northeast portion of the Town of Caledon.

Each Authority “may grant permission for development in [regulated areas] if, in its opinion, the control of flooding, ...pollution or the conservation of land will not be affected by the proposed development.” (Section 3(1)).

A permit may be required for transportation facilities that affect wetlands, watercourses and other hazard lands.



1.3.3 Fish Habitat

The federal *Fisheries Act, 1985, as amended in 2019*, is administered by Fisheries and Oceans Canada (DFO) and provides protection for fish and fish habitat across Canada. Section 34.4 of the Act states that:

No person shall carry on any work, undertaking or activity, other than fishing, that result in the death of fish.

Section 35 (1) of the Act states that:

No person shall carry on any work, undertaking or activity that results in the harmful alteration, disruption or destruction of fish habitat.

The Act defines fish habitat as waters frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply and migration areas.

Fish habitat is present within the various lakes and watercourses present throughout the Town of Caledon. Construction of new transportation infrastructure and improvements to existing transportation infrastructure that have the potential to impact fish or fish habitat must be constructed and operated in compliance with the federal Fisheries Act. If works will proceed below the annual high-water mark, then a Request for Project Review should be made to the Fish and Fish Habitat Protection Program. If the death of a fish by means other than fishing, or the harmful alteration, disruption or destruction of fish habitat will likely result from a project, the proponent responsible for the activities is required to obtain an Authorization from the Minister of Fisheries and Oceans Canada (DFO) as per Paragraph 34.4(2) and 35(2)(b) of the Fisheries Act.

1.3.4 Wildlife Habitat

The Ministry of Natural Resources and Forestry (MNRF) has identified Mixed Wader Nesting Colonies (Great Blue Heron Nesting Site / Colony) located in the following natural areas:

- Bolton Wetland Complex;
- Wetland #1 (North of King Road, East of Duffy's Lane, Behind Maple Farm Supply East of CN tracks);
- Flooded Hardwood Swamp;
- West half Lot 27 Con 3 E Chinguacousy (south of King Road east of Heart Lake Road); and
- Albion Hills Conservation Area (Duffy's Lane Right of Way, north of Old Church, East of Humber Station).

This type of habitat is protected as Significant Wildlife Habitat.

1.3.5 Habitat for Species at Risk

The Endangered Species Act, 2007 (ESA) is the provincial legislation that provides protection for Species at Risk (SAR) and their habitat.

Under the Endangered Species Act, 2007, Section 9(1):

“No person shall, (a) kill, harm, harass, capture or take a living member of a species that is listed on the Species at Risk in Ontario list as an extirpated, endangered or threatened species.”

Furthermore, according to Section 10(1):

“No person shall damage or destroy the habitat of, (a) a species that is listed on the Species at Risk in Ontario List as an endangered or threatened species; or (b) a species that is listed on the Species at Risk in Ontario List as an extirpated species, if the species is prescribed by the regulations for the purpose of this clause.”

Federal species at risk legislation also applies to Species at Risk (SAR) and their habitat on federal lands or where federal jurisdiction applies. There are no federal lands within the Town; however, SARA applies to aquatic species at risk in all water bodies. To ensure the protection of SAR, Section 32(1) and (2) of the SARA states,

No person shall kill, harm, harass, capture or take an individual of a wildlife species that is listed as an extirpated species, an endangered species, or a threatened species

And Section 33 of the SARA states,

No person shall damage or destroy the residence of one or more individuals of a wildlife species that is listed as an endangered or threatened species, or that is listed as an extirpated species if a recovery strategy has recommended reintroduction of the species into the wild in Canada.

The SAR noted in **Table C-1** and Table C-2 have been recorded in the Town and were identified through review of various publicly available databases as having potential to be present in Caledon.

Table C-1: Terrestrial Species at Risk

Common Name	Scientific Name	Provincial Status	Federal Status
Amphibians			
Jefferson Salamander	<i>Ambystoma Jeffersonianum</i>	Threatened	Endangered
Unis-Jefferson Salamander	<i>Ambystoma laterale</i> -(2) <i>jeffersonianum</i>	Endangered	N/A
Birds			
Acadian Flycatcher	<i>Empidonax virescens</i>	Endangered	Endangered
Barn Swallow	<i>Hirundo rustica</i>	Threatened	N/A
Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened	Threatened
Canada Warbler	<i>Wilsonia canadensis</i>	Special Concern	N/A
Cerulean Warbler	<i>Dendroica cerulea</i>	Threatened	Endangered
Chimney Swift	<i>Chaetura pelagica</i>	Threatened	Threatened
Eastern Meadowlark	<i>Sturnella magna</i>	Threatened	Threatened
Eastern Wood-Pewee	<i>Contopus virens</i>	Special Concern	N/A
Golden Winged Warbler	<i>Vermivora chrysoptera</i>	Special Concern	Threatened
Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Special Concern	N/A
Henslow's Sparrow	<i>Ammodramus henslowii</i>	Endangered	Endangered
Least Bittern	<i>Ixobrychus exilis</i>	Threatened	Threatened
Loggerhead Shrike	<i>Lanius ludovicianus</i>	Endangered	N/A
Louisiana Waterthrush	<i>Parkesia motacilla</i>	Threatened	Threatened
Peregrine Falcon	<i>Falco peregrinus</i>	Threatened	N/A
Prothonotory Warbler	<i>Protonotaria citrea</i>	Endangered	Endangered
Whip-poor-will	<i>Caprimulgus vociferus</i>	Threatened	Threatened
Wood Thrush	<i>Hylocichla mustelina</i>	Special Concern	Threatened
Insects			
Nine-Spotted Lady Beetle	<i>Coccinella novemnotata</i>	Endangered	N/A
Gypsy Cuckoo Bumble Bee	<i>Bombus bohemicus</i>	Endangered	N/A
Rapids Clubtail	<i>Gomphus quadricolor</i>	Endangered	Endangered
Plants			
American Ginseng	<i>Panax quinquefolius</i>	Endangered	Endangered
Butternut	<i>Juglans cinerea</i>	Endangered	Endangered
Eastern Flowering Dogwood	<i>Cornus florida</i>	Endangered	Endangered
False Hop Sedge	<i>Carex lupuliformis</i>	Endangered	Endangered
Hart's Tongue Fern	<i>Asplenium scolopendrium</i> var. <i>americanum</i>	Special Concern	N/A
Hill's Pondweed	<i>Potamogeton hillii</i>	Special Concern	N/A
Reptiles			
Blanding's Turtle	<i>Emydoidea blandingii</i>	Threatened	Threatened
Eastern Ribbon Snake	<i>Thamnophis sauritus</i>	Special Concern	N/A
Northern Map Turtle	<i>Graptemys geographica</i>	Special Concern	N/A

Common Name	Scientific Name	Provincial Status	Federal Status
Snapping Turtle	<i>Chelydra serpentina</i>	Special Concern	N/A

Table C-2: Aquatic Species at Risk

Common Name	Scientific Name	Provincial Status	Federal Status
American Eel	<i>Anguilla rostrata</i>	Endangered	N/A
Lake Sturgeon	<i>Acipenser fulvescens</i>	Threatened	N/A
Northern Brook Lamprey	<i>Ichthyomyzon fossor</i>	Special Concern	N/A
Redside Dace	<i>Clinostomus elongatus</i>	Endangered	Endangered

Most of the habitats for these species are yet to be mapped. However, critical habitat for the Redside Dace, an Endangered fish species, is identified within a portion of the Credit River (Erin Branch), Fletchers Creek, Humber River, Kilmanagh Creek, Sal Creek, West Humber River and West Humber Tributary.

Potential habitat of Species at Risk should be avoided where possible. Proposed transportation works would be subject to mitigation measures to avoid direct impact to SAR which may include rules in regulation, timing restrictions for the removal of vegetation, minimizing the footprint of construction, and exclusion of the construction area.

2.0 Source Water Protection Areas

The Source Water Protection Information Atlas indicates four Source Water Protection Areas (SPA) are located within Caledon. Both Credit Valley SPA and Toronto SPA cover the majority of Caledon while the Nottawasaga SPA and South Georgian Bay Lake Simcoe Source Protection Plan Area / Lake Simcoe and Couchiching /Black River SPA marginally cover the northeastern limits of Caledon.

2.1 Wellhead Protection Areas (WHPA)

Several Wellhead Protection Areas (WHPA) are located within Caledon, which are illustrated in **Figure C-6**. The size, or classification, of a Wellhead Protection Area is determined by how quickly water travels underground to the well, measured in years. WHPA-A is the closest radius (100m) around a municipal well, WHPA-B is the area where water can flow to the well in 2 years, WHPA-C is the area where water can flow to the well in 5 years, WHPA-D is the area where water can flow to the well in 25 years, WHPA-E GUDI are Groundwater Under the Direct Influence of surface water, where surface water can reach the well within 2 hours. (Credit Valley, Toronto and Region and Central Lake Ontario (CTC) Source Protection Region, 2019).

2.2 Significant Ground Water Recharge Area

Areas of Caledon are considered Significant Ground Water Recharge Areas. Significant Groundwater Recharge Areas of high vulnerability are assessed a vulnerability score of 6 out of 10, while moderate areas are scored 4 and low areas are scored 2. A recharge area is considered significant in areas where the highest volumes of groundwater infiltrate to help maintain the water level in an aquifer that supplies a drinking water system (Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Region, 2019).

2.3 Highly Vulnerable Aquifer

Areas of Highly Vulnerable Aquifer are located within Caledon. A Highly Vulnerable Aquifer is one that is particularly susceptible to contamination because of either its location near the ground surface or because of the type of overlying geological materials. The aquifer vulnerability increases as the amount of protection provided by the overlying geological materials decreases (Credit Valley, Toronto and Region and Central Lake Ontario Source Protection Region, 2019).

3.0 Cultural Heritage and Archaeological Resources

3.1 Municipal Heritage Register

The municipal Heritage Register is a database of properties within the community that have been identified as being of cultural heritage value or interest under the provisions of the Ontario Heritage Act. The Ontario Heritage Act enables a community to designate individual properties (under Part IV of the Act) or a group of properties as a district (under Part V of the Act), as well as list non-designated properties (Section 27 of the Act).

In Caledon, there are:

- 131 designated properties (Part IV, OHA)
- 968 listed properties (Section 27, OHA)
- 1 Heritage Conservation District, with 168 designated properties (Part V, OHA)
- 14 candidate Cultural Heritage Landscapes (Town of Caledon CHL Inventory)

Caledon's individually designated properties and Heritage Conservation Districts are also identified on the provincial Heritage Register.

3.2 Caledon's Heritage Conservation District

A Heritage Conservation District designation includes buildings, streets, landscapes and views within a specific area. By designating a Heritage Conservation District, a municipality can manage and guide future change to preserve the identity of a heritage community as outlined in Part V of the Ontario Heritage Act.

The Town of Caledon has one Heritage Conservation District (HCD) in the Village of Bolton as illustrated in **Figure C-7**. The Village of Bolton Heritage Conservation District is Caledon's first Heritage Conservation District. Settled in 1821, Bolton is an historic 19th century mill village in the Humber River valley.

The street layout has maintained its original integrity and hosts a wide variety of commercial buildings and residences from the mid- to late-Victorian era. The District encompasses the core of the historic village and contains approximately 108 'contributing' properties.

The Town is currently working on a second Heritage Conservation District in Alton as illustrated in **Figure C-8**.

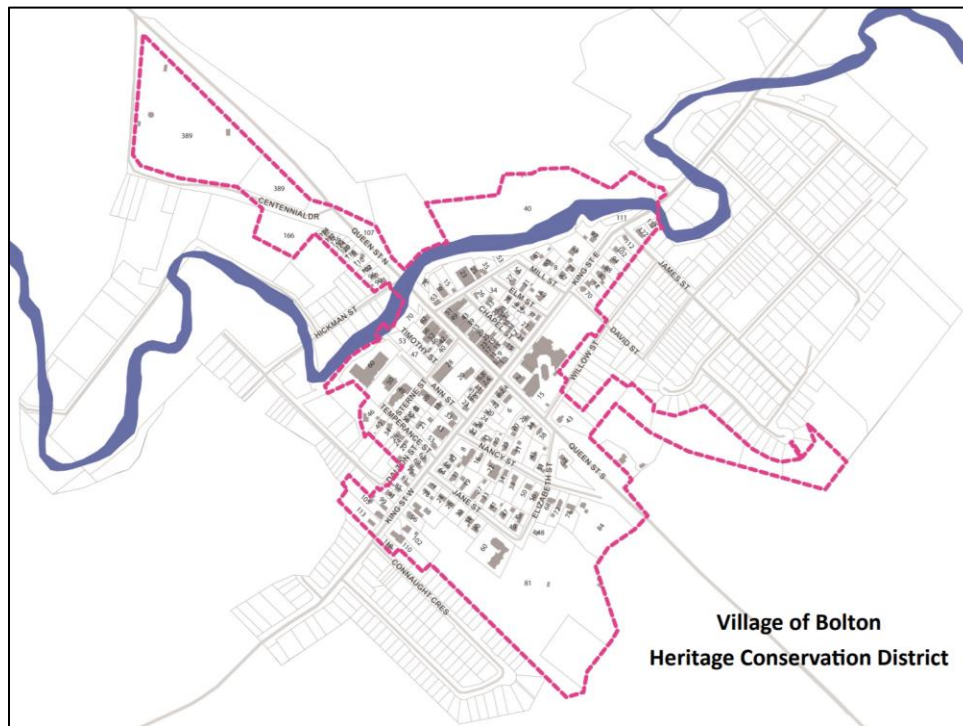


Figure C-7: Village of Bolton Heritage Conservation District

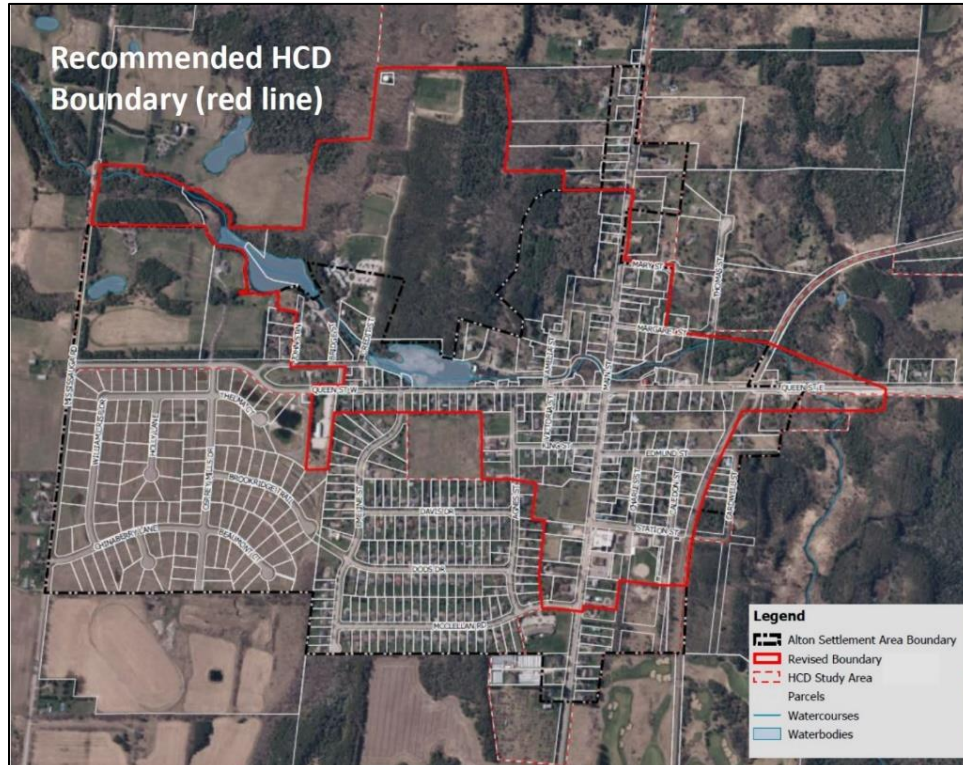


Figure C-8: Recommended Heritage Conservation District in Alton

Any future transportation projects recommended by the Multi-Modal Transportation Master Plan will need to consider impacts to all HCDs within the Town.

3.3 Caledon's Cultural Heritage Landscapes

A Cultural Heritage Landscape, as defined in the Ontario Provincial Policy Statement, can include buildings, structures, spaces, views, archaeological sites or natural elements that are valued together.

An initial inventory of candidate cultural heritage landscapes has been prepared by the Town. A cultural heritage landscape identified through this inventory shall be incorporated into the Plan by way of an Official Plan Amendment. Once an area is designated as a Cultural Heritage Landscape it is recognized in the Official Plan which in turn influences future development in Caledon.

To be designated a Cultural Heritage Landscape in Caledon the following criteria must be met, as set out in the Town's Criteria for the Identification of Cultural Heritage Landscapes Report (Andre Scheinman, Heritage Preservation Consultant and ENVISION - The Hough Group, September 2003):

- It has been altered or modified by humans;
- It must connect with major historic themes that have shaped the area;
- It must have historic significance and integrity; and
- Extensive research and physical investigation are conducted to document and evaluate the landscape characteristics of the area.

The Town of Caledon Cultural Heritage Landscape Inventory (Andre Scheinman, Heritage Preservation Consultant and ENVISION - The Hough Group, March 2009) identified candidate cultural heritage landscapes as listed in **Table C-3**. The Bolton Historic Core CHL has largely been incorporated into the Village of Bolton HCD.

Any future transportation projects recommended by the Multi-Modal Transportation Master Plan will need to consider impacts to these candidate CHLs.

Table C-3: Candidate Cultural Heritage Landscapes in Town of Caledon

No.	Candidate CHL	Character-defining Elements
1	The Far Northwest Corner	<ul style="list-style-type: none"> • 20348 Shaw's Creek (E ½ Lot 25, Con. VI) • 20537 Shaw's Creek (W ½ Lot 26, Con. V), with remaining mill pond, and remnants of dam and spillway. • Concrete shallow arch bridges, near the corner of Highpoint Road and Shaw's Creek Road c.1940 and the confluence of Shaw's Creek with the Erin tributary to form the Alton Branch of the Credit River.
2	Melville	<ul style="list-style-type: none"> • 2512 Highpoint Sideroad, (W ½ Lot 26, Con. I) • 2465 Highpoint Sideroad, (W ½ Lot 25, Con. 2) • 2345 Highpoint Sideroad, (E ½, Lot 26, Con. 2) • 20429 Willoughby Road • 20469 Willoughby Road, (W ½ Lot 26, Con. 2) • Dam at the outlet of Melville Pond • The existing railway track and bridge (also as it crosses Highpoint Sideroad and Credit River) • Melville Pond
3	Alton Village	<ul style="list-style-type: none"> • *55 John Street, Millcroft Inn • *The Manor House, Millcroft Inn • 1402 Queen Street W, The Alton Mill Studios • The Miller's House • *1334 Queen Street W, Algie – Hall House • 1398 Queen Street W, Science Hall • *1565 Queen St. E, Wright-Didd House • *1456 Queen St. W, Alton Mechanic's Institute and Library • *1422 Queen Street W, Dods-Long House • 1341 Queen St. W • *42 Charles Street, Fead-Fendley House • *10 Station Street, former Alton Baptist Church • *19739 Main Street, former Alton Congregational Church and Town Hall • the upper mill pond and dam (Millcroft) • the lower mill pond and dam (Alton Mills) • Bridge over Shaw's Creek
4	Former Settlement of Silver Creek	<ul style="list-style-type: none"> • 16631 Kennedy Road, St. Cornelius Catholic Church and cemetery, and St. Cornelius rectory directly south of church. • *16419 Kennedy Road, Silver Creek Schoolhouse • 16761 Kennedy Road, and family cemetery

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> • 16849 Kennedy Road, Silver Creek Farm • Brick farm complex on Kennedy Road • Town of Caledon Cultural Heritage Landscapes Inventory 5 -9 • 16834 Kennedy Road, California Exchange (former hotel) • c. 1880s 2-storey brick farmhouse south of church. • Silver Creek valley
5	Farmsteads of Former Chinguacousy Township (representing the Peel Plain farmsteads)	<ul style="list-style-type: none"> • *13278 Creditview Road, 'Taylor-Echlin House' (now Pt. E ½ Lot 24, Con. 4) • Seasonal streams and minor tributary of the Etobicoke Creek • 13089 Creditview Road (W ½ Lot 23, Con. 3) • *1488 Old School Road, 'Sharpe Schoolhouse' (Pt. E ½ Lot 23, Con.4) • 12911 Creditview Road (W ½ Lot 22, Con.3) • 12872 Creditview Road (E ½ Lot 22, Con. 4) • Associated lanes, fields, windrows and yard plantings
6	Belfountain and the Credit River Gorge	<ul style="list-style-type: none"> • Ruins of Deagle's mill/hydro operation, including all evidence of industrial operation • 'Cataracts' at the Village of Cataract • The Dominion Trail • Caledon Ski Club, 17431 Mississauga Road • The curving nature of the roads and the 'jogs' along Mississauga Road • 673 Bush Street, Bush Residence • 699 Bush Street, Drury Residence • 758 Bush Street, Belfountain Village Store • The historic core of the village of Belfountain • *17426 Old Main Street (Mississauga Rd) McTaggart – Douglas House and Store • Mill dams ruins at the Forks • *17241 Old Main Street (Mississauga Rd), Brock Residence • Mack's Park (Belfountain Conservation Area), 10 Credit Street • Evidence of the quarrying operations for building stone • The Bruce Trail • Willoughby Property, Forks of the Credit Road (W ½ Lot 9, Con. 4) • Cox Property, Forks of the Credit Road (E ½ Lot 9, Con. 4) • Evidence of the quarrying operations for building stone • The Credit River Gorge • Former CVR Tracks and Trestle above the Forks, Forks of the Credit Road

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> • Confluence of both river branches at the Forks of the Credit • The 'Devil's Pulpit' • Single-lane c.1930 concrete bridge along McLaren Road • The curving nature of the roads and the 'jogs' along McLaren Road • 'Cataracts' at Belfountain • Small frame cottages along River Road and Forks of the Credit Road • (Former) Forks of the Credit Village • Lime Kilns • 1 Chisolm Street, Former Schoolhouse
7	Scottish Settlement along St. Andrew's Road	<ul style="list-style-type: none"> • 17812 St. Andrew's Road, 'Stone Ridge Farm' (E ½ Lot 13, Con. 4) • 17797 St. Andrew's Road (W ½ Lot 13, Con. 5) • 17728 St. Andrew's Road (E ½ Part Lot 12, Con. 4) • 17741 St. Andrew's Road (W ½ Part Lot 12, Con. 5) • 17621 St. Andrew's Road, 'St. Andrew's Presbyterian Church and Cemetery' (Part. W ½ Lot 12, Con. 5) • The ponds and wetlands associated with Caledon Creek • St. Andrew's Church • 17797 St. Andrews Road • Town of Caledon Cultural Heritage Landscapes Inventory 8 -9 • The vestiges of the 19th century farmstead quarries (Lots 13, 14 Con. 4) • The remaining field pattern, woodlots • The Escarpment setting offering views to the south
8	Irish Settlement of Northwest Albion	<ul style="list-style-type: none"> • 19560 Glen Haffy Road (E ½ Lot 38, Con. 1) • 19353 Glen Haffy Road (W ½ Lot 37, Con. 2) • 19350 Centreville Creek Road (E ½ Lot 37, Con. 2) • *19179 Centreville Creek Road (W ½ Lot 36, Con. 3) • 19126 Centreville Creek Road (E ½ Lot 36, Con. 2) • Glen Haffy Road component of overall Road Network • The view northeast from Coolihans Sideroad • Coolihans Sideroad component of overall Road Network • The pattern of field and woodland

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> • The trout ponds of the Glen Haffy Conservation Area • The Glen Haffy Side Trail to the Bruce Trail through Innis Lake Road and Glen Haffy Road • Centreville Creek Road component of overall Road Network • 18030 Centreville Creek Road (E ½ Lot 31, Con. 2) • Finnerty Sideroad component of overall Road Network • Innis Lake Road component of overall Road Network • 17889 Innis Lake Road (W ½ Lot 30, Con. 2) • The ruins of the Dingle School (W1/2 of Lot 33, Con. 2)
9	South Albion Farmsteads (representing the farmsteads of the Peel Plain within the former Albion Township)	<ul style="list-style-type: none"> • 14921 Innis Lake Road (W ½ Lot 15, Con. 2) • 14880 Innis Lake Road (E 1/2 Lot 15, Con. 1) • 14639 Innis Lake Road (W ½ Lot 14, Con. 2) • Providence Cemetery, 14580 Innis Lake Road (NE corner East ½ Lot Con. 1) • 14520 Innis Lake Road (E 1/2 Lot 13, Con. 1) • The remaining embanked indications of the TG & B Railway on Lot 13, Con. 2 • The field pattern • 14285 Innis Lake Road (W ½ Lot 12, Con. 2) • 14117 Innis Lake Road (W ½ Lot 11, Con. 2) • The view of 14117 Innis Lake Road from King Street
10	Bolton's Historic Core (now recognized through the Village of Bolton HCD)	<ul style="list-style-type: none"> • 118 King Street West; • 110 King Street West, Caven Presbyterian Church; • 102 King Street West; • 96 King Street West; • 88 King Street West; • 105 King Street West; • 99 King Street West; • *34 Temperance Street (Shore-Nease Residence); • Temperance Street; • Temperance Street Streetscape; • King Street West Streetscape; • 11 Jane Street, Tower House; • 19 Jane Street; • 25 Jane Street; • 8 Nancy Street, Bolton United Church; • *16 Nancy Street, True Blue Masonic Hall; • 22 Nancy Street, Bolton Anglican Church;

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> • 34 Nancy Street; • 38 Nancy Street; • Original Commercial Range along Queen Street • Town of Caledon Cultural Heritage Landscapes Inventory 11 - 14 • Nancy Street Streetscape; • *45 Nancy Street, Joseph Watson Property; • *31 Nancy Street (Smith-Schaefer-Potts House); • *25 Nancy Street, (Goodfellow – Nattress – Potts); • 11 Nancy Street; • Commercial Hub: Intersection of King and Queen streets; • The Humber River as it courses through the village; • 15 King Street East: Former Bolton Town Hall; • 34 Elm Street; • Elm Street Streetscape; • 21 Elm Street; • King Street East Streetscape; • *83 King Street East: (Guardhouse – Goodfellow House); • *97 King Street East: McFall House; • 122 King Street East; • James Street Streetscape; • *65 James Street, (Lambert Bolton House); • 113 King Street West; • Commercial range along the east side of Queen Street north of King Street; • The encompassing hill views to the north and south
11	Rockside	<ul style="list-style-type: none"> • The 'Grange' (McLaren's Castle), (Lot 5 E½ Concession 4 WHS) • 15911 Creditview Road 'Hart House Farm', (Lot 3 E½ Concession 3 WHS) • 15747 Creditview Road, remains of stone house at Riding and Hunt Club, (Lot 2 W½ Concession 3 WHS) • Abandoned cottage c.1940, (Lot 2 W½ Concession 3 WHS) • 15647 Creditview Road, 'Thomas Davidson farm complex', (Lot 2 W½ Concession 3 WHS) • The MacDonald Cemetery, Creditview Road' (Lot 1 E½ Concession 4 WHS)

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> • former John MacDonald Jr. Property, Creditview Road (Lot 1 E½ Concession 4 WHS) • 'Tower House', unique structure on Creditview Road (Lot 1 E½ Concession 4 WHS) • 15428 Creditview Road, 'Alex MacDonald property', (Lot 1 E½ Concession 4 WHS) • Tin shingled barn, on former MacDonald property (Lot 1 E½ Concession 4 WHS) • 15663 Mississauga Road, 'David MacDonald property' 1877, (Lot 1 E½ Concession 4 WHS) • Derelict barn, former Alex McLaughlin property, Mississauga Road (Lot 3 E½ Concession 5 WHS) • 15962 Mississauga Road, 'Melville White Church/Cemetery', (Lot 3 E½ Concession 5 WHS) • 16015 Mississauga Road, stone schoolhouse (Lot 4 W½ Concession 4 WHS) • 16065 Mississauga Road, ' Frank property' (Lot 4 W½ Concession 4 WHS) • 16311 Mississauga Road, 'Patullo/Kirkwood property, and the *Patullo-McDiarmidSimmonds Stone Fence', (Lot 5 W½ Concession 4 WHS) • Town of Caledon Cultural Heritage Landscapes Inventory 12 - 28 • Early 1½ storey frame house and barn on former Teeter farmstead, Shaw's Creek Road, (Lot 6 W½ Concession 5 WHS) • 15668 Shaws Creek Road, 'Stonehouse', (Lot 2 E½ Concession 6 WHS) • 15719 Shaws Creek Road, 'Maple Hill' Farms, (Lot 2 W½ Concession 5 WHS) • 15859 Shaws Creek Road 'Duncan McArthur farmstead', (Lot 3 W½ Concession 5 WHS) • Frame structure (possibly with early structure at its core), Shaw's Creek Road, (Lot 3 E½ Concession 6 WHS) • 16089 Shaws Creek Road, 'McLaren farmstead' (Lot 4 W½ Concession 5 WHS) • Old frame barn, Shaw's Creek Road likely associated with McLaren Farmstead • 16245 Winston Churchill Road 'Tweed Airgh', Sharp farm, (Lot 5 W½ Concession 6 WHS) • Erin Township property (W. side of Winston Churchill Road)

No.	Candidate CHL	Character-defining Elements
		<ul style="list-style-type: none"> Erin Township property (W. side of Winston Churchill Road) 15349 Winston Churchill Road, former Alex MacArthur property, (Lot 34 W½ Concession 6 WHS, Chinguacousy Twp.) 15547 Winston Churchill Road, 'Rockfort farmstead' (Lot 1 W½ Concession 6 WHS) 15669 Winston Churchill Road, 'Westerveld farmstead', (Lot 2 W ½ Concession 6) Erin Township property (W. side of Winston Churchill Road) Small frame dwelling, possibly with early structure at its core, former Hunter property, Mississauga Road, (Lot 2 W ½ Concession 6 WHS) Abandoned barn, north of 15819 Winston Churchill Road, (Lot 3 E ½ Concession 6 WHS) 15429 Shaws Creek Road, multi-gabled frame dwelling, (Lot 1 W ½ Concession 5 WHS) 'McEachern house', Shaw's Creek Road, (Lot 5 W ½ Concession 5 WHS) former Foster house, Mississauga Road, (Lot 3 W ½ Concession 4 WHS) former Andrew McLaren House, Lot 5 E ½ Concession 3 WHS
12	Former Credit Valley Railway	<ul style="list-style-type: none"> historic rail corridor, embankments, track, signals, and structures associated with road and creek and river crossings; adjacent vegetation including creek valleys and woodlands; views to the railway and bridges as seen from roads and trails.
13	Candidate CHLs Requiring Further Investigation	<ul style="list-style-type: none"> Caledon Lakes Remaining Evidence of the Toronto Grey and Bruce Railway, Lots 18, 19, CON. 11 WHS and Associated Locations
14	Other Candidate CHLs Considered	<ul style="list-style-type: none"> Rosehill Central Caledon Township The Village of Caledon Lower Kennedy Road – Between the Grange Sideroad and Old Baseline The Methodist Farmscape of Eastern Albion Boston Mills

Note: * denotes properties or structures designated under the Ontario Heritage Act.

3.4 Archaeological Resources

Archaeological resources are scarce, fragile, and non-renewable and therefore must be managed in a prudent manner if they are to be conserved. Effectiveness in incorporating archaeological resources within the overall planning and development process requires a clear understanding of their physical nature, the variety of forms they may assume, and their overall significance and value to society.

Archaeological potential is defined in the Provincial Policy Statement (2020) as:

...areas with the likelihood to contain archaeological resources. Criteria to identify archaeological potential are established by the Province...

The Town of Caledon has created a detailed archaeological potential model for the Town within the context of developing an archaeological management plan (Town of Caledon Draft Archaeological Management Plan, March 2021). The model has been developed on a Geographic Information Systems platform to best manipulate and analyze site location attribute data. The result is a simple to use digital map of archaeological potential, which can be used by municipal staff and development proponents to determine the need for archaeological assessment in advance of land disturbing activities.

The model created geo-referenced data layers specific to the Town of Caledon that were integrated into a single Archaeological Potential Planning Layer map. This map (see **Figure C-9**) consolidated the Pre-contact Indigenous Archaeological Sites Potential data, the Historical Archaeological Sites Potential data, and the Integrity data, minus areas that have previously been subject to archaeological assessments and require no further work.

For any future transportation projects in the Town of Caledon recommended from the Multi-Modal Transportation Master Plan within an area of archeological potential as identified in the Archaeological Potential Planning Layer map, a licensed consultant archaeologist will be required to undertake (at minimum) a Stage 1 assessment to determine if archaeological potential survives within the subject area.

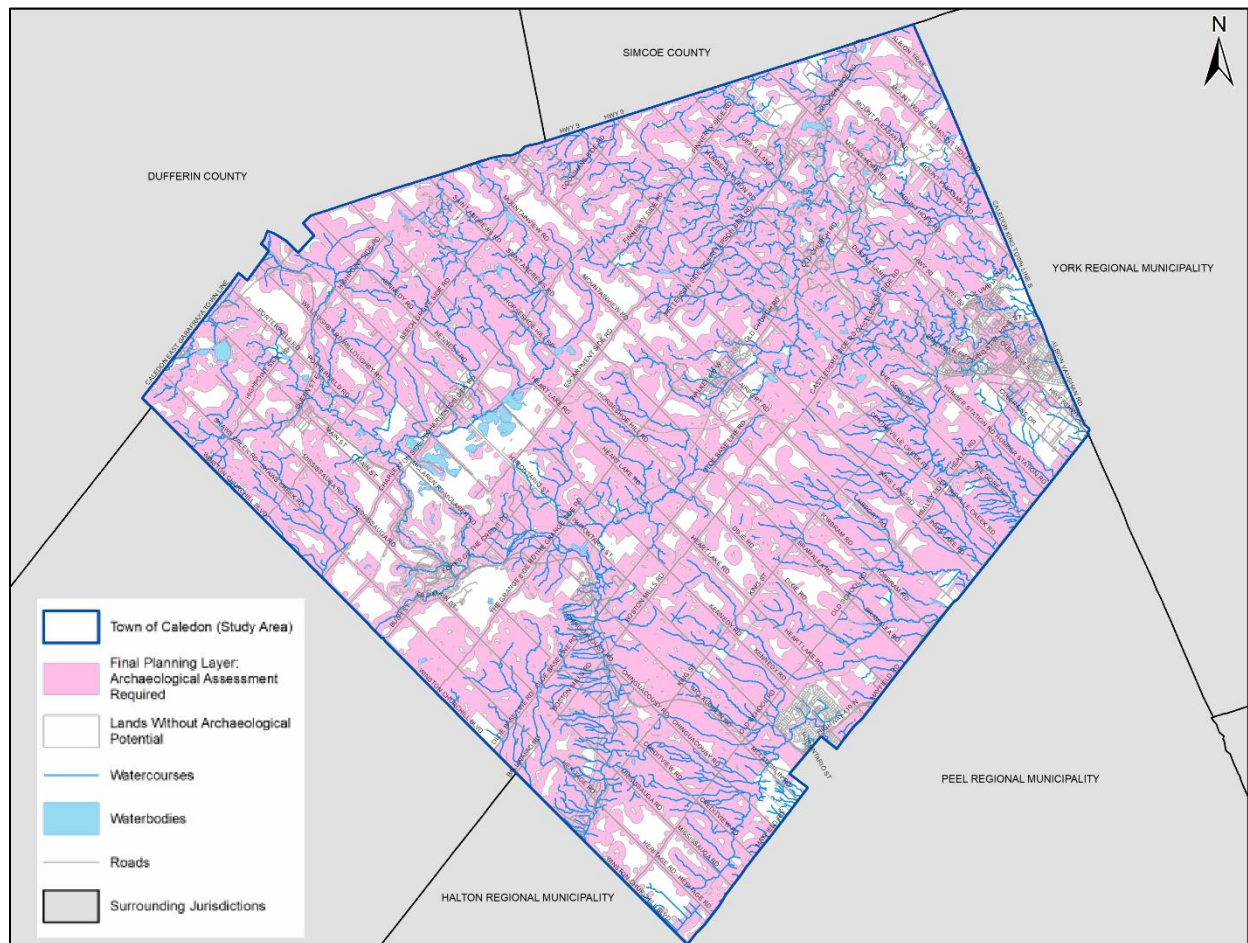


Figure C-9: Archaeological Potential Planning Map

Source: Town of Caledon Archaeological Management Plan (2021)

Appendix D

Travel Characteristics

Appendix D | Travel Characteristics

Date: May 31, 2021 **Project No.:** 300051561.0000
Project Name: Caledon Multi-Modal Transportation Master Plan
Submitted To: Town of Caledon
Submitted By: R.J. Burnside & Associates

1.0 Change in Travel Patterns

1.1 Trips to/from Caledon

A review of 2011 and 2016 data from Transportation Tomorrow Surveys (TTS), as supplied by the Data Management Group at the University of Toronto, was conducted to identify travel behaviour and recent changes in travel patterns with respect to trips starting from or ending in Caledon. The Caledon sub-areas used for the analysis, disaggregated using 2006 TTS Traffic Zones, are illustrated in **Figure D-1**.

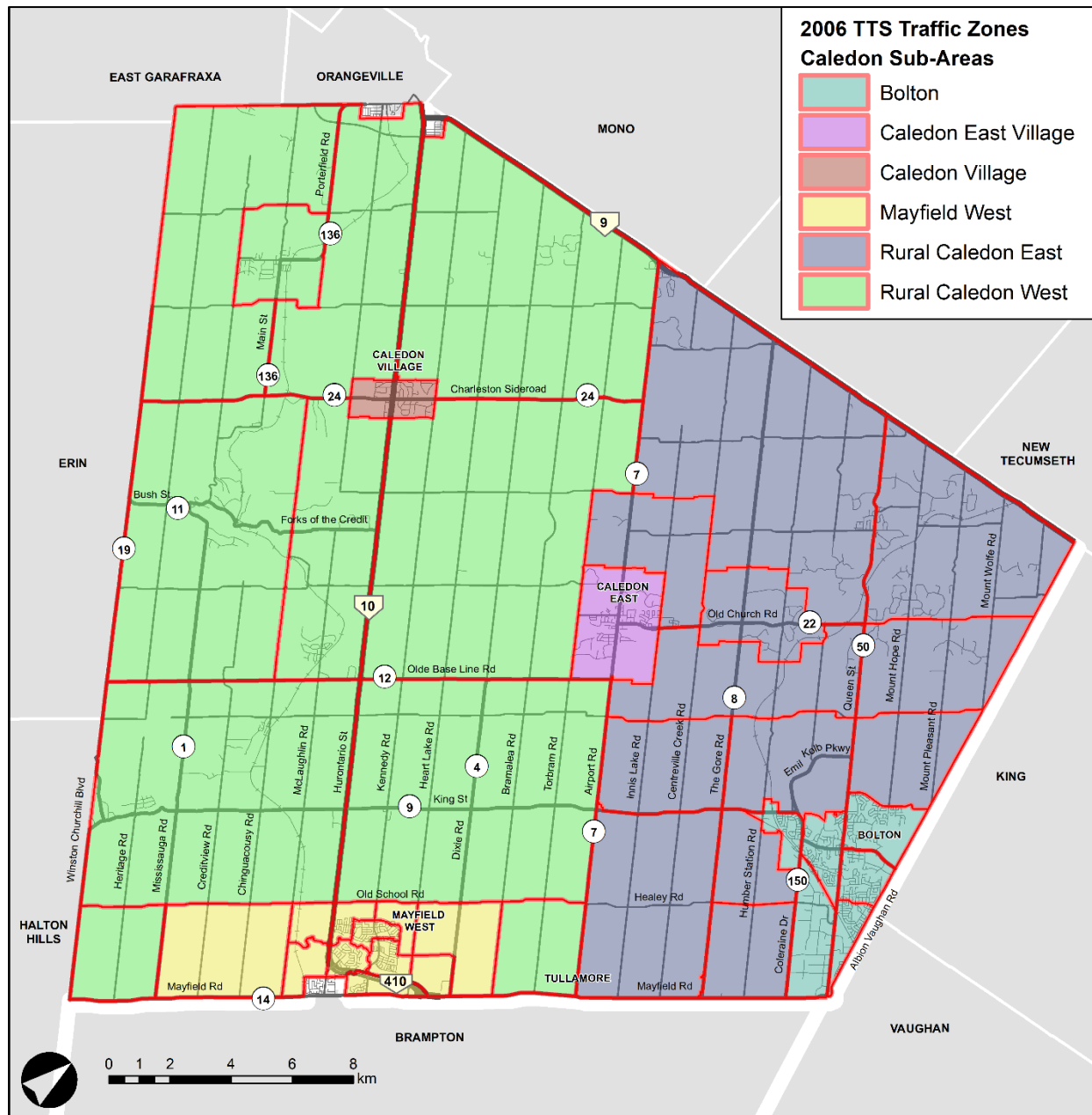


Figure D-1: Caledon TTS Traffic Zones by Sub-Area

Most recent (2016) TTS data indicate that approximately half of inbound and outbound trips during the AM and PM peak periods start or end in Bolton, as shown in **Table D-1**. In comparing these travel patterns to 2011 data, as shown in **Table D-2**, there is a change in trip distribution from/to Bolton. Between 2011 and 2016, Bolton experienced a decline in overall trips; there is also a decline in the proportion of trips being made to/from Bolton relative to other Caledon sub-areas. However, it is anticipated that planned/proposed projects, such as the Bolton Residential Expansion Area (BRES) and Bolton GO Station, will drive population, employment, and trip growth in the future. In addition, Mayfield West has experienced substantial growth in peak

period trips between 2011 and 2016, in part resulting in an increased proportion of trips to/from Mayfield West.

Table D-1: 2016 Caledon Trip Summary by Sub-Area (All Modes)

Sub-Area	AM Peak Period				PM Peak Period			
	Outbound		Inbound		Outbound		Inbound	
	Trips	%	Trips	%	Trips	%	Trips	%
Bolton	13,982	41%	13,332	50%	14,460	53%	13,563	42%
Mayfield West	6,192	18%	3,944	15%	3,288	12%	5,382	17%
Caledon Village	447	1%	180	1%	314	1%	430	1%
Caledon East	5,636	17%	4,505	17%	4,848	18%	5,219	16%
Rural Caledon West	1,521	4%	1,328	5%	1,032	4%	1,556	5%
Rural Caledon East	6,226	18%	3,452	13%	3,137	12%	5,992	19%
Total	34,004	100%	26,741	100%	27,079	100%	32,142	100%

Table D-2: 2011-2016 Caledon Trip Change by Sub-Area (All Modes)

Sub-Area	AM Peak Period				PM Peak Period			
	Outbound		Inbound		Outbound		Inbound	
	ΔTrips	Δ%	ΔTrips	Δ%	ΔTrips	Δ%	ΔTrips	Δ%
Bolton	-1,002	-8.4%	1,259	-1.2%	-916	-4.5%	-3,509	-10.1%
Mayfield West	3,513	9.4%	1,186	3.1%	951	3.3%	2,768	8.7%
Caledon Village	-556	-2.0%	77	0.2%	10	0.0%	-721	-2.2%
Rural Caledon West	-82	-2.3%	1,209	2.9%	228	0.5%	-806	-2.2%
Caledon East	-424	-1.9%	-1,236	-5.9%	-577	-2.2%	-316	-0.9%
Rural Caledon East	2,272	5.3%	577	0.8%	823	2.9%	2,091	6.7%
Total	3,721		3,072		519		-493	

1.2 External-to-External Trips

Many trips that travel through the Town of Caledon neither originate nor are destined to locations in Caledon. As depicted in **Table D-3**, it is estimated that approximately 53% (AM) and 65% (PM) of trips crossing the southern boundary in Caledon (along Mayfield Road) originate and are destined outside of Caledon. These “through” trips are largely attributed to residents of the Town of Orangeville and communities further north traveling to/from work in Brampton, Mississauga and Toronto. Between 2011 and 2016, there is an overall increase in external-to-external trips that use the Town’s Road network, particularly during the PM peak hour (3:00 – 6:00 p.m.).

Table D-3: 2011-2016 External Through Trips

	AM Peak Period			PM Peak Period		
	2011	2016	Δ%	2011	2016	Δ%
Northbound	53%	62%	+7%	42%	64%	+22%
Southbound	47%	47%	0%	52%	66%	+14%
Total	49%	53%	+4%	46%	65%	+19%

Note: 1. Percentages derived from Transportation Tomorrow Survey (TTS) and Cordon Count data.

2.0 Trip Distribution

2.1 External Trips

Of the morning trips destined to Caledon, approximately half (49%) originate from within the Town and approximately one-quarter (26%) originate from Brampton and Mississauga. The trip distribution breakdown is summarized in **Table D-4**.

Table D-4: Trip Distribution (AM Peak Period, All Modes)

Origin / Destination	Caledon	Brampton / Mississauga	Toronto	York	Halton	Other	Total
Caledon	13,072	9,161	4,651	4,020	287	2,783	33,974
Brampton / Mississauga	6,922	-	-	-	-	-	-
Toronto	1,298	-	-	-	-	-	-
York	1,518	-	-	-	-	-	-
Halton	704	-	-	-	-	-	-
Other	3,227	-	-	-	-	-	-
Total	26,741	-	-	-	-	-	-

Note: 1. Other includes Durham Region, Hamilton and the rest of the GTHA.

2.2 Internal Sub-Area Trips

A review of internal trips within the Town indicates that the majority of trips originating within each sub-area of Caledon are internal during the morning peak period. This is particularly evident for trips originating in Bolton, where 83% of the trips are internal to the sub-area (i.e., destined to Bolton). While travel between these major sub-areas do not appear to be significant compared to the proportion of internal sub-area trips, a decent portion of trips originating in Caledon East and Mayfield West are destined for Bolton (21% and 10%, respectively). Destinations of trips within Caledon sub-areas during the morning peak period are illustrated in **Figure D-2**.

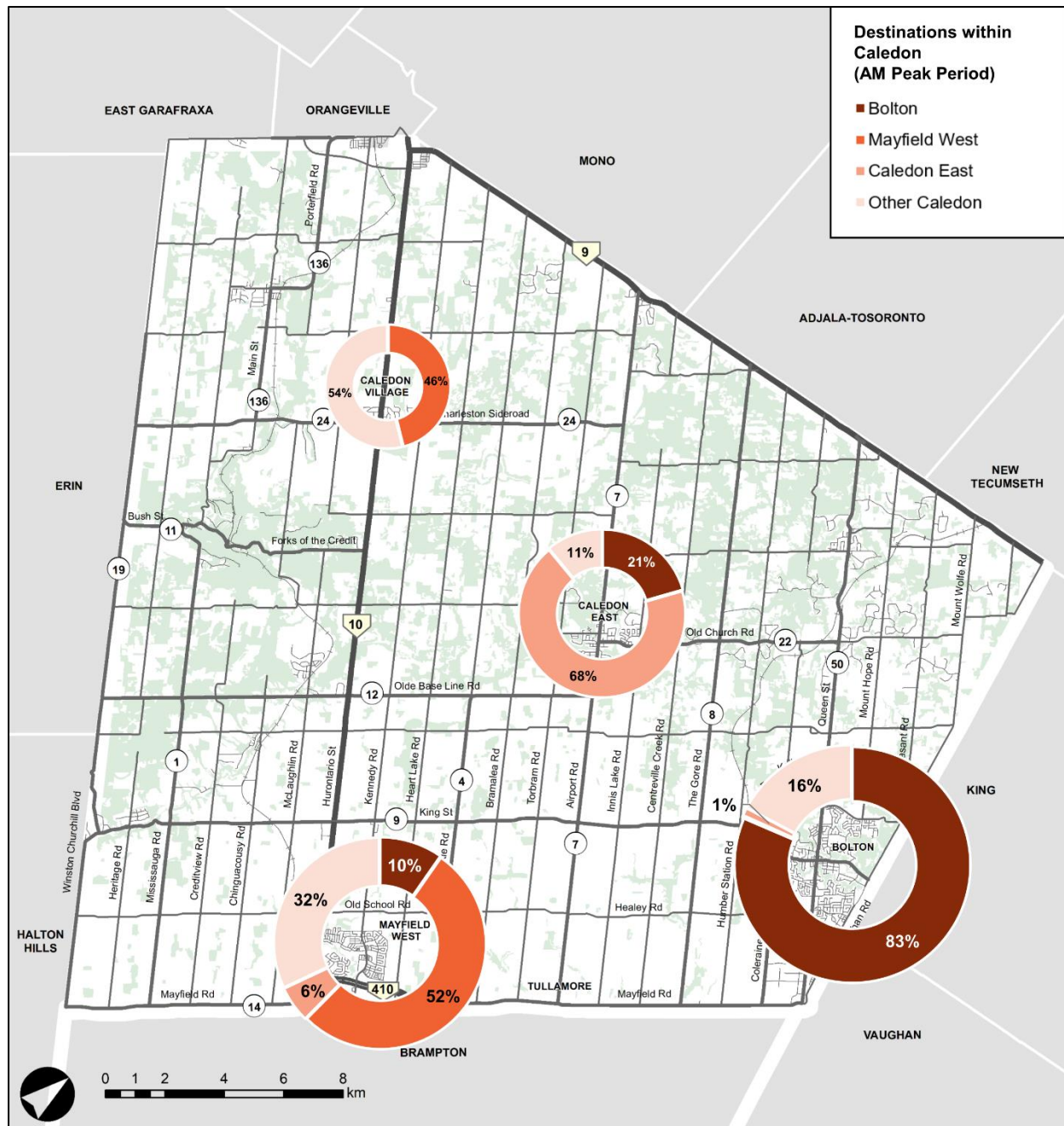


Figure D-2: Internal Trip Destination by Sub-Area (AM Peak Period)

3.0 Mode Splits

3.1 Sub-Area Mode Splits

Caledon trips consist largely of vehicle trips during the morning peak period, for all sub-areas. One-third of the trips originating in Caledon Village are made via a school bus, which reflect the largest proportion of school bus trips among the Town's sub-areas. The mode share breakdown for trips originating from Caledon sub-areas is summarized in **Table D-5**.

Table D-5: Mode Share by Caledon Sub-Area (AM Peak Period)

Mode	Trip Origin by Sub-Area						Total
	Bolton	Mayfield West	Caledon Village	Rural Caledon West	Caledon East	Rural Caledon East	
Automobile	83%	84%	62%	85%	88%	85%	84%
Local Transit	1%	2%	6%	1%	0%	0%	1%
GO Rail / Joint GO Rail	0%	1%	0%	1%	0%	0%	0%
School Bus	9%	12%	31%	13%	6%	14%	11%
Walk	7%	2%	0%	0%	6%	1%	4%
Cycle	0%	0%	0%	0%	0%	0%	0%
Other	0%	0%	0%	0%	0%	0%	0%
Total	100%	100%	100%	100%	100%	100%	100%

3.2 Trip Mode and Distance

Trips originating in Caledon, broken down by distance and mode, during the morning peak period are shown in **Figure D-3**.

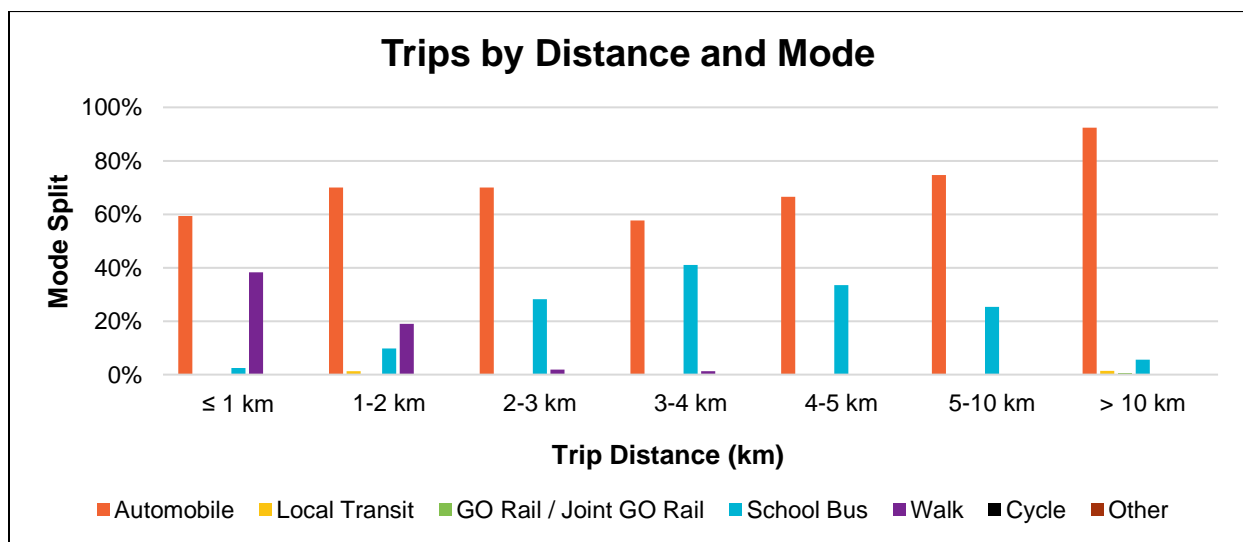


Figure D-3: Trips Originating in Caledon by Mode and Distance (AM Peak Period)

4.0 Trip Purpose

Home-based work trips make up the greatest proportion of trips originating from each of the Caledon sub-areas during the morning peak period. There is a fairly even split between home-based school and home-based discretionary trips for each sub-area, although Caledon East is observed to have a higher proportion of home-based discretionary trips (31%) compared to the other sub-areas.

Trip purpose by Caledon sub-area is summarized in **Table D-6** and illustrated in **Figure D-4**.

Table D-6: Trip Purpose by Caledon Sub-Area (AM Peak Period, All Modes)

Trip Purpose	Trip Origin						
	Bolton	Mayfield West	Caledon Village	Rural Caledon West	Caledon East	Rural Caledon East	Total
Home-Based Work	50%	53%	40%	50%	72%	47%	51%
Home-Based School	23%	20%	23%	22%	14%	21%	22%
Home-Based Discretionary	20%	17%	31%	23%	11%	23%	20%
Non Home-Based	7%	10%	5%	5%	3%	8%	7%
Total	100%	100%	100%	100%	100%	100%	100%

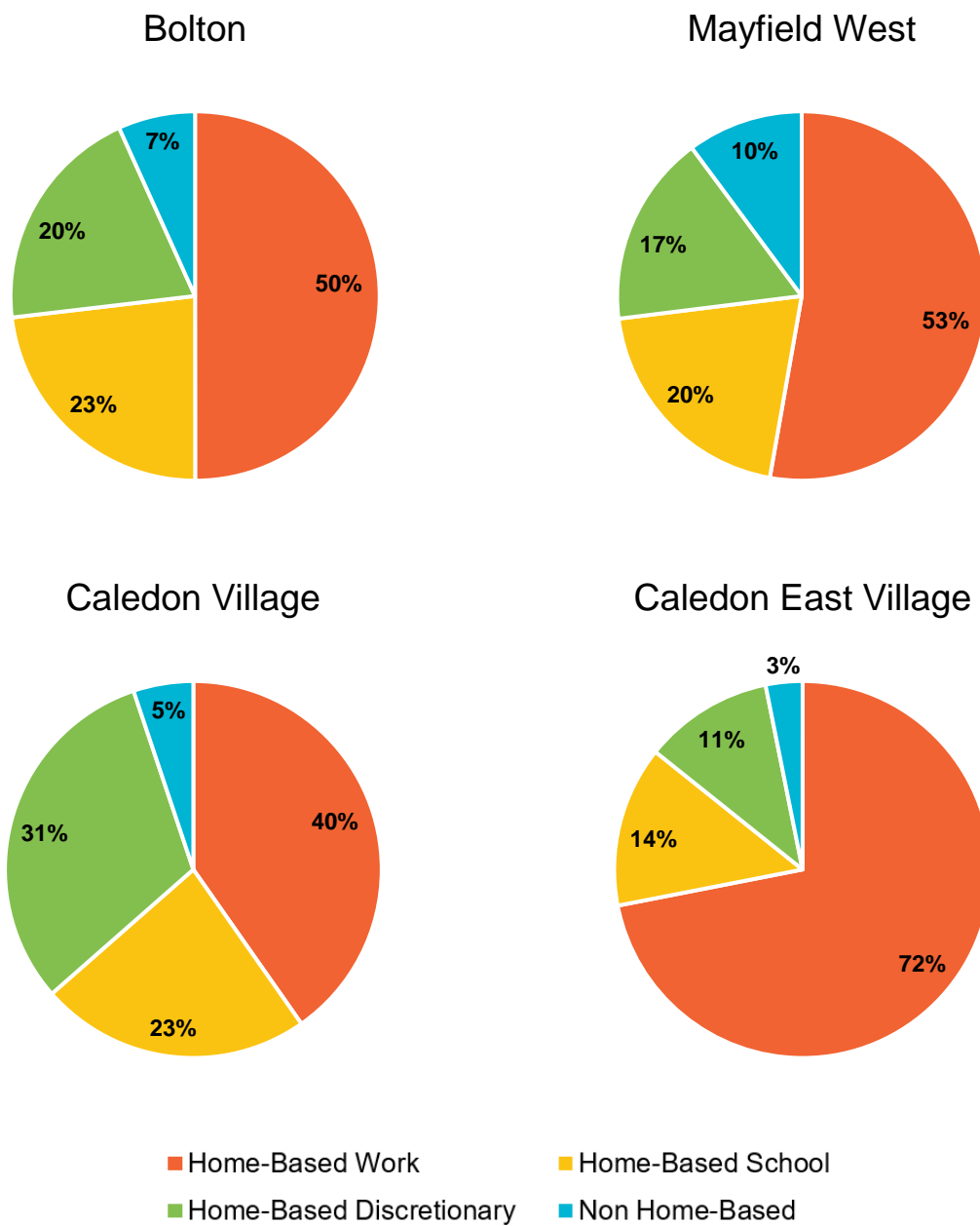


Figure D-4: Trip Purpose by Caledon Sub-Area (AM Peak Period, All Modes)

Appendix E

Road Capacity and Connectivity Analysis

Appendix E | Road Capacity and Connectivity Analysis

Date: December 1, 2023 **Project No.:** 300051561.0000

Project Name: Caledon Multimodal Transportation Master Plan

Submitted To: Town of Caledon

Submitted By: R.J. Burnside & Associates

1.0 Town of Caledon Road Network

The Town road network provides access to land, accommodates circulation of people and goods by vehicles (including transit) and provides rights-of-way for other infrastructure including utilities and active transportation (e.g., sidewalks, multi-use trails, etc.). Road capacity needs and opportunities reflect the level of efficiency and convenience necessary for public commuting, supporting public transit and accommodating goods movement.

1.1.1 Road Network

Highways within the Town are under the jurisdiction of the Province of Ontario. Highway 410 is an access-controlled freeway, that connects the north-south segments of Highway 410 to Hurontario Street (Highway 10). Highway 10 provides north-south connectivity for both through and local traffic. Highway 9 runs along the north boundary of Caledon, which is shared with Dufferin County and Simcoe County. All arterial roads within the Town are currently under the jurisdiction of the Region of Peel.

Town of Caledon roads include collector and local roads that provide circulation and land access. In rural areas, the Town road network includes a grid network of concession roads, with a 3.0 kilometre north-south spacing and a 1.4 kilometre east-west spacing. Some links in the rural collector grid play an important commuter function. Some were identified as major collector roads in the Town's 2017 Transportation Master Plan including: Heritage Road, Chinguacousy Road, Kennedy Road, Heart Lake Road, Bramalea Road, Old School Road/Healey Road, The Grange Side Road, Patterson Side Road, Beech Grove Side Road and Highpoint Side Road.

The Town of Caledon Road network accommodates traffic circulation of people and goods by vehicles (including transit), provides access to land and provides rights of way for other infrastructure including utilities and active transportation (e.g., sidewalks, bikeways, multi-use trails, etc.). For the efficiency of the Town of Caledon Road network, there should be both continuity of routes and sufficient capacity for efficient operations.

1.1.2 Capacity for Commuter Accommodation

The need for public commuting by automobile includes a range of purposes such as travel to work, medical, shopping or leisure purposes from/to locations that are not adequately served by transit / active transportation and/or do not adequately serve users with mobility or other barriers to travel by other modes.

Traffic congestion, where vehicles cannot travel at their free flow speed, occurs as vehicle volumes approach the throughput capacity of roadways causing a reduction in speed. Insufficient road capacity, relative to traffic volumes can cause traffic congestion which can have economic, social, and environmental impacts.

Economic impacts from traffic congestion include loss of time for productive activity. Social impacts from traffic congestion can include driver frustration and can contribute to what is commonly referred to as “road rage.” Congestion can increase time spent in vehicles and less time for family, leisure and physical activity.

Environmental impacts from traffic congestion include the impacts to air quality due to the use of non-optimal speeds in relation to fuel economy. Non-optimal speeds are variable between vehicle manufacturers however, in general, optimal speeds can be between 50 km/hr and 90 km/hr. Lower speeds can cause decreased fuel economy and increase emissions per kilometre travelled. Roadway congestion can also impact the quality of transit service especially if transit vehicles are mixed with traffic.

1.1.3 Capacity for Goods Movement

Within urbanized areas, the economic competitiveness of a municipality is affected by the efficiency and capacity of the movement of goods to / from business areas. Traffic congestion can significantly add to the cost of goods and services through transportation costs. Economic competitiveness often relies upon the connectivity between industry and transportation infrastructure including freeways, regional arterial roads and intermodal terminals.

An estimated \$1.8 billion worth of commodities (product or raw material) travel to, from, and through Peel every day by various modes including trucking, rail, air, marine, or pipeline. Goods movement is a pillar of the regional economy. In addition, goods-movement related industries have contributed \$49 billion of GDP to Peel Region’s economy.

The Town of Caledon Economic Development Strategy presents an action plan to support economic growth in the Town. It recognizes the need for key transportation infrastructure such as the GTA-West Transportation Corridor (also referred to Highway 413). The strategy expects “that the expeditious approval and development of Highway 413, will result in 118,000 jobs in Caledon by 2041”. It acknowledges the need for serviced “industrial areas and business parks, with a mixture of heavy industrial and light industrial land uses; warehousing and distribution facilities; small and medium scale office buildings”.

1.1.4 Accommodation of Alternative Modes of Travel

A Complete Streets approach to road design considers the needs of motorists, pedestrians, cyclists, and transit riders of all ages and abilities. Provincial, Regional and Town policy support the planning and design of Town of Caledon's streets consistent with Complete Streets principals in support of all transportation modes and strongly consider the needs of utility and maintenance providers within the public right-of-way. For Caledon roads to provide all the necessary street elements and subsurface utilities for successful Complete Streets, the Town must acquire the necessary property and public right-of-way.

1.1.5 Community Circulation and Land Access Accommodation

Within the Town of Caledon, new collector road networks are established by the Town's Secondary Plans. Secondary plans provide more detailed policies for the area it covers, and they also establish a collector road network within the lands.

Historically, the Town of Caledon directed most of their new population and employment growth in Caledon to the Urban Areas of Bolton, Caledon East and Mayfield West. The future growth allocation approach focuses development in the south of Caledon, away from sensitive environmental areas and heritage settlements, minimizes interference with agricultural activity and concentrates new demands for services in locations where this demand can be most readily met. Secondary plans for these three Urban Areas have been undertaken are incorporated in the Town's Official Plan. They include:

Schedule B: Mayfield West Land Use Plan

Schedule B2: Mayfield West Phase 2 Secondary Plan

Schedule C: Bolton Land Use Plan

Schedule D: Caledon East Land Use Plan

Planning for the future, the Town's previous "tri-nodal" growth management is evolving. While major arterials currently exist through the planned growth areas in south Caledon, new collector road networks will need to be introduced through future secondary plans. Given current spacing of the road grid and existing property block sizes in the future growth areas, there is a need for a denser road network to provide the circulation and land access required. There are alternative approaches to define a finer road grid and solutions will need to be context specific.

2.0 Road Network Continuity

2.1 Road Continuity Network Screening

Network efficiency is, in part, a function of the level of continuity and alignment of roadways. Misaligned intersections can contribute to poor roadway geometry and/or traffic movements that are not adequately supported by roadway conditions, including reduced road capacity and increased potential for safety issues. A review of road continuity and alignment was undertaken,

including offset T-intersections and major curvature with hidden driveways, based on images from Google Maps and Streetview (accessed June 22, 2021) and site observations.

Road alignment issues are most significant for rural areas where vehicles are usually traveling at a higher speed compared to urban or suburban areas. The locations identified in **Table E-1** were identified as having continuity or misalignment needs.

Table E-1: Summary of Road Alignment Issues

Major Road	Minor Road 1	Minor Road 2	Issue
Halls Lake Side Road	Albion Trail	19th Sideroad	Sharp Turns and Hidden Driveways
Patterson Side Road	Humber Station Road	Humber Station Road	Offset intersection
Mayfield Road	Humber Station Road	Clarkway Drive	Offset intersection
The Gore Road	Finnerty Side Road	Finnerty Side Road	Offset intersection
Airport Road	Boston Mills Road	Castlederg Side Road	Offset intersection
Olde Base Line Road	Mountainview Road	Torbram Road	Offset intersection
Olde Base Line Road	St. Andrews Road	Bramalea Road	Offset intersection
Olde Base Line Road	Heart Lake Road	Heart Lake Road	Offset intersection
Olde Base Line Road	Kennedy Road N.	Kennedy Road	Offset intersection

2.2 Continuity and Alignment Needs

2.2.1 Halls Lake Side Road / Albion Trail Intersection

Halls Lake Side Road is a 2-lane collector road with a posted speed limit of 60km/h connecting Mt. Wolfe Road and 12th Concession via 19th Sideroad. The annual average daily traffic (AADT) is reported to be 827 in 2019 on Halls Lake Side Road.

The intersection at Albion Trail is unconventional, in that Halls Lake Side Road has a 60-metre jog with a horizontal curve with a small radius south of the Albion Trail intersection, as illustrated in **Figure E-1**. The northeast leg of Halls Lake Side Road is stop controlled and southwest leg is

has a continuous connection to Albion Trail. There is also one driveway close to the curve on Halls Lake Side Road. The intersection configuration with views northeast and southwest is shown in **Figure E-1**.



Figure E-1: Halls Lake Sideroad

The sightline and stopping distance may warrant further study in response to any identified safety concerns through further investigations, particularly for southbound Halls Lake Side Road traffic.

2.2.2 Patterson Side Road / Humber Station Road Intersection

Humber Station Road is a 2-lane collector road with posted speed limits of 60km/h and has an AADT of 734 in 2017 based on traffic data provided by the Town. The AADT is forecasted to grow to 947 in 2021 according to the [Town of Caledon Road Construction Project](#) website, however traffic is anticipated to experience considerable growth with the future development in Brampton Highway 427 industrial secondary plan area (Area 47) and the Bolton Residential Expansion Area. The announcement of a future interchange for the GTA-West Transportation Corridor will also contribute to high future traffic growth.

Patterson Side Road is a 2-lane collector road with a posted speed limit of 60km/h and has and AADT of 1,339 in 2017.

Humber Station Road forms two stop-controlled T-intersections with an offset of 40 metres at Patterson Side Road. **Figure E-2** illustrates show the intersection configuration with views northeast and southeast.



Figure E-2: Humber Station Rd. / Patterson Side Rd. Intersection

In addition, Humber Station Road does not have paved surface north of Patterson Side Road. North of the intersection there are horizontal curves with 3 private and large side slopes and driveways.

Future traffic safety studies could review of operating conditions could include traffic speed studies and sightline studies focusing on the section north of Patterson Sideroad to determine if additional safety measures were required.

2.2.3 Mayfield Road / Humber Station Road – Clarkway Drive Intersection

At Mayfield Road (Regional Road 14), Humber Station Road and Clarkway Drive form a misaligned intersection with an offset of 30 metres.

Together, Humber Station Road and Clarkway Drive provides north-south connectivity for through traffic between the Town of Caledon and City of Brampton. **Figure E-3** shows the intersection configuration with views northeast and northwest.

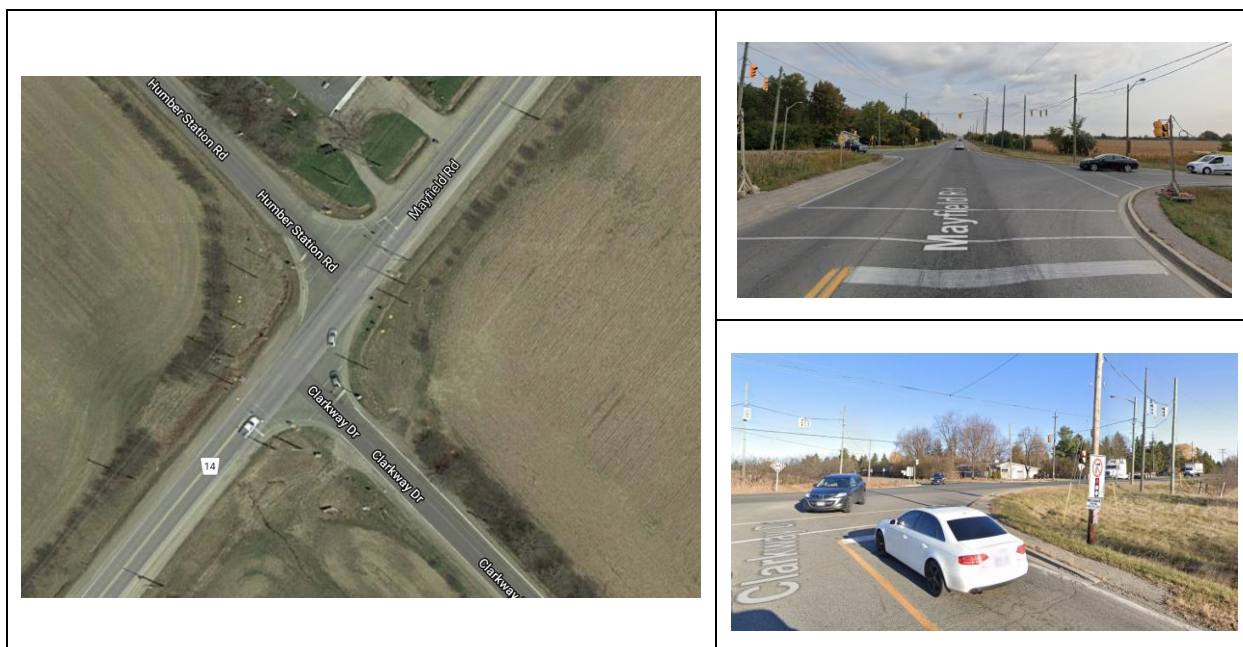


Figure E-3: Humber Station Rd. / Clarkway Dr. Intersection

Based on Peel Region's collision data, 3 collisions were reported at the Humber Station Road / Clarkway Drive / Mayfield Road intersection between 2016 and 2018 including 1 collision that resulted in a non-fatal injury.

A traffic control signal has been recently implemented at this intersection and a "right turn on red" is prohibited for both Humber Station Road and Clarkway Drive. There are sightline obstructions for southbound movements.

Given anticipated traffic growth and the future GTA-West Corridor interchange, it is recommended that Humber Station Road and Clarkway Drive be better aligned. Operations with the recent signalization should be monitored. Further study is recommended based on the current road operation conditions unless there are other safety concerns.

2.2.4 The Gore Road / Finnerty Side Road

Finnerty Side Road is an undivided, unpaved east-west collector road with a posted speed limit of 60km/h and an AADT of 116 in 2016. Finnerty Side Road forms two stop-controlled T-intersections at The Gore Road (Regional Road 8) with an offset of 60 metres. The following **Figure E-4** shows the intersection configuration with views northwest and northeast.



Figure E-4: Finnerty Side Rd. / The Gore Rd. Intersection

Based on Peel Region's collision data, 1 collision that resulted in non-fatal injury was reported between 2016 and 2018 at this location.

The sightline for northeast bound traffic from Finnerty Side Road is obstructed based on the satellite imagery due to the bush and curvature on The Gore Road.

Further safety investigation is recommended at this intersection to assess sight distance and related safety implications.

2.2.5 Airport Road / Boston Mills Road – Castlederg Side Road Intersection

Boston Mills Road is an undivided, unpaved collector road with a posted speed limit at 60km/h with an AADT of 140 in 2016. Castlederg Side Road is a 2-lane collector road with a posted speed limit at 60km/h, the AADT is reported to be 1,646 in 2017. Both roads intersect Airport Road as stop-controlled T-intersections with an offset between the two intersections of 30 metres.

The following **Figure E-5** shows the intersection configuration with views northwest and northeast.

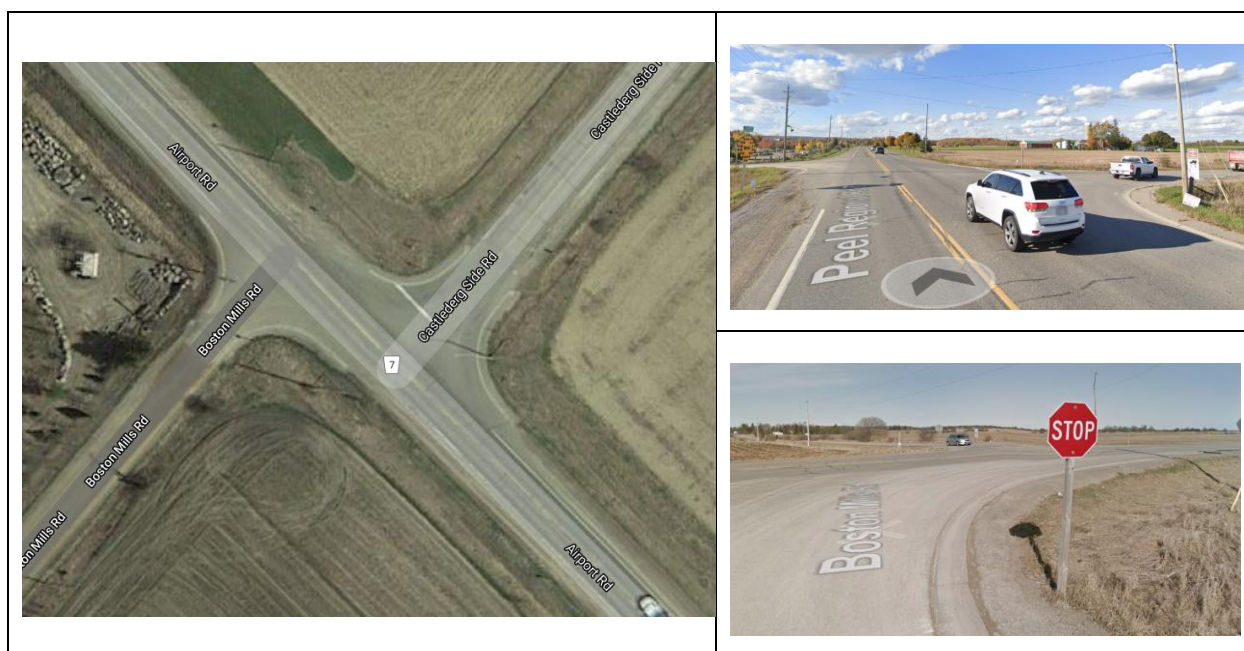


Figure E-5: Boston Mills Rd / Castlederg Side Rd. / Airport Rd. Intersection

Given the configuration of the intersection, vehicles that are travelling east-west between Boston Mills Road and Castlederg Side Road experience an undesirable manoeuvre. Drivers must wait for a gap in both northbound and southbound traffic on Airport Road to turn right into the high-speed traffic stream and then make a quick left turn. If drivers accept gaps in only one direction and stop and wait for a gap in the second direction, then they may pose a hazard to traffic travelling along Airport Road.

Based on Peel Region's collision data, 1 collision was reported at this location between 2016 and 2018. The sightline is unobstructed for all directions.

Given the high speeds on Airport Road and the anticipated growth in south Caledon, it is recommended that the intersection be monitored and ultimately align Boston Mills Road and Castlederg Side Road in the future.

2.2.6 Olde Base Line Road / Mountainview Road – Torbram Road Intersection

Olde Base Line Road (Regional Road 12) is a 2-lane Regional arterial road with a posted speed limit at 80km/h. Mountainview Road and Torbram Road are both 2-lane collector roads with posted speed limits at 60km/h. Both roads intersect Olde Base Line Road as stop-controlled T-intersection and the offset between the two intersections is 50 metres. The following **Figure E-6** shows the intersection configuration with views northeast and northwest.



Figure E-6: Mountainview Rd. / Torbram Rd. / Olde Base Line Rd. Intersection

Mountainview Road has an AADT of 1,583 in 2019 and is forecasted to have an AADT of 1,753 in 2021 based on the [*Town of Caledon Road Construction Project*](#) website, and there is a road rehabilitation project scheduled for 2022 for this section.

Given the configuration of the intersection, vehicles that are travelling between Mountainview Road and Torbram must wait for a gap in traffic on Olde Base Line Road to turn right into the high-speed traffic stream and then make a quick left turn.

Based on Peel Region's collision data, 1 collision that resulted in non-fatal injury was reported between 2016 and 2018 at this location. The sightline is unobstructed for all directions.

This misaligned intersection should be monitored as part of future safety reviews, however given the modest traffic volumes and conflict exposure, no further study is recommended at this time unless there are other safety concerns are raised.

2.2.7 Olde Base Line Road / St. Andrews Road – Bramalea Road Intersection

St. Andrews Road is a 2-lane collector road with a posted speed limit at 60km/h and an AADT of 578 in 2017. Bramalea Road is a 2-lane collector road with a posted speed limit at 80km/h and an AADT of 797 in 2017.

Both roads intersect Olde Base Line Road as stop-controlled T-intersection and the offset between the two intersections is 60 metres. The following **Figure E-7** shows the intersection configuration with views northeast and northwest.



Figure E-7: St. Andrews Rd. / Bramalea Rd. / Olde Base Line Rd. Intersection

Based on the [*Town of Caledon Road Construction Project*](#) website, St. Andrews has an ADT of 796 and there is a road rehabilitation project scheduled for 2021 for this section.

Based on Peel Region's collision data, 1 collision was reported between 2016 and 2018 at this location. The sightline is unobstructed for all directions.

This misaligned intersection should be monitored as part of future safety reviews, however given the modest traffic volumes and conflict exposure, no further study is recommended at this time unless there are other safety concerns are raised.

2.2.8 Olde Base Line Road / Heart Lake Road Intersection

Heart Lake Road is a 2-lane collector road with a posted speed limit at 60km/h. The north leg at this intersection an AADT of 720 while the south leg has an AADT of 463 in 2019.

Heart Lake Road forms two stop-controlled T-intersections at Olde Base Line Road with an offset of 30m. The following **Figure E-8** shows the intersection configuration with views northeast and northwest.



Figure E-8: Heart Lake Rd. / Olde Base Line Rd. Intersection

Based on Peel Region's collision data, 2 collision was reported between 2016 and 2018 at this location including 1 collision resulting non-fatal injury. The sightline is unobstructed for all directions. No further study is recommended based on the current road operation conditions unless there are other safety concerns.

2.2.9 Olde Base Line Road / Kennedy Road Intersection

Kennedy Road is a collector road with a posted speed limit at 60km/h. The north leg is undivided and unpaved with an AADT of 198 in 2016; the south leg is paved with pavement markings and has an AADT of 377 in 2016.

Kennedy Road intersects Olde Base Line Road as stop-controlled T-intersection and the offset between the two intersections is 20 metres. The following **Figure E-9** shows the intersection configuration with views northeast and northwest.





Figure E-9: Kennedy Rd. / Olde Base Line Rd. Intersection

Based on Peel Region's collision data, 2 collision was reported between 2016 and 2018 at this location and both collisions resulted in non-fatal injury. The sightline is unobstructed for all directions. No further study is recommended based on the current road operation conditions unless there are other safety concerns.

2.3 Recommendations

There are opportunities to reduce conflicts in the Town of Caledon Road system, by reconfiguring misaligned intersections. It is the misaligned intersections within the future urban areas that will experience the highest level of exposure to conflicts and have the highest opportunity for improvement. It is on that basis that the following intersections be improved to align off-set intersections in coordination with future road reconstruction projects:

- Humber Station Road / Mayfield Road Intersection
- Airport Road / Boston Mills Road – Castlederg Side Road Intersection

Misaligned intersections beyond the urban boundary should be monitored and considered in any future town-wide safety studies.

3.0 Road Capacity Needs and Opportunities

3.1 Existing Road Capacity Needs and Opportunities

Traffic volumes, as provided by the Town, were used to provide an understanding of existing traffic conditions. Most Town roads operate with peak direction volumes of less than 850 vehicles. The Town road segments below are shown to experience high volumes and some degree of recurring congestion:

- Kennedy Road between Mayfield Road and Dougall Avenue, and
- Albion Vaughan Road between Morra Avenue and north of Queensgate Boulevard.

3.2 Travel Demand Model and Forecast Methodology

3.2.1 Region of Peel Base Model

Road capacity needs and opportunities include future demand associated with anticipated population and employment growth. As part of the previous TMP (2018), a travel demand model was developed for the Town of Caledon to forecast future traffic using EMME software. Modifications and updates were undertaken to the Regional model to better forecast the Town's capacity needs. These modifications are provided in the below sections.

The Region of Peel Travel Demand Model ("Peel Model") is a four-stage model that predicts and analyzes travel behaviour in the Regional Municipality of Peel and the rest of the Greater Toronto and Hamilton Area (GTHA). The model was updated in 2016 and has been maintained by Regional staff. Similar to the previous Town of Caledon Transportation Master Plans and previous Region of Peel Long Range Transportation Plans, the AM peak period (6:30 AM – 9:30 AM) was used for the existing and future transportation assessment.

The Peel model uses trip rates derived from the 2011 Transportation Tomorrow Survey (TTS), as supplied by the Data Management Group at the University of Toronto. These trip rates are categorized into six categories including:

- Home-based manufacturing, trades, and construction work,
- Home-based retail, sales, and service work,
- Home-based office, professional, clerical, management, and technical work,
- Home-based secondary school trips,
- Home-based post-secondary school trips, and
- Other trips.

The need to update the model's base year to 2016 using the 2016 TTS data was considered. A comparison was conducted between 2011 and 2016 TTS data with respect to trip generation mode share, and trip distribution (refer to Appendix A). The results show an overall decline in person trip rates and trips travelling to/from Caledon between 2011 and 2016.

Mode splits appear only to change minimally (+/- 1%) between 2011 and 2016. These differences may be attributed in part to the data expansion method applied to surveyed counts, which changed in 2016. Considering the 2011 TTS data offers a more conservative analysis, the model was deemed sufficient and appropriate as a base for the purpose of establishing existing conditions and forecasting future conditions.

3.2.2 Region of Peel Model Updates and Refinements

In December 2020, near the onset of this study, the Region of Peel provided Burnside with the updated Peel Model, however numerous updates were made to the model by Regional staff throughout the beginning of 2021. The model was being refined and updated in response to two studies.

The first study was the Region's Growth Management Strategy which considers Amendment #1 to *A Place to Grow – Growth Plan for the Greater Golden Horseshoe (2019)* released by the Ministry of Municipal Affairs and Housing in August 2020. The most critical update in Amendment #1 to the transportation modelling was the release of draft 2051 population and employment figures. The second study was the Settlement Area Boundary Expansion (SABE), which determined the appropriate locations for additional community and employment lands in the Town of Caledon. In November 2021, the Region of Peel provided Burnside with an updated Peel Model reflecting the latest draft land use policies.

Through the transportation modelling undertaken for the SABE study, the Region updated the model's 2051 zone system and subsequent centroids, and centroid connectors were updated within the Town of Caledon geography. The new zone system ("2021 TTS Zone System") can be found in **Figure E-10**.

The original provision of the 2011, 2031 and 2041 models from Peel Region use the 2006 Transportation Tomorrow Survey (TTS) zone system. The 2051 model uses a more disaggregated zone system developed by regional staff. The latest 2031, 2041, and 2051 population and employment forecasts were provided for this disaggregated zone system, and accounts for growth allocated in the Settlement Area Boundary Expansion (SABE) lands, Mayfield West Secondary Plan Phase 2 Stage 2 area, and the Bolton Residential Expansion Study (BRES) area. Therefore, to ensure the latest planned growth allocations are reflected in the future horizon models, the 2031 and 2041 models were updated to use the same disaggregated zone system as the 2051 model for this study.

3.2.3 Land Use Assumptions

The Town of Caledon Multi-Modal Transportation Master Plan was undertaken at the same time as the Region of Peel's Growth Management Strategy and the Region of Peel's Settlement Area Boundary Expansion (SABE) study.

The Growth Management Strategy considers Amendment #1 to *A Place to Grow – Growth Plan for the Greater Golden Horseshoe (2019)* released by the Ministry of Municipal Affairs and

[illegible]

A Growth Management Region Official Plan Amendment is also required as part of the process to align the Region's Official Plan with the Province's A Place to Grow through a conformity exercise and Municipal Comprehensive Review. As part of the Regional Official Plan Update, the SABE study also determines appropriate locations for the additional community and employment lands in the Town of Caledon. The deadline for Provincial conformity of the Region's OP is July 1, 2022.

The draft 2041 and 2051 land use assumptions for the Town of Caledon are provided in **Table E-2**. To conceptualize the amount of growth planned in the Town of Caledon, a 2020 land use estimate is provided.

Table E-2: 2041 and 2051 Modelled Land Use Assumptions for the Town of Caledon

	2020 (estimate)	2041	2051
Population	76,581	160,000	300,000
Employment	26,700	80,000	125,000

The draft 2041 and 2051 land use assumptions for the City of Brampton and the City of Mississauga are shown in **Table E-3**.

Table E-3: 2041 and 2051 Modelled Land Use Assumptions (Cities of Brampton and Mississauga)

	Population		Employment	
	2041	2051	2041	2051
City of Brampton	889,920	983,930	324,950	353,490
City of Mississauga	910,460	994,990	564,380	590,050

The 2051 population and employment with the Region of Peel are shown in **Figure E-11**.

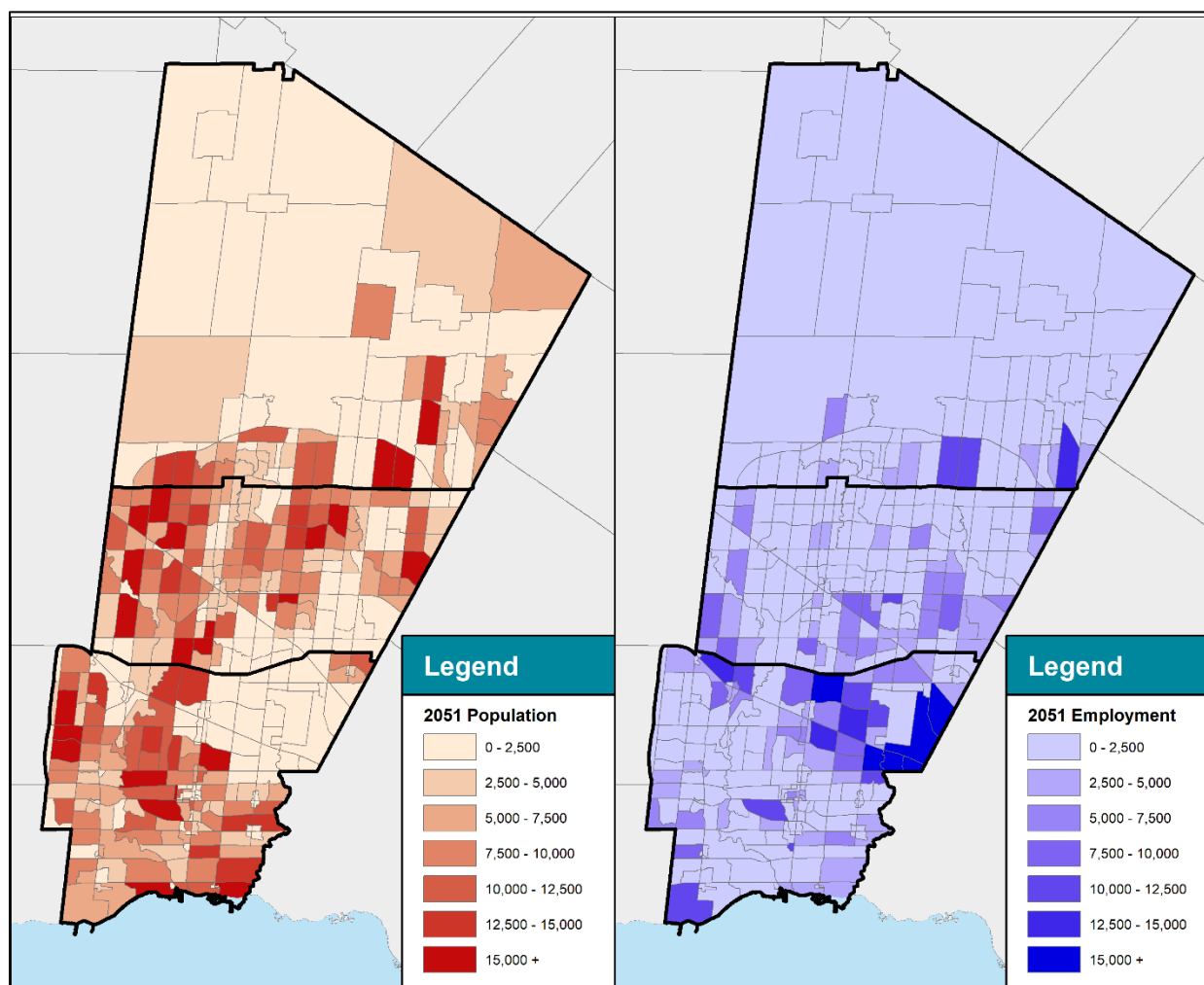


Figure E-11: 2051 Population and Employment

3.2.4 Network Assumptions

The 2041 and 2051 road networks for the horizon year base scenarios consider all planned and budgeted road improvements from the Province, the Region, and local municipalities. In addition to the work of the Town's 2017 *Transportation Master Plan* (TMP), proposed, planned and committed road improvements were identified as part of other regional and community-specific transportation plans, which are summarized in **Table E-4**.

Proposed improvements refer to projects that are currently undergoing studies, planned improvements refer to those with approved studies but are not budgeted, and committed improvements refer to projects that have been budgeted as part of the Peel Region or Caledon capital plan or development charges study. Additional road improvement projects near or crossing the Town of Caledon (not listed in the above table) include the following:

GTA West Corridor (including Highway 413):

The GTA West Corridor is proposed to be a 400-series provincial highway, including a separate transit corridor, that travels through York, Peel and Halton Region, as shown in **Figure E-12**. A portion of this corridor would travel through the southern area of Caledon and serve to facilitate inter-municipal and internal Town trips.

Highway 427 Extension to the GTA West Corridor

The Highway 427 extension further supports inter-municipal travel for Caledon residents as it extends south from the proposed GTA West Corridor (south of Bolton) to connect to the existing Highway 427 alignment, and subsequently serve other major 400-series highways.

‘A2’ Arterial Corridor and Coleraine Drive Extension:

The ‘A2’ Arterial Corridor refers to a future north-south major arterial roadway in Brampton that extends from Mayfield Road (near Highway 50) to Major Mackenzie Drive, as shown in **Figure E-13**. This new road connection is being carried out in the Part ‘A’ phase of the Schedule ‘C’ Class Environmental Assessment. The ‘A2’ was budgeted as a future 6-lane urban road in the Peel Region Development Charges Study (2020). The extension of Coleraine Drive south to the new ‘A2’ road is also proposed. Both of these road improvements would support residents in the southern area of Caledon requiring access to Highway 427.

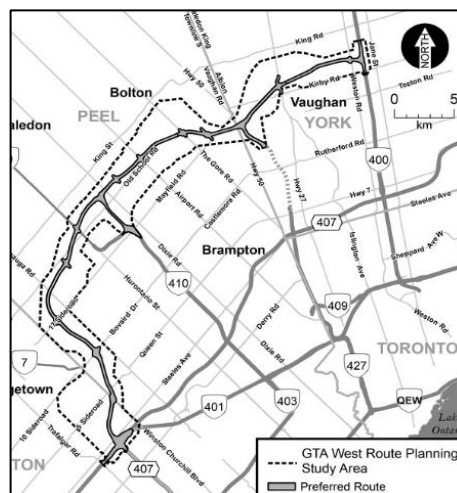


Figure E-12: GTA West Proposed Route

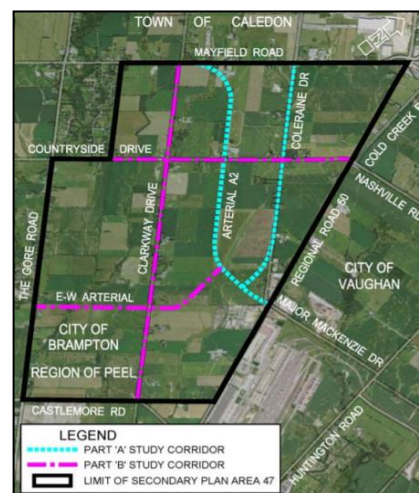


Figure E-13: ‘A2’ Arterial Study Corridor

Table E-4: Future Road Improvements within Caledon

Road	From	To	Status	Improvement	Source
By 2031					
Spine Rd	Chinguacousy Rd	McLaughlin Rd	Committed	New Road (3-lanes)	Caledon TMP (2017) & MWP2SP TMP (2018) & Caledon DC Study (2019)
	McLaughlin Rd	Hurontario St	Committed	New Road (4-lanes)	Caledon TMP (2017) & MWP2SP TMP (2018) & Caledon DC Study (2019)
McLaughlin Rd	Mayfield Rd	Mayfield West Phase 2 Limit	Committed	Widening to 4-lanes	Caledon TMP (2017) & MWP2SP TMP (2018) & Caledon DC Study (2019)
	Mayfield West Phase 2 Limit	Old School Rd	Planned	Widening to 4-lanes	Caledon TMP (2017)
Simpson Rd	Mayfield Rd	George Bolton Pkwy	Planned	Extension (2-lanes)	Caledon TMP (2017) & Bolton TMP (2015)
Albion Vaughan Rd	Mayfield Rd	King St	Committed	Widening to 4-lanes	Caledon TMP (2017) & Bolton TMP (2015) & Caledon DC Study (2019)
George Bolton Pkwy Extension	Highway 50	Industrial Rd	Committed	Extension (2-lanes)	Caledon TMP (2017) & Bolton TMP (2015) & Caledon DC Study (2019)
Chinguacousy Rd	Mayfield Rd	Spine Rd	Committed	Widening to 4-lanes	Caledon TMP (2017) & MWP2SP TMP (2018) & Caledon DC Study (2019)
	Spine Rd	Northern Limits of Mayfield West	Planned	Widening to 4-lanes	Caledon TMP (2017)
Hwy 50 (Queen St)	South of King St	Hickman St	Planned	Narrowing to 2-lanes	Bolton TMP (2015)
Mayfield Rd	Airport Rd	The Gore Rd	Committed	Widening to 4-lanes	Peel Region DC Study (2020)
	Hurontario St	Chinguacousy	Committed	Widening to 6-lanes	Peel Region LRTP (2019) & Peel Region DC Study (2020)
	The Gore Rd	Coleraine Dr	Committed	Widening to 4-lanes	Bolton TMP (2015) & Peel Region DC Study (2020)
	Chinguacousy Rd	Mississauga Rd	Committed	Widening to 4-lanes	Peel Region LRTP (2019) & Peel Region DC Study (2020)
	Dixie Rd	Bramalea Rd	Committed	Widening to 6-lanes	Peel Region LRTP (2019) & Peel Region DC Study (2020)
	Mississauga Rd	Winston Churchill Blvd	Committed	Widening to 4-lanes	Peel Region LRTP (2019) & Peel Region DC Study (2020)
	Heart Lake Rd	Hurontario St	Committed	Widening to 6-lanes	Peel Region LRTP (2019) & Peel Region DC Study (2020)
	Airport Rd	Clarkway Dr (west of Humber Station Road)	Committed	Widening to 6-lanes	Bolton TMP (2015) & Peel Region DC Study (2020)
	Albion Vaughan Rd	The Gore Rd	Planned	Widening to 4-lanes	Bolton TMP (2015)
	Coleraine Dr	Hwy 50 (Queen St)	Committed	Widening to 4-lanes	Peel Region LRTP (2019) & Peel Budget (2019)
Airport Rd	1 km North of Mayfield Rd	King Street	Committed	Widening to 5-lanes	Peel Region LRTP (2019) & Peel Budget (2019) & Peel Region DC Study (2020)
Dixie Rd	Mayfield Rd	2 km North of Mayfield Rd	Committed	Widening to 5-lanes	Peel Region LRTP (2019) & Peel Budget (2019)
Coolihans Sideroad	-	-	Planned	Closure	Ministry of Transportation (MTO) Highway 9 / Peel Road 8 (The Gore Road) Environmental Study Report (2019)
By 2041					
The Gore Rd	Mayfield Rd	Healey Rd	Proposed	Widening to 4-lanes	Peel Region LRTP (2019)
Mayfield Rd	Clarkway Dr	Coleraine Dr	Proposed	Widening to 6-lanes	Peel Region LRTP (2019)
	West of Mississauga Rd	Chinguacousy Rd	Committed	Widening to 6-lanes	Peel Region LRTP (2019) & Peel Budget (2019)
Mississauga Rd	Mayfield Rd	Old School Rd	Proposed	Widening to 4-lanes	Peel Region LRTP (2019)

Note(s): (1) TMP – Transportation Master Plan; MWP2SP – Mayfield West Phase 2 Secondary Plan; DC – Development Charges; LRTP – Long Range Transportation Plan

A few network inconsistencies were noted below and corrected accordingly.

- The northbound to westbound on-ramp at The Gore Road interchange for GTA West was originally coded with a turn restriction. This restriction was removed in the updated model to allow for northbound to westbound access at The Gore Road interchange.
- George Bolton Parkway had two overlapping links coded on top of one another, one of which did not connect to the centroid connector. This link was removed for redundancy.
- As noted in the previous section, the GTA West interchange at A2 was removed and re-coded at Humber Station Road.

Significant population and employment growth has been allocated for the Town of Caledon in the Mayfield West Secondary Plan, Bolton Residential Expansion Study (BRES) and Settlement Area Boundary Expansion (SABE) areas. It is expected that these areas will transition to a more urbanized environment given the level of intensification required to accommodate growth. Therefore, in assessing future traffic levels, the ability of road links to accommodate projected traffic should be adjusted under future conditions to account for travel friction / congestion (i.e., as a result of more accesses along the corridor, for example).

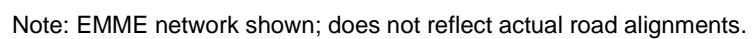
3.3 Future Road Capacity Conditions and Needs

The Region of Peel Transportation model was used to project future traffic volumes on Provincial, Regional and Town roads. The model contains future population and employment allocation assumptions.

As a part of the Region's Growth Management Strategy, the Region, in consultation with the Town of Caledon, City of Brampton, and City of Mississauga, developed the preferred population and employment land use allocations. Land use projections were developed with consideration for growth identified through the Provincial Growth Plan and the Region's Land Needs Assessment, which determines the amount of land required to accommodate the future land uses. The preferred land use allocations were incorporated into the Region of Peel transportation model by regional staff and use for this study.

Traffic volumes projections for 2041 and 2051 are illustrated in **Figure E-14** and **Figure E-15**, respectively.

Several roads within the SABE area will experience volumes in excess of 750 to 850 vehicles per hour per lane by 2051. Given the degree of turning traffic, active transportation activity at signalized intersections and anticipated transit service, these levels of traffic will best be accommodated with two through lanes of traffic per direction.



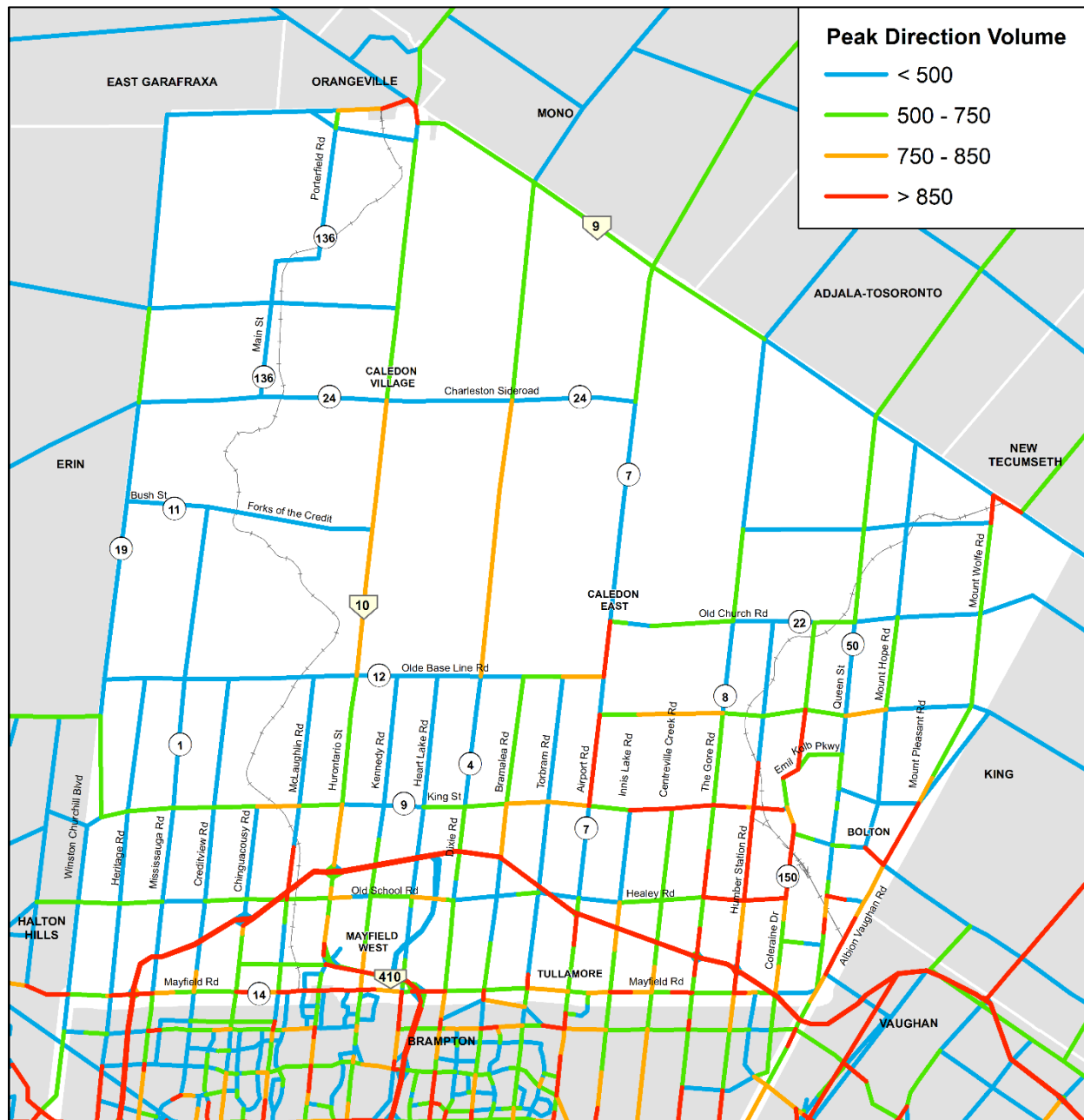


Figure E-15: 2051 Traffic Volume Projections

Note: EMME network shown; does not reflect actual road alignments.

By 2051, several road segments are expected to have per lane traffic volumes consistent with recurring congestion. Additional capacity constraints are anticipated on north-south major roads south of Old School Road given the change in nature of these streets (close intersection spacing, turning movements, transit operations and pedestrian activity) and related reduction in capacity. Congestion on Mayfield Road will require an alternative continuous east-west road, such as along Old School Road / Healy Road. Based on future congested road segments, road capacity improvements are warranted as summarized in **Table E-5**.

Table E-5: Proposed Town Road Improvements

Road	From	To	Recommendation	Year	Status ¹	Highway 413 Interchange Located Along Road Segment
Chinguacousy Road	Mayfield Road	Mayfield West Phase 2 Limit	Widening from 2 to 4 lanes	2031	Committed	No
McLaughlin Road	Mayfield Road	Mayfield West Phase 2 Limit	Widening from 2 to 4 lanes	2031	Committed	No
	Mayfield West Phase 2 Limit	Old School Road	Widening from 2 to 4 lanes	2031	Planned	No
Albion Vaughan Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	2031	Committed	No
Chinguacousy Road	Mayfield West Phase 2 Limit	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	Yes
Humber Station Road	Mayfield Road	North of King Street (Settlement Area Limits)	Widening from 2 to 4 lanes	2031	Proposed	Yes
Abbotside Way	Bonnieglenn Farm Boulevard	Heart Lake Road	Extension (4 lanes)	2031	Committed	No
Healey Road	The Gore Road	Coleraine Drive	Widening from 2 to 4 lanes	2031	Proposed	No
Torbram Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	No
George Bolton Parkway	West of Coleraine Drive	Humber Station Road	Extension (4 lanes)	2031	Proposed	No
Kennedy Road	Newhouse Boulevard	Old School Road	Widening from 2 to 4 lanes	2031	Proposed	No
Innis Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2041	Proposed	No
Centreville Creek Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2041	Proposed	No
Old School Road	Winston Churchill Boulevard	Airport Road	Widening from 2 to 4 lanes	2041	Proposed	No
Healey Road	Airport Road	The Gore Road	Widening from 2 to 4 lanes	2041	Proposed	No
Kennedy Road	Old School Road	King Street	Widening from 2 to 4 lanes	2041	Proposed	No
Caledon King Townline	King Street	Columbia Way	Widening from 2 to 4 lanes	2041	Proposed	No
Columbia Way	Regional Road 50	Caledon King Townline	Widening from 2 to 4 lanes	2041	Proposed	No
Bramalea Road	Mayfield Road	King Street	Widening from 2 to 4 lanes	2041	Proposed	Yes
Heart Lake Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No
Chinguacousy Road	Old School Road	King Street	Widening from 2 to 4 lanes	2051	Proposed	Yes
McLaughlin Road	Old School Road	King Street	Widening from 2 to 4 lanes	2051	Proposed	No
Heritage Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No
Creditview Road	Mayfield Road	Old School Road	Widening from 2 to 4 lanes	2051	Proposed	No

Note: 1. Proposed improvements refer to projects that are currently undergoing studies, planned improvements refer to those with approved studies but are not budgeted, and committed improvements refer to projects that have been budgeted as part of the Caledon capital plan or development charges study

Appendix F

Complete Streets Framework

Appendix F | Complete Streets Framework

Date: July 28, 2023 **Project No.:** 300051561.0000
Project Name: Caledon Multi-Modal Transportation Master Plan
Submitted To: Town of Caledon
Submitted By: R.J. Burnside & Associates

1.0 Introduction to Complete Streets

1.1 Background and Guiding Principles

The primary objective of complete streets practices is to effectively integrate the various functions of streets through a design process. Complete streets guidelines serve as a holistic decision-making tool in ensuring that the transportation network can be equitably and safely shared between all road users (e.g., auto drivers, transit riders, cyclists, pedestrians, persons with disabilities, etc.). This approach is becoming increasingly important given the need to accommodate a wider range of modes in support of a more sustainable and multimodal transportation network.

The Provincial Policy Statement (PPS) provides overall direction for planning and development in the Province of Ontario. The PPS provides support for a context-sensitive approach to road design, stating “transportation and land use considerations shall be integrated at all stages of the planning process”

“Complete Streets are streets that are safe for all users, regardless of age, ability, income, race, ethnicity, or mode of travel. By using a Complete Streets approach to designing road networks, we can create spaces that allow all users to thrive — not only motorists.”
- The Centre for Active Transportation (TCAT)

The complete streets design approach was adopted by the Region of Peel through their 2013 Road Characterization Study. The study recognizes the need to shift to a design approach that balances the needs of all road users, including pedestrians, cyclists, transit users, motorists, and freight hauls, within the limitations of available rights-of-way. These guidelines were developed with a focus on the Regional Road network.

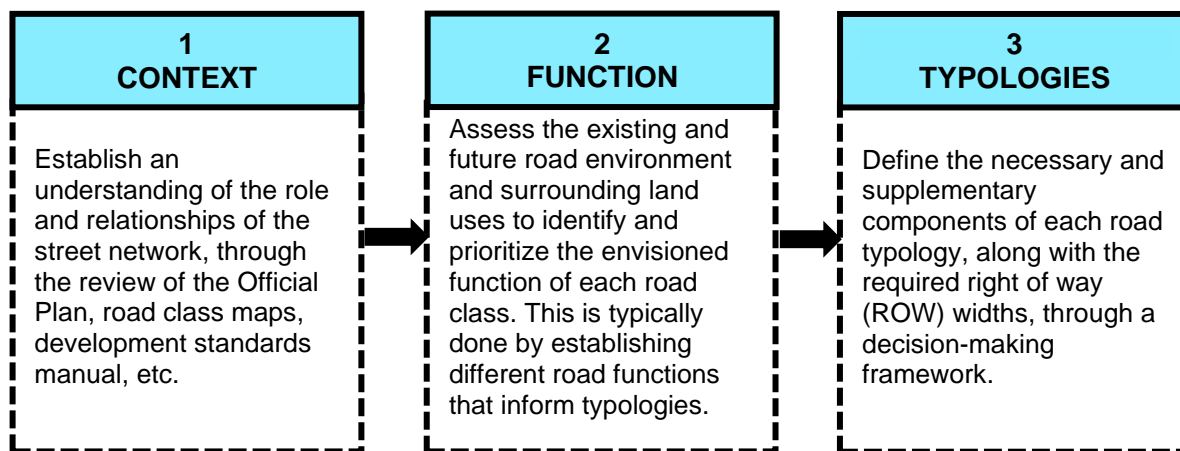
The Town’s previous TMP developed a Road Characterization Matrix that identified roadway cross-section elements and rights-of-way for seven different road typologies within the Town, which was based on the Region’s Roadway Characterization Study.

There is an opportunity for the Town of Caledon to re-define the street network using a complete streets approach, particularly within existing and future urbanized areas, to assure effective integration with and consideration for active transportation and transit within road right

of way widths. The Town of Caledon Complete Streets Guidelines builds upon the typologies from the previous TMP, recognizing the magnitude of urbanization that is anticipated in southern Caledon, and provides an implementation strategy to help determine where and when complete streets elements should be included.

1.2 Complete Streets Methodology

A high-level process was developed and applied to identify key components of complete streets planning and design. This methodology is based on complete streets practices of other jurisdictions in North America.



2.0 Development of Street Typologies

Development of the Town's complete street typologies and the appropriateness of associated street design elements depends on the road context and its function. The relationship between major roadways and the surrounding land use is a coordination of planning and roadway engineering objectives. This planning / engineering relationship provides a balanced approach to common competing priorities as follows:

- Land use and natural heritage environment
- Role of the roadway for commuting and goods movement
- Current need and potential demand for walking, cycling and aesthetic design elements
- Desirable operating conditions such as appropriate speed and roadside safety
- Constraints and cost management

2.1 Context

Complete streets design guidelines respond to the functionality and context of the corridor. The focus is on design elements on the boulevard and roadway, but complete streets also indirectly provide guidance for directing growth on surrounding lands.

The Institute for Transportation Engineers (ITE) and the Congress for New Urbanism published a recommended practice in 2006 titled *Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities*. The book, sponsored by the US Federal Highway Administration provides planners and engineers guidelines to achieve context sensitive approaches in the planning and design of major roadways. The primary purpose of this approach is to ensure that transportation projects are designed to be compatible with their surroundings (i.e., the environment and communities that they serve). The approach identifies “context zones” and builds upon, rather than discards the road functional classification system.

Within the Town of Caledon, the existing road network is served by a mix of Town, Regional and Provincial roads. The Town currently maintains and operates approximately 550 km of the roads within Caledon. Approximately 210 km of the roads within the Town are under the jurisdiction of the Region of Peel and the highways (Highway 9, Highway 10 and Highway 410), which span 60 km, are operated by the Province.

Road systems are categorized using a road class hierarchy that accounts for the variation in functionality and purpose. The roadway classifications recognize variations in design standards, flow characteristics, vehicle traffic, traffic control, access control, land use considerations and prioritization of road users.

The Town's 2022 draft Official Plan designates the road network into the categories summarized in **Table F-1**.

Table F-1: Town Draft Official Plan Road Classifications

Road Class	Jurisdiction	Function	ADT (vehicles)	Road Allowance	Lane Capacity	Desired Facility Types
Provincial Highways	Province of Ontario	➤ Serve large volumes of inter-regional and long-distance traffic at high speeds	-	-	-	-
Regional Arterials	Region of Peel	<ul style="list-style-type: none"> ➤ Serve moderate to high volumes of medium to long distance inter and intra-regional traffic at moderate speeds ➤ Primary truck and goods movement routes 	Over 8,000	30 to 50 metres	2 to 6	➤ Highest degree of separation for cycling facilities, where appropriate
Town Arterials	Town of Caledon	<ul style="list-style-type: none"> ➤ Serve moderate to high volumes of medium to long distance inter and intra-regional traffic at moderate speeds ➤ Support the Regional road system 	6,000 to 8,000	30 to 36 metres	2 to 4	➤ Highest degree of separation for cycling facilities, where appropriate
Major Collectors	Town of Caledon	➤ Serve moderate volumes of short distance traffic between local and arterial roads at moderate speeds	3,000 to 6,000	20 to 30 metres	2 to 4	<ul style="list-style-type: none"> ➤ Some degree of separation for cycling facilities ➤ On-street parking permitted
Minor Collectors	Town of Caledon	➤ Serve low to moderate volumes of short distance traffic between local and arterial roads at moderate speeds	1,000 to 3,000	20 to 26 metres	2 to 4	<ul style="list-style-type: none"> ➤ Some degree of separation for cycling facilities ➤ On-street parking permitted
Local Roads	Town of Caledon	<ul style="list-style-type: none"> ➤ Serve local traffic only ➤ Provide connections to collector roadways at low speeds ➤ Provide direct property access 	Less than 1,000	17 to 20 metres	2	<ul style="list-style-type: none"> ➤ Shared cycling facilities and sidewalks on both sides of the road, where designated rights of way and environmental conditions permit ➤ On-street parking permitted

2.2 Function

The application of complete streets is context-specific and requires a review of the needs and opportunities along road segments to determine the necessity of different types of infrastructure to meet desired functionality.

The anticipated functionality of roads within Caledon were categorized based on its operating environment and prioritization of the primary user(s) in which it is expected to serve. This informs the complete street design and assures typologies are developed to respond to the functionality and context of the corridor.

2.2.1 Operating Environment

Establishing the environment in which a road operates is important in informing functionality, particularly as it pertains to street elements and design speeds. Two operating environments—urban and rural—were considered in determining street typologies.

Urban roads are located within the Town’s denser settlement areas and mixed-use urban areas. These streets typically carry higher volumes of all modes, including pedestrians, transit users and cyclists. These roads typically have posted speeds of 50 km/h or 60 km/h. Vehicles may also experience more “friction” along these corridors as a result of closely-spaced accesses.

Rural roads are located within the Town’s agricultural and natural or environmentally significant areas. Adjacent land uses may also include sparsely settled lands or small concentrations of developed areas that are surrounded by natural areas. Operating speeds along rural roads are typically 80 km/h, as these roads typically have sparsely spaced intersections and minimal accesses.

The majority of Town roads currently operate under rural conditions. With the development of Settlement Area Boundary Expansion (SABE) lands, many of the roads within southern Caledon will transition to a more urbanized or mixed-use context.

2.2.2 Prioritization

Establishing the environment in which a road operates is important in informing functionality, particularly as it pertains to street elements and design speeds. A street typology is a way of categorizing roads to account for the land use context and the desired uses of the road. The typology provides guidance to determine the key design features for the road.

Street typologies reflect the relationship of surrounding land use context to the street, primary purpose of the street, and functional classification with respect to a street’s two fundamental priorities:

- moving people and goods, and
- place making.

2.3 Typologies

Street typologies were defined for the Town to account for the road context within the greater network and supporting land uses, along with the function it intends to serve. These functions may include commuter and goods movement, land access, safe pedestrian and cycling travel, stormwater conveyance and placemaking and aesthetic objectives of the streetscape.

2.3.1 Design Elements

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads presents a design philosophy for the development of road designs. It highlights the role of design guidelines as providing “information and background to assist the designer in choosing the appropriate combination of features, dimensions, and materials for a given design” and notes that the determination of the dimensions is the designer’s responsibility. It notes that “guidelines are necessarily general, because they cannot cover all site-specific conditions” and are required to accommodate a “range of travel modes”.

The TAC design guide presents the concept of “design domain” which is thought of as the range of values that a design element might take. The appropriate dimension relates to the “fitness of purpose for that design element”.

The intent of complete streets guidelines is to provide a framework for design approaches that meet the engineering requirements and accommodation of alternative roadway elements and modes. Complete streets cross-sections developed for the Town incorporate the key cross-sectional design elements illustrated in **Figure F-1** and summarized in **Table F-2**.

2.3.2 Characterizations

Recommended characterizations for Town roads are summarized in **Table F-3**, along with the associated land use, anticipated role, and desired design components for each. The purpose of these characterizations is to guide the complete streets design and provide a sense of hierarchy for the facilities to be considered.

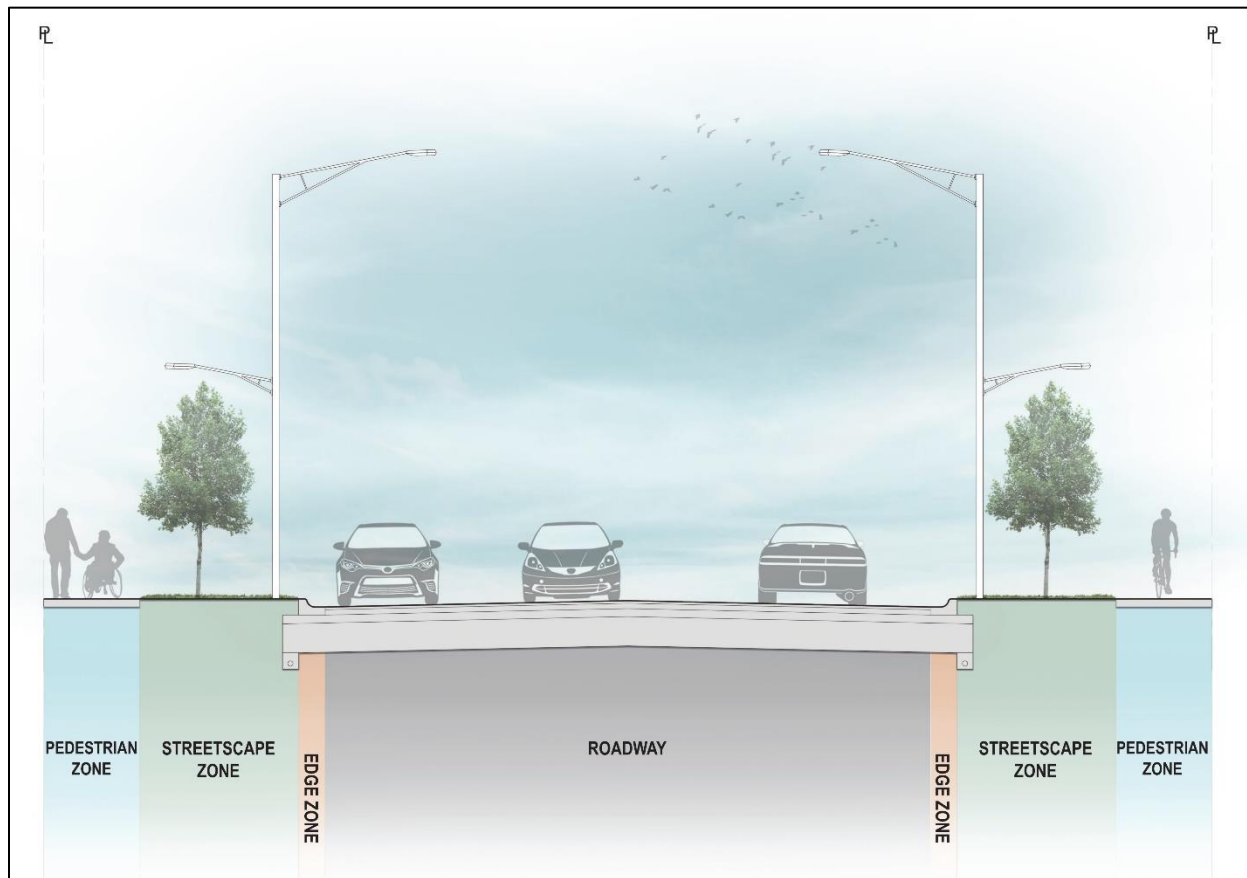


Figure F-1: Cross Section Elements

Table F-2: Complete Streets Cross-Section Elements

	Description	Potential Elements	Design Guidelines
Roadway	Provide for the safe and efficient movement of vehicles, and may accommodate bike lanes or parking	Travel lanes	<ul style="list-style-type: none"> The number of travel lanes and lane widths should consider the users of the street, including impacts on pedestrian crossing distances and the role of medians Travel lanes should not exceed 3.5 m unless it is a shared vehicle lane Passing / curb lanes should be a minimum of 3.25 m and should be sufficiently wide to accommodate the anticipated range of transit vehicles In urban areas, where lower speeds are desired, narrower travel lane widths may be more appropriate
		Shared vehicle lane	<ul style="list-style-type: none"> A desired minimum vehicle lane width of 4.5 m for vehicle lanes that are shared with cyclists
		Auxiliary Left Turn Lane	<ul style="list-style-type: none"> To provision for auxiliary left turns at intersections, a lane width as narrow as 3.0 m plus a 2.0 m median separation to opposing traffic is acceptable if trucks and buses make up less than 15 veh/h of the turning traffic; otherwise, a minimum left turn lane of 3.3 m is desired
		Parking lane	<ul style="list-style-type: none"> A minimum on-street parking width of 2.4 m is desired; however, a width of 2.0 m can be considered in constrained areas On-street parking is discouraged along roads with operating speeds of over 60 km/h
		Centre turn lane	<ul style="list-style-type: none"> Widths are generally the same as the adjacent through lane A centre turn lane width of 4.0 m is desired for roads with design speeds greater than 60 km/h; otherwise a 3.5 m width is acceptable A width of 5.0 m should be avoided due to operational concerns
		Medians	<ul style="list-style-type: none"> An overall median width of 6.0 m width (including the gutter) is desired to accommodate a protected structural pier or left-turn auxiliary lanes Wider medians with barriers are desirable along high speed, arterial roads
		On-street bicycle lanes	<ul style="list-style-type: none"> See Town Active Transportation Master Plan (ATMP) for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment A bicycle lane that is greater than 2.0 m, not including buffer width, is discouraged as vehicles may use it as a travel / passing lane

	Description	Potential Elements	Design Guidelines
Edge Zone	Located between the vehicle lanes and green zone and may include curbing or shoulders	Paved shoulder	<ul style="list-style-type: none"> • See Town ATMP for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment • A paved shoulder that is greater than 2.0 m, not including buffer width, is discouraged as vehicles may use it as a travel / passing lane • Paved shoulders should not include bicycle lane signage as they also serve as a refuge for disabled vehicles
		Cycle Track	<ul style="list-style-type: none"> • A minimum and desired width of 1.5 m and 2.0-2.5 m, respectively, is recommended for a one-way cycle track • A minimum and desired width of 3.0 m and 3.5-4.0 m, respectively, is recommended for a two-way cycle track
		Curb and gutter	<ul style="list-style-type: none"> • A curb and gutter should be provided along roads within urbanized areas or with main street environments
Streetscape Zone	Located within the boulevard and provides aesthetic and low impact development (LID) elements, street furniture, lighting, and a buffer to pedestrians	Lighting, road signs, above and below ground utilities	<ul style="list-style-type: none"> • In urban areas, lighting should be designed to accommodate pedestrians (i.e., illumination of sidewalks) • In rural areas, lighting should be incorporated for the purpose of enhancing roadway safety and visibility
		Planting and furnishing	<ul style="list-style-type: none"> • Provides space for plantation, street furniture, pedestrian amenities (e.g., benches), transit amenities (e.g., shelters) and utilities • Planting / furnishing zones is typically 1.0 to 3.0 m wide, but can vary on a corridor basis • No elements should impede pedestrian movement
		Low Impact Development (LID)	<ul style="list-style-type: none"> • Cost effective LID practices should be incorporated, where possible, for stormwater management
		Rural swale	<ul style="list-style-type: none"> • Edges of rural roads, except those in main street environments, should include swales for drainage
Pedestrian Zone	Boulevard space dedicated to sidewalks for pedestrians or a multi-use path for both pedestrians and cyclists	Sidewalk	<ul style="list-style-type: none"> • Sidewalks should be provided directly adjacent to the building frontage, property line or marketing zone depending on the context of the corridor • Sidewalks should be free of obstructions and constructed to meet AODA standards • A minimum width of 1.8 m is recommended • Within urban areas or along main streets, sidewalks and/or multi-use paths should be provided along both sides of the road

	Description	Potential Elements	Design Guidelines
		Multi-use path	<ul style="list-style-type: none"> • See Town ATMP for details on bicycle facility design requirements, including the appropriateness of facility type based on the context of the road and environment • Within urban areas or along main streets, sidewalks and/or multi-use paths should be provided along both sides of the road • Supportive amenities, including benches, waste bins, lighting and signage, are recommended
Marketing Zone	Located between the pedestrian zone and the building frontage	Patios Spil-out retail Awnings Building entrances Street furniture	<ul style="list-style-type: none"> • Marketing zone encouraged in urban areas to provide street identify / character and promote pedestrian activity • Elements should be installed such that pedestrian movement is not impeded

Table F-3: Road Characterizations

Street Typologies	Context	Primary Purpose	Lanes	Right-of-Way (ROW)
Neighbourhood Residential Street	<ul style="list-style-type: none"> Neighbourhood Residential Streets are local roads located within mature or developing residential areas. The built form is primarily low- and medium-density single or multi-family homes interspersed with schools, parks, and other community facilities. Buildings are typically street oriented, and streets have a high frequency of residential driveway accesses. 	<ul style="list-style-type: none"> Provide access to adjacent development. Provide connections within neighbourhoods. 	2	20 m
Rural Street	<ul style="list-style-type: none"> Rural Streets are located outside of the defined settlement areas and adjacent lands include agricultural, rural, and environmental protection areas. Rural Street may also serve occasional low-density residential, commercial, or industrial uses 	<ul style="list-style-type: none"> Accommodate longer distance travel between settlement areas Provide access to adjacent uses including the movement of agricultural equipment Accommodate transit 	2	26 m
Industrial / Employment Street	Industrial Streets are located in employment areas with adjacent industrial uses such as manufacturing, warehousing, assembly, storage, and research facilities that require efficient and direct access to Town roads and provincial highways.	<ul style="list-style-type: none"> Provide access for employees to their place of work Serve employment lands that may have a high volume of truck traffic that require access to the regional road system Accommodate transit 	2	26 m
Neighbourhood Connector Street	Neighbourhood Connector Streets are located within mature and developing residential zones in the settlement areas. The adjacent built form is primarily low- and medium-density single or multi-family homes interspersed with schools, parks, community facilities and neighbourhood serving commercial areas. Buildings are typically street-oriented and have a high frequency of residential driveway accesses.	<ul style="list-style-type: none"> Provide local access Connect neighbourhoods Accommodate transit 	2	26 m
Downtown Commercial Street	Downtown Commercial Streets are generally located in the core of urban and rural centres that function as a retail or civic destination. Downtown Commercial Streets are characterized by a mixed land use context incorporating both residential and commercial uses. The built form is made up of low and midrise buildings that are generally street oriented, and buildings may have historical or architectural significance.	<ul style="list-style-type: none"> Provide access to adjacent mixed uses Accommodate significant volumes of traffic, pedestrians, cyclists and transit 	2	30 m
Urban Collector Street	Urban Collector Streets are located within settlement areas and adjacent land uses include a mix of residential and commercial. The built form is characterized by low- and medium-density single or multi-family homes interspersed with schools, parks, other community facilities, and auto-oriented commercial uses. Land uses are typically oriented away from the street.	<ul style="list-style-type: none"> Provide access between neighbourhoods Provide access to the network of Town, Regional and Provincial roads Accommodate transit 	2	30 m
Urban Arterial Street	Urban Arterial Streets are located within settlement areas and adjacent land uses include a mix of residential and commercial. These roads facilitate longer distance travel between settlement areas and prioritize movement. The built form is characterized by low- and medium-density single or multi-family homes interspersed with schools, parks, other community facilities, and auto-oriented commercial uses. Land uses are typically oriented away from the street.	<ul style="list-style-type: none"> Provide access between neighbourhoods Provide access to the network of Town, Regional and Provincial roads Accommodate transit 	4	36 m

2.3.3 Cross-Sections

Upon identifying the appropriate road characterization for a Town road, the cross-sections attached to this appendix were developed with consideration for design guidelines associated with each roadway element.

To provision for future right-of-way widths, cross-sections show typical and most conservatively sized design elements associated with each typology. However, there is no singular design prescription that each typology needs to follow. These designs serve to provide guidance and should be further refined to balance the needs and expectations of pedestrians, cyclists, transit users, and motorists within the context of the street corridor. As such, the designer should understand the hierarchy of transportation modes and assign priority as appropriate. The placement of design elements should also consider roadside safety and clear zone requirements as defined in Roadside safety design references, including the Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads, Ontario Ministry of Transportation Roadside Safety Manual and PIARC Road Safety Manual.

In addition, cross-sections do not reflect all the elements at an intersection, such as exclusive turn lanes. Intersections are shared spaces and should be designed to ensure that users are aware of one another and move predictably in order to promote mobility and safety goals. Successful intersection design prioritizes safety and access for all users, as appropriate to the street typology, and enhances the public realm. It is desirable to maintain more compact intersection design in urban areas to reduce vehicle speeds and encourage safety for pedestrians, cyclists and motorists. In planning for the future, design approaches can be modified through complete streets concepts to accommodate for intersection-specific needs.

3.0 Implementing Complete Streets

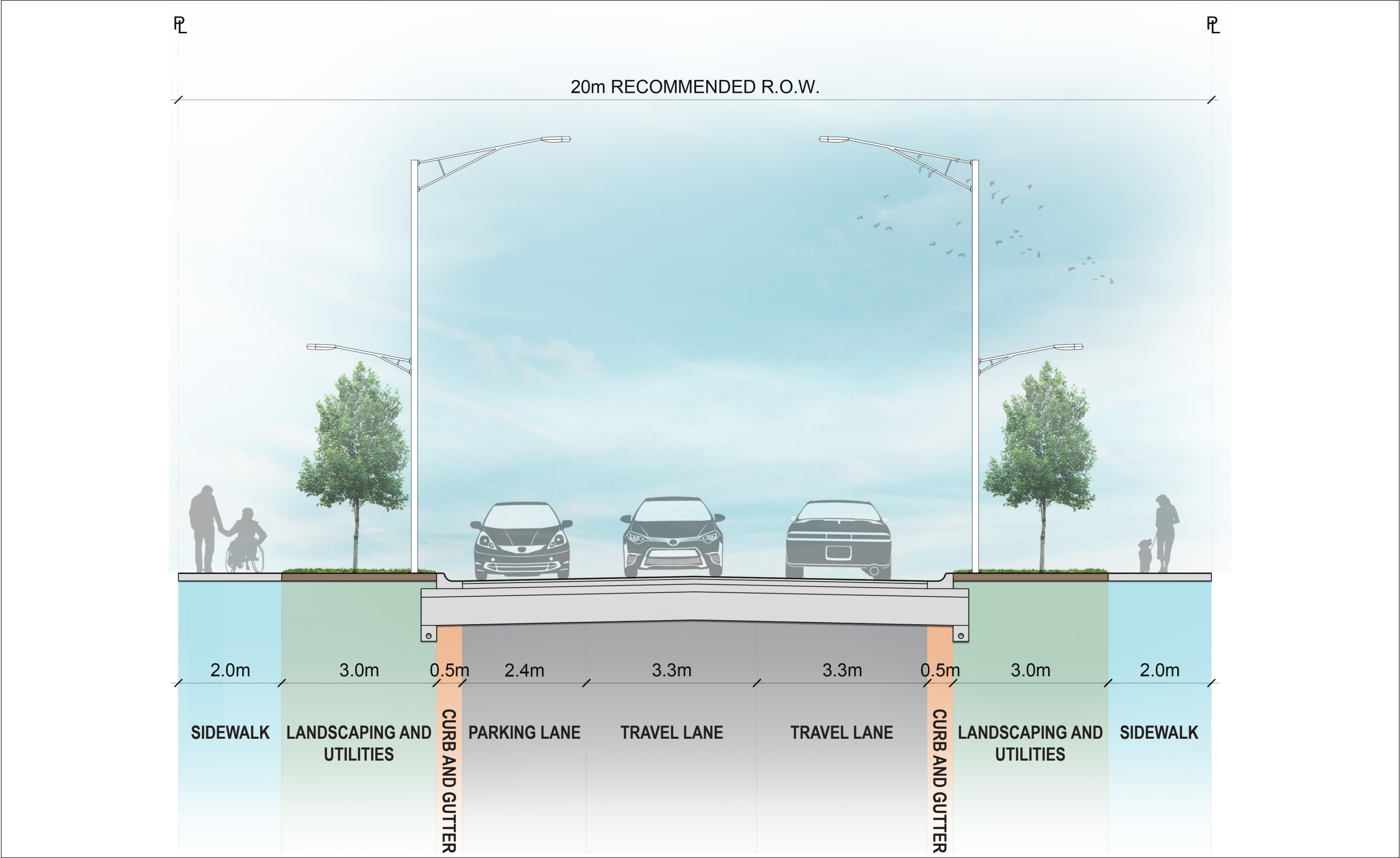
3.1 Road Right-of-way Requirements

The Town of Caledon undertook an update to their Official Plan in 2022. As part of the review, the Schedule for the road right-of-way widths was updated to provision for the future street typologies as established in the complete streets guidelines developed for the Town.

A context sensitive approach to developing design guidelines help define right-of-way priorities to address the multi-modal demands and urban design objectives of existing and future land use and roadway environments. As shown in the cross-sections in the previous section, the road right-of-way depends on the road characterization and is a function of the space required for the combined elements of the roadway, including the edge, streetscape, pedestrian and marketing zone.

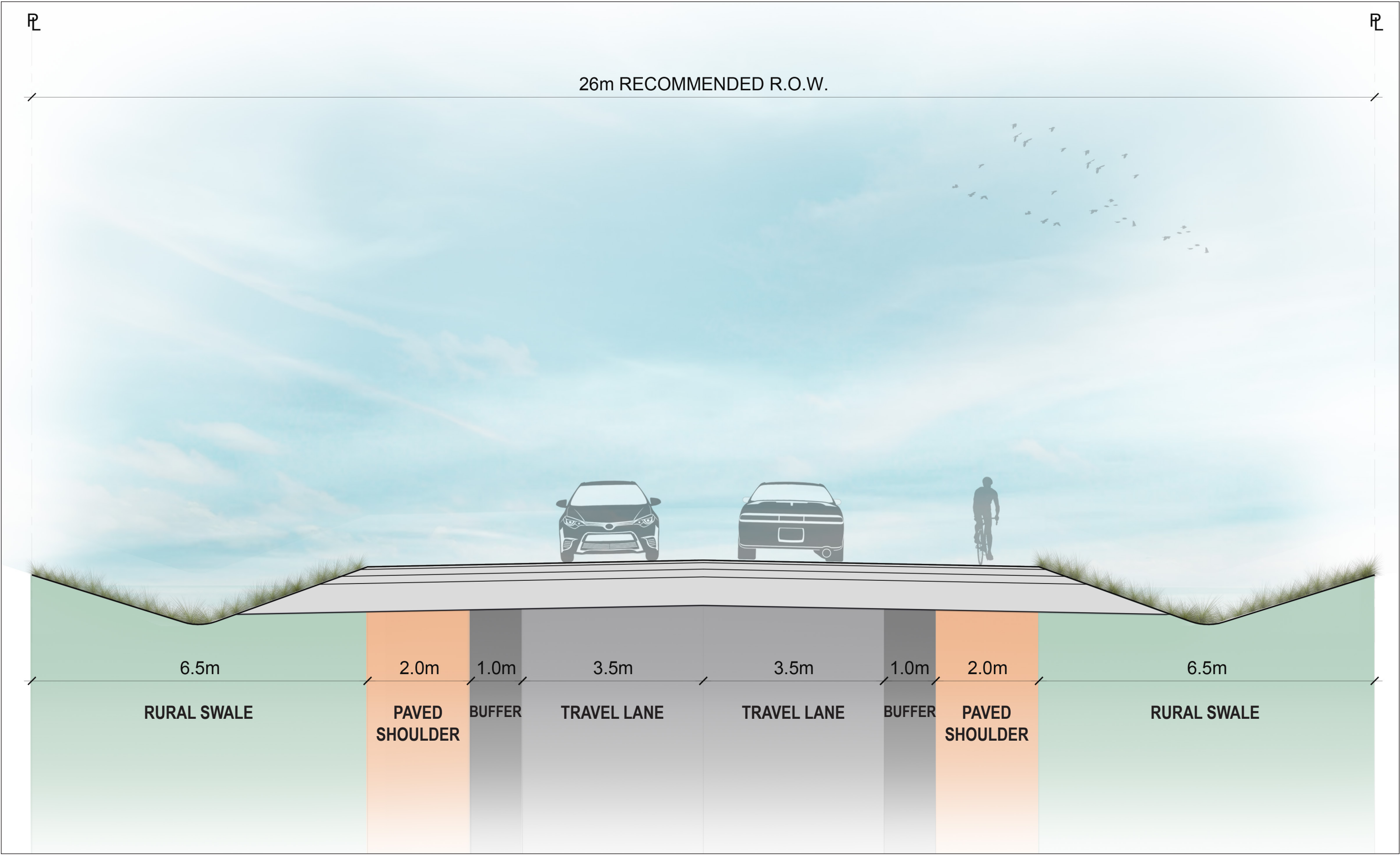
3.2 Development Standard Manual

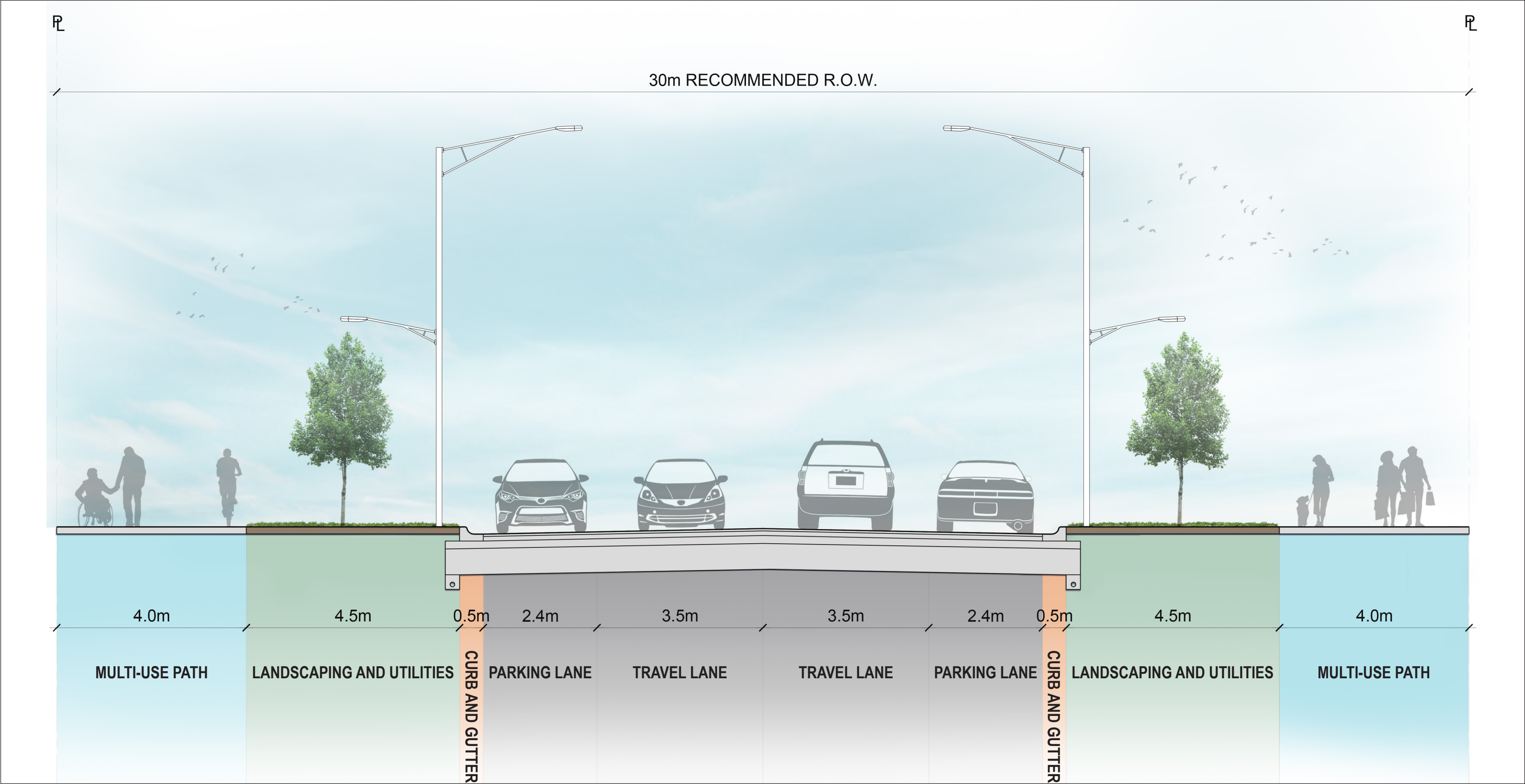
The Town's 2019 Development Standards Manual should be updated to reflect the complete streets typologies and cross-sections.



CALEDON MULTI-MODEL TRANSPORTATION PLAN

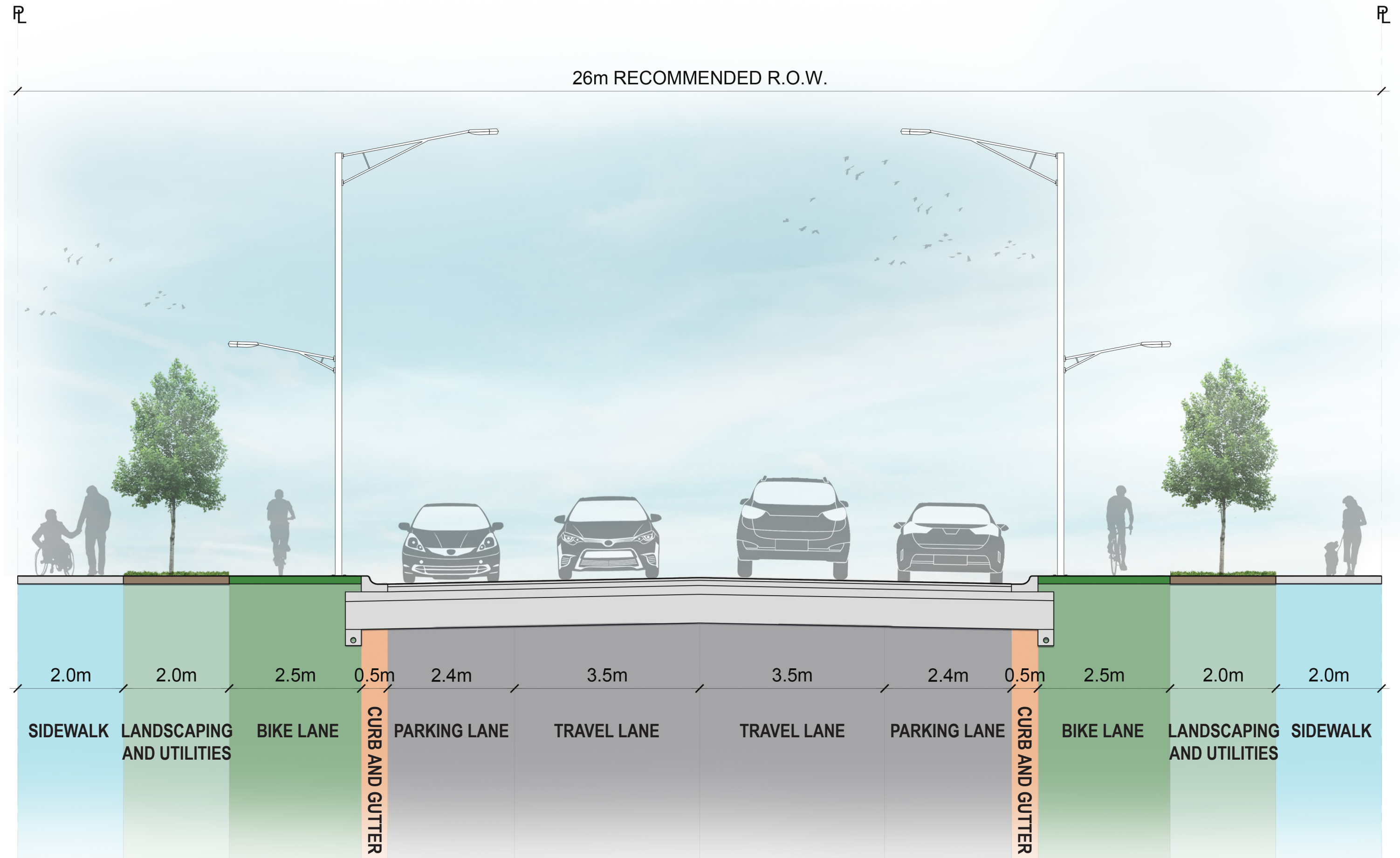
NEIGHBOURHOOD RESIDENTIAL STREET - 2 LANES WITH PARKING

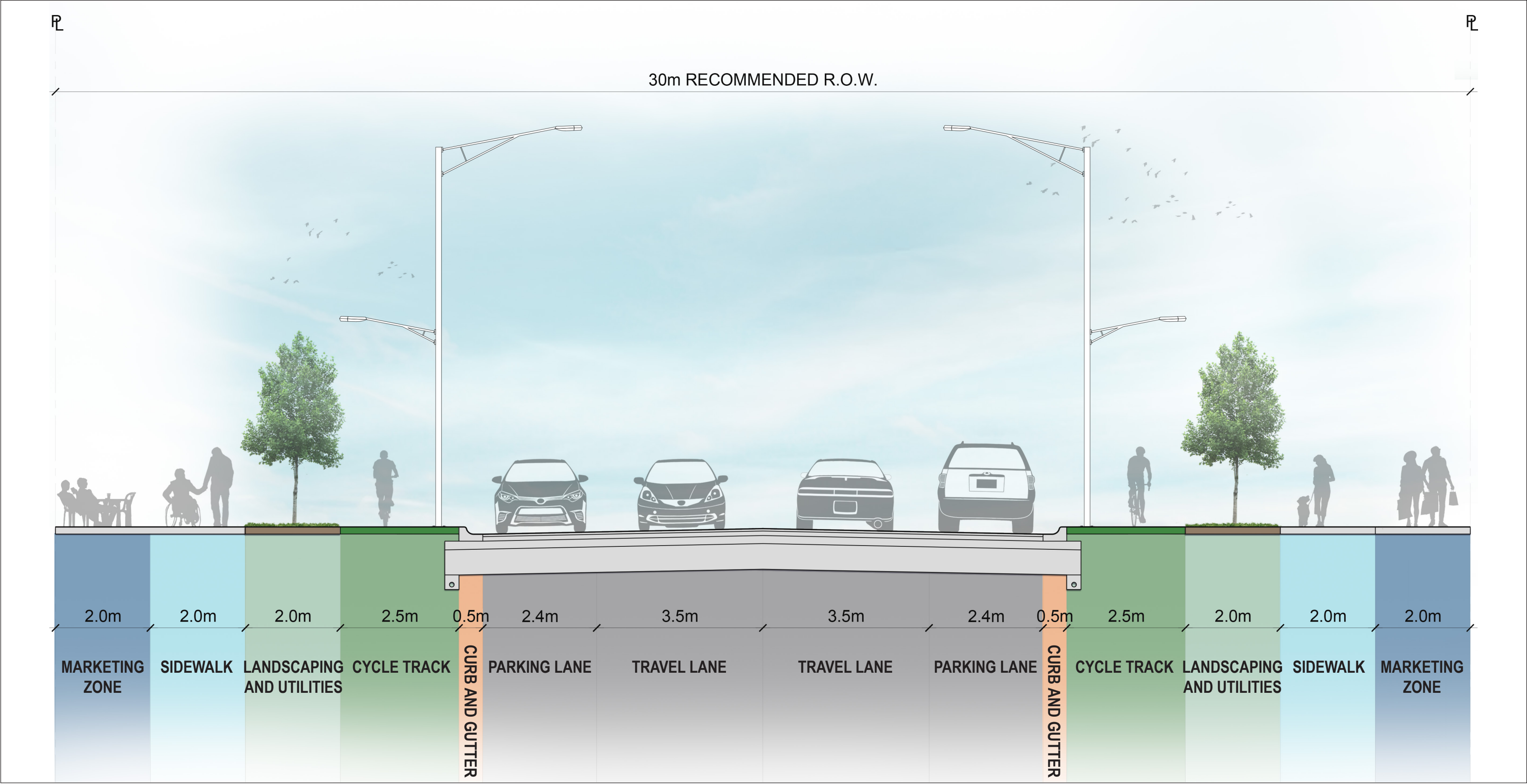




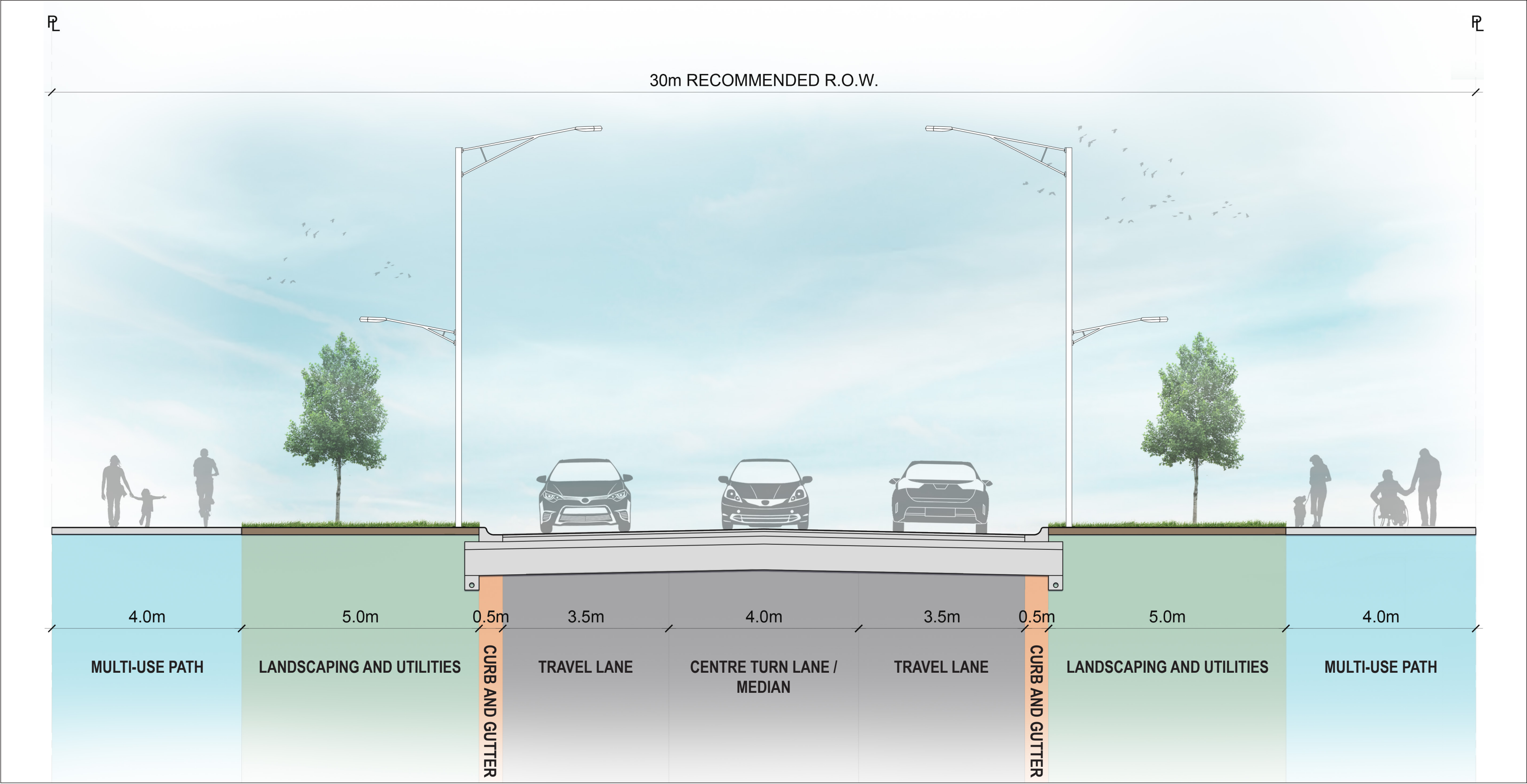
CALEDON MULTI-MODEL TRANSPORTATION PLAN

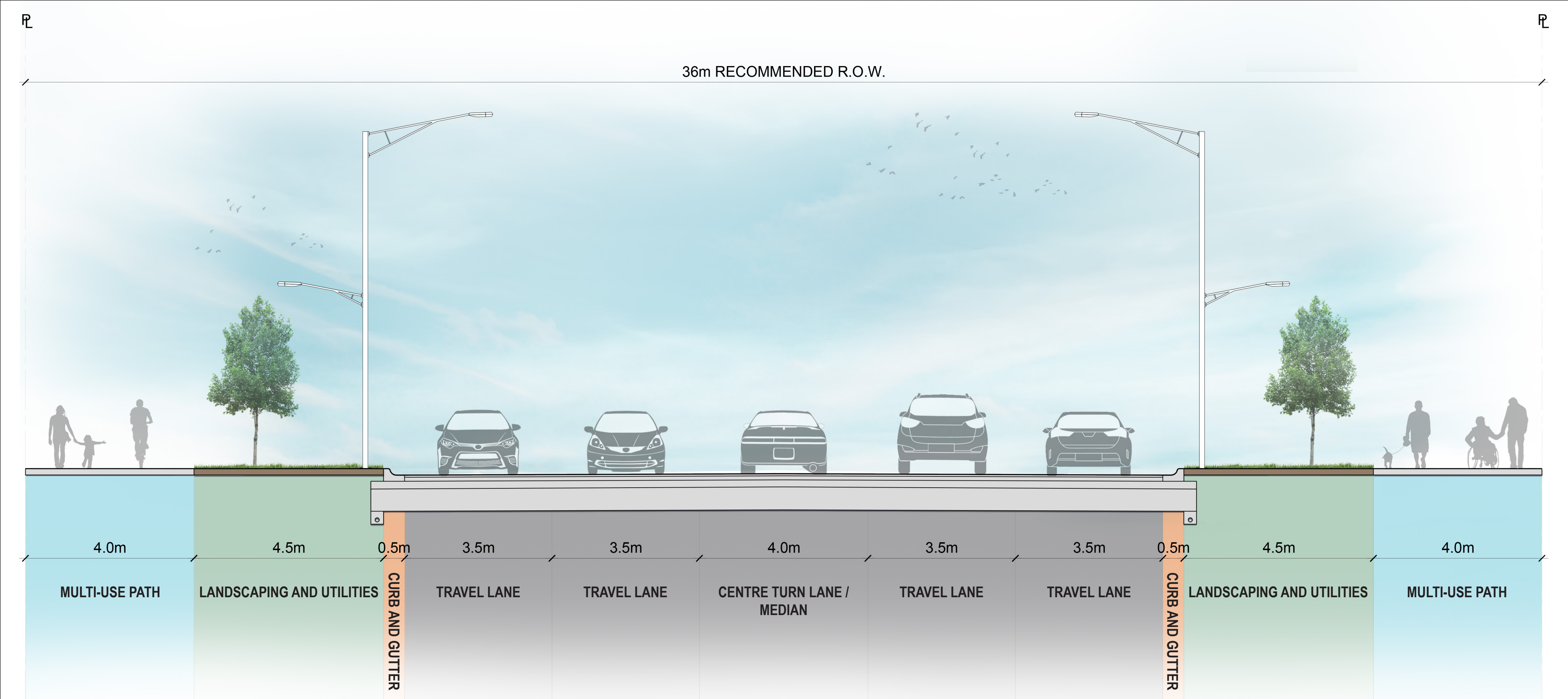
INDUSTRIAL / EMPLOYMENT STREET - 2 LANES WITH PARKING





CALEDON MULTI-MODEL TRANSPORTATION PLAN
DOWNTOWN COMMERCIAL STREET - 2 LANES WITH PARKING





Appendix G

Speed Policy

Appendix G | Speed Policy Review

Date: May 16, 2023

Project No.: 300051561.0000

Project Name: Caledon Speed Policy Review

Submitted To: Town of Caledon

Submitted By: R.J. Burnside & Associates

1.0 Town of Caledon Speed Policy

In an effort to address the implications of growth and the Official Plan objectives toward sustainable communities, a review of the speed limit policy and recommendations for defining new speed limits for the various major collector, collector and local road within the Town of Caledon.

In the path to reduce fatalities and injuries related to road traffic collisions, many municipalities in Greater Toronto and Hamilton Area (GTHA) recently reassessed their speed limit policies and reduced the posted speed limits on the roads, where warranted, following TAC speed limit guidelines. The scope of the speed review included an assessment of the current speed limit policy relative to industry practices, regulatory changes and trends and the implications of speed on road safety.

2.0 Transportation Association of Canada (TAC) Speed Limit Guidelines Criteria

The Transportation Association of Canada (TAC) Speed Limit Guidelines provide recommendations for setting speed limits on Canadian roads based on factors such as road type, traffic flow, and roadside development. The guidelines aim to promote safety, efficiency, and consistency in speed limit setting across the country.

An automated Excel spreadsheet is provided with the TAC publication to determine recommended posted speed limits based on a roadway's physical and operational characteristics. A copy of the spreadsheet is included in Attachment 1 for reference. The TAC analysis applies weighting factors and risk scores to the following physical and operational characteristics in assessing the recommended posted speed requirements:

- Road Classification (Collector, Arterial, Local etc.)
- Location (Urban vs Rural)
- Type of Median (Divided vs Undivided)
- Road Type (Major vs Minor)

- Number of Lanes
- Road geometry (horizontal)
- Road geometry (vertical)
- Average lane width
- Roadside hazards
- Pedestrian exposure
- Cyclist exposure
- Pavement surface condition
- Number of intersections with public roads
- Number of intersections with private driveways
- Number of interchanges
- On-street parking considerations.

The TAC methodology for posted speed assessment is intended to identify roads where an adjustment of posted speeds may be warranted as one of the mitigation measures to improve safety along these corridors, based on the risk factors included in this methodology. It is, however, recommended that any of the roads identified for potential posted speed adjustment should be further reviewed to identify factors that may not be captured by the TAC assessment, prior to implementing the adjustment to the posted speeds in these areas.

In addition to the physical / operational characteristics of the road, the TAC methodology also takes into consideration the design speed of the road, in making a recommendation for the posted speed. The intent is to enhance road safety through posted speed limits that match the expectation of drivers for a given roadway and its surrounding area; providing an evaluation tool to assess appropriate posted speed limits based primarily on the classification, function and physical characteristics of a roadway. It is an objective assessment based on measurable criteria. The risks associated with each of the criteria determine the appropriate posted speed, the higher the level of risk, the lower the recommended posted speed limit.

The TAC spreadsheet was used in this study for determining recommended speed limits, that could be compared to existing posted speeds and 85th percentile (operating) speeds. TAC states that a discrepancy between operating speeds and recommended posted speed limits (from the automated spreadsheet), is indicative of a road where the risks are not apparent to drivers. For any posted speed limits that are lowered or raised, TAC recommends that a review of traffic operations and safety be conducted 6 to 12 months after the implementation of the new speed limit. In addition, it should be noted that lowering the speed limit more than the recommendations based on the guidelines might result in discrepancy of the road condition / design speed and the posted speed limit, leading to high operational speed compared with the posted speed limit and high rate for speeding violations.

Studies, regarding the relationship between safety performance, after raising or lowering posted speed limits, indicate that changing posted speed limits “has a higher impact on crash severity (i.e., more injury or fatality occurrences as compared to property damage only) rather than

impacts to crash frequencies. However, revisions to posted speed limits may also affect the variations of operating speeds along a roadway, which in turn may increase safety risks (e.g., an increase in passing collisions or rear-end collisions).

3.0 Recommended Reactive and Proactive Review of Speed Limit Changes

Based on the evaluation, 35 road speed limit reductions are recommended for consideration by Town of Caledon council. The full evaluation table for all the road segments evaluated is shown in Attachment 1 of this appendix. The proposed speed limit changes are illustrated in a map in Attachment 2.

It is recognized that most of the speed limit reductions relate to the misalignment between the road classification/functionality and the existing posted speed limit. Under rural conditions, the TAC evaluation tool only recommends a posted speed limit of 80 kmph or more for

- divided major collector (1 lane)
- divided major collector (1 lane)
- divided minor collector (2+ lanes)
- divided major collector (2+ lanes)
- undivided major collector (2+ lanes)

and 70 kmph for

- undivided major collector (1 lane)
- divided minor collector (1 lane)
- undivided minor collector (2+ lanes)

Presently, in many cases, an undivided minor/major collector road (1 lane) would have a posted speed limit of 70 kmph or 80 kmph, and will lead to a recommended speed limit reduction.

Furthermore, it is our recommendation to monitor the operation of the collector roads within the Settlement Area Boundary Expansion (SABE) area. A posted speed limit reduction is recommended for a few specific road segments due to high risk scores.

The recommended speed limit change after considering the operational and enforcement concerns is shown in Table 1.

Table 1: Speed Reduction Recommendations

No.	Road Name	From	To	Posted Speed Limit (km/hr)	Risk Score	Recommended Speed Limit (km/hr)	Recommended Speed Reduction (km/hr)
1	Creditview Rd	Mayfield Road (RR 14)	King Street (RR 9)	70	25	60	-10
2	Creditview Rd	A point 250 m north of Kennedy Road	Olde Base Line Road (RR 12)	70	25	60	-10
3	Bramalea Rd	Mayfield Road (RR 14)	A point 1 km north of Mayfield Road (RR 14)	60	29	40 ¹	-20
4	Bramalea Rd	A point 1 km north of Mayfield Road (RR 14)	Old School Rd	80	24	60	-20
5	Bramalea Rd	Old School Rd	King Street	80	22	70	-10
6	Chinguacousy Road	Mayfield Road (RR 14)	Old School Rd	80	28	60	-20
7	Chinguacousy Road	Old School Rd	King Street	80	29	70	-10
8	Healey Rd	The Gore Road (RR 8)	Airport Road (RR 7)	70	24	60	-10
9	Heart Lake Rd	Mayfield Road (RR 14)	Old School Rd	80	25	60	-20
10	Heart Lake Rd	Old School Rd	King Street (RR 9)	80	25	70	-10
11	Heritage Rd	A point 700 m south of King Street (RR 9)	Mayfield Road (RR 14)	70	22	60	-10
12	Horseshoe Hill Rd	Charleston Sideroad (RR 24)	Highway No. 9	70	20	60	-10
13	Humber Station Rd	Mayfield Road (RR 14)	King Street	80	24	60	-20
14	Humber Station Rd	King Street	Castlederg Sideroad	70	24	60	-10
15	McLaughlin Rd	Mayfield Road (RR 14)	Old School Rd	80	27	60	-20
16	McLaughlin Rd	Old School Rd	Boston Mills Road	80	23	70	-10

No.	Road Name	From	To	Posted Speed Limit (km/hr)	Risk Score	Recommended Speed Limit (km/hr)	Recommended Speed Reduction (km/hr)
17	Mississauga Rd	Queen Street West	Charleston Sideroad (RR 24)	80	23	60	-20
18	Old School Rd	Winston Churchill Boulevard (RR 19)	Airport Road (RR 7)	70	21	60	-10
19	Willoughby Rd	A point 300 m south of Highpoint Sideroad	Charleston Sideroad (RR 24)	70	20	60	-10
20	Willoughby Rd	A point 275 m south of County Road 109	A point 300 m north of Highpoint Sideroad	70	18	60	-10
21	Centreville Creek Road	Mayfield Road (RR 14)	Healey Rd	80	28	60	-20
22	Centreville Creek Road	Healey Rd	King Street (RR 9)	80	26	70	-10
23	Innis Lake Rd.	Mayfield Road (RR 14)	Healey Rd	80	21	60	-20
24	Innis Lake Rd.	Healey Rd.	A point 1.0 km north of Healey Rd.	80	35	50	-30
25	Innis Lake	A point 1.4 km north of Healey Rd.	A point 1.6 km north of Castlederg Sideroad	80	19	70	-10
26	Torbram Rd	Mayfield Road (RR 14)	Old School Rd	70	20	60	-10
27	Torbram Rd	Old School Rd	King Street (RR 9)	70	24	60	-10
28	Torbram Rd	King Street (RR 9)	Olde Base Line Road (RR 12)	80	22	70	-20
29	St Andrew Rd	Charleston Sideroad (RR 24)	Beech Grove Sideroad	70	29	60	-10

No.	Road Name	From	To	Posted Speed Limit (km/hr)	Risk Score	Recommended Speed Limit (km/hr)	Recommended Speed Reduction (km/hr)
30	Pine Ave	Birch Ave	Mt Hope Rd	60	35	50	-10
31	Castlederg Sideroad	Highway 50 (RR 50)	Mount Wolfe Road	70	26	60	-10
32	Boston Mills	Mississauga Road	Highway No. 10	70	23	60	-10
33	Glen Haffy Road	A point 1 km south of Highway No. 9	Coolihans Sideroad	80	34	50	-30
34	Mountainview Road	Charleston Sideroad (RR 24)	Highway No. 9	70	20	60	-10
35	Queen Street West	Mississauga Road	John Street North	80	27	40	-40*

Table 1 summarizes the result of analysis of the posted speed limits, risk scores, recommended speed limits, and the corresponding speed reduction for 34 road segments within the jurisdiction of the Town of Caledon. Although the study has been conducted for all the roads in the Town of Caledon, Table 1 only shows the road segments where speed reduction is recommended. From the table, it can be observed that the current posted speed limits for these road segments vary, with some roads having a speed limit of 70 kmph and others having a higher limit of 80 kmph. Additionally, the study assessed the risk scores for each road segment, considering various factors including but not limited to location, geometry, road classification, presence of vulnerable road uses etc.

Based on the review and the adopted TAC methodology, the study recommends reducing the speed limits of 33 road segments. Generally, it suggests reducing the speed limit of roads within the boundaries of major urban areas to 60 kmph and rural areas to 70 kmph. According to the draft of the Town of Caledon Official Plan, areas south of Old School Road and Healy Road is classified as urban areas. The speed limits shown by the Table 1, shows a 60 kmph speed limit in the areas south of Old School Road and Healy.

4.0 Speed Limit Policy – Local Streets

On May 30, 2017, the Safer School Zone Act, also known as Bill 65, was enacted by the Province of Ontario. This legislation grants municipalities the authority to lower speed limits in neighbourhood areas. As it stands, the standard speed limit in Ontario is 50 km/h, unless otherwise indicated. Ontario Regulation 615 Signs (5.1.1) describes the required signage for an area that has been designated by By-law as having a speed limit of less than 50 km/h. The Regulation states that speed limit signs shall be erected on each highway that enters the designated area at the boundary of the designated area. These signs will include an AREA tab specifying that the driver is entering a 40 km/h area. The Regulation also requires that signs be erected at the boundary of a designated area informing motorists that they are leaving the designated area. That is, instead of reducing speed limits street by street, neighbourhood area speed limits establish a reduced speed limit for an entire neighbourhood.

In recent years, municipalities across Ontario have been taking steps to enhance road safety and reduce the risk of traffic accidents. One such municipality is the Town of Orangeville, which, as per their Infrastructure Services report INS-2021-006, has successfully implemented a town-wide speed limit reduction from 50 km/h to 40 km/h on most town local roads.

Lowering the speed limit can significantly improve road safety. At lower speeds, drivers have more time to react to unexpected situations, and the severity of collisions is reduced. This is particularly important in residential areas and near schools, where children and other vulnerable road users are present. The reduction of speed limits often has broad community support, particularly in residential areas where the safety of children and other pedestrians is a concern.

Lower speed limits can discourage through traffic and make streets more pleasant for residents, and would encourage more active forms of transportation, such as walking and cycling.

It is our recommendation for Town of Caledon to consider similar measures for updating the speed limit policy to improve community safety:

1. Setting the speed limit on local roads at 40km/h. This would align with the provisions of Bill 65 and follow the example set by Orangeville.
2. Identify key roads for inclusion in the list of Community Safety Zones. These roads should be selected based on factors such as proximity to schools, parks, and other areas with high pedestrian activity.
3. Develop a plan for the installation of new speed limit signs and the identification of designated 40 km/h areas for existing and new communities, whenever needed.

There will be some challenges associated with implementing a lower speed limit, such as the need for new signage and public education. However, these challenges can be overcome with careful planning and budgeting, as well as active public engagement and marketing. The benefits of improved safety and community satisfaction are likely to outweigh the costs.

Legend	
Collector Road	
Community Safety Zone	
Streetview Not Available	

Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
1	Creditview Rd	Mayfield Road (RR 14)	King Street (RR 9)	70	25	60	10
2	Creditview Rd	A point 700m north of King Street	A point 250m north of Kennedy Road	40	N/A	40	0
3	Creditview Rd	A point 250 m north of Kennedy Road	Olde Base Line Road (RR 12)	70	25	60	10
4	Creditview Rd	Olde Base Line Road (RR 12)	Northerly limit of Creditview Road	50	34	50	0
5	Albion Vaughan	A point 260 m south of Kirby Road	Highway 50 (RR 50)	60	43	60	0
6	Albion Vaughan	King Street East (RR 9)	A Point 260 m south of Kirby Road	60	39	60	0
7	Beech Grove Sideroad	Westerly Limit of Main Street	Airport Road (RR 7)	60	27	60	0
8	Beech Grove Sideroad	Winston Churchill Boulevard (RR 19)	Mississauga Road	60	35	60	0
9	Bramalea Rd	Mayfield Road (RR 14)	A point 1 km north of Mayfield Road (RR 14)	60	29	40	20
10	Bramalea Rd	A point 1 km north of Mayfield Road (RR 14)	Old School Rd	80	24	60	20
11	Bramalea Rd	Old School Rd	King Street	80	22	70	10
12	Bramalea Rd	King Street	Olde Base Line Road (RR12)	70	27	70	0
13	Caledon/King Townline North	Halls Lake Sideroad	Highway No. 9	60	35	60	0
14	Caledon/King Townline South	King Street East (RR 9)	Castlederg Sideroad	60	24	60	0
15	Chinguacousy Road	Mayfield Road (RR 14)	Old School Rd	80	28	60	20
16	Chinguacousy Road	Old School Rd	King Street	80	29	70	10
17	Chinguacousy Road	King Street	Boston Mills Road	70	25	70	0

Legend	
Collector Road	
Community Safety Zone	
Streetview Not Available	

Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
18	Chinguacousy Road	Boston Mills Road	Olde Base Line Rd	60	30	60	0
19	Chinguacousy Road	Olde Base Line Rd	Northern End	60	28	60	0
20	Columbia Way	A point 415m west of Westchester Road	Caledon King Townline South	60	32	60	0
21	Columbia Way	Highway 50 (RR 50)	A point 415m west of Westchester Road	40	N/A	40	0
22	Escarpment Side Rd	Highway No. 10	Airport Road	60	34	60	0
23	Escarpment Side Rd	Willoughby Rd	Highway No. 10	50	31	60	-10
24	Finnerty Side Rd	Airport Road	Provincial Highway 9	60	32	60	0
25	Halls Lakeside Rd	Mt Wolfe Road	Caledon King Townline	60	30	60	0
26	Healey Rd	Highway 50 (RR 50)	Coleraine Drive (RR 150)	50	39	50	0
27	Healey Rd	Coleraine Drive (RR 150)	The Gore Road (RR 8)	60	24	60	0
28	Healey Rd	The Gore Road (RR 8)	Airport Road (RR 7)	70	24	60	10
29	Heart Lake Rd	Mayfield Road (RR 14)	Old School Rd	80	25	60	20
30	Heart Lake Rd	Old School Rd	King Street (RR 9)	80	25	70	10
31	Heart Lake Rd	Highway No. 9	King Street (RR 9)	60	24	60	0
32	HERITAGE RD	A point 700 m south of King Street (RR 9)	Mayfield Road (RR 14)	70	22	60	10
33	HERITAGE RD	King Street (RR 9)	A point 700m south of King Street (RR 9)	60	33	60	0
34	HERITAGE RD	Northerly limit of Heritage Road	King Street (RR 9)	60	NA	60	0
35	Highpoint Side RD	A point 400 m west of Willoughby Road	Highway No. 10	40	N/A	40	0
36	Highpoint Side RD	Winston Churchill Boulevard	A point 400 m west of Willoughby Road	60	31	60	0

Legend	
Collector Road	
Community Safety Zone	
Streetview Not Available	

Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
37	Horseshoe Hill Rd	Olde Base Line Road (RR 12)	Charleston Sideroad (RR 24)	60	23	60	0
38	Horseshoe Hill Rd	Charleston Sideroad (RR 24)	Highway No. 9	70	20	60	10
39	Humber Station Rd	Mayfield Road (RR 14)	King Street	80	24	60	20
40	Humber Station Rd	King Street	Castleberg Sideroad	70	24	60	10
41	Humber Station Rd	Castleberg Sideroad	Old Church Road	70	25	70	0
42	Humber Station Rd	Old Church Road	Highway No. 9	60	31	60	0
43	Main St	Regional Rd 23	20233 Main St Driveway	60	27	60	0
44	McLaren Rd	A point 1.8 km south of Charleston Sideroad (RR 24)	The Grange Sideroad	50	33	50	0
45	McLaren Rd	Charleston Sideroad (RR 24)	A point 1.8 km south of Charleston Sideroad	60	29	60	0
46	McLaughlin Rd	Mayfield Road (RR 14)	Old School Rd	80	27	60	20
47	McLaughlin Rd	Old School Rd	Boston Mills Road	80	23	60	20
48	McLaughlin Rd	Olde Base Line Road (RR 12)	Boston Mills Road	60	22	60	0
49	McLaughlin Rd	Olde Base Line Road (RR 12)	100 metre north of McColl Drive	40	N/A	40	0
50	McLaughlin Rd	Forks of the Credit Road (RR 11)	100 metre north of McColl Drive	60	28	60	0
51	Mississauga Road	A point 600 m South of Cataract Road	Forks of the Credit Road (RR 11)	50	N/A	50	0
52	Mississauga Rd	Charleston Sideroad (RR 24)	A point 600 m South of Cataract Road	60	24	60	0
53	Mississauga Rd	Queen Street West	Charleston Sideroad (RR 24)	80	23	60	20
54	Mississauga Rd	Highpoint Side Rd	Queen Street West	60	28	60	0

Legend	
Collector Road	
Community Safety Zone	
Streetview Not Available	

Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
55	Mississauga Rd	Northerly limit of Mississauga Road	Highpoint Side Rd	60	32	60	0
56	Mount Hope Road	Columbia Way	Southerly limit of Mount Hope Road	40	N/A	40	0
57	Mount Hope Rd	Highway No. 9	Columbia Way	60	24	60	0
58	Mount Wolfe Rd	Castleberg Sideroad	Highway No. 9	60	23	60	0
59	Old Church	Highway 50 (RR 50)	Mount Wolfe Road	60	26	60	0
60	Old School Rd	Winston Churchill Boulevard (RR 19)	Airport Road (RR 7)	70	21	60	10
61	Patterson Sideroad	Airport Road (RR 7)	A point 200 m west of Highway 50 (RR 50)	60	24	60	0
62	Patterson Sideroad	A point 200 m west of Highway 50 (RR 50)	Highway 50 (RR 50)	40	N/A	40	0
63	Queensgate Blvd	Highway 50	Albion Vaughan Rd	50	33	50	0
64	The Grange Sideroad	Mountainview Road	Granite Stones Drive	50	17	50	0
65	The Grange Sideroad	McLaren Road	Mountainview Road	60	25	60	0
66	The Grange Sideroad	A point 900 m east of Creditview Road	McLaren Road	40	N/A	40	0
67	The Grange Sideroad	Creditview Road	A point 900 m east of Creditview Road	60	31	60	0
68	The Grange Sideroad	Mississauga Road (RR 1)	Creditview Road	50	36	50	0
69	The Grange Sideroad	Winston Churchill Boulevard (RR 19)	Mississauga Road (RR 1)	60	31	60	0
70	Willoughby Rd	A point 1.1 km north of Escarpment Side Road	Escarpment Sideroad	50	26	50	0
71	Willoughby Rd	Charleston Sideroad (RR 24)	A point 1.1 km north of Escarpment Side Road	60	26	60	0

Legend	
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Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
72	Willoughby Rd	A point 300 m south of Highpoint Sideroad	Charleston Sideroad (RR 24)	70	20	60	10
73	Willoughby Rd	A point 300 m north of Highpoint Sideroad	A point 300 m south of Highpoint Sideroad	40	N/A	40	0
74	Willoughby Rd	A point 275 m south of County Road 109	A point 300 m north of Highpoint Sideroad	70	18	60	10
75	Willoughby Rd	The boundary limit between Caledon and Orangeville	A point 275 m south of County Road No. 109	50	25	50	0
76	Winston Churchill Boulevard	Beech Grove Sideroad	Caledon/East Garafraxa Townline	70	20	60	10
77	Mt Pleasant Rd	Caledon/King Townline South	Highway No. 9	60	23	60	0
78	Albion Trail	Halls Lake Sideroad	Highway No. 9	60	20	60	0
79	Duffys Ln	Old Church Rd	Emil Kolb Pkwy	60	24	60	0
80	Duffys Ln	Provincial Highway 9	Patterson Sideroad	50	38	50	0
81	Centreville Creek Road	Mayfield Road (RR 14)	Healey Rd	80	28	60	20
82	Centreville Creek Road	Healey Rd	King Street (RR 9)	80	26	70	10
83	Centreville Creek Road	Patterson Sideroad	King St	60	21	60	0
84	Centreville Creek Road	Provincial Highway 9	Patterson Sideroad	60	31	60	0
85	Innis Lake Rd.	Mayfield Road (RR 14)	Healey Rd	80	21	60	20
86	Innis Lake Rd.	Healey Rd	A point 1.4 km north of Healey Road	80	35	50	30
87	Innis Lake Rd.	A point 1.4 km north of Healey Road	A point 1.6 km north of Castlederg Sideroad	80	19	70	10
88	Innis Lake Rd.	Old Church Rd	A point 1.6 km north of Castlederg Sideroad	60	22	60	0

Legend	
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Attachment 1: Summary of Speed Limit Analysis

Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
89	Innis Lake Rd.	Northerly intersection of George Crescent	Old Church Rd	50	N/A	50	0
90	Innis Lake Rd.	A point 500 m north of Finnerty Sideroad	Northerly intersection of George Crescent	60	24	70	-10
91	Torbram Rd	Mayfield Road (RR 14)	Old School Rd	70	20	60	10
92	Torbram Rd	Old School Rd	King Street (RR 9)	70	24	60	10
93	Torbram Rd	King Street (RR 9)	Olde Base Line Road (RR 12)	80	22	60	20
94	St Andrew Rd	Olde Base Line Road (RR 12)	Charleston Sideroad (RR 24)	60	25	60	0
95	St Andrew Rd	Charleston Sideroad (RR 24)	Beech Grove Sideroad	70	29	60	10
96	St Andrew Rd	Beech Grove Sideroad	Highway No. 9	60	23	60	0
97	Kennedy Rd.	A point 529 m south of King Street (RR 9)	A point 280m north of Newhouse Blvd	60	28	60	0
98	Kennedy Rd.	Olde Base Line Road (RR 12)	King Street (RR 9)	70	22	60	10
99	Kennedy Rd.	A point 550 m south of Charleston Sideroad (RR 24)	Olde Base Line Road (RR 12)	60	20	60	0
100	Kennedy Rd.	Giles Road	A point 550 m south of Charleston Sideroad (RR 24)	40	N/A	40	0
101	Kennedy Rd.	Highway No. 9	Giles Road	60	20	60	0
102	Porterfield Rd.	Beech Grove Sideroad	Queen Street East (RR 136)	60	N/A	60	0
103	Shaws Creek	Olde Base Line Road (RR12)	A point 422m south of Bush Street (RR11)	60	30	60	0
104	Shaws Creek	A point 422m south of Bush Street (RR11)	River Road	40	N/A	40	0

Legend	
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Attachment 1: Summary of Speed Limit Analysis

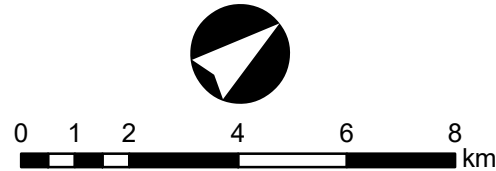
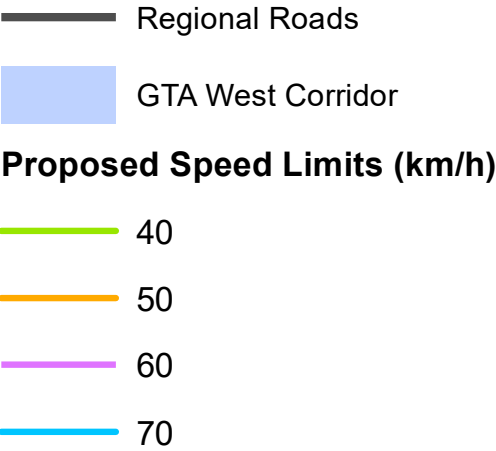
Number	Street	From	To	Maximum	Risk Score	Recommend Speed Limit	Recommended Speed Reduction
105	Shaws Creek	River Road	Caledon/East Garafraxa Townline	60	27	60	0
106	Rockside Rd.	Olde Base Line Rd	Ballinafad Rd	60	30	60	0
107	Coolihans Sideroad	Airport Road (RR.7)	Highway No. 9	60	30	60	0
108	Hunsden Sideroad	Mount Hope Road	Mount Wolfe Road	60	24	60	0
109	Pine Ave	Birch Ave	Mt Hope Rd	60	35	50	10
110	Pine Ave	Highway 50	Birch Ave	40	N/A	40	0
111	Walker Road W	Mountainview Rd	Marilyn St	40	N/A	40	0
112	Castleberg Sideroad	Highway 50 (RR 50)	Mount Wolfe Road	70	26	60	10
113	Castleberg Sideroad	Airport Road (RR 7)	Highway 50 (RR 50)	60	34	60	0
114	Boston Mills	Highway No. 10	Airport Road	60	28	60	0
115	Boston Mills	Mississauga Road	Highway No. 10	70	23	60	10
116	Boston Mills Road	A point 450 m west of Mississauga Road	Mississauga Road	60	34	60	0
117	Ballinafad Rd.	Winston Churchill Boulevard (RR 19)	Rockside Road	60	28	60	0
118	Glen Haffy Road	Highway No. 9	A point 1 km south of Highway No. 9	60	39	60	0
119	Glen Haffy Road	A point 1 km south of Highway No. 9	Coolihans Sideroad	80	34	60	20
120	Highpoint Sideroad	Highway No. 10	Heart Lake Road	60	27	60	0
121	Mountainview Road	Olde Base Line Road (RR 12)	Charleston Sideroad (RR 24)	60	23	60	0
122	Mountainview Road	Charleston Sideroad (RR 24)	Highway No. 9	70	20	60	10
123	Queen Street West	Mississauga Road	John Street North	80	27	40	40

Town of Caledon

Transportation Master Plan

Attachment 2

Proposed Speed Limit Reduction



R.J. Burnside & Associates Limited is not responsible for the accuracy of the spatial, temporal, or other aspects of the data represented on this map. It is recommended that users confirm the accuracy of the information represented.

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