Final Draft – Transportation Master Plan
Town of the Blue Mountains

July 2022

Town of the Blue Mountains Transportation Master Plan

Final Draft Report (Revision 2)

Completed by:

Stantec

Prepared for:

TOWN OF THE BLUE MOUNTAINS

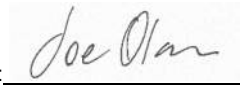
July 25, 2022

If you have any accessibility requirements in order to participate in this project, please contact one of the Project Team members listed below:

Adam Fraser
TMP Project Coordinator,
Town of The Blue Mountains
Phone: 705-351-2630
Email: tmp@thebluemountains.ca

John Heseltine, MCIP
Project Manager, Senior Planner
Stantec Consulting Ltd.
Phone: 902-481-1477
Email: john.heseltine@stantec.com

This document entitled Town of the Blue Mountains TMP: Final Draft Report was prepared by Stantec Consulting Services Inc. (“Stantec”) for the account of The Town of the Blue Mountains (TBM) (the “Client”). Any reliance on this document by any third party is strictly prohibited. The material in it reflects Stantec’s professional judgment in light of the scope, schedule and other limitations stated in the document and in the contract between Stantec and the Client. The opinions in the document are based on conditions and information existing at the time the document was published and do not take into account any subsequent changes. In preparing the document, Stantec did not verify information supplied to it by others. Any use which a third party makes of this document is the responsibility of such third party. Such third party agrees that Stantec shall not be responsible for costs or damages of any kind, if any, suffered by it or any other third party as a result of decisions made or actions taken based on this document.

Prepared by: 

Joe Olson, P.Eng., PTOE
Sustainable Transportation Project Manager

Prepared by: _____

Stephen Oliver, MA, RPP, MCIP
Active Transportation / Emerging Technology Lead

Prepared by: _____

Nevena Gazibara, B.Sc., MREM, ENV SP.
Engagement Lead

Reviewed by: _____

John Heseltine, LPP, MCIP
Senior Project Advisor

Independent
Review by: _____

Paula Hohner, MScPl, MCIP, RPP
Senior Environmental Planner

Draft – Transportation Master Plan
Town of the Blue Mountains

June 2022

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Overview 1
1.2 Purpose of the Plan 2
1.3 Guiding Documents 2
1.4 The Environmental Assessment Process 4
1.5 Engagement Dates 6

2.0 POLICY & PLANNING CONTEXT 8
2.1 Provincial 8
2.2 Regional 10
2.3 Municipal 13

3.0 EXISTING CONDITIONS 17
3.1 Population and Land Use 17
3.2 Current Mode Share 26
3.3 Road Network 27
3.4 Transit Network 35
3.5 Active Transportation Network 49
3.6 Base Year Travel Demand Modelling 75
3.7 Collision Data Review 80

4.0 STAKEHOLDER ENGAGEMENT (ROUND 1) 85
4.1 Online Survey 1 85
4.2 Purpose of Online Public Information Centre 1 96
4.3 Notification 96
4.4 Location, Date and Time 97
4.5 Reference Materials 97
4.6 Format 98
4.7 Participation 98
4.8 Online PIC 1 Comments and Responses 99
4.9 Online PIC 1 Themes 99

5.0 GUIDING THEMES & OBJECTIVES 101
5.1 Using the TMP 101
5.2 Emerging Trends 102
5.3 Vision and Objectives 108

6.0 TRAFFIC GROWTH & MODE SHARES 112
6.1 Historical & Projected Growth 112
6.2 Existing Mode Share 116
6.3 Scenario 1: Mode Share Trend 116
6.4 Scenario 2: Achieve mode Share Target 117

7.0 2032 & 2042 TRAVEL DEMAND MODELLING SCENARIOS 120
7.1 2032 (10 Year) Future Horizons 120
7.2 2042 (20 Year) Future Horizon 124
7.3 Future Horizon Summary 127

8.0 NETWORK RECOMMENDATIONS 129
8.1 Road network 129
8.2 Transit 134
8.3 Active Transportation 136
8.4 Complete Streets: Proposed Cross-Sections 141
8.5 Corridor and intersection safety improvements 148
8.6 Parking 150
8.7 Goods Movement 156
8.8 Bridge & Culvert rationalization plan 158
8.9 Emerging Technology 161

9.0 STAKEHOLDER ENGAGEMENT (ROUND 2) 164
9.1 Public Information Centre 2 164

10.0 EVALUATION OF ALTERNATIVES 170

11.0 SUPPORTING STRATEGIES AND POLICIES 171
11.1 Vision Zero 172
11.2 Traffic calming policy & speed management 172
11.3 Roundabout Selection 173
11.4 Transportation Demand Management 173
11.5 Road & Multi-Use Pathway Maintenance 174
11.6 Wayfinding guideline 174
11.7 Traffic impact assessment guideline 174

12.0 IMPLEMENTATION & COSTING 176
12.1 Projects 176
12.2 Programs to support implementation Actions 181
12.3 Cost Estimates 182
12.4 Implementation Plan 183

13.0 CONCLUSIONS & NEXT STEPS 186
13.1 Conclusions 186
13.2 Next Steps 186

APPENDICES 187

LIST OF FIGURES

Figure 1-1: Transportation Master Plan Study Stages 2
Figure 1-2: Municipal Class Environmental Assessment Planning and Design Process 5
Figure 3-1: TBM Population Pyramid, 2016 18
Figure 3-2: Permanent Residents in TBM and Grey County, 2006-2016 19
Figure 3-3: Occupied Private Dwellings by Type, 2016 19
Figure 3-4: Existing Land Use in TBM 21
Figure 3-5: TBM Community Structure Plan 23
Figure 3-6: TBM Employment Occupation Split, 2016 25
Figure 3-7: Mode Share in TBM, 2016 26
Figure 3-8: Existing Road Classification in TBM 30
Figure 3-9: Existing Right-of-Way Widths in TBM 31
Figure 3-10: Preferred Recommended Road Improvements and New Corridors .... **Error! Bookmark not defined.**
Figure 3-11: Existing Route 3 & 4 of Grey County Transit Line 37
Figure 3-12: Existing Walking Distances to Transit Stops 38
Figure 3-13: Collingwood Transit Blue Mountain Link Annual Ridership Change, 2014-2020 40
Figure 3-14: Collingwood Transit Blue Mountain Link Monthly Ridership, 2014-2020 41
Figure 3-15: Existing Grey County Transit Route 4 Ridership, 2020/2021 42
Figure 3-16: Grey Transit Route 4 Stop-Level Ridership (Oct 2020 – Jan 2021 Average) 43
Figure 3-17: Annual Ridership by Peer Agency, 2015-2019 46
Figure 3-18: Passengers per Service Hour by Peer Agency 48
Figure 3-19: Peer Comparison of Service Hours and Passengers (per Capita) 49
Figure 3-20 Types of Cyclists 52
Figure 3-21: Existing Active Transportation Network 54
Figure 3-22: Seasonal Trip Frequency by Day of the Week (2019) 60
Figure 3-23: Average Hourly Trip Distribution (Winter Saturday, 2019) 61
Figure 3-24: Average Hourly Trip Distribution (Summer Saturday, 2019) 62
Figure 3-25: Average Hourly Trip Distribution (Fall Weekday, 2019) 62
Figure 3-26: Origins and Destinations of Trips to and from the Blue Mountains in 2019 65
Figure 3-27 The Blue Mountains Internal Zones Trip Production in 2019 Winter Saturdays 71
Figure 3-28 The Blue Mountains Internal Trip Attraction in 2019 Winter Saturdays 71
Figure 3-29 The Blue Mountains Internal Zones Trip Production in 2019 Summer Saturdays 72
Figure 3-30 The Blue Mountains Internal Zones Trip Attraction in 2019 Summer Saturdays 72

Figure 3-31 The Blue Mountains Internal Zones Trip Production in 2019 Fall Weekdays 73
Figure 3-32 The Blue Mountains Internal Zones Trip Attraction in 2019 Fall Weekdays 73
Figure 3-33: The Blue Mountains Gates Local and Pass-Through Average Daily Traffic, 2019 75
Figure 3-34: TBM Model Zone System 77
Figure 3-35: Existing Model Road Network 78
Figure 3-36: Summer Saturday Peak Hour Model Output (2019) 79
Figure 3-37: Winter Saturday Peak Hour Model Output (2019) 80
Figure 3-38: All Collision Events in TBM 81
Figure 3-39: Speed Related Collision Events in TBM 82
Figure 3-40: Pedestrian and Cyclist Collision Events in TBM 83
Figure 4-1: Online Survey Question # 7 Results 86
Figure 4-2: Online Survey Question # 9 Results 87
Figure 4-3: Online Survey Question # 12 Results 88
Figure 4-4: Online Survey Question #13 Results 90
Figure 4-5: Online Survey Question # 17 Results 91
Figure 4-6: Online Survey Question # 18 Results 92
Figure 4-7: Online Survey Question # 21 Results 93
Figure 4-8: Online Mapping Survey Results 95
Figure 4-9: Online Mapping Survey Results (Thornbury) 96
Figure 4-10: Number of Unique Visits to Online PIC 1 Website 99
Figure 5-1: Multi-Modal Transportation Open Data 102
Figure 5-2: Uber Integration into the Transit App 104
Figure 5-3: Complete Streets Road Space Equity 105
Figure 5-4: Traffic Fatalities in Sweden, 2000-2015 106
Figure 5-5: User Interface of Belleville's On-Demand Transit Mobile App 107
Figure 6-1: Existing Mode Share (Urban Trips) 116
Figure 6-2: Existing Mode Share (All Trips) 116
Figure 6-3: Annual Vehicle Trip Growth (King Street @ Thornbury Bridge) 117
Figure 6-4: Target Mode Share (All Trips) 118
Figure 6-5: Target Mode Share (Urban Trips) 118
Figure 6-6: Annual Vehicle Growth Rate with Investment 119
Figure 7-1: Summary Saturday Peak Hour Model Output (2032) 120
Figure 7-2: Winter Saturday Peak Hour Model Output (2032) 121
Figure 7-3: Summer Saturday Peak Hour Model Output with 10% Mode Share Increase (2032) 122
Figure 7-4: Winter Saturday Peak Hour Model Output with 10% Mode Share Increase (2032) 123
Figure 7-5: Summer Saturday Peak Hour Model Output (2042) 124
Figure 7-6: Winter Saturday Peak Hour Model Output (2042) 125
Figure 7-7: Summer Saturday Peak Hour Model Output with 10% Mode Share Increase (2042) 126

Figure 7-8: Winter Saturday Peak Hour Model Output with 10% Mode Share Increase (2042) 127
Figure 8-1: Road Classification Hierarchy for TBM 129
Figure 8-2: Potential Transit Service Expansion Areas 135
Figure 8-3 Active Transportation Network by Category 137
Figure 8-4: MTO OTM Book 18 Design 140
Figure 8-5: Existing Cross Section for Highway 26 142
Figure 8-6: Potential Cross-Section Treatment for King Street 143
Figure 8-7: Potential Cross-Section Treatment for County Rd 2 144
Figure 8-8: Potential Cross-Section Treatment for Bruce Street 145
Figure 8-9: Potential Cross-Section Treatment for Clark Street 146
Figure 8-10: Proposed Cross-Section Treatment for Sleepy Hollow Road 147
Figure 8-11: Proposed Cross-Section Treatment for Local Roads 148
Figure 8-12: On-Street Parking Locations & Restrictions 151
Figure 8-13: Off-Street Parking Locations 153
Figure 8-14: Thornbury On-Street Parking (Bruce Street looking West) 154
Figure 8-15: Blue Mountain Resort Parking 155
Figure 8-16: Parking Area for Meltcalfe Rock Hike (10th Line) 155
Figure 8-17: Existing Bridge & Culvert Locations 159
Figure 9-1 Number of Unique Visits to Online PIC 2 Website 167
Figure 10-1: Alternatives Evaluation Summary 171
Figure 12-1: Proposed Active Transportation Projects (Rural Locations) 178
Figure 12-2: Proposed Active Transportation Projects (Urban Locations) 179

LIST OF TABLES

Table 3-1: TBM Employment Occupation Split 24
Table 3-2: TBM Road Classification Lengths 29
Table 3-3: Annual Ridership on Collingwood Transit Blue Mountain Link, 2014-2020 39
Table 3-4: Transit Peer Agencies 43
Table 3-5: Peer Agency Operational Data 45
Table 3-6. Existing Active Transportation Facility Types 52
Table 3-7: Active Transportation User Breakdown 55
Table 3-8: Other Network User Breakdown 56
Table 3-9: Daily Trip Distribution - Winter Saturday 2019 63
Table 3-10: Daily Trip Distribution – Summer Saturday 2019 64
Table 3-11: Daily Trip Distribution – Fall Average Weekday 2019 66
Table 3-12: Internal Daily Trip Distribution - Winter Saturday 2019 68
Table 3-13: Internal Daily Trip Distribution – Summer Saturday 2019 69
Table 3-14: Internal Daily Trip Distribution – Fall Weekday 2019 70
Table 3-15 The Blue Mountains Gates Local and Pass-Through Daily Traffic – 2019 74

Table 3-16: TBM Model Summary 76
Table 3-17: Road Class Assumptions 76
Table 3-18: Speed Related Collision Events in TBM by Weather Conditions 82
Table 4-1: Online PIC 1 Notification Methods 97
Table 5-1: TMP Objectives and Supporting Strategies 110
Table 6-1: TBM Zones Historical Trip Generation – Winter Saturday 2017, 2019, and 2020 112
Table 6-2: TBM Zones Historical Trip Generation – Summer Saturday 2017, 2019, and 2020 113
Table 6-3: TBM Zones Historical Trip Generation – Fall Weekday 2017, 2019, and 2020 113
Table 6-4: Development Summary 114
Table 7-1: Travel Demand Model - Peak Winter and Summer Peak Hour Comparison 128
Table 8-1: Road Classification Guidelines for TBM 130
Table 8-2: Speed Data Summary 131
Table 8-3: Recommended Posted Speed Limits 132
Table 8-4: On-Street Parking Restrictions Legend 151
Table 8-5: Bridge & Culvert Inventory and Locations ..... **Error! Bookmark not defined.**
Table 9-1: Online PIC 2 Notification Methods 164
Table 12-1: Proposed Active Transportation Projects 180
Table 12-2: High Level Infrastructure Cost Summary 182
Table 12-3: Infrastructure Cost Breakdown by Jurisdiction 182
Table 12-4: Short & Medium Term Administrative Actions 183
Table 12-5: Short Term (<3 year) TBM Projects 185

Draft – Transportation Master Plan
Town of the Blue Mountains

June 2022

1.0 INTRODUCTION

1.1 OVERVIEW

The Town of the Blue Mountains (TBM) has commissioned Stantec to develop a Transportation Master Plan (TMP) to support and accommodate anticipated growth through 2041 and to inform and support the Town's recent declaration of a Climate Emergency. The TBM Transportation Master Plan or TMP is a long-range strategic plan for TBM. The TMP will identify transportation infrastructure requirements to address existing challenges and support anticipated growth, along with policies to guide transportation and land use decisions. TMPs are integrated with environmental planning and sustainability principles and provide the framework and "blueprint" for implementing coordinated improvements on a town-wide basis. The TMP is aligned with other neighbouring municipal transportation studies. A financial strategy will be developed to address the short, medium, and long-term transportation needs of the community.

Work for this study is divided into three stages that complement each other in an iterative process visualized in **Figure 1-1:**

Stage 1: Status Assessment, Data Collection, Community Engagement
Stage 2: Technical Analysis, Visioning & Draft Recommendations
Stage 3: Comprehensive Transportation Master Plan & Implementation

Stage 1 identified existing and future deficiencies or opportunities. Stage 2 will develop solutions to address these issues or opportunities by considering the existing environment in the context of established decision-making criteria and Stage 3 has taken the preferred solution and developed implementation and financial plans culminating. Key outputs from all three stages have been consolidated in this document to create comprehensive Transportation Master Plan.

We have pursued a collaborative approach through all three stages. This report has been prepared for review by Town staff, neighbouring municipalities, Transportation Advisory Committee, Council, and the public to confirm our complete and accurate understanding of the TBM transportation network and the challenges and opportunities it should address. The project team has worked closely with adjacent municipalities including the Municipality of Meaford, Town of Wasaga Beach, Clearview Township, Municipality of Grey Highlands, and Town of Collingwood and Grey and Simcoe Counties throughout this TMP Study. This report presents Stage 1 findings that provided the foundation for identifying future transportation constraints, needs, opportunities, and strategies for TBM in Stages 2 and 3 of this study. Stage 2 and 3 outputs, presented below, map short-term actions over the next ten years to initiate a process to develop a transportation network for the TMP Horizon Year of 2065.

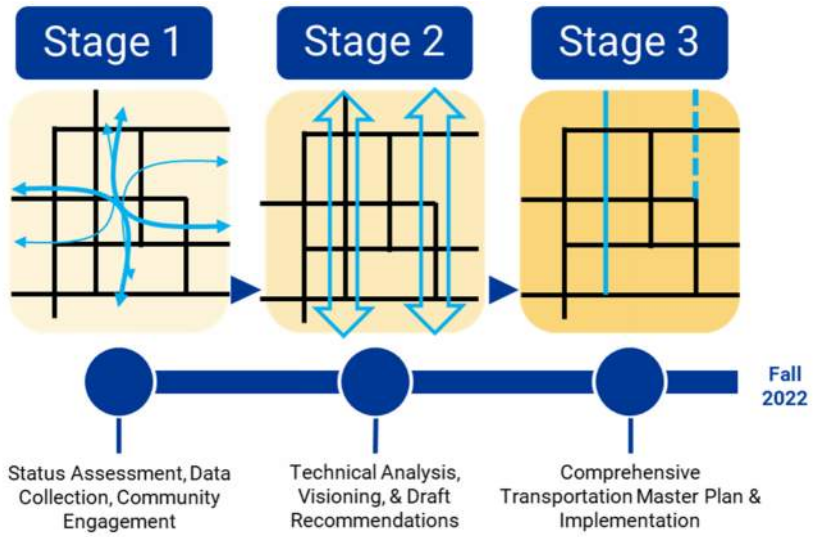


Figure 1-1: Transportation Master Plan Study Stages

1.2 PURPOSE OF THE PLAN

Transportation networks are influenced and shaped by the communities they serve. Their role can vary widely depending on community expectations and needs. The Town of the Blue Mountains is connected to a popular four-season recreational and tourism destination in Ontario and has two major urban centers as well as significant rural agricultural areas. Picturesque features of the town such as the Niagara Escarpment, Nipissing Ridge, and Nottawasaga Bay attract both residents and visitors. In the context of its natural beauty, TBM provides hiking, cycling, golfing, skiing, and much more to residents and visitors. Given its role as a recreational community and significant agricultural hub that supports the tourism sector and the local economy, transportation provisions for TBM must address seasonal changes in population, fluctuating levels of visitation, as well as associated safety concerns.

1.3 GUIDING DOCUMENTS

1.3.1 Grey County Transportation Master Plan (TMP)

TBM is a lower-tier municipality within Grey County and adjacent to Simcoe County, another significant upper-tier region with significant tourism and agriculture. The Grey County Transportation Master Plan (TMP) which was not adopted by Grey County Council in 2015, but is regarded as a guide to transportation issues in the region, sets out five objectives for the County's transportation system:

Goal #1: Create a vision for all modes of transportation in Grey County, with a particular focus on encouraging active transportation options (cycling, walking/running)
Goal #2: Identify transportation network constraints and opportunities, as well as required infrastructure improvements/expansions to ensure the continued safe and efficient movement of people and goods to the year 2036
Goal #3: Ensure that the TMP is fully aligned with the County's vision and goals identified in the County Corporate Strategic Plan and other County plans/strategies
Goal #4: Establish solutions reflective of the present economic climate and future conditions
Goal #5: Coordinate and establish partnerships with public and private agencies

The first goal focuses on developing an integrated transportation system that promotes active transportation options, such as cycling, walking, and running. The County TMP also emphasized the need to define network limitations and opportunities to assure safe and efficient movement of people and goods to 2036 (Goal #2). All the objectives must be aligned with the County's vision and goals defined in the County Corporate Strategic Plan and other County plans/strategies (Goal #3).

1.3.2 Town of the Blue Mountains Official Plan

As required by the Planning Act, a lower-tier municipality Official Plan must conform to the Official Plan of an upper-tier municipality – in this case, Grey County. In 2016 (after completion of the Grey County Official Plan), the Town of the Blue Mountains completed their own Official Plan. Within this Plan, transportation objectives around safety, efficient movement of people and goods, accommodation of all modes, and promotion of public transit were identified. In addition, the plan identifies several key actions or policies around active transportation and travel demand management in order to successfully encourage walking, cycling, and the efficient use of transportation infrastructure. These objectives and key actions are described further in **Section 2.3.4**.

1.3.3 Grey County Corporate Strategic Plan

The Vision of the 2017 to 2019 Corporate Strategic Plan developed after the County's TMP is: "Grey County... an exceptional blend of healthy living and economic opportunity, where people feel genuinely at home and naturally inspired," which aligns with the TMPs endorsement of Active Transportation. The Strategic Plan also commits to improving rural transportation services and endorses TMP recommendations for connecting links and road transfers. Potential road transfers include the transfer of County roads and bridges within Blue Mountains to the Town.

Although these guiding documents are focused on Grey County and the Town of the Blue Mountains, it should be recognized that transportation networks do not end at their boundaries. For this reason, it is important that neighboring plans are reviewed to ensure that the transportation networks are well integrated where the plans meet.

1.4 THE ENVIRONMENTAL ASSESSMENT PROCESS

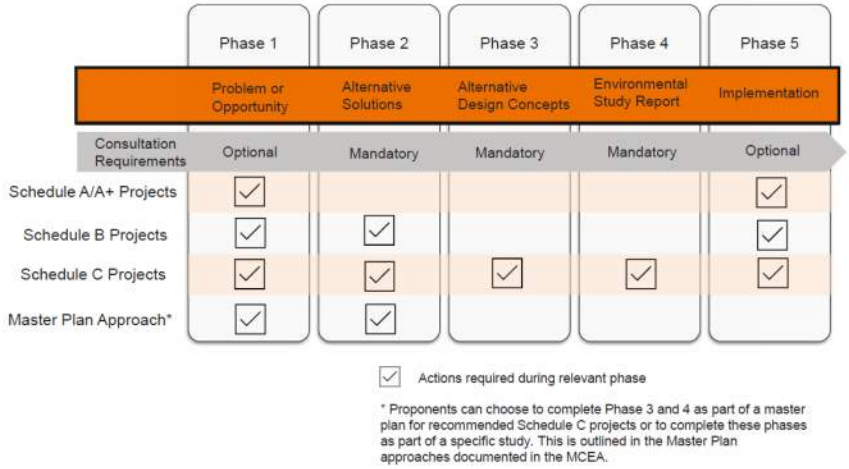
This TMP is being conducted in accordance with the requirements of the *Municipal Class Environmental Assessment* process (MCEA 2000, as amended in 2007, 2011, and 2015) for Master Plans (Approach 1). The *Municipal Class Environmental Assessment* (MCEA) outlines a streamlined, proponent driven, comprehensive planning process under which municipal road, sewage, and water infrastructure undertakings are approved. The undertakings are considered approved provided the mandatory environmental planning process as set out in the Municipal Class EA document is completed.

The MCEA document provides municipalities with a five-phase planning process approved under the EA Act to plan and undertake all municipal infrastructure projects in a manner that protects the environment: Phases 1 and 2 of the MCEA process including the identification of existing and future problems (deficiencies) or opportunities and the development of solutions to address them. **Figure 1-2** outlines the five phases of the Municipal Class EA planning process.

Key components of the MCEA planning process include:

Consultation with potentially affected parties early and throughout the process
Consideration of a reasonable range of alternative solutions
Systematic evaluation of alternatives
Clear and transparent documentation
Traceable decision-making.

The Master Plan approach recognizes the benefits of using the EA process when comprehensive plans are undertaken for projects with relatively minor environmental effects.



The outputs of this TMP include road and active transportation projects, as well as recommendations relating to public transit.

Figure 1-2: Municipal Class Environmental Assessment Planning and Design Process

The Municipal Class EA process addresses Phases 1 and 2 of the EA process including the identification of problems and opportunities, as well as identifying and evaluating alternative solutions to address the problem and establish the preferred solution. Approach 1 for Master Plans involves preparing a Master Plan document at the conclusion of the first two phases of the Municipal Class EA. The Master Plan is made available for public comment before proceeding to the Municipality for approval. Master Plans are typically done at a broad level of assessment. More detailed analysis or investigation is required at the project level to fulfill the requirements for specific Schedule B and C projects identified within the Master Plan. Schedule A+ and A projects, on the other hand, can be implemented on approval of the TMP. Examples of transportation projects under each schedule include:

Schedule A projects are limited in scale, have minimal anticipated environmental impacts, and generally include normal or emergency operational activities. Projects may be implemented without following the planning process as outlined in the Municipal Class EA. **Schedule A+** projects are similarly pre-approved but require proponents to notify potentially affected parties before implementation. Schedule A and A+ projects may include road rehabilitation works. **Schedule B** projects generally include improvements and minor expansions to existing facilities. They have the potential for some adverse environmental and social impacts. Proponents must undertake a screening process involving mandatory contact with potentially affected members of the public, Indigenous communities, and relevant review agencies to ensure stakeholders are aware of the project and their concerns are addressed. Schedule B projects require the

completion of Phases 1 and 2 of the Municipal Class EA planning process, which is documented in a Project File made available for review by the public, review agencies, and Indigenous communities for a minimum 30-day period.
Schedule C projects have the potential for significant environmental impacts and must follow the full planning process specified in the Municipal Class EA document including Phases 1 through 4. These projects are documented in an Environmental Study Report (ESR) that is filed for review by the public, review agencies, and Indigenous communities for a minimum 30-day review period.

1.5 ENGAGEMENT DATES

Stakeholder engagement is an important component of the EA process. Notifications and consultation with public, agencies, and other stakeholders are required at key phases of the process. Continuous consultation ensures stakeholder issues, ideas, and priorities will be incorporated in the plan in a meaningful way.

The following consultation opportunities and events are either completed, ongoing, or planned for the study:

Notice of Commencement | May 14, 2021
Online Engagement Survey #1 | June 23, 2021, to July 16, 2021
Public Information Centre #1 (Online) | July 29 – August 27, 2021
Technical Advisory Group Meetings | July 2021 and October 2021
Stakeholder Advisory Committee Meetings | July 2021 and October 2021
Study Update Presentation to Council | October 2021
Public Information Centre #2 and online survey questions | April 2022
Final Draft TMP Report Presentation to Council | June 2022
Public Information Centre # 3 | August 2022
Final TMP Report to Council | September 2022
Notice of Completion | September - October 2022.

The TMP was initiated in May 2021 through a Notice of Study Commencement published on the Town's website, and in The Blue Mountains Review and Collingwood Connection newspapers. It was also sent directly to key community stakeholders by email. Invitations to participate in the Technical Advisory Group (TAG) and Stakeholder Advisory Committee (SAC) were also sent out with the Notice of Commencement on May 14, 2021.

A dedicated TMP study webpage (https://yourview.thebluemountains.ca/transportation-master-plan) was developed to provide ongoing information concerning project events and outcomes. An email account (tmp@thebluemountains.ca) was also established to facilitate email correspondence from members of the public interested in the TMP. The email account is linked to key study team members to provide instant access to incoming and outgoing messages and create a common forum. Throughout the entire study process, stakeholders have been able to provide their email or contact information so that they may be directly informed of the study's

progress and upcoming engagement sessions. A monthly newsletter providing TMP study updates has been regularly posted to the dedicated study website.

Online surveys have been posted on the Town's existing engagement platform as an enhancement to the PICs. Each survey included questions regarding demographics, general travel trends, visioning, and preferences, to obtain input on multi-modal transportation network issues, successes and opportunities.

In addition to the consultation opportunities noted above, the consultants made a series of presentations to the Town's Transportation Committee outlining key issues and local concerns identified through our existing conditions analysis. The sessions also provided opportunities to share information related to travel analyses and forecasting. A summary of all comments received will be included as an appendix to the final TMP report.

2.0 POLICY & PLANNING CONTEXT

A wide range of municipal, regional, and provincial plans dealing with land use and environmental protection, as well as transportation frame or influence this TMP. It is important to align the TMP with provincial, regional, and municipal planning frameworks to complement and enhance their over-arching vision, values, and goals as they pertain to multi-modal transportation.

2.1 PROVINCIAL

The Province of Ontario has produced several guidance documents over the past decade that shape the land use context in which Grey County and TBM are to develop.

2.1.1 Towards a Greater Golden Horseshoe Transportation Plan: Discussion Paper (2021)

TBM is located close to but outside of the Greater Golden Horseshoe (GGH) area, which includes the Cities of Toronto and Hamilton, and lands bordering the western half of Lake Ontario south to Niagara Falls, north to Peterborough, and west to the border of Grey County. Traffic in the Town is significantly influenced by trips to and from the GGH.

The 2051 vision outlined in the Discussion Paper focuses on region-wide transit investments and promotion of active transportation for local trips.

In relation to Goal 7 dealing with Muskoka, Haliburton and Connections Beyond the GGH, the Discussion Paper specifically refers to the Town of the Blue Mountains with the context of the south Georgian Bay area:

> MTO is committed to working with the communities in the south Georgian Bay area to identify needs and opportunities to improve the transportation network. This includes looking at ways for the transportation system to better support the needs of the tourism sector in urban and rural areas so that both tourists and tourism employees can move efficiently – both for short term recovery and in the long term.[1] (p. 28)

It further references the area in connection with Ontario government initiatives that are already underway:

> The Southwestern Task Force has already been established and is discussing issues such as highway, airport, and transit improvements and opportunities that connect to the GGH, including along the Hwy 401 corridor as well as in the Blue Mountains and Owen Sound areas, among other topics.

---

[1] Ontario, *Towards a Greater Golden Horseshoe Transportation Plan: Discussion Paper*, June 2021, p. 28.

and

> Addressing traffic and safety concerns in the Georgian Bay area, including connections between the Greater Golden Horseshoe and southwestern Ontario, by working with municipalities to explore improvements along highways and county roads, such as the implementation of revised posted speed limits on Highway 26 in the Craigleith area, to better support tourism and local mobility MTO will continue to meet with municipalities to discuss capital projects and safety improvements along provincial highways within the region, provide input to regional transportation plans, and share available data.[2]

2.1.2 Provincial Policy Statement (2020)

The Provincial Policy Statement is intended to provide policy direction on matters of provincial interest related to land use planning and development. As a key part of Ontario's policy-led planning system, the Provincial Policy Statement defines the policy foundation for regulating the development and use of land. It also supports the provincial goal to improve the quality of life for all Ontarians. Policies related to the transportation system emphasized promoting active and public transportation modes. In addition, the plan asserts the need to plan public streets, spaces, and facilities to be safe, meet the needs of pedestrians, strengthen social interaction, and facilitate active transportation and community connectivity.

2.1.3 A Place to Grow: Growth Plan for the Greater Golden Horseshoe (2019)

The Growth Plan for the Greater Golden Horseshoe was released by the Ministry of Municipal Affairs and Housing in 2006, as Ontario's growth strategy for the region to 2031. It is a "framework for implementing Ontario's vision for building stronger, prosperous communities by better managing growth in this region". Grey County and TBM are just outside the Greater Golden Horseshoe but are strongly influenced by its large population. The Growth Plan complements the Provincial Policy Statement and Places to Grow Act and has the objective to develop and optimize infrastructure while protecting and enhancing natural resources and heritage. It defines a framework of objectives and policies to achieve a balance between development, protection, and the enjoyment of this important landform feature and the resources it supports.

2.1.4 Niagara Escarpment Plan (2017)

The Niagara Escarpment Plan identifies where and how population and employment growth should occur across the Niagara Escarpment. The Niagara Escarpment extends 725 kilometres from Queenston on the Niagara River to the islands off Tobermory on the Bruce Peninsula, including the Regions of Niagara, Halton and Peel, Counties of Dufferin, Simcoe, Grey, and Bruce, and the City of Hamilton. The plan seeks to protect the natural environment of the

---

[2] *Ibid*., p. 29.

Niagara Escarpment and surrounding lands by ensuring compatible development. Lands within the Blue Mountains TMP study area are designated as Recreation Areas, acknowledging TBM's role as a key tourist and recreational attraction. Under the Escarpment Plan, existing and new recreational developments should protect and maintain community character, hydrologic and natural heritage features, and the scenic resources of the Escarpment.

2.1.5 Greenbelt Plan (2017)

The Greenbelt Plan, released by the Ministry of Municipal Affairs under the Greenbelt Act in 2005, identifies where urbanization should not occur in the Greater Golden Horseshoe region and complements the Growth Plan for the Greater Golden Horseshoe. The Greenbelt Plan permanently protects agricultural land use, natural heritage, and water systems while encouraging eco-tourism and recreation in protected areas within a band of land encompassing the Greater Golden Horseshoe. The Greenbelt Plan details measures for environmental protection and restoration of natural and open space connections surrounding Lake Ontario.

2.1.6 #CycleON Strategy (2013)

#CycleON is Ontario's 20-year vision through the year 2033 to have cycling recognized as a respected and valued mode of transportation. The plan acknowledges cycling's potential to reduce traffic congestion and create province-wide benefits for personal and public health, the environment, and tourism. The guiding principles of this strategy are safety, partnership, Accessibility and Connectivity which culminate in five strategic directions including:

1. Design healthy, active, and prosperous communities
2. Improve cycling infrastructure
3. Make highways and streets safer
4. Promote awareness and behavioral shifts
5. Increase cycling tourism opportunities

2.2 REGIONAL

TBM is a component of Grey County and operates within a framework developed by the upper tier government. Several key documents deal directly with transportation and active transportation and include specific directions for TBM:

The Official Plan of Simcoe County, which TBM borders,

Official Plans abutting lower-tier municipalities in Grey County (Meaford and Grey Highlands) and Simcoe County (Collingwood and Clearview), and

The Municipality of Meaford Transportation Master Plan 2021

~~TBM.~~

2.2.1 Grey County Cycling and Trails Master Plan (2020)

The Cycling and Trails Master Plan provides tools and resources to support ongoing efforts achieve the County's future vision for cycling and trails. The main objectives of the plan are as follows:

Design a continuous and connected network
Improve accessibility and inclusivity
Provide recreational, commuting, and touring opportunities within the County
Provide connections to areas of natural and cultural significance
Support the increased use of active modes of travel and recreation
Identify tools, policies and programs of cycling, trails all over the year
Identify potential partners and programs to support local economic development and tourism initiatives
Support the development of clear, consistent, and branded communications to enhance promotion, safety and increased use of cycling, trails and other active forms of travel and recreation
Provide the County with tools, strategies, and recommendations to guide future planning, design, implementation and operations of safe and comfortable infrastructure and meaningful programming

The Plan proposes 63 kms of cycling routes and trails in TBM (29 kms on County roads). It identifies several short- and long-term investments valued at $23,150 to create 22.6 kilometres of trails and cycling routes in TBM close to Blue Mountain Village and in the Thornbury area.

The County adopted the plan in 2020, but only 3 of the 9 municipalities (including TBM) have adopted the plan as a policy document only (not specific routes confirmed).

2.2.2 Recolour Grey: County Official Plan (2019)

Grey County's Official Plan is aligned with the Vision of County's Corporate Strategic Plan "to be the place where people feel genuinely at home and naturally inspired – enjoying an exceptional blend of active healthy living and economic opportunity". The plan presents five main themes: Cultivate Grey, Develop Grey, Natural Grey, Live Grey, and Move Grey. These themes set the foundation and policy direction for the Plan:

Cultivate Grey takes into account the rural and agricultural areas outside towns, cities, and villages, which make up the bulk of the land in the County and are crucial to Grey County's residents, businesses, and visitors
Develop Grey emphasizes settlement areas where the majority of population growth, essential services, and businesses will be located
Natural Grey focuses on Grey County's scenic and naturally beautiful environment
Live Grey focuses on some of the profound areas that affect living standards and quality of life in Grey County

Move Grey calls for an integrated transportation system, incorporating different projects to connect settlement areas including Recreational Resort Areas, while prioritizing active transportation and public transit. Safety is an essential element in the plan and land use is to be managed to avoid compromising future transportation corridors

2.2.3 Town of Collingwood Official Plan (2019)

Collingwood's Official Plan calls for re-direction of traffic from the Town to recreational and resort destinations, improvement of roads within the Town and connection the Town to the GTA, and establishment of a system of pathways and trails. Policy also encourages compact development to support public transit. The Plan specifically commits to cooperation with neighbouring municipalities such as TBM to foster an integrated transportation system.

2.2.4 Township of Clearview Official Plan (2019)

The leading transportation objective of Township of Clearview Official Plan is to "foster an integrated (hierarchical) transportation system, in cooperation with the Township's neighbouring municipalities." In addition to objectives concerning road standards, parking, and safe vehicle movement, the final transportation objective is to promote "pedestrian and cycling linkages."

2.2.5 County of Simcoe Official Plan (2016)

Simcoe County seeks to maintain and improve a multi-modal transportation network following the County's Transportation Master Plan "considering the needs of pedestrians and cyclists in road design." Policies also promote cooperative transit and "inter-regional connectivity."

2.2.6 Grey County Growth Management Strategy (2008) Update (2015)

The 2008 Growth Management Strategy forecasted population, household, and employment growth in the County to 2031. This report is employed as a guide for the five-year official plan of the Grey County and its municipalities. An update was prepared in 2015. The update projects populations in TBM of 8,320 in 2031 and 8,910 in 2041 up from 6,830 in 2006 and 7,025 counted by the most recent complete census in 2016. It anticipates 3,850 occupied dwelling units, 230 vacant units, and 4,300 seasonal residential units in the Town by 2036. The prediction that 54% of units will be unoccupied is by far the highest among areas forecasted in the County. The Update also notes that TBM had a resident employed labour force of 2,180 in 2011 of which 64% commuted to work outside of the Town. Census numbers from 2016 not referenced in the Growth Management Strategy Update indicate out commuting fell to 56% of TBM's employed labour force.

2.2.7 Grey County Transportation Master Plan (2014)

The Transportation Master Plan (TMP) is a strategic plan that manages policies and infrastructure initiatives in Grey County. The Master Plan was developed in 2014 but was not adopted by County Council (2015). Its objectives nevertheless align with current priorities to be

addressed by this TMP for Blue Mountains, most notably through its emphasis on active transportation and regional transportation solutions. It has been referred to by Stantec for content and is considered a guiding document for the current TMP process.

2.2.8 Municipality of Meaford Official Plan (2014)

The Meaford Official Plan sets out objectives for road network development and encourages the provision of active transportation facilities. The plan seeks to encourage a built environment that supports active transportation and to develop a regional active transportation network "to permit linkages between municipalities." The document, however, makes no reference to transit development.

2.2.9 Meaford Transportation Master Plan (2021)

The Municipality of Meaford Transportation Master Plan was adopted by Council in July 2021. Its vision statement is to:

"… provide a sustainable, connected and economical multi-modal transportation system where goods and agricultural equipment are moved efficiently and people of all ages and abilities can travel safely."

From this vision statement, four (4) goals and sixteen (16) directions were developed to guide the TMP. The goals are:

Meet the needs of present and future urban and rural residents and businesses.

Be delivered and maintained in a fiscally responsible and sustainable manner.

Enhance safety, accessibility, equity and inclusivity to support active, healthy lifestyles and livable communities.

Support environmentally sustainability and climate change objectives.

As this TMP is situated on the western border of the Town of the Blue Mountains, it will be important to align with recommended east-west transportation corridor improvements that cross this boundary.

2.2.10 Municipality of Grey Highlands Official Plan (2010)

The Official Plan for Grey Highlands is focused on issues of road categorization and access, and on development on roadways. The Plan does not refer to public transit or active transportation.

2.3 MUNICIPAL

TBM's own plans set directions with which the TMP should be aligned. The 2010 Comprehensive Strategic Transportation has set the current direction for transportation services in the Town. This TMP will review and re-shape the priorities of the ten-year old document. In

addition to the documents listed consultants, Dunbar & Associates, are preparing a Leisure Activities Plan to assess community recreation interests and needs. A report is not yet available, but it can be expected to address active transportation from the recreation perspective.

2.3.1 Town of the Blue Mountains Economic Development Strategy, 2021-2025

The Economic Development Strategy addresses the broad objectives of the Town to assist and promote business including initiatives to recover from the COVID pandemic. The SWOT analysis conducted by the consultants identified "limited public transportation infrastructure" as a weakness of the community. The Strategy also notes initiatives of the Community Recovery Task Force to hire four additional By-law enforcement officers to manage parking issues and other concerns, and the implementation of paid parking to manage traffic at high-volume beachfront areas.

2.3.2 The Blue Mountains Future Story: Integrated Community Sustainability Plan (2020)

TBM has engaged consultants to prepare a new Integrated Community Sustainability Plan (ICSP) to replace the ICSP prepared in 2010 (see **Subsection 2.3.6**, below). The consultants have completed the first phase of the project, which is reported in a "Current State Report." The document summarizes a situational assessment conducted in 2020 and acknowledges the ongoing TMP process. It also reinforces transportation themes established in the 2010 ICSP including the promotion of active transportation and public transit.

The project has two additional phases. A Vision and Objectives Report is expected in October 2021. The final ICSP, to be titled The Blue Mountains Future Story is scheduled for completion in December.

2.3.3 Town of the Blue Mountains' Corporate Strategic Plan (2020-2024)

TBM's Corporate Strategic Plan contains five goals with sub objectives (not listed here):

Goal #1: Create Opportunities for Sustainability
Goal #2: Engage Our Communities & Partners
Goal #3: Support Healthy Lifestyles
Goal #4: Promote a Culture of Organizational & Operational Excellence
Goal #5: Ensure Our Infrastructure is Sustainable

The recommendations set forth in this TMP must align with the Strategic Plan's goals and objectives to support a growing and evolving community. In particular, Goal #1 encourages the use of sustainable modes of transportation, Goal #2 requires that the community has their say throughout the process of this TMP and beyond into implementation, Goal #3 to support healthy lifestyles can be achieved through expanding the active transportation network to increase physical activity and recreation, Goal #4 relies on an efficient use of Town resources and assets, and Goal #5 ensures that infrastructure is available to support development.

2.3.4 Town of the Blue Mountains' Official Plan (2016)

The TBM Official Plan sets out the Municipality's long-term vision for growth and development. The plan guides Council decisions on development applications, changes in land use, and community enhancements. The goals of the plan are intended to achieve a sustainable balance between the environment, society, culture, and the economy, and to promote development that meets the needs of the present while keeping in mind future generations and their needs. The Town has recently launched a Plan review process with which this TMP will be coordinated.

Related to transportation, the goals are as follows:

Assure safe and efficient movement of people and goods within the Town's communities and from and to neighbouring municipalities
Create an integrated transportation system that takes into consideration different modes, including walking and cycling, public transit and automobiles
Encourage active transportation modes (walking and cycling) in addition to public transit as accessible and affordable forms of travel
Protect transportation corridors to make it easy for the development of a transportation system that takes into account the existing and future land uses
Assure safety while constructing new roadways
Ensure the appropriate right-of-way widths and all proposed and existing roadways
Encourage efficient land use along transportation corridors to enhance the level of use of public transit
Set restrictions on private roads development

With regards to active transportation, the plan proposed several goals that would encourage walking and cycling, which will reduce the use of vehicles. Below presents some of the goals for active transportation:

Encourage a connected, safe, and well-designed active transportation network for cyclists and pedestrians
Promote the vision of safe and convenient cycling and walking routes, especially for new developments
Considering the Georgian Trail as a master active transportation corridor through the Town, which provides a connecting link between Collingwood and Meaford
Prioritize the maintenance of the Georgian Trail along the former CN rail line
Require sidewalks in settlement areas and where appropriate
Promote mixed-use and pedestrian-oriented neighbourhood design
Consider providing bicycle/ pedestrian paths whenever possible in the reconstruction of roads and bridges

Finally, with regards to the transportation demand management goals, TBM emphasizes on the need to promote active transportation modes to manage the increase in travel demand

2.3.5 The Town of the Blue Mountains Comprehensive Transportation Strategic Plan (2010)

The Comprehensive Transportation Strategic Plan addresses the short, medium, and long-term transportation needs for all levels of road infrastructure in TBM. The main objectives of the plan are as follows:

Define the effect of existing and future development on all major roads and on all local roads that intersect with major roads within the study area
Conduct a traffic operational review within the Craigleith area (including the area at the base of Blue Mountains) to define and recommend the collector and arterial road network to support existing and proposed development
Develop a Highway Access Management Plan (HAMP) that will help to maintain and/or enhance the safety, mobility and Level of Service along the Highway 26 corridor within the Town's boundaries
Specify alternative transportation modes (e.g., transit and cycling), travel demand management tools (e.g., commuter parking and carpooling) and related strategies consistent with Provincial policies and initiatives to mitigate the effect of new development
Review road classification and propose recommendations while taking into account their classification
Develop time schedule and capital cost estimate for the recommended enhancements

2.3.6 The Blue Mountains Sustainable Path 2010-2060 (2010)

The Sustainable Path was TBM's first ICSP. It presents a vision to establish TBM as "an international showcase for rural sustainability" by 2060. The plan is built on three foundational pillars – Environment and Ecological Integrity, Community Vibrancy, and Economic Prosperity – that support 18 core themes accompanied by 63 goals, and multiple strategies and actions. The document emphasizes collaboration with lower and upper tier municipalities in Grey and Simcoe counties. It also identifies a range of transportation-related initiatives that the current TMP will carry forward including encouragement of more compact communities, development of "alternative" transportation infrastructure (e.g., energy efficient vehicle as well as AT facilities), encouragement of transit, and diversion of Highway 26.

3.0 EXISTING CONDITIONS

Stantec reviewed TBM's current land use, demography, and multi-modal transportation network operations to understand how the Town's transportation system operates. Appreciation of existing transportation provisions and constraints is critical before applying future population and employment growth to the network. For the transportation network review, the following section summarizes the road network hierarchy, travel trends, traffic volumes, commercial vehicle network, transit ridership, cycling facilities, and pedestrian facilities.

3.1 POPULATION AND LAND USE

An effective multi-modal transportation network must be tailored for the local context. Understanding the correlation between tourist trips, the shifting local age profile, and the distribution of land uses is imperative to understanding current traffic movement, as well as the future needs of residents and businesses.

TBM is on the eastern edge of Grey County and is primarily connected to the region via Highway 26, County roads, multi-use trails, and options such as Grey Transit Route and Collingwood Transit. The road network connects the Town to neighbouring communities in Grey and Simcoe Counties such as Grey Highlands, Meaford, Collingwood, and Clearview Township. Major road connections include:

Grey Road 19 / Mountain Road (at Grey Road 21 on the eastern boundary)
Sideroad 12 / Highway 32 (at Grey Road 19 on the eastern boundary)
Grey Road 40 (at Blue Mountains Meaford Townline Road on the western boundary)
Grey Road 2 (at Osprey-The Blue Mountains Townline Road on the southern boundary)

3.1.1 Age Profile

Based on the 2021 Census, the Town's population has grown 33.7% since 2016 from 7,025 to 9,390. From 2011 to 2016, population in the Town grew by 1.7% annually (comparatively, Ontario grew by 0.9%). Based on the 2021 Census, the Town's population of 9,390 accounts for 9.3% of 100,905 Grey County residents.

The number of total private dwelling units increased from 6,477 in 2016 to 7,396 in 2021. Comparison of total private dwelling units in the town (7,396) to private dwelling units occupied by usual residents (4,348) indicates only 41% of the dwelling units are occupied by permanent residents.

TBM's 2021 and 2016 population pyramids are inverted. The largest age group of TBM residents is the cohort from 60 to 64 years, amounting to 11% of the total population compared to 6% in this cohort in Ontario (**Figure 3-1**). In general, the town has an older population than the province, with a median age of 58 compared to the Ontario median of 41. The aging population is likely due to the influx of "Baby Boomers" born between 1946 and 1966 who are reaching retirement age and choosing the Town of the Blue Mountains as their permanent residence in retirement.

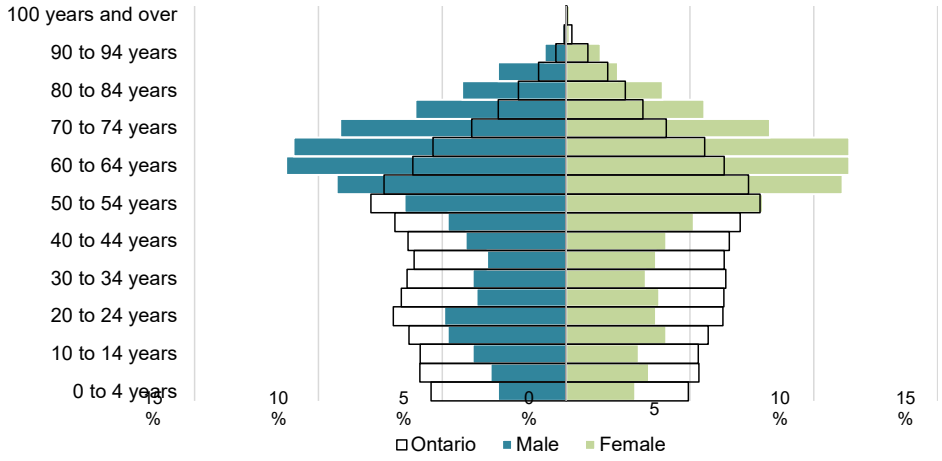


Figure 3-1: TBM Population Pyramid, 2016

Source: Census Profile *(Statistics Canada, 2016)*

3.1.2 Dwelling Type

Housing occupancy numbers from the Census illustrate the high level of vacation and seasonal/temporary housing the Town of the Blue Mountains. Over the past 10 years, roughly half of all dwelling units in the town housed permanent residents, compared to over 80% in Grey County (Figure 3-2). Seasonal fluctuations in population create unique transportation needs, with a flexible transportation network required to accommodate changing population levels efficiently.

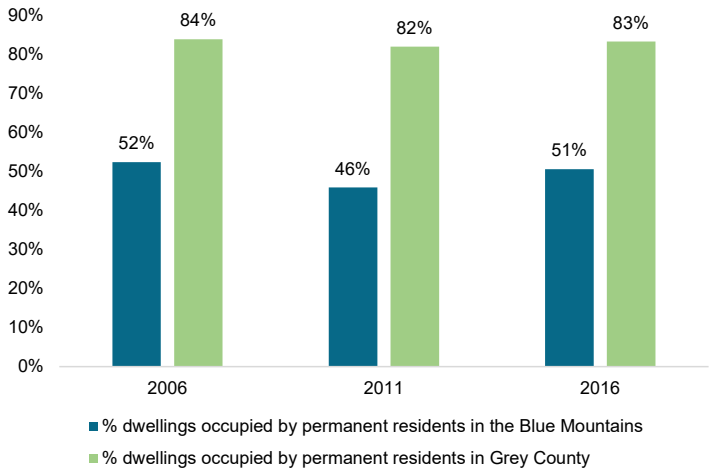


Figure 3-2: Permanent Residents in TBM and Grey County, 2006-2016
Source: Census Profile (Statistics Canada, 2016)

Figure 3-3 illustrates occupied private dwellings by type in Ontario, Grey County, and TBM according to the 2016 Census. Among the three geographies, the Town has the highest percentage of single-detached housing with 69% of all dwelling units compared to 65% for Grey County and 43% for Ontario.

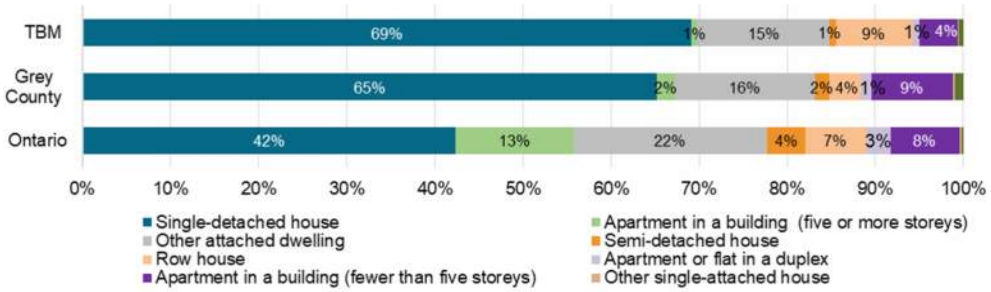


Figure 3-3: Occupied Private Dwellings by Type, 2016
Source: Census Profile (Statistics Canada, 2016)

During the pandemic in 2020, local observation suggests some seasonal residents chose to stay in TBM and work remotely. Given the apparent acceptance of telecommuting by a much wider range of employers as a result of recent experience, more seasonal residents as well as new residents may choose to live in the Town year-round. Data to establish the extent of the shift will not be available until all of the 2021 Census of Canada data is released in 2022.

3.1.3 Land Use

TBM hosts a wide variety of urban, rural, recreational, and tourism amenities. The town is also situated on the shores of Georgian Bay within the Niagara Escarpment Plan Area, which contains unique ecological and geological features, and historic areas, including the Bruce Trail, and designated Natural, Protection, Rural and Recreation Areas, as well as Parks and Open Space. The varied natural environmental provides an abundance of recreational opportunities within less than two hours of the Greater Toronto Area. The Town is a four-seasons recreational and tourism destination with skiing, hiking, cycling, golf, and other recreational activities. Blue Mountain Village, the primary recreational area, draws large numbers of tourists annually and provides a mix of employment opportunities for local residents. In addition to being a recreational destination, the Town is a hub for agriculture and agri-food industries.

Based on the Town of The Blue Mountains Official Plan, lands within the town are primarily used for Agricultural, Recreational, Residential, Small Town Ontario Urban, Rural, and Open Space **(Figure 3-4**). The primary residential areas are within the communities of Thornbury and Clarksburg, and in the Blue Mountain Village area, as well as the residential shoreline communities of Craigleith, Camperdown, and Lora Bay. Thornbury and Clarksburg are the main urban employment areas and community living areas, which generally consist of residential development and complementary land uses.

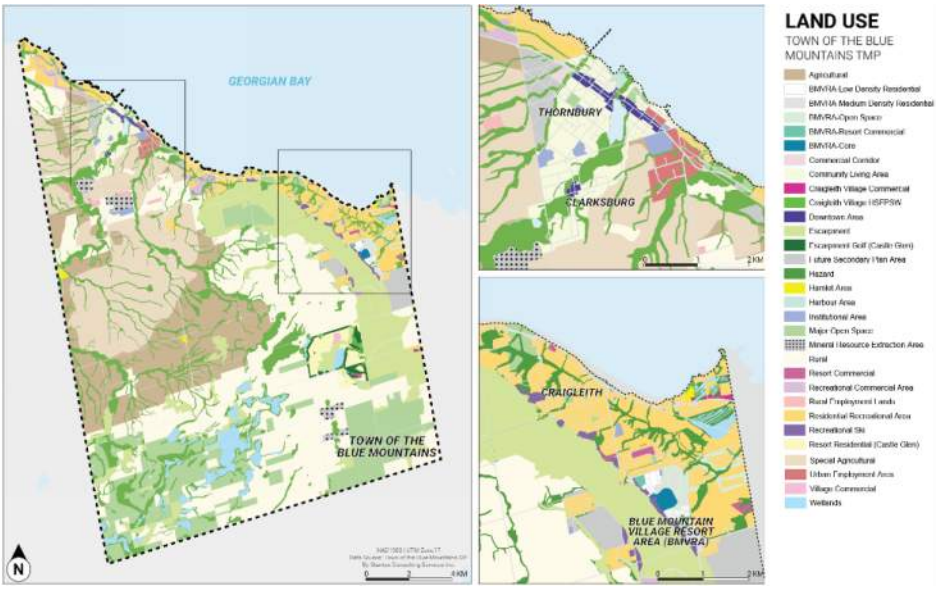


Figure 3-4: Existing Land Use in TBM

The Official Plan includes the Community Structure Plan (CSP) (**Figure 3-5**), which illustrates the major structural elements of the Town including settlement areas, resort areas, and key corridors and connections. The CSP guides land use and infrastructure decisions that affect where people live, work, and play, as well as their travel choices within the Town. The CSP is also supports the efficient use of infrastructure, minimizes the consumption of land, and supports the mixing of uses and activities in appropriate locations. The main elements of the CSP are as follows:

Thornbury/Clarksburg Settlement Area – the main concentration of urban activities including commercial, residential, cultural, and government functions in a well-designed land use form. The settlement area will continue to function as a place of symbolic and physical interest for residents and visitors. A range of housing types is supported but all new development should respect the character of the community and established neighbourhoods while making efficient use of infrastructure.

Blue Mountain Village Resort Area – the primary resort area that complements the existing recreational base through a range of residential, recreational, and commercial uses, and provides additional opportunities for year-round recreational opportunities and facilities.

Craigleith Village – a smaller settlement area similar to the Thornbury/Clarksburg Settlement Area, serving Craigleith and surrounding area providing commercial, residential, and recreational functions.

Residential/Recreational Area – the area designated in the County Official Plan extending along the Georgian Bay shoreline providing a resort-related residential and recreational function.
Future Secondary Plan Areas – areas that are identified as requiring more detailed planning before undertaking development:

Area in west part of Thornbury

Area east of Thornbury, south of Highway 26

Area south of Blue Mountain Village Area

Area south of Swiss Meadows Subdivision

Special Study Areas – areas where further review and analysis is required prior to development proceeding.
Highway 26 Spine and Georgian Trail – Highway 26 serves as the Town's main transportation corridor for residents and tourists, linking Thornbury/Clarksburg to other communities along the Georgian Bay shoreline. The Spine is the corridor for the location of community facilities and services. The Georgian Trail is a regionally significant trail link along the Highway 26 corridor.
Key Corridors/Connections – links other communities and areas of the Town to the Highway 26 Spine and nearby communities.
Community Gateways – intended to achieve a sense of entrance/arrival to the Town and neighbourhoods through effective site, building and landscaping design.
Rural Countryside, Natural and Waterfront Areas – consists of agricultural areas, specialty crop areas, hamlets, natural features/areas/systems, and waterfront areas for conservation, recreation, and tourism purposes.

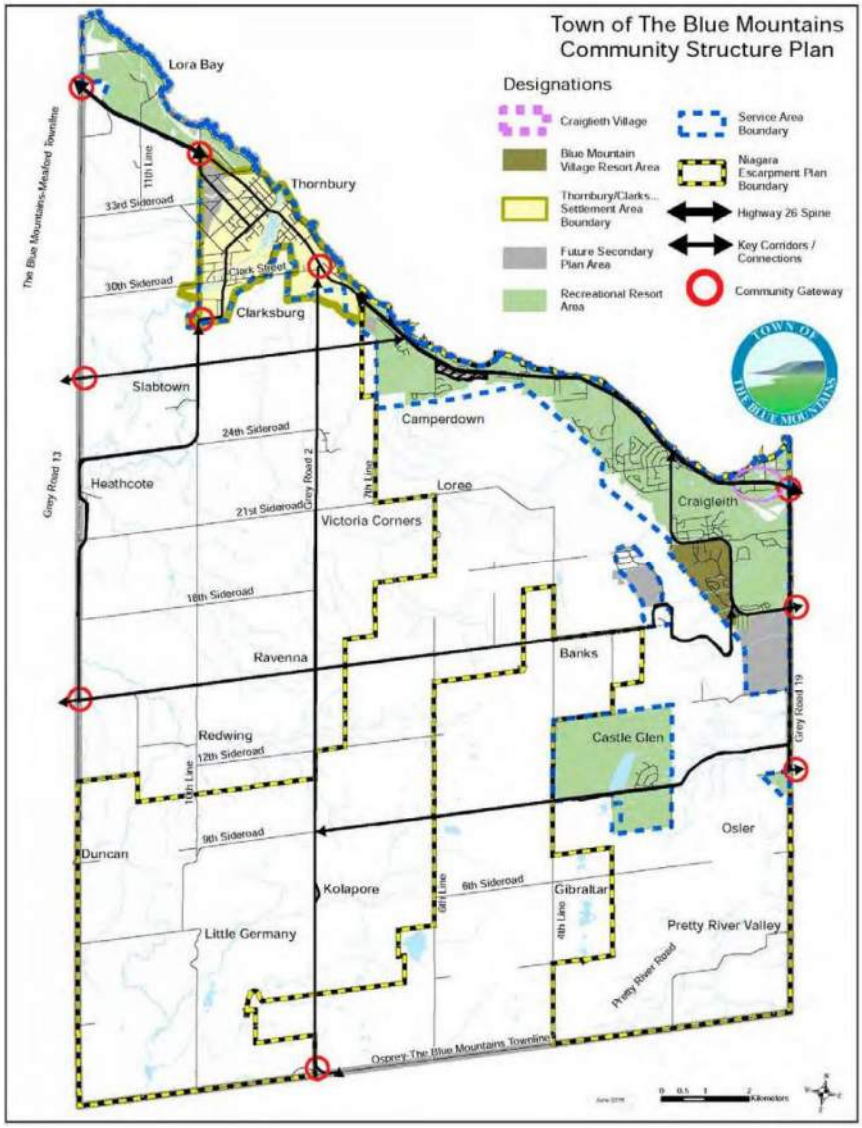


Figure 3-5: TBM Community Structure Plan

Source: Town of the Blue Mountains Official Plan, 2016

3.1.4 Employment

According to the Town's employment distribution as summarized in **Table 3-1** and **Figure 3-6** sales and service occupations (21%) account for the largest share of jobs. Many service businesses are focused on the tourist market and their employment numbers peak in the most active winter and summer months. A considerable percentage of the population is also employed in management occupations (20%); business, finance, and administration (14%); education, law, and social, community and government services (11%); and trades, transport, and equipment operators (11%).

Table 3-1: TBM Employment Occupation Split

Occupation	Employment	Share (%)
Sales and service	720	21%
Management	690	20%
Business; finance and administration	500	14%
Trades, transport and equipment operators and related occupations	395	11%
Education; law and social; community and government services	390	11%
Art; culture; recreation and sport	250	7%
Health occupations	240	7%
Natural resources; agriculture and related production occupations	130	4%
Natural and applied sciences and related occupations	115	3%
Manufacturing and utilities occupations	60	2%
Total	**3,490**	**100%**

Source: Census Community Profile (Statistics Canada, 2016)

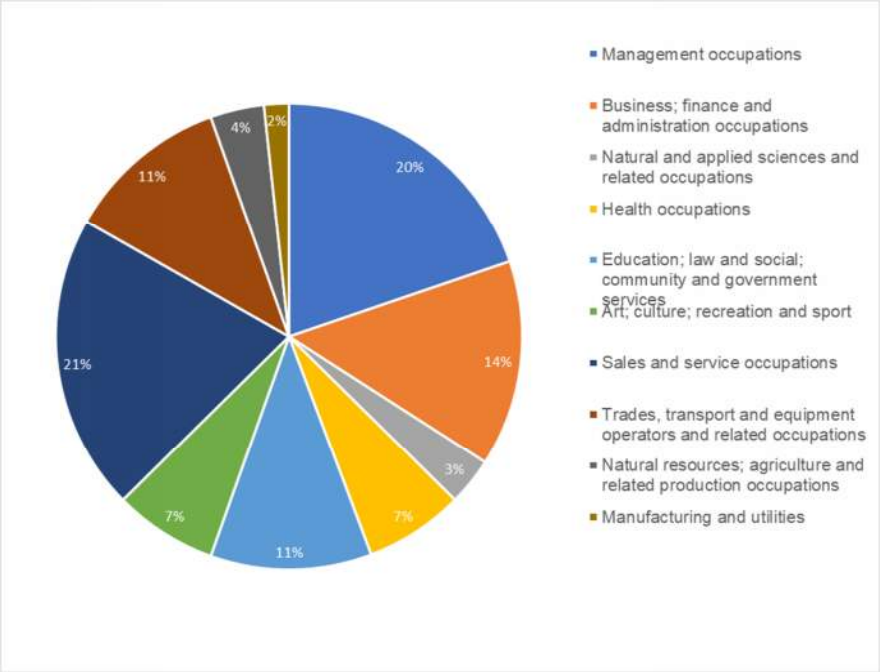


Figure 3-6: TBM Employment Occupation Split, 2016
Source: Census Community Profile (Statistics Canada, 2016)

3.2 CURRENT MODE SHARE

According to 2016 Census data collected from approximately 2,155 respondents in TBM, private vehicles are the dominant mode of transportation, with 91% of the respondents commuting as vehicle drivers or passengers (**Figure 3-7**). By contrast, 77.9% of Ontarians commuted in private vehicles in 2016, with 14.6% using transit. Walking, which is favoured by more than 7% of TBM residents, is however more popular in TBM than in Ontario as a whole, where it accounts for 5.3% of commuting trips. Bicycling on the other hand is the choice of 1.2% of Ontarians but just 0.4% in TBM. The data does not however include seasonal variation in commuting modes.

For comparison purposes the community of Niagara-on-the-Lakes and Township of Tiny sees a comparable mode shares. Both present ~90% auto, 4% cycling, 4% walking and 2% transit. Notably they are participants in the Transportation Tomorrow Survey and this data is collected from that source, which suggests a difference in collection and timing that should be considered when comparing the communities.

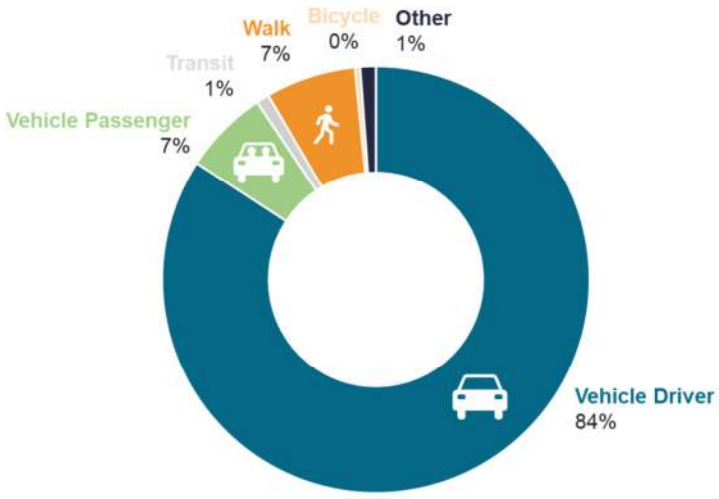


Figure 3-7: Mode Share in TBM, 2016

Source: Census Community Profile (Statistics Canada, 2016)

3.3 ROAD NETWORK

3.3.1 Road Classifications & Right-of-Way

A road classification system groups streets into different classes according to the type of service each class is intended to provide. The road hierarchy is a fundamental tool for urban development and road management. Grouping roads with similar functions can improve transportation planning, road infrastructure design, maintenance, traffic, and road operations, while reducing land use conflicts. New roads and re-constructed roads under the Town's jurisdiction shall be developed to comply with the classification, function, and general design requirements for each road category. Building roads to the standards set for each class ensures travel will be efficient and safe for all modes.

The 2016 Town of the Blue Mountains' Official Plan recognizes the following roadway groupings:

Highway 26 and connecting links: Highway 26 serves mainly inter-regional travel demands and connects urban areas or nodes in different municipalities. It carries high volumes of traffic and accommodates truck traffic, rapid transit services, and high occupancy vehicle lanes. The road is under the jurisdiction of the Ministry of Transportation and access is restricted. The Highway 26 right of way width is up to 50 meters and transit-supportive land uses are encouraged along its right-of-way within urban areas. Specific Provincial regulations set out by the Ministry of Transportation Ontario (MTO) apply in the vicinity of the highway. MTO has a Connecting Links program that allows municipalities to apply for provincial funding to repair designated roads and bridges that connect two ends of a provincial highway through a community or to a border crossing. The Town of the Blue Mountains is a listed community in the program and Highway 26 (Arthur Street/King Street) between Peel Street N and Grey Street N is identified as a connecting link

County Roads: Roads owned and maintained by Grey County serve mainly inter-regional and regional travel demands. They accommodate truck traffic, carry high volumes of traffic, and connect urban areas or nodes in different municipalities. County Roads have a right-of-way width up to 30 meters. For County Roads outside of settlement areas, on-street parking is not permitted, and access is restricted with access points consolidated where possible. It should be noted that within TBM, several County Roads are routed through populated areas (e.g. Thornbury, Clarksburg, Craigleith)

Major Collector Roads: Major collectors connect neighbourhoods and provide access to adjacent land uses. They direct traffic to and distribute traffic from County Roads. Major Collector Roads have a right-of-way width up to 26 meters and 30 meters with on-street parking. On-street parking is generally permitted on these roads; however, access is restricted with access points consolidated where possible.

Minor Collector Roads: Minor Collectors are similar to Major Collector Roads with two travel lanes and right-of-way width up to 26 meters. Access to Minor Collector Roads is partially controlled.

Local Roads: Local Roads connect individual properties to collector and arterial roads. They are expected to carry low volumes of traffic. Right-of-way width is up to 20 meters and 23 meters for rural cross-sections. On-street parking in rural areas is generally restricted, while parking in urban areas may be allowed on both sides depending on pavement widths. Access control is not required.

Local Heritage Roads: Historic routes/roads and cottage roads classed as Heritage Roads usually serve low volumes of local traffic. The designation recognizes roads where the historic method of construction, terrain, and local environment may be considered to be below modern geometric standards. Local Heritage Roads have a right-of-way width up to 20 meters with up to two travel lanes. They provide limited opportunity for road improvements and area specific construction standards shall be used for their construction.

Seasonal Roads: The Town manages Seasonal Roads and provide access to adjacent lands. These roads will not be maintained during the winter season and have a right-of-way width up to 20 meters with up to two travel lanes. Like Heritage Roads, they provide limited opportunity for road improvements and area specific construction standards shall be used for their construction.

Private Roads: Private Roads are historic laneways and shared driveways that may or may not be owned or assumed by the Town and include condominium roads established under the Condominium Act. Area specific construction standards are to be used for their construction. All condominium roads shall be designed and built wide enough to accommodate emergency vehicles with vehicle parking provided on one side of the road.

Error! Reference source not found. provides a summary of the lengths of each road category within the boundaries of TBM. **Figure 3-8** illustrates the Town's current road classification and **Figure 3-9** shows existing right-of-way (ROW) widths, which indicates that most Town roads currently have 20 metre rights-of-way.

Table 3-2: TBM Road Classification Lengths

Road Network Class	Length (km)
Provincial Highways (Highway 26)	19.5
County Roads	82.1
Minor Collector	7.1
Major Collector	6.2
Local and Unclassified	283
All Roads	**397.8**

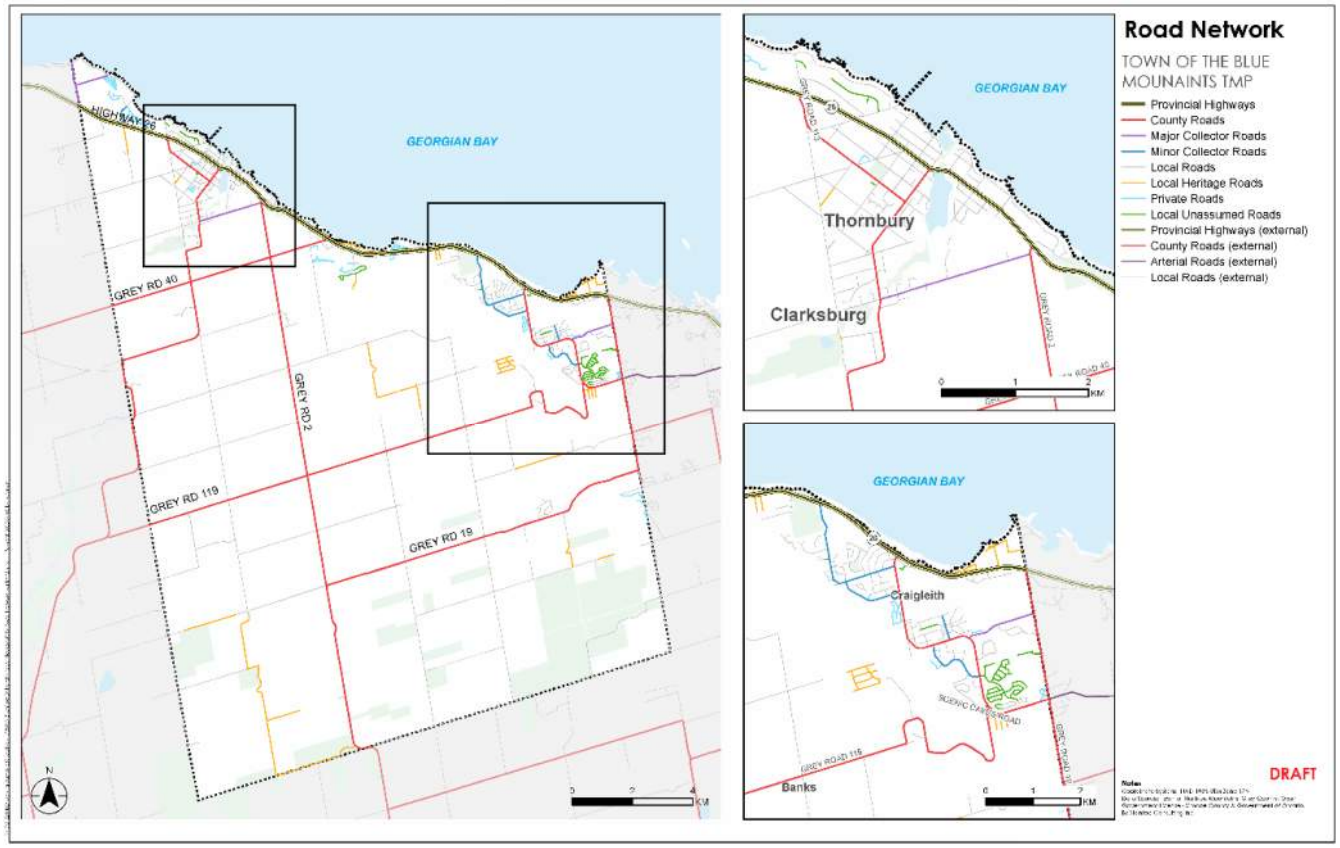


Figure 3-8: Existing Road Classification in TBM

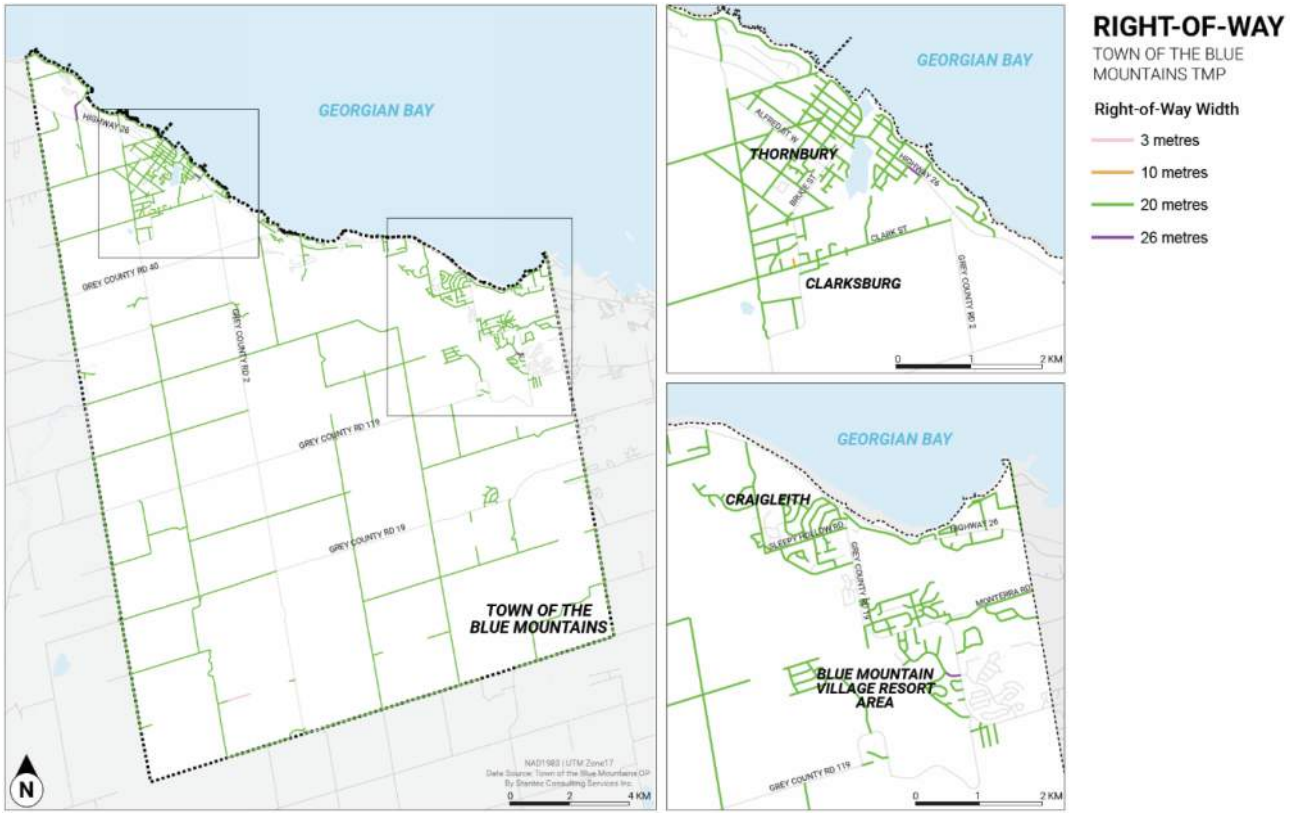


Figure 3-9: Existing Right-of-Way Widths in TBM

Public and private parking in the Town of the Blue Mountains is provided at on street and off-street. On-street parking is provided through the town's road network. Parking on-street is not permitted overnight between 2:00 AM and 7:00 AM from November 1st until April 1. The Zoning-Bylaw regulates the on-street parking including limitations on no-parking areas and time limited parking. The private off-street parking lots play an important role in providing parking for the attractions in the area. The Town also provides public parking at municipally owned recreational, institutional, and other facilities. Stantec will further review and discuss the Town's parking supply in later stages of this study as part of developing a car parking strategy.

3.3.2 Highway 26

Highway 26 along the south shore of Georgian Bay is an important regional mobility corridor, providing a principal route for moving people and goods between communities in the Georgian Triangle and other parts of Ontario, including the Greater Toronto Area. Highway 26 supports access to a variety of adjacent land uses (commercial, recreational, and residential) and plays a critical role in local circulation for area residents, businesses, and tourists. Within the TBM it handles most of the pass-through traffic along the shoreline corridor. This corridor can experience both high-speed traffic and points of congestion during periods of peak traffic demand.

In 2015, the Ministry of Transportation Ontario (MTO) conducted a Highway 26 Transportation Needs Assessment (the MTO Study) with a study area extending from Clearview Township to the east in Simcoe County to the Town of Meaford to the west in Grey County. The MTO study explored potential transportation improvements due to existing transportation facilities experiencing congestion and increasing growth and development in the region. The MTO Study had a horizon year of 2031 and was conducted to:

- Analyse existing and future transportation conditions, problems, and opportunities.
- identify and evaluate a range of multi-modal solutions to address the problems and opportunities; and
- recommend a preferred alternative(s).

The fundamental problems and opportunities identified in MTO's 2015 Study are still relevant and becoming increasingly so through evolving traffic patterns, population growth, and the successes of regional economic development. In the long term, solutions to address congestion issues will impact residents of the Blue Mountains and other municipalities within Grey County, though the timing, location and degree of impact has yet to be determined. Consistent with any future environmental assessments completed for Highway 26, impacts to residents will be assessed within the appropriate Environmental Assessment framework that considers a comprehensive range of factors and priorities such as, but not limited to, potential impacts to the natural, socioeconomic and cultural environment, financial considerations, and how well the identified problem(s) are addressed through the investigated alternative solutions.

Commented [OJ1]: New content for Final Draft Rev 2

TMP modelling in **Section 7.0** demonstrates that peak periods of traffic demand (summer and winter weekends) are beginning to approach the 2-lane highway capacity particularly at congestion points at Thornbury Bridge and at Grey Road 21. As vehicular traffic is projected to

grow 3% annually, congestion will continue to increase even with the mitigating effects of transit and active transportation infrastructure investment.
For The Blue Mountains, there are two critical elements regarding future Highway 26 capacity that requires further investigation and coordination across relevant jurisdictions:

1. **Alternate Highway route around Thornbury & Clarksburg**
   As indicated in MTO's 2015 Study and validated in modeling presented in Section 7.0, the capacity constraints of Highway 26 through Thornbury will become more critical over time without intervention. An alternate highway route around the communities of Thornbury and Clarksburg is the preferred approach to accommodate future highway capacity. To achieve highway design standards and offer competitive travel times, it is recommended that a future alternate route study area be identified that does not traverse through existing urban areas. The area indicated in **Figure 3-10** is consistent with the recommended future study area within MTO's 2015 study. It is recommended that this future study area be recognized in the Town's Official Plan. However, this proposed alternate route may depend on decisions made to the Highway 26 corridor east of Thornbury. It is also recommended that as soon as there is certainty regarding a Highway 26 bypass alignment east of TBM, that the Town engage MTO to initiate a Provincial Class Environmental Assessment for the Highway 26 bypass options across the study area.

Commented [OJ2]: New wording added for Final Draft Rev 2.

2. **MTO's preference to widen Highway 26 to 4 or 5 lanes between Grey Road 21 and the proposed alternate route around Thornbury & Clarksburg**

   The alternatives evaluated in MTOs 2015 Study gave due consideration to upgrading existing local and county roads or creating new potential routes over the escarpment as opposed to widening the existing Highway 26 corridor indicated in **Figure 3-10**. The major environmental challenges, highway design constraints, and projected modest traffic demand (in terms of competitive travel time for desired origins and destinations) were not favorable for 'over the escarpment' alternatives. Streetlight Data presented in **Section 3.5.4** is consistent with MTO's 2015 Study with respect to the proportions of local and through-traffic, which supports the notion that 'over the mountain' options would have limited effect on relieving traffic from the existing Highway 26 corridor within The Blue Mountains.
   The possibility of widening Highway 26 to 4 or 5 lanes as proposed by MTO (to be studied via a Provincial Class EA) poses a significant potential disruption to the residents and communities along the Highway 26 corridor. As indicated in the 2015 Study and reiterated through TMP consultations, there is a continued desire to find suitable alternatives that do not result in the widening of Highway 26 through The Blue Mountains and preserve the consideration of an 'over the mountain' option. However, TMP consultations also indicated that some residents see value in widening Highway 26. The differing opinions are likely rooted in where residents live and their perceived impacts (positive or negative) of increased highway capacity.

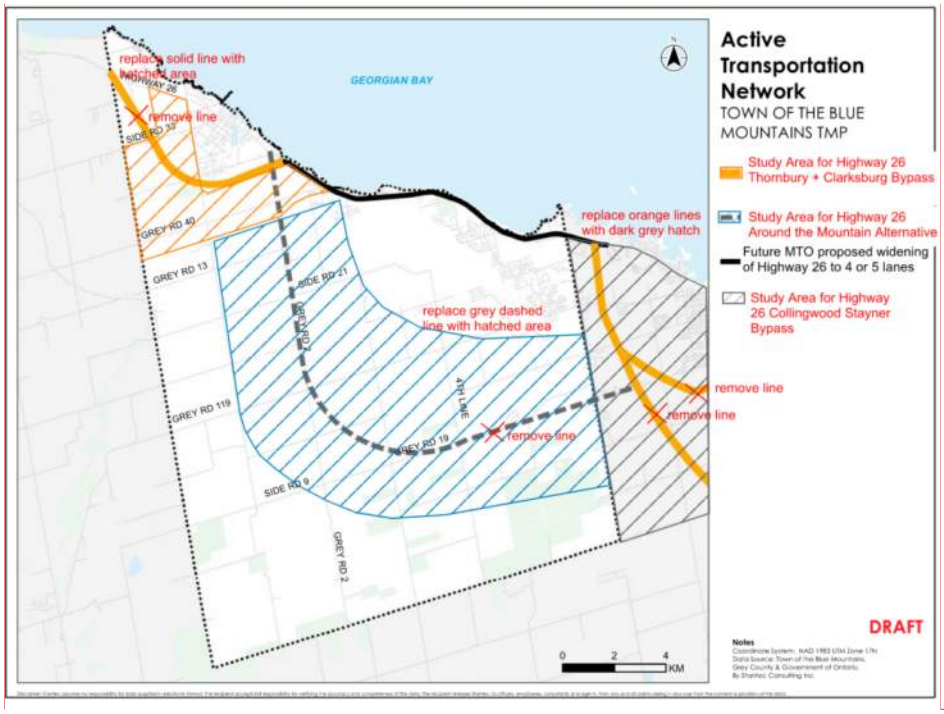


Figure 3-10: Highway 26 Widening & Bypass Study Areas

It is recommended that MTO revisit their 2015 Study and consider further Highway 26 capacity alternatives that strike a preferred balance of Provincial vs local interests, and initiate more detailed Highway 26 assessments such as the Provincial Environmental Assessments identified in the 2015 Study with the goal of identifying and protecting future highway corridor needs. Considerations made regarding Highway 26 capacity needs within The Blue Mountains have broad inter-regional implications involving Grey County, Simcoe County, and both MTO West and Central Regions. This requires an integrated and coordinated approach with MTO leadership. It is recommended that Town staff continue engaging with MTO and actively participate in opportunities to inform the current and future design of Highway 26.

Where are we now?

A traffic volume projection made for east of Thornbury in MTO's 2015 study assumed a 2% annual increase in Average Annual Daily Traffic to 2030. Available 2022 traffic volume data is consistent with the projection trend line provided in **Figure 3-11** taken from the MTO 2015 Study. 2022 AADT east of Thornbury 12,000-13,000 est. consistent with model forecasts.

Commented [OJ3]: New Figure for Final Draft Rev 2

Commented [OJ4]: New content.

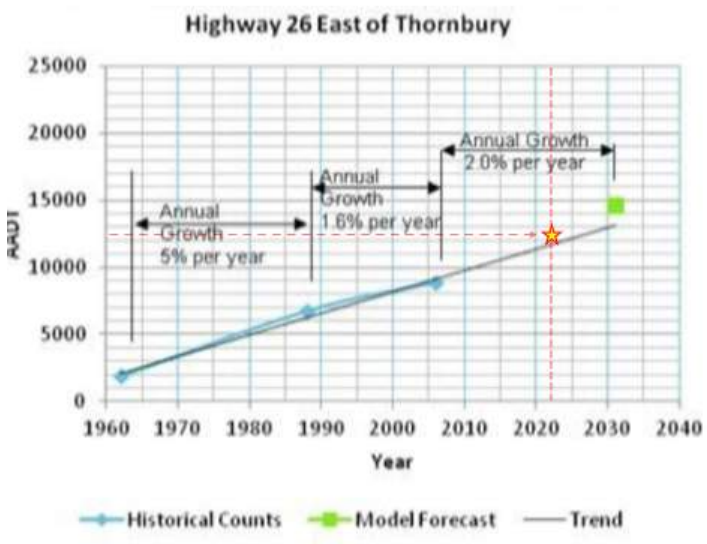


Figure 3-11: MTO Forecast Highway 26 Daily Traffic Volume

3.4 TRANSIT NETWORK

The built-up areas of TBM are partially served by Collingwood Public Transit (CollTrans) and Grey Transit Route (GTR). Collingwood Transit provides public transit services to the Craigleith area, including Blue Mountain Resort, on the Collingwood/Blue Mountain Link (**Figure 3-12**). The headway for this bus link is hourly, with a stop at Blue Mountain Village. In addition, GTR recently introduced public transit services from TBM to Owen Sound in September of 2020 that connects riders to other routes throughout Grey County as illustrated in **Figure 3-12**. The primary service is the Route 4, from which riders transfer in Downtown Meaford to the Route 3 (Owen Sound to Meaford). Trips run from Wednesday to Sunday during the AM and PM peak periods.

The transit service in TBM provides crucial connections to essential and frequently visited destinations in the Town such as the Blue Mountains Village, resorts, shopping, dining, and other leading destinations. TBM faces unique challenges to developing an improved transit system. Many destinations, services and residences in the densest areas of town are designed to cater for tourists who most often arrive with their own vehicle. Furthermore, tourism creates peaks in travel demand such as in the summer and winter weekends, where conditions differ significantly from typical off-peak patterns in other communities.

It is worth noting that the Blue Mountain Village has out of town transit / shuttle services that are targeting resort users. The service connects the Village to the GTHA on a fixed route/stop

model. This type of resources assists in limiting the number of cars initially arriving at the resort, which reduces those trips, and reduces the background activities of people traveling around the area by similar car. The service was severely impacted by COVID restrictions, with reduced travelers to the village compounded by capacity limits in the shuttles. The number provided indicate that these services carried 5626 passengers between July 2, 2021 and December 31, 2021, across 1488 shuttle trips. Private services such as these, are targeted to specific user groups their function is somewhat unique, they do however serve to change the transportation makeup of travelers to the TBM.

Another factor impacting the success of transit is the pedestrian environment surrounding bus stops, as a comfortable and walkable neighbourhoods are important for attracting and maintaining riders. It is important to evaluate the increased number of stops against the number of destinations in proximity to the stop. Five- and ten-minute walking distances are generally represented by 400 and 800 metre network distances, respectively. Highway interchanges, large block sizes, grade separations, circuitous streets, and a lack of sidewalks all reduce the distance that can be covered in 5 or 10 minutes from transit. Designing pedestrian-friendly walkable streets around mixed-use developments will improve the experience for pedestrians accessing transit and reduce the distances from transit to the final destination. The current 5-minute (400 m) and 10-minute (800 m) walking distances to transit stops, also called walksheds, are shown in **Figure 3-13**.

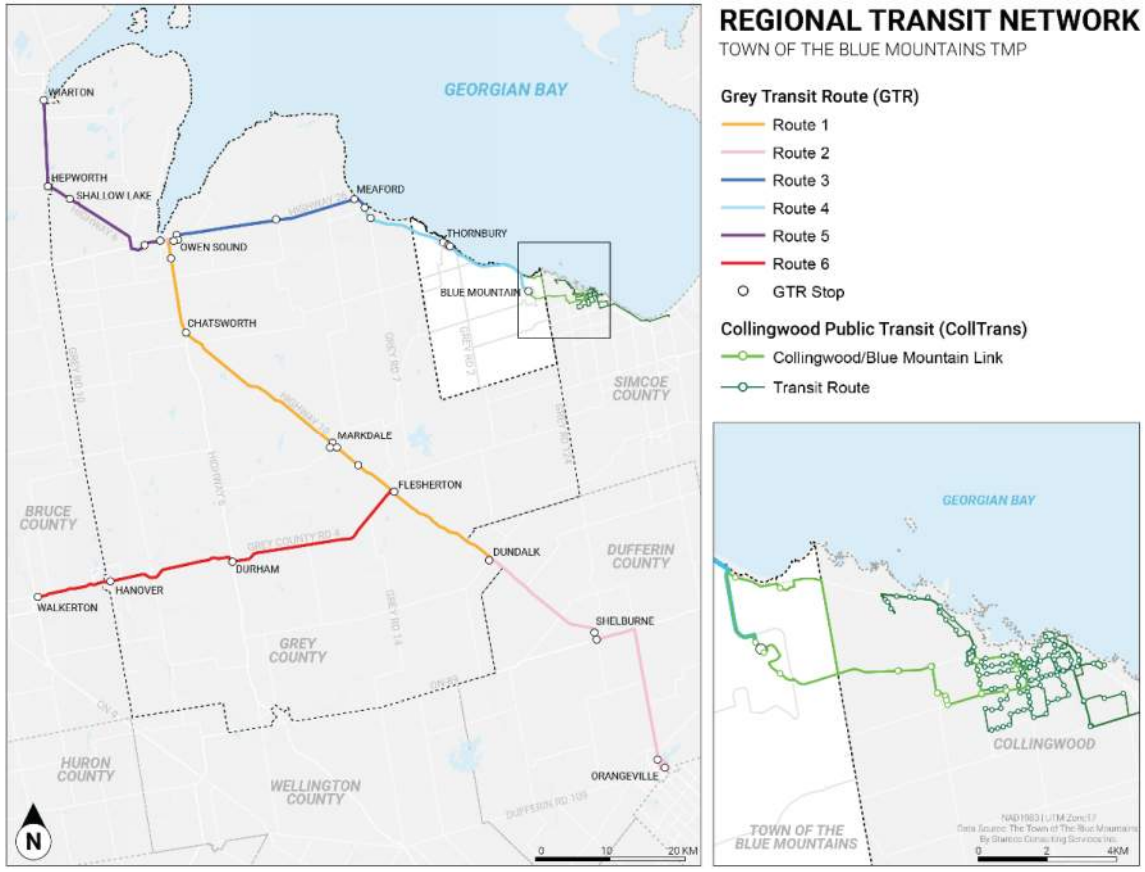


Figure 3-12: Existing Route 3 & 4 of Grey County Transit Line

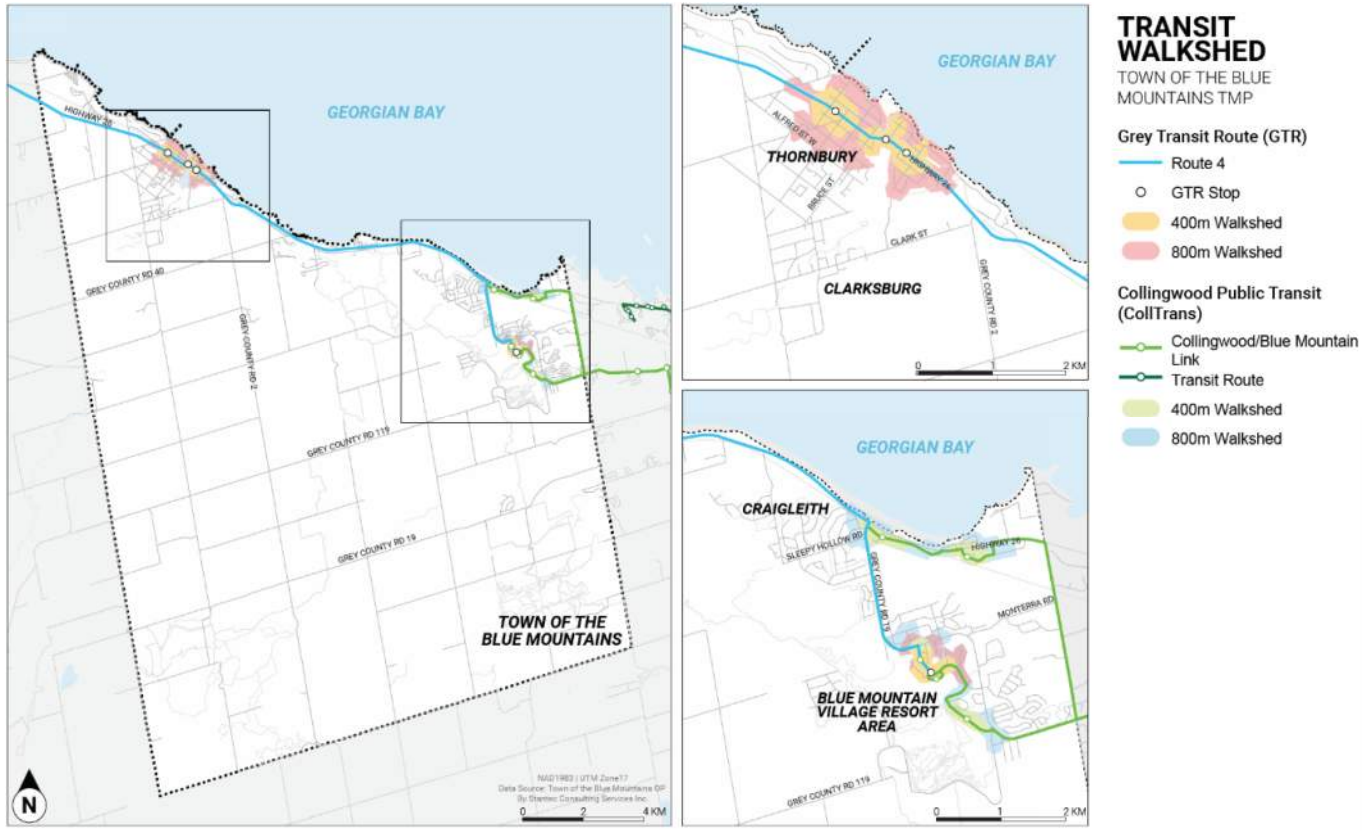


Figure 3-13: Existing Walking Distances to Transit Stops

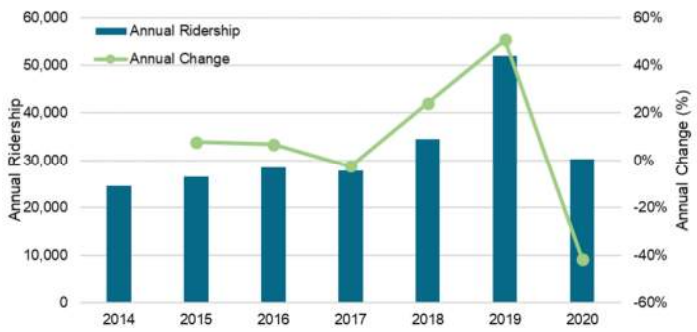
3.4.1 Ridership

Stantec reviewed historical ridership along the Collingwood Transit Blue Mountain Link dating back to 2014, as illustrated in **Table 3-3** and **Figure 3-14**. The data reveals a growing interest in transit in the town from 2014 to 2019. It also shows peak ridership during summer and winter months, which is consistent with traffic peaks during these periods when recreational activities in the community are at their highest levels (**Figure 3-15**). Ridership has been increasing since 2014, with a sharp increase in 2019 followed by a decline in 2020 and 2021 due to the COVID-19 pandemic. Ridership will be monitored throughout 2022 to understand how well transit riders are returning to the system as stay-at-home restrictions lessen and businesses reopen.

Table 3-3: Annual Ridership on Collingwood Transit Blue Mountain Link, 2014-2020

Year	Annual Ridership
2014	24,683
2015	26,635
2016	28,455
2017	27,785
2018	34,507
2019	51,995
2020*	30,348
2021	24,836
*Blue Mountain Resort was closed Dec 26, 2020 to Feb 16, 2021 due to COVID 19 restrictions.	

Figure 3-14: Transit Blue Annual Ridership 2014-2020



Collingwood Mountain Link Change,

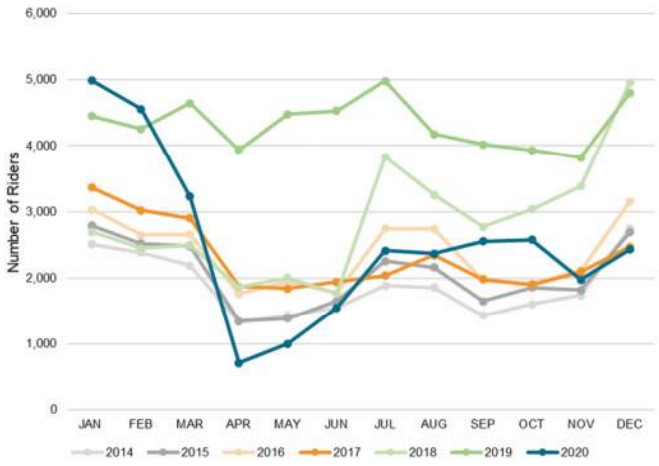


Figure 3-15: Collingwood Transit Blue Mountain Link Monthly Ridership, 2014-2020

Stantec reviewed ridership between October 2020 and January 2021 on GTR Route 4 serving TBM (**Figure 3-16**). While the ridership numbers appear low, service on GTR Route 4 was introduced on September 23, 2020, in the midst of COVID-19 pandemic restrictions and has not operated during typical conditions as businesses and recreational destinations have been partially or fully closed during the time period. In addition to people working from home and generally reducing the number of trips they make due to the pandemic, potential riders may have felt unsafe traveling on public transit due to the potential spread of COVID-19 and difficulty social distancing onboard public transit vehicles. The route has, therefore, had lower-than-expected ridership that is anticipated to increase once people feel more comfortable sharing vehicles and the region reopens to pre-pandemic levels.

October had the highest level of ridership, with declining use into the winter. It should be noted that this new service was free for riders during the month of October to encourage transit use and allow riders to test out the service. The decline in ridership following this initial free period may be due to the increase in cost as well as harsher weather conditions and pandemic restrictions. Given the small sample and the influence of the pandemic on the period examined, our assessment will also take into consideration stakeholder feedback and demographic information.

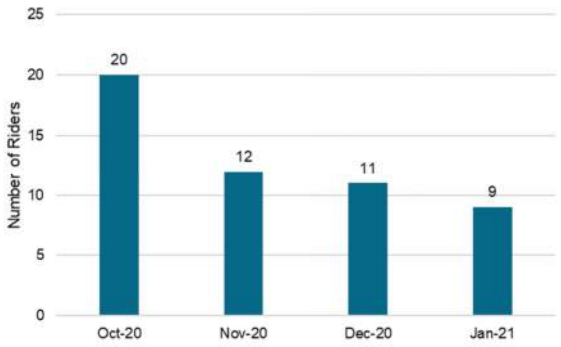


Figure 3-16: Existing Grey County Transit Route 4 Ridership, 2020/2021

Looking one level deeper, the average ridership at each stop on Route 4 was analyzed between October 2020 and January 2021 (**Figure 3-17**). The analysis reveals that both end destinations for the route – Blue Mountain Village and Downtown Meaford – see the highest activity. As mentioned above, this analysis is based on a relatively small sample size during pandemic conditions and may not reflect the patterns of pre- or post-pandemic travel.

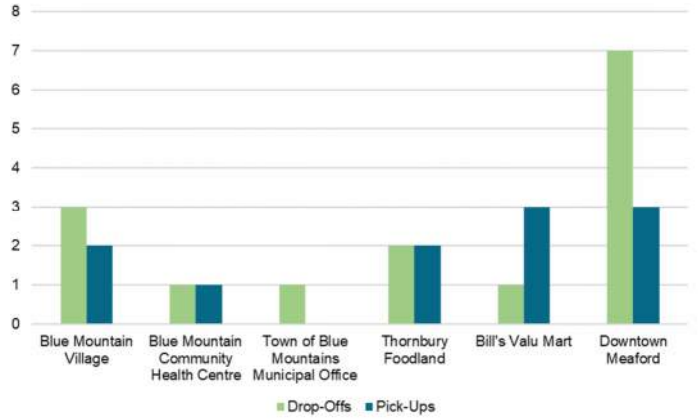


Figure 3-17: Grey Transit Route 4 Stop-Level Ridership (Oct 2020 – Jan 2021 Average)

3.4.2 Transit Peer Review

Nine peer transit agencies were selected for comparison to Collingwood Transit, which serves TBM (**Table 3-4**). The peer group consists of transit agencies in Ontario cities or towns serving 7,000 to 20,000 people to allow for a reasonable operational comparison. Tourist destinations such as Niagara-on-the-Lake and Wasaga Beach, with similar patterns of visitation and economic activity to TBM, were also included. Collingwood Transit has a more extensive service area with a larger population than just TBM, which we have considered in the peer review.

Table 3-4: Transit Peer Agencies

Agency/Municipality	Service Area Population	Service Area (km^2)
Collingwood	19,000	27.1
Port Colborne	18,425	40.5
Midland	12,500	23.0
Port Hope	12,350	13.1
Wasaga Beach	11,560	18.4
Niagara-on-the-Lake	12,041	22.2
Huntsville	11,000	12.0
Cobourg	10,741	13.0
Elliot Lake	10,498	16.0
Kenora	7,000	16.0
Peer Average	**11,791**	**19.4**

Source: Ontario Public Transit Association Transit Fact Books, 2019

The peer group was analyzed based on available operational and financial data to determine how Collingwood Transit performs in comparison to similar agencies. All transit agency data was sourced from the 2019 Ontario Public Transit Association (OPTA) Fact Book, which is the most recent dataset dealing with all the peer communities. Data for GTR was not available as part of this dataset.

Table 3-5 compares operational data from the OPTA Fact Book for Collingwood Transit (including transit to TBM) with its selected peers. Collingwood Transit performs similarly to its peers in many areas. Its ridership is significantly higher but that reflects service throughout Collingwood rather than just TBM.

Considering the service hours per capita, Collingwood Transit offers higher levels of service than its peers, which supports a transit culture. Passengers per service hour are just below the peer average but indicate that ridership uptake in Collingwood and TBM is comparable to its peers. At the same time, ridership levels also suggest there may be opportunities to evolve the current transit system to improve linkages between trip generators (schools, tourist sites, offices, medical facilities, etc.) and better serve the communities.

Considering the service hours per capita, Collingwood Transit offers higher levels of service than its peers, supporting a transit culture. Passengers per service hour are just below the peer average but indicate that ridership uptake in Collingwood and TBM is comparable to its peers. At the same time, ridership levels also suggest there may be opportunities to evolve the current transit system to improve linkages between trip generators (schools, tourist sites, offices, medical facilities, etc.) and better serve the communities.

Table 3-5: Peer Agency Operational Data

Agency	Service Area Population	Service Area (km^2)	Number of Routes	Fleet Size	Ridership	Passengers per Capita	Service Hours per Capita	Passengers per Service Hour
Collingwood Transit	19,000	27.1	5	6	236,661	12.5	1.5	8.2
Port Colborne	18,425	40.5	2	1	29,734	1.6	0.4	4.5
Midland	12,500	23.0	2	1	27,405	2.2	0.4	6.0
Port Hope	12,350	13.1	2	4	66,612	5.4	0.3	17.3
Wasaga Beach	11,560	18.4	2	4	56,541	4.9	0.6	7.6
Niagara-on-the-Lake	12,041	22.2	2	5	91,166	7.6	0.9	8.5
Huntsville	11,000	12.0	2	7	25,398	2.3	0.5	4.4
Cobourg	10,741	13.0	2	5	98,795	9.2	0.8	11.4
Elliot Lake	10,498	16.0	4	3	104,020	9.9	0.6	16.8
Kenora	7,000	16.0	3	4	34,575	4.9	0.5	9.8
Peer Average	**11,791**	**19.4**	**2**	**4**	**59,361**	**5.3**	**0.6**	**9.6**

Source: Ontario Public Transit Association Transit Fact Books, 2019
****In the absence of 2019 data for Port Colborne, 2018 data was used***

Annual ridership is shown below for Collingwood Transit and its peers. Ridership has remained relatively consistent over the past five years, but **Figure 3-18** suggests there has been a slight increase over time. Collingwood Transit has had one of the greatest increases in overall ridership, growing from 214,995 passengers in 2015 to 236,661 in 2019 (10% change). Kenora and Huntsville have seen the greatest decrease in annual ridership. Others have generally experienced moderate increases.

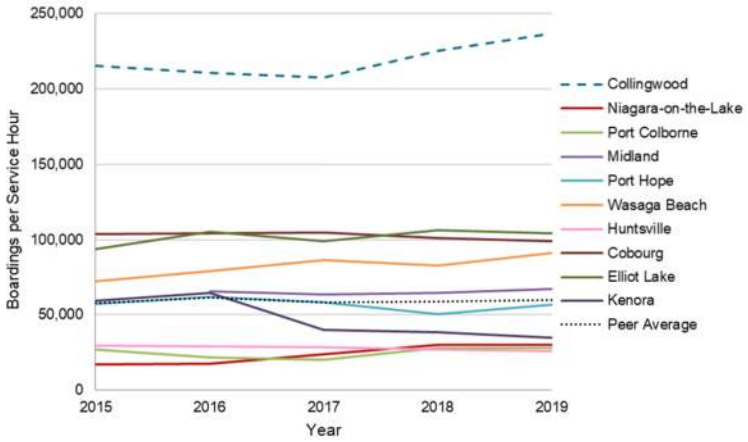


Figure 3-18: Annual Ridership by Peer Agency, 2015-2019

Source: Ontario Public Transit Association Transit Fact Books, 2015- 2019

Passengers per service hour (also called passengers per revenue hour) is an industry standard used to assess the productivity of a transit system. It indicates the number of customers attracted to the transit system per hour of service, which reveals the effectiveness of the route to carry passengers. Historical service productivity (passengers per service hour) for Collingwood Transit was compared to the peers in **Figure 3-19** based on available OPTA data from 2015 to 2019. The chart indicates a downward trend in productivity for Collingwood Transit compared to a peer average that is increasing slightly over time. While Collingwood Transit has experienced an increase in ridership from 2015 to 2019, ridership has not increased at the same rate as the service hours provided, resulting in a decrease in ridership per hour of service.

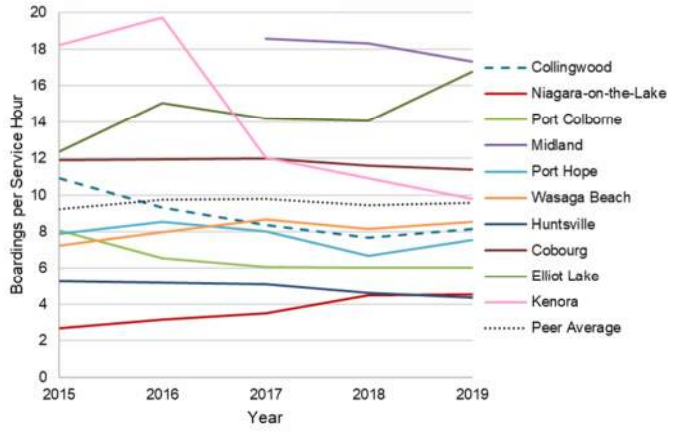


Figure 3-19: Passengers per Service Hour by Peer Agency

Source: Ontario Public Transit Association Transit Fact Books, 2015-2019

Ridership per capita is a relative measure of system usage that allows us to compare agencies operating in areas with different population size. Service hours per capita is a good measure of transit availability or investment in transit by the agency or municipality. **Figure 3-20** compares 2019 passengers and service hours per capita for the selected peer agencies.

Clearly, investment in increased transit service is correlated to higher ridership per capita. Agencies with above-average service levels, such as Collingwood, Niagara-on-the-Lake, Cobourg, and Elliot Lake all have above-average ridership per capita. Passengers per capita on Collingwood Transit remains higher than the peer average and all other peers. **Figure 3-19** and **Figure 3-20**, together,

suggest that Collingwood Transit is offering good levels of service, though there is room to modify routing and schedules using existing resources to improve the overall effectiveness of the service.

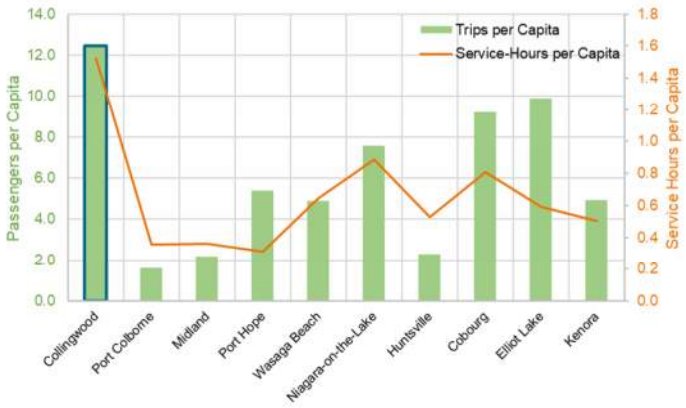


Figure 3-20: Peer Comparison of Service Hours and Passengers (per Capita)

Source: Ontario Public Transit Association Transit Fact Books, 2019

3.5 ACTIVE TRANSPORTATION NETWORK

Unlike networks for transit, goods, and personal vehicle movement, active transportation networks typically balance user movement with recreational values. Like the other networks, active transportation facilities carry their users (i.e., walkers, cyclists, and other self-propelled travelers) safely and efficiently between desired origins and destinations. At the same time, they are expected to provide

opportunities for fitness, relaxation, and enjoyment of the natural environment. As recreational amenities, they may join important origins and destinations in the process, but trips frequently follow inefficient routes in pursuit of recreational and entertainment experiences. OTM Book 18 – 2021 provides a frame of reference when considering the type of user and their planning considerations, this table has been presented as **Figure 3-21.**

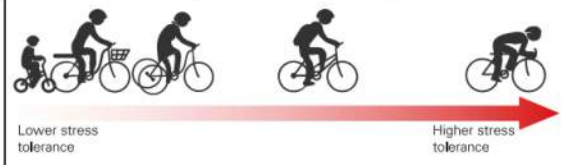
	DESIGN CYCLIST		
	Interested but Concerned	**Somewhat Confident**	**Highly Confident**
	• Strong preference for separated cycling facilities or very low-volume and low-speed streets • Cycling frequency depends heavily on having a network of low-stress facilities • Can generally negotiate simple low-speed interactions with motor vehicles at intersections	• Comfortable cycling on-street and interacting with moderate-speed traffic • Preference for separated cycling facilities or low-volume and low-speed streets • Cycling frequency increases as network of low-stress facilities expands	• Comfortable cycling on-street and interacting with higher-speed traffic • Preference for cycling facilities that allow for easy overtaking and efficient movement • Cycling frequency not necessarily affected by network
			
% of population	• 51–56%	• 5–9%	• 4–7%
Stress tolerance	• Low	• Moderate	• High
Skill level	• Experience varies • Ability to anticipate and mitigate basic hazards	• Comparatively experienced • Ability to anticipate and mitigate common hazards	• Highly experienced • Well-developed ability to anticipate and mitigate most hazards
Typical demographic profiles	• Age: All* • Gender: any • Ability: includes individuals who may have a disability or are new to cycling	• Age: 18–65+ • Gender: women are under-represented • Ability: individuals with a disability are under-represented	• Age: 18–65+ • Gender: women are under-represented • Ability: individuals with a disability are under-represented
Typical travel speed	• 10–25 km/h	• 15–25 km/h	• 20–35 km/h

Figure 3-21 Types of Cyclists
Source: OTM Book 18 – 2021

One of the defining characteristics of TBM and a leading economic driver is the balance of natural beauty with small communities and recreational opportunities. The Town's active transportation infrastructure serves the community at both levels. It provides a recreational facility as well as a practical means of connecting destinations for individuals relying on self-propelled transportation modes.

3.5.1 Existing Network

In reviewing the existing network, the conditions of the Active Transportation network were variable. **Figure 3-22** presents the existing network in context of type, it is evident that several significant transportation network gaps exist. In both the Thornbury and Craigleith residential areas, for example, the sidewalk coverage does not exist, which limits the ability of those walking to move on medium speeds streets. Key destinations, such as schools and grocery stores are both limited to vehicular access. Similarly, the cycling network is limited in these areas, which indicates that the necessary level of protection is not present to support daily trips by all users. When this figure is considered in combination with Error! Reference source not found. additional gaps are reviewed. In particular, the Road Cycling routes, which are below in the provincial guidance (OTM Book 18) and All Ages and Abilities (AAA) standards. This indicates that the current network is generally designed to support a recreational function, with a high user confidence and risk tolerance required.

When considering the active transportation network, the role of the network in serving a primarily transportation function (so people can move from one place to another) or recreation function (so people enjoy moving through the area). The Bruce trail as an example provides strictly a regional recreation function. Other trails serve both functions, such as the Georgian Trail, which connects several communities on a high travel corridor. **Figure** 3-22 categorizes these, with the intent of isolating the transportation corridors to identify gaps and opportunities in future stages of the project.

Table 3-6. Existing Active Transportation Facility Types

Facility Type	Length (km)
Sidewalks (1 side)	34.6

Facility Type	Length (km)
Sidewalks (both sides)	10.4 (2 x 5.2)
Road Cycling Routes*	286.4
Regional Trails	114.5
Local Trails	38.7
Snowmobile Routes	5.2

**Most do not meet provincial design standard of 1.5m shoulder (+buffer at higher posted speed)*

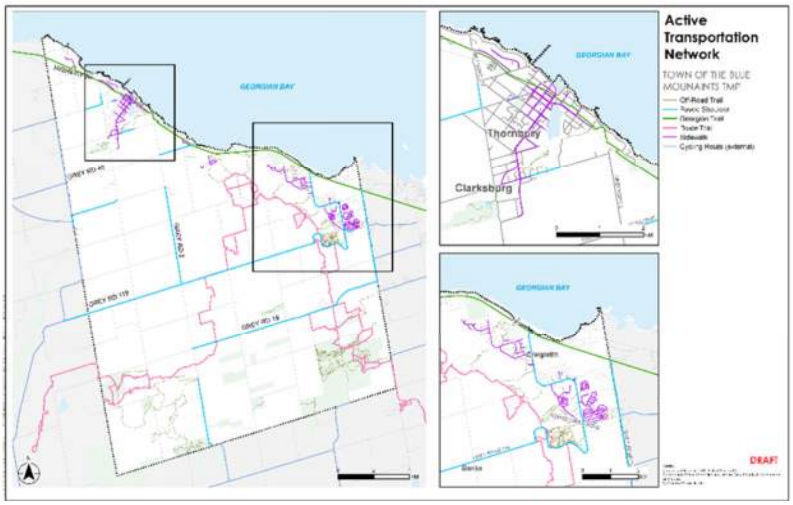


Figure 3-22: Existing Active Transportation Network

3.5.2 Mode and Facility Analysis

While active transportation encompasses the modes of travel listed in **Table 3-7** local and regional trail networks are often shared by additional users as shown in **Table 3-8**. Each mode brings different considerations to design, and accommodation of users categorized by the column headings in the table:

the general purpose of a trip using that mode of travel as either recreation or transportation
identification of existing facility types that mode will use based on the legal requirements and user behaviors
considerations for users traveling by that mode, which are important when considering the environment in planning for them
applicable principles of network design.

Some modes are less compatible with others. Horses for example, often do not mix well with other modes on narrow trails and are generally excluded from shared trail systems as a result. Similarly, snowmobiles, snowshoers, and cross-country skiers are rarely compatible as they have very different design considerations given differing expectations of trip distance and protection from weather.

Table 3-7: Active Transportation User Breakdown

Mode	Type of travel in general	Existing facility types	Considerations for users	Additional Comments
Walking / Running	Transportation/ Recreation	Sidewalks, crosswalks, multi-use trails, and paved shoulders	Trip lengths tend to be short / within a local area, and are often linked with other modes (e.g., Transit, rideshare)	Trip lengths are short
Hiking / Trail running	Recreation	Trails	Users visit trails for the purpose of recreation (e.g., going for a walk, hike or run)	Trips will often originate with another mode to arrive at the trail

Cycling / E-bikes	Potential for both	Roads (with or without protection from other traffic) Engineered trails	Accommodates longer trip lengths, serving as transportation mode and fully recreational trips	Existing facilities on road are currently provided without any protection for users

Table 3-8: Other Network User Breakdown

Mode	Type of travel in general	Existing facility types	Considerations for users	Principles for network design
Snowmobiles	Generally, Recreation	On roads or designated trails only	Requires appropriate weather conditions.	Employs a mixture of designated trails and roads.
ATVs	Recreation, Agricultural activity	Off-road trails only (not permitted on TBM roadways)	ATVs must be transported to off-road trails and cannot be driven on roadways	Safety is a key element of trail design as ATVs may share off-road trails with other AT users
Horses	Recreation	On designated trails only. Horses can use road shoulders.	Not frequently used for trip destination without destination planning, often used in context of group rides	Not generally compatible with other uses, especially motorized uses.
Micro mobility / Scooters	Generally, transportation	Undefined – mixture of sidewalks, paved trails and roads	Shorter trip lengths in general, can be personally owned or rented	Emerging technology which has not yet deployed in TBM.

Facility design and accommodation are particularly important when planning active transportation networks, especially when accommodating the range of modes considered in this study. This is further complicated by the various design guidelines applied for active transportation facilities. When planning for active transportation in TBM, the following principles are paramount:

Safety: It is critical that users are both meant to be safe and feel safe using active transportation facilities. Users need sufficient protection from passing traffic to use each mode. In areas of higher congestion, this may mean physical protection (e.g., dividing curbs) or separation (e.g., trails). In lower congestion areas, additional space may be sufficient (e.g., paved shoulder). This may inform design operating speed for other vehicles as well.
Directness: Distance and time are exponentially more significant for self-propelled travel modes than for vehicle travel. For example, if a pedestrian must add two minutes to an 8-minute trip to access a crosswalk, their trip time increases by 25%. This may reduce affect the willingness of pedestrians and cyclists to cover the distance, causing them to cross wherever they are or may discourage their use of active transportation altogether.
Accessibility: Under the Accessibility for Ontarians with Disabilities Act, which aims to make the province fully accessible by 2025, each active mode requires specific adaptation to address the mobility needs of all population members. Providing a seamless universally accessible journey supports the mobility of a mother pushing a stroller as much as a senior or other mobility challenged individual using a mobility device.
Comfort: Active modes are not only more affected by variations in distance and time, they are also more sensitive to variations in routing. Topography is particularly important as it can influence the effort required from users and may limit access to individuals with mobility limitations. It is also often important, where facilities serve recreational and tourist functions in addition to transportation roles, to consider views and environmental factors that may enhance user experiences.

Active transportation facilities in TBM generally require improvement or modification to satisfy these principles. Sidewalks are concentrated in the Thornbury area and Blue Mountain Village, and many are too narrow in select areas to support universal accessibility. Cycling routes, where present, are provided without any protection or delineation on regional and local roads where they share roadways with high-speed vehicles and seasonal agricultural operations. Trails are generally not engineered, increasing some accessibility barriers. The highest quality trail in TBM is the heavily used the Georgian Trail, connecting TBM, the Municipality of Meaford, and the Town of Collingwood. The trail is crushed limestone and is best suited to recreational cyclists and pedestrians in the summer, and hiking, snow shoeing, or cross-country skiing in the winter. Winter maintenance of the Georgian Trail began in winter 2020-21..

Addressing the infrastructure deficit will promote increased user safety, support sustainability objectives, and facilitate user choice. Given the wide range of needed improvements for active transportation, a program of upgrades should be developed and prioritized to maximize the benefits of capital investment. It should be recognized that the rural character of TBM is diverse - that the rural lifestyles, scenic terrain, recreational opportunities, and tourism and agricultural industries produce a dynamic mix of road users who are often required to share road space. The Active Transportation network therefore serves both recreational and transportation-oriented users and should be planned with both in mine. Road improvements should feasibly balance the safety and operational needs of all road users to mitigate conflict and elevate awareness of the presence of vulnerable road users. However, it is anticipated that road users in the rural areas – agricultural equipment, motorists, cyclists, and pedestrians - will continue to experience circumstances requiring a sharing mindset. The use of AAA infrastructure requires ongoing negotiations as facilities can be difficult to implement for reasons such as right-of-way and road geometry constraints, agricultural equipment operations, and potential high capital and operating costs. It should also be recognized that some design and infrastructure options for AAA design can be easier to accommodate in the built-up areas of TBM, where surplus parking and wide roadways are available. Conversely, in a rural setting a road widening could be required to implement the infrastructure with necessary space and buffer which increases the cost significantly. In the process of creating these solutions several design iterations will be necessary; however, the need to implement sufficient protection to meet a AAA standard network should be the desired outcome.

3.5.3 Seasonal Variation

Travel demand data was evaluated by leveraging anonymized mobile app data available from third-party provider StreetLight Data. StreetLight applies proprietary algorithms to estimate trips by expanding anonymized cell tower and mobile app data based on known, localized traffic data. The source of this local traffic data was through several permanent traffic counter installations and two portable units were recently purchased by TBM to help better understand ongoing traffic patterns, traffic volumes, and speeds. ~~counters.~~

According to StreetLight, “for location-based services (all modes) a trip starts when a device begins moving from a location where it was once still. Similarly, a trip ends when a device does not move at least 5 meters in 5 minutes. Additionally, a trip will end if there is a significant gap in pings seen from the device, or if the device is seen pinging within a fixed location for an extended amount of time with minimal movement. A trip is also required to be at least 3 minutes and 500 meters in length.” The aggregated data can be used to study traffic vehicle volumes, travel patterns, and origins/destinations over time. Due to the impact of the ongoing COVID-19 pandemic on 2020 traffic patterns, results from the 2019 have been used in this study to better understand the regular travel patterns.

Recognizing the variations in traffic patterns in TBM through its changing tourist seasons, Stantec reviewed 2019 trip information to assess the average daily traffic volumes across the year. Each trip included in the assessment had either its origin or destination within the Blue Mountains study area. Weekday and weekend daily trips show how tourism and employment influence mobility between weekdays and weekends. The average weekday is an average of results for Tuesday to Thursday. It does not include Mondays or Fridays as both days are typically affected by weekend trips.

presents seasonal trip frequency by day of the week in 2019. It shows that the highest traffic occurred on winter Saturdays, followed by summer Saturdays. Average 2019 winter Saturday daily traffic (90,598 vehicle trips) was 33% higher than summer Saturday daily traffic (68,074 vehicle trips) and 141% higher than average fall weekday daily traffic (37,601 vehicle trips). The numbers reinforce TBM's position as one of the leading winter destinations in Ontario. Summer had the highest average daily weekday traffic, which was 33% higher than fall weekday traffic.

, Figure 3-24, and **Figure 3-25** present the average hourly trip distribution for average winter Saturday, fall weekday and summer Saturday in 2019, respectively.

The average winter Saturday hourly trip distribution indicates the peak traffic period occurred between 1:00 PM and 3:00 PM with most of the trips traveling within TBM's boundaries. The peak traffic period in the summer Saturday period occurred during afternoon hours with the highest number of trips at 2:00 PM. Unlike winter Saturday, most trips during most summer Saturday hours were contributed to trips with origins or destinations outside TBM's limits.

Figure 3-24 shows the peak period of traffic on an average fall weekday fell between 2:00 PM and 4:00 PM, with a second peak during the morning at 8:00 AM. The results also show that majority of fall weekday trips have one origin or destination outside the limits of TBM. A comparison between winter Saturday highest peak hour volume (8,425 vehicles/hr) to fall weekday highest peak hour volume (3,318 vehicles/hr) shows a 154% growth during the winter Saturday peak hour. The seasonal variance is a unique challenge for TBM as winter Saturdays see a major increase in demand on local, regional, and provincial roadways. This is further affected by the different trip purposes that each season/period represents; with fall weekday trips typically focused on employment, and winter and summer weekend trips typically focused around recreational and commercial uses.

Tourism in TBM contributes to the observed increase in trips and how often trips are made during the weekends. The variance between weekday and weekend trip numbers is primarily evident in the incremental short-distance trips within Blue Mountain Village

on weekends. Visitors often make several short-distance trips between various points of interest in the town. This is further discussed in the following section.

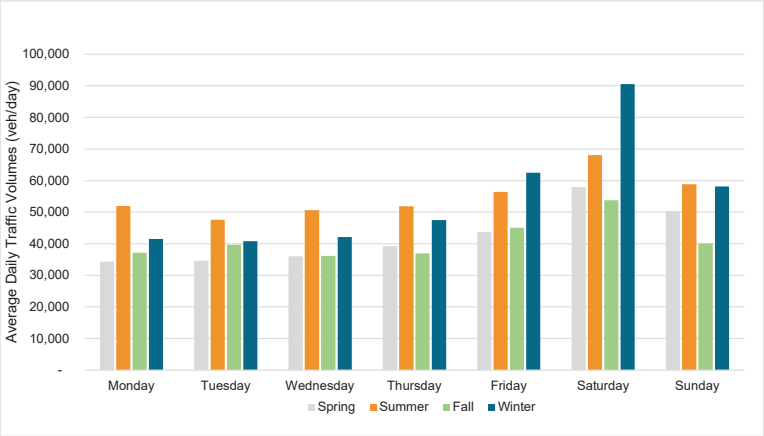


Figure 3-23: Seasonal Trip Frequency by Day of the Week (2019)

Figure 3-24: Average Hourly Trip Distribution (Winter Saturday, 2019)

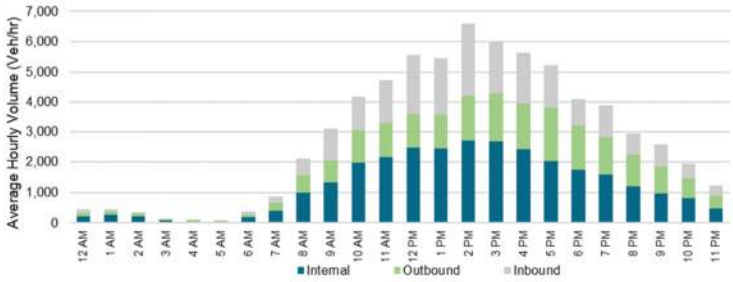


Figure 3-25: Average Hourly Trip Distribution (Summer Saturday, 2019)

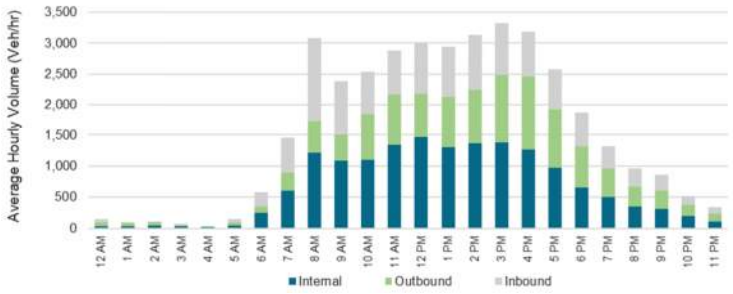


Figure 3-26: Average Hourly Trip Distribution (Fall Weekday, 2019)

3.5.4 Trip Distribution

Stantec used StreetLight Traffic data to analyze travel trends to and from TBM during 2019 average winter Saturday, the highest peak of travel period, as well as during 2019 summer Saturday and fall average weekdays. The analysis showed the majority of trips were internal trips with both their origin (trip start point) and destination (trip end point) within the community. Collingwood was the origin or destination for external trips. **Figure 3-27** illustrates TBM's trip distribution patterns for winter Saturday, summer Saturday and fall weekday in 2019. **Table 3-9** summarizes trip distribution during winter Saturday 2019 and **Table 3-10** and **Table 3-11 p**rovide similar information for 2019 summer Saturday and fall weekday.

During winter Saturday, 57% of the daily trips were internal to TBM with the remaining 43% of trips going and coming from areas beyond TBM's boundary (**Table 3-9**). Collingwood was the main origin or destination of the external trips with around 24% of trips

start or end within the town. The other major trip origins or destinations were Meaford (3%), Clearview (3%), Toronto (2%), Wasaga Beach (2%), Grey Highlands (1%), and Barrie (1%).

During summer Saturday, 43% of the daily trips were internal to TBM with the remaining 57% of trips going and coming from areas beyond TBM's boundary (Table 3-10). Like winter Saturday, Collingwood was the main origin and destination of the external trips with around 29% of trips starting or ending within the town. The other major trip origins or destinations were Meaford (6%), Wasaga Beach (3%), Clearview (3%), Grey Highlands (2%), Toronto (2%), Brampton (1%) and Barrie (1%).

During fall average weekdays, the share of daily trips classified as internal was reduced to about 42% with the remaining 58% going and coming from areas beyond TBM's boundary (**Table 3-11**). Collingwood is again the main origin or destination of the external trips with 33% of trips starting or ending there. The other major trip origins or destinations were Meaford (8%), Clearview (3%), Wasaga Beach (2%), Barrie (2%), Grey Highlands (2%), Toronto (1%), and Owen Sound (1%).

Table 3-9: Daily Trip Distribution - Winter Saturday 2019

To/From	2019			
	from	to	Total	%
TBM (Internal)	51,583		51,583	57%
Collingwood	11,237	10,215	21,452	24%
Meaford	1,625	1,456	3,081	3%
Clearview	1,129	1,269	2,398	3%
Toronto	744	1,103	1,847	2%
Wasaga Beach	899	822	1,721	2%
Grey Highlands	561	510	1,071	1%
Barrie	445	609	1,054	1%
Other Areas	2,871	3,520	6,391	7%
Total			**90,598**	**100%**

Source: Streetlight Data's Insight Platform

Table 3-10: Daily Trip Distribution – Summer Saturday 2019

To/From	2019			
	from	to	Total	%
TBM (Internal)	29,525		29,525	43%
Collingwood	9,705	9,797	19,502	29%
Meaford	2,055	2,068	4,123	6%
Wasaga Beach	1,096	1,183	2,279	3%
Clearview	794	994	1,788	3%
Grey Highlands	751	615	1,366	2%
Toronto	460	647	1,107	2%
Brampton	487	534	1,021	1%
Barrie	381	522	903	1%
Other Areas	2,783	3,677	6460	9%
Total			**68,074**	**100%**

Source: Streetlight Data's Insight Platform

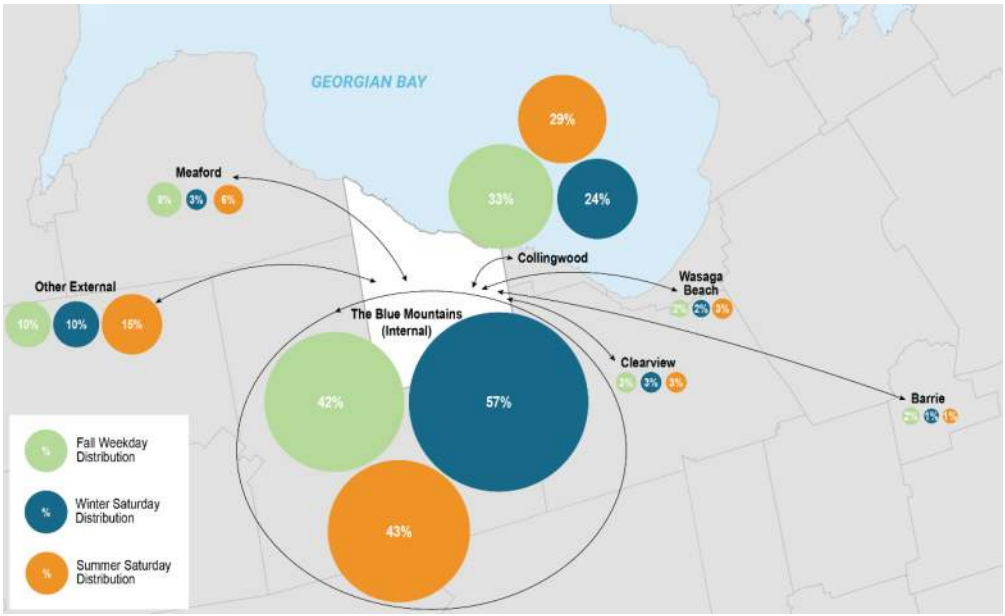


Figure 3-27: Origins and Destinations of Trips to and from the Blue Mountains in 2019

Table 3-11: Daily Trip Distribution – Fall Average Weekday 2019

To/From	2019			
	from	to	Total	%
TBM (Internal)	15,810		15,810	42%
Collingwood	6,170	6,105	12,275	33%
Meaford	1,450	1,573	3,023	8%
Clearview	506	529	1,035	3%
Wasaga Beach	468	457	926	2%
Barrie	320	344	664	2%
Grey Highlands	350	308	658	2%
Toronto	222	328	550	1%
Owen Sound	174	177	350	1%
Other Areas	1,086	1,224	2,310	6%
Total			**37,601**	**100%**

Source: Streetlight Data's Insight Platform

Table 3-12 summarizes an evaluation of daily trip distribution within TBM internal zones for 2019 winter average Saturdays. and Error! Reference source not found. show the trip production and attraction in each of the internal zones.

A review of the internal daily trip distribution during winter Saturday highlights the main travel trends within TBM as follows:

Blue Mountain Village is the main origin and/or destination of trips during the winter Saturday peak with the highest number of trips traveling internally within its area (16% of all trips) followed by trips to external locations (11% of all trips) and then from external areas (11% of all trips). Craigleith Zone 1 is the second leading trip generator within TBM. Craigleith Zone 1 internal trips account for 5% of all trips and followed by trips from TBM external areas (5% of all trips) and then to TBM external areas (5%). The trips between Craigleith Zone 1 and Blue Mountain Village are also significant representing 4% of all trips.
Thornbury & Clarksburg and Craigleith Zone 2 are the third and fourth highest trip generators for 2019 winter Saturday.

A review was also conducted of the internal daily trip distribution during Summer Saturday and result are presented in

Table 3-13. The findings were as follows:

Blue Mountain Village is the main origin and/or destination of trips during the summer Saturday peak with the highest number of trips traveling internally within its area (10% of all trips) followed by trips from external locations (14% of all trips) and then to external areas (13% of all trips). Thornbury is the second leading trip generator within TBM. Thornbury internal trips account for 7% of all trips, followed by trips from areas external to TBM (5% of all trips) and from TBM (5%). Craigleith Zone 1 is the third highest trip generator for 2019 summer Saturday.

Figure 3-29 and **Figure 3-30** show the total of trip production and attraction in each of the internal zones in Summer Saturdays.

The results of the internal daily trip distribution during Fall weekdays are presented in

Table 3-14 and **Figure 3-31** and **Figure 3-32**. While the trips are considerably lower within Fall weekdays, a similar pattern for trip distributions within the Blue Mountain has been observed.

Table 3-12: Internal Daily Trip Distribution - Winter Saturday 2019

Origin Zone	Name	Destination Zone													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Camperdown	1,082		382	6		7		210	157		11	317	543	**2,715**
2	Castle Glen		5	11				33		4				139	**192**
3	Craigleith 1	328	15	4,758	1,140	50	36	49	25	3,986	20		432	4,177	**15,016**
4	Craigleith 2	8	4	1,898	600		16	18	49	4,587			14	687	**7,881**
5	TBM West Area 1	9				28	30	9		8	11		126	160	**381**
6	Lora Bay	17		97	8	6	263	18		39			457	240	**1,145**
7	PRVP Park	34	25	9			31	1,371	16	76		38	22	860	**2,482**
8	TBM Center Zone	433	14	50	27			19	82	20	16		82	111	**854**
9	TBM Village	142	7	3,582	3,159	3	67	48	8	14,858	41		252	10,143	**32,310**
10	TBM West Area 2	7		12					13	44	130	44	149	233	**632**
11	TBM West Area 3	16						31	25	34	12	236	33	125	**512**
12	Thornbury & Clarksburg	213		242	34	138	605		98	204	201	15	3,131	2,093	**6,974**
13	External	657	121	4,221	674	87	234	1,065	259	9,628	264	106	2,188		**19,504**
Total		**2,946**	**191**	**15,262**	**5,648**	**312**	**1,289**	**2,661**	**785**	**33,645**	**695**	**450**	**7,203**	**19,511**	**90,598**

Source: Streetlight Data's Insight Platform

Table 3-13: Internal Daily Trip Distribution – Summer Saturday 2019

Origin Zone	Name	Destination Zone													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Camperdown	366		159		9	61		28	216	12		235	578	**1,664**
2	Castle Glen		8					22		7				138	**175**
3	Craigleith 1	194		1,262	112	18	4	9		2,342	44	38	280	2,460	**6,763**
4	Craigleith 2			143	448		3			1,361		24	57	849	**2,885**
5	TBM West Area 1			30		14	17		5		26	9	180	147	**428**
6	Lora Bay	38		42		17	929		4	57	18	9	533	576	**2,223**
7	PRVP Park		11	12				445		7	11	21	24	366	**897**
8	TBM Center Zone	5		18	10		5		124	19	14	68	8	164	**435**
9	TBM Village	296		2,355	1,238	5	42	23	46	6,573	50	19	285	9,185	**20,117**
10	TBM West Area 2	46		66	8	49	2		24	42	237	76	142	382	**1,074**
11	TBM West Area 3				18		28	6	21	40	39	368	117	515	**1,152**
12	Thornbury & Clarksburg	270		355	36	226	550	11	100	155	283	67	5,019	3,152	**10,224**
13	External	604	107	2,975	1,055	169	626	437	299	9,549	564	392	3,260		**20,037**
Total		**1,819**	**126**	**7,417**	**2,925**	**507**	**2,267**	**953**	**651**	**20,368**	**1,298**	**1,091**	**10,140**	**18,512**	**68,074**

Source: Streetlight Data's Insight Platform

Table 3-14: Internal Daily Trip Distribution – Fall Weekday 2019

Origin Zone	Name	Destination Zone													Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	
1	Camperdown	209	-	148	2	32	-	9	17	36	-	-	219	566	**1,237**
2	Castle Glen	-	-	-	-	4	-	-	-	5	-	-	3	42	**54**
3	Craigleith 1	148	-	596	40	4	44	4	9	656	9	-	126	1,347	**2,984**
4	Craigleith 2	-	-	50	63	-	-	8	11	307	-	13	17	228	**696**
5	TBM West Area 1	10	-	22	-	72	19	4	13	24	25	-	223	167	**580**
6	Lora Bay	17	-	19	-	21	291	-	-	34	24	26	398	350	**1,180**
7	PRVP Park	4	11	8	-	-	-	173	6	8	5	-	9	318	**543**
8	TBM Center Zone	38	-	10	-	3	-	19	26	10	5	-	47	99	**257**
9	TBM Village	16	7	694	360	5	47	4	4	3,460	38	11	197	4,404	**9,246**
10	TBM West Area 2	27	-	20	-	34	19	-	30	4	134	35	185	256	**745**
11	TBM West Area 3	-	-	-	-	-	-	-	9	16	14	52	41	143	**275**
12	Thornbury & Clarksburg	132	3	165	15	259	535	6	73	187	254	44	4,261	2,826	**8,759**
13	External	586	40	1,389	241	318	340	259	156	4,383	281	153	2,899		**11,045**
Total		**1,187**	**61**	**3,122**	**721**	**753**	**1,295**	**485**	**355**	**9,130**	**790**	**332**	**8,625**	**10,746**	**37,601**

Source: Streetlight Data's Insight Platform

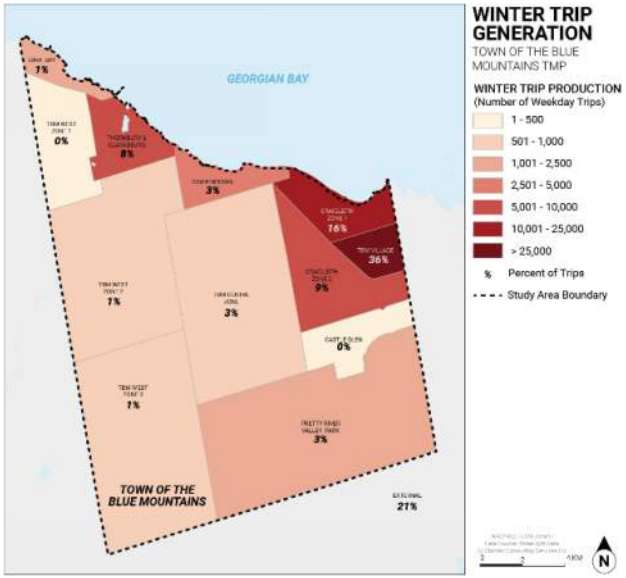


Figure 3-28 The Blue Mountains Internal Zones Trip Production in 2019 Winter Saturdays

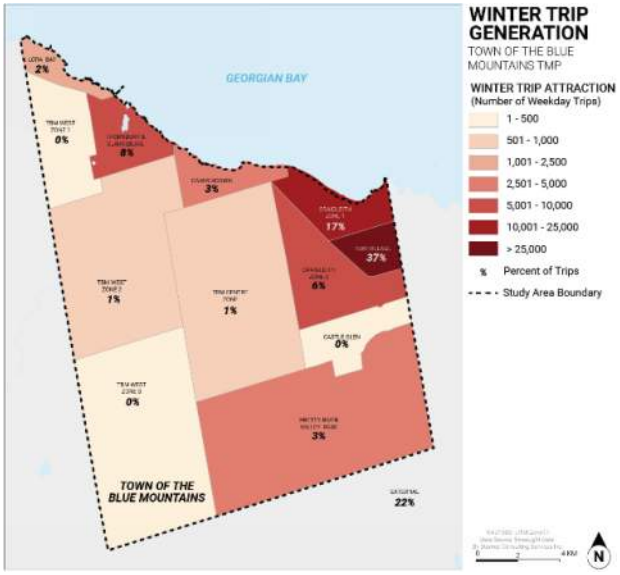


Figure 3-29 The Blue Mountains Internal Trip Attraction in 2019 Winter Saturdays

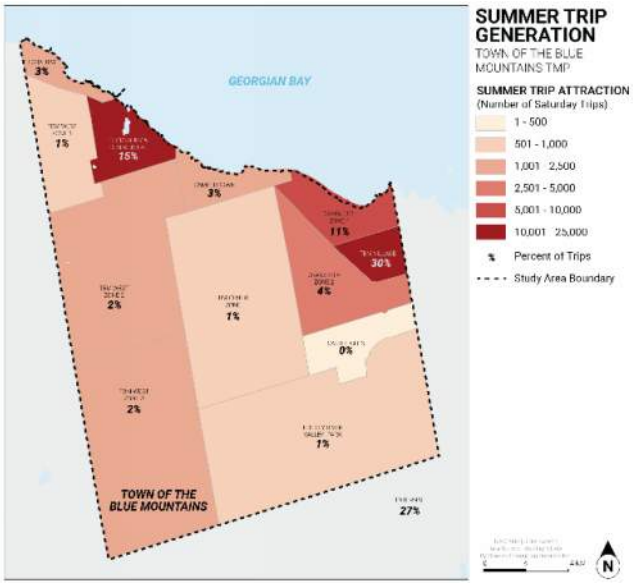


Figure 3-31 The Blue Mountains Internal Zones Trip Attraction in 2019 Summer Saturdays

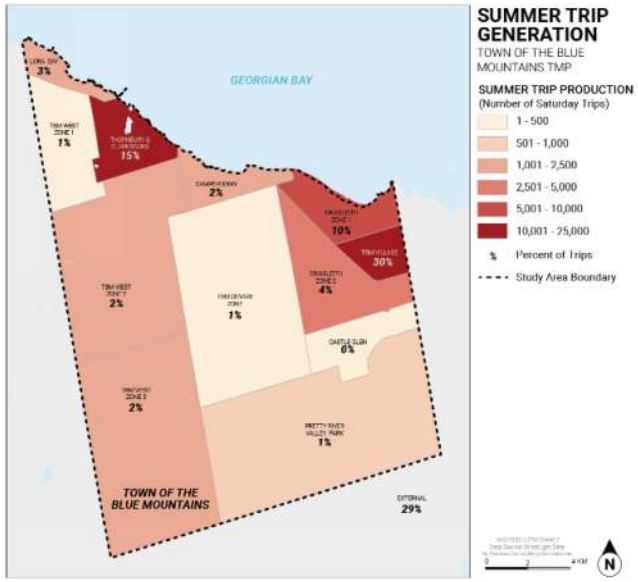


Figure 3-30 The Blue Mountains Internal Zones Trip Production in 2019 Summer Saturdays

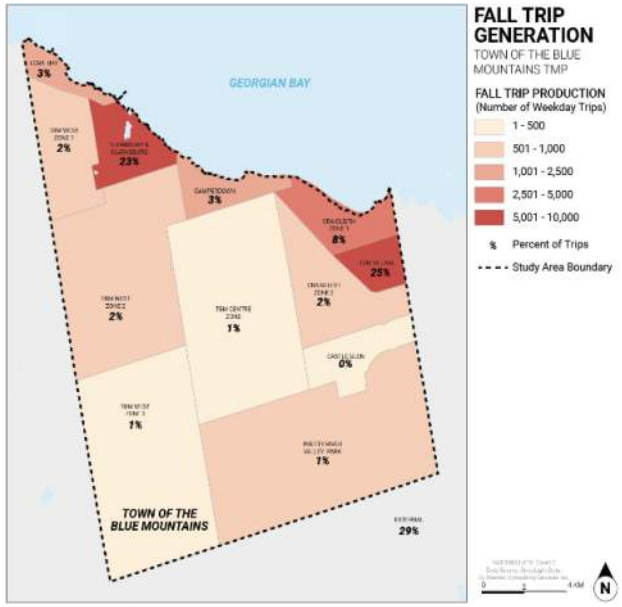


Figure 3-32 The Blue Mountains Internal Zones Trip Production in 2019 Fall Weekdays

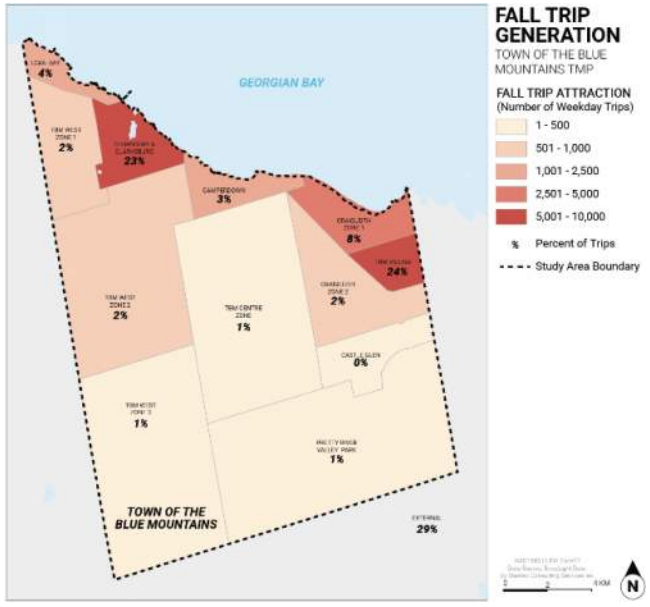


Figure 3-33 The Blue Mountains Internal Zones Trip Attraction in 2019 Fall Weekdays

Stantec reviewed pass-through traffic volumes at the following five selected gates at the borders of TBM:

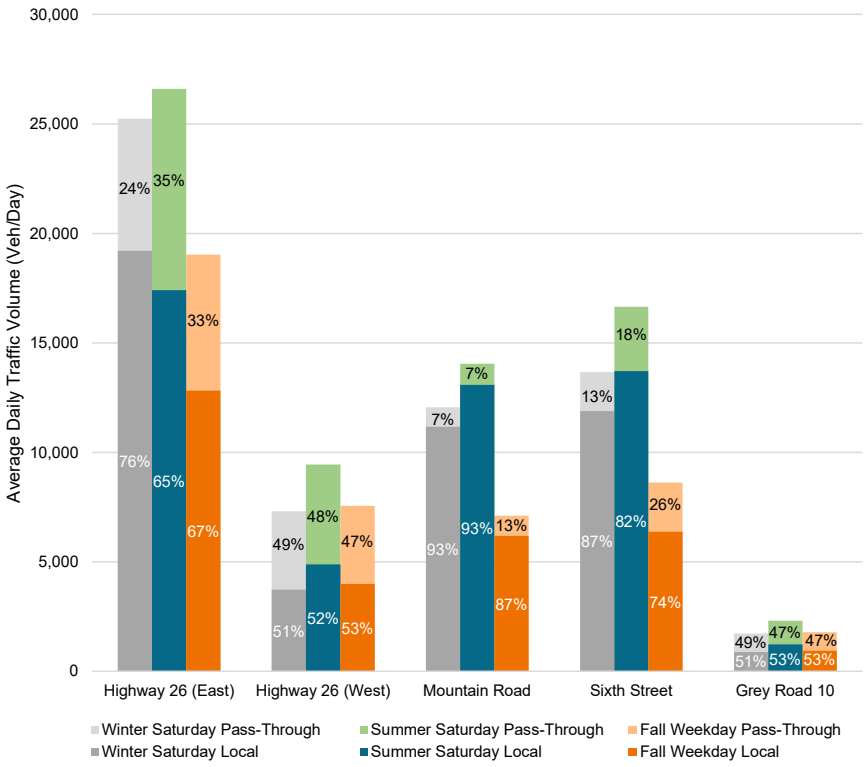
Highway 26 East: bi-directional gate east of Regional Road 21
Highway 26 West: bi-directional gate west of 10th Line
Mountain Road: bi-directional gate east of Regional Road 21
Six Street: bi-directional gate east of Regional Road 21
Gray Road 10: bi-directional gate east of 10th Line.

Table 3-15 summarizes the estimated TBM local and pass-through average daily traffic at the study gates for 2019 winter Saturday and fall weekdays. Key findings are:

Highway 26 East gate has the highest daily total traffic and pass-through traffic in both study periods.
Mountain Road has the lowest share of pass-through trips among the gates.
While daily traffic volumes are lowest at Grey Road 10 gate, the highest share of pass-through trips were observed at this gate.

Table 3-15 The Blue Mountains Gates Local and Pass-Through Daily Traffic – 2019

Selected Gate	Winter Saturday			Summer Saturday			Fall Weekday		
	Local	Pass-Through	Total	Local	Pass-Through	Total	Local	Pass-Through	Total
Highway 26 (East)	19,218	6,024	**25,242**	17,417	9,180	**26,597**	12,824	6,200	**19,024**
Highway 26 (West)	3,731	3,575	**7,306**	4,886	4,563	**9,449**	3,991	3,570	**7,561**
Mountain Road	11,162	899	**12,061**	13,093	957	**14,050**	6,192	922	**7,113**
Sixth Street	11,891	1,780	**13,671**	13,717	2,934	**16,651**	6,376	2,258	**8,634**
Grey Road 10	880	854	**1,734**	1,224	1,093	**2,317**	945	838	**1,783**



Source: Streetlight Data's Insight Platform

Figure 3-34: The Blue Mountains Gates Local and Pass-Through Average Daily Traffic, 2019

3.6 BASE YEAR TRAVEL DEMAND MODELLING

3.6.1 Inputs & Assumptions

The Town of the Blue Mountains Travel Forecasting Model is a tool used to predict and analyze the impact from traffic volume changes in the Town, adjacent municipalities, and Highway 26 pass-by trips. The model has been prepared for the winter and summer weekend peak hours based on the travel information extracted from StreetLight and road network characteristics. The Travel Forecasting Model is a tool used to quantify the impacts in congestion based on the

changes in transportation demand using the available transportation network capacity within the TBM's road network in response to changing demographic and transportation conditions

The winter and summer weekend peak hour models were developed as these peaks have higher traffic volumes on the Town's local roads along with the pass-by trips along Highway 26 and also tends to capture a wider range of traffic issues and limitations on the road network. The key features of the models are summarized in **Table 3-16**.

Table 3-16: TBM Model Summary

Model Platform	PTV Visum
Modelled Peak Hours	Winter Saturday Peak Hour Summer Saturday Peak Hour
Forecast Year	Base Year 2019 Future Year 2032 Future Year 2042
Geographic Scope	Town of the Blue Mountains and adjacent municipalities including Collingwood and Meaford
Trip Mode Modelled	Auto
Trip Generation	Based on StreetLight Data
Trip Distribution	Based on StreetLight Data
Trip Assignment	Equilibrium Assignment
Zones	Disaggregated StreetLight Zones
Volume Delay Function	BPR Standard
Road Network	Based on Adjusted TBM Road Network GIS

The network road class assumptions are shown in **Table 3-17**. The estimation of travel time is based on utilizing a standard Bureau of Public Roads (BPR) volume delay function (VDF) which estimate congested travel times as a function of each roadway's demand, free-flow speed, and effective capacity. The concept is based on the fact that when the traffic volumes are approaching the lane capacity, travel times are expected to be longer than the times with free-flow speeds and vehicles will experience congestion on the road.

Table 3-17: Road Class Assumptions

Road Class	Free-flow Speed (km/h)	Capacity (vehicle/lane/h)
Highway 26	Variable	1000
Highway 26 - urban	60	700
Arterial	Variable	800
Collector	Variable	600

The model's zone system is based on the location of major population and employment areas. The zone system used for extracting StreetLight data was used as the main zones system and then further disaggregated to the transportation analysis zones used in the model. It consists of 36 internal zones for TBM, 2 zones for Collingwood and Meaford, and 6 external gateways connecting to Highway 26 and other surrounding municipalities. The existing model network, transportation zones, and zone connectors are shown in **Figure 3-35**: TBM Model Zone System and Error! Reference source not found..

Figure 3-35: TBM Model Zone System

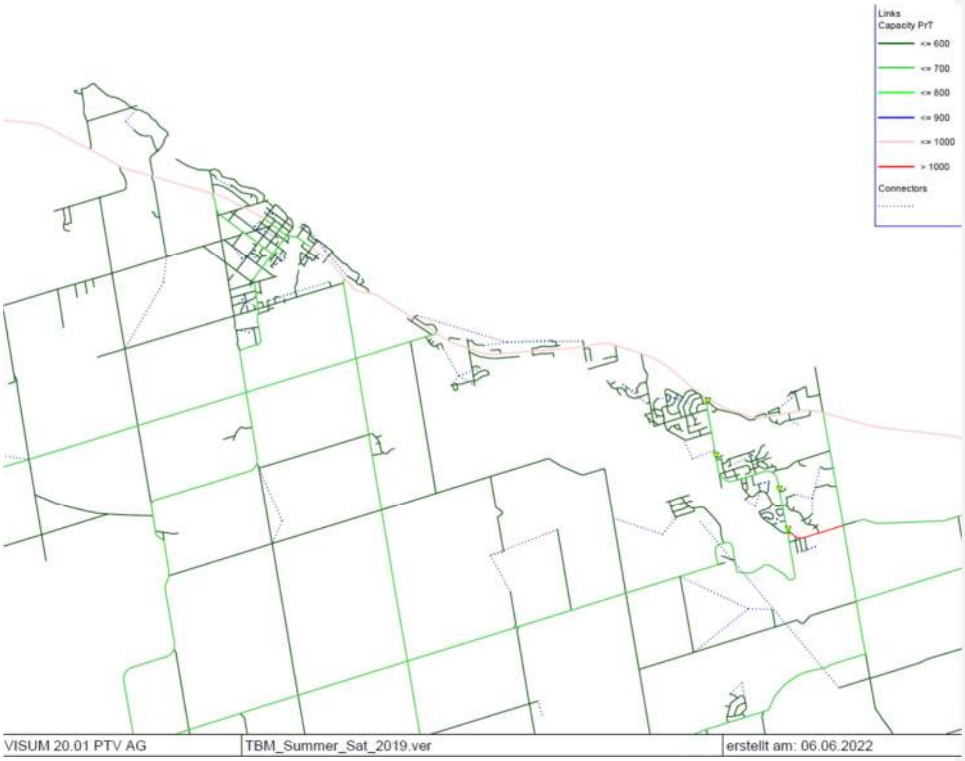


Figure 3-36: Existing Model Road Network

3.6.2 2019 Peak Hour Results

The peak hour of traffic demand was identified as occurring on a Saturday in mid-summer followed closely by a Saturday in mid-winter. While these don't reflect the typical traffic demands on the transportation network, these peak demand times were chosen for the modelling exercise. **Figure 3-37** shows the model output (volume to capacity ratio) for the peak summer demand and **Figure 3-38** for the peak winter demand. Red indicates that a segment of road is near or over capacity, while orange, light green and dark green show more and more residual capacity.

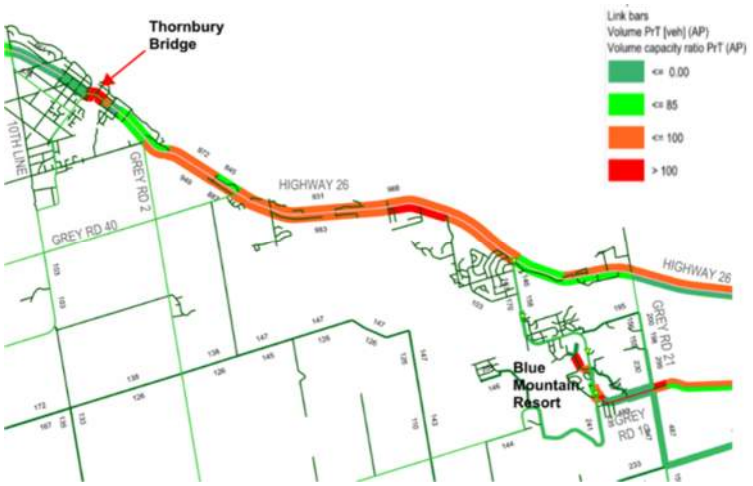


Figure 3-37: Summer Saturday Peak Hour Model Output (2019)

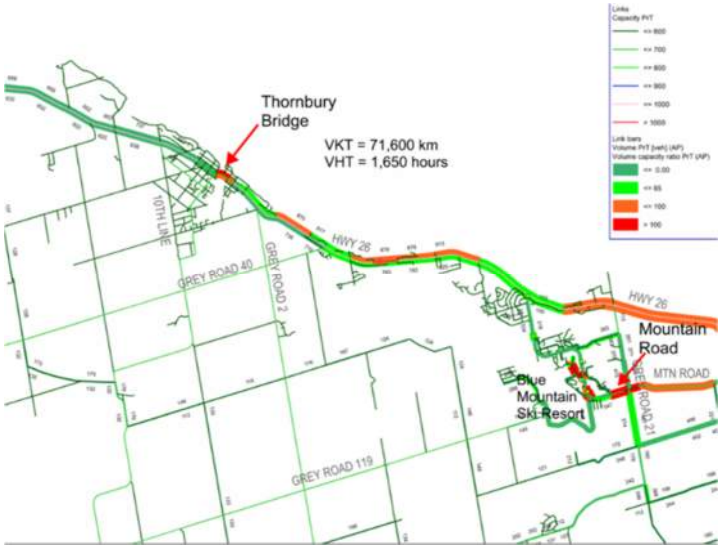


Figure 3-38: Winter Saturday Peak Hour Model Output (2019)

Figure 3-37 shows that there are congestion points at the Thornbury Bridge, a short eastbound segment of Highway 26 approaching Blue Mountain Resort, and some localized segments in the Blue Mountain Resort area. Highway 26 experiences a high traffic demand, but there is residual capacity. **Figure 3-38** shows that the Thornbury bridge westbound and a segment of Mountain Road near the Blue Mountain Resort are points of congestion. These figures illustrate that more of Highway 26 between the Resort and Thornbury experiences higher levels of congestion during the summer peak hour and that winter congestion is concentrated more toward the east side of the study area along Highway 26 and within the resort area due to the high traffic demand associated with the resort area.

3.7 COLLISION DATA REVIEW

3.7.1 Historical Data

Stantec reviewed collision reports from 2015 to 2020 to assess the frequency and type of collisions in TBM:

Collisions with animals (17%), speed related collisions (15%), and failure to yield right of way (8%) were the most frequent types of collisions.
Collisions increased consistently from 2015 to 2019 and dropped in 2020 when traffic declined during the COVID-19 pandemic.
Five collisions resulted in fatal injuries (1%), 100 resulted in non-fatal injuries (13%), and the remaining 671 collisions resulted in property damage only (86%).
Nine collisions involved pedestrians and 9 collisions involved bicycles.

Figure 3-39 illustrates collision events in TBM. The results show that the highest number of collisions were reported in the Blue Mountains Village Area and in Thornbury along Highway 26 (Arthur Street) at its intersection with Bruce Street South. The data used to generate this figure is only as recent as 2020. However, a known motorcyclist/cyclist related fatality occurred at the intersection of Highway 26 & Grey Road 113/10th Line in April 2022.

Error! Reference source not found. illustrates collision events and speed related collision events in TBM and **Figure 3-41** presents pedestrian and cyclist collision events in TBM. Error! Reference source not found. shows that Grey County Road 19, County Road 119, and Highway 26 have the highest frequency of collisions related to speeding. **Figure 3-41** shows most pedestrian and cyclist collisions occurred at County Road 19 and Highway 26 in Thornbury and the Blue Mountain Village area.

The speed related collision events were also explored by weather conditions at the time of the event. Out of a total of 113 speed related collision events, 103 (91%) were categorized as "speed – too fast for conditions" while only 10 (9%) were categorized as "speed – excessive."

This indicates that collisions because of excessive speeding are much less common than speeding faster than the conditions allow, such as in snow or rainy conditions. The breakdown of weather for the “speed – too fast for conditions” category is shown in **Figure 3-40**: Speed Related Collision Events in TBM

Table 3-18.

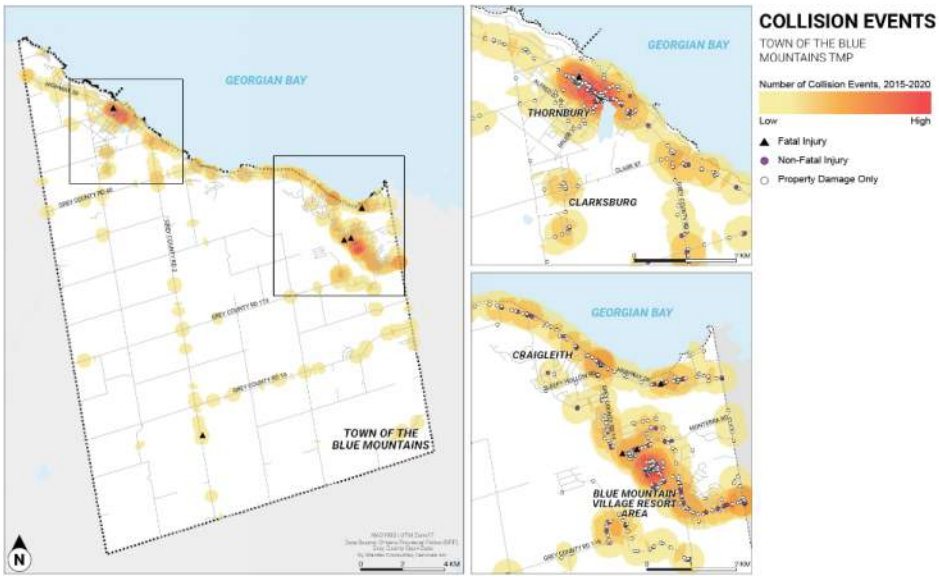


Figure 3-39: All Collision Events in TBM
Source: Town of the Blue Mountains & Stantec

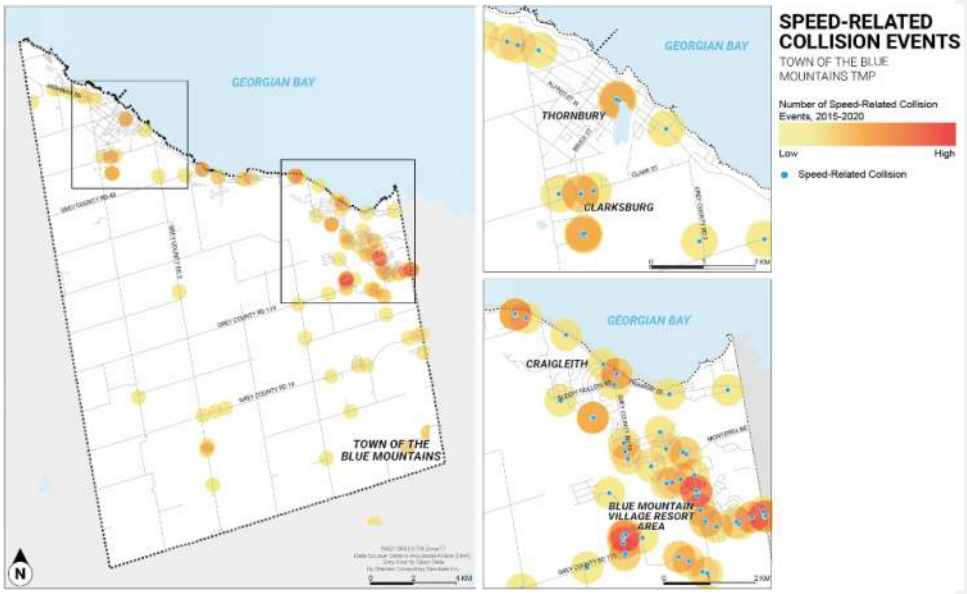


Figure 3-40: Speed Related Collision Events in TBM

Table 3-18: Speed Related Collision Events in TBM by Weather Conditions

Speeding Category	Weather Conditions	Count	Percent
Speed -- too fast for conditions	Snow	52	46.0%
	Clear	32	28.3%
	Drifting Snow	10	8.8%
	Freezing Rain	3	2.7%
	Rain	3	2.7%
	Strong Wind	2	1.8%
	Other	1	0.9%
Speed -- excessive		10	8.8%
Total		**113**	**100.0%**

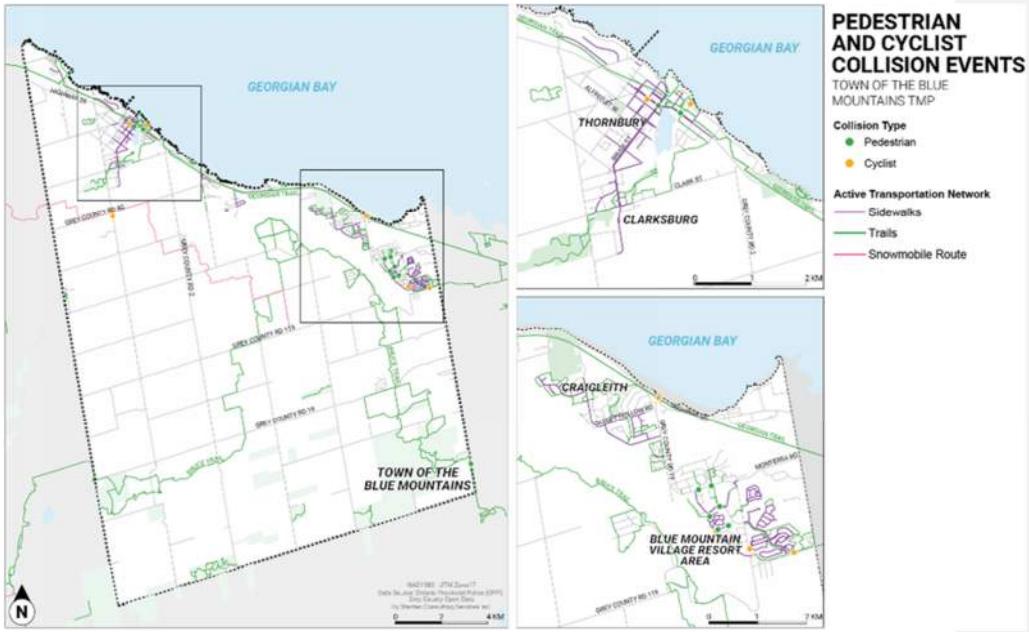


Figure 3-41: Pedestrian and Cyclist Collision Events in TBM

Source: Town of the Blue Mountains & Stantec

3.7.2 Conclusions

The collision data available indicates, unsurprisingly, that the significant collisions are concentrated in the built-up areas. This is generally related to the increase in activity (vehicular and otherwise) that is located where people live and work. This indicates that the need for infrastructure that supports the objectives of reduction or elimination of road collisions, should consider considerable investment on those major corridors that have these collisions. In particular Grey Road 19 through the resort areas, which has considerable excessive speed related collisions. This corridor could benefit from a full Safety Audit, though this recommendation would need to be discussed with Grey County. Similarly the conditions of Highway 26 as it passes through Thornbury, while more challenging to influence due to provincial jurisdiction, should be reviewed for design consideration which can better support the urban function of Thornbury in contrast with the rural function of Highway 26 as a high-volume, high-speed roadway.

4.0 STAKEHOLDER ENGAGEMENT (ROUND 1)

4.1 ONLINE SURVEY 1

The online survey and online mapping survey were available prior to Online PIC 1 from June 23, 2021, to July 16, 2021. The survey was hosted on the Town's dedicated webpage for this study (https://yourview.thebluemountains.ca/transportation-master-plan) through the Bang the Table survey application. The online mapping survey was hosted via an ArcGIS platform. The goal of these surveys was to collect information on how people use the transportation network, identify priorities concerning transportation, and obtain feedback on the overall vision for the future multi-modal transportation network.

The online mapping survey also offered survey participants an opportunity to identify areas of concern or opportunity within the Town's transportation network. As part of this mapping exercise, users were asked to select from a list of transportation topics and place points on a map of the Town related to specific locations and provide their feedback.

A total of 490 unique visits were made to at least one page of the online survey. Visitors to the site completed 233 online surveys and the Town received 18 hard copies of the survey, which were added to the database. The online mapping survey collected 115 unique map points. The survey results help to guide the TMP but it should be noted that they don't necessarily encompass and reflect the views and opinions of all stakeholders and community members.

The following themes were identified through the survey responses:

In addition to the themes identified above, the following survey results were identified:
67% of survey participants noted that they are a permanent resident of the Town of The Blue Mountains
Over 70% of survey participants were 55 and older
Most people travel to use services or to shop in the Town
Driving a car is the most frequently used travel mode (82%) to get around Town and the most preferred travel mode (55%)
Traffic volumes and congestion, road safety, and expanding walking and cycling infrastructure are the three top transportation issues
Improvements identified that could make travel safer and/or more convenient include adding paved shoulders on roads to improve safety for cyclists, separating cyclists and pedestrians from motor vehicle traffic at more locations, improving pedestrian and cyclist crossings, improving traffic signal timing at intersections, and adding intersection improvements (e.g., turning lanes, turn arrows, traffic signals, traffic circles) at more intersections
Desire to prioritize cycling and pedestrian facilities and improve education on sharing the road for cyclists and motorists
More than 50% of participants noted that driving a car is their preferred travel mode and 20 % selected bicycle as their preferred travel mode (see Figure 4-1**).**

Overall, most survey participants noted that there are no barriers for them to use their ideal travel mode but 23% said inadequate transportation infrastructure is a barrier to them using their ideal travel mode (see Figure 4-2).

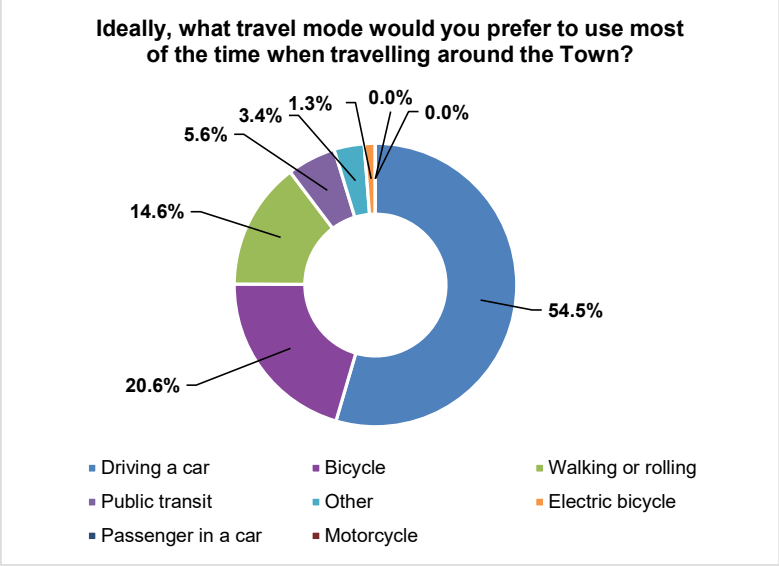


Figure 4-1: Online Survey Question # 7 Results

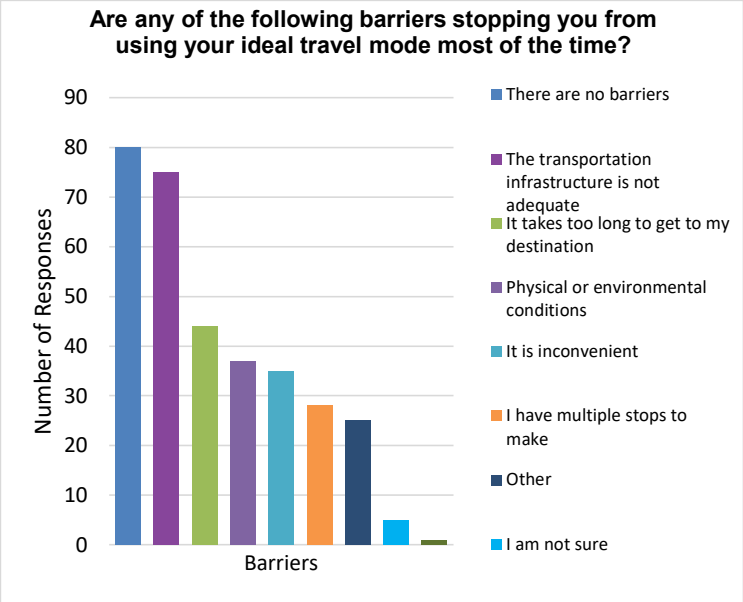


Figure 4-2: Online Survey Question # 9 Results

Safety and improvements to the existing transportation network were another focus of the online survey. A series of questions asked about safety, speed management and potential improvements for safety. Survey participants were asked to rank key transportation issues for the TMP.

Traffic volume and congestion, road safety, and expanding walking and cycling infrastructure were ranked as the three most important transportation issues that the TMP should consider for the future of the Town, while expanding public transportation services, availability of parking for cars, and preparing for new technologies (autonomous vehicles) were ranked as the three least important transportation issues (see **Figure 4-3**).

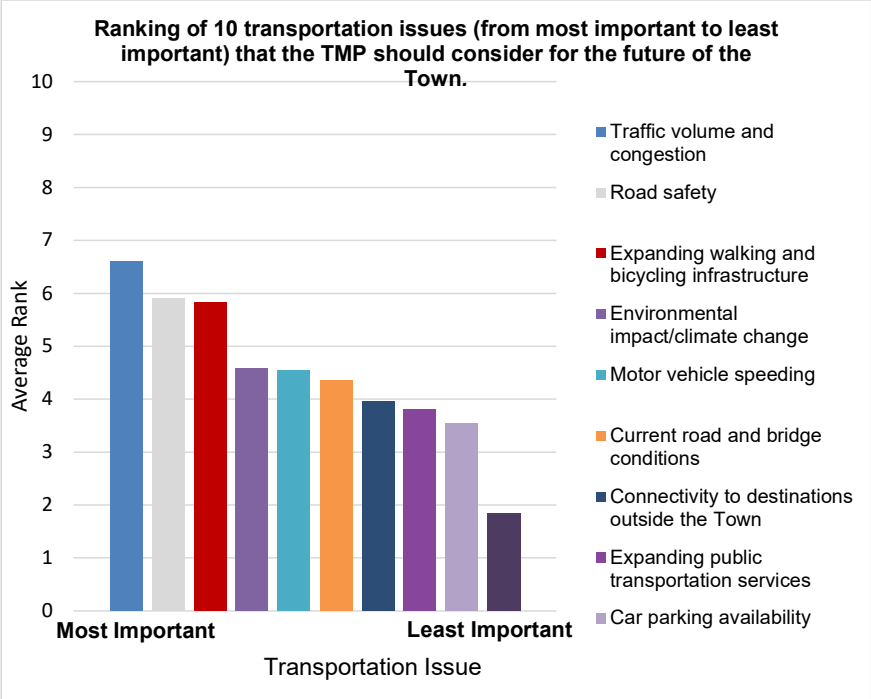
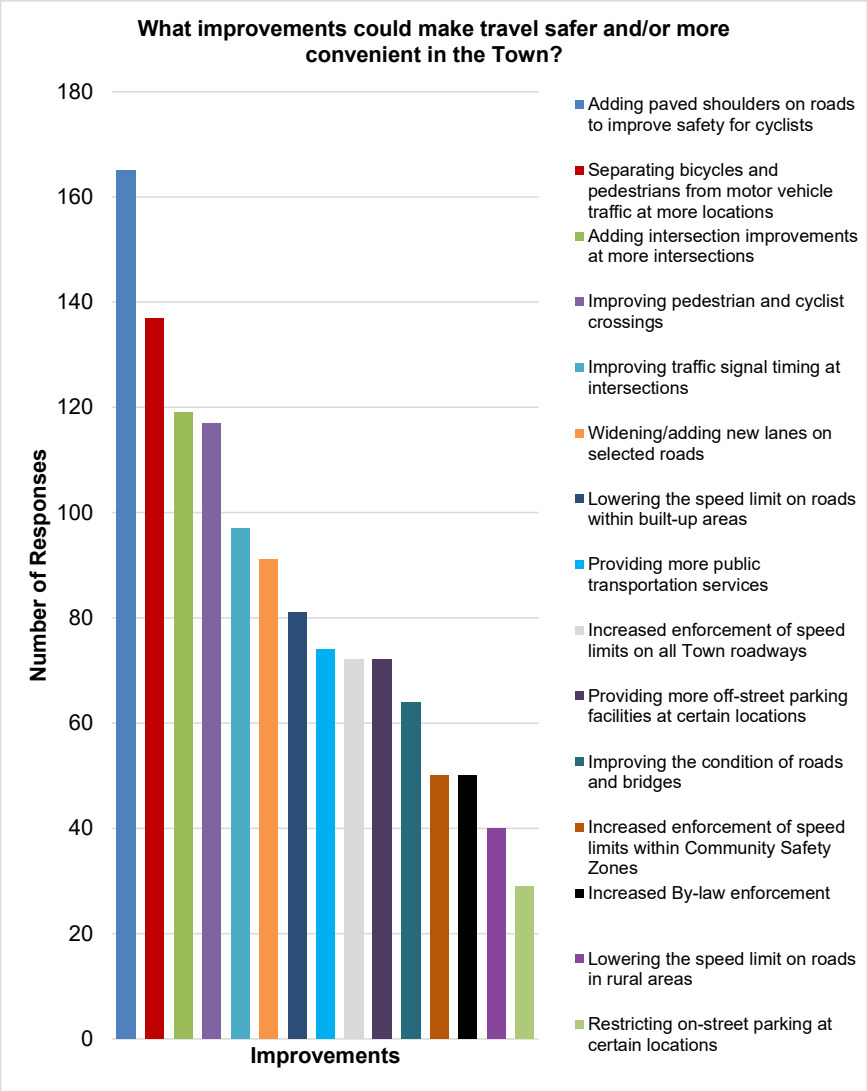


Figure 4-3: Online Survey Question # 12 Results

Most improvements identified by survey participants to make travel safer in the Town were focused on improvements to increase the safety of cyclists and pedestrians. The most popular suggested improvements were adding paved shoulders on roads to improve safety for cyclists, separating bicycles and pedestrians from motor vehicle traffic, adding intersection

improvements, and improving pedestrian and cyclist crossing facilities at certain locations (see



).

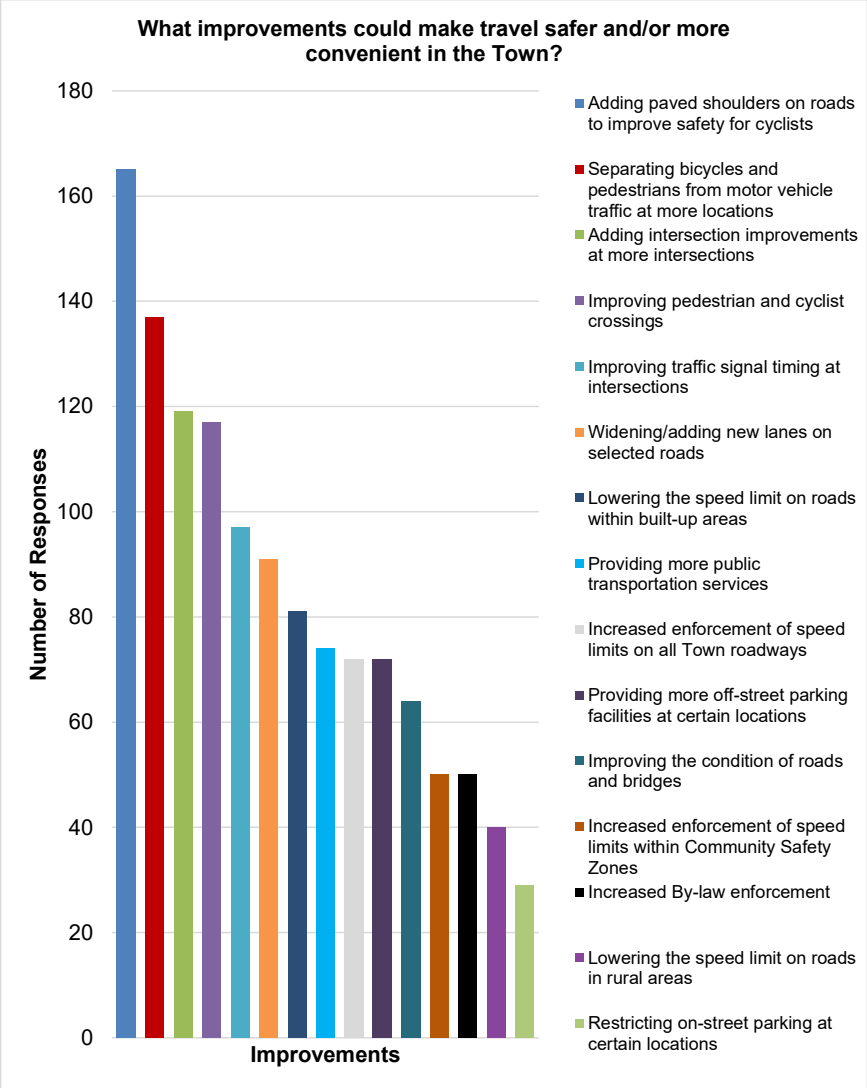


Figure 4-4: Online Survey Question #13 Results

The online survey also included questions on public transit and active transportation.

The majority of participants said they do not use public transit. Nearly a quarter of participants were not aware of the public transit services currently available in the Town. While nearly a quarter of participants noted that no improvements would get them to use public transit, the remainder said that better service, coverage, and routing; better access and connectivity to destinations; and more information concerning transit services would encourage them to use the service (see **Figure** 4-5).

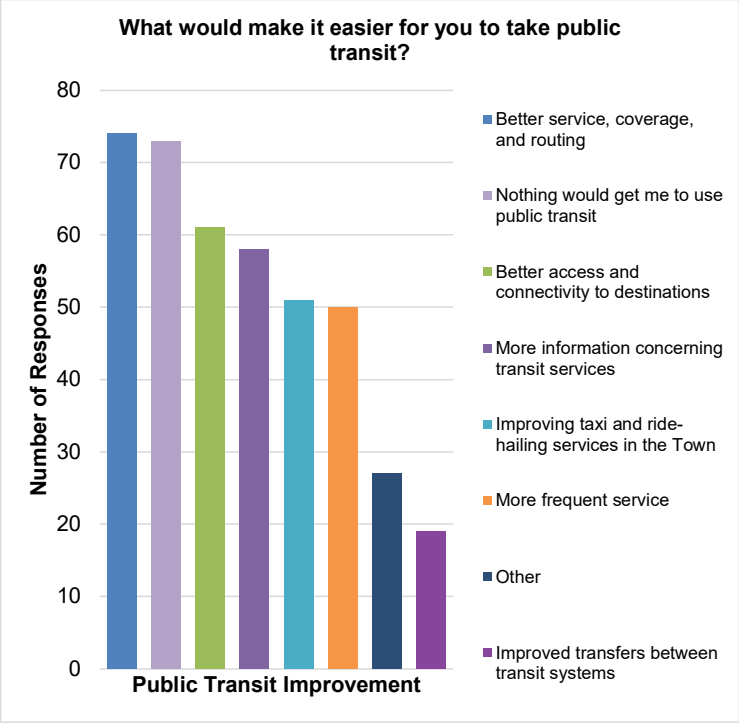


Figure 4-5: Online Survey Question # 17 Results

The survey responses indicate a moderate level of bicycle or e-bike use as a travel mode with over half of survey participants using a bicycle or an e-bike at least once a week and a third using a bicycle or e-bike more than once a week although one-third rarely or never use a bicycle or e-bike (see **Figure 4-6**). The Georgian Trail, the Beaver River Trail, and Town roads such as Cameron Street, Grey Road 19, Grey Road 13, Grey Road 2, 10th Line were listed as popular cycling routes for various reasons including recreation, ease of access, safety, and connections to amenities.

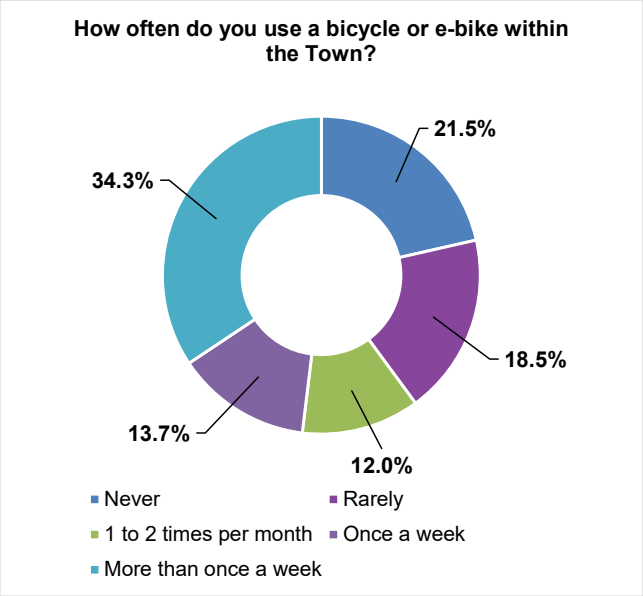


Figure 4-6: Online Survey Question # 18 Results

The survey also included a question asking participants to rate how strongly they agreed or disagreed with a series of statements regarding transportation infrastructure in the Town (**Figure 4-7**). The statements included topics such as active transportation facilities, Off-Road Vehicles, Highway 26, parking facilities, and potential road improvements. More than 60% of participants agreed or strongly agreed that there are intersections on Highway 26 in the Town that need traffic lights or a roundabout. Most participants strongly disagree with the Town allowing Off-Road Vehicles for recreation purposes on the Georgian Trail. Most participants (66%) strongly agreed or agree that there should be an alternate route built to support Highway 26 regional traffic around Thornbury, while the remaining third participants were split among Neutral, Disagree and Strongly Disagree.

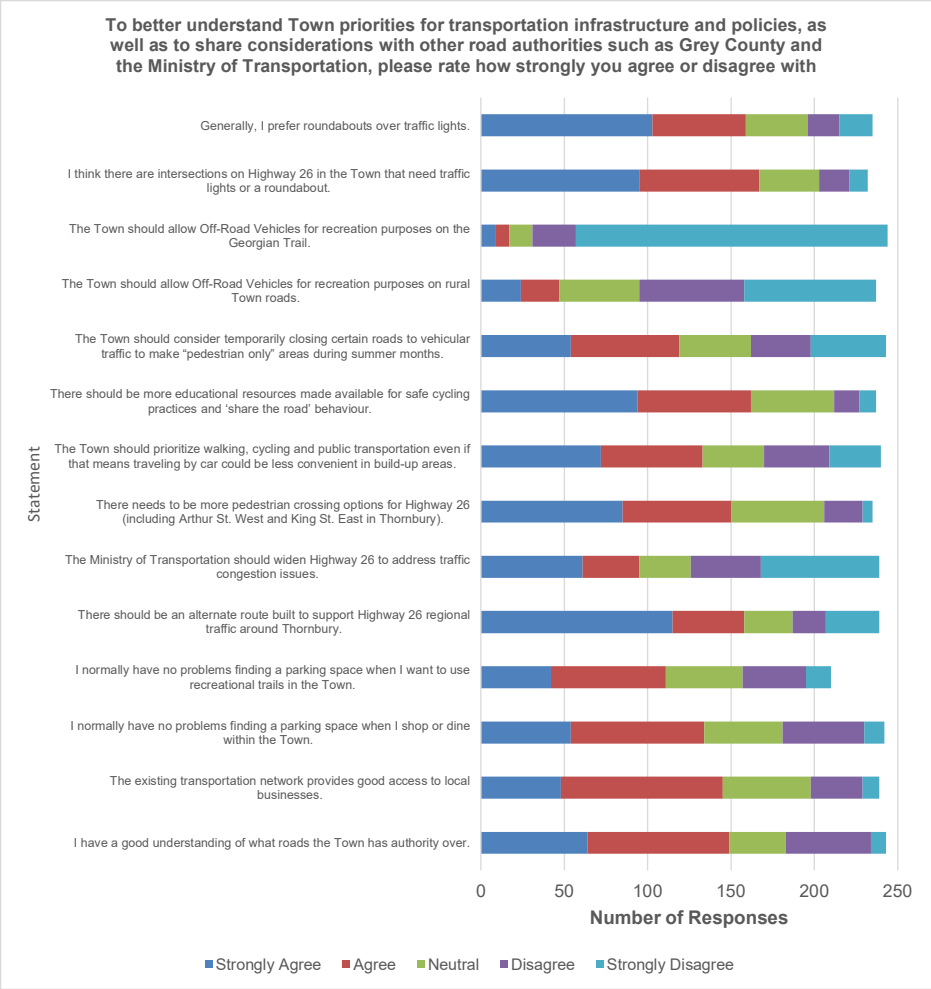


Figure 4-7: Online Survey Question # 21 Results

Overall, survey participants said they enjoy travelling in the Town because of the ease of driving, good calm traffic conditions during tourism off-season, proximity to amenities and shops, and access to the Georgian Trail.

The online mapping survey results are summarized in **Figure 4-8 and Figure 4-9**. Based on the feedback received through the online mapping survey, it was generally noted that most feedback was focused within the Thornbury area, with some points noted along Highway 26, as well as within the mid-portion of Blue Mountain Village. Specifically, the following themes were identified:

Many road safety points within Thornbury adjacent to Highway 26, as well as along 4th Line and 6th Line and Side Road 21
Speeding issues were also identified within Thornbury, and along Highway 26
Concerns associated with the intersection operations in Thornbury and Blue Mountain Village
New active transportation infrastructure needs within Thornbury as well as on Grey Road 40 and Beaver Valley Road.
Traffic volume capacity issues in Thornbury, as well as along Highway 26, Mountain Road, and County Road 2.

The map legend and key to the survey result symbols are provided below:

Figure 4-8: Online Mapping Survey Results

Figure 4-9: Online Mapping Survey Results (Thornbury)

4.2 PURPOSE OF ONLINE PUBLIC INFORMATION CENTRE 1

The purpose of Online PIC 1 was to present and gather feedback on the TMP study process, the goals and objectives of the TMP, existing travel conditions and community characteristics, community input on transportation infrastructure in the Town, as well as next steps in the TMP process. Comment form links were imbedded in the Online PIC presentation where interested persons could submit their input and feedback on particular topics in the Online PIC content (i.e., input on challenges and opportunities identified for the TMP, preliminary evaluation criteria, draft vision statement) or general comments as well.

Interested persons were also encouraged to contact the study team directly, should they have any additional comments, concerns and/or wished to be added to the study mailing list.

4.3 NOTIFICATION

The Notice of Online PIC 1 was distributed to the public, agencies, utilities, stakeholders and First Nations through the three methods outlined in Table 4-1

below:

Table 4-1: Online PIC 1 Notification Methods

Method of Distribution	Date of Distribution
Emailed electronic copy to study mailing list	July 16, 2021
Emailed electronic copy to TMP Your View (Bang the Table) subscribers	July 16, 2021
Project Website and Town Website Notice	July 16, 2021
Posted in the local newspapers (Blue Mountains Review & Collingwood Connection)	July 22, 2021 & July 29, 2021
TMP Newsletter to Town Advisory Committee Members	August 6, 2021
Reminder email to study mailing list	August 18, 2021
Reminder email to TMP Your View (Bang the Table) subscribers	August 18, 2021

Study team member contact information was also provided within the notification, and on the study webpage.

4.4 LOCATION, DATE AND TIME

As mentioned, the first PIC was held online, and consisted of a recorded presentation that was hosted on the study website (https://yourview.thebluemountains.ca/transportation-master-plan), beginning on July 29, 2021 and concluding on August 27, 2021.

4.5 REFERENCE MATERIALS

The following displays were presented as part of the online PIC presentation:

Welcome
Transportation Master Plan Study Area
TMP Background and Context
TMP Objectives
Master Planning Process
Consultation Process
Challenges and Opportunities
Community Characteristics
Land Use Characteristics
Existing Road Network
Existing Active Transportation Network
Existing Off-Road Vehicle (ORV) Use
Existing Transit Network

Existing Travel Trends: Mode Share
Existing Travel Trends: Seasonal Trips
Existing Travel Trends: Hourly Distribution
Existing Travel Trends: Traffic Distribution
Existing Trends: Active Transportation
Collision Data Review
Online Survey Results
Draft Vision Statement
Guiding Principles
Proposed Evaluation Criteria
Next Steps

4.6 FORMAT

As noted, due to the COVID-19 pandemic, the PIC was hosted online via the study website (https://yourview.thebluemountains.ca/transportation-master-plan). A recorded presentation, including the transcript and displays, were available for review, and members of the public were encouraged to complete the online comment forms, and to contact the project team to ask questions and/or share any ideas with respect to the study. Comment forms were provided via a link to a Survey Monkey comment format. Online PIC 1 participants were encouraged to submit their comments online, either within the online comment forms, or by email and/or telephone by August 27, 2021.

4.7 PARTICIPATION

Statistics were gathered during the online PIC period (i.e., from July 29 to August 27, 2021) to determine the number of viewers of the online presentation. A total of 99 unique visits to the project website were made during the PIC time period. The most number of unique visits to the website in a day was 22 visits on August 18, 2021. Figure 4-10 shows the unique visits by date.

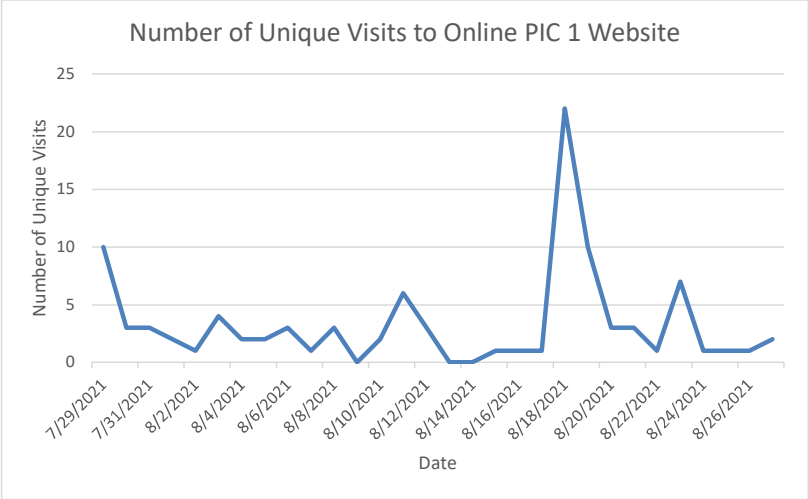


Figure 4-10: Number of Unique Visits to Online PIC 1 Website

4.8 ONLINE PIC 1 COMMENTS AND RESPONSES

During the Online PIC 1 period, participants submitted comments via the online survey questions embedded within the recorded PIC presentation and/or via the email address provided on the Town's engagement website. In total, six people submitted comments via the SurveyMonkey embedded comments links provided within the PIC presentation. A total of fourteen email comments were submitted during the Online PIC period. The embedded comments links were intended to provide the public with the opportunity to provide feedback on preliminary evaluation criteria, TMP objectives, the draft TMP Vision Statement, and any additional inputs they wished to provide.

4.9 ONLINE PIC 1 THEMES

Based on the comments submitted via email and via the imbedded comment links within the PIC presentation, the following themes were identified:

Excessive speeding on Highway 26

Requests to lower speed limit on Highway 26

Highway 26 should be re-routed and should bypass Town of Blue Mountains

Highway 26 should not be widened

Speed reductions on specific roads such as Sunset Boulevard, Sleepy hollow Road, and Grey Road 19

Roundabouts should be implemented at Highway 26 and County Road 21

The waterfront should be protected

Safety for pedestrians due to speeding vehicles

Design for more pedestrian and cyclist friendly communities and multi-modal activities

The environment and greenhouse emissions must be considered for the TMP

Agricultural communities should be considered as part of TMP

Pedestrian safety at Highway 26 and crossing roads like Elgin

Paved shoulders on roads for cyclists

5.0 GUIDING THEMES & OBJECTIVES

The preparation of a TMP is an opportunity to update transportation provisions and objectives for The Blue Mountains community. Our foregoing assessment of current transportation infrastructure and services will provide a foundation for determining future improvements. Directions will consider the latest thinking to create a balanced multi-modal transportation system.

5.1 USING THE TMP

The TMP is meant to be used by transportation stakeholders as both a reference and a guiding document for developing strategies and making investment decisions. It may also be used as a starting point for developing more detailed plans and analyses for transportation-related studies, projects, and initiatives. This is underpinned by the Town's transportation vision, goals, strategy, and initiatives to help TBM grow into the future. More specific examples illustrating how the TMP may be used include:

The public may have an interest in following the development of transportation initiatives in the town and in gaining a better understanding of how mobility choices will improve in the future. The TMP empowers the public to actively participate in the change and prepare for its benefits.

Elected Officials should use the TMP to assist in decision making. They can also use it to educate and engage their constituents about transportation-related changes that will impact their neighbourhoods and the community.

Town staff should use the TMP as a guide to make clear, balanced and fiscally prudent decisions on transportation initiatives, infrastructure investments, and program administration. In general, TMPs can be used as the basis for implementing the Town's Official Plan.

Town engineers, designers, and capital delivery programs staff should scope transportation capital programs and plans to implement the TMP.

Town transportation professionals, planners, and health practitioners will be able to use the transportation system performance targets to achieve modal-split aspirations and improve the reliability of travel by balancing the transportation network for all users, regardless of age, ability, or income.

The TMP can put the Town into a "state-of-readiness" for partner-funded transportation initiatives (e.g., Federal, Provincial, Public-Private-Partnerships) as funding becomes available and partners are engaged.

Prospective investors in the Town may use it to make development decisions based on transportation initiatives that result in new available transportation connections.

5.2 EMERGING TRENDS

Approaches to transportation and community development are constantly evolving. Transportation professionals have access to increased data and improving analytical tools. Emphasis is increasingly placed on comprehensive approaches that consider transit and active transportation alongside motor vehicle movement. The goal, now, is more often to encourage alternative modes of travel and, ensure that they can co-exist comfortably and safely with motor vehicles. New data, improved data processing and communications, and new approaches are creating more varied, attractive, and environmentally friendly transportation networks.

5.2.1 Smart Cities and Open Data

The application of Big Data is a major trend in all forms of management and analysis. Smart Cities describes the leveraging of Big Data by municipalities across Canada and the world to enhance urban and regional planning. A Smart City is an urban area that uses different types of electronic data collection sensors to supply information to manage assets and resources efficiently. In terms of mobility, traditional methods of data collection use pneumatic tubes or manual counting for traffic recording. These mechanical methods are often costly to implement, prone to high maintenance costs, and difficult to leverage for alternative modes of transportation like transit, cycling, and walking. As illustrated in **Figure 5-1,** there are new ways to leverage information and communication technology to optimize the cost-effectiveness of data collection and the efficiency of town operations to promote a dialogue between town planners and the public and to better understand how people travel within the community.

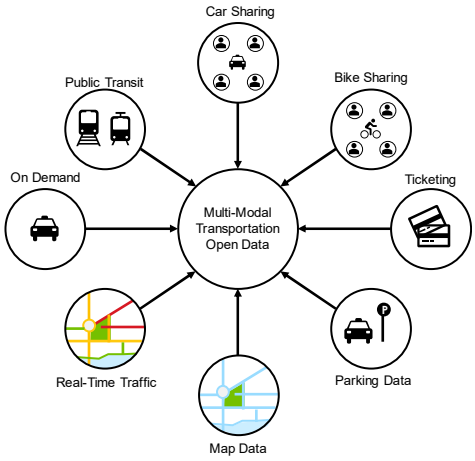


Figure 5-1: Multi-Modal Transportation Open Data

The foundation of this trend is open data or databases that are available free or at low cost for use by governments, businesses, and private citizens. The expansion of open data, combined with advances in big data analytics, is freeing information that was once trapped inside the dusty pages of overlooked reports, enabling improved decision making, new product and service offerings, and greater accountability. This change comes at a time of heightened focus on data-driven knowledge and evidence-based decision making. To be successful this data needs to be captured and maintained in a useable manner. Generally, this is achieved through creating an overarching Data Sharing Policy, that outlines the technical details of how the data is captured where it is stored and how privacy is addressed. The process of capturing historical

data, converting them to a consistent format, and uploading them to a database provides an additional layer of effort, which must be examined when scoping, to ensure relevant timelines are included. Finally, formats which can update automatically through digital sharing interfaces (e.g., RSS, KML, APIs), require a cohesive infrastructure through which developers are able to reliably connect their services.

Smart City technology and Open Data can help improve transportation-demand forecasting, prioritize transport infrastructure improvements, and synchronize the ways different modes of transportation inter-operate. For example, the Toronto Transit Commission (TTC) was able to avoid building their own mobile application to identify next-bus arrival times by making their real-time vehicle GPS data open through an application programming interface (API). This avoided the need to procure a developer and handle the continual maintenance of a mobile application. This same process has been leveraged in the City of Barrie for Barrie Transit where several mobile applications have been built using open data.

The success of Big Data as an analytical tool can, over time, influence the planning (both land use and transportation) process through advanced understanding of the people in the area and how they interact with the TBM. While this data is a lagging indicator (it measures how people have used the system), Big Data and machine learning have capacity to predict with greater accuracy. While developing and determining outcomes for a project, for example a land use, machine learning may be more apt to create a scenario for a traffic analysis based on comparable conditions.

TMP Action 5-1
Develop an Open Data / Data sharing policy to direct and communicate options for the storage, management and distribution of data for the purposes of supporting transportation of goods and people in the TBM.

5.2.2 Mobility as a Service (MaaS)

Mobility as a Service (MaaS) is the integration of various forms of transportation services into a single mobility service accessible on demand. To meet a municipality's transportation demand, MaaS facilitates a diverse menu of transport options, be they public transport, ride-, car- or bike-sharing, taxi or private automobile, or a combination thereof. For residents, this approach can offer added value through use of a single application or service to provide access to mobility with a single payment channel instead of multiple ticketing and payment operations. At its most basic level, MaaS helps residents meet their mobility needs and solve the inconvenient parts of individual journeys by providing easier access to the entire system of mobility services. The aim of MaaS is to provide an alternative to the use of the private car that may be as convenient, possibly cheaper, and more sustainable, while helping to reduce congestion and constraints in transport capacity.

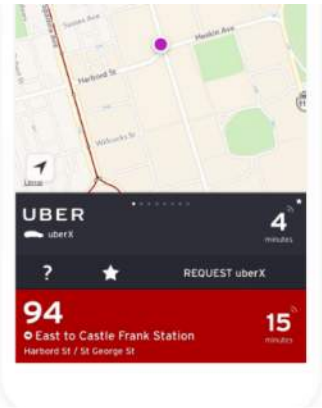


Figure 5-2: Uber Integration into the Transit App

Source: *https://transitapp.com/region/toronto*

MaaS is a relatively new concept and approach to transportation planning, with elements integrated in a piecemeal fashion in many jurisdictions across North America. The most abundant form of MaaS is via integrated ride-hailing mobility services such as Uber or Lyft and bikeshare services integrated into transit planning or maps applications such as The Transit App or Google Maps as represented in Error! Reference source not found.. Several European and Asian cities have fundamentally changed the way people search for, consume, and pay for transportation, in much the same way as Netflix has changed video consumption. Since 2016, Helsinki residents have been able to use an app called Whim to plan and pay for all modes of public and private transportation within the city – be it by train, taxi, bus, carshare, or bikeshare. Anyone with the app can enter a destination, select his or her preferred mode of to get there – or, when no single mode can cover the door-to-door journey – a combination of modes.

While there are obvious stark differences between TBM and Helsinki, MaaS can be molded to create a localized and tailored solution that works with the available transportation assets and is scaled to TBM's capacity and need. The initial steps on the part of the TBM require an approach to data management and data sharing, discussed above, which can create and predictable and reliable platform from which the application development community can rely.

5.2.3 Complete Streets

Streets are vital places within TBM. They are the common spaces where the town comes together, where children learn to ride bicycles, neighbours meet, and couple's stroll. They are the proverbial front door to homes, businesses, parks, and institutions. They reflect the values of the town and, at their best, are a source of pride for residents and visitors alike. Understanding how our transportation network can equitably be shared between different road users such as auto drivers, transit riders, cyclists, or pedestrians is imperative to promoting a multi-modal transportation network that provides a range of attractive choices for mobility by integrating all modes into a seamless network.

Complete Streets is an approach whereby streets are designed to be safe for everyone who walks, cycles, takes transit, or drives, and regardless of age and ability (now known widely in the transportation planning practices as "AAA" infrastructure). This ensures that transportation is planned and designed for all road users, not only motorists. There is no singular approach to Complete Streets; however, the concept recognizes that a delicate balance needs to be maintained among different road users and stakeholders. Without question the process of

designing and implementing a complete street requires interactive processes, for many the street is optimized currently for the way it is used now, and changing that will only negatively impact their experience. The local context determines this based on the needs and opportunities that dictate the necessity for specific infrastructure in different parts of the multi-modal transportation network as illustrated in Figure 5-3**.** The link between Complete Streets and public health is well documented as it enhances human and environmental health by providing an environment that enables and encourages active transportation.

Although the figure clearly emphasizes complete streets as a response to the demands of intensely develop urban environments, the concept is equally valid in small communities and rural areas. Incorporating facilities for alternative modes is generally easier to implement in less intensively developed settings where space is more available and facility requirements are likely to be more modest. The Toronto Area Centre for Active Transportation Backgrounder for Rural Complete Streets[3] points out that in 2011, "25% of pedestrian fatalities in Canada were on rural roads, although only 19% of the population lives in rural areas." The Backgrounder further notes that 29% of Canadians are not licensed drivers and many rural areas have limited transit services. Finally, they note that these facilities add activity to rural streets and enliven local environments. We would add that they are important recreation facilities in smaller communities that cannot always afford the type of large-scale recreation complexes found in cities and suburban areas and support active tourism opportunities that support many rural economies. Implementation of complete streets as a solution to public health, transportation and environmental considerations requires conscious efforts from TBM with long term planning and tactical approach for quick wins.

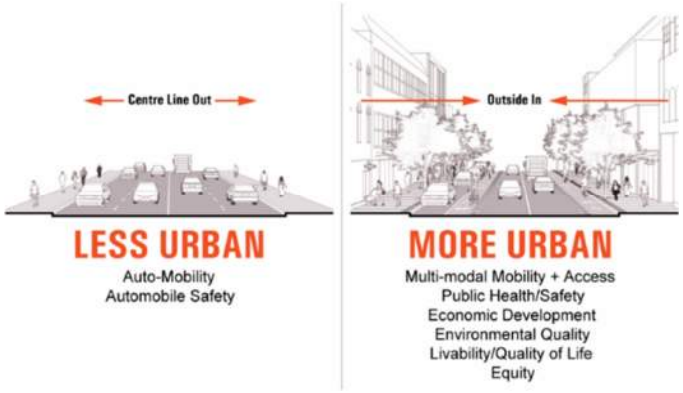


Figure 5-3: Complete Streets Road Space Equity

[3] Toronto Area Centre for Active Transportation, *Backgrounder: Rural Complete Streets*, https://www.completestreetsforcanada.ca/wp-content/uploads/2019/01/Rural-Complete-Streets-final.pdf

Source: *City of Toronto Complete Streets Guidelines* (City of Toronto, 2017)

5.2.4 Vision Zero

Vision Zero is a multi-national road traffic safety project that aims to achieve a transportation network with no fatalities or serious injuries involving road traffic. The approach started in Sweden and was approved by the Swedish Parliament in October 1997. A core principle of the vision is that 'Life and health can never be exchanged for other benefits within society' rather than the more conventional comparison between costs and benefits, where a monetary value is placed on life and health, and then that value is used to decide how much money to spend on a road network towards the benefit of decreasing how much risk. Since adopting the concept, Sweden has made tremendous progress in road safety reducing the number of traffic fatalities by over 50% between 2000 and 2014 (**Figure 5-4**).

Figure 5-4: Traffic Fatalities in Sweden, 2000-2015

Source: (Parachute Vision Zero Network, 2017)

Several municipalities across Canada are embracing the Vision Zero approach to road safety by implementing road safety plans and actions to reduce road-related fatalities and protect vulnerable road users. In 2015, Edmonton became the first major Canadian City to officially adopt Vision Zero. The City of Toronto soon followed suit in 2017. Vision Zero is now a recognized approach toward planning for road safety with other cities, including the City of Ottawa, considering its implementation.

5.2.5 Alternative Service Delivery

Alternative service delivery is a strategy deployed by many transit agencies and municipalities (including Blue Mountain Village) across North America. The approach enables transit riders to pre-book trips at a specific time, noting a pickup and drop-off destination, within a set service boundary. This service is often enabled through dynamic scheduling technology where trips can be grouped and optimized, allowing riders to use a mobile application to book, track, and pay for

their trips. This type of service would integrate effectively within a MaaS platform where individuals can plan all components of their multi-modal trip via one resource, leveraging available technology for real-time updates. Several transit agencies across Canada have been deploying alternative delivery services to provide the right-size service in communities that are not adequately served by conventional fixed-route services or to expand coverage areas of transit service. When establishing this service type in new areas it can be used to document travel patterns and build transit ridership to support the eventual introduction of fixed-route service.

Alternative service delivery encompasses a continuum of service types. Two commonly used methods include an on-demand service where riders in designated neighbourhoods are offered door-to-door or stop-to-stop trips as well as a home-to-hub type service where riders in designated service areas may book trips from their homes to a nearby transportation hub where they may connect to fixed-route service or access other transportation services.

Benefits of alternative service delivery include:

Flexible routing or scheduling to meet customer demand
Use of technology (mobile apps) to correlate supply and demand
Optimized fleet deployment resulting from the comingling of different customer types
Connections provided between several transportation services to complete trips.

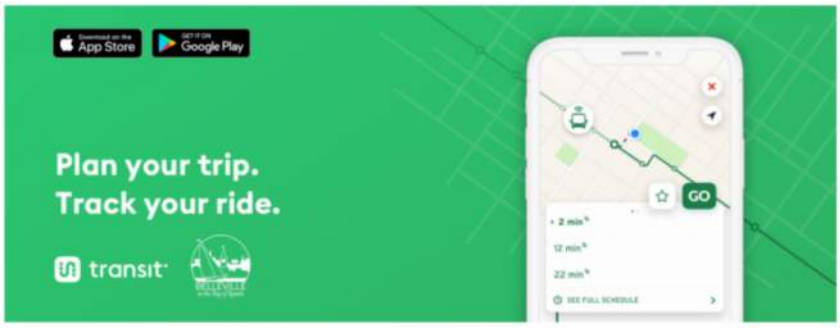


Figure 5-5: User Interface of Belleville's On-Demand Transit Mobile App

Source: (City of Belleville, 2020)

Many municipalities across Ontario have been deploying some form of alternative service delivery. One notable example is Belleville Transit, which launched a demand-response pilot in September 2018 where they replaced two fixed route late night services with a demand-response service. The agency used a mobility app on their existing 40-foot conventional buses to provide dynamic routing and scheduling as shown in **Figure 5-5**. This service was stop-to-stop as opposed to door-to-door, meaning users were transported to and from existing bus stops, rather to and from their homes. Trips were booked via phone, mobile app, or web

booking. A significant increase in ridership was observed- with the number of monthly trips tripling over the pilot period. The bus fleet grew from two to five buses with certain trips operating at full capacity. Average utilization rose to 30 people per vehicle in the evening (9 PM to 12 AM) compared to just three people per vehicle in the same period previously.

TMP Action 5-2
Develop relationships with business partners that may be involved in the digital transportation space, to determine the scope and potential of a future service

5.3 VISION AND OBJECTIVES

TBM roadway, transit, and active transportation systems must reflect the community's vision to foster multi-modal transportation options that address a spectrum of needs across all ages, abilities, and trip purposes. Planning and analysis conducted through this TMP acknowledges the Town's role within its regional context and provides connections to both local and regional facilities. This must all be done by balancing the needs of varied users of the multi-modal transportation network and the Town's fiscal and environmental responsibilities of maximizing the network's efficiency to accommodate future growth while reducing dependence on private automobiles.

5.3.1 Draft Vision Statement

A draft vision statement for the TMP was developed and presented for feedback from the public :

*"**As the Town of The Blue Mountains continues to grow, the TMP will provide a blueprint to enhance connections between neighbourhoods, jobs, services, local businesses, recreation and tourism opportunities, balancing all modes of transportation to become a more livable and healthy community.**"*

Following feedback received during PIC 1, the vision statement was revised to the following:

*"**As the Town of The Blue Mountains continues to grow, the TMP will provide a blueprint to enhance connections between neighbourhoods, jobs, services, local businesses, recreation and tourism opportunities, balancing all modes of transportation to become a more livable and sustainable community.**"*

5.3.2 Objectives

A well-designed multi-modal transportation network can be a strong contributor to achieving the local goals articulated in various plans. Simplicity in design and functionality usually means establishing a **simple and effective multi-modal transportation network** that everyone can understand and use. Understanding why people may react to transportation options in different ways, based on their personal needs and circumstances, helps to create a multi-modal network

that is intuitive and that reduces barriers to use - potentially offering new and sustainable ways to travel for many. The expectation of the network is captured and incorporated in its overall vision and the TMP **articulates this vision** by describing what that might look like in terms of service and infrastructure, and **then outlines a plan** to evolve toward that vision. The creation of a vision is necessary to inform other plans and create a sense of unity and cohesion amongst them.

Transportation plays an important role in the life of residents, businesses, and visitors to TBM, not only to move around, but as a tool that enhances the Town's quality of life and facilitates business and economic activity. With this consideration, it is imperative that transportation plays a role in empowering the community's residents, visitors, and businesses by balancing a multi-modal approach to transportation that addresses all different types of needs and users. A strain on the transportation network has negative ripple effects in other areas of the community, and even beyond to neighbouring communities. Often, improving conditions for one user group may create unfavorable conditions for another. An example may be increasing traffic speed limits to improve the throughput of a roadway. It may improve traffic flow, but it may diminish the safety of other modes of transportation such as cycling and walking. It is important to acknowledge the interdependencies of the community's environment and make recommendations that balance benefits between all users. The following are some general goals that are applicable to TBM in relation to the TMP:

Identify the town's future transportation needs and opportunities on the short and long-term horizons
To provide connectivity between transportation modes to move people and goods sustainably, efficiently, and safely
To establish a sustainably integrated multi-modal transportation system that reduces reliance on any single mode and promotes walking, cycling, and transit
To define policies and long-term strategies that will protect corridors for all modes of transportation to address current and projected population and employment growth.

Taking into consideration the various components of this study, we have developed eight objectives that will guide the development of the TMP and its recommendations. Based on stakeholder feedback, the objectives were refined and These objectives will be tailored and adjusted during the study through consultation and stakeholder engagement. They are shown in Table 5-1

Table 5-1: TMP Objectives and Supporting Strategies

	TMP Objective	Supporting Strategies
1	**The transportation system will be supported by settlement and land use patterns that encourage active transportation and transit**	• Denser patterns of settlement will be encouraged to reduce trip distances and facilitate the use of active transportation and transit options • Mixed use development will be encouraged to facilitate denser development • Pedestrian and cycling links will be incorporated in new development and retrofitted where possible in existing developments to connect to the TBM and regional active transportation networks • Requirements for parking and other facilities to accommodate motorized vehicles will be eased where feasible to encourage the use of transportation alternatives • Facilities to support sustainable transportation options (e.g., bicycle racks and electric vehicle and electric bicycle charging stations will be encouraged • Develop policies that will support the inclusion of ride sharing services, companies, and private mass transit options
2	**The transportation system will encourage active transportation and transit**	• The active transportation network will serve a transportation function to help reduce automobile use through alternative options. • Active transportation infrastructure (when possible and practical) will complement and promote transit, tourism, and healthier communities year-round. • Transit will be a viable alternative for residents, leveraging multi-modal connections and emerging/creative service solutions to maximize its investment. • Develop education strategies for all road users that explain the benefits to all users for sustainable modes, mode choice, safety and the need to share the road and respect each other
3	**The transportation system will improve connectivity and travel choices**	• One integrated multi-modal network will be provided instead of separate networks for each mode. • The multi-modal network will promote the idea of using different modes for different trips and needs, as well as using multiple modes within a single journey. • Residents and visitors will have many viable transportation options.

4	**The transportation system will improve safety for all road users**	• The multi-modal transportation system will be safe, comfortable, and reliable for all road users regardless of how residents choose to travel. • Accessibility of the transportation network will be assured regardless of age or ability.
5	**The transportation system will support seasonal tourism fluctuations**	• The transportation network will allow dynamic use of transportation infrastructure that can change with seasonal tourism levels. • The network will minimize under-utilized infrastructure during off-peak seasons and enhance network operations during peak seasons. • Active transportation and transit networks will work together year-round to serve residents and tourists, encouraging active transportation users to shift to transit during winter months.
6	**The transportation system will reduce greenhouse gas emissions**	• The multi-modal network will promote a shift away from single-occupancy vehicle use through efficient active transportation, transit, and other shared ride options.
7	**The transportation system will support the movement of goods**	• The heavy vehicle network will move goods sustainably, efficiently, and safely. • The goods movement network will support economic prosperity within the Town of the Blue Mountains.
8	**The transportation network will improve regional transportation connections**	• Improvements will be identified that will effectively manage growth throughout the region. • The transportation network will consider the needs of other municipalities in Grey County and facilitate regional connections.

5.3.3 TMP Updates

Traditionally, municipal Transportation Master Plans are updated every 10 years. This makes sense as they are intended to inform at least a 10-year capital plan. However, with so much change in the world (e.g. energy and fuel prices, housing prices, new technologies, and remote work advanced by COVID-19 restrictions) it is recommended that this TMP be updated within 5 years. This aligns with the MCEA Master Planning Process which recommends a 5-year review.

6.0 TRAFFIC GROWTH & MODE SHARES

6.1 HISTORICAL & PROJECTED GROWTH

6.1.1 Historical Growth

To review traffic growth in TBM, Stantec extracted trip generation data for 2017, 2019, and 2020 from StreetLight data for the internal zones. Trip generation includes both trips to and trips from each zone and covers internal and external trips. As noted, the outbreak of COVID-19 virus influenced travel behavior in 2020.

Table 6-1,

Table 6-2**, and Table 6-3** present daily trip generation changes from 2017 to 2019 and then from 2019 to 2020 for winter Saturday, summer Saturday, and fall average weekend. **Table 6-1** shows that while total daily trips on winter Saturdays increased at an annual rate of 9%, they decreased by 22% due to the COVID-19 impacts from 2019 to 2020. On summer Saturdays, total daily trips were increased at an annual rate of 8% from 2017 to 2019. A 3% increase was also reported between 2019 to 2020. The average fall weekday daily trip generation results in **Table 6-3** show a slight reduction from 2017 to 2019 (-1% per annum) and then -15% from 2019 to 2020.

Table 6-1: TBM Zones Historical Trip Generation – Winter Saturday 2017, 2019, and 2020

Zone/Year	Winter Saturday Trip Generation			Annual Trip Variance %	
	2017	2019	2020	2017-2019	2019-2020
Camperdown	4,064	5,643	6,182	18%	10%
Castle Glen	381	392	275	1%	-30%
Craigleith1	24,014	30,400	23,665	13%	-22%
Craigleith2	3,019	13,503	7,947	111%	-41%
TBM West Area 1	370	680	1,000	36%	47%
Lora Bay	1,921	2,434	2,239	13%	-8%
PRVP Park	2,426	5,176	3,184	46%	-38%
TBM Center Zone	677	1,650	1,207	56%	-27%
TBM Village	64,263	65,506	47,707	1%	-27%
TBM West Area 2	1,086	1,333	912	11%	-32%
TBM West Area 3	181	915	564	125%	-38%
Thornbury & Clarksburg	17,233	14,332	16,002	-9%	12%

Zone/Year	Winter Saturday Trip Generation			Annual Trip Variance %	
	2017	2019	2020	2017-2019	2019-2020
Total	**121,652**	**143,983**	**112,904**	**9%**	**-22%**

Table 6-2: TBM Zones Historical Trip Generation – Summer Saturday 2017, 2019, and 2020

Zone/Year	Summer Saturday Trip Generation			Annual Trip Variance %	
	2017	2019	2020	2017–2019	2019-2020
Camperdown	2,434	3,506	5,091	20%	45%
Castle Glen	107	295	461	66%	56%
Craigleith1	13,051	14,046	13,957	4%	-1%
Craigleith2	2,019	5,790	7,056	69%	22%
TBM West Area 1	485	946	1,103	40%	17%
Lora Bay	3,484	4,531	5,425	14%	20%
PRVP Park	138	1,775	2,624	259%	48%
TBM Center Zone	499	1,105	1,735	49%	57%
TBM Village	29,927	40,087	35,108	16%	-12%
TBM West Area 2	1,143	2,365	1,781	44%	-25%
TBM West Area 3	1,391	2,196	3,215	26%	46%
Thornbury & Clarksburg	28,204	20,782	22,713	-14%	9%
Total	**84,899**	**99,443**	**102,289**	**8%**	**3%**

Table 6-3: TBM Zones Historical Trip Generation – Fall Weekday 2017, 2019, and 2020

Zone/Year	Fall Average Weekday Trip Generation			Annual Trip Variance %	
	2017	2019	2020	2017-2019	2019 -2020
Camperdown	1,858	2,401	2,770	14%	15%
Castle Glen	319	113	430	-41%	281%
Craigleith1	9,584	6,001	5,541	-21%	-8%
Craigleith2	657	1,399	1,168	46%	-17%
TBM West Area 1	365	1,317	1,503	90%	14%
Lora Bay	1,525	2,440	2,094	26%	-14%
PRVP Park	1,120	989	1,147	-6%	16%
TBM Center Zone	798	591	761	-14%	29%

TBM Village	14,517	18,063	13,278	12%	-26%
TBM West Area 2	841	1,535	1,095	35%	-29%
TBM West Area 3	676	581	1,130	-7%	94%
Thornbury & Clarksburg	21,909	17,418	13,564	-11%	-22%
Total	**56,186**	**54,866**	**46,500**	**-1%**	**-15%**

6.1.2 Future Development

Several approved residential developments and are planned in the TBM study area. These are summarized in Table 6-4 and shown in Figure 6-1.

Table 6-4: Development Summary

Commented [OJ5]: Table needs revision.

Development	# Units
Lora Bay	288
Blue Mountain Village	478
Community Campus of Care	455
Castle Glen	xxx
Camperdown	xxx
Total	**1221**

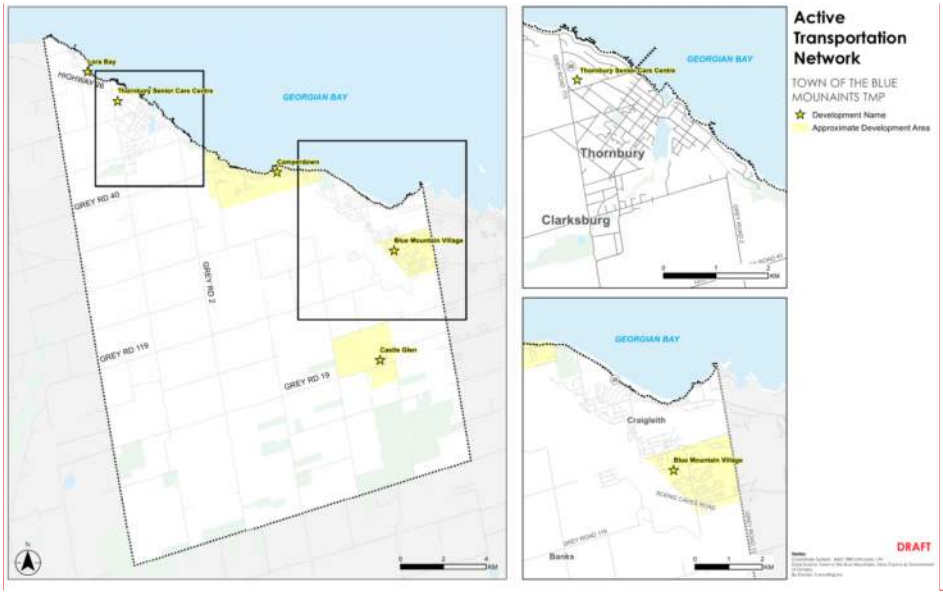


Figure 6-1: TBM Planned Developments

Commented [OJ6]: New figure.

6.1.3 Forecast Growth Rate

Based on historical growth in the study area and Grey County of approximately 2%, and modest development and population growth anticipated for the area, a slightly conservative annual growth rate of 3.0% was used for this transportation master plan to account for the increased development summarized in Table 6-4. This is higher than the 2.0% assumed by MTO in the Future Needs Study.

6.2 EXISTING MODE SHARE

As shown in Figure 6-3 below, the Town of the Blue Mountains has a low modal split (9%) with 91% of all trips being made by vehicles (84% drivers, 7% passengers). This is not surprising as TBM is a large geographic rural area requiring long distance trips. The 2016 census data was not detailed enough to provides existing mode share by trip length. However, we can estimate local urban trips to have a higher modal share of 20% with 80% of trips being made by vehicles (75% drivers, 5% passengers) as shown in Figure 6-2

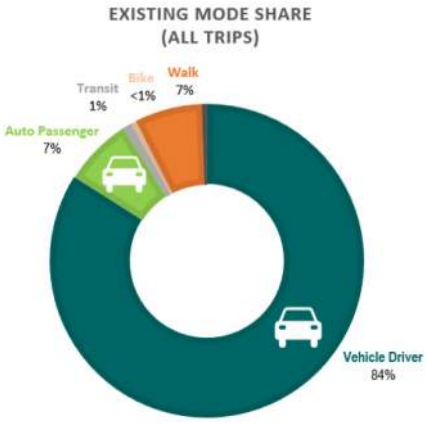


Figure 6-3: Existing Mode Share (All Trips)

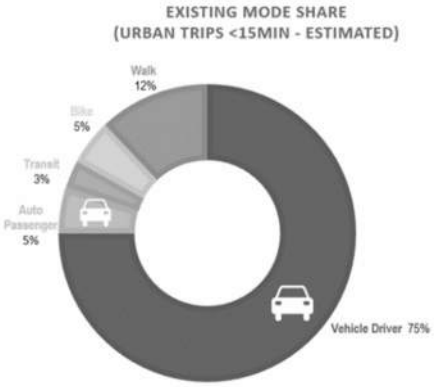


Figure 6-2: Existing Mode Share (Urban Trips)

6.3 SCENARIO 1: MODE SHARE TREND

Using the Thornbury Bridge (King Street/Highway 26) as a reference point with an estimated 12,500 daily vehicle trips in 2019 and assuming a 3% compounded annual growth rate (which will account for developments such as the Long-Term Care facility in Thornbury, by 2032, an estimated growth to 18,900 trips, or a 51% increase, is anticipated as shown in Figure 6-4. The increase can be expected to have noticeable impacts on the levels of congestion at the bridge during peak periods.

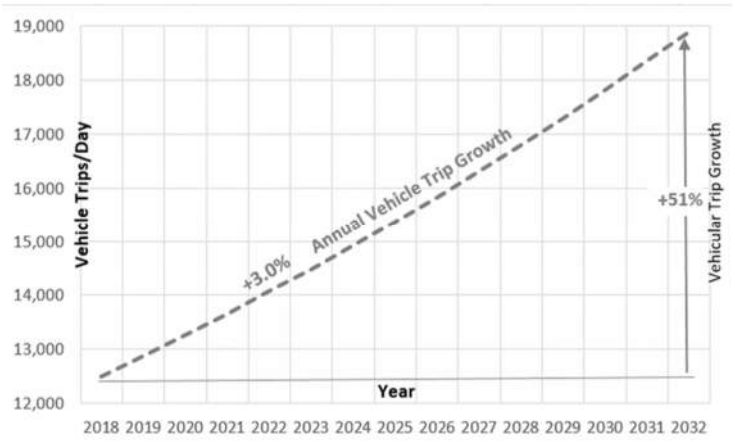


Figure 6-4: Annual Vehicle Trip Growth (King Street @ Thornbury Bridge)

6.4 SCENARIO 2: ACHIEVE MODE SHARE TARGET

Targets help jurisdictions measure progress toward a future goal. In the case of TBM, setting a modal target will help reduce Greenhouse Gas (GHG) emissions by reducing reliance on the automobile for travel. For longer trips lasting more than 45 minutes, changing travel behaviour will be a challenge, though extension of current transit routes may reduce some vehicle trips. For shorter trips of less than 15 minutes, however, the introduction of safe pedestrian and cycling infrastructure has been shown to significantly increase the mode share. Given what has been achieved in similar-sized communities, and the recreational activities that TBM residents and visitors currently enjoy, a target of 26% trips for active users and 5% for transit users for trips under 5 kilometers should be achievable, provided investment is made in the necessary infrastructure to attract those users.(Figure 6-6)When averaged into “all-distanced” trips, this results in an overall target mode split of 14% (12% active users, 2% transit) up from 9% currently **(**Figure 6-5**).** TBM is a large, predominately rural, area with its boundaries over 20 km apart. Though impacting mode share at this scale is challenging, it is still possible to shift 5% of all trips away from vehicles. The largest shift in mode share is at the urban level (11%). With more investment in pedestrian, cyclists, and transit, distances are short enough that residents can choose these ways of getting around and enjoy the health and environmental benefits that come from it.

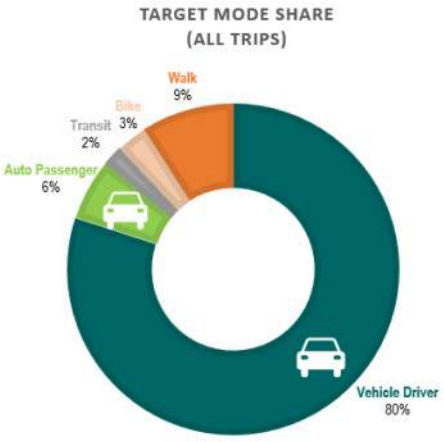


Figure 6-5: Target Mode Share (All Trips)

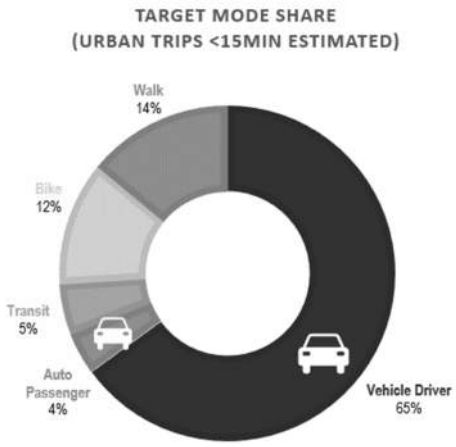


Figure 6-6: Target Mode Share (Urban Trips)

Using the same reference location (Thornbury Bridge) and by investing in active transportation and transit infrastructure, we can suppress the growth in vehicle trips, particularly in urban locations (shorter, internal trips). If modal targets are met (orange line), we can reduce the growth in vehicle demand by 20% (equivalent to 2,600 vehicles per day). This is the equivalent of lowering the overall growth rate in vehicle trips from 3.0% to 1.9%. This is shown in **Figure 6-7.**

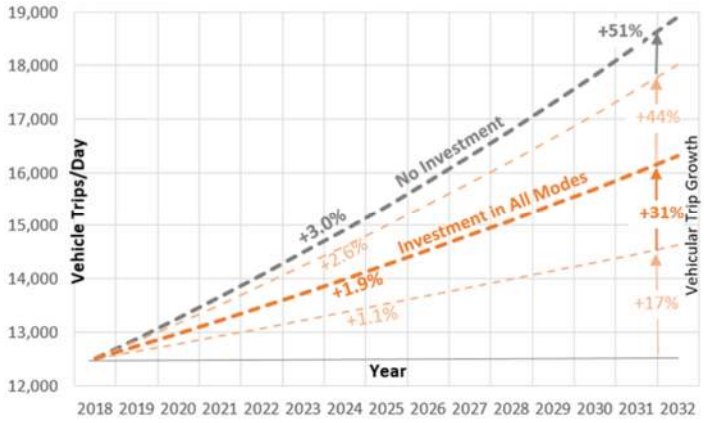


Figure 6-7: Annual Vehicle Growth Rate with Investment

7.0 2032 & 2042 TRAVEL DEMAND MODELLING SCENARIOS

The following two Sections, **7.1: 2032 (10 Year) Future Horizon** and **7.2: 2042 (20 Year) Future Horizon** show the modelling output for both maintaining current infrastructure, and investing in active transportation and transit for both Summer and Winter peak demand periods. These results are summarized in **Section 7.3**.

7.1 2032 (10 YEAR) FUTURE HORIZONS

7.1.1 Maintain Current Infrastructure

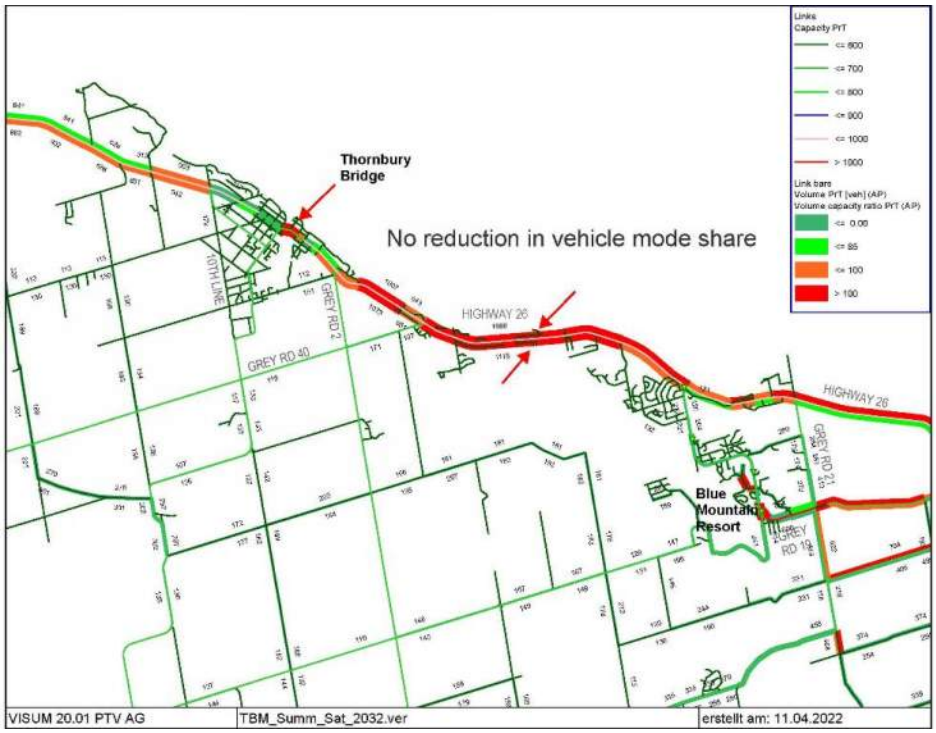


Figure 7-1: Summary Saturday Peak Hour Model Output (2032)

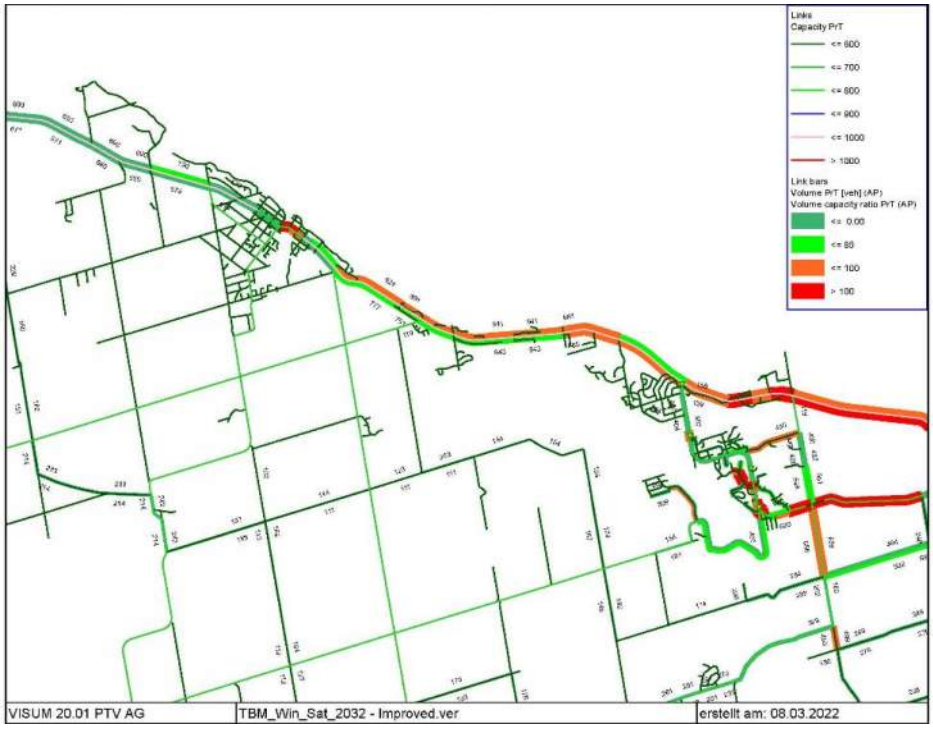


Figure 7-2: Winter Saturday Peak Hour Model Output (2032)

7.1.2 Invest In Transit & Active Transportation

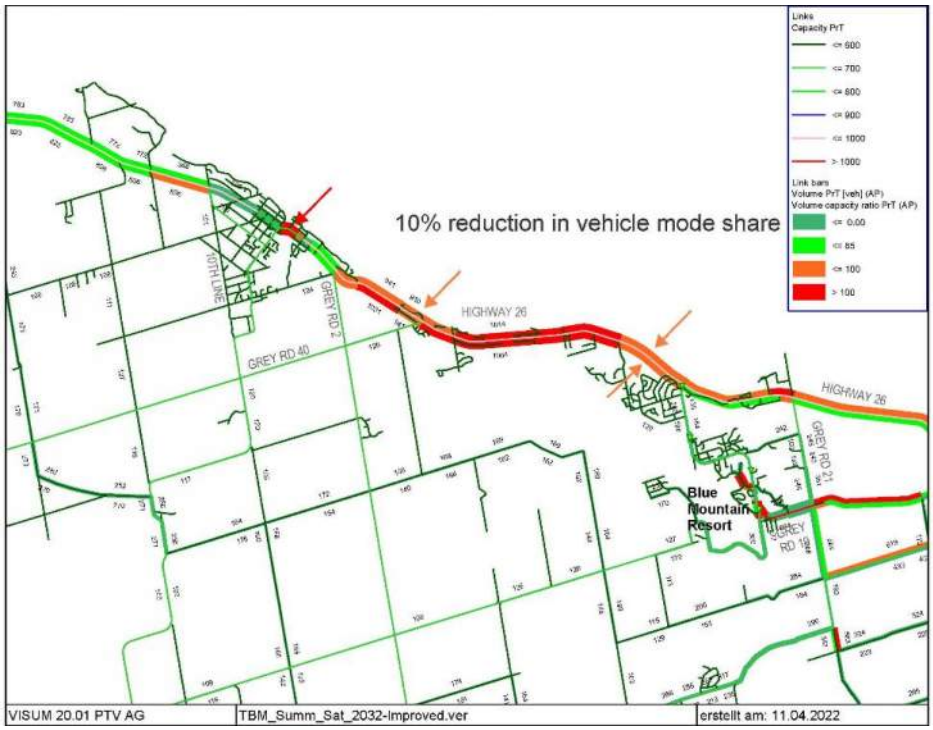


Figure 7-3: Summer Saturday Peak Hour Model Output with 10% Mode Share Increase (2032)

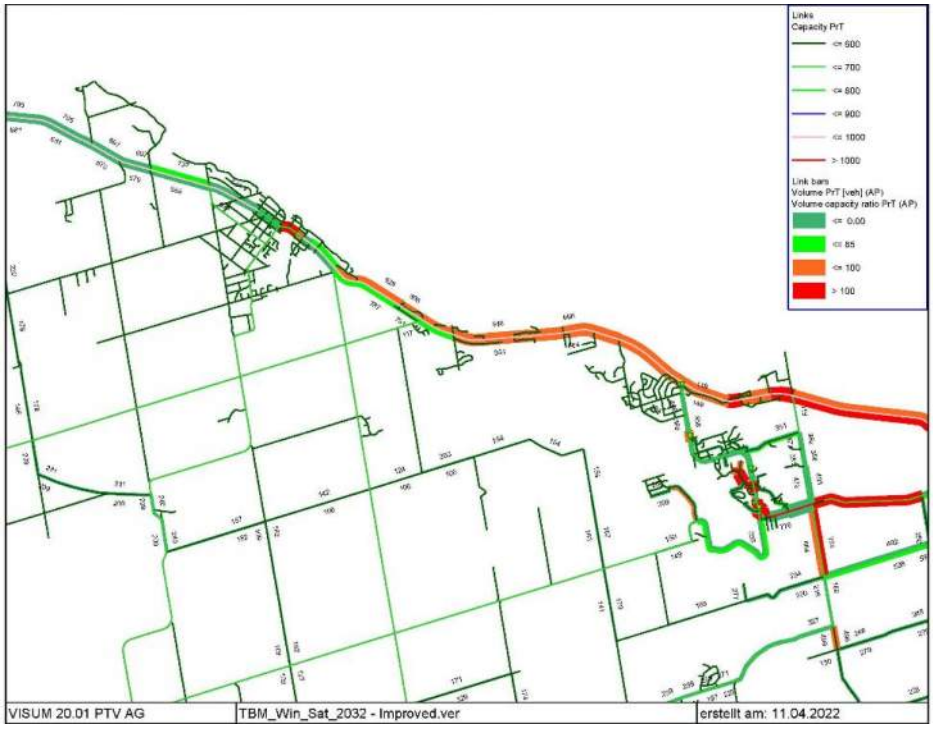


Figure 7-4: Winter Saturday Peak Hour Model Output with 10% Mode Share Increase (2032)

7.2 2042 (20 YEAR) FUTURE HORIZON

7.2.1 Maintain Current Infrastructure

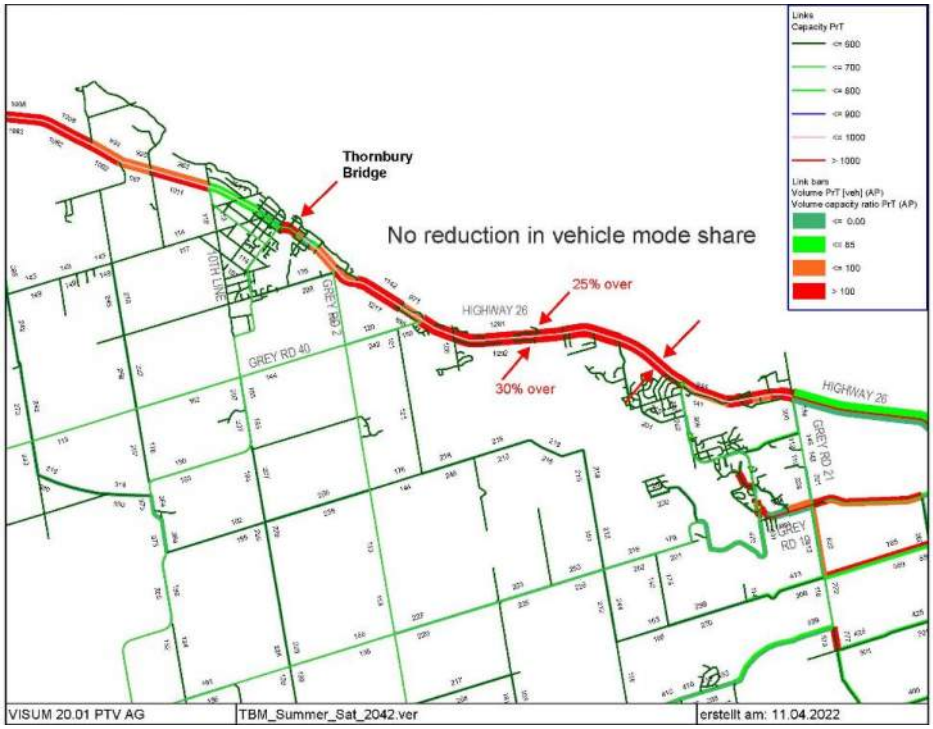


Figure 7-5: Summer Saturday Peak Hour Model Output (2042)

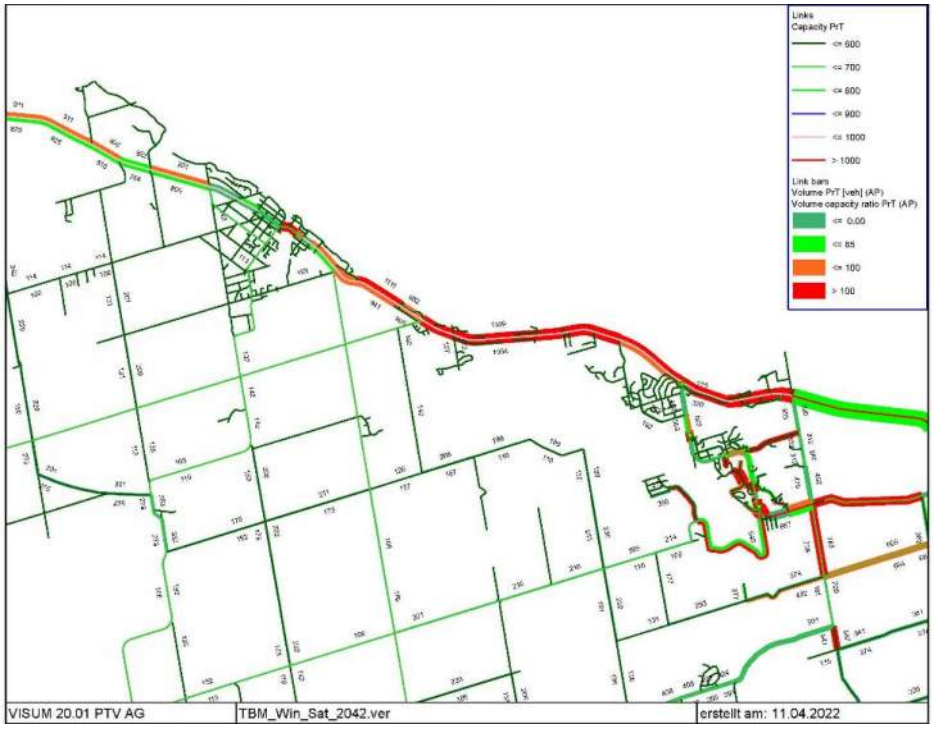


Figure 7-6: Winter Saturday Peak Hour Model Output (2042)

7.2.2 Invest In Transit & Active Transportation

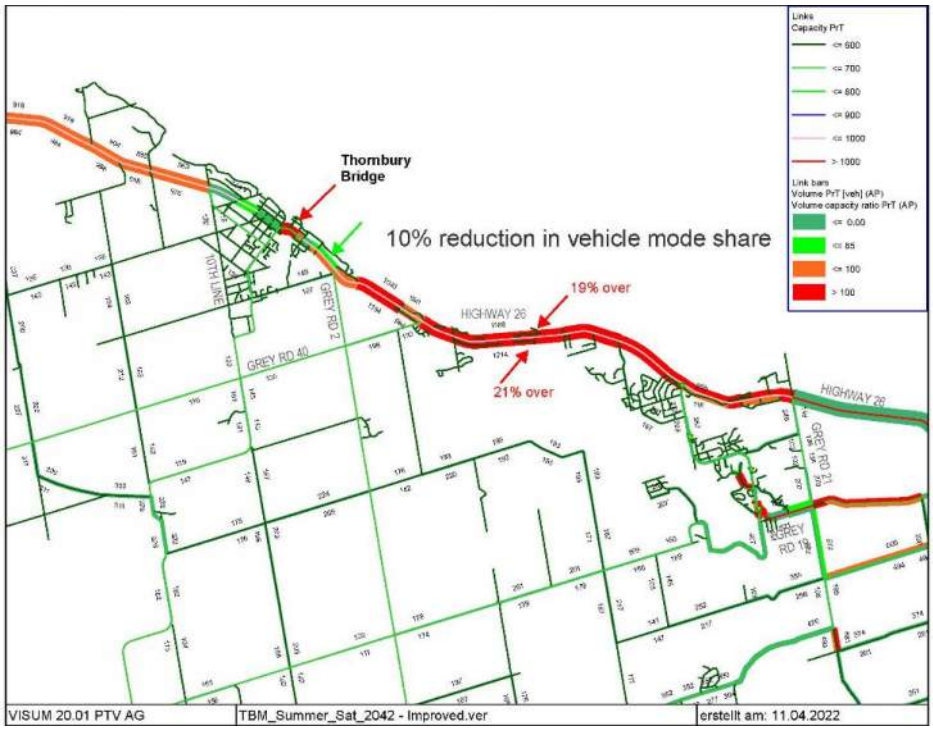


Figure 7-7: Summer Saturday Peak Hour Model Output with 10% Mode Share Increase (2042)

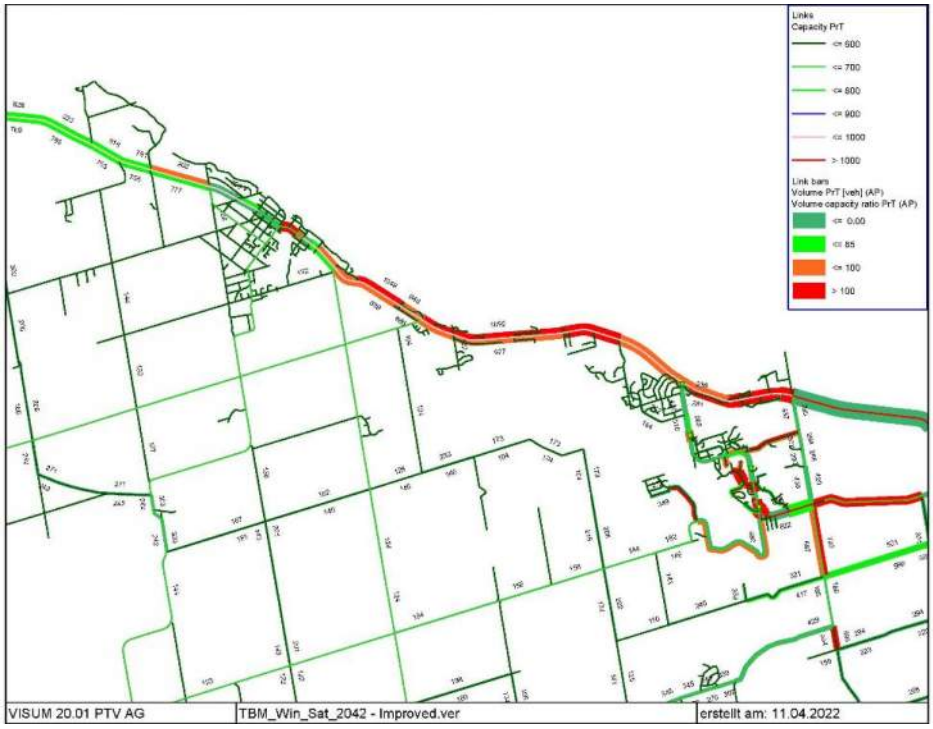


Figure 7-8: Winter Saturday Peak Hour Model Output with 10% Mode Share Increase (2042)

7.3 FUTURE HORIZON SUMMARY

Table 7-1provides a summary of all the scenario outputs for the peak Winter and Summer day of the week – Saturday. Summer peak is slightly (2-3%) higher than winter peak. 2032 shows a 34% increase in vehicle kilometers travelled. This is reduced by almost half with a 10% mode shift to active use and transit trips. 2042 shows a 65% increase in vehicle kilometers travelled. This is reduced to by about 1/3rd with a 10% mode shift to active use and transit trips.

Table 7-1: Travel Demand Model - Peak Winter and Summer Peak Hour Comparison

Horizon/Scenario	Winter Saturday		Summer Saturday	
	VKT*	VHT**	VKT	VHT
Existing (2019)	69,800	1,570	71,400	1,530
Future (2032)	93,300	2,280	95,800	2,190
% Change	34%	45%	34%	43%
Future (2032) with 10% mode shift	82,600	1,950	84,900	1,880
% Change	18%	24%	19%	23%
Future (2042)	114,800	3,030	118,000	2,890
% Change	64%	93%	65%	89%
Future (2042) with 10% mode shift	101,800	2,560	104,800	2,470
% Change	46%	63%	47%	61%

*VKT=Vehicle kilometres travelled (per day)
**VHT=Vehicle hours travelled (per day)

8.0 NETWORK RECOMMENDATIONS

8.1 ROAD NETWORK

8.1.1 Road Classification Guidelines (Current)

The Town of the Blue Mountains does not currently have defined functional standards for its road classification system. Though there are local, collector, and arterial roads, the characteristics of each are not well defined. It is very beneficial for jurisdictions to have a formalized set of road classifications whose function, service level, and geometric/design characteristics are defined. This provides valuable guidance for designing, constructing, maintaining, and retrofitting the road network.

Table 8-1is a proposed classification guideline strategy for TBM that better defines the currently Local, Minor Collector, and Major Collector Roads, and Highways and County Roads outside of TBM's jurisdiction.

As illustrated in Figure 8-1, Highways and County Roads are intended to move large volumes of traffic over long distances at high speeds. Major and Minor Collector Roads branch off Highways and Country Roads to provide access to communities and commercial land uses. They are lower speed and carry moderate traffic volume levels. Local roads branch off collector roads and provide direct access to residences. These are designed for low speeds and low traffic volumes.

Figure 8-1: Road Classification Hierarchy for TBM

Table 8-1: Road Classification Guidelines for TBM

Road Classification	Function	Posted Speed	Volume Range	Road Width	Surface Type	Service Level	Requirements for Bicycle Facilities
Highway	Higher speed, higher volume. Goods movement.	70 km/hr or higher	>5,000 vpd	2-4 lane typically w/paved shoulders	Paved	2-3	Not recommended for Bicycle Facilities unless separated multi-use trail (e.g. Georgian Trail)
Connecting Link	Highway routed through an urban area. Low speed, high volume.	50-60 km/hr	>10,000 vpd	2 lane with curb&gutter	Paved	2-3	Potential for protected bicycle facilities on-street or raised bicycle paths.
County Road	Higher speed, higher volume, Goods movement.	60-80 km/hr (some 50 km/hr in Urban areas)	<5,000 vpd	2 lane w/paved shoulders	Paved	2-3	1.5m minimum pavement width (both sides) + 0.5m minimum buffer. Some form of surface treatment or vertical barrier recommended for speeds >60 km/hr.
Major Collector	Moderate speed, moderate volume, direct access. Regional transit. Cyclists.	50-80 km/hr	<5,000vpd	2 lane w/narrow paved shoulder or curb & gutter (some currently not paved)	Paved	3-5	1.5m minimum pavement width (both sides) + 0.5m minimum buffer. Some form of surface treatment or vertical barrier recommended for speeds >60 km/hr.
Minor Collector	Low speed, low volume. Cyclists	40-50 km/hr	<2,500 vpd	2 lane paved with curb & gutter	Paved	3-5	Painted bike lanes. Minimum 1.5m width. (50 km/hr)
Local (Urban)	Low speed, low volume. Direct access. Cyclists share the road. Pedestrians on sidewalks.	30-50 km/hr	<1,000 vpd	2 lane w/no shoulder or c&g	Paved or gravel	4-6	1.2m minimum paved shoulder (both sides) or minimum 2.4m multi-use paved shoulder (40 km/hr)

Local (Rural)	Higher speeds, low volume. No cyclist, pedestrian accommodations.	60-80 km/hr	<1,000 vpd	2 lane w/gravel or not shoulders	Paved or gravel	4-6	If paved, 1.5m minimum pavement width (both sides) + 0.5m minimum buffer. Some form of surface treatment or vertical barrier recommended for speeds >60 km/hr.

8.1.2 Road Classification Recommended Changes

No major revisions to the current road classification system are recommended for TBM. Although major and minor collectors were originally considered to be consolidated into a single collector classification, there is enough difference in length, posted speed, and function of these two classifications that this is not being recommended. As for Local roads however, there is an opportunity to reclassify many of the Heritage Local Roads to Local Roads. This will simplify current road standards and provide Heritage Local Roads with a better opportunity to be upgraded and maintained to the same standards that Local Roads currently receive. Local unassumed roads are assumed to be built, accepted, and eventually become part of TBM's public road inventory.

8.1.3 Speed Analysis & Recommendations

TBM collected multi-day operating speed data in 2018 and 2019. This data was reviewed and is summarized in Table 8-2. Average speed is the average of all travel speeds collected (50% would be travelling faster and 50% would be travelling slower than this speed). 85th percentile speed is a traffic engineering metric used to indicate the speed at which 85% of users are travelling slower. When the speed is more than 10 km/hr over the posted limit, this is usually an indication of a speeding issue that requires attention.

Table 8-2: Speed Data Summary

Corridor	Location	Classification	Speed km/hr		
			Posted Speed	Average Speed	85th Percentile Speed
4th Line	County Rd 19 to 3rd Side Rd	Local (Rural)	60	67	81
10th Line	N of 21st Side Rd	Local (Rural)	80	69	84
10th Line	S of Country Rd 119	Local (Rural)	50	43	61
10th Line	@ Tomahawk Golf Course	Local (Urban)	50	57	71
Arthur St W	Foodland to Lansdowne	Hwy 26 (Urban)	50	53	60
King Street	161 King St	Hwy 26 (Urban)	50	61	69
Beaver Street		Local (Urban)	50	47	56
Elma Street S	41 Elmas Street	Local (Urban)	50	38	45
County Rd 2	Clark St	County Rd	80	67	77
County Rd 19	Mountain Rd to Crosswinds Bv	County Rd	60	64	72
County Rd 19	Jozo Weider Bv to Monterra Rd	County Rd	60	62	71
County Rd 21	S of Highway 26	County Rd	60	70	79

Jozo Weider Bv	138 to 242 Jozo Weider Bv	Minor Collector	50	43	50
Monterra Rd	Grand Cypress Ln	Major Collector	60	66	77
Victoria St S	N of Alice St W	Local (Urban)	50	44	53

Some conclusions can be drawng from Table 8-2**:**

County Roads set at 60 km/hr generally have good adherence to the posted speed and, based on the data above, setting to 80 km/hr may not be necessary. 70 km/hr should be be sufficient.

Minor Collectors set at 50 km/hr are too high as average speeds are lower. 40 km/hr should be sufficient.
Local urban roads appear to be operating at an average of 45 km/hr suggesting that a lower posted speed of 40 km/hr is appropriate, however 30km/hr may require further measures to implement successfully.
There is a need for traffic calming and/or enforcement measures along King Street and Monterra Road

As with all speed studies, outliers (those travelling at excessive speeds) were identified, but no locations indicated high frequency of this activity and the need for a additional speed enforcement to deter that behaviour

Based on this speed analysis, the safe accommodation of active users, and existing posted speed limits, recommended speed limits for both rural and urban contexts are summarized in

Table **8-3**.

Table 8-3: Recommended Posted Speed Limits

Road Classification	Function	Existing Posted Speed	Recommended Posted Speed
Highway	Higher speed, higher volume. Regional transit. Goods movement.	70 km/hr or higher	**Urban: 50 km/hr** **Rural: 80 km/hr**
County Road	Higher speed, higher volume. Regional transit. Goods movement.	60-80 km/hr (some 50 km/hr)	**Urban: 50 km/hr** **Rural: 70 km/hr**
Major Collector	Moderate speed, moderate volume, direct access. Regional transit. Cyclists.	50-80 km/hr	**Urban: 50 km/hr** **Rural: 60 km/hr**
Minor Collector	Low speed, low volume. Cyclists	40-50 km/hr	**40 km/hr**
Local (Urban)	Low speed, low volume. Direct access. Cyclists share the road. Pedestrians on sidewalks.	40-50 km/hr	**30 km/hr**

Local (Rural)	Higher speeds, low volume. No cyclist, pedestrian accommodations.	60-80 km/hr	**80 km/hr (AT routes: max 70 km/hr)**

TMP Action 8-1:
Adopt the Road Classification Guidelines and the new Posted Speed Limits recommended by this TMP.

TMP Action 8-2:
Work with Grey County to determine potential speed reductions on Sunset Boulevard, Sleepy hollow Road, and Grey Road 19

8.1.4 Highway 26 Recommendations

The modelling in **Section 7** demonstrates that peak periods of traffic demand (summer and winter weekends) are beginning to approach the 2-lane highway capacity particularly at congestion points such as Thornbury Bridge and at Grey Road 21. As residential and visitor growth continues at 3% annualy, congestion will continue to increase even with the mitigating effects of transit and active transportation infrastucture investment. Knowing this, it is recommended MTO proceed with the recommend future EAs of both the Thornbury bypass and widening of Highway 26 & alternate route consideration or undertake an update to their 2015 Study to reflect regional traffic changes and newer data availability..

TMP Recommendation 8-3:
It is recommended that Town staff continue engaging with MTO, encourage the MTO to revisit their 2015 Study to consider further Highway 26 capacity alternatives, and actively participate in opportunities to inform the current and future design of Highway 26.

TMP Recommendation 8-4:
Explore opportunities with Grey County and MTO to address public concerns associated with the intersections at Provincial Highways and County Roads (e.g. Highway 26 and County Road 21), including changes in geometry, signals or the use of roundabouts.

8.2 TRANSIT

Existing transit service currently consists of three main routes or services: The Collingwood/Blue Mountain Link operated by Collingwood Public Transit (CollTrans), Grey Transit Route (GTR) Route 4, and the Blue Mountain Resort Shuttle. The Blue Mountain Link provides regular daily service between 7am-9pm and typically has over 30,000 riders annually. Grey Transit Route 4 only runs during morning and afternoon peaks from Wednesday to Sunday and has much less ridership. The Resort Shuttle has 2 internal routes, 10 shuttle stops and runs every 15-20 minutes from Friday to Sunday between 8am and 10pm. On-demand service is available on other days. Based on input from the stakeholder engagement residents would like to see transit expansion, an emphasis on cyclist/pedestrian safety, better service-coverage-routing, and improved transfers between transit systems. StreetLight data showed that winter Saturdays are the busiest followed by summer Saturdays. Most trips are to or from Collingwood, most trips are under 10 kilometers, and trips are clustered around Highway 26. Seven long-term transit objectives have been identified. They are:

6. **Connect** major residential and employment centres
7. **Seek** a balance in service options to address coverage needs and ridership targets.
8. **Provide** options for members of the community with accessibility needs.
9. **Support** integration with active modes of transportation
10. **Contribute** to transportation demand management and parking issues
11. **Seek** efficiencies in operations and management costs by fostering relationships with municipal and private industry partners
12. **Establish** sustainable funding sources to maintain service delivery in the long term

Additionally, seven Transit recommendations or preliminary *strategies* have also been developed:

- *Review and update TBM transit mission statement*
- *Continue to monitor and evaluate the performance of the Blue Mountain Link and GTR Route 4 coming out of the pandemic to find operational options to increase ridership service*
- *Build on relationship with existing transit providers and stakeholders to consider:*

Pilot 30-minutes headway of Blue Mountain Link
Partner with Blue Mountain Resort to explore expansion of their on-demand service for the Craigleith/Blue Mountain Resort/Village area
Explore improved transit service linking Thornbury & Clarksburg to Craigleith/Blue Mountain Village Area with County's GTR Route 4 or expanded partnership with CollTrans

Connect the Blue Mountain Resort to the Simcoe Linx through expansion of that service and stop location.

- *Identify sustainable funding sources if pilot projects are determined to be successful.*
- *Explore paratransit services options for persons with accessibility needs.*
- *Develop key performance indicators that are aligned with the mission, goals, and objectives of transit, and develop a contractor monitoring, evaluation, and performance management plan.*
- *Hold transit-tailored public consultation when service changes are being proposed to refine how the services will meet community, stakeholder, and visitor needs.*
- *Continue to monitor and evaluate the performance of the Blue Mountain Link and GTR Route 4 coming out of the pandemic*

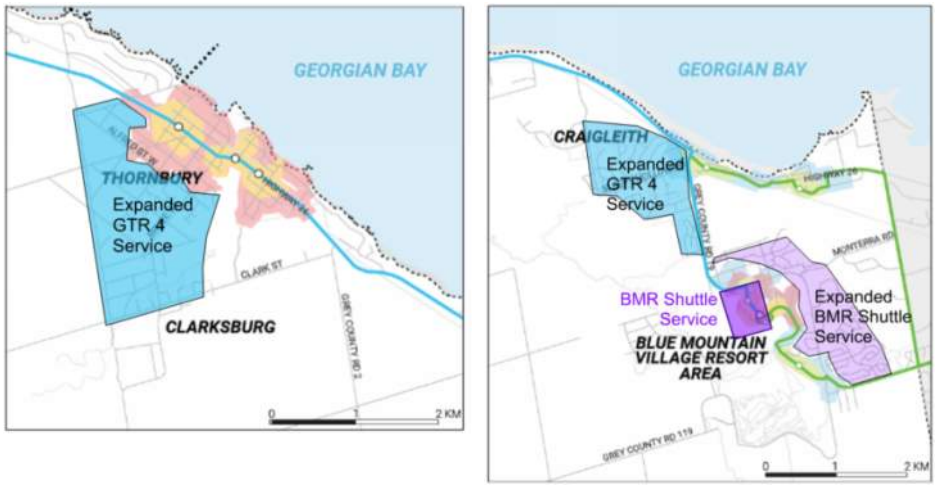


Figure 8-2: Potential Transit Service Expansion Areas

TMP Action 8-5:
Develop a Transit Strategy (beginning with a Transit Mission Statement) that incorporates the preliminary TMP strategies for transit

8.3 ACTIVE TRANSPORTATION

8.3.1 Network approach

The approach to Active Transportation necessary in TBM involves accommodation of both a recreational and transportation functions, as outlined in **Section** Error! Reference source not found..The implementation of a transportation network must balance the user requirements against the capital implications. For the purposes of developing a network that can serve a range of users, from cautious to confident, we recommend a layered approach to network comprised of three categories:

- Core network
- General network
- Recreation network

This network approach does not dictate a specific facility design guideline, instead it indicates the base level of protection / delineation that is required to support the users of that network. Inherent in this approach is a tradeoff of facility and user type that would ideally be exceeded wherever / whenever possible.

It is important to note at this stage that the network is being considered primarily with the cyclist and walker in mind, using an approach that accounts for their movements. While the introduction of transportation solutions like e-bikes has made active transportation more accessible and approachable for users, it has not fundamentally changed their need for protection required. These mobility solutions serve largely to expand the network scale, as users are more confident to travel farther (5 km or more) or tackle more topography such as trips that include the escarpment.

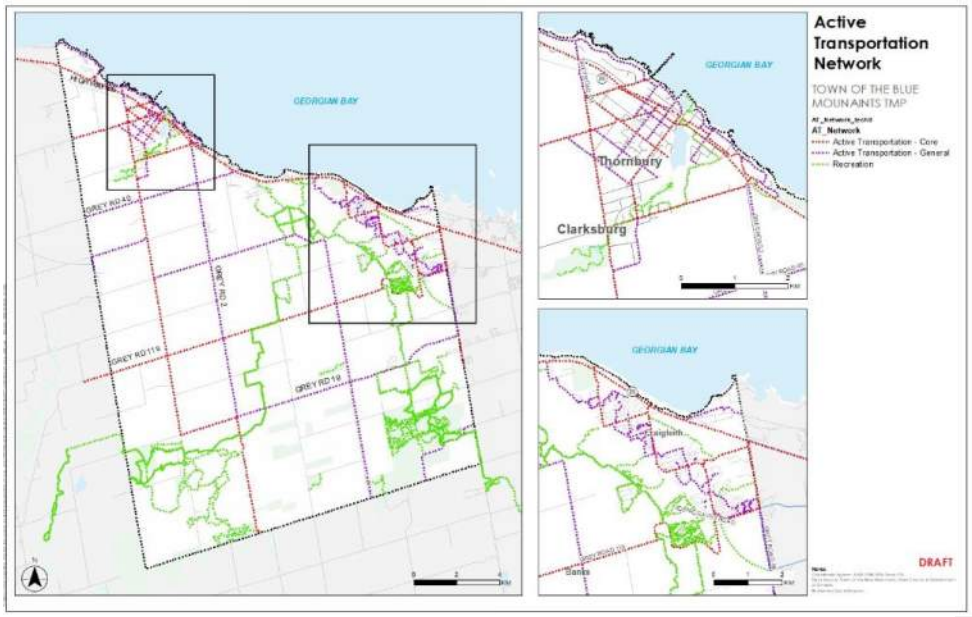


Figure 8-3 Active Transportation Network by Category

Core network

The objective of the core network will be to establish a protected network that will encourage and support new adopters and cautious users. This network should provide vertical deflection or rumble strips where vertical deflection is not possible due to winter maintenance or agricultural vehicle considerations. The core network should serve as a major corridor connection between destinations, accessible to most residents in the urban context with no greater than a 400-metre trip on a low speed / low volume roadway.

Key features of the Core network:

The Georgian Trail –While the trail has historically been regarded as a recreational trail, it also serves as a parallel spine to Highway 26, which enables seamless connections to the waterfront and residential areas. For the core network, the trail is a key spine and should be maintained at a level to make that will facilitate easy travel using a multi-use pathway standard.
Thornbury – The townsite of Thornbury has a rural town development pattern with a surplus of parking both on-street and off-street. The core network in this area connects key destinations, including the waterfront, and business area. It additionally provides access for residents to protected infrastructure through low volume/low speed roads.
Craigleith - The core network in this area connects key destinations waterfront, business area. Additionally provides access to residents to protected infrastructure through low volume/low speed roads
Grey Road 2 & 10th Line – The roads provide a North – South corridor through the Thornbury.
Sideroad 15 / 119 – The roads provide a core east-west corridor with mountain access and communities along the network.

It is worth highlighting that these core features connect key destinations, versus designed and implemented independently, thereby completing the core network design and enabling a broader user base. The Community of Care, for example has an active modes connection identified to connect it to the Central Business District and trail network.

Commented [OJ7]: Content added for Final Draft Rev 2

General Active Transportation Network

To reflect the use of rural roads as recreational networks, the objective of the general network is to facilitate the movement of cyclists and walkers relying on shared facilities. The general active transportation network will provide an infrastructure standard based on a level of confidence in the user, and readily acknowledges that the infrastructure deficiency will be a barrier for some users.

Recreational Network

The objective of the recreation network is to secure those segments of the network that serve a uniquely recreational role, TBM has a unique natural beauty with which residents and visitors alike want to interact. These facilities may require vehicle parking to serve the recreational

access and are often a destination. When designed for walking, these facilities should, with only the rare exception, exist entirely separated/protected from the vehicle network. Where the network interacts, the facility should recommend the appropriate facility type based on the user group and function. For example, the Bruce Trail is not available to cyclists, and is designed with only hikers in mind. Alternatively for cycling, facilities should highlight opportunities designate a facility that responds to the higher volumes of cyclists moving at higher speeds. This may mean wider cycling areas, consideration of advisory lanes, or similar features. The cycling routes favored by these groups will also benefit from resurfacing and should have additional attention paid to damage, such as potholes.

8.3.2 Design Principles & Guidelines

A successful active transportation system requires two key elements – connectivity, and safety. Specifically, for TBM, design guidance should consider:

- North-South and East-West Connectivity (roughly every 3 km in the rural areas and 800 metres in the urban context if possible, and feasible)
- Connections to and through towns, hamlets, beaches, and other destinations
- Connection to the Bruce and Georgian Trails, including to the associated key parking and access locations.
- Use of a Multi-Use Trail when close to communities (so that people can walk)
- Use of All Ages and Abilities (AAA) / Ontario Traffic Manual (OTM) Book 18 cycling facilities wherever the investments can be made, with emphasis on the core network.
- Lower traffic speeds for bike routes (70 kph or less)
- Lower traffic volumes for bike routes (less than 4,000 vehicles per day).

All Ages and Abilities Design Guidance calls for facilities to serve the needs of a range of users. The overarching objective is to encourage facilities that are Safe, Comfortable and Equitable. This type of network functionally promotes growth in the cycling user base by providing a viable transportation alternative that currently does not exist with existing infrastructure. Functionally, the principle is to create a network that serves the safety and accessibility of all users. In urban or constrained areas, protection can be provided through vertical deflection, which can impact snow removal and agricultural functions. Where space is available protection can be provided with space and control of traffic speeds to achieve a AAA environment.

Design Guidance from the Ministry of Ontario, in the form of OTM Book 18 for the design of safe bicycle facilities for rural areas is presented as **Figure 8-4**. Since the street network in TBM is largely rural roads with shoulders, we need to make best use of that space. The design speed of the roadway affects the shoulder width for cycling. The two key design guidelines are:

Minimum shoulder (or bike lane) width for lower speed/lower volume roads is **1.2 metres**
Minimum shoulder width for moderate speed/moderate volume roads is **1.5 metres plus a 0.5 metre buffer**

	Shared Operating Space	Paved Shoulder (may include buffer)	In-Boulevard Multi-use Path or Off-road Trail
			
Description	Roadways with low motor vehicle volumes and speeds where people cycling share the operating space with motor vehicles. On very low-volume rural roads (< 1000 ADT), there will be few vehicle/cyclist passing events, and a shared lane may provide a comfortable condition.	People on bikes ride on a paved surface adjacent to the traveled portion of the roadway in the same direction as traffic. In a rural context, a paved shoulder may also be used for pedestrian activity. Motorists may be allowed to stop or park on the shoulder, but do not typically operate within the paved shoulder. A buffer may be added for additional separation from motor vehicle traffic and to minimize the aerodynamic effects from large trucks.	A multi-use path beyond the clear zone of the roadway or an off-road trail provide the highest degree of separation between people cycling and motorists. These facilities should be considered where motor vehicle speeds and volumes are high and where there are high volumes of trucks. Consideration should be given to potential sightline issues and conflicts at intersections and driveways, which should be mitigated through design treatments found in **Section 6**.

Figure 8-4: MTO OTM Book 18 Design

> ***TMP Action 8-6***
> *Identify community partners (e.g. County, neighboring municipalities, cycling advocacy groups) to participate in discussions around the safe implementation of bicycle routes (existing and future) including shoulder width, protection from traffic, posted speeds, impact on other users, maintenance requirements, and liability risks.*

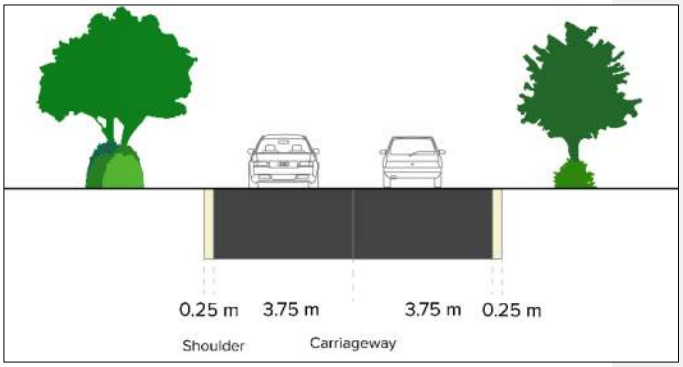
8.4 COMPLETE STREETS: PROPOSED CROSS-SECTIONS

Traditional cross-sections are generally very auto centric. They are designed primarily for the movement of cars, not pedestrians and cyclists. This is particularly true in rural areas where pedestrian and cycling activity is low. This section provides some typical retrofits for existing street classes to accommodate those users today. These examples can also be applied for new construction to better accommodate these others the day that the road is open for traffic.

8.4.1 Provincial Highway (Rural Area)

The rural portion of Highway 26 within the study area (i.e., outside of Thornbury) is posted at 70 km/hr or higher and has narrow paved shoulders (0.25 to 0.5 metres). As this section of the road network has high travel speeds and high traffic volumes (greater than10,000 vehicles per day), it is not recommended for a future bicycle facility. The current cross section is shown in **Figure 8-5** along with a street-view image and location. Future upgrading or new rural provincial highway sections should consider widening the paved shoulder to at least 2.0 metres for incident management.

Figure 8-5: Existing Cross Section for Highway 26



8.4.2 Provincial Highway (Urban Area)

Portions of Highway 26 that pass-through Thornbury take on a lower-speed urban function. King Street, for example, has a posted speed of 50 km/hr, adjacent land use, and separate sidewalks and street trees as shown in Figure 8-6**.** An upgrade of this corridor has already been identified as an important Town need. The existing curb and large landscaped boulevard space is an excellent opportunity for introducing a raised bike path that would protect cyclists from the high traffic volume for which this corridor is known.

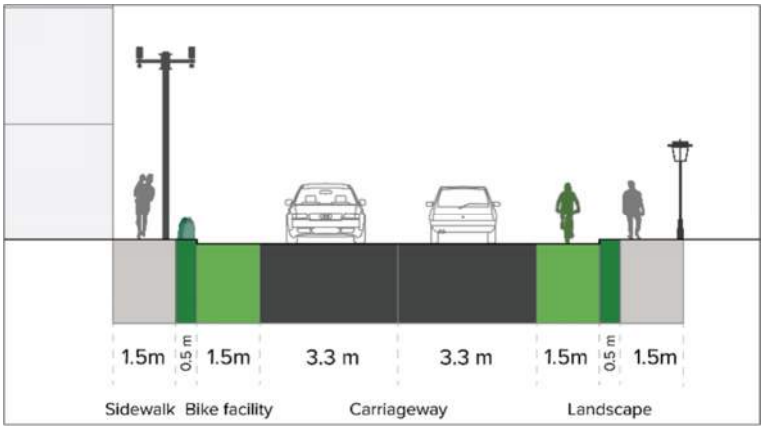


Figure 8-6: Potential Cross-Section Treatment for King Street

8.4.3 County Road (Rural Area)

Although County Roads are not in TBM's jurisdiction, they still serve residents and visitors within the study area and provide north-south connectivity for users. County Road 2 is one such corridor that has been identified for future active transportation use. With no existing paved shoulders and posted speeds of 60 to 80 km/hr, additional paving will be required to provide a minimum of 2 metres pavement space (including buffer space from traffic) for the exclusive use of cyclists. This treatment is illustrated in **Figure 8-7**.

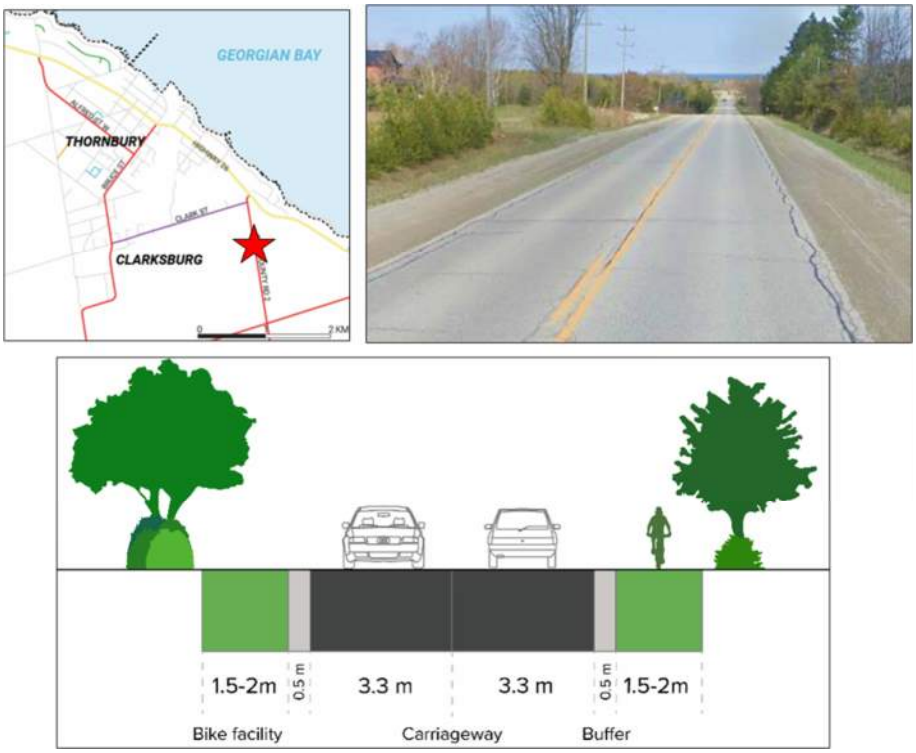


Figure 8-7: Potential Cross-Section Treatment for County Rd 2

8.4.4 County Road (Urban Area)

Some County Roads in the study area enter urban areas like Thornbury. Grey Road 13 (Bruce Street) is one such street. Fortunately, lower speed limits (40 to 50 km/hr) and lower traffic volumes allow the addition of bicycle facilities without physical separation from vehicles. This provides some flexibility in the existing road space. On Bruce Street, for example, removal of parking from one side of the street and adjustment to the centerline provides sufficient space of a bi-directional bicycle facility on one side while retaining parking on the other side of the street. This is illustrated in Figure 8-8.

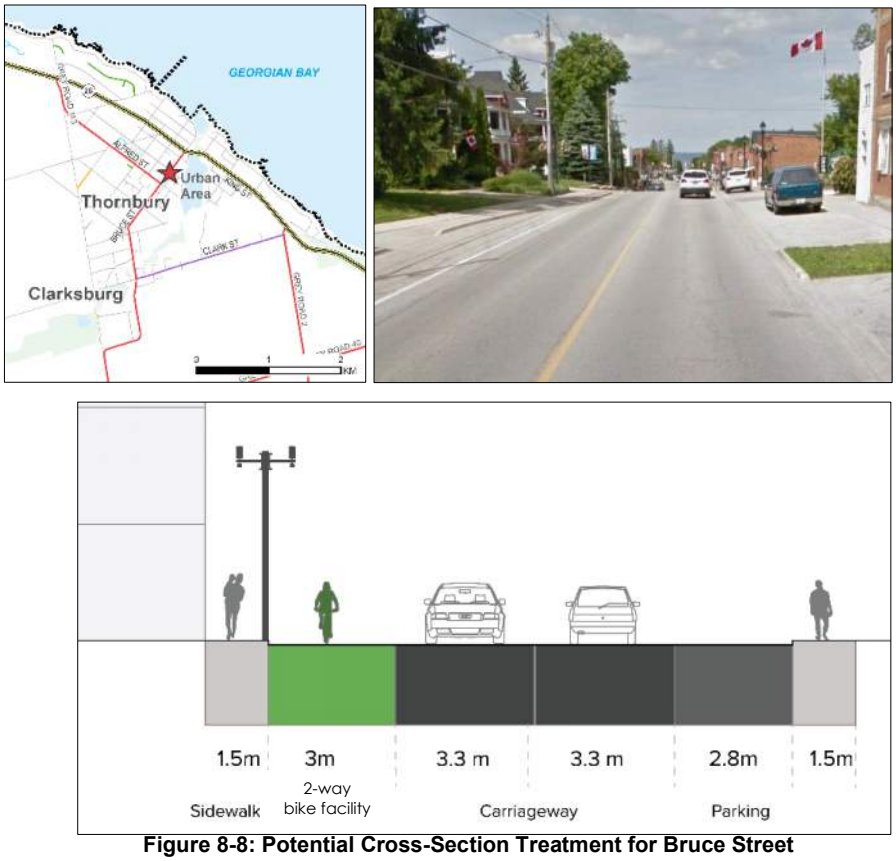


Figure 8-8: Potential Cross-Section Treatment for Bruce Street

8.4.5 Major Collector Road

Major Collector Roads are similar to County Roads but fall within TBM's jurisdiction . The roads have posted speeds of 50 to 60 km/hr and carry low daily traffic volumes. Given these traffic characteristics, the corridors are good candidates for bicycle facilities without requiring significant separation from vehicular traffic. Clark Street, for example, requires less than 1.0 metre of additional pavement on each shoulder to provide adequate shoulder width for bicycle facilities. This is illustrated in Figure 8-9

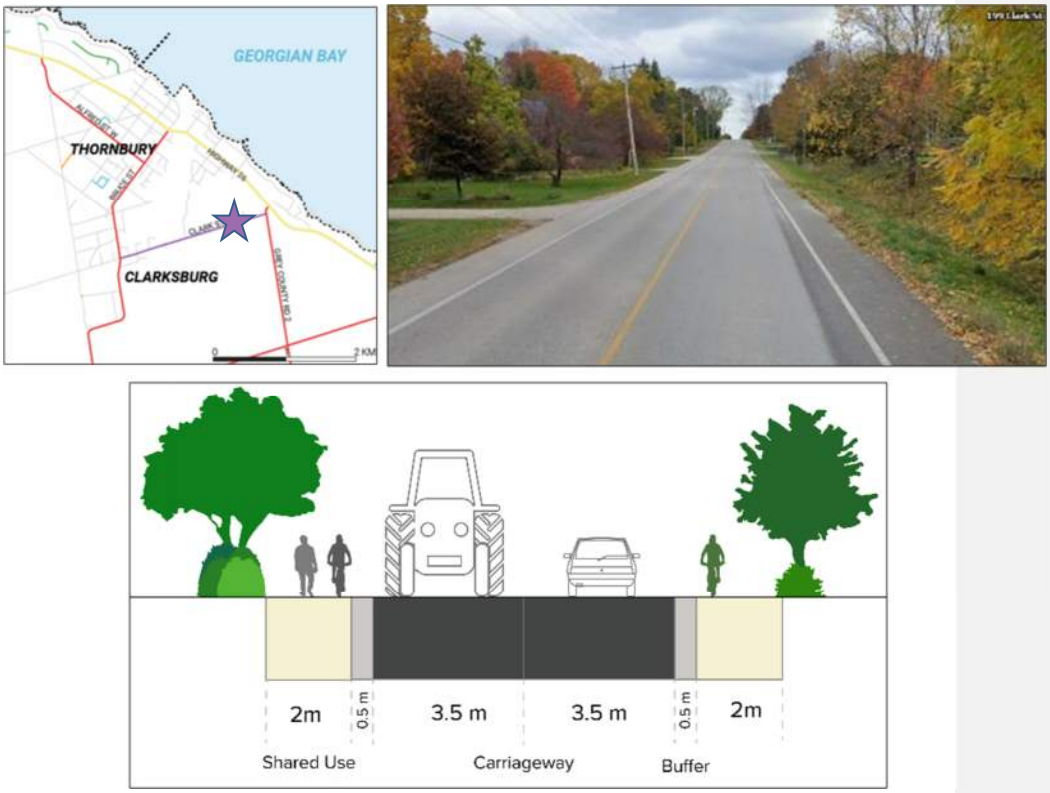


Figure 8-9: Potential Cross-Section Treatment for Clark Street

8.4.6 Minor Collector Road

Minor Collector Roads provide direct access to residents, have low posted speeds (40 to 50 km/hr) and carry low daily traffic volumes. With these traffic characteristics, only 1.2 meters of space is required for painted bike lanes. Sleepy Hollow Road, with its 9.0 meters of existing pavement width, only requires reallocation of space and pavement markings to fit two bicycle lanes and two travel lanes without widening the current road surface. This is illustrated in **Figure 8-10**

Figure 8-10: Proposed Cross-Section Treatment for Sleepy Hollow Road

8.4.7 Local Roads

Local roads provide direct access for residents, have low posted speeds (40 km/hr), and carry very little daily traffic. At a recommended posted speed of 30 km/hr, cyclists can safely share the same road space as vehicles. It is recommended that signage and pavement marking at the local street entrance be installed to notify drivers that they are in a shared-use environment.

Figure 8-11: Proposed Cross-Section Treatment for Local Roads

8.5 CORRIDOR AND INTERSECTION SAFETY IMPROVEMENTS

An intersection scan was undertaken during the development of this TMP to capture known intersection concerns based on previous collision data, previous studies undertaken by TBM, and critical core AT network links. Several locations have been identified as requiring further examination to address safety concerns. These are summarized below:

8.5.1 Highway 26

@Grey Road 40
Previous study conducted with alternatives created to address traffic issues in the area. Alternatives included addition of turn lanes and closing nearby streets.

@Grey Road 19
This intersection carries a significant transportation volume, especially as it relates to the Village resorts and water access (parking on north side). Addressing this intersection will necessitate an examination of waterfront access and active transportation to eliminate the barrier of Highway 26 to the resort, especially for cycling.

@Thornbury
The following locations were identified based on collision pattern and traffic volumes. These are high traffic intersections, with high traffic volumes on Highway 26 and a mix of destinations on both sides. These intersections are often cited as barriers for access across modes. These intersections demonstrate the tension between traffic 'through' the Town, and local traffic (by a mixture of modes) that want access. This connecting link" segment of Arthur Street and King Street in Thornbury includes the intersections of: Lansdowne St, Victoria St, Elma St, Bruce St, Mill St and Elgin St. The MTO should continue to monitor warrants (numerical thresholds based on factors like traffic and collision numbers) for upgrading of traffic controls and/or pedestrian crossing measures.

8.5.2 Grey Road 19 Corridor

Historical collision data identifies this corridor through Craigleith and Blue Mountains Resort as an area with high collisions and has significant changes to its horizontal alignment. A discussion with Grey County for the need to undertake a safety audit of Grey Road 19 to identify potential safety improvements would be required.

8.5.3 Other Locations

Grey Road 119 (between 15th Sideroad and Blue Mountain Road)
There is a pattern of collisions along this segment of the road, generally concentrated at the intersections / property accesses.

Grey Road 2 & Grey Road 40
This intersection shows a pattern of collisions at a location where two important traffic and AT corridors meet.

Grey Road 2 @ Grey Road 119 & Grey Road 19
These intersections are important in the proposed core active transportation plan, with some collision history, which may necessitate examination and design interventions. This would be part of any infrastructure improvements to the Grey Rd 2 corridor.
Highway 26 @ Grey Road 2
This intersection has a pattern of collisions, and is located on the proposed core active

transportation route. It is anticipated that this intersection could see increased activity from all modes that may justify additional attention.

A transportation report, Highway 26/Grey Road 2 Intersection Improvements MCE Assessment (Burnside & Associates Ltd. May 2016) reviewed this location and indicated that the preferred option was for signalized control including:

Signalization at Highway 26 / Grey Road 2 / Lakeshore Road and addition of left turn lanes on the west, north and south approaches
Realignment of Lakeshore Road to the Highway 26 / Grey Road 2 intersection and close of east Lakeshore Road access at Highway 26 with retention of an emergency at this location
Realignment of Georgian Trail to cross at the Highway 26 / Grey Road 2 signalized intersection
Realignment of Clark Street of the south with stop control at the new intersection with Grey Road 2

TMP Action 8-7
Working with Grey County and the MTO, undertake the necessary safety reviews (or audits) to design and implement safety improvements at the priority corridors and intersections identified in this TMP.

8.6 PARKING

8.6.1 On-Street Parking Locations & Restrictions

The Town of the Blue Mountains has GIS data related to its on-street parking locations and restrictions within five Zones or Schedules. Figure 8-12 denotes these different zones by color. Solid lines indicate that there are no restrictions (parking is permitted anytime) and dashed lines indicate either a time restriction or seasonal restriction). Refer to Table 8-4 for the on-street parking restrictions legend.

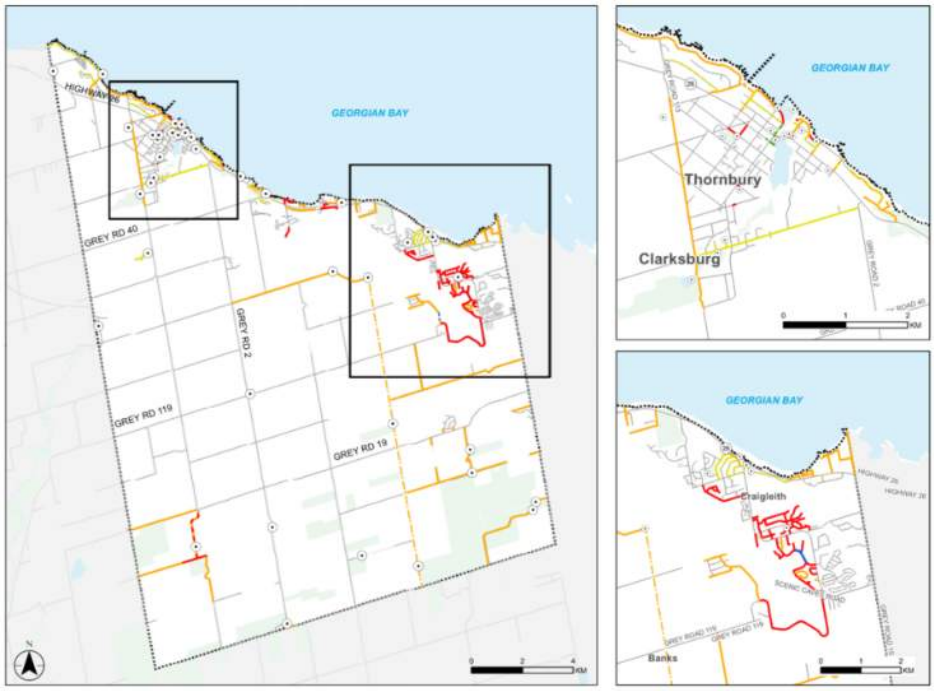


Figure 8-12: On-Street Parking Locations & Restrictions

Table 8-4: On-Street Parking Restrictions Legend

Schedule	Any Time		Limitation		
	Symbol	Key Locations	Symbol	Type	Key Locations
A		Local roads in Craigleith, GR119		Hour	10 th Line (near SR 6)
B		n/a		Hour	Bruce St, Louisa St
C		Jozo Weider Bv		Seasonal	Swiss Meadows Blvd

E		10th Line, SR 6, SR 12, SR 21, Pretty River Rd, Lake Dr, Cameron St		Seasonal	4th Line
F		Clark St		Hour	High Bluff Ln, Huron St, Lakeshore Rd

Specific details for these parking restrictions can be found in the Town of the Blue Mountains latest amended Parking Bylaw 2003-11.

8.6.2 Off-Street Parking Locations & Inventory

All off-street parking locations (free, paid, and future paid) are shown in Figure 8-13. There are a total estimated 2,600 parking spaces. Most off-street parking locations are in and around the Thornbury area. Others are scattered near the Blue Mountains Resort area, concentrated near Highway 26, and in rural recreational areas throughout the study area. Thornbury and the Highway 26 corridor have the largest concentration of paid off-street parking which is estimated to be 1,300 spaces. Theses spaces, typically situated at public beach accesses off Highway 26, cost $10/hour up to a maximum 4 hours, unless the user is a resident of the area and has a pass. This high price is intended to off-set operational costs such as garbage collection. This program should continue to be monitored to ensure that visitation to the area is not negatively impacted.

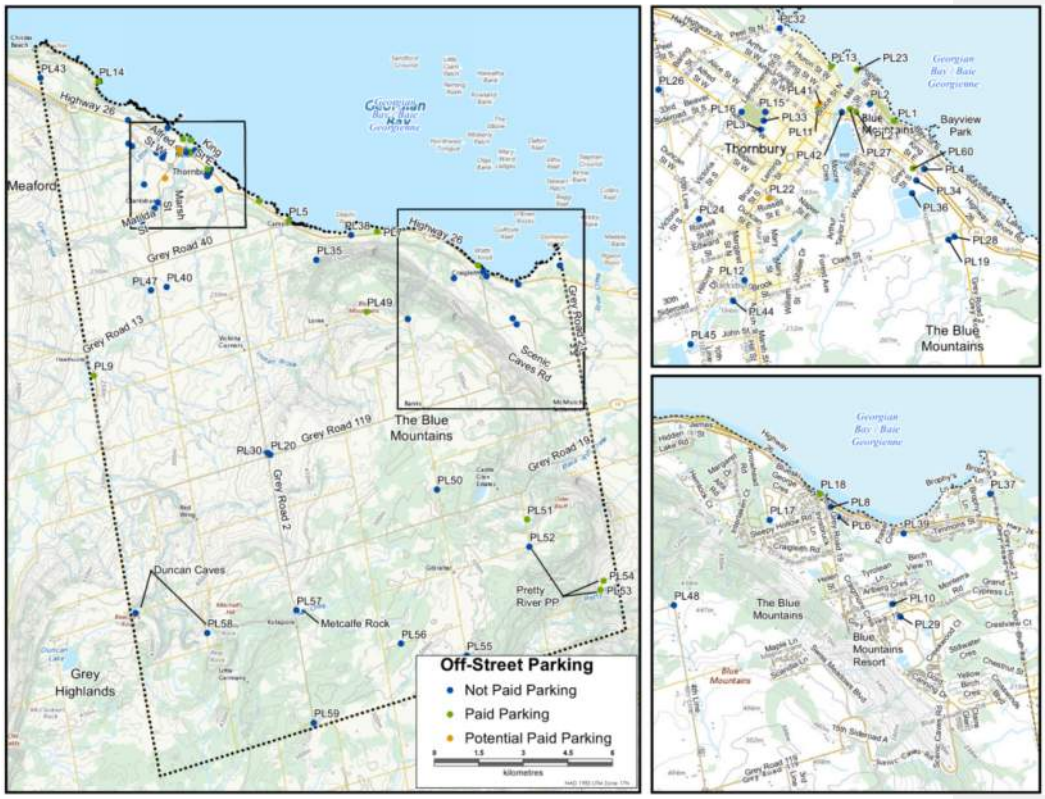


Figure 8-13: Off-Street Parking Locations

8.6.3 Focus Areas

There are three distinctive areas in TBM with unique parking demands and contexts:

- Thornbury/Clarksburg
- Blue Mountain Resort
- Rural/Recreational areas

Thornbury/Clarksburg has the most on-street parking demand along commercial fronting streets. Figure 8-14 shows a section of Bruce Street where there is a high concentration of retail

and parallel parking has been delineated with pavement marking. There is also parking available on nearby side-streets that are restricted to 2-hour time limits.

Figure 8-14: Thornbury On-Street Parking (Bruce Street looking West)

Blue Mountain Resort is a significant generator of parking demand in both the winter ski season and summer season. Most parking is restricted to off-street parking areas and though they are not within the direct jurisdiction of TBM, good parking management of this area not only benefits Blue Mountain Resort, it also benefits the nearby residents of Craigleith.

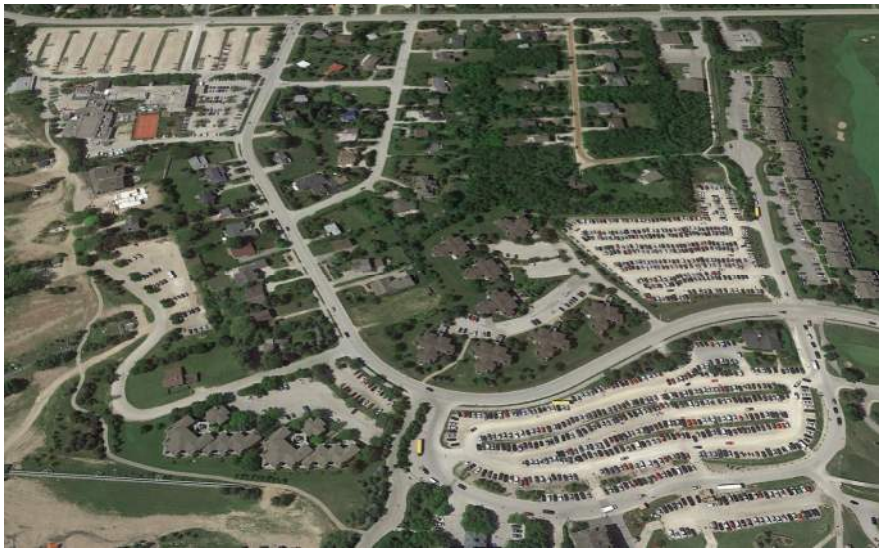


Figure 8-15: Blue Mountain Resort Parking

There are several recreational access points located throughout TBM, many of which have underdeveloped parking areas and facilities. In more popular areas, this could lead to an overflow of parking to roadway shoulders, ditches or private property. There are strategies that could control parking demand and prevent illegal parking. These are discussed in the following section.

Figure 8-16: Parking Area for Meltcalfe Rock Hike (10th Line)

8.6.4 Strategies & Recommendations

Several parking strategies are presented in this section, however, without the benefit of a comprehensive parking study/strategy with seasonal and time of day utilization data for on-street use, off-street parking use, Blue Mountains resort use, and an inventory of all recreational parking facilities, specific implementation strategies and associated costs can't be provided within the scope of this TMP. However, several preliminary strategies can be recommended to provide the framework for a comprehensive parking study.

TMP Action 8-8
Undertake a comprehensive Parking Strategy that includes data collection to determine the current daily and seasonal parking demands for the three focus areas. adopts the TMP preliminary strategies (Section 8.6.4) as a framework for the Strategy.

TMP Action 8-9
Work with Grey County and other land managers on the recreational parking locations and pursue opportunities for additional parking locations .

Commented [OJ8]: Action revised.

Preliminary Strategies

Thornbury/Clarksburg:

Optimize existing parking availability. (oversupply can lead to induced demand)
Consider improved wayfinding to encourage parking in underutilized areas
Identify short-term and long-term parking areas.

Blue Mountain Village & Resort Area:

Encourage stakeholders to invest in tools to improve parking optimization (e.g. technologies to monitor and provide information around where parking supply is available)
Recommend to BMR/Village to introduce paid parking for parking sites closest to slope access for high demand times
Work with Village/Resort through future development to identify and consider alternatives to manage parking supply
TDM strategies to mitigate parking demand (e.g. incentives to employees to cycle or take transit to work)

Rural Recreational Areas

Improve Trailhead parking supply/design
Identify new or expanded parking supply in locations that have fewer road safety issues
Consider paid parking options, favouring by donation rather than fixed price.
Implement wayfinding signage for alternative parking locations, where applicable.

8.7 GOODS MOVEMENT

Truck routes are intended to be the major travel corridors for heavy trucks/goods movements. Trucks travelling unnecessarily through residential neighbourhoods are undesirable and unsafe. For those reasons, it is useful to designate certain roads for carrying trucks across TBM. Goods movement includes both the movement through and to destinations within TBM. These

movements may be raw materials for manufacturing (notably the agricultural sites in TBM), goods for distribution, or the distribution of goods to the point of sale / consumption. Many goods move through TBM on Highway 26 (MTO's jurisdiction) destined for locations outside the study area, and delays within the corridor have a direct financial impact to businesses. Goods movement requires a predictable transportation network that provides a high level of service on key corridors, most of which are under the jurisdiction of Grey County. It is also important to locate distribution and manufacturing land uses on key corridors to reduce pressures on local or residential roads.

Agricultural processing has a somewhat different function within TBM. While moving agricultural goods from the several distribution centres or individual farms is functionally the same as other goods movement, agricultural operations require accessing large areas of land using slow moving vehicles such as tractors. These vehicles may be moving feed, moving large equipment, or moving the processed food. In each case, Generally, farm vehicles move much slower than the posted limit and in so doing frequently obstruct traffic flow. These vehicles rely on unobstructed access to the shoulder of the road, which can be expanded in areas of high traffic to enable traffic to safely pass. Where the shoulder area cannot be increased, passing lanes should be considered.

8.7.1 Strategies & Recommendations

Preliminary *strategies* have been developed for the movement of goods. They include:

Consider the needs of the agricultural industry and their potential to conflict with other road users

Consider locations for truck and trailer parking in future road improvements

Continue to determine the future Highway 26 corridor needs. Recognize future MTO study area alternate route (Highway 26) for Thornbury/Clarksburg, and engage the goods industries in the decision framework

Continue working with MTO to fulfill identified highway access management projects (complete and incomplete EAs) to support industrial development or existing conflict areas

Develop options to support private industry, including Blue Mountain Village for loading areas and delivery needs in future expansions/growth.

TMP Action 8-10
Develop a Goods Movement Strategy that includes the needs of commercial, industrial, and agricultural industries. Adopt the preliminary strategies identified in this TMP as the framework for the Goods Movement Strategy.

8.8 BRIDGE & CULVERT RATIONALIZATION PLAN

8.8.1 Existing Bridge & Culvert (>3m) Inventory

TBM provided an existing bridge and culvert inventory and condition report which has been summarized in Error! Reference source not found. and mapped in **Figure 8-17**.

Table 8-5: Bridge & Culvert Inventory and Locations

Structure #	Condition (BCI)*	Geographic Location	Structure #	Condition (BCI)*	Geographic Location
B-01	73	10th Line	C-201	72	18th Sideroad
B-02	24	6th Sideroad	C-202	69	10th Line
B-03	22	6th Sideroad	C-203	69***	21st Sideroad
B-04	63	9th Sideroad	C-204	75	6th Line
B-05	27	12th Sideroad	C-205	71	Grand Cypress Line
B-06	52	10th Line	C-206	74	Arrowhead Road
B-07	62	12th Sideroad	C-207	74	Indian Circle
B-08	64	6th Line	C-208	63	Sunset Blvd
B-09	29	6th Line	C-209	74	Alice Street
B-11	74	21st Sideroad	C-210	57	Arthur Street
B-12	75	21st Sideroad	C-211	70	11th Line
B-13	61**	Main St	C-212	85	7th Line
B-14	75	24th Sideroad	C-213	99	Pretty River Road
B-15	75	Slabtown Road	C-214		Crosswinds Blvd
B-16	34	10th Line			
B-17	64	Clark St (Black Bridge)			
B-18	65	10th Line			
B-19	35	11th Line			
B-21	70	Beaver River Bridge			

Source: TBM Bridges & Culverts 2021 BCI Data & TBM Bridge & Culvert Asset Management Plan (2020)
***Based on average BCI, B-13 should be changed to "Poor" condition.*
****Based on average BCI, C-203 should be changed to "Fair" condition*

*BCI Average 2019-2021

Good	90-100
Fair	70-89
Poor	40-69
Very Poor	39 and below

Commented [AF9]: I have asked our manager of Road and Drainage if he has any in mind for potential decommissioning. Might be useful to have criteria with recs? – very low volume, does not isolate any properties, and minimal impact to residents?

Commented [OJ10]: New table to reflect the 2020 Asset Mgmt Plan Inventory

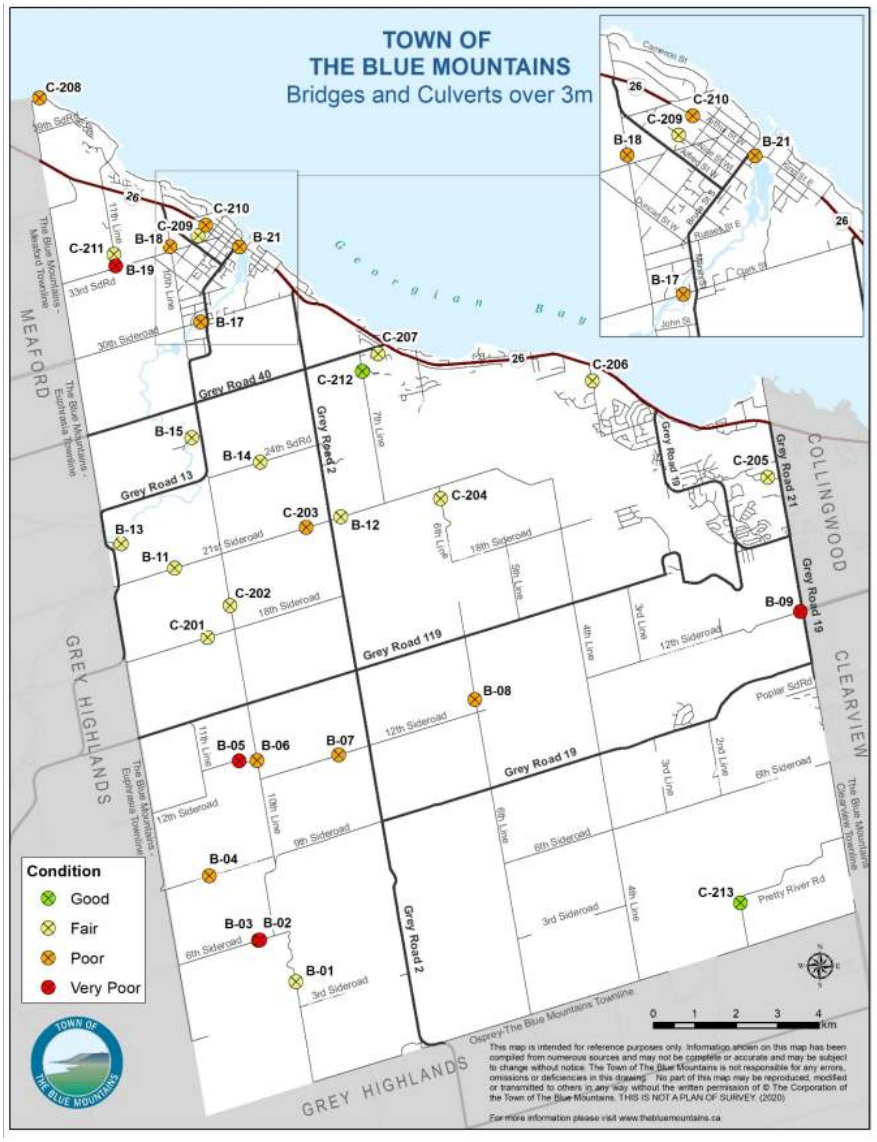


Figure 8-17: Existing Bridge & Culvert Locations

Commented [OJ11]: New figure to reflect the 2020 Asset Management Plan.

8.8.2 Condition Evaluation Parameters

The recommendations proposed for the structures under consideration is prepared based on the provided data and on following factors: **Structure's BCI value.** The Bridge Condition Index (BCI) is a measure of the structural health of a structure and its ability to continue safely functioning as it is intended to. The BCI is based on visual inspection only. Based on experience a BCI threshold value of 60 or less could, generally, be considered as an indication that this structure needs to be considered for a replacement or major rehabilitation work soon.
To avoid using a single value of a BCI from a specific single year's structure inspection report (BCI values of year 2019 were referenced in the provided tables), and to avoid possible subjectivity in the evaluations, we are using the average BCI value of 2019 and 2021 inspection reports provided in the tables.

Age of structure
Structures have a finite service life, and, with time, they will deteriorate and have their residual life decrease. The age of a structure is usually a major indication of the ability of this structure to continue in service and to safely function as it was intended to.

Type of structure
A structure's age and its BCI value, at a certain point of time, are major factors in evaluating its structural health. However, consideration of the long-term performance and rate of deterioration of different types of structures is also required to understand the ability of a structure to continue to safely function as it is intended to. A structure's performance and rate of deterioration is dependent upon the type of structure under consideration. For example, if we consider a concrete rigid frame structure and a CSP arch structure that were both built at the same time and, say, both now have the same BCI value, experience over the years has proven that the rigid frame structure can continue to safely function as it is intended to for a much longer period of time than the CSP structure.

Condition Assessment Structures' Condition assessments of GOOD, FAIR, POOR or VERY POOR were provided and used, together with the above factors, to come up with the proposed Action Plan.

8.8.3 Location of Structures and Future Construction Contracts Budgeting Condition Assessment

As construction contracts for replacement or major rehabilitations of structures are not usually issued on a structure-by-structure basis, the proximity of a few structures to each other, could be an important factor in considering bundling the work on these structures together in a single contract. This could be more economical to do even if the BCI value,

the age, and other factors of some of these structures in the bundle are not the worst in the overall Action Plan evaluation ranking.

Also, the Owner's future allocated yearly budgets for structures' rehabilitation or replacement could affect which structures would be packaged and contracted out together or separately in a specific year or multi-year plan. This factor would be easier to manage when individual structures' construction cost estimates become available to the decision makers.

8.8.4 Rationalization Study

Commented [OJ12]: New section.

For the rationalization study, a review of the maximum detour distance that a bridge decommissioning would create and whether that bridge exists on a proposed active transportation route was undertaken. Detours exceeding 5 kilometers were considered not acceptable based on resident inconvenience and delayed emergency response.

The only structure that meets these criteria for decommissioning, is bridge structure #07, a concrete rigid frame on 12th Sideroad with a current condition rating of 62.

8.9 EMERGING TECHNOLOGY

When considering investments into emerging technology approaches need to consider the potential value to the transportation network. Often these technologies serve very specific functions that target specific users' groups. When considering which tools are most applicable to TBM several considerations were made to suggest emerging approach that are most suitable. Suitability of technology should be practical and applicable, but notably investments in Smart Mobility should be viewed through the additional lenses of Resilient and Equitable. The role of resilience and equity targets supporting investment which responds to the changing environmental and transportation realities. These are investments that should support the transportation system as reliance on a single transportation mode becomes more challenging from a health and environmental side. Equity, as a lens highlights the importance in making these investments in areas which are not considered, often rural communities are left for latter considerations in these matters, which impacts of transportation fragility are most painful for these residents and businesses.

Identified strategies include:

Travel time messaging for Highway 26th: The importance of Highway 26 to the movement of people and good in and through TBM suggests that increases in this information, where through a mixture of on road signage and available online messaging will enable travel patterns to adapt and use the entire transportation network. These travel times are particularly important for goods movement, which rely on Just in Time

delivery for the management of resources and drivers. There is an opportunity here to coordinate with adjacent jurisdictions; however, even in the local context a solution like this can avoid traffic bypassing Thornbury (out of concern for congestion) or change the time-of-day people travel.

Smart Connected Signals: Smart signals through coordinated signal management and counters, could alleviate some of the transportation pressures at key intersections. This could adapt to presented travel patterns in real time, including coordinated signals with nearby crossing locations.

Parking information: The role of TBM as a recreational destination, such as those accessing the water, attending an event, or hiking on the Bruce Trail, means that people are often required to drive there. This puts pressure on an otherwise abundant parking supply where many users are trying to access one location and may dissuade users from attending. The opportunity here could be about providing information on signage and online to enable trip planning. Examples would provide 'park here for this event' and 'number of spaces per lot' and could in time extend to paid parking spot reservation.

Winter Road Closure data integration: Winter storms are a frequent occurrence the TBM, the impact to the Transportation System across Grey County is significant. Currently road conditions are available to drivers through a mixture of MTO provided online services, public PSAs (generally over the commercial radio) and alert signage at key roadways. This could be augmented through providing sensors in road closure areas, to advise of vehicles within the closed area, or the use of push notifications / combined with other messaging opportunities to push the message forward. As the area is frequently travelled by out of area visitors, the opportunity to integrate these alerts with their trip planning could prevent significant risk.

Permanent counters / Volume and Trip counters: TBM has several key transportation corridors, which indicate overall transportation volumes, this is true across modes. The introduction of permanent counters would support long- and short-term transportation planning, both for the investments in Active Transportation, Recreational Networks and vehicles infrastructure. This can be provided through a strategic approach to counters (for example some permanent and some temporary based on seasonality) This will support several other Smart Mobility efforts. Permanent counters could be coordinated with ITS solutions to manage signal timing a key congestion points.

Open Data / Data sharing policies: Currently the TBM has limited the data sharing to GIS / Online mapping. Smart Mobility requires open access to data available for respond to market needs, be they recreational, industrial or commercial. With this comes concerns for data privacy and technology standards. An open data / data sharing policy would provide a framework for the TBM to provide that to both industry and residents.

Explore partnerships with local industries / agriculture: At a municipal level the transportation system is planned to respond to the needs of users. It is important to acknowledge investment in Smart Mobility is starting at the ground level, and key industry partners including the resorts and agricultural business will be driving this investment locally. To support practical useful growth there is an opportunity to collaborate on the investment, including access to government grant funding.

Bike Share / Micro mobility: There is an opportunity in both Craigleith and TBM to support the deployment of bike share or micro mobility solutions that enable residents and visitors to move around the area without relying on their Car. Through use of solutions, such as cargo bikes or e-bikes a shift in transportation users can be realized. This would likely be a balance between public effort and private resorts to implement.

Invest in EV charging on public lots: Planning for the deployment of Electric Vehicle Charging is a fundamental shift is the behaviours of people while charging. It is not clear yet that the 'gas station' approach to electric charging is the most appropriate, where you can now better tie the activity of charging the vehicle with getting groceries or grabbing a coffee. The movement toward Electric Vehicles is occurring quickly, the Town should respond with a strategic approach to EV charging that ensure the Town continues to the accessible to all visitors and residents after they have made the change.

TMP Action 8-12
Continue to explore, develop and implement Smart Mobility approaches identified in the TMP either as their own initiative or as part of another initiative.

9.0 STAKEHOLDER ENGAGEMENT (ROUND 2)

9.1 PUBLIC INFORMATION CENTRE 2

9.1.1 Purpose of Online Public Information Centre 2

The purpose of the second online Public Information Centre (PIC) was to present and gather feedback on proposed travel mode targets (i.e., via transit, active transportation, and cars), identified deficiencies in the transportation network, proposed improvements to the transportation network, preliminary policy recommendations, and next steps in the TMP process.

9.1.2 Notification

The Notice of Online PIC 2 was distributed to the public, agencies, utility stakeholders and First Nations through the three methods outlined in **Table 9-1** below:

Table 9-1: Online PIC 2 Notification Methods

Method of Distribution	Date of Distribution
Emailed electronic copy to study mailing list	April 13, 2022
Emailed electronic copy to TMP subscribers	April 13, 2022
Project Website and Town Website Notice	April 12, 2022
Posted in the local newspapers (Blue Mountains Review & Collingwood Connection)	April 14, 2022, and April 21, 2022
Reminder email to study mailing list	April 27, 2022
Reminder email to TMP subscribers	April 27, 2022

Study team member contact information was also provided within the notification, and on the study webpage. A copy of the Notice of Online PIC 2 and the notification email is included within **Appendix A**.

9.1.3 Location, Date & Time

As mentioned, the second PIC was held online and at two in-person sessions. The online PIC consisted of a recorded presentation that was hosted on the study website (https://www.thebluemountains.ca/planning-building-construction/current-projects/strategic-

projects-initiatives/transportation), from April 18 to May 7, 2022. The two in-person PIC sessions were held on May 5th from 5:00 PM to 7:00 PM and May 7th from 9:00 AM to 11: 00 AM at the Town of The Blue Mountains Town Hall at 32 Mill Street in Thornbury.

9.1.4 Reference Materials

The following displays were presented as part of the online PIC presentation:

- Welcome
- TMP Revised Objectives & Study Area
- Master Planning Process
- Consultation Process
- What We've Heard: Growth and Demand
- What We've Heard: Transit
- What We've Heard: Active Transportation and Complete Streets
- What We've Heard: Intersection Improvements and Goods Movement
- What We've Heard: Speed Management
- What We've Heard: Parking
- TMP Revised Vision Statement
- Regional Context – South Georgian Bay
- Existing Road Classifications
- Existing & Target Mode Shares (All Trips)
- Existing & Target Mode Shares (Urban Trips)
- Traffic Growth to 2032
- Travel Demand Model (Existing, 2032, 2042)
- Existing Transit Services
- Draft Transit Long-Term Objectives
- Draft Transit Recommendations
- Existing Active Transportation Network
- Proposed Active Transportation Network
- Complete Streets Principles
- Road Design Examples
- Road Classification Guidelines
- Proposed Speed Limit Changes
- Traffic Calming Policy
- Off-Road Vehicle Permitted Use
- Parking Strategy
- Goods Movement Strategy
- Evaluation of Alternatives
- Next Steps

A copy of the Online PIC 2 presentation is included within **Appendix B**.

9.1.5 Format

The PIC was hosted online via the study website (https://www.thebluemountains.ca/planning-building-construction/current-projects/strategic-projects-initiatives/transportation). A recorded presentation, including the transcript and displays were available for review, and members of the public were encouraged to complete the online comment forms, and to contact the project team to ask questions and/or share any ideas with respect to the study. Comment form links were embedded in the Online PIC 2 presentation where interested persons could submit their input and feedback on particular topics in the Online PIC content or general comments as well. Comment forms were provided as embedded links via Microsoft Office Forms in the online PIC presentation. Online PIC 2 participants were encouraged to submit their comments online, either within the online comment forms, or by email and/or telephone by May 7th, 2022. Interested persons were also encouraged to contact the study team directly, should they have any additional comments, concerns and/or wished to be added to the study mailing list.

The two in-person PIC sessions were held on May 5th from 5:00 PM to 7:00 PM and May 7th from 9:00 AM to 11:00 AM at the Town of The Blue Mountains Town Hall at 32 Mill Street in Thornbury. Attendees were able to speak directly to members of the project team and look at printed PIC 2 display boards in the room.

9.1.6 Participation

Statistics were gathered during the online PIC period (i.e., from April 18 to May 7, 2022) to determine the number of viewers of the online presentation. A total of 278 unique visits to the project website were made during the PIC time period. The highest number of unique visits to the website in a day was 57 visits on April 27, 2022.

Figure 9-1 shows the unique visits by date.

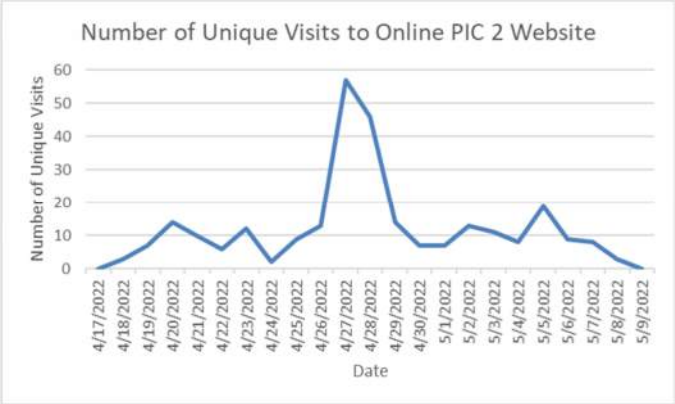


Figure 9-1 Number of Unique Visits to Online PIC 2 Website

During the two in-person PIC events, a total of 16 people attended the events.

9.1.7 PIC 2 Comments

During the Online PIC 2 period, participants submitted comments via the online survey questions embedded within the recorded PIC presentation and/or via the email address provided on the Town's engagement website. In total, six people submitted comments via the embedded comments links provided within the PIC presentation. A summary table of all comments submitted, and a complete comments package is provided in **Appendix C**. A total of four email comments were submitted during the Online PIC period and 62 survey responses were submitted for the combined targeted survey question links. No comments were submitted during the two in-person PIC events.

During the two in-person PIC events, the following topics and comments were discussed during conversations between attendees and the project team:

Cycling

Cycling proponents agreed that having a AAA facility connecting north-south and the Thornbury and Clarksburg would be helpful. Otherwise, paved shoulders were a good base, in particular at Grey Road 2.
Strong opposition to rumble strips, but understand that a level of protection is required, without a clear answer as to what that is, since snow complicates the use of sticks.
May be some ascents that should have 'climbing lanes'
Cycling behavior issues (e.g., side by side riding, not giving way)

Agriculture

Movement of both livestock/ agricultural equipment and supplies is significant in a few areas. They benefit from paved shoulders

Speed Limits

People are most concerned about the impact to their travel time where they oppose speed reductions
Highway 26 (in particular) has had many speed limit changes, it should be a consistent speed limit (60 kph)

Highway 26 Bypass - Thornbury/Clarksburg

Proponents are in favour of the saving in travel time, easing the bridge pressure point
Opponents concerned both about cost, and taking away people from the Town's business areas

Transit

Transit has a huge opportunity to tie in with resort TDM programs (e.g., bus pass includes ski lift tickets)
Higher level of service between hotels, towns and resorts.

9.1.8 PIC 2 Themes

Based on the comments submitted via email, the online survey responses and discussions at the in-person PIC 2 events, the following themes were identified:

- Increase road capacity not AT infrastructure
- Excessive speeding on Highway 26 and unsafe passing
- Highway 26 and 10th Line intersection is not safe for pedestrians and cyclists due to excessive speeding and traffic.
- Support for Alternative 3 from the Evaluation of Alternatives
- Highway 26 should be re-routed and should bypass Town of Blue Mountains
- Support for improvements to AT network
- Road quality where AT is being proposed must be improved
- Support for roundabouts
- TMP must consider future modes of transportation like e-bikes
- Support for a traffic calming policy
- Support for speed limit reductions (improved safety for pedestrians, cyclists and agricultural equipment)
- Opposed to speed limit reductions (reduced speeds will lead to more accidents because of aggressive driving, increase travel time, local urban speed of 30 km/h is too low)
- Transit recommendations/improvements are too costly, and money should be spent on fixing existing infrastructure

- Not in favour of paid parking near and in the Blue Mountain Village and resort area- will result in bigger parking issues on local streets
- Thornbury has parking capacity and parking signage issues
- Improve parking signage and improve trailhead parking
- Agricultural communities should be considered as part of TMP and agricultural equipment on roads need to be accommodated
- Paved shoulders on roads for cyclists
- Consider time of day/night restrictions for ORV use on roads

9.1.9 Next Steps

All comments received since commencement of the study have been reviewed and considered by members of the study team and will continue to be considered as the TMP progresses. As a next step, PIC 3 will be held to present and gather feedback on the draft Transportation Master Plan report. PIC 3 is anticipated to be held in August 2022.

10.0 EVALUATION OF ALTERNATIVES

To align with Canadian Municipal Class Environmental Assessment (MCEA) planning process (See Section 1.4), an evaluation of transportation network alternatives was undertaken for this TMP. A preliminary set of evaluation criteria to compare alternatives was developed in Stage 1 of the project:

Increase the number of shared ride trips
Improve traffic safety (reduce the number of collisions and severity of collisions)
Provide more sidewalks and trails
Increase the number of new cycling facilities on road corridors
Increase connectivity of road network
Decrease travel time
Increase the number of low-carbon vehicle amenities
Increase percentage of accessible intersections
Provide more accessible and equitable transit options
More frequent transit routes and stops
Decrease average travel time by transit
Increase cycling and trail connectivity to key destinations

This set of criteria was later revised and reduced to five that reflect the priorities identified through engagement and aligned with the objectives developed for the TMP:

Alternative improves capacity in the transportation network

Alternative enables for the safe movement of all users in the transportation network.

Alternative enables efficient movement of goods and agricultural equipment

Alternatives improves active transportation and public transit modes of travel

Alternative improves socio-economic and environmental outcomes

The three alternatives being evaluated are:

Alternative 1: Maintain Existing Infrastructure

This alternative is 'business as usual' with investment only being made to maintain the existing road network with any improvements being directed at maintaining vehicular traffic flow.

Alternative 2: Invest in Active Transportation and Transit

This alternative expands on the current active transportation and transit networks, repurposes existing road space for safe and efficient movement of these users, and strives to achieve the recommended mode share targets

Alternative 3: Highway 26 Alternative Route & Investment in Active Transportation and Transit

This alternative builds on Alternative 2, but will provide additional capacity to the existing 2-lane Highway 26 network by providing alternative route choices and/or widening of Highway 26 as illustrated in **Figure 3-10** of this TMP.

The evaluation of these three alternatives against the five evaluation criteria is summarized below in **Figure 10-1**: Alternatives Evaluation Summary

Evaluation Criteria	Alternative 1 Maintain Existing Infrastructure	Alternative 2 Invest in Active Transportation & Transit	Alternative 3 Hwy 26 Alternate & Investment in AT & Transit
1. Alternative improves capacity in the transportation network	Low	Med	High
2. Alternative enables for the safe movement of all users in the transportation network	Low	High	High
3. Alternative enables efficient movement of goods and agricultural equipment	Med	Med	High
4. Alternative improves active transportation and public transit modes of travel	Low	High	High
5. Alternative improves socio-economic and environmental outcomes	Low	High	Med

Low — Alternative has a low probability of meeting criteria over time
Med — Alternative has a medium probability of meeting from criteria over time
High — Alternative has a high probability of meeting criteria over time

Figure 10-1: Alternatives Evaluation Summary

Alternative 3 has a high probability of achieving all but one of the evaluation criteria, but as this Alternative is dependent on the action by the Ministry of Transportation & Highways, Alternative 2 is the recommended option for TBM in the near term.

11.0 SUPPORTING STRATEGIES AND POLICIES

11.1 VISION ZERO

The approach to Vision Zero is one change that fundamentally changes the approach to safety, where the stated objective is one of zero road fatalities. Those subsections and recommendations below this do not require a Vision Zero initiative, but do work in concert if one is established.

TMP Action 11-1
Establishment of a Vision Zero initiative, targeting the principles and programs which strive to have zero road fatalities in the Town.

11.2 TRAFFIC CALMING POLICY & SPEED MANAGEMENT

Commented [OJ13]: This Section Revised for Final Draft Rev 2

TBM is currently developing a traffic calming policy (which indirectly supports a Vision Zero initiative), the approach is heavily informed by those measures used in Simcoe County. This policy provides a standardized process to intake, evaluate, and prioritize speeding in areas identified through data or the public for mitigation. In addition to the recommended posted speed limit changes for specific classifications of roads, the traffic calming policy should consider the following educational and enforcement approaches to speed management: including:

Development of a central information web page:

To create a consistent entry point for public communication, information and service requests TBM provide a repository for these resources. This should be housed on the Town page and provide context on speeding in TBM, Speed management and other actions.

Implementing Community Safety Zones (CSZs)
Implement CZAs (with a posted speed of 40 km/h) with priority given to those with known speeding issues where 50 km/h or higher is currently posted. Note that there are defined requirements for Community Safety Zones that need to be assessed for applicability in communities.

Implementing Pedestrian Safety Zones (PSZs)
Implement PSZs (with a posted speed of 30 km/h) at the following potential locations:

- Public beach areas
- Parks
- Areas with high pedestrian traffic (>100/day)
- Areas with known pedestrian safety issues

Installing "Watch your Speed" (WYSP) Signs
It is recommended that Installation of WYSP signs (solar, permanent installation) be considered at locations with high vulnerable user activity or safety issues, and long

stretches of lower classification roadways which have a reduced speed limit. More specifically, the following areas are candidates for this application:

- Corridors with long distances of posted speeds of 50 km/h or less
- Areas with high pedestrian traffic (>100/day)
- Areas with known pedestrian or bicycle safety issues
- Areas with a history of collisions (all types)

Automated Speed Enforcement (ASE)
Automated Speed Enforcement cameras are expensive, but effective. Their implementation, therefore, should be considered at locations with higher safety risks and higher speeds. More specifically:

- Areas with a history of high severity collisions (all types)
- Areas with known pedestrian or bicycle safety issues
- Areas where a speed limit reduction from 70 or 80 km/h is planned

TMP Action 11-2
Consider,, as part of the TBM Traffic Calming Policy development, the application of Automated Speed Enforcement and other measures as outlined in Section 11.2 of this TMP.

Commented [OJ14]: Action Revised for Final Draft Rev 2

11.3 ROUNDABOUT SELECTION

Roundabouts are a form of intersection control that have many benefits: slower travel speeds, fewer conflict points, less expensive to implement and maintain, and can accommodate a higher amount of traffic. It should not, however, be implemented at all locations. Roundabouts require more right-of-way at intersections (particularly corners), they should not be used when traffic flows are uneven (limited in the ability for traffic to enter the roundabout), and they should not be used near driveway entrances, train crossings, or on steep grades. If a roundabout is proposed in an urban area where pedestrian traffic is likely, additional pedestrian safety measures such as rectangular rapid flashing beacons should be considered.

11.4 TRANSPORTATION DEMAND MANAGEMENT

A Transportation Demand Management (TDM) program will provide an opportunity to support the diversion of transportation from Single Occupant Vehicles. TDM strategies use transportation options, incentive programs and marketing techniques to change how people see their transportation options. TDM programs are best suited to large centrally located employers, in this case the resort, which could target travel for both employees and visitors through coordination with transit (e.g., transit ticket includes lift pass or snowboard rides for free), similarly introduction of shuttles or carpooling incentives could all benefit to reduce the demand

of single occupancy vehicles. Initial stages would be a discovery phase with stakeholders to determine the potential TDM partners and interest.

> ***TMP Action 11-3***
> *Develop a Transportation Demand Management (TDM) program targeting businesses and recreational users in the TBM.*

11.5 ROAD & MULTI-USE PATHWAY MAINTENANCE

The widening of rural shoulders for on-street active transportation/cycling and new multi-use pathways for the off-street active transportation use will require an adjustment to current winter and spring maintenance procedures, potentially new equipment for pathway snow and ice control, and associated additional capital and operational costs.

> ***TMP Action 11-4***
> *Update the current operation and maintenance program for the transportation network to include additional activities to maintain new on-street (urban), shoulder (rural) and regional trails during the winter and spring seasons and increase funding to support.*

11.6 WAYFINDING GUIDELINE

It is recommended that TBM inventory all existing directional signage and develop a guideline for the implementation of wayfinding signage for easier navigation to destinations (and parking) for drivers, cyclists and pedestrians.

> ***TMP Action 11-5***
> *Develop a Wayfinding Guideline for drivers, cyclists and pedestrians for TBM.*

11.7 TRAFFIC IMPACT ASSESSMENT GUIDELINE

Commented [OJ15]: Section Revised for Final Draft Rev 2

It is recommended that TBM complete its Traffic Impact Assessment (TIA) Guideline with a focus on identifying transportation impacts warranting developer-funded network improvements including, but not limited to, intersection improvements, sidewalks, and bicycle or multi-user facilities. The TIA Guidelines should also define the general scope for small, medium, and large-scale developments that impact TBM's transportation network.

TMP Action 11-6
Complete the Traffic Impact Assessment Guideline for TBM. Include identification of multi-user facility requirements and guidance around the scoping of small, medium, and large-scale development proposals.

Commented [OJ16]: Action Revised for Final Draft Rev 2

12.0 IMPLEMENTATION & COSTING

12.1 PROJECTS

12.1.1 Currently Planned TBM Projects

The following TBM projects have committed funding over the next five years:

- Arrowhead Rd reconstruction
- Peel Street North reconstruction
- Thornbury West reconstruction (Elma, Victoria, Beaver, Louisa)
- Lansdowne South
- Jozo Weider Ph 3 reconstruction
- Lakewood Drive
- Arthur St. West / King St. East (Connecting Link) reconstruction/design
- Clark Street realignment
- 6th Sideroad - Bridge #2/#3 replacement (construction underway)
- 10th Line - Bridge #16 (Clendenan Bridge Upgrades (to maintain AT access)
- 12th Sideroad - Bridge #5 & #9 Class EA
- Main Street Heathcote - Bridge #13 replacement

12.1.2 Intersection & Corridor Safety Reviews

There are locations that have been identified through the analysis of collision data and engagement that that all fall under the jurisdiction of either the TMO or Grey County. These are summarized below:

MTO Jurisdiction (Highway 26 Corridor)

These rural and urban intersections are shown to have high collision rates or frequent mention from the public as having safety or speeding concerns. TBM should meet with the MTO to highlight these locations and encourage safety reviews to be undertaken.

- @ Grey Road 40
- @ Grey Road 19
- @ Thornbury: Lansdowne St, Victoria St, Elma St, Bruce St, Mill St and Elgin St.

Grey County Jurisdiction

These corridors (or intersections) have a history of collisions, or the potential for collisions where core AT Networks planned. TBM should meet with the County to highlight these locations and encourage safety reviews to be undertaken.

- Grey Road 19 Corridor through Craigleith and adjacent to BMR

- Grey Road 119 (between 15th Sideroad and Blue Mountain Road)
- Grey Road 2 & Grey Road 40
- Grey Road 2 @ Grey Road 119 & Grey Road 19

12.1.3 Active Transportation Projects

Proposed Active Transportation Projects have been identified in **Figure 12-1**. **Table 12-1** can be used to cross-reference these projects that have generally be organized by street or corridor. Some projects (#23, #25) group several rural streets together as this approach will be more effective to implement and display, summarize here. High level cost estimates were undertaken to provide TBM with an order of magnitude costs to construct sidewalks, shoulder paving, trail paving signage and pavement markings to build these proposed Active Transportation Projects. These unit cost assumptions were used in the development of these costs:

- Shoulder widening (additional gravel base*): $32/m^2
- Shoulder widening (additional pavement*): $21/m^2
- Sidewalks: $80/m^2
- Shoulder or bike lane signs & pavement markings: $10/lm

**This is a highly variable unit cost due to the variability and uncertainty of shoulder structural quality and side slope implications resulting from widening the road structure. Pathway construction including grade prep is generally $50/m^2*

These unit costs are then applied to the known width and lengths of the assigned projects in Figure 12-1 and Table 12-1. These costs can be considered Class 4, order-of-magnitude costs as concept design has not been done at this TMP phase to inform the cost estimates. These can be considered to be within +/- 30% of actual costs.

Commented [OJ17]: New content re: Class 4 cost estimates.

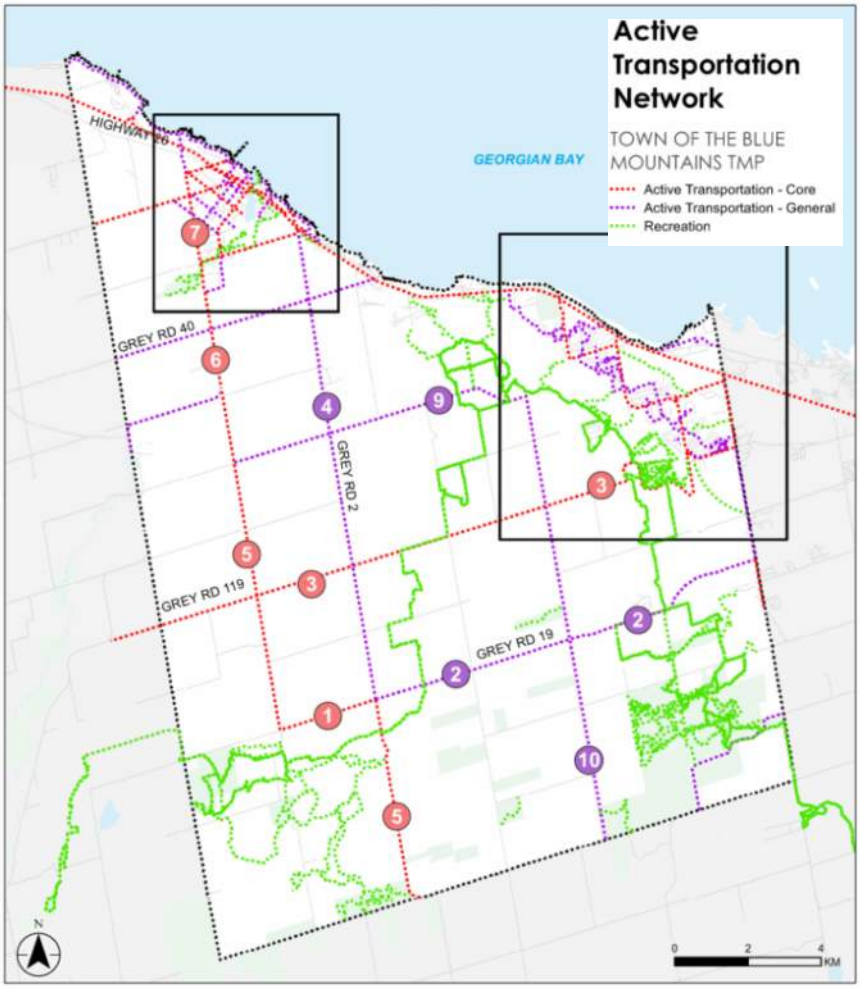


Figure 12-1: Proposed Active Transportation Projects (Rural Locations)

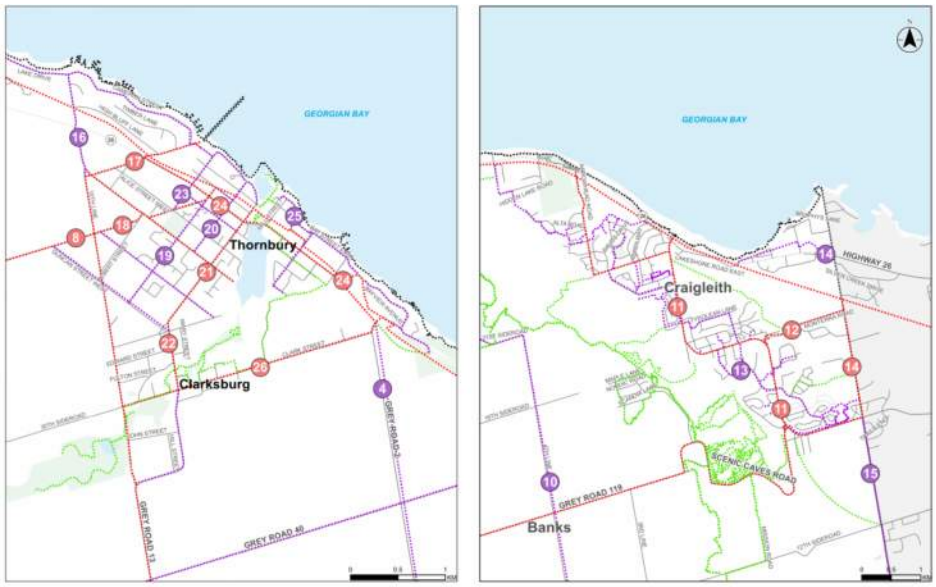


Figure 12-2: Proposed Active Transportation Projects (Urban Locations)

Table 12-1: Proposed Active Transportation Projects

Project #	Corridor	Description	Jurisdiction	Cost Est* ($1,000's)	Priority
1	Side Rd 9	Core AT (rural)	TBM	$500	Medium
2	Grey Road 19	General AT (rural)	Grey County	$1,300	Low
3	Grey Road 119	Core AT (rural)	Grey County	$2,500	Medium
4	Grey Road 2	General/Core AT (rural	Grey County	$2,500	Low
5	10th Line	Core AT (rural)	TBM	$1,600	Medium
6	Grey Rd 13	Core AT (rural)	Grey County	$250	Medium
7	10th Line	Core AT (urban)	TBM	$700	High
8	Side Rd 33	Core AT (rural)	TBM	$500	Medium
9	Side Rd 21	General AT (rural)	TBM	$1,500	Low
10	4th Line	General AT (rural)	TBM	$1,700	Low
11	Grey Road 19	Core AT (urban)	County	$200	High
12	Monterra Rd	Core AT (urban)	TBM	$150	High
13	Jozo Wieder	General AT (urban)	TBM	$160**	Medium
14	County Rd 21/34	Core/General AT (urban)	TBM/County	$300	Medium
15	County Rd 19/34	General AT (rural)	County	$400	Low
16	Grey Rd 113/10th Line	General AT (urban)	County	$130	High
17	Peel St	Core AT (urban)	TBM	$350**	High
18	GR 113/Alfred	Core AT (urban)	TBM/County	$250	High
19	Victoria St	General AT (urban)	TBM	$150**	Medium
20	Elma St	General AT (urban)	TBM	$120**	Medium
21	Bruce St	Core AT (urban)	TBM	$50	High
22	Country Rd 13	Core AT (rural)	County	$500	High
23	Various (Thornbury)	General AT (urban)	TBM	$500**	Medium
24	Arthur St/King St	Core AT (urban)	MTO	$300**	High
25	Various (Thornbury)	General AT (urban)	TBM	$200	Medium
26	Clark St	Core AT (urban)	TBM	$300**	High

**These cost estimates are high level (Class 5) subject to preliminary design to determine more accurate estimates.*

***These estimates may be high as these projects are directly related to committed projects over the next 5 years.*

12.2 PROGRAMS TO SUPPORT IMPLEMENTATION ACTIONS

12.2.1 Resourcing & Standing Committee

There are considerable tasks and coordination created by this report, it is important that the implementation of the TMP, in addition to progress in the smaller programs / policies, is assigned to staff. This may require dedicated staff to be successful. This position would be responsible for development reviews, policy updates, program administration and infrastructure investments as they relate to the outcomes of this TMP.

TMP Action 12-1
Establish a one (1) Full-Time Equivalent (FTE) position for the implementation of the TMP recommendations, including overseeing additional studies, corridors plans, AT infrastructure implementation, and regular reporting back to a standing committee and TBM Council.

TMP Action 12-2
Develop a terms of reference for a standing administrative committee to guide implementation of the TMP. Identify key staff within TBM for the implementation of the TMP actions and include them in this committee.

12.2.2 Public Education

Consideration for a public education program, tied to Transportation Demand Management, Active Transportation (such as cycling), and Active and Safe Routes to School. This program would increase the visibility of transportation infrastructure and programs leveraging the effort in implementation. This could hold regular open houses, workshops and coordinate with other Town departments.

TMP Action 12-3
Develop and implement a Public Education program to support the objectives of TBM and this TMP.

12.2.3 Community Enforcement

Partnership with local peace officers to coordinate **enforcement** around identified areas of concern. This applies primarily to traffic and parking enforcement.

TMP Action 12-4
Develop partnership with local peace officers to coordinate enforcement around identified areas of concern. This applies primarily to traffic and parking enforcement.

12.3 COST ESTIMATES

High level estimates were undertaken to provide TBM with an order of magnitude costs to construct sidewalks, shoulder paving, trail paving signage and pavement markings to build-out the proposed Active Transportation network. A cost summary to implement all recommended improvements to the study area is provided in **Table 12-2** and a breakdown by jurisdiction is provided in **Table 12-3**.

Table 12-2: High Level Infrastructure Cost Summary

Measures	Cost
Sidewalks	$1.8M
AT Facilities (Rural)	$13.9M
AT Facilities (Urban)	$1.8M
Georgian Trail Paving (4m)	$2.5M
TOTAL	**$20.0M**

Table 12-3: Infrastructure Cost Breakdown by Jurisdiction

Measures	Cost
Town of the Blue Mountains	$10.0M
Grey County	$8.0M
MTO	$0.5M
Other Partners	$1.5M
TOTAL	**$20.0M**

Estimates for specific intersection safety improvements and traffic calming measures can't be determined at this time. Further review of these locations and identification of specific safety improvements is required. Until these reviews are completed and funding for permanent intersection or traffic calming measures are implemented, estimated unit costs are provided below:

- Short-term temporary intersection improvements: $10k/intersection for delineator posts, pavement markings, and signage
- Watch Your Speed Signs: $10k
- Automated Speed Enforcement Cameras: $70k
- Speed Limit Reduction: $1k/sign or $4k/km

TMP Action 12-5
Secure funding in the next budget adjustment to implement the TBM short-term (<3 year) actions identified in Table 12-1 of the TMP .

12.4 IMPLEMENTATION PLAN

12.4.1 Short & Medium-Term Administrative Actions

Most of the actions presented in this TMP are related to partnerships, strategies, initiatives, design standards, and operational/maintenance improvements to successfully implement the Plan. It is recommended that these actions are undertaken (or at least initiated) within the next 5 years (e.g. short and medium term). They are, in the order presented in this TMP for easy reference, summarized in **Table 12-4**.

Table 12-4: Short & Medium Term Administrative Actions

Action #	Action Type	Action Description
5-1	Operations	*Develop an Open Data / Data sharing policy to direct and communicate options for the storage, management, and distribution of data for the purposes of supporting transportation of goods and people in the TBM.*
5-2	Partnership (Business)	*Develop relationships with business partners that may be involved in the digital transportation space, to determine the scope and potential of a future service*
8-1	Design Standard	*Adopt the Road Classification Guidelines and the new Posted Speed Limits recommended by this TMP.*
8-2	Partnership (County)	*Work with Grey County to determine potential speed reductions on Sunset Boulevard, Sleepy hollow Road, and Grey Road 19*
8-3	Partnership (MTO)	*Town staff continue engaging with MTO, encourage the MTO to revisit their 2015 Study to consider further Highway 26 capacity alternatives, and actively participate in opportunities to inform the current and future design of Highway 26.*
8-4	Partnership (MTO, County)	*Explore opportunities with Grey County and MTO to address public concerns associated with the intersections at Provincial Highways and County Roads (e.g. Highway 26 and County Road 21), including changes in geometry, signals or the use of roundabouts.*
8-5	Strategy	*Develop a Transit Strategy (beginning with a Transit Mission Statement) that incorporates the preliminary TMP strategies for transit*
8-6	Design Standard	*Identify community partners (e.g. County, neighboring municipalities, cycling advocacy groups) to participate in discussions around the safe implementation of bicycle routes (existing and future) including shoulder width, protection from traffic, posted speeds, impact on other users, maintenance requirements, and liability risks.*

Commented [OJ18]: Action wording revised.

8-7	Strategy	*Working with Grey County and the MTO, undertake the necessary safety reviews (or audits) to design and implement safety improvements at the priority corridors and intersections identified in this TMP.*
8-8	Strategy	*Undertake a comprehensive Parking Strategy that includes data collection to determine the current daily and seasonal parking demands for the three focus areas. Adopt the TMP preliminary strategies (Section 8.6.4) as a framework for the Strategy.*
8-9	Partnership (County)	*Work with Grey County and other land managers on the recreational parking locations and pursue opportunities for additional parking locations .*
8-10	Strategy	*Develop a Goods Movement Strategy that includes the needs of commercial, industrial, and agricultural industries. Adopt the preliminary strategies identified in this TMP as the framework for the Goods Movement Strategy.*
~~8-11~~	~~Operations / Strategy~~	~~*Using the Bridge & Culvert Action Plan of the TMP, that TBM undertake an access review of those structures requiring short (<5 year) and medium term (5-10 year) upgrading to determine which structures can be decommissioned.*~~
8-12	Strategy	*Continue to explore, develop and implement Smart Mobility approaches identified in the TMP either as their own initiative or as part of another initiative.*
11-1	Strategy	*Establish of a Vision Zero initiative, targeting the principles and programs which strive to have zero road fatalities in the Town.*
11-2	Design Standard	*Incorporate, as part of the TBM Traffic Calming Policy development, the application and implementation of Community Safety Zones, Pedestrian Safety Zones, Watch Your Speed Signs, and Automated Speed Enforcement measures.*
11-3	Strategy	*Develop a Transportation Demand Management (TDM) program targeting businesses and recreational users in the TBM.*
11-4	Operations	*Update the current operation and maintenance program for the transportation network to include additional activities to maintain new on-street (urban), shoulder (rural) and regional trails during the winter and spring seasons and increase funding to support.*
11-5	Guideline	*Develop a Wayfinding Guideline for drivers, cyclists and pedestrians for TBM.*
11-6	Guideline	*Complete the Traffic Impact Assessment Guideline for TBM.*
12-1	Operations	*Establish a one (1) Full-Time Equivalent (FTE) position for the implementation of the TMP recommendations, including overseeing additional studies, corridors plans, AT infrastructure implementation, and regular reporting back to a standing committee and TBM Council.*
12-2	Operations	*Develop a terms of reference for a standing administrative committee to guide implementation of the TMP. Identify key staff within TBM for the implementation of the TMP actions and include them in this committee*
12-3	Strategy	*Develop and implement a Public Education program to support the objectives of TBM and this TMP.*
12-4	Partnership (Local Enforcement)	*Develop partnership with local peace officers to coordinate enforcement around identified areas of concern. This applies primarily to traffic and parking enforcement.*

Commented [OJ19]: Action wording revised.

12-5	Operations	*Secure funding in the next budget adjustment to implement the TBM short-term (<3 year) actions identified in Table 12-1 of the TMP .*

12.4.2 Short Term (<3 year) TBM Projects

Table 12-4 summarizes the short-term projects under the control of the TBM jurisdiction presented in Table 12-1 for the Active Transportation Network. They were selected as short-term by focusing on the urban core network recommendations presented in Figure 12-1. The cost of these adds up to approximately $1.8 million. Improvements associated with traffic calming, and intersection safety improvements require further investigation and/or discussions with Grey County or MTO.

Table 12-5: Short Term (<3 year) TBM Projects

Project #	Corridor	Description	Jurisdiction	Cost Est* ($1,000's)	Priority
7	10th Line	Core AT (urban)	TBM	$700	High
12	Monterra Rd	Core AT (urban)	TBM	$150	High
17	Peel St	Core AT (urban)	TBM	$350**	High
18	GR 113/Alfred	Core AT (urban)	TBM/County**	$250 (50% of)	High
21	Bruce St	Core AT (urban)	TBM	$50	High
24	Arthur St/King St	Core AT (urban)	TBM/MTO**	$300 (50% of)**	High
26	Clark St	Core AT (urban)	TBM	$300**	High
Total				**$1,830**	

*Cost estimates are high level and subject to preliminary design to determine accurate capital costs.
**These TBM cost estimates may be high as either the corridors are cross-jurisdictional and cost-shared, or projects already have committed funding.

13.0 CONCLUSIONS & NEXT STEPS

13.1 CONCLUSIONS

Previous modelling from the Roads Future Needs Report (2015) and current modelling for development of this TMP indicate that even with investment in active transportation and transit infrastructure, there will be increasing congestion issues (and potential impacts to goods movement and transit) along Highway 26 during peak demand periods (mid-summer and mid-winter weekend days). Indications are that traffic demand could exceed supply by up to 30% by 2042 along Highway 26 between Craigleith and Thornbury during these peak times. Alternate routes and/or widening of Highway 26 will need to be implemented within the next 10 years to mitigate this.

Not including Highway 26, TBM's road network is well established and comprehensive. While there is little need for additional road connections and there is adequate capacity to carry peak traffic, the transportation network will be improved over time by:

Implementing the proposed Active Transportation Network improvements focusing on the core network situated near urban areas. Improved transit service to Thornbury and Craigleith
Implementing TDM initiatives to reduce traffic demands during peak hours
More efficient operation, costing, and wayfinding for parking
Introducing traffic calming measures and intersection improvements to improve safety
Implementing a goods movement strategy to better serve the commercial, industrial and agricultural industries of TBM
Making use of smarter mobility technologies including electric vehicle charging locations, smart applications, and open-source data opportunities

13.2 NEXT STEPS

Once this Transportation Master Plan has been adopted by TBM Council and finalized, the next recommended steps are for TBM to:

- Request that MTO advance an Environmental Assessment of the preferred Highway 26 alternative measures as shown in Figure 3-10 of this TMP.
- Secure funding for select short term improvements within TBMs jurisdiction
- Discuss prioritization of funding for recommended short-term improvements within Grey County and MTO's jurisdiction.
- Develop concept designs and cost estimates for the short-term improvements
- Engage affected stakeholders and public on these designs
- Proceed to detailed design and construction of the short-term improvements
- Update the Transportation Master Plan in 5 years (begin work in 2025)

APPENDICES

Will be provided in Final TMP Report.