Municipality of Meaford

Transportation Master Plan

July 2021

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1 About This Plan

1.1 What is the Meaford Transportation Master Plan?

This report is Meaford's Transportation Master Plan (TMP). It provides recommendations for infrastructure and policies that aim to address Meaford's transportation needs and support the vision:

The Municipality of Meaford will 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.

This TMP identifies a number of needs and issues related to transportation, and solutions to these needs which balance fiscal responsibility, safety, accessibility, equity, sustainability and climate change objectives for the Municipality of Meaford.

It's an exciting plan for all residents of Meaford; many affordable initiatives have been identified that can improve transportation for urban and rural residents in

the short term, and longer-term needs are also identified to support growth and goals through the 2045 planning horizon.

1.2 Why Was the Plan Prepared?

As it is evolving, the Municipality of Meaford is facing new challenges in building and maintaining its transportation network. These challenges relate to aging infrastructure, growth in traffic levels and growing concerns about accessibility, safety and equity. Demographics are changing in Meaford with an aging population with unique needs. More people want to walk and cycle but there are gaps in sidewalks and limited cycling facilities. Meaford has varied responsibilities in balancing the maintenance of aging infrastructure and building for a future that will be quite different than its past. These point to a need for a plan.

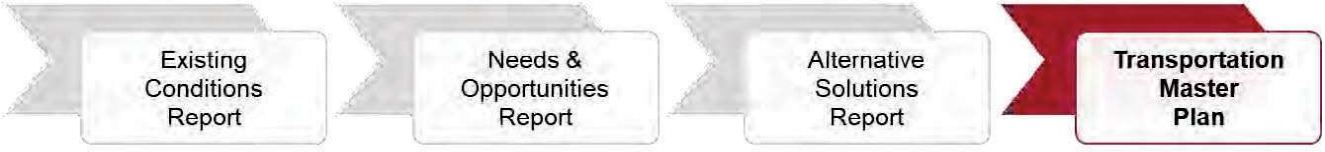
This is Meaford's first Transportation Master Plan. The TMP is a strategic plan that guides transportation policy development and infrastructure planning. It provides the need and justification to invest in transportation infrastructure, including rural and urban roads, the walking and cycling network, traffic calming, safety, maintenance, and parking, among many needs.

The TMP is also forward-looking. Transportation is changing with e-commerce, work-from-home, potential new technologies such as connected and autonomous vehicles and electric vehicles. These changes are accompanying a changing economy in Meaford, with a growing tourism sector supporting its agricultural base. These changes are accelerating and the TMP looks at these trends to accommodate and plan.

1.3 How Was the Plan Prepared?

The study followed the Terms of Reference and study Work Plan, with work undertaken from Fall 2019 through Spring 2021. The study was undertaken in four major phases, summarized in Exhibit 1.1. The first three of these steps correspond to the major outputs of the study. Those reports are included as Appendix A (Existing Conditions), Appendix B (Needs and Opportunities) and Appendix C (Alternative Solutions) and each provides more detail into the analyses and tasks undertaken at each step. The fourth phase was the finalization of recommendations and preparation of this TMP document. Additional technical memoranda in specific topic areas are also included as appendices.

Exhibit 1.1: Study Process



The public, stakeholders, and external agencies provided input at key milestones in the development of the TMP. Two public information centres and stakeholder engagement rounds were held as follows:

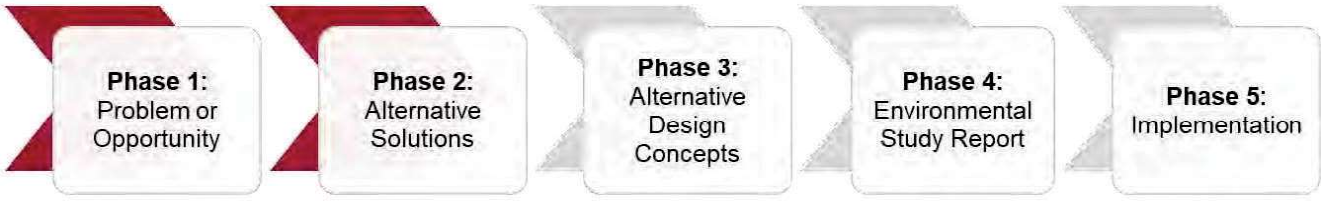
- Consultation Round 1 in Spring 2020 consisted of an online public information centre (PIC) with materials posted and an online survey questionnaire and stakeholder meeting (held online). The purpose of the first round of consultation was to obtain input on what the transportation challenges, needs and problems are in Meaford to ensure all key areas of interested would be addressed by the study.
- Consultation Round 2 in Fall 2020 consisted of online PIC materials, public survey, a live in-person consultation session held online and a stakeholder meeting, also held online. The objective of the second round of consultation was to obtain feedback on the draft study recommendations.

Materials from consultation are included in Appendix I – Consultation Summary.

The Meaford Transportation Master Plan follows the Municipal Class Environmental Assessment (MCEA) Master Plan process, which is an approved process under the *Environmental Assessment Act*, R.S.O. 1990, c. E.18.

The Master Plan approach allows for the consideration of a group of interrelated projects or interconnected system, such as a community's transportation system. The Meaford TMP follows Approach #2, which integrates it with the Class Environmental Assessment (EA) process such that it fulfils Phases 1 and 2 for the individual projects within this master plan. This process is summarized in Exhibit 1.2.

Exhibit 1.2: Municipal Class Environmental Assessment Process



The Needs and Opportunities report (Appendix B) fulfills the requirements of Phase 1, outlining Meaford's transportation needs, issues and opportunities, while the requirements of Phase 2 are fulfilled by the Alternative Solutions report (Appendix C).

Major projects identified in this TMP that are classified as Schedule C projects will require individual EAs that will build from the Master Plan's foundation and fulfillment of Phases 1 and 2.

2 Vision and Goals

The vision, goals and directions for the Meaford Transportation Master were established early in its development. These are intended to reflect the community's ambitions and objectives. They helped shape the direction of the study and influenced recommendations by setting a vision for the future, where Meaford sees itself in 25 years and beyond.

A draft version of the vision and goals was built by incorporating language and directions from other recent and relevant Meaford planning documents. This draft was presented to the public and stakeholders at the first round of consultation. The vision, goals and directions were then revised based on feedback received and finalized into the framework outlined in the following sections.

Further details on how the vision, goals and directions were developed are outlined in Appendix B – Needs and Opportunities.

2.1 Vision Statement

The Transportation Master Plan's vision statement presents, at a high level, the desired future state of the Municipality's transportation system. The vision helps to shape the direction of the plan, in that recommendations and strategies are developed to support the vision. The TMP provides the Municipality a tool to build towards its vision in incremental progression over the coming years and decades.

The Meaford TMP's vision statement is:

The Municipality of Meaford will 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.

The intent of this vision statement is to highlight the importance of sustainability, supporting the economy and improving safety. In this context, 'sustainable' refers both to fiscal sustainability and environmental sustainability.

The term 'connected' refers to the importance of providing easy access between destinations within and outside of Meaford. Meanwhile, the term 'economical' refers to the need that transportation infrastructure and policy decisions must be affordable for the municipality and taxpayers.

The vision statement also acknowledges the importance of the agricultural industry to Meaford's prosperity.

Finally, the vision statement acknowledges the importance that safe and efficient travel be available to all residents, regardless of age and ability and their chosen mode of travel.

2.2 Goals and Directions

Four goals and 16 directions were identified. These build upon the vision statement and provide additional detail and more specific direction for the Transportation Master Plan. All strategies, projects and other recommendations developed for the final TMP should address at least one of the directions listed with one of the four goals below and be consistent with the overall vision for future Meaford.

Meaford's transportation system will:

Goal #1: Meet the needs of present and future urban and rural residents and businesses.

- **Direction #1:** Develop a multi-modal transportation network that enables efficient regional travel and sustainable travel choices.
- **Direction #2:** Enable the efficient movement of goods and agricultural equipment.
- **Direction #3:** Support economic development and tourism.
- **Direction #4:** Increase access to opportunity for residents and businesses.

Goal #2: Be delivered and maintained in a fiscally responsible and sustainable manner.

- **Direction #5:** Prioritize maintenance and operations of existing infrastructure.
- **Direction #6:** Improve operations and maintenance policies and procedures and consider life-cycle costs in all infrastructure decisions.
- **Direction #7:** Become more resilient to impacts from climate change.
- **Direction #8:** Embrace sustainable transportation practices and the emerging shared economy.

Goal #3: Enhance safety, accessibility, equity and inclusivity to support active, healthy lifestyles and livable communities.

- **Direction #9:** Improve traffic safety for all road users.
- **Direction #10:** Enable active transportation as an everyday option for residents of all ages and abilities.
- **Direction #11:** Enhance connections to recreational trails and facilities.
- **Direction #12:** Support the regional public transit and specialized transit plans.

Goal #4: Support environmental sustainability and climate change objectives.

- **Direction #13:** Reduce the reliance on single-occupancy vehicles.
- **Direction #14:** Transition to a more integrated multi-modal transportation system.
- **Direction #15:** Contribute to a reduction in greenhouse gas emissions.
- **Direction #16:** Protect Meaford's natural and cultural heritage.

3 Needs Assessment

Development of the Transportation Master Plan entailed analyses of existing and future conditions. These analyses provide the basis for the identification and assessment Meaford's transportation needs. The needs identified through this process can be grouped into four key themes:

- Improving the road network;
- Addressing safety concerns;
- Supporting active transportation and transit; and
- Refining operations, maintenance and asset management.

An overview of these needs is provided in section 3.2. Further details can be found in the Appendix B – Needs and Opportunities. Further, Chapter 5 of this Transportation Master Plan presents recommendation infrastructure projects and policy directions in response to these needs.

3.1 Existing and Future Conditions

To establish Meaford's transportation needs and opportunities, existing and future conditions were reviewed and analyzed. The existing conditions analysis involved reviewing current policy and planning documents, identifying trends in Meaford's demographics and travel patterns, reviewing the performance of the existing transportation system and identifying the important natural and cultural heritage features of the Municipality. This analysis is documented in Appendix A – Existing Conditions. Key takeaways from the existing conditions review are outlined below.

- Meaford has been managing the changing economy well. The decline in manufacturing has been offset by growth in the service economy. Some service jobs are located outside of Meaford, increasing commuting distances.
- Tourism is also growing, and connections to destinations may require improvements, upgrades, or rehabilitation.
- There is demand and interest in safe and comfortable walking and cycling facilities.
- The municipality is facing issues with its aging infrastructure. Many roads and bridges need to be repaired, rehabilitated or reconstructed.
- Many intersections and roads have geometric or safety concerns.

Subsequently, future conditions were examined in terms of projected population and employment growth, development activity and future land use, changing demographics, travel demand and technological changes occurring or expected. The analysis of future conditions is documented in Appendix B – Needs and Opportunities. Key takeaways from the future conditions analysis are outlined below.

- Meaford is projected to grow to nearly 13,000 residents and 4,000 jobs by 2045 (as of the 2017 Grey County Growth Management Strategy Update).
- The population is aging. In Grey County, the share of the population aged 65 or older is expected to grow from one quarter in 2018 to one third in 2045. Meanwhile, the share of the population under 25 years old is expected to decrease slightly, from 25.5% to 24.4%. The share of the population between 25 and 64 is forecasted to fall significantly, from 49.9% to 42.7%.
- There is a significant amount of development activity being planned in Meaford. As of February 2020, over 2,400 residential units were in various stages of planning or construction. This includes longer-term development plans expected to the 2045 planning horizon.

- Non-residential growth includes uses that will drive changes in travel demand, including a cidery, a winery, school, hotel and other commercial and industrial uses.
- The types of jobs available in Meaford have been changing and will continue to adapt to new economic conditions. Manufacturing and other industrial sectors are declining, while a higher proportion of future jobs in Meaford will be in sales, services and professional fields. Tourism, including agri-tourism and recreational tourism, is also growing in Meaford, pointing to the need for improved access to points in rural Meaford. The agricultural industry remains an important component of Meaford's economy.
- Growth-related constraints on the Municipality's road network include all intersections along Sykes St, the corridor expected to be the most impacted by the growth of the community, as well as the Ridge Road-Person St corridor.
- Trends in e-commerce, food and grocery delivery, telecommuting and working from home, on-demand transit services, electric vehicles, connected and automated vehicles and shared micromobility (e.g. bicycle share, scooters, etc.) will continue to change and shape the transportation landscape in Meaford.

3.2 Identified Needs

Improving the road network

The road network is Meaford's most important transportation asset. As the Municipality grows and changes, the road network must change and adapt along with it. Improving the road network must address the following needs.

Accommodate growth in the urban area: Most of Meaford's municipal rural and urban road network has the capacity to accommodate growth, however, key corridors such as Sykes St, Highway 26, St. Vincent St and Pearson St / Ridge Rd will face increased demand for travel as the community grows.

Meanwhile, traffic operations and safety along these corridors may deteriorate as demand for travel increases. Highway 26 intersections with Ridge Rd, Nelson St and St. Vincent St / McKibbon Dr should be subjected to operational assessments periodically as growth occurs.

Better support the agricultural economy: The agricultural sector is a major component of Meaford's economy and needs a functional and efficient road network to provide access for equipment and goods movement.

Concerns have been raised by the public and stakeholders that rehabilitation and repair to the rural roads is falling behind, causing increased trip distances as detours are sought, additional wear and tear on vehicles and the loss of products due to tip-over incidents. The TMP recognizes the importance of local

road connections in the rural areas. Local connections to accommodate large vehicles are needed from the Bognor / Walter's Falls area to Highway 6 to the west and County Road 7 to the east.

There are also growing agri-tourism and retail operations in Meaford, which should be supported. Wineries, cideries and other farm-based retail operations need safe, attractive and convenience access to attract visitors and customers. Paved roads may assist in attracting customers to these businesses and should be considered where warranted.

Manage truck movements: Goods movement, with associated heavy trucks, is a key part of the economy and the trucking industry should be supported. Some concerns have been raised by the public and stakeholders about heavy trucks operating through downtown and urban parts of Meaford as they create noise, vibration, and safety concerns.

Meaford does not have a designated goods movement network but operates a load-restriction system on most municipal roads. The provincial and county road networks act as the de facto network for goods movement. Highway 26 is a logical primary route between communities east and west of Meaford, however, this routes commercial vehicles through the areas of Meaford with the highest density and where pedestrians and cyclists are found in higher numbers.

As few alternatives exist to Highway 26, there is a need to consider alternatives for through traffic and trucks coming from Owen Sound or Collingwood areas passing through urban Meaford as truck traffic continues to grow.

Addressing safety concerns

Develop a traffic calming process: Speeding has been flagged by the public and stakeholders as a major concern. The relationship between speeds and severity of collisions has been well established, particularly for vulnerable road users (i.e. pedestrians and cyclists). Enforcement of speeding is constrained by the availability of OPP officer time and budget. While enforcement continues to be a key tool, there are other strategies such as traffic calming and design standards that can encourage lower speeds.

Improve intersection safety: Intersection safety concerns are regularly raised to Meaford Council and staff and have been submitted through the TMP engagement process. Several intersections with irregular configurations or sightline issues have been identified. Modifications to these intersections will help improve traffic flow and road safety.

Supporting active transportation and transit

Expand the sidewalk network: Walking is a common mode of travel in the urban areas, but challenges persist. The sidewalk network has gaps and many roads have no sidewalks at all. An incomplete network of sidewalks forces pedestrians to share the road with vehicles, presents barriers to people who rely

on mobility devices, and generally discourages walking as a form of transportation or recreation.

Enable cycling as a daily activity: Cycling in Meaford has been primarily a recreational activity and rural cycling will be a key component of the cycling network plan. However, utility cycling has growth potential. The compact nature of the urban area and relatively low traffic volumes mean that cycling could be an easy, convenient mode for many people, if the right infrastructure is available. A utilitarian cycling approach can also help to support recreational cycling, by providing connections to the important trails in Meaford, such as the Georgian Trail and the Tom Thompson Trail.

Support regional transit: Public transit can play an important role in improving accessibility and mobility for those without access to private cars. Grey County's recently launched transit service connects downtown Meaford to Owen Sound and The Blue Mountains. Meaford needs to support the first and last mile of transit trips through initiatives such as sidewalk connections, parking areas, pick-up and drop-off areas and secure bicycle storage.

Refining operations, maintenance and asset management

Prioritize bridge and structure renewal: Several bridges are reaching the end of their lifespan and will require rehabilitation or replacement to avoid closure. These represent a significant expense for the Municipality and are at risk of consuming available funds and requiring debt financing. Meaford should consider new bridge types and innovative treatments to reduce short or long-term costs and should consider closing bridges and creating cul-de-sacs where negative impacts can be minimized.

Ensure maintenance needs are being met: Maintaining existing assets in a state of good repair will improve reliability for all transportation users and reduce costs in the long-run. Infrastructure growth needs to be balanced with the demands of maintaining existing infrastructure.

4 Planning Directions

The Transportation Master Plan was developed following the Municipal Class Environmental Assessment Master Plan process. Part of this process involves identifying and evaluating alternative solutions to address the stated needs. In the case of a master plan like Meaford's TMP, this step is completed at a high-level, where various strategic planning alternatives are identified and evaluated. This process is summarized below. Further detail is found in Appendix C – Alternative Solutions.

After the needs and opportunities were identified as outlined in Chapter 3, three high-level planning alternatives were developed. Each alternative represented a different approach to addressing the identified needs. These alternatives were:

- **Alternative #1 – Maintain Existing Infrastructure:** The "maintain" alternative focuses on maintaining the Municipality's existing transportation assets in a state of good repair and avoids the cost of any new significant infrastructure. Minor safety and operational improvements, new policy directions and travel demand management

measures are included under this planning solution. With the lowest cost, this alternative would follow life cycle strategies for the existing road surfaces.

- **Alternative #2 – Improve the Road Network:** The second alternative focuses transportation investment on growing and upgrading the road network. This includes capacity improvements (e.g. widening roads or intersection operational improvements) where traffic growth becomes an issue and upgrading corridors to handle increased traffic, such as the downtown bypass and the new east-west connection in southern Meaford. Additional focus would entail upgrading rural roads to a higher standard, paving gravel roads and accelerating bridge rehabilitation work. There are no major upgrades to cycling, walking or transit-supportive infrastructure under this scenario. This alternative would make driving smoother and faster, and goods movement less vulnerable.
- **Alternative #3 – Invest in Active Transportation:** The third alternative focuses on growing active transportation usage through infrastructure investment and travel demand management policies. This includes constructing on-street cycling facilities in the urban area, paved shoulders in the rural area and expanding the off-street trail network. Completing the sidewalk network in the urban area is also a key feature of this alternative solution. Improvements that support transit are also included in this scenario. No road network expansion or upgrading occurs under this scenario.

Each alternative encompassed a range of projects and policies oriented to the alternative with the intent of meeting the vision and goals of the TMP. These alternatives were evaluated against the goals and it was found that none fared well against the goals individually. In response to this, potential projects within each alternative were individually scored against the TMP's goals. The highest scoring projects were carried forward to create a fourth alternative planning solution. This is known as **Alternative #4 – Combined Approach**. All alternative solutions were once again evaluated against the TMP's goals, resulting in Alternative #4 being selected as the preferred solution. This evaluation is summarized in Exhibit 4.1. Full details can be found in Appendix C – Alternative Solutions.

Exhibit 4.1: Alternative Solution Evaluation

Criteria	Alternative #1: Maintain	Alternative #2: Improve Roads	Alternative #3: Active Transportation	Alternative #4: Combined Approach
Contributes to creating a more multi-modal transportation system	**Low:** Does nothing to improve the status quo of the auto-focused transportation system.	**Low:** Increases overall road capacity and connectivity but does not improve mobility for any other modes.	**High:** Focuses investment on walking and cycling, increasing mobility options for residents and visitors.	**High:** Addresses needs of all modes – strategic road improvements, sidewalk expansion and supporting strategies.
Represents a fiscally-responsible management of transportation infrastructure	**High:** Focuses on maintaining and optimizing existing assets rather than new construction.	**Low:** Road expansion projects are expensive and do not typically represent high return investments.	**Medium:** AT projects are typically lower cost investments and can provide a high return. The alternative ignores road maintenance issues, however.	**High:** Focuses investment where it is most needed for all modes and where the biggest benefits are achievable.
Enables efficient movement of goods and agricultural equipment	**Medium:** Improved maintenance practices may improve the efficiency of goods movement.	**High:** Improves conditions for goods movement and agricultural equipment as these predominantly happen on Meaford's roads.	**Low:** Does nothing to improve status quo for goods movement or the agricultural industry.	**High:** Targets strategic corridors for upgrades in the rural area based on agricultural and goods movement needs.
Improves socio-economic and environmental outcomes	**Low:** Does nothing to improve status quo in terms of economic development, tourism or environmental impacts.	**Medium:** An improved road network may incentivize economic development however it is likely to worsen environmental outcomes.	**High:** Investments in AT can produce improved health and environmental outcomes and increase tourism appeal.	**High:** Strategic investments aim to support tourism, economic development and mitigate environmental risks.
Overall:	Medium	Medium	Medium	**High**

5 Project and Policy Recommendations

The Meaford Transportation Master Plan's project and policy recommendations are structured around addressing the four key, broad needs identified in the earlier phases of the study and outlined in Chapter 3. The study's final recommendations are presented below. These recommendations should be incorporated into municipal documents and by-laws (e.g. Official Plan, road use by-law, engineering standards, asset management plan, etc.) where applicable.

Further details can be found in the various background studies and reports accompanying this document. Specific reports will be highlighted throughout the section for those interested in more details and analyses. Implementation, timing and costing considerations are presented in Chapter 6. Full-sized maps are provided in Appendix J – Maps.

5.1 Improving the Road Network

The road network is the most important transportation asset in Meaford. It is comprised of municipal roads, within the jurisdiction of the Municipality of Meaford, as well as roads owned and maintained by the County of Grey and the Province of Ontario. As Meaford continues to grow and change, the road network must adapt along with it. The recommendations in this section are aimed at addressing the following needs:

- Accommodating growth in the urban area;
- Better supporting the agricultural economy; and
- Managing truck and heavy vehicle movements.

5.1.1 Road Network Modifications

An assessment of projected growth and planned development was undertaken to identify where travel demand will be expected to grow the most in the coming years and decades. Concurrently, other road network issues and opportunities were identified through the existing conditions review and public and stakeholder consultation. Details of these analyses are presented within Appendix B – Needs and Opportunities. Based on this analysis, several road projects of various types were identified for Meaford. These are presented below.

Recommendation

Implement road projects identified in this chapter. Further detail regarding cost and timing can be found in Chapter 6 (Implementation).

Rural Road Projects

Improvements to the rural road network are focused on improving conditions for residents and businesses, with consideration for the movement of agricultural equipment and goods. Recommended rural road projects are presented in Exhibit 5.1. An overview of each project is presented below in Exhibit 5.2.

Exhibit 5.1: Rural Road Project Map

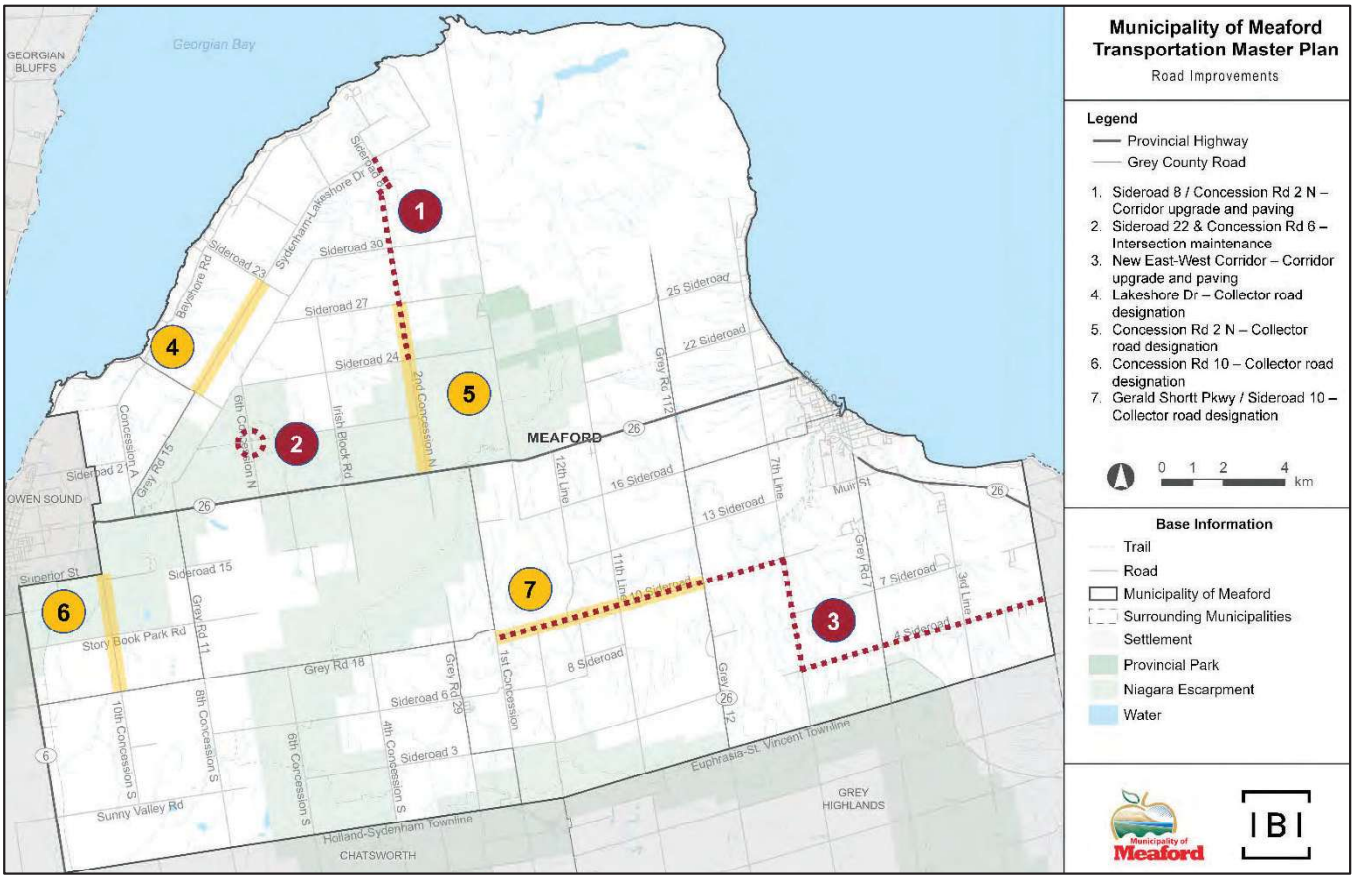


Exhibit 5.2: Rural Road Project Details

No.	Location	Project	Description
1	Sideroad 8 / Concession Rd 2 N	Corridor upgrade and paving	Forms part of a "paved loop" in the northern rural area of Meaford. Southern segment identified as a collector road (see section 5.1.2). Supports agricultural and tourism industries, supports planned cycling route (see section 5.3.4).
2	Sideroad 22 & Concession Rd 6	Intersection maintenance	Add to maintenance program to remove vegetation and any other obstructions that would help improve sightline.
3	New East-West Corridor	Corridor upgrade and paving	Longer-term east-west connection providing continuous paved and upgraded corridor for heavy vehicles and other users connecting to points in the southern parts of Meaford. Includes paving section of Sideroad 10. Consider designating corridor as collector road when upgrades are completed.
4	Lakeshore Dr	Collector road designation	Upgrades over longer-term to bring road up to collector road standard. See section 5.1.2 for more details.
5	Concession Rd 2 N	Collector road designation	Upgrades over longer-term to bring road up to collector road standard. See section 5.1.2 for more details.
6	Concession Rd 10	Collector road designation	Upgrades over longer-term to bring road up to collector road standard. See section 5.1.2 for more details.
7	Gerald Shortt Pkwy / Sideroad 10	Collector road designation	Upgrades over longer-term to bring road up to collector road standard. See section 5.1.2 for more details.

Urban Road Projects

While rural road projects are focused more on existing conditions, urban road projects are needed to accommodate the growth expected in urban Meaford throughout the TMP's planning horizon. Recommended urban road projects are presented in Exhibit 5.3. An overview of each project is presented below in Exhibit 5.4.

Exhibit 5.3: Urban Road Project Map

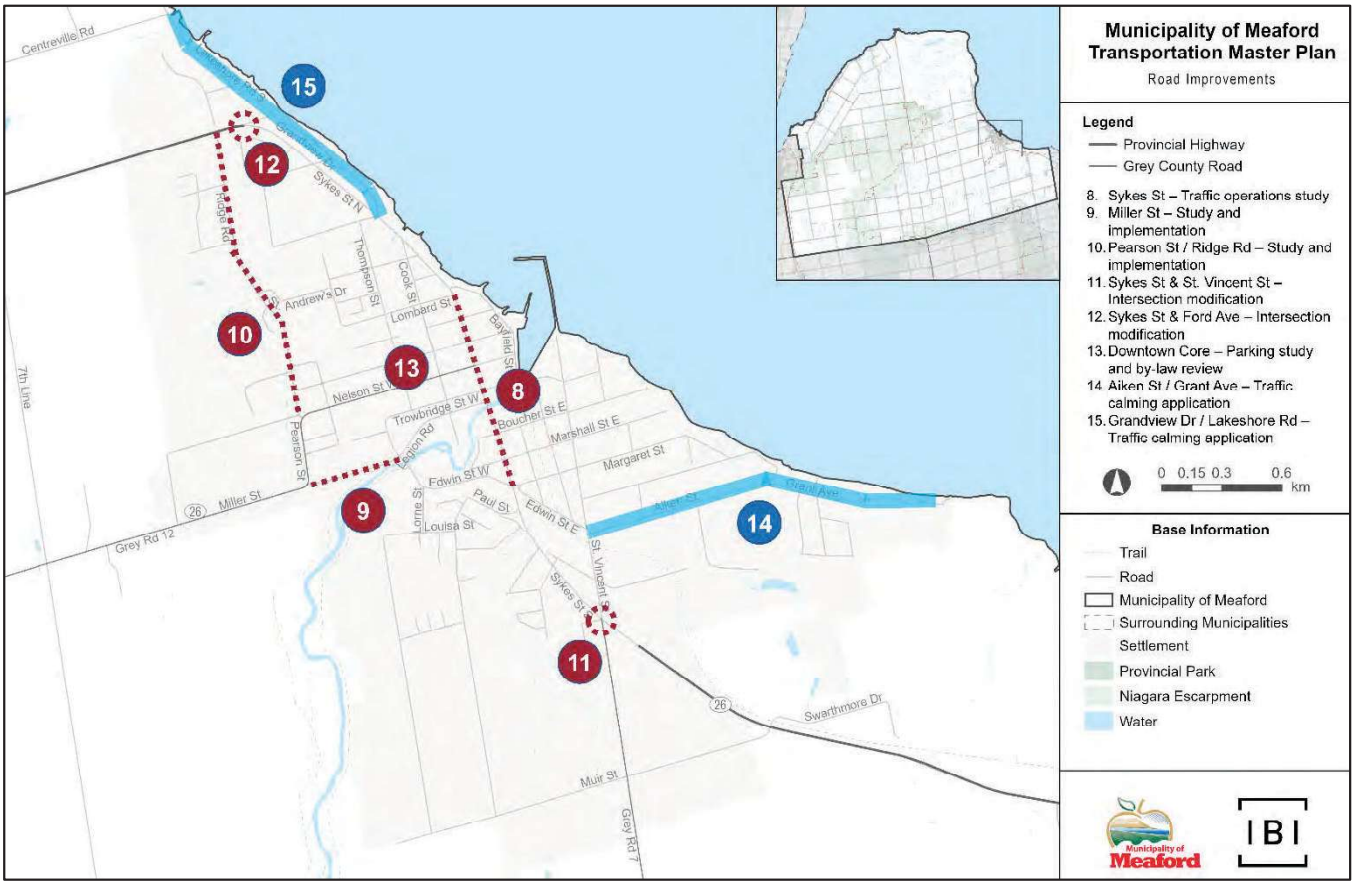


Exhibit 5.4: Urban Road Project Details

No.	Location	Project	Description
8	Sykes St	Traffic operations study	Sykes St corridor study; integrated with potential Miller St closure (re-routing traffic through downtown). Will optimize traffic flow while considering the needs of other road users. Needed to ensure corridor (Hwy 26/Sykes) can continue to absorb growth in the area.
9	Miller St	Study and implementation	Further study is required to determine optimal configuration of Miller St east of Grey Road 12 given geographic constraints and intended function of street as a local connection. Study should consider converting to cul-de-sac, one-way operation, and other possibilities and examine impacts on all road users, maintenance, and residents. The study should consider inter-dependencies with Sykes St traffic operations study above.
10	Pearson St / Ridge Rd	Study and implementation	Corridor traffic study; intersection studies at Nelson St, St. Andrews Dr & Highway 26; new pedestrian and cycling facilities. Traffic calming measures should be applied in the interim (see section 5.2.2).
11	Sykes St & St. Vincent St	Intersection modification	Work with Grey County to improve safety and traffic operations.
12	Sykes St & Ford Ave	Intersection modification	Further study required to determine if sight distance and safety issues require closing or turning restrictions at Ford Ave at Sykes.
13	Downtown Core	Parking study and by-law review	Review supply and demand in commercial core; update policies and by-laws across the entire community. See section 5.1.4 for more information.
14	Aiken St / Grant Ave	Traffic calming application	Implement soft traffic calming measures. Monitor compliance and consider hard traffic calming measures if necessary. See section 5.2.2 for more information.
15	Grandview Dr / Lakeshore Rd	Traffic calming application	Implement soft traffic calming measures. Monitor compliance and consider hard traffic calming measures if necessary. See section 5.2.2 for more information.

5.1.2 Road Classification System

A new proposed road classification system was developed for this Transportation Master Plan. The proposal includes classifying roads into urban and rural road classes and collector and local road classes. These proposed classes are subject to refinement regarding land use, development and access policies and regulations through the next Official Plan review. Typical characteristics of each classification is presented in Exhibit 5.5.

The road classification hierarchy recommended in this document does not impact Minimum Maintenance Standards (O. Reg. 239/02), which is a separate classification is utilized for identifying minimum levels of ongoing maintenance for municipal roads.

Further details on the road classification system can be found in Appendix D – Road Classification.

Arterial Roads:

- **Provincial Roads:** Highways 26 and 6/10 are the primary transportation routes between Central Ontario and Owen Sound as well as northern Bruce and Grey Counties. Development abutting Highways 26 and 6/10 is subject to the requirements of the Ministry of Transportation, except within a Connecting Link, where the Municipality has jurisdiction.
- **County Roads:** These roads serve a regional role by carrying traffic through the Municipality or from the Municipality to neighbouring municipalities. These roads function as arterial roads. Special setbacks apply to development abutting a county road. Generally, no building or structure shall be located closer to any county road than as set out by the County of Grey. All development abutting county roads are subject to the jurisdiction of Grey County.
- **Connecting Link:** Defined by the MTO as a class of roadway that links two segments of provincial highway under the jurisdiction of the municipality. Sykes St is designated a Connecting Link and generally functions as an arterial road, though it also fulfills the function of a main street in the urban area, where access is more important than vehicular throughput.

Collector Roads:

- Collector roads are further divided into **Rural Collector** and **Urban Collector** roads. They are primarily intended to carry traffic from local roads to the arterial road network (county, provincial and connecting link). They are expected to carry higher volumes of traffic than local roads and are key goods movement corridors. They are also important pedestrian and cycling links.

Local Roads:

- Local roads are further divided into **Rural Local** and **Urban Local** roads. They carry traffic and goods from the provincial and county road system and from the collector roads to individual properties.

Other Types of Roads:

- Private roads which cross private property to access a lot.
- Unopened road allowances.
- Unassumed roads.
- Roads that are owned and maintained by a public authority for only a part of the year.

Recommendation

Adopt road classification system outlined in this chapter and incorporate into next Official Plan update.

Collector Roads

With the new road classification system in place, provincial and county roads form the arterial road network, while the majority of roads under Meaford's jurisdiction would retain their classification as local roads. With urban and rural collectors forming a new road classes, the collector roads needed to be identified. The process to determine which roads should be identified as collector roads involved an analysis of several conditions and how they relate to the typical conditions identified in the road classification matrix. Considerations included annual average daily traffic (AADT) volumes, annual average daily truck volumes, planned growth and connectivity to the arterial road network.

Rural Collectors:

- Sydenham Lakeshore Dr (Sideroad 33 / Grey Road 15 to Sideroad 23)
- 2nd Concession N (Highway 26 to Sideroad 27)
- 10th Concession (Owen Sound border to Grey Road 18)
- Gerald Shortt Pkwy / Sideroad 10 (Grey Road 18 / 1st Concession to Grey Road 12)

Urban Collectors:

- St. Vincent St (Sykes St S to Bridge St)
- Bridge St / Trowbridge St E (St. Vincent St to Sykes St N)
- Pearson St / Ridge Rd (Grey Road 12 (Nelson St) to Highway 26)

Recommendation

Consider upgrading identified rural and urban collector roads to a higher road standard, over the long run, as they near planned rehabilitation or reconstruction.

The road classification system is presented in Exhibit 5.6 and Exhibit 5.7, which show the network of arterial roads (county, provincial and connecting link) along with the identified collector roads, and the remaining roads that retain their status as local roads.

5.1.3 Goods Movement

The collector road network is intended to, with the county and provincial roads, form the truck route network. This means that through trucks without a local destination should be restricted to using these roads in Meaford. The benefits and costs of having a separate goods movement system include ensuring the road network performs more efficiently and safely from both a traffic operations and road safety perspective.

Recommendation

Develop road use by-laws to restrict trucks from local roads unless required for a pick-up or delivery; and monitor truck traffic to determine if a dedicated goods movement network is appropriate for the future.

Local roads are also important for goods movement. Farmers moving agricultural goods and equipment by truck can experience difficulties operating on local roads. The Niagara escarpment geography means many roads have steep gradients, tight turns, and narrow road widths. The road network can have gaps requiring circuitous routes, and maintenance of roads can be a challenge for Meaford due to weather and wear and tear on the road surface. Further complicating goods movement are the aging bridges and culverts, some of which require rehabilitation and maintenance and others which do not meet current standards – and the challenge of funding to address these deficiencies.

The TMP has developed a series of policies and actions to support rural goods movement:

- The recommended road classification system introduces collector roads in the rural area. These collector roads are intended to provide greater service levels to rural goods movement and should be a priority for surface type and maintenance.
- A maintenance prioritization methodology for bridges and culverts. This allows Meaford to identify the bridges where targeted maintenance can provide the biggest benefits.
- A review of bridges identified as candidates for closure by Meaford with the goal of maintaining service levels on rural roads within available funding.

- The consideration for paving rural roads emphasizes that traffic volumes are not the sole criteria for paving, but network connectivity, isolation, and drainage needs are also important considerations.

Exhibit 5.5: Road Classification Typical Characteristics

	Arterial Roads			Collector Roads		Local Roads	
Road Characteristics	**Provincial Highway**	**County Road**	**Connecting Link**	**Urban**	**Rural**	**Urban**	**Rural**
Jurisdiction	Province	County	Municipality	Municipality	Municipality	Municipality	Municipality
Land Access / Traffic Service	Traffic movement / land access of equal importance	Traffic movement / land access of equal importance	Traffic movement/land access of equal importance	Traffic movement / land access of equal importance	Traffic movement / land access of equal importance	Land access primary function. Traffic movement secondary consideration	Land access primary function. Traffic movement secondary consideration
Typical Traffic Vol. (AADT)	n/a	n/a	> 5,000	> 1,000	> 1,000	< 1,000	< 1,000
Design Speed	60 – 90 km/h	60 – 90 km/h	50 – 60 km/h	40 – 60 km/h	60 – 90 km/h	40 – 50 km/h	50 – 90 km/h
Posted Speed	50 – 80 km/h	50 – 80 km/h	40 – 60 km/h	40 – 50 km/h	50 – 80 km/h	40 – 50 km/h	40 – 80 km/h
Desirable Connections	Collectors, Connecting Link, County Roads, Provincial Highways	Locals, Collectors, Connecting Link, County Roads, Provincial Highways	Locals, Collectors, County Roads, Provincial Highways	Locals, Collectors, County Roads Connecting Link	Locals, Collectors, County Roads, Provincial Highways	Locals, Collectors, County Roads, Connecting Link	Locals, Collectors, County Roads, Provincial Highways
Pedestrian Facilities	Sidewalks on both sides within designated urban areas.	Sidewalks on both sides within designated urban areas.	Sidewalks on both sides.	Sidewalks on both sides.	Paved shoulders where warranted.	Sidewalks on one side.	Paved shoulders where warranted.
Cycling Facilities	Paved shoulders where warranted.	Dedicated bike facilities where required.	Dedicated bike facilities where identified in cycling plan.	Dedicated bike facilities where identified in cycling plan.	Paved shoulders where identified in cycling plan.	Signed route (or dedicated bike facilities where warranted) where identified in cycling plan.	Signed route (or paved shoulders where warranted) where identified in cycling plan.
Typical Right-of-Way Width	As per MTO.	As per Grey County.	20 m – 26 m	20 m – 26 m	20 m – 26 m	12 m – 20 m	12 m – 20 m
Parking Provisions	As per MTO.	As per Grey County.	Permitted on one or both sides where desired and feasible.	Permitted on one or both sides where desired and feasible.	Permitted on one or both sides where desired and feasible.	Permitted on one or both sides where desired and feasible.	Permitted on one or both sides where desired and feasible.
Truck Route	Not restricted.	Not restricted.	Not restricted.	Not restricted.	Not restricted.	Restricted.	Restricted.
Traffic Calming	As per MTO.	As per Grey County.	Where warranted	Where warranted	Where warranted	Where warranted	Where warranted

Exhibit 5.6: Recommended Road Classification Map

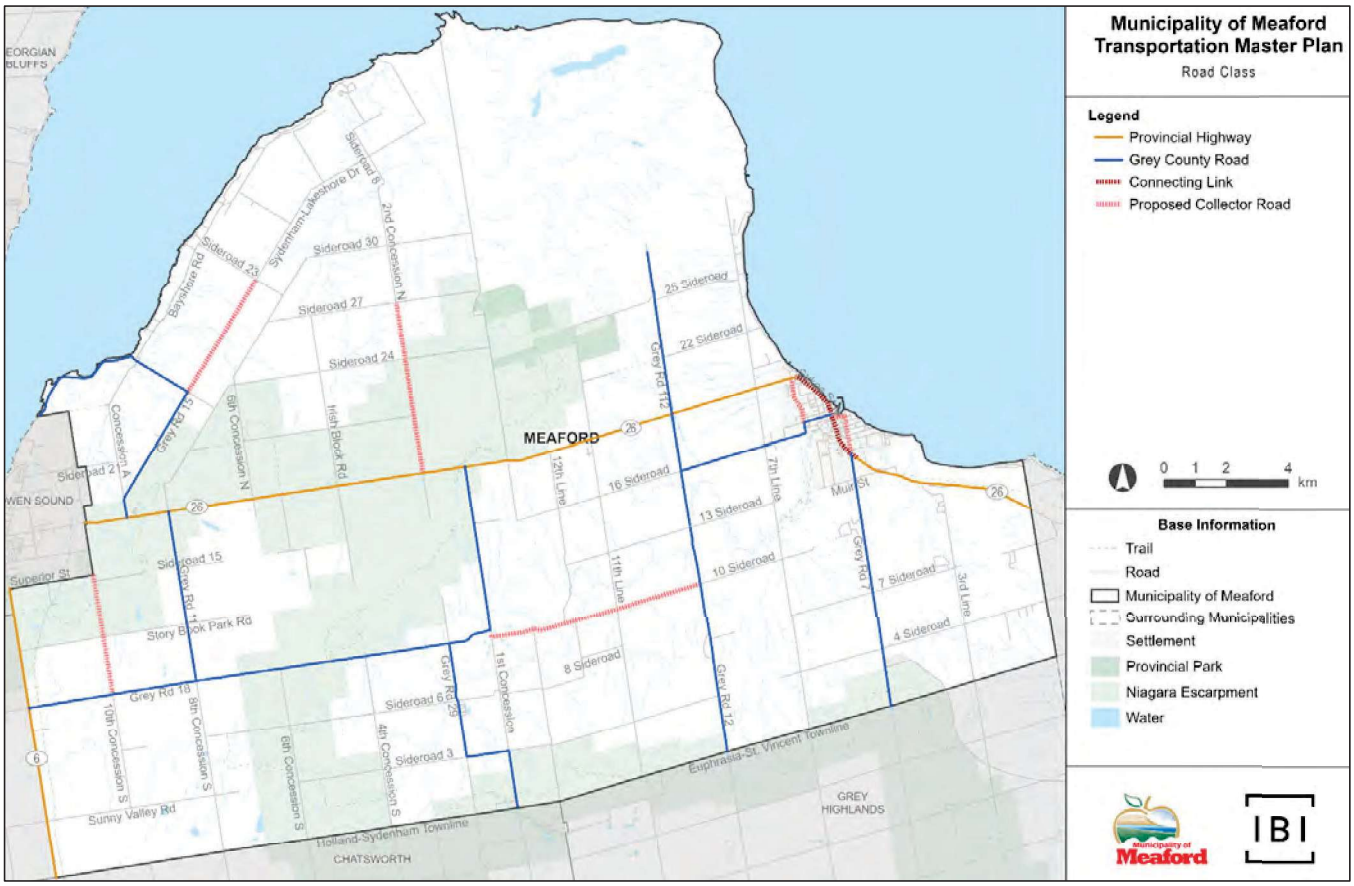
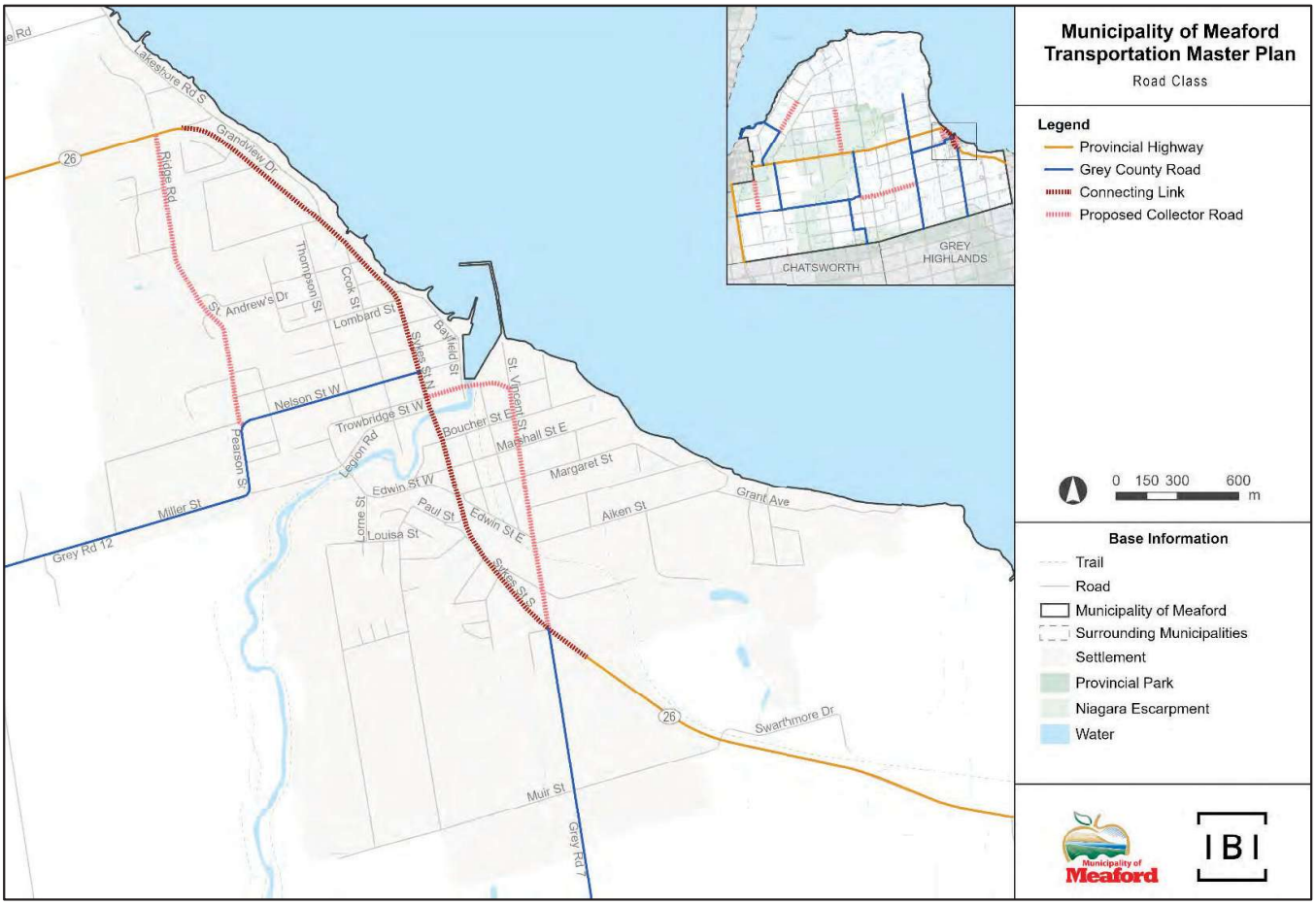


Exhibit 5.7: Recommended Road Classification Map – Urban Area



5.1.4 Vehicle Parking

There is growing concern in Meaford about whether the supply of parking meets the community's needs now and in the future. There is increased residential interest in the downtown area, increasing the need for longer-term and overnight parking and other general needs changing regarding parking and accessible parking.

Providing the appropriate amount of parking supply is a factor in fostering economic growth and producing lively, vibrant urban areas. The availability of parking opportunities in urban areas are needed to encourage visitors to support local businesses. Conversely, if too many parking facilities (off-street surface lots or parking structures) are provided, it detracts from the livelihood of the urban area. The space that could be used to build new businesses, or expand existing ones are occupied by underused parking facilities.

A parking study is recommended to assess existing and future parking supply and demand and provide appropriate solutions.

Recommendation

Meaford should engage a consultant to undertake a parking master plan study that reviews and updates all pertinent by-laws, including an assessment of the possibility of removing or reducing off-street minimum parking requirements for new developments in all or some parts of Meaford, and assesses on- and off-street parking supply and demand within the downtown core area.

Parking-related by-laws should be reviewed to ensure they are continuing to meet the community's needs and are following emerging best practices.

- Minimum parking requirements for new developments may be constricting potential growth if they are too high. These should be reviewed.
- Overnight parking restrictions should be reviewed to allow for year-round resident parking in the urban area, where appropriate.

Additional parking considerations are discussed in Appendix G – Policy Areas and Design Guidance.

Parking at Rural Amenities

Meaford supports the provision of safe parking at rural amenity locations such as trailheads and conservation areas in the longer term. The Municipality will consider measures to improve parking, including reaching out to the owners of lands adjacent to trailheads and other attractions or widening the road base to provide shoulder parking. In a future trails study, parking should be considered further.

Recommendation

Explore options for providing parking at key rural locations where parking demand is evident. Prioritize locations where existing on-road parking practices compromise road safety.

Electric Vehicle Charging

Battery-powered electric vehicles (EVs) emit less greenhouse gas emissions than combustion powered vehicles, accounting for their full life-cycle from materials procurement to disposal and recycling. With a greater selection of electric vehicles available to consumers, and guidance from the federal government for 100 percent electric vehicle sales in 2040, an increasing share of vehicles in Meaford will be electric over the time-frame of the TMP.

The majority of EV charging is at homes, work locations, or at private charging stations operated by businesses. Public charging services can be provided for visitors and residents without charging stations at home. However, according to PlugShare (accessed in April 2021) there are currently no publicly-accessible charging stations in Meaford.

As the TMP includes climate change support in its goals, support of EVs is included in the plan. This could take the form of development requirements for charging stations, or installation of charging stations on public land. Subsidy of businesses or residents for installation of charging stations is another alternative, though rare for municipalities and more common at the provincial or federal level. Some municipalities have stations at community centres, arenas, libraries, municipal administration centres, and parks. There is also potential for some economic benefit of EV chargers as they can be a destination or stopover point for EV owners.

EV chargers come in various configurations with more costly installations offering faster charge speeds. Many public chargers are installed by a service provider that maintains the charger and charges the public a fee for its use. Alternatively, 240-volt chargers can be installed at parking locations and made free to the consumer with electricity costs subsidized by the land-owner as an incentive or goodwill gesture.

Recommendation

Meaford should support EV adoption through support of EV charging. Low-cost chargers for use by the public or staff at administration offices or public locations could be a first step, and staff can explore the availability and cost of retaining a service provider for installation on public land. Funding is assumed to be separate from the TMP capital plan and included in facilities / maintenance budgets.

5.2 Addressing Safety Concerns

In addition to changes to the road network to address growth pressures, changes are needed to improve safety throughout Meaford. Safety is a major concern and emphasis of the Municipality of Meaford. Implementing safety-related improvements can be costly, necessitating an approach that assesses severity of problems and prioritizes improvements based on cost and benefit. The Transportation Master Plan addresses safety concerns through three lenses: policies, programs and infrastructure changes.

5.2.1 Road Safety Monitoring

Though collisions are tracked by the Ontario Provincial Police, these data are not part of an ongoing process to assess and improve the safety of Meaford's roads and streets. Tracking collision frequency and severity can help identify areas where safety improvements are most needed and can provide insight into the types of alterations needed to be made. For a safety monitoring program to be effective, it must become an ongoing concern for municipal staff.

The monitoring program outlined below is intended to get Meaford to the point where they can routinely identify problem locations and assess whether additional actions should be taken to mitigate the issues, including potential capital work. The monitoring program is made up of the following ongoing tasks and actions.

- The Municipality will request from OPP collision data for the previous five years and continue to request updated data on an annual basis.
- Using this data, Meaford will identify intersections and mid-block locations with the most collisions (i.e. more than ten collisions in prior five years).
- Coordinate and cross check problem locations with speed limit assessment, stop signs, community safety zones, road design and planning criteria as outlined in the respective TMP policies. Take appropriate action to mitigate issues according to these policies an processes.
- If larger capital works are required, schedule into the road improvement program and capital budget planning processes and prioritize accordingly.
- Report to council findings once per year.

Further detail on road safety monitoring can be found in Appendix G – Policy Areas and Design Guidance.

Recommendation

Utilizing existing staffing and resources, undertake the road safety program tasks outlined above on an ongoing basis.

5.2.2 Traffic Calming

Traffic calming is a topic of growing public interest in Meaford. Speeding and cut-through traffic are issues that lead to requests for traffic calming. The traffic calming process allows the Municipality to respond to these requests in a systematic, transparent and data-driven manner. This allows traffic calming needs to be assessed on their safety merits and network-wide impacts.

Traffic calming treatments can be separated into two categories: soft calming (passive) and physical intervention.

Soft calming measures look to improve driver awareness or reduce speeding through visual cues. Examples include enhanced signage, pavement markings and reduced lane widths.

Physical treatments alter the roadway to create deflections or obstacles to prevent vehicles from traveling in a straight line at excessive speeds. Examples include speed humps, median islands and roundabouts.

The intention of the traffic calming process is to improve the safety and livability of Meaford's streets in both urban and rural contexts for all road users, particularly vulnerable road users (e.g. pedestrians, cyclists, elderly residents, people with disabilities, etc.). The potential passive and physical measures are discussed in Appendix F – Traffic Calming. They should all be considered and the best fit selected at the judgment of Municipality staff and/or outside consultants.

Recognizing that physical traffic calming measures can be costly, Meaford's traffic calming process is designed with lower cost (i.e. passive or soft) measures as the first stage. Only if these approaches are not found to be sufficient, should physical interventions be considered.

The following principles should be kept in mind when investigating, considering and implementing traffic calming measures.

- Public safety is the first and foremost consideration.
- Problems should be clearly identified, and data sufficient to quantify the issue.
- Physical treatments should only be considered after education, enforcement and traffic engineering have not sufficiently addressed the issue.
- Self enforcing treatments should be considered before treatment requiring police presence to enforce compliance.
- Treatments should not hinder cyclists, pedestrians, emergency vehicles or transit vehicles without alternate accommodations agreed upon during consultation.
- The public and stakeholders should be sufficiently consulted.

- Effectiveness shall be monitored after implementation and reported to stakeholders and ineffective treatments should be removed or replaced.

The traffic calming process is initiated when a traffic calming request is made. The first step is to assess the corridor against the warrant criteria presented in Exhibit 5.8 and Exhibit 5.9. If warrants are not met, no further action is taken. If the warrants are met, the next step is to identify and implement soft or passive traffic calming measures. The impact of these measures should be evaluated. If found to be ineffective, the next step would be to consider physical measures.

Details on the process and warrants can be found in Appendix F – Traffic Calming.

Exhibit 5.8: Volume and Speed Warrants for Urban Traffic Calming Application

Traffic Volume	400+ vehicles per day on a local road **OR** 1000+ vehicles per day on a collector road
AND	
Traffic Speed	85th percentile speed is >10 km/h over the posted speed limit

Exhibit 5.9: Speed Warrants for Rural Traffic Calming Application

Traffic Speed	85th percentile speed is >10 km/h over the posted speed limit

Recommendation

Adopt traffic calming process outlined above and in Appendix F – Traffic Calming and apply to traffic calming requests received.

Three locations were identified for initial traffic calming implementations. They are noted below. The traffic calming process outlined above should be followed to identify appropriate soft / passive traffic calming treatments. These installations will help address road safety needs in these areas.

- Ridge Rd & Pearson St;
- Aiken St & Grant Ave; and,
- Grandview Dr & Lakeshore Rd.

Other corridors of concern have also been flagged through the interim traffic calming measures currently being utilized. The policy and process outlined in

above should be utilized to address these and other locations as they are identified.

Recommendation

Identify appropriate soft / passive traffic calming measures and implement at the three locations identified above.

5.2.3 Cul-de-Sac Policy

During the development of the TMP, maximum length of cul-de-sac was raised as a topic of interest, as Meaford currently does not have a by-law on this topic. In line with other municipalities, future by-law revisions should include a maximum length of a cul-de-sac, mainly driven by the need for emergency services to have good access to all properties along a cul-de-sac, and a limit to its length is logical given that roads can be blocked by construction or incidents. A typical maximum cul-de-sac length of 250m should be considered. During time of by-law update, specific requirements should be reviewed by a transportation engineer.

5.2.4 Safer Speed Limits

In recent years there has been interest in some Ontario municipalities in lowering urban speed limits to 40 km/h. There is well documented evidence that a reduction in travel speed below 50 km/h (e.g. 30 km/h or 40 km/h) drastically increases survivability of pedestrian-vehicle collisions. This is shown in Exhibit 5.10. However, reducing the speed limits alone will not always result in lower operating speeds. Further details can be found in Appendix G – Policy Areas and Design Guidance.

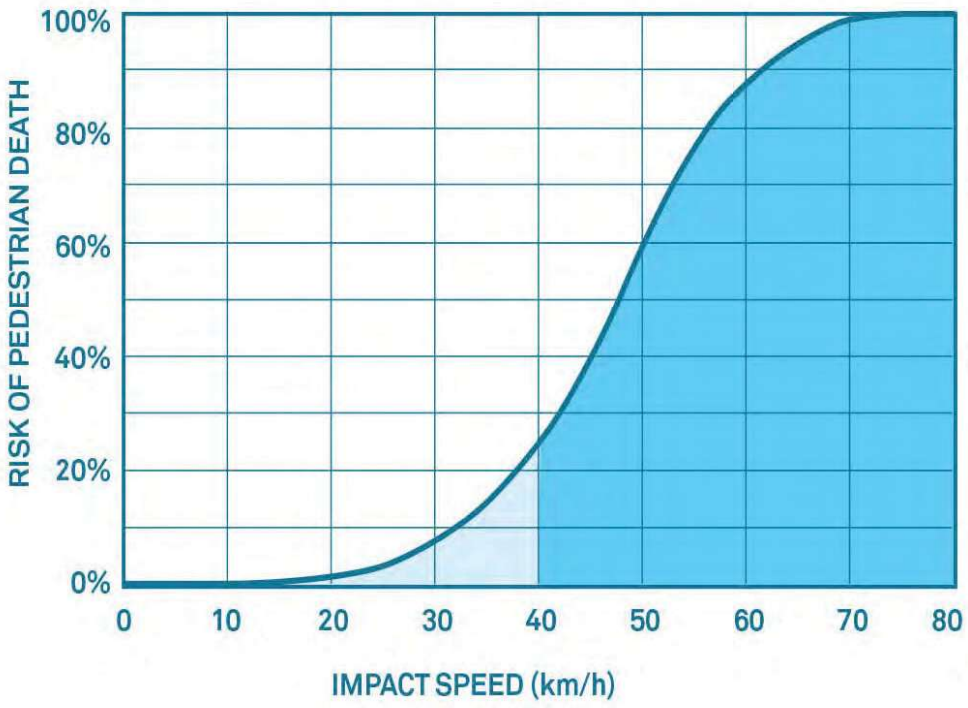
Recommendation

Meaford should consider a reduced 40 km/h default speed limit within the urban area. A reduced default speed limit would be illustrated through ‘blanket’ speed limit signage on entry to Meaford and at strategic locations. This would require a separate process to update the by-law and bring the change through Meaford Council.

5.2.1 Community Safety Zones

Community Safety Zones (CSZ) are designated roadway sections recognized under the Highway Traffic Act to allow fines associated with speeding offences to be doubled. CSZs are intended to help influence a change in driver behaviour and to improve safety. CSZs are typically designated at locations which have safety concerns or complaints, or near sensitive areas such as schools, day-care centres and retirement homes, where the presence of vulnerable road users is more likely.

Exhibit 5.10: Relationship Between Impact Speed and Risk of Pedestrian Death.



Source: Global Street Design Guide (NACTO, Global Designing Cities Initiative, 2013)

Enforcement resources must be taken into consideration when determining the effectiveness, size, and location of a CSZ, since they require active enforcement to be effective. Given the scarcity of enforcement resources, a case-by-case approach to Community Safety Zones is recommended for Meaford. The Municipality can tailor the number of CSZs to available enforcement resources and operations funding rather than having to adhere to specific warrant criteria.

Recommendation

Community Safety Zones will be assessed on a case-by-case basis and will be informed by Meaford's Road Safety Monitoring Program and coordinated with other safety-related initiatives. Community Safety Zone enforcement should be coordinated with the Ontario Provincial Police.

Automated Speed Enforcement

One of the biggest issues with CSZs in Meaford in the past has been that limited enforcement resources have been stretched thin. Traditional policing can be expensive and comes with its own constraints and challenges.

The Province of Ontario has recently passed regulations allowing municipalities to operate an Automated Speed Enforcement (ASE) program (also known as speed cameras). ASE is an automated system that uses a camera with a speed measurement device to detect and capture images of vehicles travelling faster

than the posted speed limit. Images are reviewed by Provincial Offence Officers and then tickets are issued to the owner of the vehicle.

ASEs have been shown to be effective in reducing speed and reducing collisions but can be politically unpopular. Warning signage, awareness campaigns and/or pilot periods are recommended if this option is implemented.

Recommendation

The Association of Municipalities of Ontario, of which Meaford is a member, recently began the process of developing a turn-key solution for implementing and administering an ASE program. When this becomes available, it is recommended that Meaford should review potential costs and benefits of the program and consider taking part.

Further detail on community safety zones and automated speed enforcement can be found in Appendix G – Policy Areas and Design Guidance.

5.3 Supporting Active Transportation and Transit

Active transportation helps to create healthier and happier communities, it improves environmental outcomes and has economic benefits including being an important part of Meaford's tourism sector. Further, with working from home expected to be more common following the COVID-19 pandemic, Meaford can position itself to be more attractive to younger and working age people who are working in bigger cities, but want the charm and lifestyle of a smaller, walkable community. Active transportation also accounts for the first and last legs of most journeys made by transit. Improving active transportation facilities within Meaford can help support regional transit initiatives.

The compact nature of Meaford's urban area lends itself well to make walking and cycling more common choices for residents and visitors. More trips by foot or bike can help take pressure off the existing parking supply and reduce the growth in traffic volumes. This is particularly true when new developments are planned to incorporate walking and cycling as driving is incorporated. This means sidewalks, cycling paths and short- and long-term bicycle parking.

5.3.1 Public Transit

Transit is an important initiative to support. A newly launched County-run system, the Grey Transit Route, connects Meaford with both Owen Sound and The Blue Mountains. This service will help connect more people with employment, social, recreation and other opportunities. Meaford can support this initiative through the following:

- Promotion and public awareness, including advertising, notices in community centres / arena, and social media.
- Include the transit stop on Nelson St in the Sykes Street traffic study and downtown parking study to identify if any changes to support transit are appropriate, including sidewalks, bicycle parking, designated parking, or pick-up or drop-off parking within the downtown core.
- Continued support of Meaford Moves+ service, and monitoring service needs to maintain good levels-of-service to the public;
- Work with Grey County on future transit initiatives including potential transit-on-demand services;
- Monitor and if appropriate support new technology that provides improved transit accessibility (e.g. apps for transit services, new services).

Recommendation

Support the continued growth of regional transit initiatives through the provision of first mile / last mile facilities and local public awareness campaigns.

5.3.2 Priority Sidewalk Corridors

The provision of sidewalks is desirable for safety and accessibility purposes. Continuous and connected corridors allow for safe, accessible travel within the urban area. The TMP has identified 15 priority sidewalk corridors where adding new sidewalks or filling in missing links will provide the biggest positive impacts. Criteria considered included connecting to existing sidewalks, connecting to key destinations (e.g. schools, parks, community facilities, hospitals, commercial areas), cost and feasibility, vehicle traffic volumes and speeds and input from public and stakeholder consultation. Exhibit 5.11 shows the recommended locations for priority sidewalk corridors and new pedestrian crossovers (see section 5.3.3). Rationale and additional considerations for each priority corridor are presented in Exhibit 5.12. Further can be found in Appendix E – Active Transportation.

Recommendation

Construct the priority sidewalk corridor segments identified in this section in the next 10 years. Continue expanding the sidewalk network following the completion of the priority sidewalk corridors.

Exhibit 5.11: Priority Sidewalk Corridors and Crossover Locations

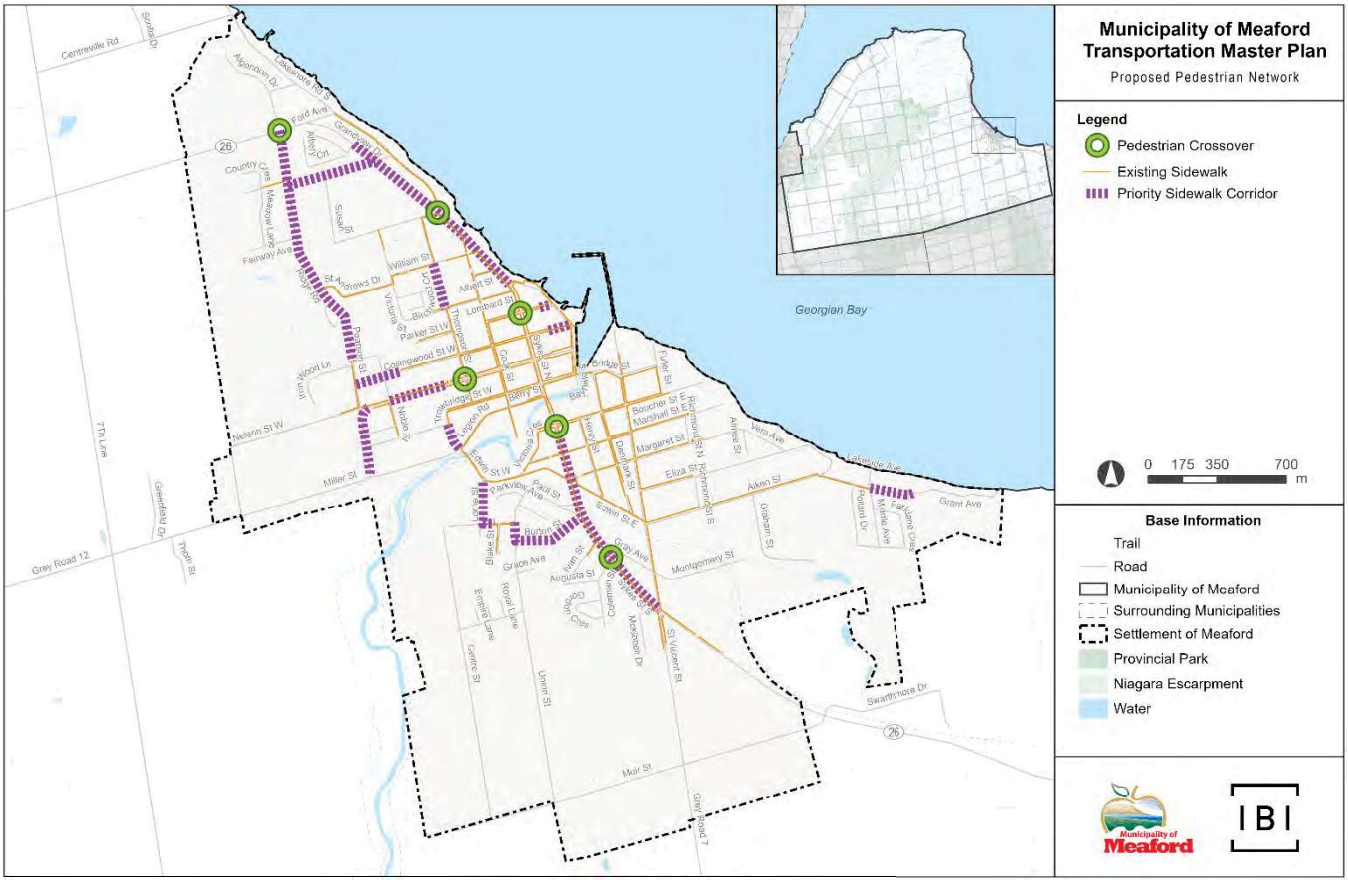


Exhibit 5.12: Priority Sidewalk Corridor Details

Corridor	Extent	Length	Rationale and Considerations
Pearson St / Ridge Rd	Noble St to Sykes St N	1,260 m	Corridor is becoming an important multi-modal link as Meaford grows. It has been designated as a collector road. Commonly cited by public and stakeholders as needing pedestrian facilities.
Sykes St N	Albery Ct to Bayfield St	1,030 m	Sykes St is urban Meaford's main arterial road and most important pedestrian corridor. Sidewalks should be provided on both sides. Connects neighbourhoods in the north to the downtown area, including new developments.
Sykes St S	North of Marshall St to St. Vincent St	970 m	Sykes St is urban Meaford's main arterial road and most important pedestrian corridor. Sidewalks should be provided on both sides. Connects neighbourhoods in the south to Meaford's largest grocery store and to the downtown area to the north.
Grant Ave	Middle Ave to Memorial Park	200 m	Commonly cited by public and stakeholders as needed pedestrian facilities. Links Memorial Park with existing sidewalks.
Collingwood St W	Pearson St to east of Noble St	230 m	Completes a small gap in the sidewalk network, connecting Pearson St to the downtown core.
Collingwood St E	East of Sykes St N to Bayfield St	110 m	Completes a small gap connecting to the waterfront area.
Parker St E	East of Sykes St N to Bayfield St	60 m	Completes a small gap connecting to the waterfront area. Importance is increased with pedestrian crossover being planned at Sykes St and Parker St.
Owen St	Berry St to Miller St	120 m	Completes a small gap in the sidewalk network.
Thompson St	William St to Lombard St	230 m	Completes a small gap in the sidewalk network.
Helen St	Stewart St to Sykes St N	260 m	Provides east-west access in the northern part of urban Meaford.
New Path	Ridge Rd to Stewart St	180 m	Clearly worn desire line at this location. Connects to Helen St (see above) to provide continuous east-west route across northern urban Meaford to Sykes St.

Corridor	Extent	Length	Rationale and Considerations
Lorne St (and Louisa St)	Edwin St to Louisa St	250 m	Provides connection to recent sidewalk installed on Edwin St and further to Beautiful Joe Park and Trout Hollow Trail. Includes short segment on Louisa St to connect to existing sidewalk. The area to the south is a future (long-term) growth area. Sidewalks should be built along with development to connect to these segments.
Farrar St / Burton St (and Union St and James Cr)	Union St to James Cr	480 m	Provides connection for residents in the area to Sykes St businesses and further to the new Meaford school. Includes segments on Union St and James Cr to connect to existing sidewalk segments. The area to the south is a future (long-term) growth area. Sidewalks should be built along with development to connect to these segments.
Nelson St (CR-12)	Noble St to west of Thompson St	290 m	Provides pedestrian access to Meaford's hospital and closes a small gap in the sidewalk network along a busy county road.
Pearson St (CR-12)	Nelson St to Miller St	380 m	Extends the Ridge Rd / Pearson St north-south connection to Miller St and connections into southern urban Meaford.

The corridors listed above are the priorities but building the rest of the sidewalk network should not be ignored. The Municipality should continue with ongoing work to identify sub-standard existing sidewalk sections that need to be upgraded to meet AODA standards. Additionally, corridors within the urban area without sidewalks that are not identified as priorities above should continue to be considered for sidewalks if opportunities are presented through new developments, road re-construction or other required capital projects.

Recommendation

Meaford should identify sub-standard sidewalk sections and curb ramps on an ongoing basis and integrate needs into capital program (bundling with other infrastructure projects where possible) to retrofit to AODA standards when performing other related projects. .

5.3.3 Pedestrian Crossovers

Safe street crossings are an important part of the pedestrian network. In Meaford, there are long stretches of Sykes St, its busiest road, with no signalized or other safe crossings. Six locations have been identified for the installation of pedestrian crossovers in a phased approach. These are shown in Exhibit 5.11 and detailed in Exhibit 5.13.

Exhibit 5.13: Pedestrian Crossover Details

Location	Type*	Rationale and Considerations
Sykes St S at Coleman St	Level 2 Type B	Three-lane section of road more difficult to cross informally. Provides access to neighbourhoods on both sides of Sykes St and commercial land uses on both sides.
Sykes St S at Boucher St	Level 2 Type C or Type D	Provides a safe crossing at the southern end of Meaford's downtown commercial core.
Sykes St N at Parker St	Level 2 Type C or Type D	Provides a safe crossing at the northern end of Meaford's downtown commercial core and improves access to Meaford's waterfront and Fred Raper Park.
Sykes St N at Grandview Dr	Level 2 Type C or Type D	Connects neighbourhoods on both sides of Sykes St. Next closest planned crossing is more than 650 metres to the south (Parker St).
Sykes St N (ON-26) at Ridge Rd	Level 2 Type B	Provides connections between growing neighbourhoods. Visible desire line on north side indicates demand for pedestrian infrastructure. Installation should include formalizing the desire line with a short sidewalk or trail connection to the north. This location is outside of the Connecting Link and would require coordination with the MTO.
Nelson St (CR-12) at Thompson St	TBD – data not available	Provides access to hospital, community centre, churches and connects neighbourhoods on both sides of Nelson St. An alternative location was considered at Noble St, which should also be considered in the future as the neighbourhoods around Pearson St and Ridge Rd continue to grow.

*Note that OTM Book 15 warrants use 4-hour or 8-hour traffic volumes. For the purposes of this study, these have been estimated from 24-hour volumes. Traffic levels and crossover types should be confirmed prior to installation.

In some cases, there may be justification for full signalized intersections based on traffic volumes. The TMP recommends a more comprehensive intersection study at Sykes St and Ridge Rd[1] based on growing traffic volumes and at Sykes St and Coleman St and other nearby intersections based on turning traffic. If traffic signals are warranted, they would supersede the pedestrian-only crossings. The TMP also recommends further study at Nelson St and Pearson St that may make the potential crossing at Noble St noted above redundant.

5.3.4 Cycling Network

The Grey County Cycling and Trails Master Plan has provided Meaford with a solid starting point for a cycling network that links the Municipality to the rest of

[1] The Sykes St & Ridge Rd intersection is located outside of the Connecting Link and is the responsibility of the MTO.

the County. Meaford is supportive of the Grey County plan and should implement where possible with other capital work, with funding partnerships. Building on that, two key needs were identified for the cycling network:

- Providing finer grained local connections in the urban area; and
- Providing continuous paved (hard surface) routes in the rural area.

Based on the above needs, two connections were identified in the urban area to be added on top of the Grey County plan, while an additional north-south route and a key east-west connection were identified in the rural area. Rural connections are detailed in Exhibit 5.14, urban connections are detailed in Exhibit 5.16. The proposed cycling network is displayed in Exhibit 5.15 and Exhibit 5.17.

These recommendations form the long-term cycling network. Where infrastructure upgrades are contemplated, timing of implementation will vary based on a variety of factors. These include available capital budget, grants or funding from other levels of government and co-ordination with other infrastructure priorities (e.g. underground utility work, road re-construction or rehabilitation, etc.).

Recommendation

Implement the long-term cycling network.

Further details on the development of these recommendations can be found in the Appendix E – Active Transportation.

Exhibit 5.14: Rural Municipal Cycling Connection Details

Route	Corridor	Type	Rationale and Considerations
North-South Paved Route	Concession Rd 2 N (Side Rd 27 to Highway 26)	Signed Route	This segment will form part of a continuous paved route once it is upgraded and paved to reflect its rural collector road status.
North-South Paved Route	Highway 26 (Concession Rd 2 N to 12th Line)	Paved Shoulders	As no roads continue directly north and south of Highway 26 in this area, a brief jog via Highway 26 is required. Given traffic volume and speed, the TMP recommendation is for the Province to provide paved shoulders on the segment linking the cycling facilities north of and south of Highway 26.
North-South Paved Route	Grey Rd 18 (Highway 26 to Gerald Shortt Pkwy)	Signed Route	This connection provides a direct extension of the north-south paved route and connects into the east-west Grey County and #CycleON routes.
North-South Paved Route	Side Rd 16 (12th Line to 11th Line)	Signed Route	This segment will require an upgrade to pavement to provide a continuous paved route.

Route	Corridor	Type	Rationale and Considerations
North-South Paved Route	11th Line (Side Rd 16 to Side Rd 10)		Provides an alternative north-south paved route to the busier Grey County route and connects to the east-west County and #CycleON routes.
East-West Paved Connection	Side Rd 10 (Grey Rd 12 to 7th Line)	Signed Route	Segment to be part of future paved road forming a new east-west vehicular connection. Paving will provide opportunity to be added to cycling route network and improve connectivity and continuity south of the urban area for cycling. Implementation in the long-term (towards 2045) depending on traffic counts and other factors.

Exhibit 5.15: Meaford TMP Cycling and Trails Network

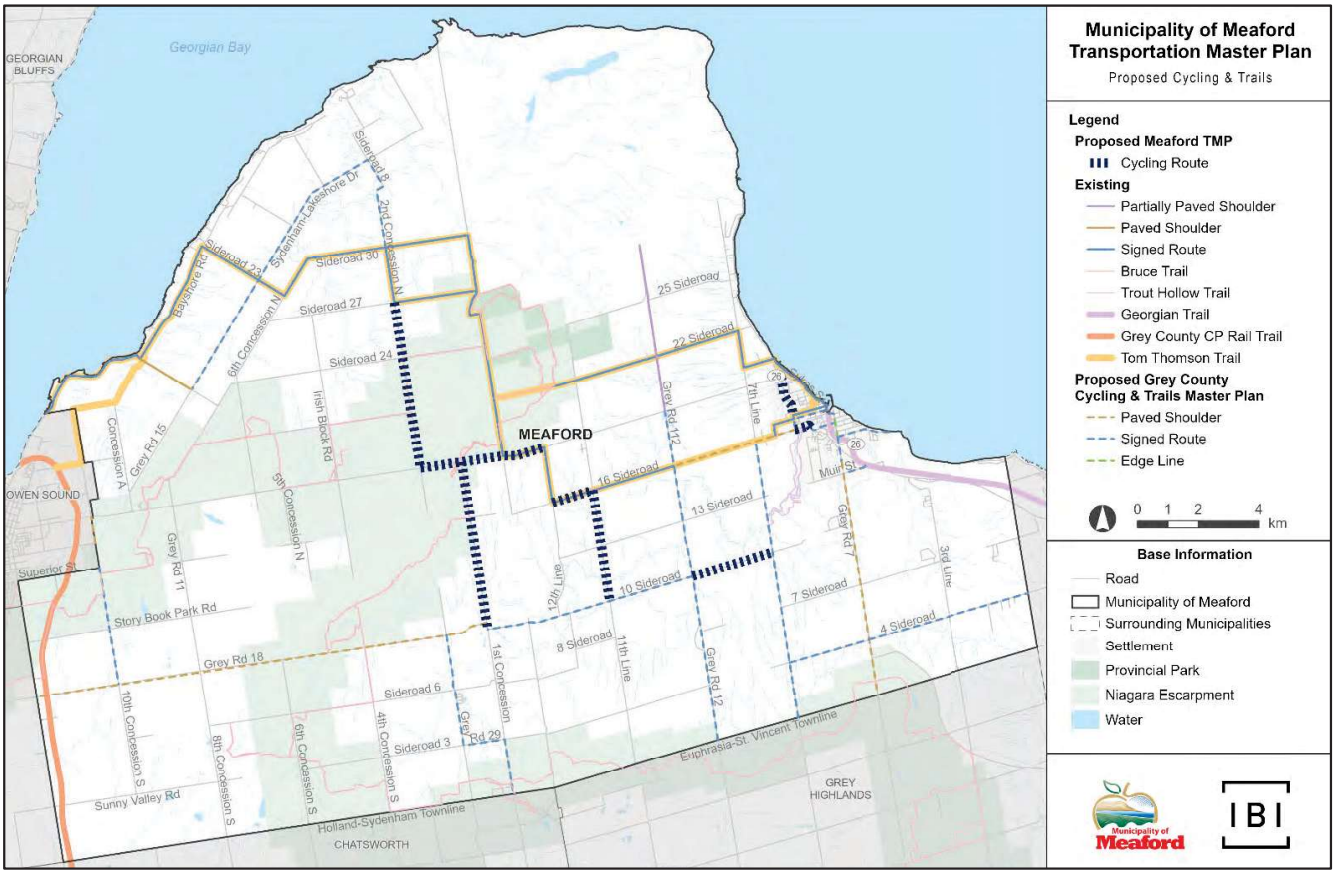
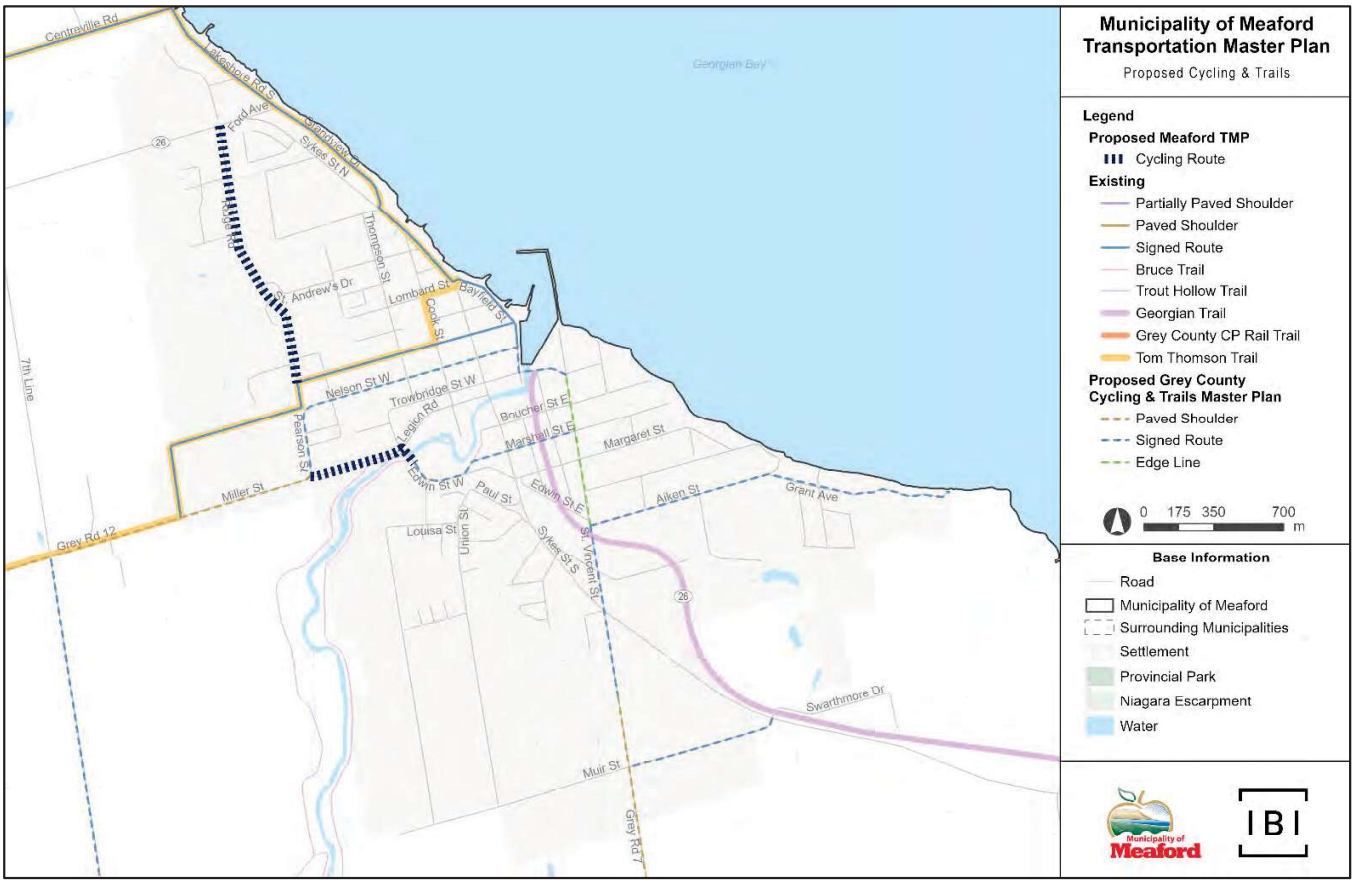


Exhibit 5.16: Urban Municipal Cycling Connection Details

Corridor	Extent	Type	Rationale and Considerations
Pearson St / Ridge Rd	Sykes St N to Nelson St	Signed Route	Corridor provides an additional north-south link and a quieter option than Hwy 26. As Pearson St / Ridge Rd is identified as a collector road, traffic volumes and speeds should be monitored to determine if a dedicated facility is warranted. If so, it should be implemented when the road is rebuilt. Alternatively, since the corridor also needs pedestrian infrastructure, a multi-use trail could serve both purposes.
Miller St	Pearson St to Owen St / Edwin St	Signed Route	Under the assumption that Miller St will be converted into a cul-de-sac to eliminate cut-through traffic, it becomes a much more attractive and quieter route linking Grey County's planned paved shoulders on CR-12 to the planned signed route at Edwin St, bypassing the busier segments of Nelson St.

Exhibit 5.17: Meaford TMP Cycling and Trails Network – Urban Area



5.3.5 Land Use Planning and Transportation

How Meaford plans its land uses has a direct influence on how people move within and through the Municipality. Compact urban development encourages more sustainable travel choices (e.g. walking, cycling) and lends itself to better supporting transit. How Meaford grows will be very important towards achieving the goals of the TMP. Meaford should carefully consider implications of land use planning decisions through the implementation of zoning by-laws and the Official Plan. Carefully considered policies can improve the Municipality's quality of life, vibrancy and economic development, all while helping to achieve the transportation outcomes envisioned in this TMP. The following outlines several items for Meaford to consider and integrate into future land use planning.

- Encourage new developments in the urban area to be oriented towards walking and cycling by requiring compact, mixed-use development, built closer to the street and property line.
- Update by-laws to require new developments to provide sidewalks that connect to the nearest existing sidewalk for all developments.
- Update by-laws to require larger new developments to provide internal sidewalks and/or multi-use trails to the standard of the Municipality, subject to the development review process. See section 5.3.6 for more detail.
- Update by-laws to require the provision of short and long-term bicycle parking at new residential, office and commercial developments.
- Update by-laws to reduce or eliminate minimum parking requirements for new developments. See section 5.1.4 for more detail.
- Consider shared parking between different land uses (e.g. day use vs. night use).

Recommendation

Update by-laws as discussed above so land use planning better supports the transportation outcomes envisioned in this document. Incorporate these concepts into the next Official Plan update.

5.3.6 Supporting Strategies and Policies

Sidewalks

The importance of providing accessible and continuous sidewalks is well established in this TMP, with the priority sidewalk corridors identified above in section 5.3.1. However, some general guidelines and policies should also be considered to improve the pedestrian experience in Meaford.

Within the urban area, sidewalks should be provided on both sides of arterial roads (e.g. provincial, county and connecting link) and collector roads.

Sidewalks should be provided on one side of local roads. It is recognized that this is a long-term objective and will have to be applied selectively as many corridors within the urban area are still more functionally rural in nature. As the community continues to grow and urbanize, however, providing a complete sidewalk network becomes more important.

Where sidewalks are only required on one side of the street, they should be provided continuously on the same side within the corridor. It is understood that constraints may require changing sides, but this should be minimized, and accessible crossings should be provided where the sidewalk changes sides. It is not necessary that all corridors have sidewalks on the same side. That is, parallel corridors need not have sidewalks both provided on the west side, so long as the corridors are as consistent as possible.

Finally, as noted above, by-laws should be updated requiring new developments to meet these sidewalk requirements. Small-scale developments should be required to connect into the nearest connection. Meanwhile, large-scale developments (e.g. new neighbourhoods) should be required to provide internal sidewalk connections and/or multi-use trails that satisfy this policy as well as connecting into the greater network.

Recommendation

Update by-laws to require new developments to provide sidewalks pursuant to the policy outlined above and connecting to the nearest existing sidewalk.

Bicycle Parking

End of trip facilities form an important part of recognizing the transportation or utilitarian use of bicycles. Bicycle parking should be provided at key destinations in urban Meaford where people can lock their bicycles securely while supporting local businesses. On public land, Meaford should consider ring and post-style bicycle parking. Alternatively, many municipalities operate programs where businesses can request bicycle parking facilities be provided. Meaford should also consider providing higher-capacity bicycle parking facilities on municipally-owned parking lots.

Recommendation

Provide bicycle parking in downtown Meaford and other key locations throughout the urban area.

Paved Shoulders

The rural cycling network relies on lower traffic volume connections, where longer distance touring trips can be made. However, where traffic volumes and speeds are in conflict with slower moving bicyclists, paved shoulders should be provided to improve the safety of all road users. Paved shoulders also provide extra room for moving oversized and slow agricultural equipment and provide safer spaces for pedestrians along rural roads.

The Ontario Traffic Manual Book 18 guide to designing cycling facilities is currently being updated and is expected to provide updated guidance on where paved shoulders are most appropriate for cycling routes. Once released, Meaford should follow the guidance provided within. Traffic volumes and speeds should be monitored to identify where upgrades may be beneficial as the Municipality continues to grow. This is particularly true where the rural collector road network and cycling network overlap, as well as where other needs (e.g. providing pedestrian space, moving agricultural vehicles) are identified.

5.4 Refining Operations, Maintenance and Asset Management

Day-to-day operations and regular maintenance of transportation assets are key considerations for the Municipality of Meaford. Operational considerations refer to how the transportation system works on a day-to-day basis. This includes items such as the placement of stop signs, street directionality (i.e. one-way or two-way operation) and setting speed limits.

Maintenance, meanwhile, refers to the long-term repair, rehabilitation, and eventual replacement of transportation assets. Properly funding maintenance activities can help extend the life of assets and reduce costs in the long run.

Within this section, policies, actions and other considerations are outlined for a number of areas relating to road design, operation and maintenance. Further background information is provided in Appendix G – Policy Areas and Design Guidance.

5.4.1 Stop Signs

The Municipality of Meaford will apply Ontario Traffic Manual (OTM) Book 5 to determine if a stop sign is warranted, prior to installation. This policy acknowledges that stop signs are not typically appropriate for use to protect pedestrians, as a speed control device, and as a means of deterring through traffic.

Over time Municipal should consider monitoring and identifying locations with problematic all-way stop control. This could be through collision data monitoring (see safety policy) and through assessment and local knowledge. If a location with all-way stop control is identified as unnecessary, OTM Book 5 provides a methodology for removal of stop signs.

Recommendation

Undertake review of existing stop sign locations to identify safety or operational problems.

5.4.2 One-Way Streets

One-way streets can improve traffic flow and could address sight-line concerns at intersections, by restricting the direction of traffic that has sight-line concerns. While a potential tool to address traffic and sight-lines, one-way streets can have a significant impact on accessibility of properties if they require long detours. In Meaford, a conversion to a one-way street would be considered through a detailed study that includes traffic operations, safety, and impacts to property including accessibility.

5.4.3 Speed Limits

Speed limits that are currently in place in Meaford reflect provincial standards and typical municipal practices for most roads, plus some individual road segments that had their speed limits set through staff or council direction in past years. Meaford receives requests for changes to speed limits from the public, often due to concerns about speeding. The municipality should undertake speed limit reviews on an individual basis and tie these reviews into the recommended safety program of the TMP, which includes collision data monitoring and tracking of safety-related issues. When a speed limit review is undertaken, it should follow the procedures of the Transportation Association of Canada (TAC) and be consistent with the guidelines set out in the Road Classification system.

Recommendation

Adopt the TAC methodology and use the safety program to review and set speed limits.

5.4.4 Paving Rural Roads

With traffic growth and the importance of agricultural goods movement to the economy, paving rural roads should be considered where appropriate to improve service levels to road users. Meaford will through this TMP develop a Level of Service policy that utilizes industry best practices in a two-step process.

- Fewer than 200 vehicles per day: Granular
- Between 200 and 400 vehicles per day: Surface treated (LCB)
- More than 400 vehicles per day: Paved (HCB)

Best practices can evolve over time as costs for surface types change and new technologies are developed. Meaford should periodically review thresholds and surface treatment types and engage with the industry and peer municipalities to explore and adapt municipal practices.

Where AADT data suggests a road's surface should be changed, further assessment is required on a case-by-case basis to assess the other factors that contribute to determining the appropriate surface type (e.g. boulevard width, network connectivity, maintenance and drainage). If an upgrade is recommended, the project should be scheduled and prioritized through capital budget planning.

Recommendation

Develop a Level of Service policy to determine the most appropriate surface treatment as outlined above.

5.4.5 Bridge Management

Bridge Rehabilitation Strategy

Meaford, like many municipalities, is facing a challenge in its aging infrastructure with bridges that requires rehabilitation and replacement. A number of issues are present on individual bridges ranging from inadequate railing and traffic protection to aging bridge decks or structures that require replacement. Undertaking all the necessary bridge maintenance and rehabilitation is an enormous undertaking outside of current transportation capital budgets.

Meaford currently prioritizes bridges based on OSIM reports which include recommended timing. However, much more funding is required if timing recommendations were to be kept as many bridges require rehabilitation in the next five years.

For the TMP a supplementary review was undertaken by a structural engineer and proposed a 'Structure Priority Number' approach which uses the information in the OSIM reports in a scoring system that provides an overall score based on numerous risk factors. This approach can help guide the municipality ensure that the highest-risk bridges with safety-related needs are prioritized. The Structure Priority approach has been adopted by other Ontario Municipalities. The technical memo is provided in Appendix H.

Recommendation

Adopt bridge rehabilitation strategy outlined in Appendix H.

Bridge Closure Strategy

The TMP acknowledges the challenges in maintaining the Municipality's numerous bridges in safe, working order. With current trends, Meaford will need to identify and close low-use bridges where viable alternative routing exists, as bridges become unsafe for public use. If this is necessary, this TMP recommends a transportation review of the impacts of these closures, considering detour distance of the alternative routes, viability of the alternative routes for heavy agricultural equipment and trucks and impacts on residents and businesses. Consultation with adjacent landowners should be included.

Recommendation

Undertake a more detailed assessment of potential bridge closures to evaluate impacts and risks, focusing on the criteria outlined above (e.g. detour distance, detour suitability for heavy vehicles, and other local impacts).

6 Implementation and Monitoring

6.1 Costs and Phasing

Cost estimates for TMP projects and programs were developed using MTO's Parametric Estimating Guide (2016) for road projects, and internal estimates for active transportation projects, studies, traffic calming, safety program, and other miscellaneous items.

Projects were assigned to the three TMP horizons by priority as identified in the supporting materials. A number of edits and customizations were made on the capital program, in order to spread costs as follows.

- The proposed east-west collector (road project 3) is a high-cost project due to a need for major re-grading along Side Road 10 and was placed in the 2031-2045 horizon.

- Rural collector and rural local road improvements were spread across the planning horizons on a yearly-cost basis.
- Sykes Street, Miller Street study, and Pearson Street / Ridge Road traffic studies, and recommended parking study, were all allocated to the 2021-2025 horizon and subsequent capital estimates allocated to the 2026-2030 horizon.
- Priority sidewalks and pedestrian crossovers were assumed to be constructed by 2030 and allocated evenly by 2021-2025 and 2026-2030.
- Road safety program and other projects including cycling, parking at trails, and other miscellaneous projects were allocated by year or by five-year period.

The proposed TMP capital plan is provided in Exhibit 6.1.

Exhibit 6.1: TMP Capital Program

Project	2021-2025	2026-2030	2031-2045
Rural Roads			
1 - Sideroad 8 & Concession Rd 2 N: Corridor upgrade and paving		$2,019,000	
2 - Sideroad 22 & Concession Rd 6: Intersection maintenance	$5,000		
3 - New East-West Collector			
Environmental Assessment		$300,000	
Side Road 4 From Blue Mountains to 7th Line	*completed		
7th Line from Side Road 4 to Side Road 10			$1,073,000
Side Road 10 from 7th Line to County Road 12			$2,428,000
4-7 - Rural collector road improvements	$98,000	$123,000	$368,000
Other - Rural local road improvements (paving)	$246,000	$307,000	$921,000
Urban Roads			
8 - Sykes St Traffic Operations Study	$50,000	$200,000	
9 - Miller Street Cul-de-Sac Study and Implementation	$25,000	$151,000	
10 - Pearson Street / Ridge Road - Study and Implementation	$30,000	$1,000,000	$1,500,000
11 - Sykes Street & St. Vincent St Intersection			
12 - Sykes Street & Ford Ave	$7,000	$50,000	
13 - Parking Study	$50,000		
14 - Traffic Calming Aiken St & Grant Ave	$5,000		

Project	2021-2025	2026-2030	2031-2045
15 - Traffic Calming Grandview Dr & Lakeshore Rd	$5,000		
Cycling			
Urban - Ridge Road		*incl. in #10	
Urban - Miller Street		*incl. in #9	
Rural Roads - Paved Loop		*incl. in #1	
Rural Roads 10 Side Road East of Grey Road 112		$466,805	*incl. in #3
Pedestrian			
Priority Sidewalks	$610,000	$610,000	
Remaining Sidewalk Gaps			$5,600,000
Pedestrian Crossovers	$45,000	$45,000	
Policies and Programs			
Road Safety Program	$80,000	$100,000	$300,000
Traffic Calming			
Community Safety Zones			
Speed Limits			
Stop Signs			
Cycling other - signage, bicycle parking, public information	$28,000	$35,000	$105,000
Roads - parking at trails and tourism locations	$50,000	$50,000	$150,000
Pedestrian / cycling - improved trail access, other trails	$50,000	$50,000	$150,000
Speed enforcement / ASE (assume cost-neutral)			
Total	**$1,384,900**	**$5,507,000**	**$12,596,000**
Cost / Year	**$346,000**	**$1,101,000**	**$840,000**

6.2 Affordability and Funding the TMP

The capital program identified in the TMP, to enable all recommendations by 2045, has a total cost of approximately $19.5 million dollars. The allocations of projects to the various time horizons split this amount to approximately $346,000 per year in the first four years (2021-2025), $1.1M per year in the next five years (2026-2030), and $840,000 per year in the remaining 15 years from 2031-2045.

Based on the total tax supported budget in 2021, the recommended $346,000 per year represents a 2.4% increase. Assuming budgets are consistent through to 2026, the $1.1M per year in medium-term horizon would represent and additional 5.1% increase. These figures are likely too high for the municipality to fund on its own, but these percentages do not account for funding from other levels of government and/or development charges. It is unlikely that the municipality would self-fund the larger projects, including the east-west collector road improvements (Side Road 10). Projects in the TMP may be candidates for other funding sources as well:

- Sykes Street improvements including the traffic study, parking study, and recommendations arising from those studies, could be partially funded through development charges.
- Grey Official Plan indicates support for sidewalks and Active Transportation network improvements.
- #CycleON – Ontario's active transportation strategy may produce funding availability;
- Canada National Active Transportation Strategy is currently undergoing consultation with municipalities for criteria and process to allocate up to $400M in funding
- Funding programs and initiatives from provincial and federal governments related to replacement of aging infrastructure, road, transit, and other transportation-related programs.
- Growth-related transportation projects can be fully or partially funded through development charges.

Funding sources such as these can alter the timing of projects. This TMP provides a project list including projects and initiatives that are ready to proceed pending funding availability, thus projects can be moved earlier if funding is available or deferred if not.

Given the above the TMP can be described as affordable for the next five years and requiring monitoring of funding sources during the next five years to proceed to implementation of some of the recommendations.

6.3 2025 Action Plan

The TMP provides a list of projects, policies, and initiatives for the municipality to pursue over the next 25 years. The TMP also shows that there are a number of lower-cost initiatives that can be undertaken in the short-term to support the vision and goals for transportation in Meaford. The proposed 2025 action plan is given by the following exhibit.

Exhibit 6.2: 2025 Action Plan

No.	Action
1	Begin implementation of rural collector road improvements
2	Begin implementation of rural local road upgrades
3	Undertake a Sykes St traffic operations study
4	Undertake a Miller St cul-de-sac study and implement the directions from the study
5	Undertake a Pearson St / Ridge Rd traffic study and start the implementation of road improvements along the corridor
6	Work with the County on the Sykes St and St. Vincent St intersection
7	Implement soft traffic calming on Aiken St / Grant Ave and on Grandview Dr / Lakeshore Rd and on Ridge Rd / Pearson St as an interim measure
8	Start the construction of priority sidewalks
9	Build the first three pedestrian crossovers
10	Start the road safety program
11	Support cycling with funding for signage, bicycle parking, and public information
12	Support recreation walking and cycling with parking improvements at trail heads and at tourism locations
13	Review community safety zones and explore Automated Speed Enforcement (ASE)
14	Consider a 40 km/h default urban speed limit
15	Update by-laws to require developments to provide sidewalks and bicycle parking
16	Prioritize bridge maintenance and rehabilitation using industry best practices approach

6.4 Monitoring Program and Future Updates

The Transportation Master Plan is a guide for Meaford to manage its transportation system over the coming years. It will be necessary to track progress of the Municipality towards the plan and update the plan over time to respond to changing conditions.

The action plan provides a list of items for Meaford to implement by 2025 and is therefore the starting point of the monitoring plan. Monitoring of safety will also come from the recommended safety program, which will collect and review collision data annually to identify location-specific issues and overall trends. Staff will also monitor population growth and developments compared to assumptions made in the TMP and consider updates if new developments or changes in development plans arise. Finally, demographic changes and technology changes should be monitored, and major changes flagged for inclusion in a TMP update.

Municipalities are required to consider an update of their transportation master plan at the time of official plan updates, which occurs every five years. Beyond five years, assumptions used in the TMP can start to vary from actual conditions. The TMP also forms the need and justification (Phases 1 and 2) of the Class EA process, and is considered valid for a period of 10 years.

The current TMP proposes a range of projects and policies to guide Meaford in managing its transportation system through the coming years, which is certain to contain significant changes in transportation. As time passes and items are crossed off the list, future update can re-examine needs and opportunities to support the Transportation Vision.

IBI

Appendix A

Existing Conditions

Municipality of Meaford

Transportation Master Plan

July 2021

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1 Introduction

The Municipality of Meaford is developing its first comprehensive Transportation Master Plan (TMP). The TMP will be a strategic long-term plan guiding the management of transportation infrastructure and investment into improvements to operations and safety of all modes of travel and goods movement. The TMP is a plan for the future responding to changing demographics, growing tourism and seasonal traffic, aging infrastructure and associated costs, and increasing demand for safe walking, cycling, and recreational travel infrastructure.

1.1 About This Report

This report is the first step of the TMP study, establishing the existing conditions to which the TMP will respond. This report examines the current policy context, recent trends in travel demand, trends and forecasts in population and employment, the existing transportation system and natural and environmental features.

Documenting the existing conditions is an important step in the TMP as it provides a look at trends, issues, and needs across the transportation network. The content of this report provides an initial base for public and stakeholder consultation, to gather information of how the transportation system in Meaford is working, or not working, for residents, businesses and visitors. This report provides input into the next steps of the TMP study, Needs and Opportunities which explores future transportation conditions and further details the transportation needs, issues and opportunities, and Alternative Solutions, where potential solutions and strategies are developed and assessed. The study process is summarized in Exhibit 1.1.

Exhibit 1.1: Study Process

1.2 Meaford at a Glance

The Municipality of Meaford is a diverse economy with a combination of urban amenities and rural lifestyle that make it a great place to live, visit and do business. Meaford's historic downtown core and waterfront location generates high tourism travel, recreational trips, local business travel, and walking and cycling traffic. The downtown features entertainment options, retail, and a wide range of eateries and services. Situated on the shores of Georgian Bay, the municipality has access to and connections with many destinations along the lake and throughout the Niagara Escarpment. Rural Meaford provides natural and recreational destinations, an agricultural base, and destinations including apple orchards, wineries and cideries.

The Municipality of Meaford is one of nine lower-tier municipalities in Grey County. Situated on the southern shore of Georgian Bay, Meaford covers 589 km^2 of land and borders Owen Sound and Georgian Bluffs to the west, Chatsworth and Grey Highlands to the south, and The Blue Mountains to the east. Exhibit 1.2 presents basic demographic characteristics as of 2016.

The Municipality is comprised of urban Meaford, several other villages and communities including Annan, Bognor, Leith, Rockford and Woodford. The Municipality also contains the Land Force Central Training Area for the Canadian Forces (Department of National Defense Military Maneuver and Training Area) facility 5 km northwest of downtown Meaford. Exhibit 1.3 provides an overview of the geography of the Municipality of Meaford.

Exhibit 1.2: Demographic Characteristics (2016)

Characteristic	
Permanent Residents	10,991
Private Dwellings	5,590
Private Dwellings Occupied by Usual Residents	4,830
Average Household Size	2.2
Land Area (km^2)	588.57
Population Density (per km^2)	18.7
Median Age	53.0

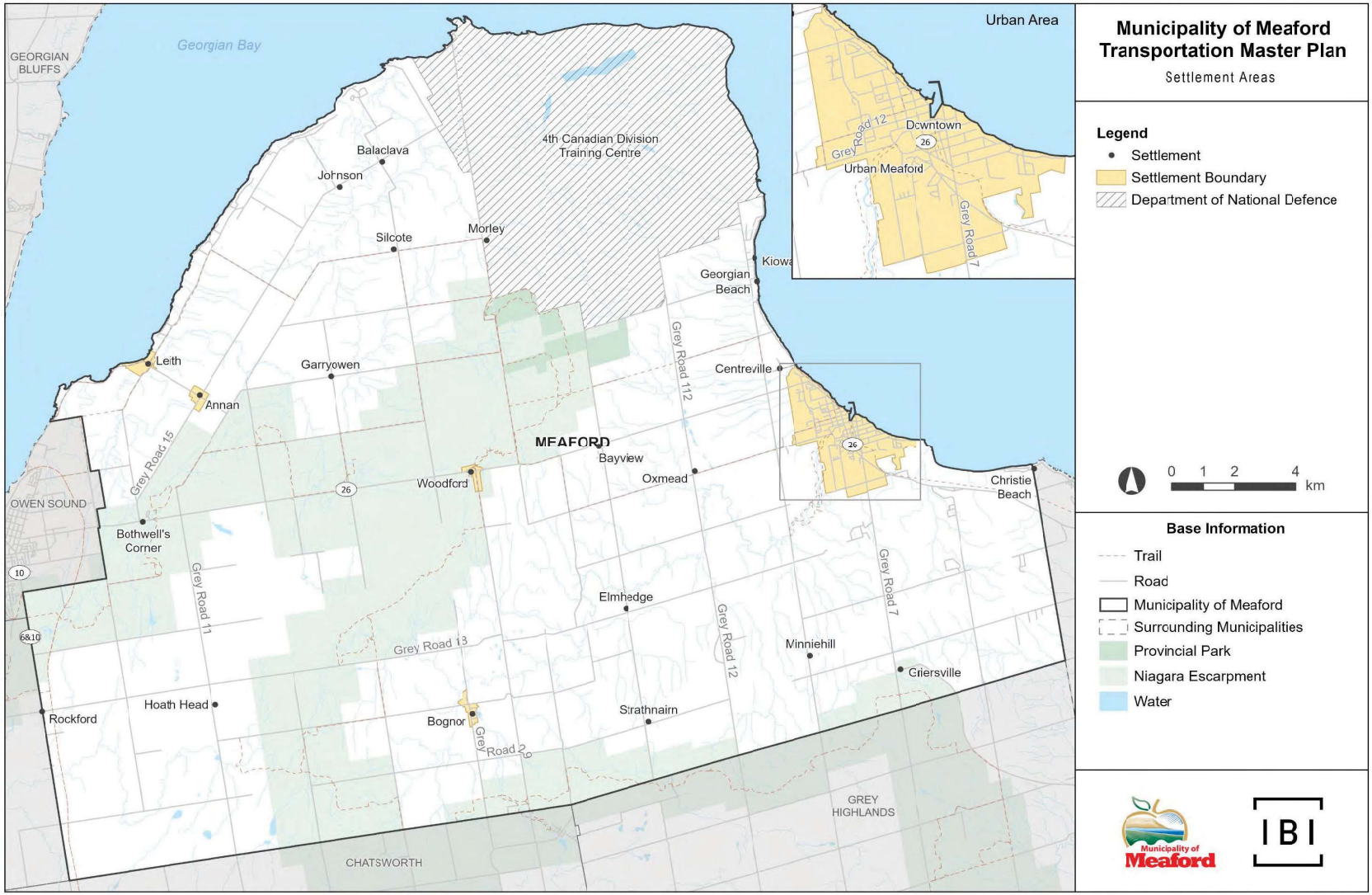
Source: Statistics Canada, 2016 Census of Population

Urban Meaford includes the Municipality's main public waterfront area, its urban main street (Sykes Street), several community and recreational facilities and a hospital. Forty-five percent[1] of Meaford's permanent population resides within urban Meaford. Residential built form in urban Meaford is predominantly comprised of detached homes, but townhomes and multi-family buildings are also present.

The rural areas of Meaford, which is home to 55% of the urban population, are predominantly agricultural lands, including cideries and wineries that draw interest from tourists. There are also several small rural settlements and natural areas including the Bayview Escarpment Provincial Natural Reserve, the Bognor Marsh Management area and segments of the Niagara Escarpment.

[1] Statistics Canada, 2016 Census of Population

Exhibit 1.3: Urban Area and Settlements in Meaford



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2 Planning Context

The Meaford TMP builds upon prior and current planning efforts within the Municipality, at Grey County and at the Province of Ontario. The TMP endeavors to be consistent with the goals and objectives put forward in previous plans, while adapting to the latest best practices, changing conditions and public interest.

Two key documents have a significant role in guiding the development of the Meaford TMP. These are Meaford's Official Plan and the Grey County Transportation Master Plan. These documents provide the foundation for the Meaford TMP as it builds off the strategic directions and infrastructure recommendations made in these documents.

2.1 Meaford Official Plan, 2014

The Meaford Official Plan (OP) provides goals, objectives and policies to guide the decision of public authorities and private interest for the next 20 years. The Plan, coupled with the Grey County Official Plan, guides the land use and development strategies within the municipal boundaries, and sets general infrastructure policy, including transportation. The Community Vision in the Official Plan is built around five key planning principles:

- Protect the natural environment;
- Conserve the Municipality's natural resources;
- Protect the character of developed and undeveloped areas;
- Direct growth and settlement to appropriate locations; and
- Encourage economic development.

Section A2.6 (Infrastructure) of the Official Plan presents the strategic objective of encouraging "**the establishment of an integrated transportation system that safely and efficiently accommodates various modes of transportation including walking, cycling, other human-powered modes, automobiles and trucks**." This is one of the main drivers in the need for a comprehensive transportation master plan that considers all modes of travel, and the interactions between those modes. The OP further encourages "reductions in the use of private automobiles" through better land use panning and the development of more mobility options, including promoting active transportation, under Section A2.9 (Sustainable Development).

The link between land use and transportation planning is made explicit in the Official Plan in the objective to encourage density and built form that supports and enhances active and alternative modes of transportation. The TMP will need to build on this approach by ensuring infrastructure planning meets these objectives as Meaford grows and re-develops. Exhibit 2.1 and Exhibit 2.2

present the Meaford Official Plan land use concept (Schedule A and Schedule A-1).

Section D2.6 of the Official Plan describes the following active and alternative transportation objectives:

- To ensure a built environment that supports and encourages active transportation.
- To ensure that the design of new residential development provides convenient pedestrian access to schools, neighbourhood recreational facilities, shopping areas and employment areas.
- To recognize that public safety and security must be encouraged in the planning and design of sidewalks and walkways
- To ensure that that the design of transportation facilities considers the need to provide safe, convenient and attractive sidewalks and walkways.
- To design roads that ensure the safety of all users.
- To develop a connected system of regional trails and bike-friendly streets/lanes/paths to permit linkages between municipalities.

2.2 Grey County Transportation Master Plan, 2014

The Grey County Transportation Master Plan is a strategic plan directing policies and initiatives that shape the transportation system of Grey County. As Meaford is a lower-tier municipality in Grey County, the County TMP has significant influence on transportation policy at the local level. The Meaford TMP will need to be consistent with the overall direction and objectives within the Grey County TMP. Section 1.1 outlines the goals of the Grey County TMP:

- Create a vision for all modes of transportation in Grey County, with a particular focus on encouraging active transportation options (cycling, walking/running).
- 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.
- 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.
- Establish solutions reflective of the present economic climate and future conditions.
- Coordinate and establish partnerships with public and private agencies.

Exhibit 2.1: Meaford Official Plan Land Use (Schedule A)

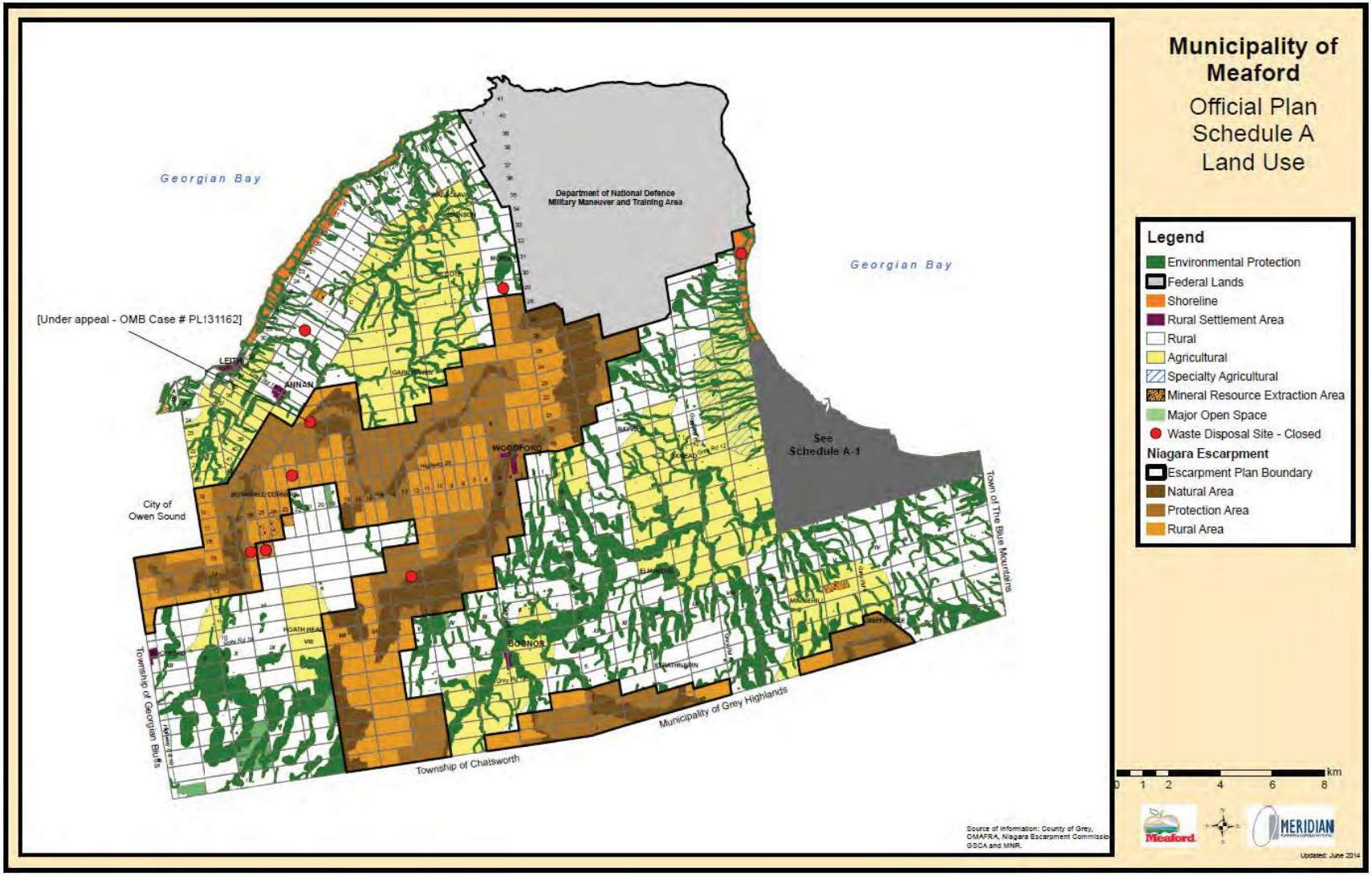
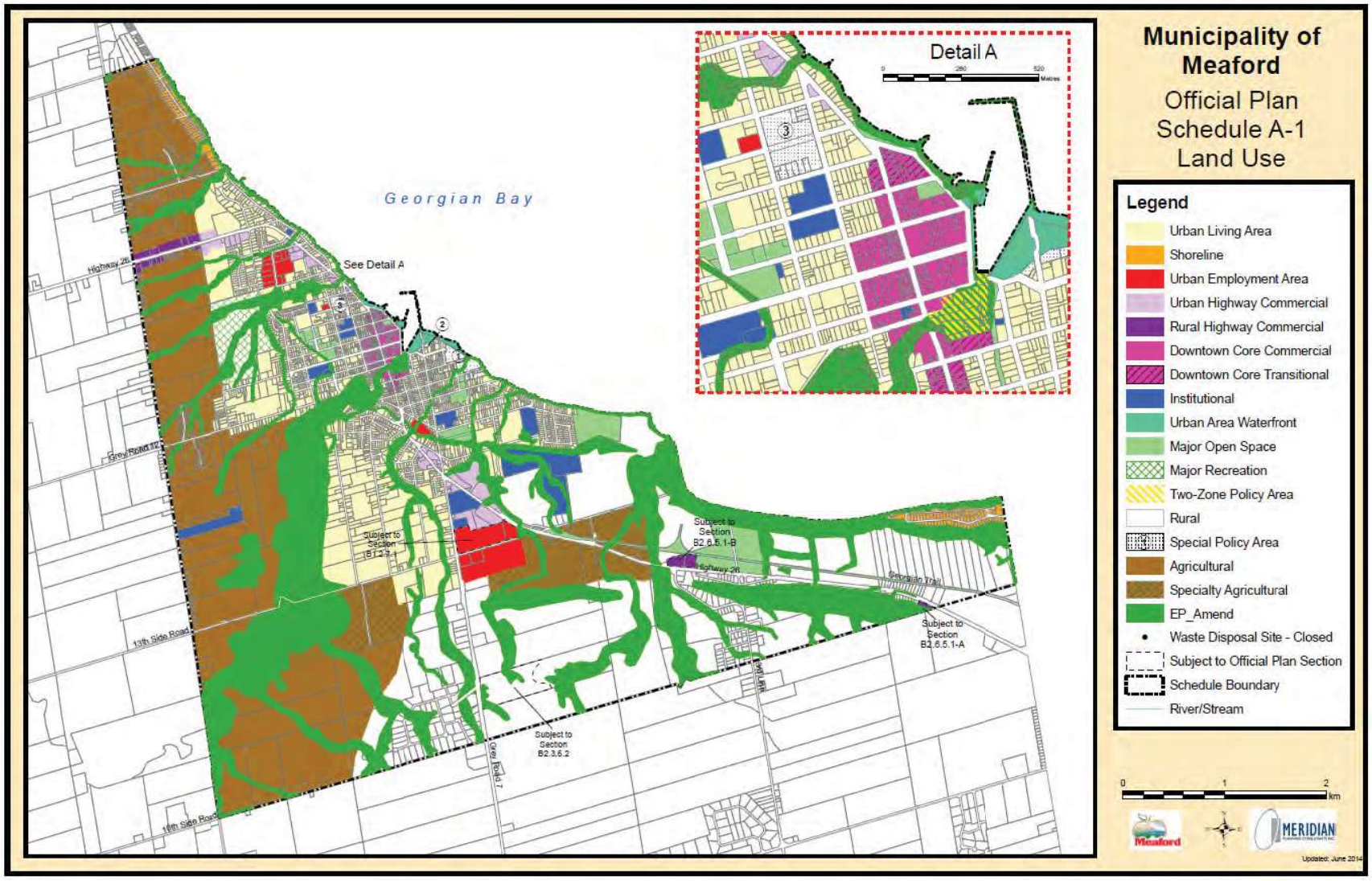


Exhibit 2.2: Meaford Official Plan Land Use (Schedule A-1)



The Grey County TMP provides recommendations for all modes of transportation and goods movement in the County. The Plan provides a Bridge Rationalization Strategy, Road Rationalization Strategy, Community Traffic Strategy, Transit Strategy and Active Transportation Strategy. The following provides an overview of each strategy's implications for Meaford that the TMP will build upon.

- **Road Rationalization Strategy –** Recommendations include the downloading of several county roads in Meaford, with various approaches to sharing the funding of operations and maintenance activities. A phasing plan for transferring roads to the municipalities was also provided.
- **Bridge Rationalization Strategy –** Recommendations include transferring a number of bridges to the municipalities based on the corridors identified in the Road Rationalization Study. Funding options were also explored.
- **Community Traffic Strategy –** Recommendations include that Grey County adopt a speed management program for transition zones for rural settlement areas along County roads and that a traffic calming policy and screening process be established.
- **Transit Strategy –** The TMP indicates overall support for transit and identifies the needs for transit services, particularly connecting rural areas. However, it acknowledges the County will not be a transit operator. Rather, it should act as a facilitator organizing and coordinating transit between its communities.
- **Active Transportation Strategy –** Recommendations include undertaking an Active Transportation Master Plan, focusing on accessibility for all ages and abilities, enhanced pedestrian design features and developing a connected network of cycling routes for both utility and recreation. The TMP notes that the "provision of active transportation infrastructure and facilities is the first step to achieving a more sustainable transportation network."

The overall direction of the Grey County TMP is that transportation systems in the County need to continue to evolve to be more inclusive of other modes. The Meaford TMP will build on this principle at the municipal level.

2.3 Other Municipal Plans and Policies

Meaford Council's Strategic Priorities, 2019

The Meaford Council's Strategic Priorities guide Council's decision making and give direction to staff. The plan sets the vision of being "THE place to be on Southern Georgian Bay. To meet this vision, five strategic focus areas were set:

- Leading in Municipal Government

- Ensuring Sustainability
- Growing our Economy
- Investing in Infrastructure
- Strengthening our Community.

The Meaford TMP can forward goals relating to sustainability, economic growth, strengthening community and investing in infrastructure responsibly. These strategic focus areas will be integrated into the vision, goals and directions in the Needs and Opportunities component of the TMP.

State of the Infrastructure Report – Roads, 2014 and Bridges and Culverts, 2016

The State of the Infrastructure Report includes the inspection of eligible infrastructure within the municipality – roads, bridges and culverts. It informs the long-term Asset Management Strategy and feeds into the capital budgeting process. The Roads report (2014) summarizes the road system survey conducted and identifies the condition of each road asset by its time of need and recommends maintenance, rehabilitation or reconstruction treatment. Condition ratings on paved road sections were updated in 2019 by StreetScan utilizing a Pavement Condition Index (PCI) as the rating system.

The Bridges and Culverts report confirms the ownership cost or replacement of 80 structures. The Council adopted Strategy #4 providing direction to maintain, rehabilitate or replace 70 structures and close or eliminate 9 structures within Meaford. In 2019, Council revisited this decision and endorsed Strategy #2, proposing to maintain 80 structures.

These two reports will inform the Meaford TMP to the timing and priority of infrastructure recommendations. They also underscore the need for a better co-ordinated approach to operations and maintenance and ensuring that infrastructure decisions take a life-cycle approach in the long-term planning phases.

Meaford Waterfront Strategy & Master Plan, 2014

The Meaford Waterfront Strategy & Master Plan guides the development of the waterfront to enhance economic development through tourism and encouraging the establishment of new businesses. The Plan provides an analysis of business opportunity, identifies new tourism and new economic development opportunities. It works to enhance the connectivity between existing attractions, business communities, and the waterfront/trail system. It presents a conceptual design, policy and land use recommendations, an implementation plan and a funding strategy while encouraging private sector partnerships.

The Meaford TMP will provide the transportation support to achieve the plan, integrating with land use planning and exploring opportunities to improve multi-modal connections to the waterfront.

Sustainable Meaford, 2012

Sustainable Meaford provides a summary of how sustainability initiatives will be implemented through respective policies and recommendations. Key goals of the Sustainable Meaford plan include to "develop an accessible, efficient, integrated, multi-modal transportation network," to "ensure Meaford's municipal transportation system is environmentally and economically responsible," and to "create a multi-modal transportation network which strongly supports active transportation and the ages and abilities of all residents to promote a healthy community."

Long-term sustainability is a key principle for development of the Meaford TMP. The TMP will seek to build upon the initiatives within Sustainable Meaford, aiming to meet the goals outlined above.

2.4 Other County Plans and Policies

Grey County Official Plan, 2019

The Grey County Official Plan, Recolour Grey, is a long-term policy document that sets goals and objectives related to land use development within the County. Recolour Grey provides a set of policies to guide and manage every distinct land use within the County.

There is a focus on improving existing road infrastructure to ensure safety of users and how active and public transportation can be supported to become an attractive and viable choice of movement throughout the County.

Move Grey, Section 8 of the County's Official Plan, considers how people, goods and information move in and out of the County. Recognizing that motorized vehicles are essential for travel and understanding the need for transportation options. The Plan prescribes policies establishing a complete, multi-modal transportation system to improve and support the needs of residents, businesses and tourists.

The transportation policies outlined in the Grey County Official Plan help form the basis for the Meaford TMP's policy approach. The TMP will further the goals of providing more transportation choice and establish the multi-modal transportation system outlined at the municipal level.

Grey County Cycling and Trails Master Plan, 2020

The Cycling and Trails Master Plan is a planning document that provides infrastructure improvements that guide future growth and development of on-road cycling and off-road trail opportunities. The Plan guides decisions regarding budgeting, communication and implementation of trails and cycling initiatives. The Plan proposes new paved shoulder routes and signed routes within Meaford. Excerpts from these recommendations are shown in Exhibit 2.3.

The Meaford TMP will incorporate the proposed active transportation facilities and seek to improve connections and safety in development new municipal-level infrastructure.

Grey County Corporate Strategic Plan, 2017-2019

The Corporate Strategic Plan provides direction when setting priorities and delivering services for Grey County. Considering the changing needs of the community, the Plan outlines goals for delivering quality services. It focuses on enhanced rural transportation service, advocates for rural-friendly policies, transportation funding and implementing recommendations as outlined in the Grey County Transportation Master Plan.

Meaford TMP policies will be consistent with the vision and goals of the Strategic Plan, including the focus to strengthen rural transportation services.

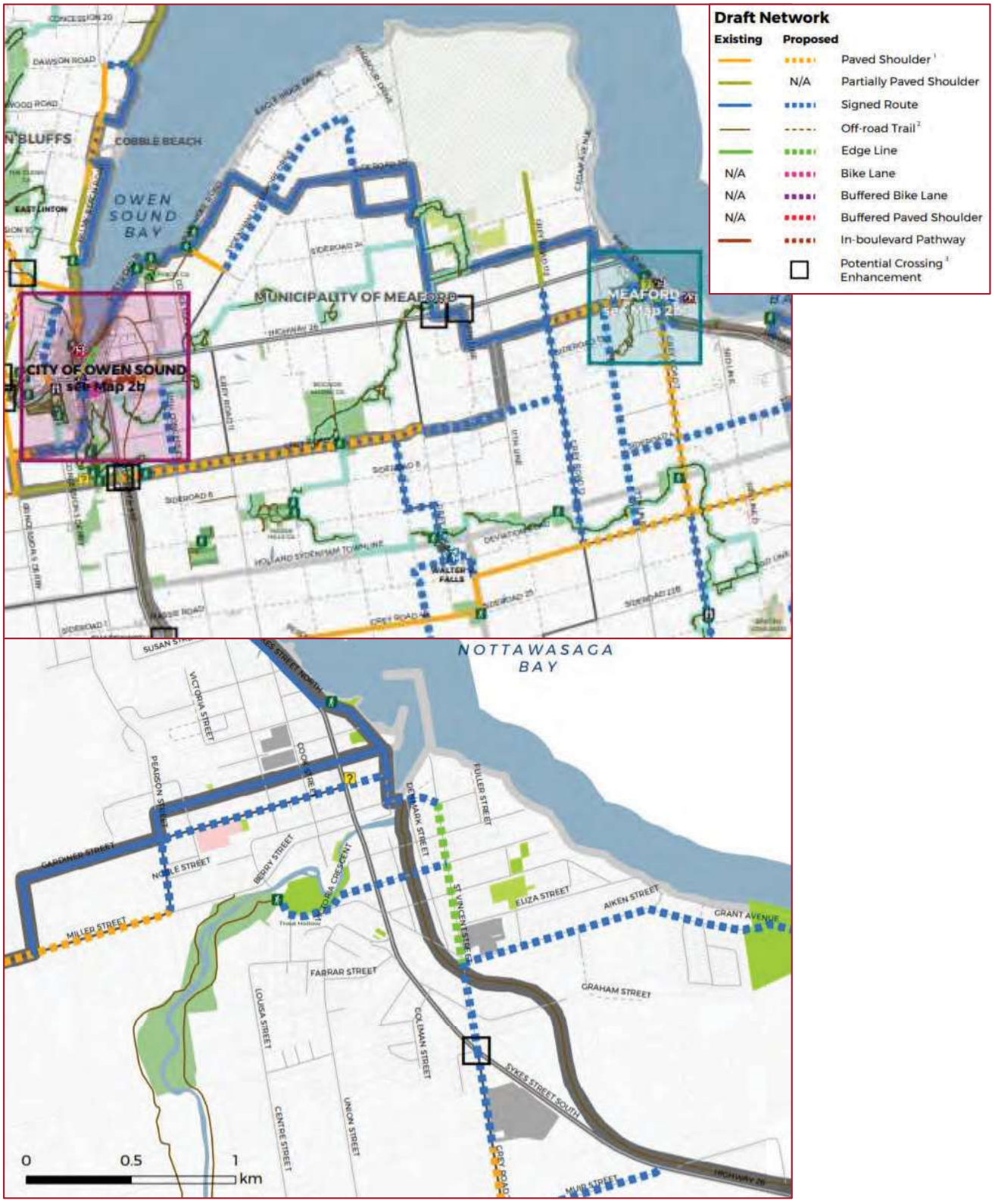
2.5 Provincial Plans and Policies

Provincial Policy Statement, 2020

The Provincial Policy Statement (PPS) provides policy direction on matters of provincial interest related to land use planning and development. The PPS provides guidance for development and land use patterns, employment, housing, public space, infrastructure and public facilities, transportation, management of resources, and protection of public health and safety. An updated Provincial Policy Statement has been released, effective May 1, 2020. The update provides guidance in building healthier, safer communities, making life more affordable and creating more competitive business environment while protecting the environment

The Meaford TMP adheres to the policy direction contained within the Provincial Policy Statement. Policies established in the PPS include increased focus on transportation choices, active transportation, and planning streets for all users. The TMP will aim to expand transportation choices including walking, cycling, and transit, and develop and identify policies to improve mobility for all users and age groups.

Exhibit 2.3: Grey County Cycling and Trails Master Plan, Meaford Area



Source: Draft Grey County Cycling and Trails Master Plan (2020)

#CycleON: Ontario's Cycling Strategy, 2013 and 2018 and Province-Wide Cycling Network Study, 2018

#CycleON is the Province's long-term strategy to promote cycling to people of all ages and abilities. Released in 2013, the Strategy and accompanying Action Plan 1.0 is based on a bold vision and ambitious goals with a targeted set of strategic directions intended to guide the development of policies, programs, and a Provincial network of cycling facilities to 2033. In 2018, a follow-up document was released, Action Plan 2.0.

The cycling strategy focuses on building healthy, active and prosperous communities, incentivizing the construction of cycling infrastructure, providing safer highways and streets, increasing awareness of cycling and recognizing the impacts of cycling tourism.

The 2018 Network Study proposes on-road facilities connecting the Georgian Trail to Owen Sound through downtown Meaford.

The development of Meaford's active transportation strategies will be informed by the Province's strategic framework, with the aim of creating a culture of active transportation in Meaford that welcomes people of all ages and abilities. The proposed network component will be integrated into the cycling network planning.

Connecting the Southwest: Draft Transportation Plan for Southwest Ontario, 2020

The Transportation Plan for Southwest Ontario will navigate regional challenges and explore opportunities to build an integrated transportation system within the Province.

This plan is organized around the following goals to achieve the transportation vision for southwestern Ontario:

- Getting people moving and connecting communities
- Supporting a competitive open for business environment
- Improving safety
- Providing more choice and convenience
- Preparing for the future

The Plan considers all transportation modes and road network types, in addition to roads on First Nation reserves. A focus on the plan is in creating inter-community bus and rail connections, in addition to strengthening the provincial highway network.

The goals of the Plan overlap with potential goals for the Meaford TMP. As such, the Meaford TMP will attempt to recommendations for practical transportation improvements that will connect communities as envisioned in the Province's

plan by improving the road network, active transportation and accessibility within Meaford.

Greenbelt Plan, 2017

The Greenbelt Plan serves to protect significant natural features, including the Niagara Escarpment, and important and productive farmland from unregulated development. The Greenbelt Plan provides a strategy and certainty about urban structure, where and how growth should be accommodated and what should be protected.

Part of Meaford is protected within the Greenbelt Area under the Niagara Escarpment Plan Area (see Exhibit 1.3). The Meaford TMP will adhere to this Plan.

Niagara Escarpment Plan, 2017

The Niagara Escarpment Plan regulates land uses within the Niagara Escarpment Plan Area aiming to protect the Escarpment's geological features as well as the lands in its vicinity. Parts of Meaford are within the Niagara Escarpment Plan Area (see Exhibit 1.3), designated as Natural Areas, Protection Areas, Rural Areas, Mineral Extraction Areas, Open Parks and Space System and Minor Urban Centre.

The mandate to preserve the Niagara Escarpment will be adhered to in the planning of transportation infrastructure for the Meaford TMP.

3 Demographic and Transportation Trends

There are several important demographic and transportation trends that impact the development of the TMP. The following subsections highlights these trends.

3.1 The Population is Growing

Meaford has maintained a stable economy with good residential construction rates, indicating that the community continues to be an attractive and viable place to live. This is an important achievement as many rural municipalities in Canada struggle with declining population, while Meaford is stable and growing. Though younger people are moving to larger cities in search of education and jobs, Meaford counteracts this by being an attractive location for retirees to settle.

As of the 2016 Census, Meaford had a population of 10,991. The Grey County Growth Management Strategy (GMS) Update (2017) forecasts a permanent population of 12,180 in 2031, a growth rate of 9.8% over 15 years, or 0.65% per year. However, between 2006 and 2016 Meaford's population remained steady, with total growth of 43 residents over 10 years. Exhibit 3.1 shows the historical and forecasted population from 2006-2041.

Exhibit 3.1: Historical and Forecasted Population for the Municipality of Meaford

Source	2006	2011	2016	2021	2026	2031	2036	2041
Census of Population	10,948	11,100	10,991	-	-	-	-	-
Grey County GMS (2017)	11,300	11,360	11,250	11,530	-	12,180	12,440	12,650

Sources: Historical populations from Statistics Canada, Census of Population. Population forecasts from Grey County Growth Management Strategy Forecast and Land Supply Review and Update (2017).

While the Grey County Growth Management Strategy forecasts modest growth, there is potential for growth to exceed the forecasts over the 20 year planning horizon based on the number and size of projects in the early stages of development.

In the five year periods ending in 2006, 2011 and 2016, 305, 295 and 110 new residential units were completed. After a decline between 2011 and 2016, development activity has rebounded recently in Meaford.

According to planning staff, 78 new residential units were completed in 2018 and another 64 units in 2019. A further 111 residential units are under construction as of March 2020. Another 157 residential units and 128 long-term care beds expected to start construction later in 2020. Of note is a large development currently in the approvals phase, which proposes a mixed-use community of more than 1,000 residential units. It is anticipated that this development could

begin by 2023. Construction would be phased, contributing between 35 and 50 new units per year[2].

As with many communities in Ontario, the structure of Meaford's households are changing. Average household size has been decreasing, a phenomenon generally attributed to the aging population, in-migration of the older population and out-migration of younger adults. Exhibit 3.2 shows the average person per household from 2006 to 2016 for Meaford, Grey County and Ontario.

Exhibit 3.2: Average Persons per Household, 2006-2016

Area	2006	2011	2016
Municipality of Meaford	2.4	2.3	2.2
Grey County	2.4	2.4	2.3
Ontario	2.6	2.5	2.6

Source: Statistics Canada, Census of Population

The implication of shrinking household sizes is that new units being built will not be entirely devoted to new residents. Some portion of the existing residents will be re-organized into more units over time. There are also transportation implications of smaller household sizes. Generally, this results in more demand for travel as required trips such as buying groceries serve fewer people. There is also a decreased potential for carpooling among smaller households.

3.2 Meaford's Population Is Aging

Meaford is a desirable location for retirees and retirement-aged people constitute a growing share of the population. The median age in Meaford in 2016 was 53 years old, greater than Ontario as a whole, and somewhat higher than Grey County, as shown in Exhibit 3.3. The share of Meaford's population aged 60 and above has grown considerably over the last decade. The aging of this "baby boomer" population and the continued out-migration of younger cohorts in search of education, jobs and a more urban lifestyle have contributed to the aging of the population in Meaford. This trend is consistent with other rural communities. Exhibit 3.4 shows the aging trends across the Municipality of Meaford, Grey County, Ontario and Canada.

The Trends and Analysis Summary in the County of Grey Housing and Homelessness Plan 2014-2024 suggests, "Population growth has been relatively limited as a result of in-migration of older age-groups looking for affordable, small-town or rural communities in which to retire".

Growth in the aging population will have significant fiscal, service and policy implications towards planning for transportation. The senior population remains continuously active in their retirement and more reliant on alternative modes

[2] Developer Details Plans for Meaford Property, Bayshore Broadcasting, September 27, 2018 http://www.bayshorebroadcasting.ca/news_item.php?NewsID=104506

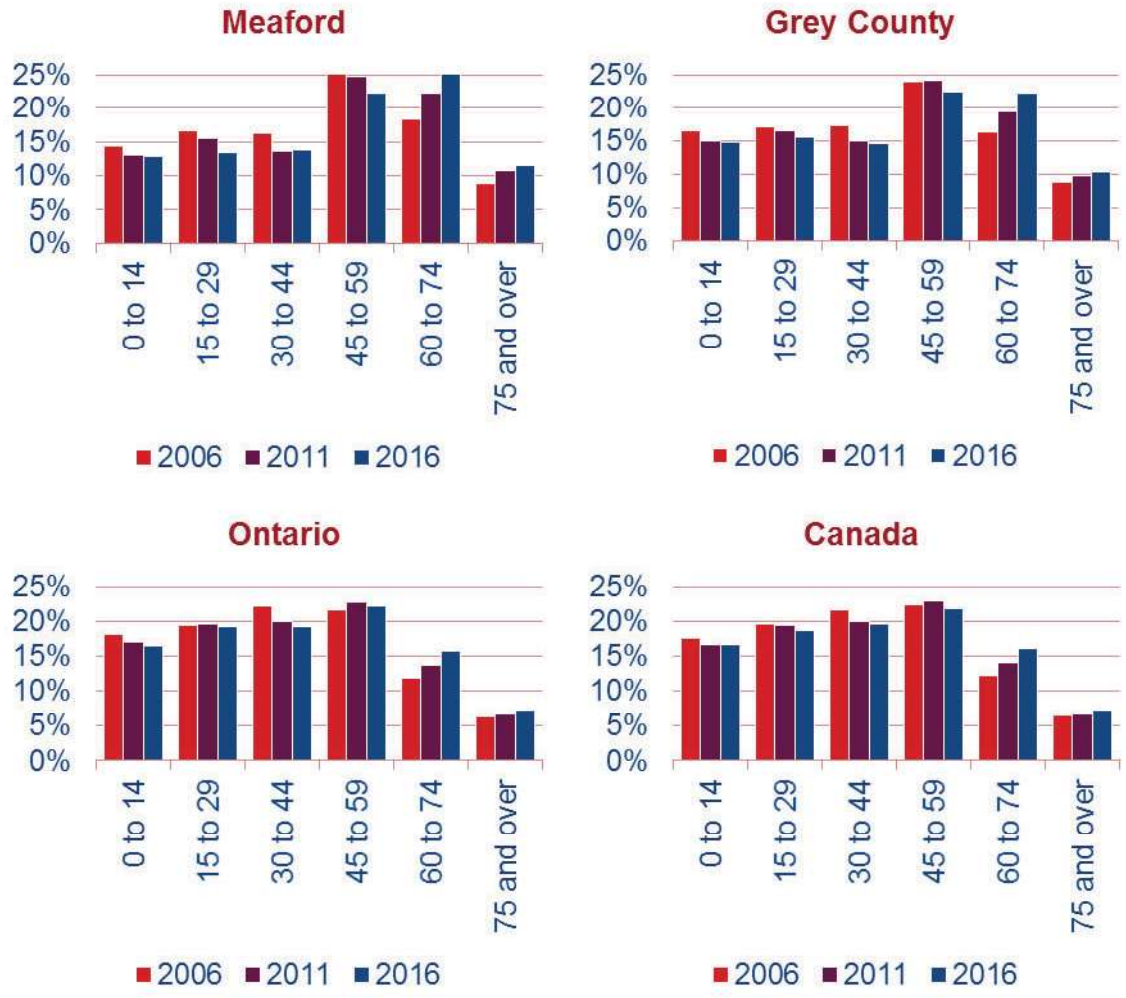
such as mobility services, cycling and walking for health and economic activities. The transportation network will have to respond accordingly.

Exhibit 3.3: Median Age, 2001-2016.

Area	2001	2006	2011	2016
Municipality of Meaford	47.2	46.7	50.4	53.0
Grey County	41.9	44.4	47.3	49.3
Ontario	37.2	39.0	40.4	41.3
Canada	37.6	39.5	40.6	41.2

Source: Statistics Canada, Census of Population

Exhibit 3.4: Comparison of Aging Trends by Age Group, 2006 to 2016



Source: Statistics Canada, Census of Population

3.3 Meaford Has a Large Seasonal Population

Fourteen percent of private dwellings in Meaford are not occupied by usual residents. This has been steady since 2006, as shown in Exhibit 3.5. These homes are either vacation or used on a seasonal or recreational basis. Meaford's seasonal variance is less than The Town of The Blue Mountains where nearly half of all private dwellings are not occupied by a usual resident, but at fourteen percent interim residents likely generate a significant uptake in travel demand combining with tourism to greatly increase traffic in summer months. TMP recommendations should consider that peak traffic may occur away from traditional weekday a.m. and p.m. peak hours and likely occurs during weekdays and weekend days in the summer.

Exhibit 3.5: Proportion of Total Housing Units Not Occupied by Usual Residents, 2001-2016

Area	2001	2006	2011	2016
Municipality of Meaford	7%	14%	13%	14%
Grey County	16%	16%	18%	17%

Source: Grey County Growth Management Strategy

3.4 Employment Rebounding, Expected to Grow

After a sharp decline between 2006 and 2011 associated with the economic downturn and loss of manufacturing, employment in Meaford has grown in each successive period through to 2016. The Grey County Growth Management Strategy Forecast and Land Supply Update (2017) forecasts adding 500 jobs between 2016 and 2041, as shown in Exhibit 3.6. This forecasted employment represents an average annual growth rate of 0.55%, slightly behind the 0.65% population growth rate and reflecting the increasing portion of retired residents.

Exhibit 3.6: Historical and Forecasted Employment

Source	2006	2011	2016	2021	2026	2031	2036	2041
Grey County GMS	3,680	3,330	3,420	3,560	-	3,660	3,780	3,920

Source: Historical data (2006-2016) and forecasts (2021-2041) from and Grey County Growth Management Strategy (GMS) Update (Forecast and Land Supply Update, 2017).

Major employment sectors in Meaford include agriculture, construction, tourism and professional services. The 4th Canadian Division Training Centre has over 600 soldiers in training on any given week[3].

The number and types of jobs in Meaford and surrounding areas will influence where people choose to locate. Attracting jobs to Meaford will also help attract new and younger residents to the community. Future jobs are anticipated to be different from those of the past. Over recent decades, manufacturing and trades

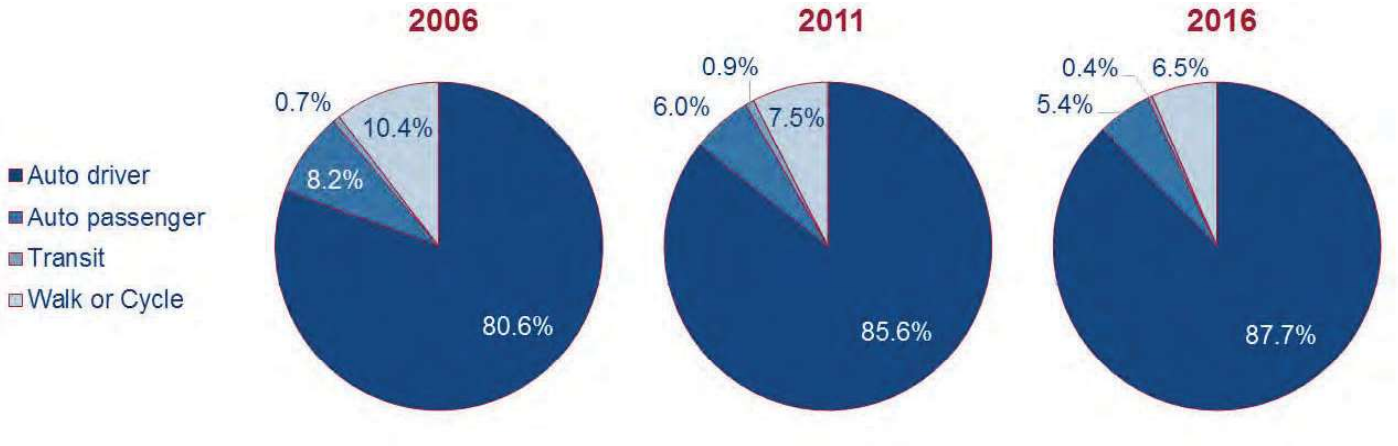
[3] Municipality of Meaford Community Profile, page 9

have declined. Under current trends a higher proportion of future jobs will be in sales, services and professional fields[4].

3.5 Most Employed Residents Commute by Driving Alone

Driving is the dominant mode of travel for all commuter trips in Meaford. Auto-based trips as a percentage of all trips have grown modestly since 2006, accounting for 89% of all commuting trips in 2006, 92% in 2011 and 93% in 2016. Exhibit 3.7 displays mode shares for all trip types in 2006, 2011 and 2016. Most recently, the 2016 Census Statistics shows that auto driver increased while auto passenger decreased, suggesting that more automobile trips were being taken alone. This may reflect the decreasing household size with fewer opportunities to carpool.

Exhibit 3.7: Journey to Work by Mode (2006-2016)



Source: Statistics Canada, Census of Population 2006 & 2016, NHS Profile 2011: Mode of Transportation

In 2016, 6.5% of Meaford residents' commute trips used active transportation (walking or cycling) for the primary mode of travel. This is a notable decrease since 2006 when 10.4% of commute trips were taken on foot or by bicycle. There is a significant difference in walking mode share between genders. Females commuted on foot at rates more than double that of males in 2016, both within urban Meaford and the entire Municipality of Meaford.

Transit mode share is very low at 0.4% in 2016, recognizing that the only transit available in Meaford prior to the 2016 Census is the specialized transit service.

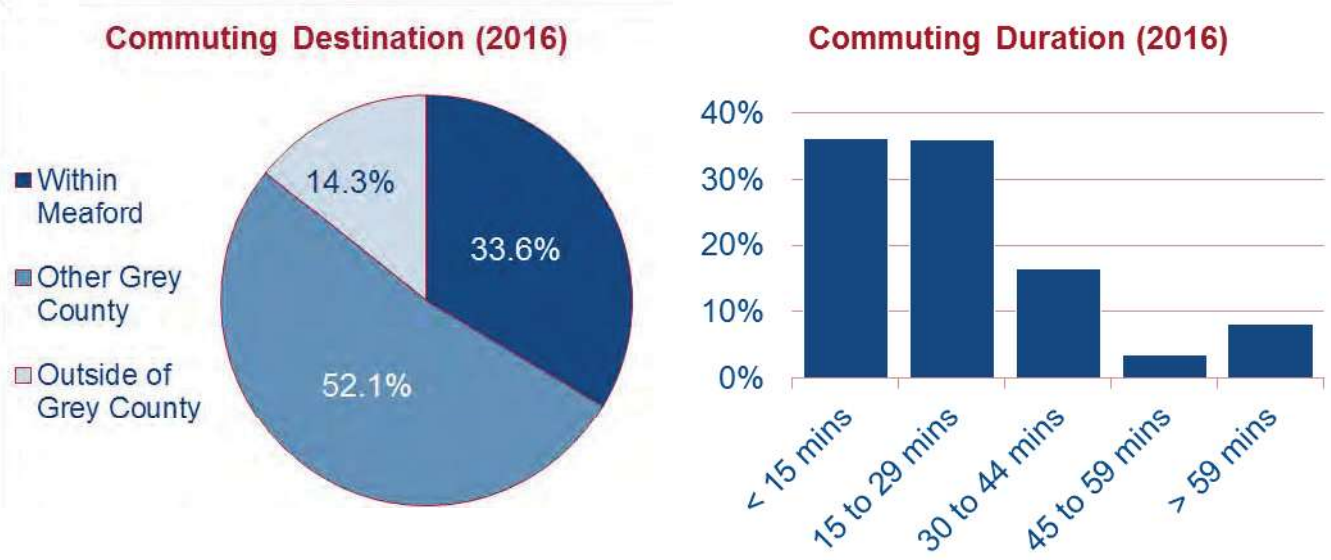
3.6 Residents Mostly Work in Neighbouring Municipalities

Two-thirds of residents commute outside of Meaford to reach their usual place of employment. As shown in Exhibit 3.8, 52% of commuting trips are to other parts of Grey County while 14% extend beyond Grey County. Owen Sound is the most common place of work for employed Meaford residents with a usual place

[4] Grey County Growth Management Strategy Update (2015), page 13

of work located outside of Meaford. 34% travel to Owen Sound for work[5]. The Town of the Blue Mountains is the next most common commute destination at 13%, where there are a significant number of tourism and service industry jobs. Despite predominantly leaving Meaford for employment, 72% of commuting trips are typically less than 30 minutes in duration. This is also shown in Exhibit 3.8.

Exhibit 3.8: Commuting Destination and Duration for Meaford Residents



Source: Statistics Canada, Census of Population (2016)

Since 2006, internal commuting trips (i.e. living and working in Meaford) have decreased by 17%, while commuting outside of the Municipality has increased, as shown in Exhibit 3.9. These trends likely reflect the economic changes since 2008 including the reduction in manufacturing and increase in the service-based economy.

Exhibit 3.9: Daily Commute Destination of Meaford Residents

Commute Destination	2006	2016	2006-2016
Within Meaford	1,580	1,315	-17%
Other Grey County	1,940	2,040	5%
Outside Grey County	540	560	4%
All Trips	**4,060**	**3,915**	**-4%**

Source: Statistics Canada 2006 & 2016: Commuting Destination

3.7 Agricultural Trends in Meaford

Agriculture is an important industry in Meaford. Much of the rural landscape in the Municipality is occupied by active agricultural operations. According to the 2016 Census of Agriculture, 301 farms operated within Meaford. One third of

[5] Statistics Canada, 2016 Census of Population, Statistics Canada Catalogue no. 98-400-X2016325.

these businesses were engaged in cattle ranching and farming, leaving two-thirds for grains, produce, and other production. Between 2011 and 2016, the total number of farms decreased by three (1%). There has been a general trend across Canada of farms getting bigger, individually. While total farm area has been relatively flat, since 1971, the number of agricultural operations has dropped by roughly one half[6]. With bigger areas, farmers are using the road network more frequently to move equipment.

The agricultural sector impacts the transportation system in two ways. First, farms must get their products to market, thus generate commercial vehicle trips. The Grey County Transportation Master Plan (2014) suggests that the County road system was developed to provide a "farm to market" connection, considering land use is predominantly rural and agriculture, this provided the farming population access to marketplaces in the urban areas[7]. However, truck movements were identified to not be a burden on the road network as they were seasonal and travelled on major routes on the way to the urban centres. In Meaford, municipal roads provide access to the farms not on the County road network.

Agricultural enterprises also use the road network to move equipment between plots of land. Typically, these are oversized and slow-moving vehicles. It has been noted anecdotally that agricultural equipment is trending larger and larger, changing how they interact with the road network and other vehicles. While heavy farm equipment can be a road hazard, generally, equipment movement is handled responsibly by farmers during daylight hours, avoiding busy roads where possible, and without undue delays to background traffic.

3.8 Tourism and Recreation Are Important Parts of the Economy and Transportation Landscape

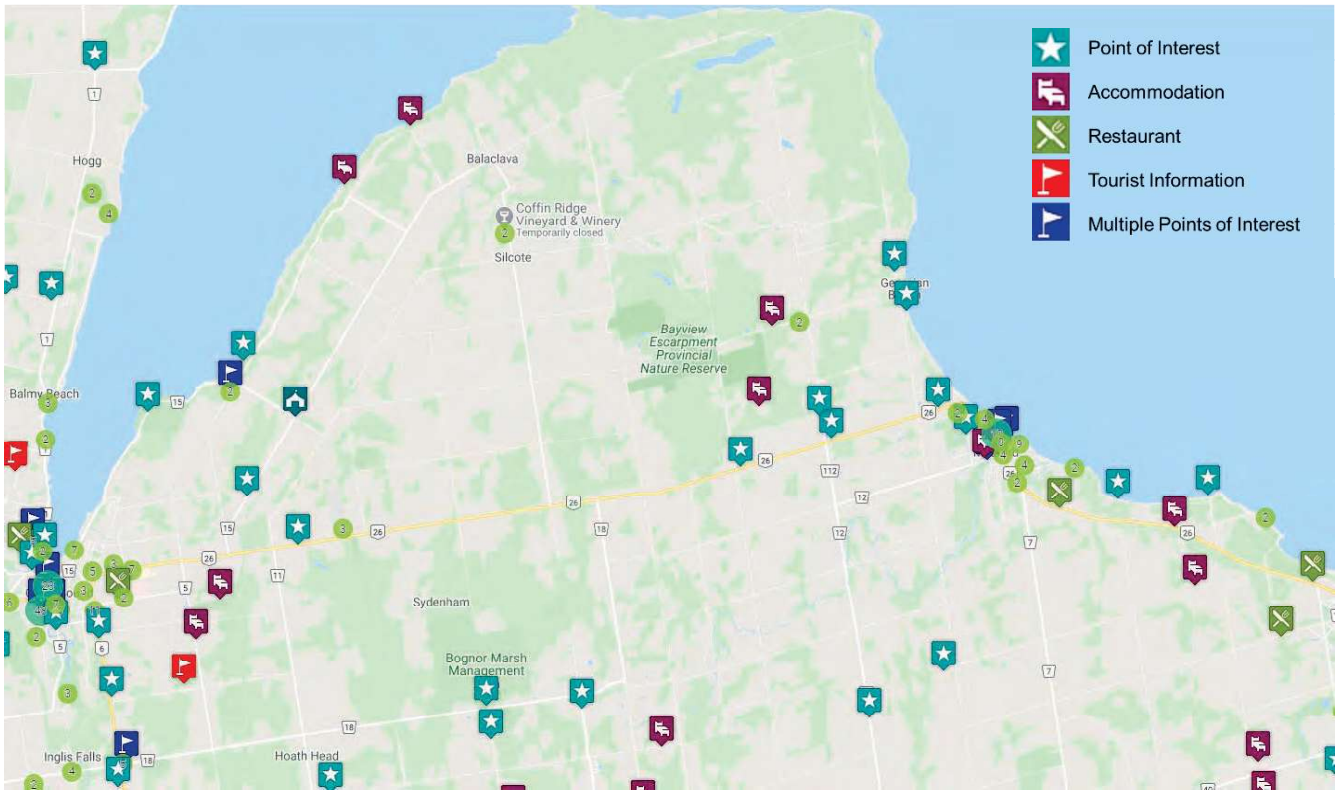
Tourism is an important economic generator in Meaford. The Municipality boasts significant arts and cultural attractions, outdoor adventures and activities for families. Meaford is also a popular destination for recreational tourism, where cyclists can take longer trips through the countryside, along the Grey County cycling routes, and walkers and hikers can explore the extensive trail network. Major tourist attractions include the waterfront and shoreline, museums, farmers markets, wineries, cideries, and other culturally-significant draws. Exhibit 3.10 shows the location of points of interest in Meaford and surrounding Grey County.

The transportation impacts of tourism will be considered over the course of the TMP study. A transportation system that works in co-ordination with local economic development and tourism goals will be necessary. The transportation system will also need to ensure recreational tourism is supported by safe and

[6] How much bigger are farms getting? Country Guide, April 3 2020. https://www.country-guide.ca/guide-business/how-much-bigger-are-farms-getting/
[7] Grey County Transportation Master Plan (2014), page 23

comfortable cycling routes and convenient access to off-road trails and other points of interest.

Exhibit 3.10: Tourist Points of Interest in Meaford



Source: Grey County Tourism (visitgrey.ca) and Google Maps

4 Existing Transportation System Overview

4.1 Road Network

Existing Network

Meaford's road network is comprised of provincial highways, county roads, municipal roads and private roads. All roads are two-lane cross-sections, except for a segment of Highway 26 and Sykes Street as it approaches urban Meaford from the south with a three-lane cross-section. Exhibit 4.1 details the lengths of the existing road network and Exhibit 4.2 shows the road network in Meaford by jurisdiction and surface type.

Exhibit 4.1: Summary of Roads in Meaford

Jurisdiction	Paved	Unpaved	Total
Province of Ontario	39 km	-	39 km
Grey County	73 km	-	73 km
Municipality of Meaford	208 km	182 km	390 km
Private Roads	1 km	5 km	6 km

Source: The Municipality of Meaford GIS database

Two provincial highways function as the main arterials through Meaford. Highway 26 connects Meaford to the City of Owen Sound to the west, to the Town of the Blue Mountains to the southeast which connects further to Barrie and Highway 400. Highway 26 is an undivided two-lane road, with a posted speed of 80 km/h, which is reduced to 50 km/h within the urban area. Through the urban core of Meaford, Highway 26 becomes Sykes Street and is the responsibility of the Municipality. Funding, however, is provided through the Province's Connecting Link[8] program.

Provincial Highway 6 & 10 runs north-south along the western border of Meaford. The highway connects Owen Sound to Port Dover via Guelph, Hamilton and other smaller towns. Through the study area, Highway 6 & 10 is an undivided two-lane road, with a posted speed of 80 km/h.

County roads function as Meaford's arterial roads, generally intended for longer distance regional travel. Six corridors are identified as county roads and are maintained by Grey County. These are numbered as County Roads 7, 11, 12, 15, 18 and 112.

Meaford is responsible for the majority of the roads within its borders. There is no further classification system to distinguish municipal roads. Meaford's roads generally function either as urban or rural local streets providing connections

[8] Ministry of Transportation Ontario, Connecting Links http://www.mto.gov.on.ca/english/highway-bridges/connecting-links.shtml

between homes, businesses and farms back to the County and Provincial road networks.

Finally, there are a number of private roads in Meaford. These are owned and maintained by individuals, groups of property owners, or businesses. These roads are found in private developments, waterfronts or cottage areas and are generally constructed to the Municipal standard.

Traffic volumes are typically expressed in terms of vehicles per day (average annual daily traffic – AADT) or vehicles per hour during peak hours. Sykes Street is the busiest street in the Municipality, as it performs a dual role, catering to longer-distance regional travel as well as forming the urban area's traditional main street. Available data shows that traffic on Sykes Street reaches as high as 11,500 vehicles per day (AADT), south of the urban core.

Exhibit 4.3 shows the average annual daily traffic volumes on Meaford's road network. The traffic counts were conducted by the municipality in 2019. Most roadways in the urban core of Meaford have AADT volumes less than 1,200 vehicles, translating to a peak hour of approximately 120 vehicles per hour[9]. Given the low observed AADT volumes, the overall urban transportation network in Meaford is expected to be operating well, although there may be certain areas with localized traffic congestion or operational issues, typically at intersections.

There are a number of needs and issues for the road network to consider in the Transportation Master Plan, as gathered through initial investigations and consultation with stakeholders and the public. These include addressing localized congestion in the urban area, addressing speeding and road safety issues, accommodating agricultural vehicles, and addressing operational and safety issues at certain intersections.

Maintaining the existing road network is also a concern for Meaford. The roads in poor condition will require significant investment to rehabilitate or rebuild and ongoing maintenance is required to extend the life of the roads in better condition. Exhibit 4.4 highlights roads in Meaford with a Pavement Condition Index under 40, indicating they are in very poor or serious condition. Segments that are scheduled for improvements in 2020 have been highlighted.

Bridges and Large Span Culverts

There are 87 structures in Meaford within the roads and trail networks. Meaford wholly owns 79 of the structures and co-owns one more with Grey Highlands (50% share). Seven structures are owned by Grey County.

Three bridges were closed in 2016. Later in 2016, a State of the Infrastructure report was produced which recommended the closure of six additional structures. However, Municipal Council decided that it would attempt to replace or remediate these structures rather than remove them.

[9] A k-factor of 10% (rule-of-thumb) was applied to the AADT to estimate peak hour volumes in a suburban area.

As more bridges are reaching the end of their lifespan, they will require rehabilitation or replacement in order to avoid closure. These represent a significant expense for the Municipality and are at risk of consuming available funds and requiring debt financing.

Parking

On-street and off-street parking is provided in the Downtown Core Commercial Area. There are two municipal parking lots accounting for 117 parking spaces including 2 accessible spaces. There are also 205 on-street spaces, including 6 accessible spaces.

4.2 Active Transportation

Walking

Meaford has 25 km of sidewalks, covering much of the downtown area within urban Meaford, as shown in Exhibit 4.5. A number of roads in urban Meaford lack sidewalks. This can present a challenge, particularly for people with reduced mobility. Walking accounts for 10.7% of residents' journeys to work for residents living within the Meaford urban area.

Cycling

Cycling to work, both within and outside of the urban area has little to no mode share (2016 Census). Cycling is more popular as a recreational activity in Meaford and Grey County. There are no designated on-street cycling facilities and few rural roads have paved shoulders. Growing cycling will depend on providing safe, comfortable routes and infrastructure such as paved shoulders and bike lanes where necessary and educating travellers about cycling opportunities and safety.

Recreational Walking and Cycling

Grey County is a popular road cycling destination in Ontario. Great scenery, quiet country roads, low traffic volume, access to services and convenient starting points make Grey County conducive to recreational cycling. Grey County publishes a cycling guide highlighting the key on-road cycling routes and major multi-use trail corridors. The following Grey County cycling routes are within or pass through Meaford: Georgian Trail, Meaford Loop, Great Lakes Waterfront Trail, Tom Thomson Trail, and Balaclava.

Exhibit 4.6 shows Grey County cycling routes and trails in Meaford.

The Bruce Trail also passes through Meaford. It is intended to be a hiking and walking trail only. The Bruce Trail roughly follows the Niagara Escarpment between the Bruce Peninsula and the Niagara River near Queenston in Niagara Region. The main trail covers approximately 890 km.

Exhibit 4.2: Meaford Road Network by Jurisdiction and Surface Type

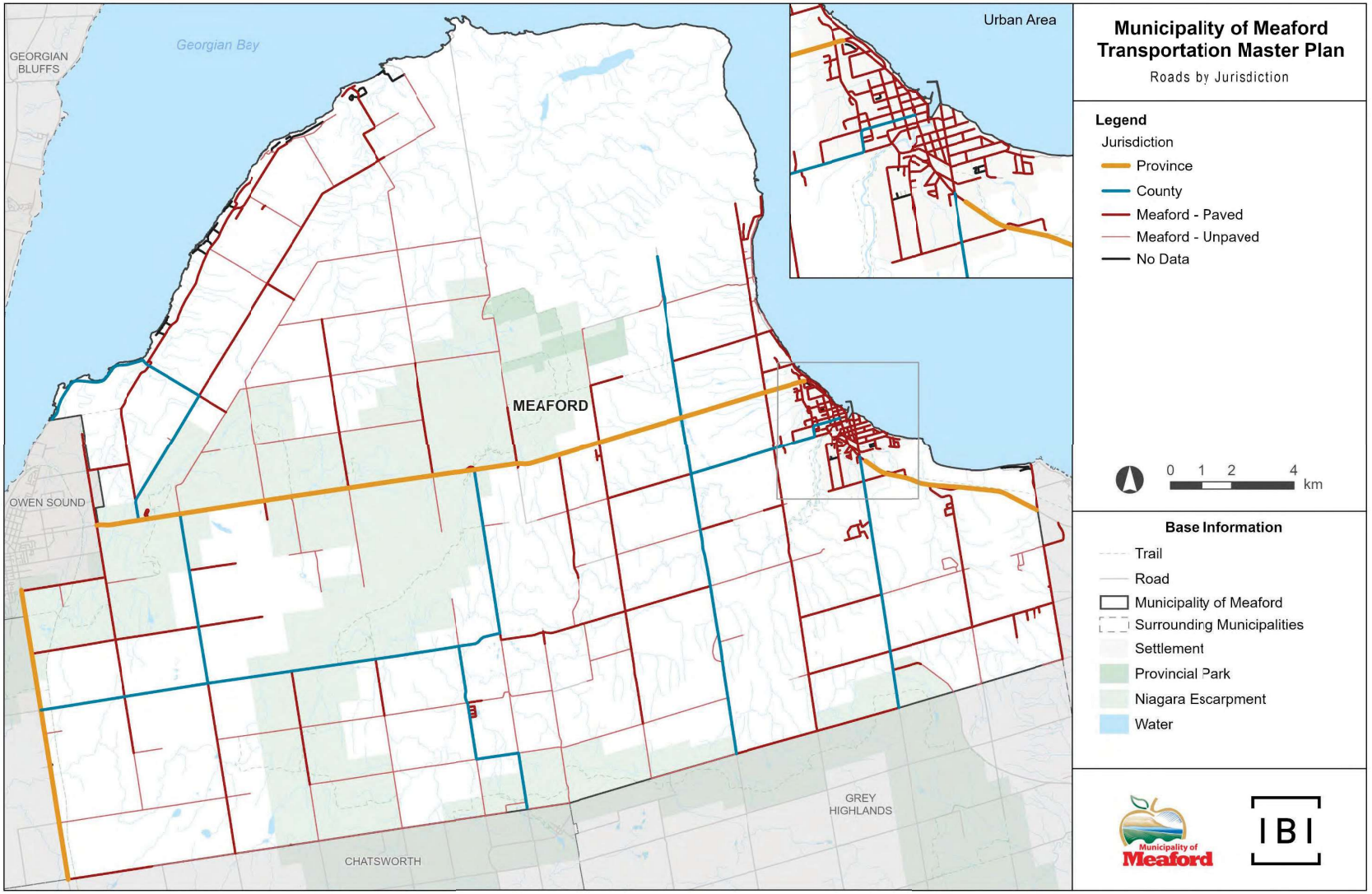


Exhibit 4.3: Average Annual Daily Traffic Volumes in Meaford (2019)

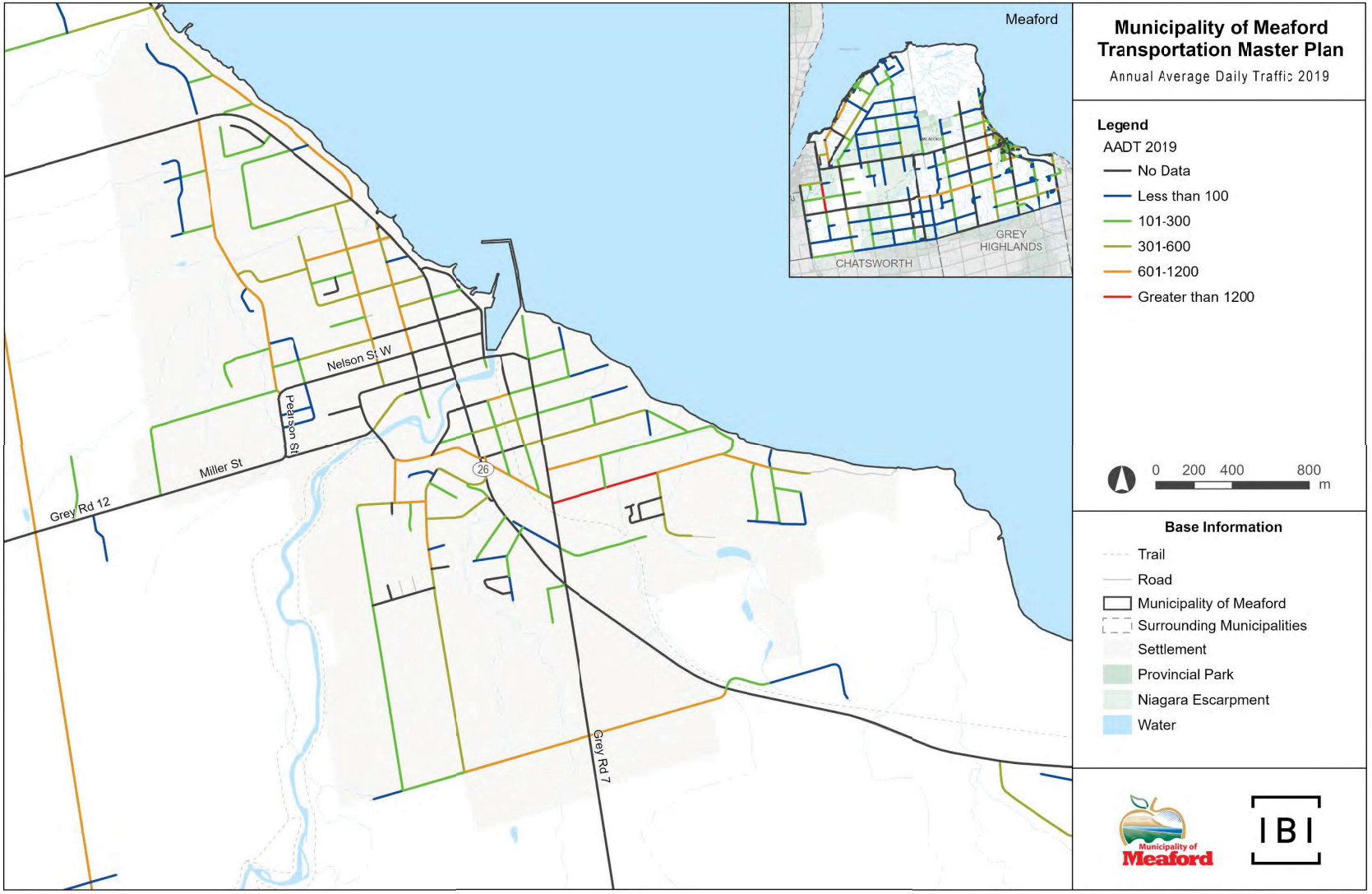


Exhibit 4.4: Roads in Meaford in Very Poor or Serious Condition

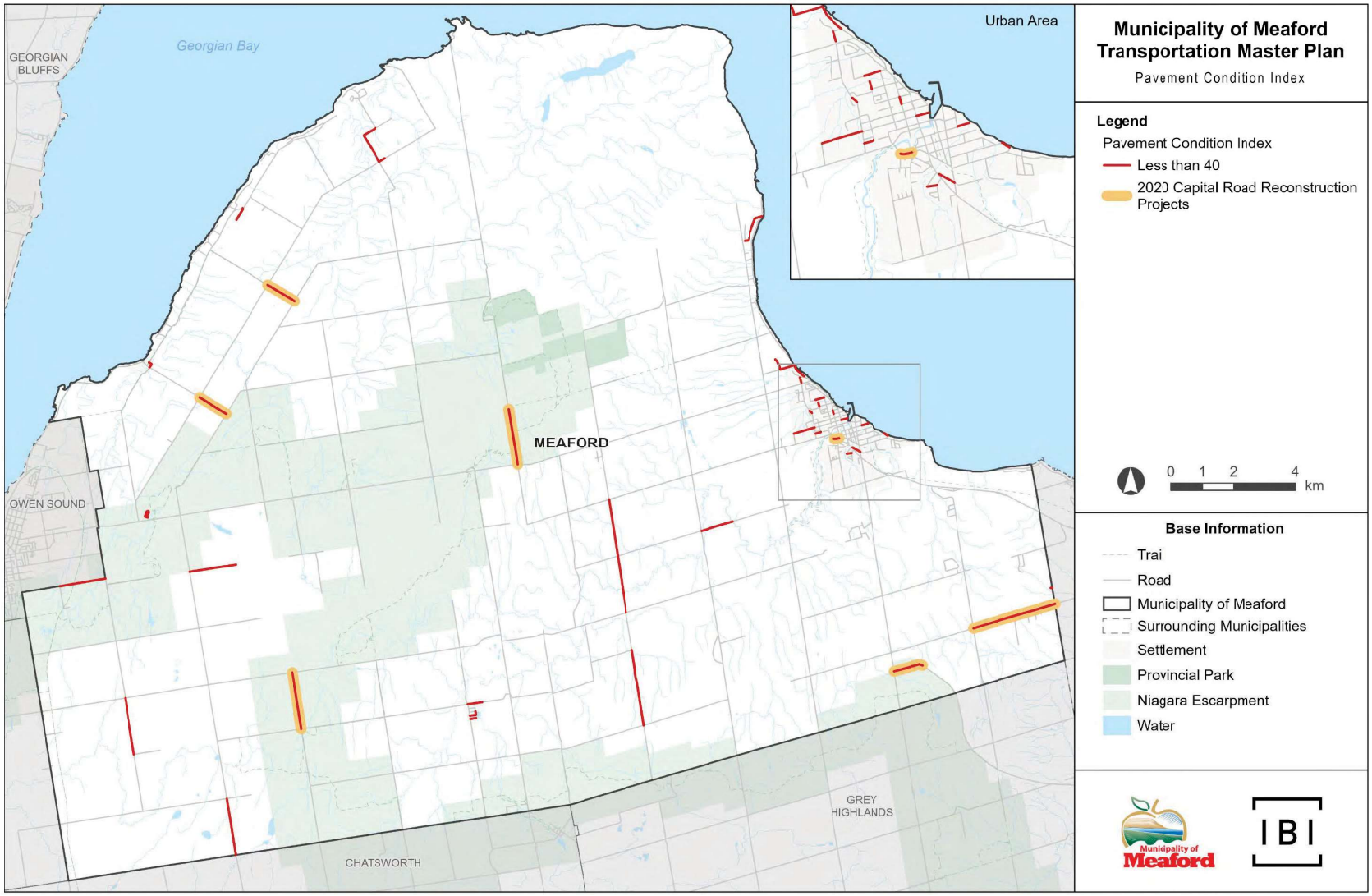


Exhibit 4.5: Sidewalks in Meaford

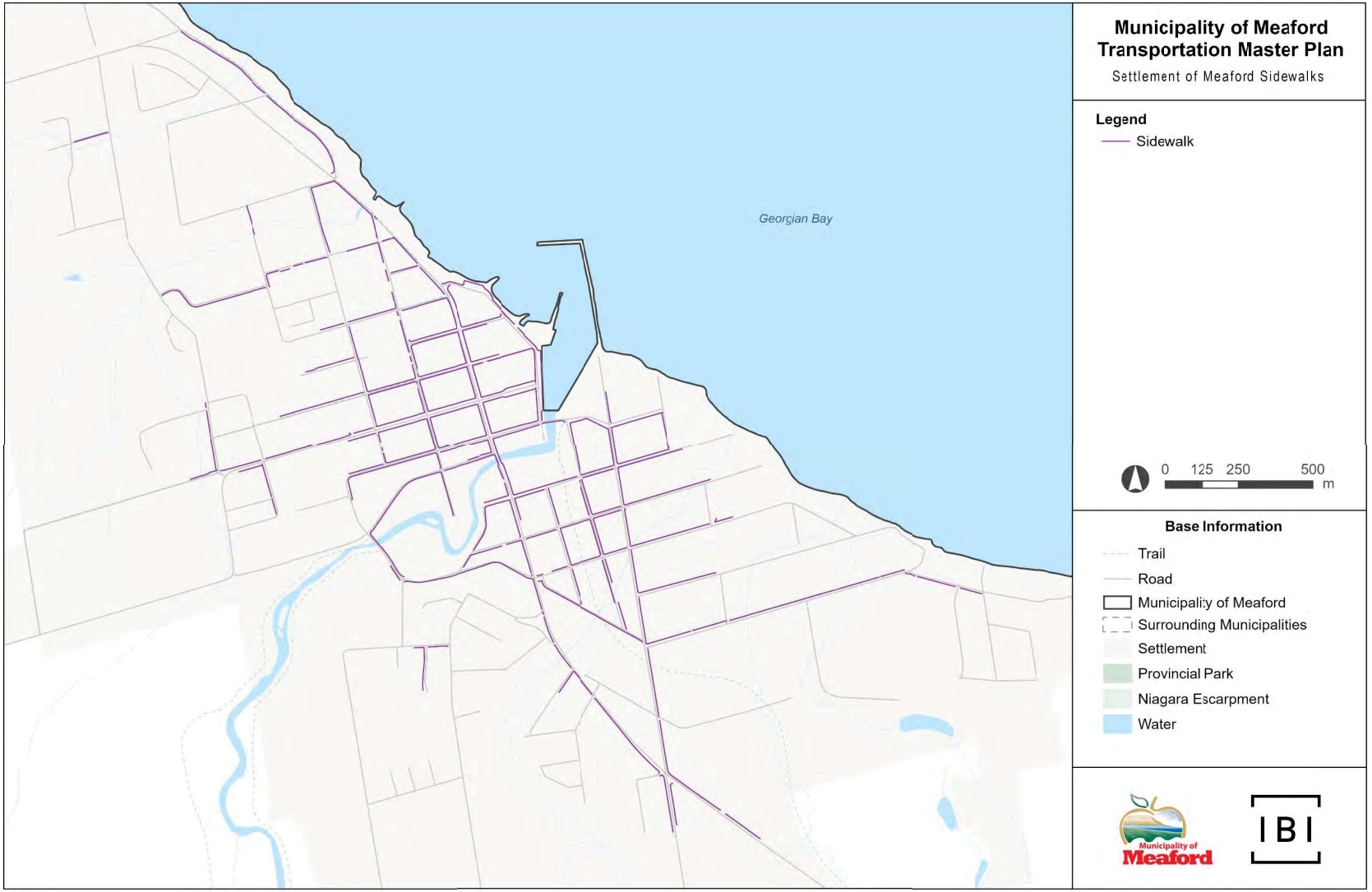
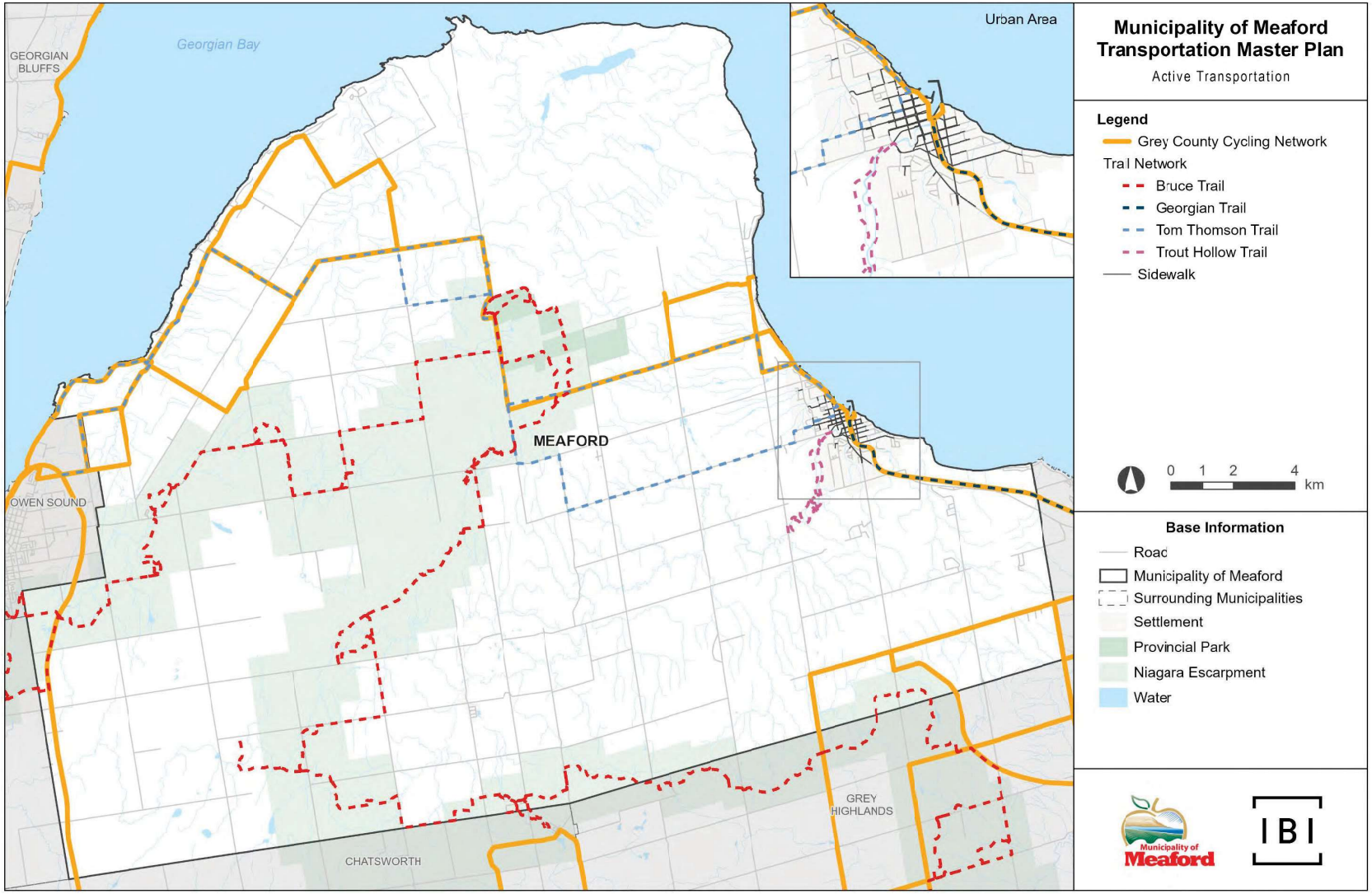


Exhibit 4.6: Existing Active Transportation Routes and Trails in Meaford



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4.3 Public Transit

Conventional Transit Pilot

From October 2016 to June 2019, Meaford ran a pilot conventional transit system. The ridership in 2017 and 2018 was below 1.25 riders per hour[10]. Fares were reduced from $4 to $2 within 6 months into the pilot, but ridership did not increase. The program was cancelled in 2019 due to low ridership, heavy subsidization, and eventual replacement of the service van being used to continue the program.

Specialized Transit

Meaford Move+ is the municipality's door-to-door bus (Specialized Transit Service) service eligible to disabled residents, offered by the Municipality of Meaford and operated by a contracted service provider.

Grey County Rural Transportation Pilot

Grey County received funding to develop and coordinate rural transportation for residents. Partnering with Home and Community Support Services of Grey-Bruce, Grey launched a Rural Transportation Pilot, Movin'GB in 2015. It was eligible to seniors and people living with disability in underserviced areas including Meaford. The program has since been cancelled, March 2018.

Future Transit Service in Meaford and Grey County

Currently, Grey County is petitioning to launch Grey Transit Route (GTR) which will act as the regions Coordinated Rural Transportation. It is expected that service will launch in 2020. One route is expected to follow Highway 26 and Sykes Street between Owen Sound and The Blue Mountains, passing through rural and urban Meaford. An additional route is expected on Highway 6 & 10 between Owen Sound and Orangeville, travelling along Meaford's western border.

Transit can play an import role in sustainable mobility. Transit of various types including the proposed GTR and other on-demand services will be explored further in the TMP.

4.4 Other Motorized Transportation

ATVs can be operated in Meaford. The Meaford Off-Road Vehicles By-Law permits "Off-Road Vehicles to be driven on most roadways under the jurisdiction of the Municipality of Meaford as regulated in accordance with Ontario

[10] Owen Sound Sun Times, Meaford Ends Transit Pilot (June 2019)
https://www.owensoundsuntimes.com/news/local-news/meaford-ends-transit-pilot

Regulation 316/03." In the winter, snowmobiling is a popular activity, utilizing many of the regional trails (where permitted).

4.5 Harbour

The Meaford harbour primarily includes recreational and passive marine operations. The Department of Fisheries and Oceans categorizes Meaford harbour as a small craft recreation harbour. Meaford has a harbour master plan (Waterfront Strategy & Master Plan) that directs the future development of harbour and waterfront areas. Ongoing development in these areas is intended to include mixed uses which ultimately aims to increase economic activity and make the harbour a destination for residents and tourists.

5 Natural and Environmental Features

This section documents natural and environmental features of the Municipality. These features play a role in transportation in that they are existing tourism and recreational destinations, they have potential for increased tourism or economic development of appropriate types and are protected areas where impacts of any recommendations of the TMP are to be avoided or minimized.

5.1 Overview

Meaford's environmental and topographical features include the "Georgian Bay shoreline, the Niagara Escarpment, the Meaford Harbour, the Big Head River and its tributaries, the Bruce and Georgian trails and the large forest tracts, valley lands, smaller woodlots and wetland areas that support diverse wildlife and plant communities.[11]" These features contribute to Meaford's identity and environmental heritage. As such an underlying principle within the Meaford Official Plan is that the protection of these environmental features takes precedence over development.

Meaford is under the jurisdiction of Grey Sauble Conservation Authority, managing 28,995 acres in the Grey-Bruce County area. Exhibit 5.1 highlights the key environmental and resource features in the Municipality of Meaford.

Provincially-significant Areas of Natural and Scientific Interest (ANSI) are identified in the Municipality of Meaford by the Ministry of Resources (MNR). Two types of ANSIs are identified: Earth Science and Life Science. Earth Science ANSIs are geological in nature and consist of significant representative examples of bedrock, fossils, and landforms in Ontario. Life Science ANSIs are significantly representative areas of Ontario's biodiversity and natural landscapes. ANSIs in Meaford are protected under the Environmental Protection designation (Meaford Official Plan policies, B3.1 Environmental Protection & Natural Function) and should be considered when developing adjacent to these areas.

Meaford also consists of areas of Karst Topography. These are landscapes shaped by the dissolving of water on carbonate bedrock, further characterized by sinkholes and caves. Grey County Official Plan (2.8.5 Special Policy Area) and Meaford Official Plan (C14 Karst Topography) outline development constraint overlays that corresponds with areas of potential Karst Topography. Where a Planning Act approval is required an investigation of the potential impacts of the development on the surface and groundwater supply are required[12].

Other significant environmental and resource areas of interest include:

[11] Meaford Official Plan (2014), page 8
[12] Meaford Official Plan (2014), page 122

- **Potential Aggregate Resource Areas:** Identified in Meaford to protect significant areas of mineral aggregate resources. The Meaford Official Plan states protection of known high quality resources shall take precedence over extraction and development.
- **Wetlands:** Seasonal or permanent lands covered by shallow water. Development shall not be permitted on and adjacent to provincially significant wetlands unless the use has been evaluated and can demonstrate that there is no negative impact on the natural features or ecological function. All wetlands of Meaford are protected under the Environmental Protection designation within the Meaford Official Plan.
- **Significant Woodlands Areas:** All significant woodlands are protected under Significant Woodlands policy in the Meaford Official Plan.
- **Intake Protection Zones**: The area of water, surface water and land around a municipal intake pipe which contributes to Meaford's source of clean drinking water. The area indicated as the municipal Intake Protection Zone (IPZ) is protected as a special protection area because of its susceptibility to contamination to source water.

5.2 Niagara Escarpment

The Niagara Escarpment is a landform feature and ecological area of the Municipality of Meaford. The preservation of the Niagara Escarpment Natural Area falls under the Niagara Escarpment Plan. The Plan provides for the maintenance of the escarpment lands and surrounding area, and ensures development is compatible with the natural environment. The Meaford Official Plan outlines policies for development within the Niagara Escarpment Plan Area, however, the Niagara Escarpment Plan will take precedence over all local planning documents. The Rural Settlement Area of Woodford is located within the Niagara Escarpment Plan area and is designated as a Minor Urban Centre.

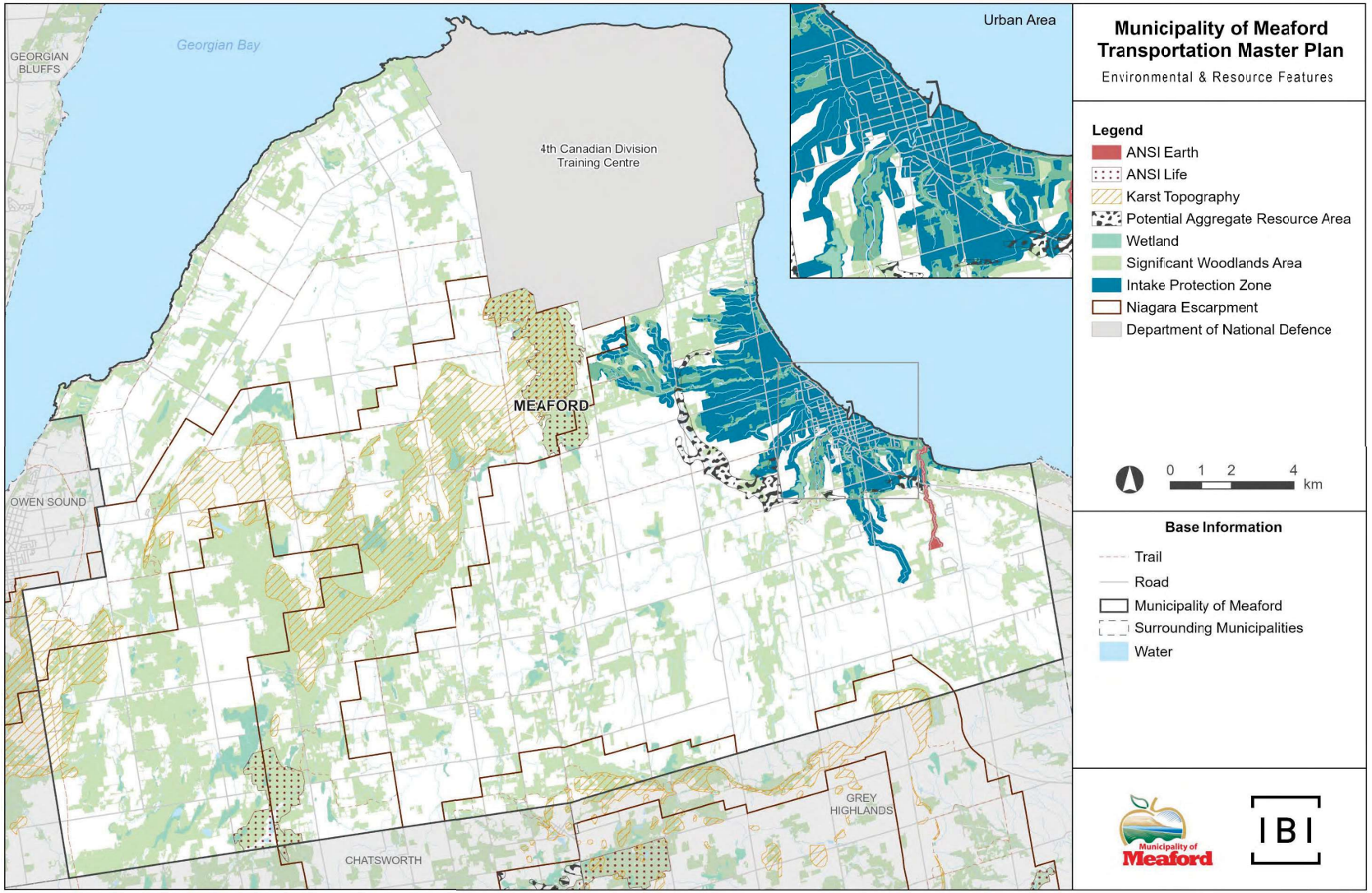
5.3 Bayview Escarpment Provincial Nature Reserve

This 439-hectare Provincial Nature Reserve is managed by Ontario Parks and borders the Department of National Defense lands to the northeast. The park is located within the Niagara Escarpment Planning Area and is included in the Niagara Escarpment Parks and Open Space System as a Natural Reserve.

Current recreational uses permitted in the reserve include hiking, cross-country skiing, and snowboarding. The Nature Reserve is best suited for viewing nature at several viewpoints. All-terrain vehicles have become a concern after causing some damage to the area.

The Bayview Escarpment Provincial Natural Reserve is part of the Provincially Significant Life Science ANSI which protects several important ecological functions including groundwater discharge, watershed, swamp, natural corridor and forest interior (hardwood forest), and numerous rare vascular plant species. The reserve also contains Regionally Significant Earth Science features

Exhibit 5.1: Environmental and Resource Features in Meaford



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6 Summary and Next Steps

The information contained within this document forms the first steps of the Meaford Transportation Master Plan study. Several topic areas, and issues were identified and discussed, to be brought forward to the Needs and Opportunities report for further analysis

- Meaford is growing – several developments are planned within urban Meaford that will generate new traffic. Tourism is also growing, and connections to destinations may require improvements, upgrades, or rehabilitation.
- There is demand and interest in safe and comfortable walking and cycling facilities. Filling in gaps in the sidewalk network, and new cycling connections and infrastructure need to be considered.
- Meaford's population is aging as the Municipality attracts retirees and young people depart for post-secondary education. Aging populations are more reliant on modes other than driving. Improving mobility choices, including transit and active transportation should be explored.
- Many roads and bridges need to be repaired. The TMP should explore strategies that will support the development of the Municipality's Level of Service for its road network and to ensure the required investment to maintain its current network while encouraging sustainable growth.
- Several intersections and roads have geometric or safety concerns. The TMP should explore policies and programs to assess and fix trouble spots.

The background information and initial investigation into Meaford’s transportation needs will be captured in the TMPs vision and goals, including the need for improving efficiency, supporting alternative travel modes, and improving safety.

Building on the existing conditions documentation, further analysis will be undertaken and, in conjunction with public and stakeholder consultation, issues, needs and opportunities will be identified. A vision for the future of Meaford’s transportation system with supporting goals and directions will also be developed. These tasks are detailed in the Needs and Opportunities Report.

IBI

Appendix B

Needs and Opportunities

Municipality of Meaford

Transportation Master Plan

July 2021

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1 Introduction

The Municipality of Meaford is developing its first Transportation Master Plan (TMP). The TMP will be a strategic long-term plan guiding the management of transportation infrastructure and investment into improvements to operations and safety of all modes of travel and goods movement. The TMP is a plan for responding to changing demographics, growing tourism and seasonal traffic, aging infrastructure and associated costs, and increasing demand for safe walking, cycling, and recreational travel infrastructure.

1.1 About This Report

This Needs and Opportunities report identifies a wide range of policies, infrastructure investments, and programs under consideration for the TMP. These address the issues and trends identified in the Existing Conditions report, through public and stakeholder consultation, plus a look at the future needs to 2045. Measures will be further refined in the upcoming Alternative Solutions report for incorporation into the Final TMP. The study process is summarized in Exhibit 1.1.

Exhibit 1.1: Study Process

This report documents the following:

- **The TMP's vision, goals and directions -** the process and inputs involved in developing and finalizing the study's vision statement, explicit goals and supporting directions.
- **Future conditions –** an assessment of the future state of transportation in Meaford to the planning horizon of 2045.
- **Needs and opportunities –** an initial identification of Meaford's transportation needs and potential infrastructure projects, policies and other strategies to address these needs.
- **Planning solutions –** strategic alternatives building on the needs assessment to address the vision, goals and directions.

The planning solutions identified in this report, and the projects and policies within the solutions, will be evaluated and refined in the Alternative Solutions report to form the recommendations of the TMP.

2 Vision, Goals and Directions

2.1 What is a Vision Statement?

A TMP's vision statement presents, at a high level, the desired future state of the Municipality's transportation system. The vision helps to shape the direction of the plan, in that recommendations and strategies are developed to support the vision. The plan will provide the Municipality a tool to build towards the vision in incremental progression over the coming years.

2.2 Policy Context

The vision and goals were developed in an iterative and collaborative process. The initial draft was developed by building from previous plans and policies at the municipal and the county levels, including:

- Meaford TMP Request for Proposal,
- Meaford Official Plan,
- Meaford Council Strategic Priorities 2019-2022,
- Sustainable Meaford,
- Grey County Official Plan,
- Grey County Transportation Master Plan, and
- Grey County Council Strategic Plan 2017-2019.

The key directions embedded in these previous studies provided a starting point and represented previous efforts to determine the public's vision for Meaford's future. Excerpts from these documents, as they relate to transportation planning visions and objectives, are provided in Appendix A.

2.3 Public Consultation

The study's vision and goals need to reflect the broader community's ambitions and objectives. The vision and goals need to align with how residents, business owners, employees, and visitors want the municipality to grow. As such, the draft vision and goals were presented to the public and to stakeholders during the first round of public and stakeholder engagement.

Members of the public were able to provide comments on the draft vision and goals through the online and telephone survey which was available between May 7 and June 7, 2020. A total of 308 submissions were received where 65% responded that they like the vision statement as written, while 22% added it needed some changes. Only 13% did not like the draft version of the vision statement. Respondents were able to provide comments on how to improve the vision, goals and directions. These have been reviewed and incorporated into

the final versions presented below. A Public Consultation Summary is provided separately from this report with more information on the comments received.

2.4 Vision Statement

The Municipality of Meaford will 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.

The intent of the vision statement is to inform the reader about the important of sustainability, supporting the economy and safety. 'Sustainable' refers both to fiscal sustainability and environmental sustainability 'Connected' refers to the importance of providing easy access between destinations within and outside of Meaford. "Economical" refers to the need that transportation infrastructure and policy decisions must be affordable for the municipality and taxpayers. The vision also acknowledges the importance of the agricultural industry to Meaford's prosperity. Finally, it is important that safe and efficient travel be available to all residents, regardless of age and ability and their chosen mode of travel.

2.5 Goals and Directions

Four key goals and 16 directions have been identified. These goals and directions build upon the vision statement and provide more details. All strategies, projects and other recommendations developed for the final TMP should address at least one of the directions listed with one of the four goals below and be consistent with the overall vision for future Meaford.

Meaford's transportation system will:

Goal #1: Meet the needs of present and future urban and rural residents and businesses.

- **Direction #1:** Develop a multi-modal transportation network that enables efficient regional travel and sustainable travel choices.
- **Direction #2:** Enable the efficient movement of goods and agricultural equipment.
- **Direction #3:** Support economic development and tourism.
- **Direction #4:** Increase access to opportunity for residents and businesses.

Goal #2: Be delivered and maintained in a fiscally responsible and sustainable manner.

- **Direction #5:** Prioritize maintenance and operations of existing infrastructure.
- **Direction #6:** Improve operations and maintenance policies and procedures and consider life-cycle costs in all infrastructure decisions.
- **Direction #7:** Become more resilient to impacts from climate change.
- **Direction #8:** Embrace sustainable transportation practices and the emerging shared economy.

Goal #3: Enhance safety, accessibility, e uity and inclusivity to support active, healthy lifestyles and livable communities.

- **Direction #9:** Improve traffic safety for all road users.
- **Direction #10:** Enable active transportation as an everyday option for residents of all ages and abilities.
- **Direction #11:** Enhance connections to recreational trails and facilities.
- **Direction #12:** Support the regional public transit and specialized transit plans.

Goal #4: Support environmental sustainability and climate change ob ectives.

- **Direction #13:** Reduce the reliance on single-occupancy vehicles.
- **Direction #14:** Transition to a more integrated multi-modal transportation system.
- **Direction #15:** Contribute to a reduction in greenhouse gas emissions.
- **Direction #16:** Protect Meaford's natural and cultural heritage.

3 Future Conditions

Meaford is growing with several new developments in various stages of the planning process. Over the coming years there will also be background economic and tourism growth in the province, and changing demographics including the aging population and other trends described in the Existing Conditions report. These changes will increase demand on the transportation network and increase attention on other needs such as safety, efficiency of travel, and goods and agricultural movement.

This section provides a picture of future conditions to identify the issues and needs that will arise. Future conditions are looked at in terms of growth, demographics, travel demand, and technological changes occurring or expected.

The COVID-19 pandemic has created uncertainty about the future. The long-term impacts from this crisis are difficult to predict. Working from home may become the new normal for many more people. In that situation, being geographically located near major job markets is no longer a necessity. For Meaford, this could mean increased demand for its small-town way of life. Impacts to transportation are also possible with less need to support heavy commuting flows into employment areas, and greater need for safe walking and cycling as a form of safe, socially-distanced mobility.

Forecasts for population and employment are taken from the Grey County Growth Management Strategy. The analysis in this section also uses development planning applications (as of early 2020) for assessment of road network needs.

This section also discusses the latest emerging technologies in transportation, and how Meaford may be able to take advantage of them. These include on-demand transit service, autonomous vehicles, and electric vehicles.

A TMP provides a “road map” as to the planning needs for Meaford to meet future challenges. It is necessary to monitor progress towards the TMP and the trends used to inform it and update the TMP over time.

3.1 Population, Employment and Land Use Forecasts

This section examines population and employment growth to 2045, demographic changes, and development plans and their locations to assess the impacts and needs of these changes on the transportation network.

Meaford is Growing

Population and employment are expected to grow, mostly in the areas in and around urban Meaford to the 2045 planning horizon. Meaford's population is expected to grow by approximately 1,600 residents (+14%) by 2045, while over 500 jobs are expected to be added to the Municipality (+17%). Exhibit 3.1 presents forecasted permanent population, households and employment in Meaford through to the 2045 study horizon.

Exhibit 3.1: Forecasted Population and Employment in Meaford

Measure	2016	2021	2026	2031	2036	2041	2045	Annual Growth Rate
Population	11,250	11,530	n/a	12,180	12,440	12,650	12,870	0.45%
Households	4,820	4,990	n/a	5,270	5,390	5,470	5,570	0.48%
Employment	3,420	3,560	n/a	3,660	3,780	3,920	3,990	0.52%

Source: Grey County Growth Management Strategy (GMS) Forecast and Land Supply Review and Update (2017) 2045 pro ections were extrapolated from GMS forecasts
Note: 2016 population differs from the number stated in other TMP documents (10,991) due to the Grey County GMS including the ad ustment for Census net undercoverage.

The allocation of this growth is discussed below and its impact on traffic levels is assessed in Section 3.2.

Future Land Use and Distribution of Growth

The physical distribution of Meaford's expected growth is important to identifying transportation needs. The allocation of growth has been projected based on the policies outlined in Meaford's Official Plan as well as a snapshot of existing development applications at the time this report was written.

Meaford's Official Plan aims to "direct the majority of new residential and employment growth to the urban area, where full municipal services and other community facilities exist" and to "encourage development having location, density and connectivity that supports and enhances active and alternative modes of transportation."

The above policies point towards infilling empty lots in the urban area and increasing overall densities. The compact development in urban Meaford bodes well for alternative travel modes such as walking and cycling. As density increases, public transit will become a more attractive option. Meaford needs to ensure they provide the support to enable active transportation and transit as viable modes of travel.

Ongoing development applications reflect the objective of directing more population and employment into the urban area. There were over 2,400 residential units in various stages of planning and development as of February 2020. Development pressure in Meaford is higher than what was contemplated in the Grey County Growth Management Strategy. Reflecting the range of uncertainty, the approach taken for the TMP was to apply the more aggressive growth projections (i.e. development applications). Using this approach where development and growth projections may be overstated helps to identify all potential transportation needs within the TMP's planning horizon. Slower growth, however, would delay the timing of identified infrastructure needs.

With input from Meaford Development Services staff, the following planning horizons were developed for the purposes of the TMP and future traffic projections to the 2045 planning horizon.

- Short term (by 2025),
- Medium term (by 2030), and
- Long term (by 2045).

Of the more than 2,400 residential units planned, 438 units are expected in the short term (by 2025) and 705 additional units are expected in the medium term (by 2030).

Non-residential development applications include a boutique hotel, cottages, a winery, a cidery, a church, a school, an industrial use and a commercial use.

Development applications are at various stages of progress, and not all are certain to materialize. However, there is also a possibility that new proposals replace those proposals in the longer-term. Development applications are detailed in Appendix C and their location within Meaford shown in Exhibit 3.3 and Exhibit 3.4.

Residential and commercial growth will trigger a greater need for intersection upgrades, operational improvements and active transportation facilities, increase demand for transit and increase the ongoing maintenance burden.

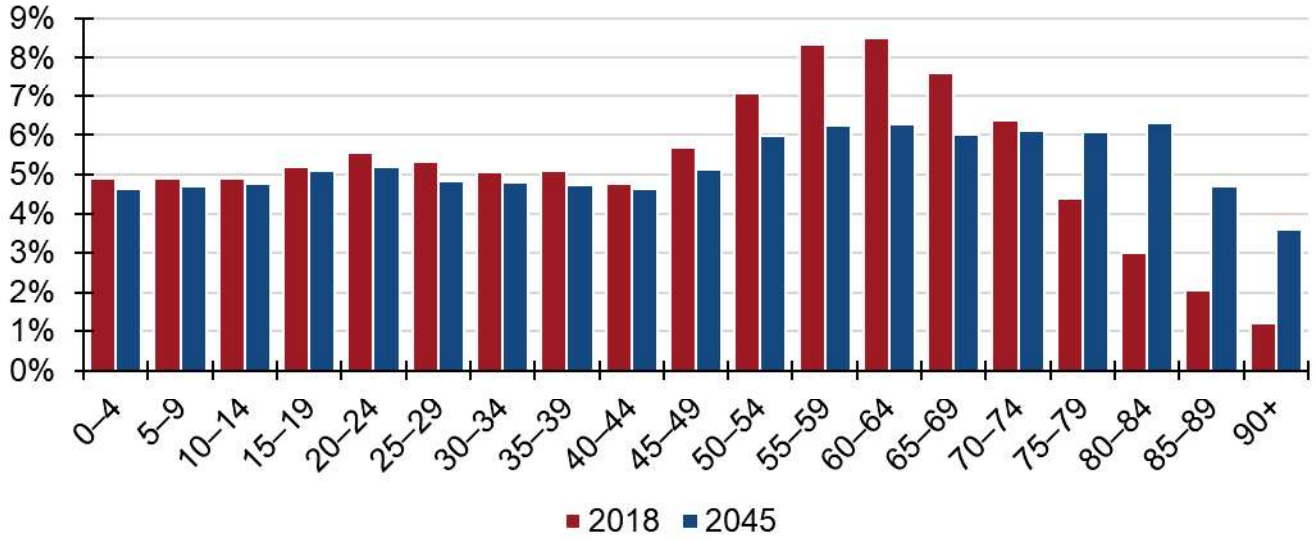
The Population is Aging

How the population is growing is important to how transportation must be planned. While Meaford-specific forecasts are not available, the trend can be inferred from Grey County data. In Grey County, the share of the population aged 65 or older is expected to grow from one quarter in 2018 to one third in 2045[1]. Meanwhile, the share of the population under 25 years old is expected to decrease slightly, from 25.5% to 24.4%. The share of the Grey County population between 25 and 64 is forecasted to fall significantly, from 49.9% to 42.7%. Further details are presented in Exhibit 3.4.

[1] Ministry of Finance, Ontario Population Pro ections, 2018 2046. Table 4: Historical and pro ected population by census division, selected years reference scenario

The forecast of an aging population in Grey County can broadly be applied to Meaford, but it is important to note that the Meaford population is already older than Grey County according to 2016 Census data. The median age in Meaford was 53 years old in 2016. Grey County, by comparison, was 49. In Meaford, 28% of the population was 65 years and older in 2016.

Exhibit 3.2: Forecasted Population Share by Age Cohort, Grey County (2018-2045)



Source: Ontario Population Pro ections, 2018-2046 Ministry of Finance

The largest cohorts are in the 55-69 range today, which means that in just 15 years, the largest segments could be in the cohorts above 70 years of age. This ongoing demographic shift will impact the transportation needs of Meaford. With a significant decrease in the share of working-age population, commute-based trips will not rise at the same rate as overall trips. With improved health care and higher life expectancy, people aged 65 and older are tending to stay more active. This means more trips for social or recreational purposes than previous generations of retirees. Driving will continue to be a dominant mode of mobility

Exhibit 3.3: Urban Development Map

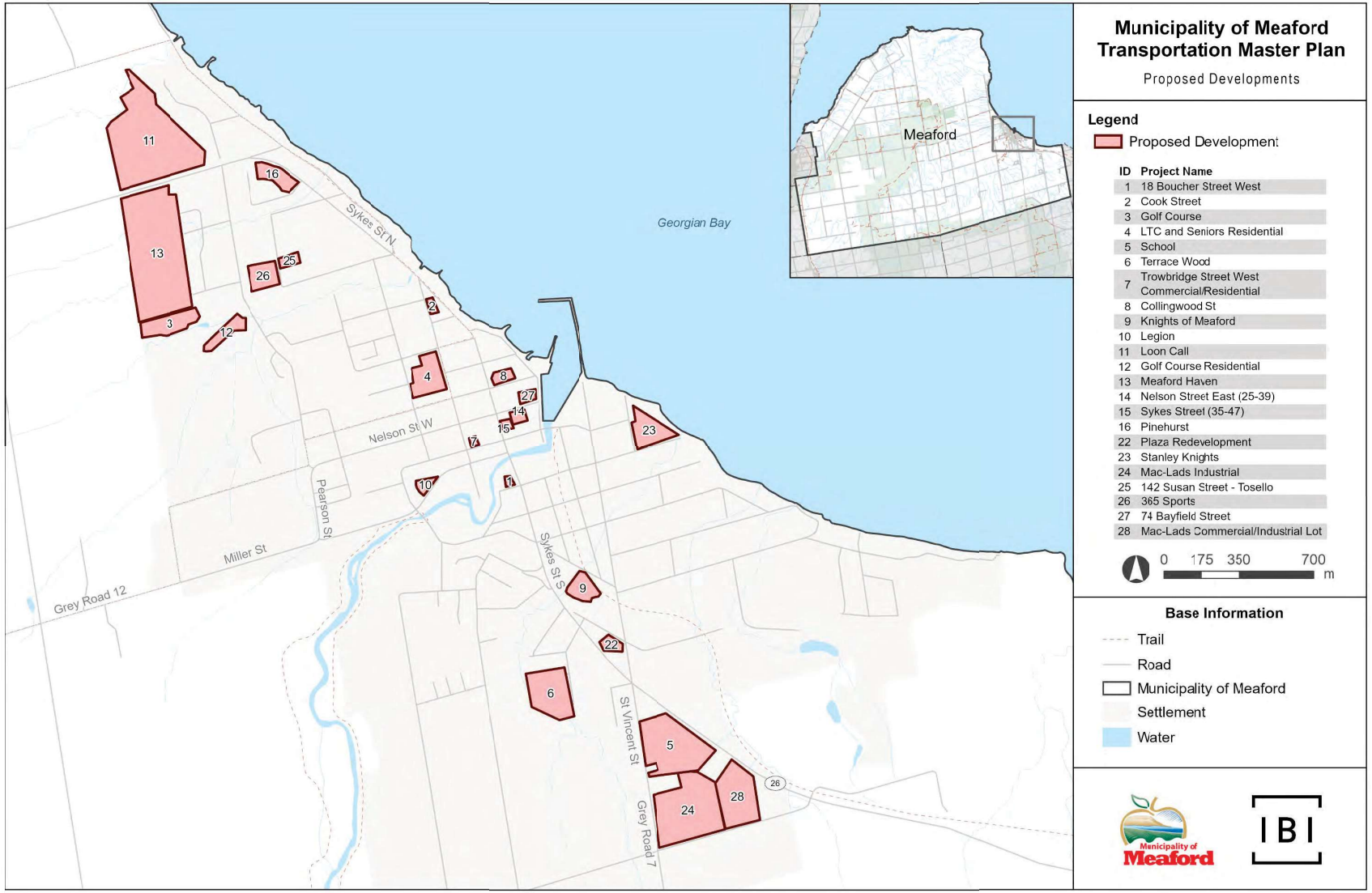
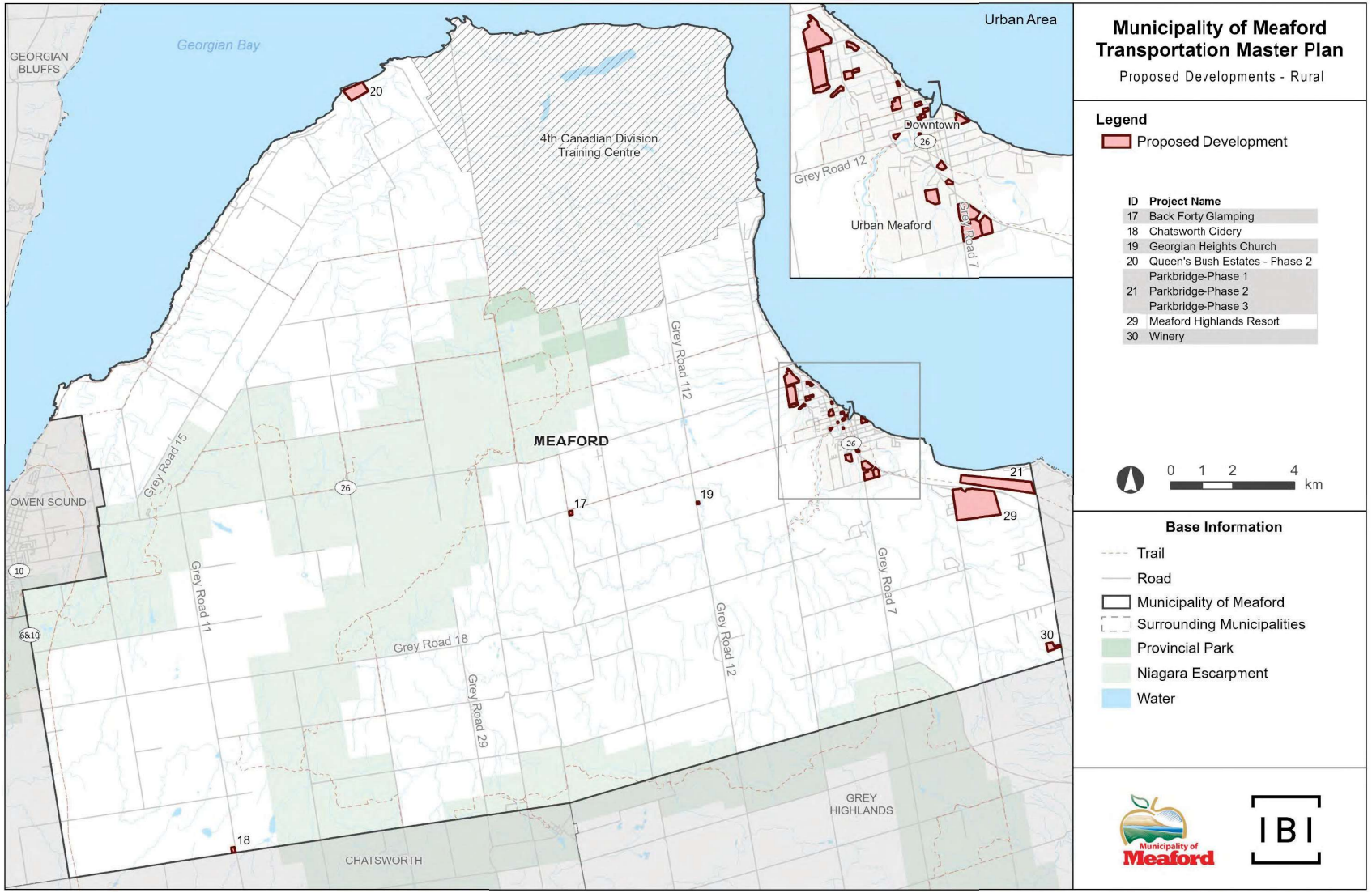


Exhibit 3.4: Rural Development Map



among this cohort, while walking and to a lesser extent cycling can be important travel modes for people 65 and older.

For all modes of travel, safety is a priority when looking at needs for people aged 65 and older. For drivers and other road users, safe road design meeting appropriate standards (e.g. Transport Association of Canada, Ontario Traffic Manual) is a requirement for new construction. The municipality should also look to, over time, addressing locations known to have safety concerns or where standards are not met. These locations can be identified by collision records or through knowledge of staff and input from the public.

Populations aged 65 and older may be particularly sensitive to roads lacking sidewalks, and destinations lacking accessible parking. Addressing sidewalk deficiencies and maintaining accessible parking requirements are thus incorporated into the TMP. An aging population may also increase demand for transit (including specialized transit) as it provides mobility for those who can no longer safely drive.

The Future Job Market

The types of jobs available in Meaford have been changing and will continue to adapt to new economic conditions. Manufacturing and other industrial sectors are declining, while a higher proportion of future jobs in Meaford will be in sales, services and professional fields[2]. Tourism, including agri-tourism and recreational tourism, is also growing in Meaford, pointing to the need for improved access to points in rural Meaford. New cideries and wineries, attractive touring cycling and a growing seasonal population are contributing the growth in the sales and service fields. Meanwhile, the agricultural industry remains an important component of Meaford's economy, employing a large number of seasonal labourers.

3.2 Travel Demand

This section assesses where growth in traffic will occur, identifies where constraints on traffic operations and goods movement may occur and identifies potential solutions to address these constraints. Though a significant objective of the TMP is to provide more multi-modal opportunities, for simplicity, this analysis assumes that all trips will be made by private vehicles. This represents a sort of worst case scenario for traffic congestion.

Developments that will generate traffic growth in were identified through Meaford's Development Status Map. The identified development sites are detailed in Appendix C.

Each development is subject to its own traffic impact assessment and separate review. For the purposes of the TMP, traffic generation was estimated and roads serving developments expected to accommodate traffic growth were identified.

[2] Grey County Growth Management Strategy Update (2015), page 13

To estimate traffic growth, trip generation estimates were taken from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition (September 2017). The trip generation estimates by traffic peak hour (i.e. Weekday AM, Weekday PM, and Saturday Midday) and development phasing timeline are summarized in Appendix B.

Within the urban area, developments identified under the short-term timeline (i.e. by 2025) will increase hourly traffic volumes by approximately 300 to 700 trips during the Weekday AM, Weekday PM, and Saturday Midday peak hours. By 2030, an additional 300 to 400 trips will be generated during all peak hours due to the medium-term developments. Further increases to traffic by an additional 300 to 500 trips will be generated by 2045 due to the long-term developments.

Outside of the urban area, there is one major development to note. The Parkbridge residential development is proposed to include approximately 1,000 residential units, with construction starting in the short term, and 35-50 homes completed each year[3]. For the purposes of this study, the project has been divided into three phases, matching the planning horizons identified previously. The portion to be built between 2026 and 2045 will add approximately 600 to 700 peak hour trips to the transportation network. A portion of the trips associated with this proposed development will also impact the urban area, mainly along Highway 26.

Exhibit 3.5 illustrates the combined traffic impacts from these proposed developments. Highway 26, Sykes Street and St. Vincent Street / Grey Road 7 will experience most of the forecasted traffic volumes resulting from development activity.

3.3 Constraints and Potential Improvements

Growth-Related Constraints

Upon review of the corridors impacted by traffic growth, preliminary constraints were identified. The locations of these constraints are illustrated in Exhibit 3.6 and Exhibit 3.7. A list of the identified constraints and preliminary recommendations is presented in Exhibit 3.8. Growth-related constraints include all intersections along Sykes St, the corridor expected to be the most impacted by the growth of the community, as well as the Ridge Road-Person St corridor.

Operational and Geometric Constraints

Additional safety or geometric issues have been identified through public and stakeholder consultation. These include sight distance and visibility issues, constrained cross-sections and speeding and other safety issues. The locations of these constraints are also illustrated in Exhibit 3.6 and Exhibit 3.7. A list of these issues and preliminary recommendations is presented in Exhibit 3.9.

[3] Bayshore Broadcasting, Developer Details Plans for Meaford Property, Sept. 27, 2018 (retrieved June 18, 2020)

Exhibit 3.5: Development Traffic Impacts

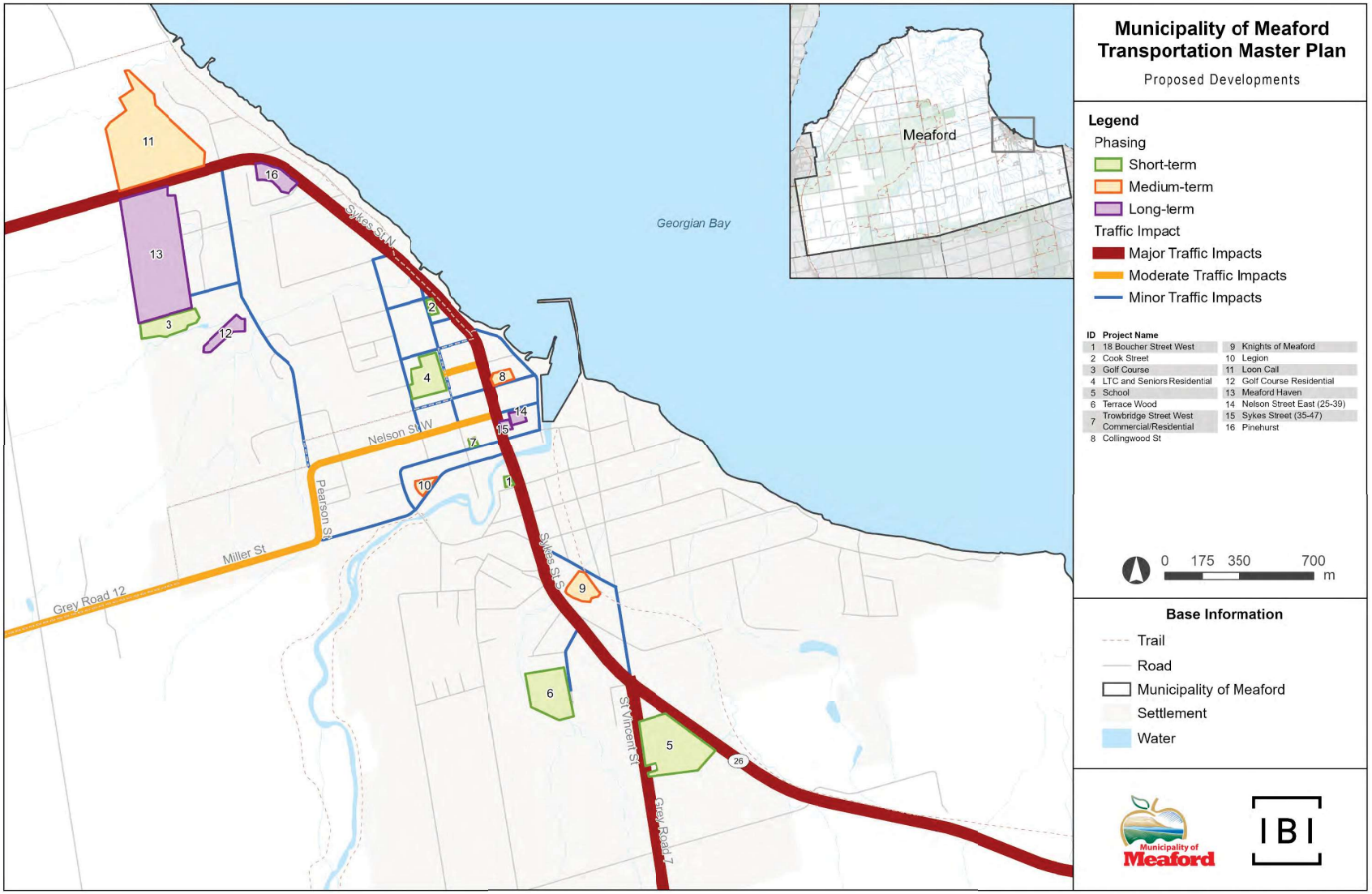


Exhibit 3.6: Future Constrained Intersections and Corridors Urban

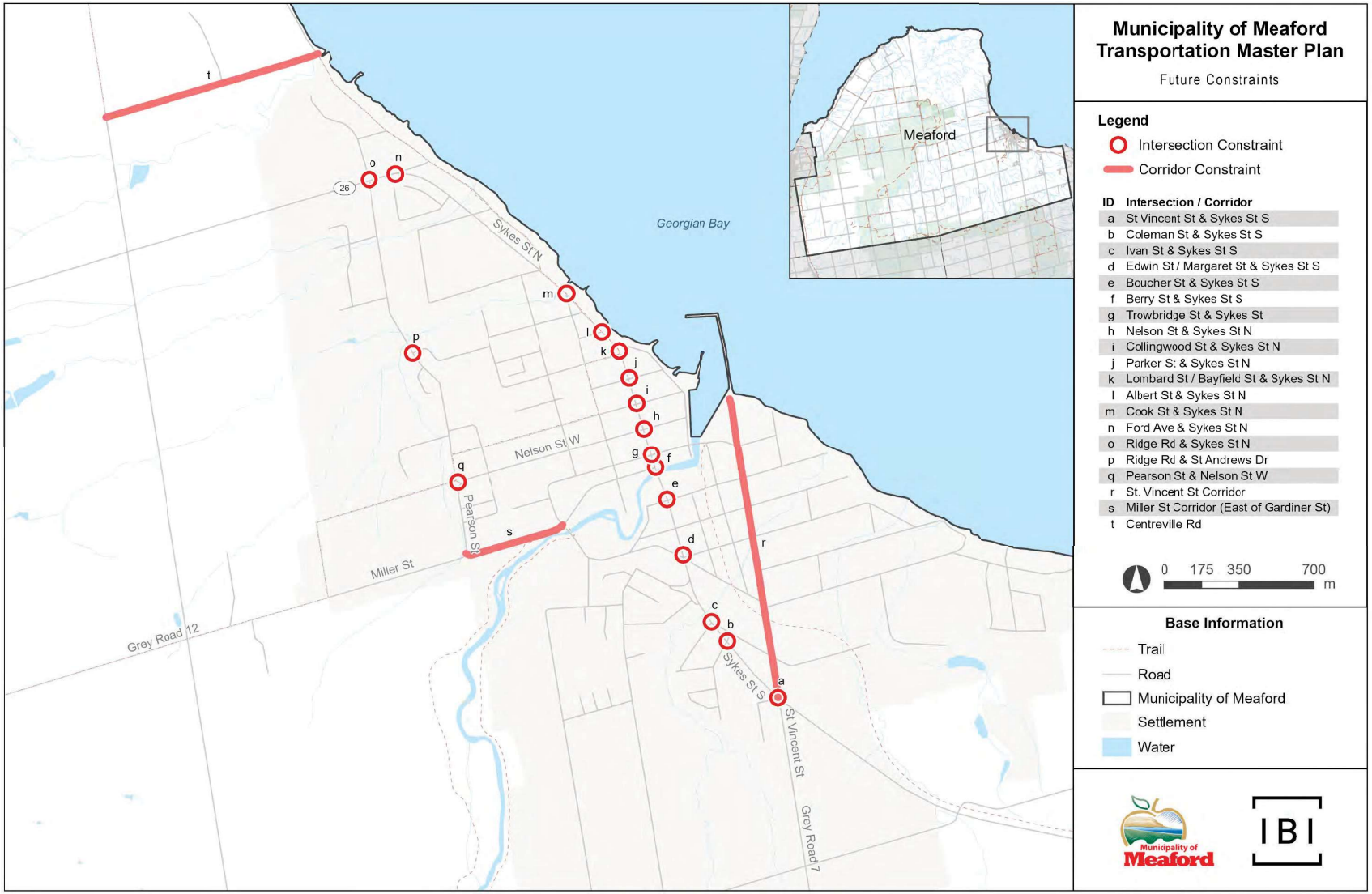


Exhibit 3.7: Future Constrained Intersections and Corridors Rural

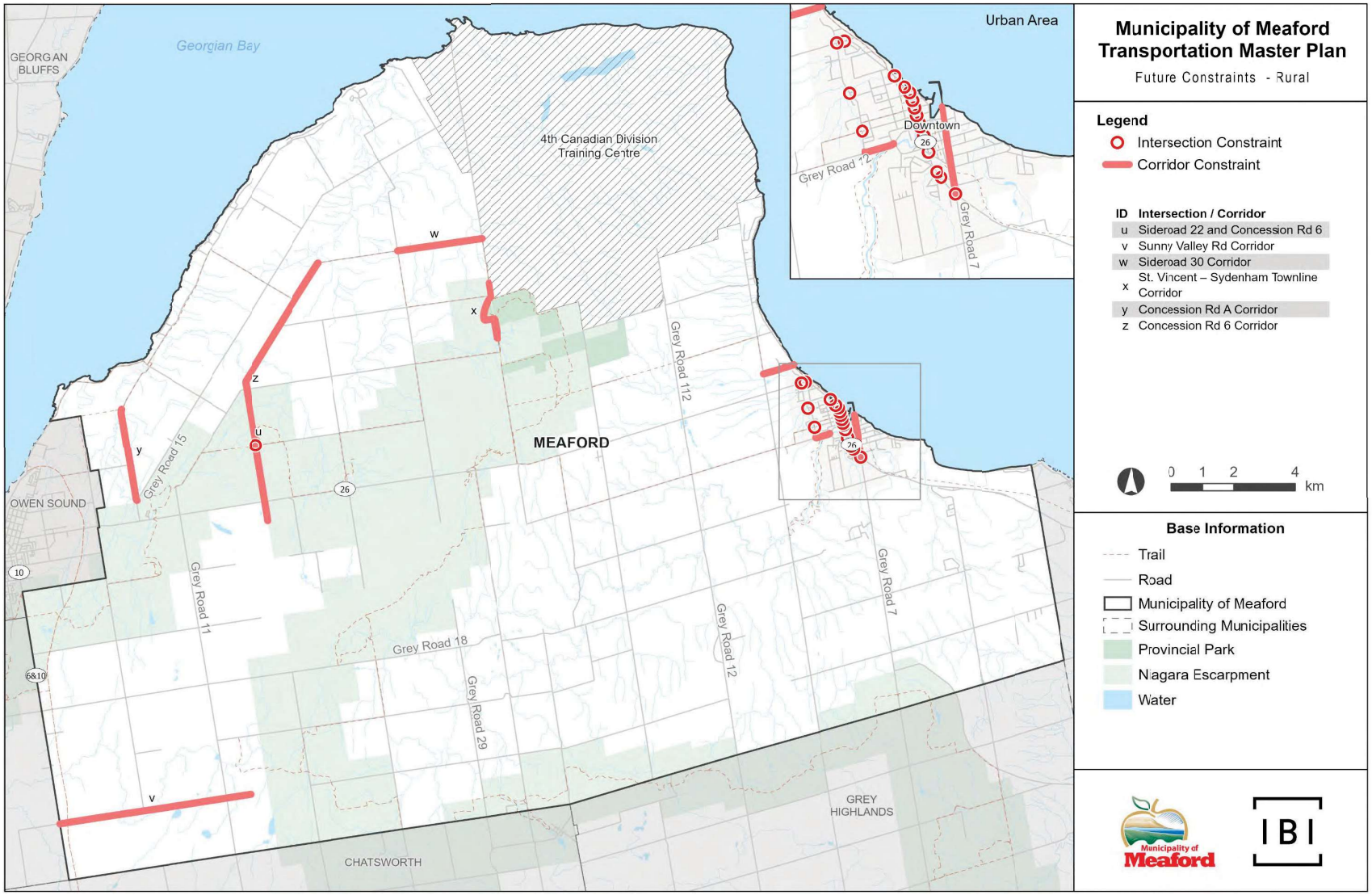


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Exhibit 3.8: Growth-Related Road Network Constraints and Potential Strategies and Actions

ID	Location	Constraint	Potential Strategies Actions
a	St. Vincent St and S Sykes St	Potential for operational changes needed to accommodate growth, potential safety concerns with the existing skewed, five-legged intersection.	Work with Grey County to complete a safety review to determine if the intersection should be realigned, and to complete a preliminary roundabout analysis to determine if a roundabout is a better alternative to the existing signals.
b	Coleman St and S Sykes St	Operational constraints due to development growth in area.	Undertake a traffic control study or signal warrant.
c	Ivan St and S Sykes St	Operational constraints due to development growth in area.	Undertake a traffic control study or signal warrant.
d	Edwin St / Margaret St and S Sykes St	Operational constraints due to development growth in area.	Undertake a traffic control study or signal warrant.
e	Boucher St and S Sykes St	Operational constraints due to development growth in area.	Undertake a traffic control study or signal warrant.
g	Trowbridge St and N Sykes St	Operational constraints due to development growth in area.	Complete a core area traffic assessment, focused on downtown Meaford (from Berry Street to William Street) and include intersection-specific recommended assessments identified in this TMP (e.g., Berry Street and Sykes Street intersection sightline assessment and one-way street review). Note that the intersection of Nelson and Sykes St is under the jurisdiction of Grey County, requiring County involvement in this project.
h	Nelson St and N Sykes St	Operational constraints due to development growth in area.	
i	Collingwood St and N Sykes St	Operational constraints due to development growth in area.	
j	Parker St and N Sykes St	Operational constraints due to development growth in area.	
k	Lombard St / Bayfield St and N Sykes St	Operational constraints due to development growth in area.	
l	Albert St and N Sykes St	Operational constraints due to development growth in area.	
m	Cook St and N Sykes St	Operational constraints due to development growth in area.	

ID	Location	Constraint	Potential Strategies Actions
o	Ridge Rd / Pearson St Corridor	Operational constraints due to development growth in area.	Conduct a corridor assessment of Ridge Rd / Pearson St, between Sykes St N. and Nelson Street to assess whether street widening is warranted as a result of future growth. Signal warrant analyses should be completed at both unsignalized intersections. Note that the intersection at Ridge Rd and Sykes St N is under MTO jurisdiction.
q	Pearson St and Nelson St W	Operational constraints due to development growth in area. Possible alignment issues at this intersection may lead to safety concerns.	Work with Grey County to complete a signal warrant analysis to determine if future growth warrants a traffic signal and complete a safety review to determine if intersection realignment is warranted.

Exhibit 3.9: Operational and Geometric Road Network Constraints and Potential Strategies and Actions

ID	Location	Constraint	Potential Strategies Actions
f	Berry St and S Sykes St	Potential sightlines for the eastbound approach are constrained due to the bridge structure on Sykes St that was rebuilt in 2019.	Conduct a sight distance review for all approaches at the intersection to determine if sufficient sight lines have been provided. Sightline issues can be solved by prohibiting eastbound travel, which would require an additional operational review.
n	Ford Ave and N Sykes St	Potential sightline constraints.	Work with the Province to conduct a sight distance review for all approaches at the intersection to determine if sufficient sight lines have been provided.
p	Ridge Rd / Pearson St Corridor	Issues with the current speed limit.	Conduct a review of the existing speed limits based on TAC guidelines and OTM Book 5 to determine if the existing speed limits and/or the speed control signs are appropriate.
r	St. Vincent St Corridor	Issues with the current speed limit here.	Conduct a review of the existing speed limits based on TAC guidelines and OTM Book 5 to determine if the existing speed limits and/or the speed control signs are appropriate.

ID	Location	Constraint	Potential Strategies Actions
s	Miller St Corridor (East of Pearson St)	Operational issues due to narrow cross-section.	Conduct a review of the road characteristics to determine if Miller Street could benefit from being converted to a one-way street or converted to a cul-de-sac, east of Pearson Street.
t	Centreville Rd	Issues with the current roadside design.	Refer to the MTO Roadside Design Manual to determine if the roadside along this corridor is appropriate given the road characteristics.
u	Sideroad 22 and Concession Rd 6	Potential sightline constraints.	Conduct a sight distance review for all approaches at the intersection to determine if sufficient sight lines have been provided.
v	Sunny Valley Rd Corridor	Potential sightline constraints.	Conduct a sight distance review for all approaches at all intersection intersections along Sunny Valley Road to determine if sufficient sight lines have been provided.
w	Sideroad 30 Corridor	Issues with the current speed limit.	Conduct a review of the existing speed limits based on TAC guidelines and OTM Book 5 to determine if the existing speed limits and/or the speed control signs are appropriate.
x	St. Vincent – Sydenham Townline Corridor	Issues with the current speed limit.	Conduct a review of the existing speed limits based on TAC guidelines and OTM Book 5 to determine if the existing speed limits and/or the speed control signs are appropriate.
y	Concession Rd A Corridor	Issues with the current speed limit.	Conduct a review of the existing speed limits based on TAC guidelines and OTM Book 5 to determine if the existing speed limits and/or the speed control signs are appropriate.
z	Concession Rd 6 Corridor	Issues with the current roadside design.	Refer to the MTO Roadside Design Manual to determine if the roadside along this corridor is appropriate given the road characteristics.

3.4 Emerging Technologies in Transportation

Digital technology advancements that support automated, electric, connected, and shared transportation options are changing the future of transportation. New mobility services that are currently being launched in larger cities are likely to expand to Meaford over time. These are services that will allow people to live car free or with fewer vehicles per household and help increase the demand for active transportation, transit and greater multi-modality in general. This section provides an overview of several opportunities for Meaford to capitalize on emerging technologies.

Online Shopping and Food Delivery

The growth in online shopping, same or next-day delivery, grocery delivery and the proliferation of prepared food delivery apps has reduced the need to travel for shopping and eating. These types of services have been available in larger cities for some time and will undoubtedly expand to smaller communities as economics allow. This trend has been accelerated by the COVID-19 pandemic, as people are trying to limit trips away from home as much as possible. These services reduce car-dependency, allowing residents to access opportunities that would not be otherwise available within walking distance. This may reduce the rate of private vehicle ownership across and allow for more independent living, particularly among elderly residents.

In the longer term, aerial drone deliveries may offer faster, more efficient service for local goods movement. In a rural context where distances are long and densities are low, drones that can fly in a straight line from a distribution centre to a rural home. Adoption of this technology will be driven by the private sector, but municipalities should be aware of potential issues and benefits.

Telecommuting and Work-from-Home

The COVID-19 pandemic has also accelerated a potential shift in workplace culture and reduced the need to be at a physical office on a day-to-day basis. For employees who are no longer needed at the office on a regular basis, the importance of being closely located is reduced. Municipalities like Meaford become more attractive for people seeking the smaller-town lifestyle while being able to maintain employment, typically located in the bigger cities. This could attract new residents and convert existing seasonal inhabitants to full-time residents.

On-Demand Services

Many small communities are investigating on-demand transit to provide mobility options in areas that conventional transit struggles to work efficiently. In Ontario, communities such as Brant County, Wellington County, Innisfil, Sault Ste. Marie, and Belleville are all testing some form of on-demand transit to serve lower density areas.

An on-demand transit service where the municipality only covers the cost of trips taken aligns operating expenses with ridership, helping to contain costs in lower density areas. Modern trip booking, dispatching, and payment-processing systems offered by companies like Via On-Demand Transit, RideCo, Pantonium, and Spare give municipalities a comprehensive solution and can even provide call-centre support for riders who are unable to use smartphone apps. In some cases, deployments can incorporate AODA-compliant specialized service like Meaford Moves+ to make better use of existing vehicles and drivers.

The socioeconomic trends in Meaford—increasing number of retirees, decreasing persons per household alongside a growing population, and commute patterns that see most workers leaving the Municipality to work—all hint at more dispersed trip-making that is hard to serve with conventional transit. As on-demand alternatives proliferate, Meaford may stand to benefit from the improved technologies available to transit operators.

Electric Vehicles

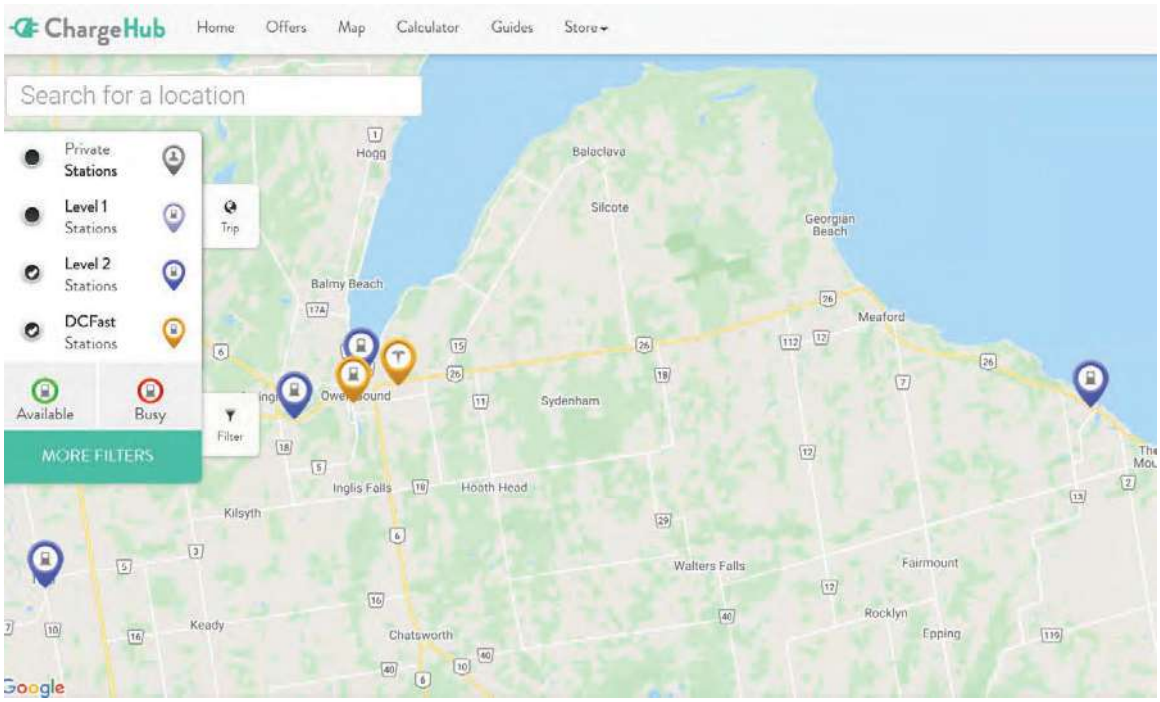
Electric vehicles (EV) have become more commonplace on Canadian roads in the past decade and trends suggest that the market share of EVs will continue growing. Between 2014 and 2019, the number of EVs in Canada grew from just 10,000 to 136,000[4] and Transport Canada has set a target for all light-duty vehicles in Canada to be zero-emission (EVs, hydrogen fuel cell, etc.) by 2040[5].

Given this federal government support and the consumer demand for EVs, the tourists that are an important part of Meaford's economy will increasingly be travelling to and within the community in EVs over the coming years. Meaford's lack of charging stations, as illustrated in Exhibit 3.10, presents a barrier for these drivers who must either drive 13 km east to Thornbury or 27 km west to Owen Sound to charge their vehicles. The Municipality has been unsuccessful in previous provincial grants for EV infrastructure because of the separation of Owen Sound, Collingwood, and Barrie along the Highway 26 corridor. Grants may have to be offered to fill gaps or the Municipality will have to fully fund these chargers.

[4] Tchir, J. (2020, January 1). We ll likely see a few electric vehicles on every street by the end of this decade. *The Globe and Mail.* Retrieved from https://www.theglobeandmail.com/drive/mobility/article-well-likely-see-a-few-electric-vehicles-on-every-street-by-the-end-of/

[5] Transport Canada (2020, January 31). *Zero-emission vehicles*. Retrieved from https://www.tc.gc.ca/en/services/road/innovative-technologies/_ero-emission-vehicles.html

Exhibit 3.10: Map showing locations of EV charging stations near Meaford



Source: ChargeHub (https://chargehub.com/en/charging-stations-map.html)

While the lack of charging stations alone may not drive a visitor's decision to come to Meaford, it sets the town apart from its neighbours that offer similar vacation experiences while also catering to the needs of EV drivers.

Shared Micro-Mobility

Though more popular in larger cities, shared micro-mobility programs including shared bicycles, electric-assist bicycles and electric kick scooters have been garnering more interest from smaller communities. Meaford's urban area may be a candidate for such services as it grows. This can be a service provided by the private sector through permitting agreements or as a form of public transit owned by the Municipality or non-profit. Micro-mobility systems have been advantageous in helping shift communities to more sustainable travel, exposing residents and visitors to cycling and other forms of active or semi-active travel that they would otherwise not experience.

Automated Vehicles

In the longer term, automated vehicles (AVs) may be ready for deployment on a widespread scale. For Meaford, AVs may be available as private vehicles, enabling increased mobility for groups who are unable to or unwilling to drive themselves. Concurrently, on-demand transit services could be made even more cost-effective through automated vehicles.

Candiac, Quebec, a town of 21,000 on the outskirts of Montreal, was one of the first in Canada to pilot AV shuttles in 2018-2019, which operated in mixed traffic

between the Chartwell Le Montcalm Retirement Residence, the local bus and train station, and the shores of the St. Lawrence.

For Meaford, these vehicles could augment Meaford Moves+ service and provide first-mile/last-mile connections to Grey County's transit system.

MTO is currently running a pilot that allows automated vehicles to operate on public roads, subject to several conditions, to allow the Province, municipalities, and vehicle operators to gain experience with this technology under local conditions.

4 Needs and Opportunities

This section develops potential strategies to meet the needs of Meaford through 2045. The strategies and projects outlined below form the preliminary "long list" of strategies that are to be further refined through the TMP process. At this time, strategies are grouped into the following themes:

- **Mobility:** The ability of people to travel efficiently on the road network by car, and by walking, cycling, and transit where economically feasible;
- **Goods movement:** Meeting the needs and supporting the farming industry and trucking within and through Meaford;
- **Maintenance:** Maintaining a state of good repair for the transportation network including rural roads that service agriculture and urban roads that accommodate all modes of travel;
- **Safety:** Safety improvements and speed reduction strategies are needed at locations, as well as a framework to address future traffic calming requests;
- **New technology:** Plan for and incorporate electric cars, transportation service providers, and autonomous cars.

The potential strategies will be incorporated into the alternatives assessment and assessed in further detail. As noted, these are identified as potential strategies and are not yet recommendations.

4.1 Mobility

The road network must accommodate growth

Most of Meaford's municipal rural and urban road network has sufficient capacity to accommodate growth, however, key corridors identified in Section 3.3 are subject to increased traffic levels with tourism growth and developments.

Within the urban area, Sykes Street (Highway 26 connecting link) is the main arterial and will experience the most growth. Traffic operations and safety along the corridor may deteriorate. Specifically, intersections with Ridge Road, Nelson Street and St. Vincent Street/McKibbon Drive should be subjected to operational assessments periodically as growth occurs. Several of these intersections have reduced or limited sight-distances, and while there may be sufficient capacity in the network, drivers can experience long delays waiting for a gap to turn onto Highway 26. Over time and occasionally these types of delays can lead to driver frustration and unsafe manoeuvres.

Other corridors in the urban area will also experience impacts from development-based traffic growth. These include St. Vincent Street, Nelson

Street and Miller Street. Future study by both the Municipality and the County of Grey would be required as growth occurs.

Changes to the road network are also being driven by safety deficiencies. These locations are discussed in Section 4.4.

Potential pro ects, strategies and policies include:

- Complete traffic operations study or signal warrant analysis at intersections identified in Section 3.3 and Exhibit 3.8.
- Given the long list of intersections identified along Sykes Street / Highway 26, undertake a core area traffic assessment.
- Undertake a downtown parking study to ensure adequate supply of parking, including accessible parking, and address areas where parking on residential streets creates mobility issues.
- Implement capacity improvements on corridors outlined in Section 3.3:
    - Highway 26 / Sykes St
    - St. Vincent St (Grey Road 7)
    - Nelson St / Miller St (Grey Road 12)
- Conduct a corridor assessment of Pearson St / Ridge Road, between Sykes St N. and Nelson Street.
- Upgrade Side Road 8 and Concession Rd 2 N to complete the “paved loop” through rural Meaford north of Highway 26.
- Construct new east-west route connecting Thornbury with Owen Sound, aligned between midway between County Road 40 and Highway 26 (see Section 4.2 Goods Movement and 4.4 Safety for additional justification for considering this alternative).
- Construct truck bypass route to remove through traffic from Downtown Meaford.

Support active transportation as a community health ob ective

Demand for safer walking and cycling facilities has been growing in Meaford. Walking is a common mode of travel in the urban areas, but challenges persist. The sidewalk network has gaps and many roads have no sidewalks at all. An incomplete network of sidewalks forces pedestrians to share the road with vehicles, presents barriers to people who rely on mobility devices, and generally discourages walking as a form of transportation or recreation.

Cycling in Meaford has been primarily a recreational activity and rural cycling will be a key component of the cycling network plan. However, utility cycling has growth potential. The compact nature of the urban area and relatively low traffic

volumes mean that cycling could be an easy, convenient mode for many people, if the right infrastructure is available. A utilitarian cycling approach can also help to support recreational cycling, by providing connections to the important trails in Meaford, such as the Georgian Trail and the Tom Thompson Trail.

There are other forms are active mobility beyond walking and cycling. All are valid and need to be considered in the planning and design of active transportation infrastructure. These include wheelchairs, hand bicycles, tricycles, mobility scooters, kick scooters, skateboards, rollerblades and more.

Potential pro ects, strategies and policies include:

- Identify and prioritize infilling sidewalk gaps (to be completed as part of this TMP).
- Retrofit sidewalks and sidewalk ramps to meet AODA standards.
- Adopt a new policy that all municipal streets within the urban settlement area are to be upgraded with sidewalks on at least one side and identify the conditions where sidewalks should be considered on both sides of the street.
- Investigate Sykes St pedestrian crossovers at:
    - Coleman St,
    - Boucher St,
    - Parker St,
    - Bayfield St,
    - Grandview Dr, and
    - Ridge Rd.

  Some of these locations overlap with road constraint locations and may be candidates for other intersection treatments.
- Investigate Nelson St pedestrian crossovers at:
    - Noble St, and
    - Thompson St

  Some of these locations overlap with road constraint locations and may be candidates for other intersection treatments.
- Identify a cycling network (to be completed as part of this TMP).
- Adopt OTM policy that paved shoulders be constructed on cycling routes with an AADT higher than 700 vehicles.
- Adopt a new policy that commercial developments provide bicycle parking or incorporate bicycle parking into design guidelines.

- Invest in bicycle parking in urban Meaford.

Regional transit should be supported

Public transit has not historically been a meaningful method of travelling around Meaford. However, it can play an important role in improving accessibility and mobility for those without access to private cars, which are stated goals and objectives of the TMP. Grey County is planning a new transit service with the Grey Transit Route initiative. Details are limited at the current time.

Potential pro ects, strategies and policies include:

- Support Grey Transit Route:
    - Support the first and last mile of transit trips through initiatives such as sidewalk connections, parking areas, bicycle storage, etc.

4.2 Goods Movement

The rural road network needs to support agricultural economy

The agricultural sector is a major component of Meaford's economy and needs a functional and efficient road network to provide access for equipment and goods movement.

Concerns have been raised by the public and stakeholders that rehabilitation and repair to the rural roads is falling behind, causing increased trip distances as detours are sought, additional wear and tear on vehicles and the loss of products due to tip-over incidents. The agricultural community has raised concern that the economic output that is supported to the rural road network should be a factor in the decision-making process to prioritize rehabilitation and repair work.

Farming operations also make use of the road network to move agricultural equipment. While heavy farm equipment can be a road hazard, generally, equipment movement is handled responsibly by farmers during daylight hours, avoiding busy roads where possible, and without undue delays to background traffic.

There are also growing agri-tourism and retail operations in Meaford, which should be supported. Wineries, cideries and other farm-based retail operations need safe, attractive and convenience access to attract visitors and customers. Paved roads may assist in attracting customers to these businesses and should be considered where warranted.

A data-driven approach is needed to ensure key economic factors are integrated into the framework for prioritizing projects, a shift to an approach that more fairly balances the needs of the rural and agricultural communities with those of the urban area.

Potential pro ects, strategies and policies include:

- Adjust maintenance and upgrade priorities using a data-driven approach and warrants, considering economic output.
- Upgrade Side Road 8 and Concession Rd 2 N to complete the "paved loop" through rural Meaford north of Highway 26. (Strategy also identified in under 4.1 Mobility.)
- Construct new east-west route connecting Thornbury with Owen Sound, aligned between midway between County Road 40 and Highway 26. (Strategy also identified in under 4.1 Mobility.)
- Develop a paved shoulder policy that accounts for the movement of oversized agricultural equipment. (Potentially complements paved shoulder policy identified under 4.1 Mobility.)
- Consider bylaw restricting equipment movement to daytime hours.

Better manage truck movements

Goods movement, with associated heavy trucks, is a key part of the economy and the trucking industry should be supported. Some concerns have been raised by the public and stakeholders about heavy trucks operating through downtown Meaford as they create noise, vibration, and safety concerns. Other concerns have been noted of through trucks taking shortcuts on Meaford's municipal roads.

Meaford does not have a designated goods movement network but operates a load-restriction system on most municipal roads. Off of municipal roads, the provincial and county road networks act as the de facto network for goods movement.

Highway 26 is a logical primary route between communities east and west of Meaford, however, it becomes a Connecting Link through downtown (as Sykes Street). This naturally routes commercial vehicle through the areas of Meaford with the highest density and where pedestrians and cyclists are found in higher numbers.

A review of the County road network shows that the main alternatives to Highway 26 through Meaford are Grey County Road 40 (east-west) and Grey County Road 12 (north-south) but County Road 40 in particular is quite far south of Meaford. As few alternatives exist, there is a need to consider alternatives for through traffic and trucks coming from Owen Sound or Collingwood areas passing through urban Meaford as truck traffic continues to grow.

Potential pro ects, strategies and policies include:

- Construct truck bypass route to remove through traffic from Downtown Meaford. (Strategy also identified in under 4.1 Mobility.)

- Identify primary heavy truck routes (to be completed as part of this TMP).
- Upgrade municipal roads on identified truck routes to better serve heavy trucks.
- Develop a road classification system and define the characteristics of typical streets in the classification system (speed, surface types, urban vs. rural, maintenance standards, operations and maintenance LOS, etc.) (to be completed as part of this TMP) and review road connectivity against County roads and adjacent municipal roads.
- Consider changes to load restriction bylaw such as a more general truck restriction bylaw.
- Work with OPP towards increased enforcement of load restriction bylaw.

4.3 Maintenance

Maintain roads to meet business, resident and visitor needs

Road maintenance and rehabilitation are closely tied with the strategies identified under Section 4.1 including support of agricultural industry and goods movement.

Potential pro ects, strategies and policies include:

- Adjust maintenance and upgrade priorities using a data-driven approach and warrants, considering economic output. (Strategy also identified in under 4.2 Goods Movement.)
- Develop a road classification system and define the characteristics of typical streets in the classification system (speed, surface types, urban vs. rural, maintenance standards, operations and maintenance LOS, etc.) (Strategy also identified in under 4.1 Mobility.)

In addition to the above, the Municipality has a backlog of bridge maintenance and rehabilitation as described below.

Bridge and structure renewal need to be prioritized

Several bridges are reaching the end of their lifespan and will require rehabilitation or replacement in order to avoid closure. These represent a significant expense for the Municipality and are at risk of consuming available funds and requiring debt financing. Infrastructure growth needs to be balanced with the demands of maintaining existing infrastructure. Meaford should consider new bridge types and innovative treatments to reduce short or long-term costs and should consider closing bridges and creating cul-de-sacs where negative impacts can be minimized. This action would be considered under detailed

review and in specific circumstances. Environmental Assessments and consultation with residents may be required.

Potential pro ects, strategies and policies include:

- Develop and apply a streamlined process to prioritize investment in bridge and structure replacement based on risk.

4.4 Safety

Speeding is a ma or concern

Improving road safety has been a long-term yet growing priority among Ontario municipalities including Meaford. Speeding has been flagged by the public and stakeholders as a major concern. The relationship between speeds and severity of collisions has been well established, particularly for vulnerable road users (i.e. pedestrians and cyclists). Enforcement of speeding is constrained by the availability of OPP officer time and budget. While enforcement continues to be a key tool, there are other strategies such as traffic calming and design standards that can encourage lower speeds.

Traffic calming includes applications such as speed bumps, raised crosswalks, chicanes and other diversions, and narrow traffic lanes which communicate with and force drivers to travel at safer speeds, which improves safety outcomes for all road users. In rural areas, speed control and traffic calming typically means defining transition areas that clearly signal to drivers that they are entering populated areas or areas with mixed traffic (i.e. road cyclists) and to reduce their speed to limit potential conflicts. While effective tools, traffic calming is expensive to implement, can be counter-productive (e.g. increasing accidents, or affecting emergency response times), and must be studied on a case-by-case basis. It should be noted that traffic calming can also help address occurrence of cut-through traffic.

Interim Traffic Calming Measures were presented to Meaford Council in June 2020. The TMP will review and build upon that to improve the process of implementing traffic calming elements.

Potential pro ects, strategies and policies include:

- Develop a traffic calming policy and process to guide the installation of traffic calming elements in a transparent and systemic manner (to be completed as part of this TMP).
- Implement speed controls, safety infrastructure, reconstruction, and/or pedestrian infrastructure at select locations known to be a concern:
    - Pearson St and Ridge Rd,
    - Miller Street (east of Pearson St),

  - St. Vincent St,
  - Grandview Dr and Lakeshore Rd,
  - Aiken St and Grant Ave, and
  - The area of Centre St, Union St and Louisa St
- Identify guidelines for determining appropriate posted speed limits and identify locations where posted speed limits can be effectively lowered (to be completed as part of this TMP).
- Review best practices and warrants for identifying community safety zones (to be completed as part of this TMP).
- Develop guidelines for installing roadside safety devices (to be completed as part of this TMP).

Safety improvements are needed at intersections

The municipal road network has intersections and geometries that were constructed in decades past when road design standards were lower. It is not financially feasible to address all locations, even looking through to the 2045 horizon. Safety concerns are regularly raised to Meaford Council and staff and have been submitted through the TMP engagement process. Several intersections with irregular configurations or sightline issues have been identified. Modifications to these intersections will help improve traffic flow and road safety. Consideration for roundabouts at new or upgraded intersections should be given. Roundabouts typically reduce severe and injury collisions though collision numbers can increase.

Potential pro ects, strategies and policies include:

- Collect 5-year collision data on bi-annual basis to identify problem locations.
- Undertake a municipality-wide safety study to prioritize intersections for treatment based on collision history.
- Implement roundabouts as an alternative to signals, as they can encourage slower speeds and signal entry to urban areas.
- Undertake a traffic safety reviews at S Sykes St & St. Vincent St and conduct preliminary roundabout analysis to determine if a roundabout is a preferred alternative to existing traffic signals. If preferred, construct a roundabout at the intersection of S Sykes St & St. Vincent St to create a gateway to urban Meaford, slowing speeds, improving intersection safety and providing a clear indicator to drivers that the function of the road is changing.

- Study problem intersections and corridors for potential modifications to traffic flow through closing segments or creating one-way segments. Preliminary locations identified include:
  - Convert Berry Street to one-way operation to remove sightline issues.
  - Convert Miller Street to one-way operation and re-purpose remaining space for safety improvements (i.e. sidewalks, guiderails).
  - Close Coleman Street east of Sykes Street to restrict unsafe movements.
- Conduct sight distance reviews at the following locations:
  - Berry St & S Sykes St,
  - Ford Ave & N Sykes St,
  - Sideroad 22 & Concession Rd 6, and

4.5 New Technology

Monitor emerging technologies and support electric vehicles

The need for being nimble and adaptable is an important trait for a municipality in an age of rapid technological change. Some of the most impactful trends in mobility recently have been driven by digital technology advancements that support automated, electric, connected, and shared transportation options. While many of these advancements have focused on large, dense urban centres, they also provide new opportunities for Meaford to move toward its vision for sustainable mobility.

Potential pro ects, strategies and policies include:

- Work with Grey County to investigate the feasibility an on-demand transit service for local trips leveraging modern trip-booking, dispatching and payment processing technologies.
- Pilot the deployment automated vehicle as an upgrade to Meaford Moves+ mobility service.
- Install electric vehicle charging stations to support local EV usage and welcome tourists using EVs.

5 Preliminary Solutions

The Municipal Class Environmental Assessment master plan process requires identifying and evaluating alternative planning solutions from a high level, considering the various trade-offs and network impacts that occur across a broader geography. For the Meaford TMP, preliminary planning solutions were developed by building on the various potential strategies outlined in Section 4. These represent possible approaches to address the needs and opportunities outlined above.

Three preliminary planning solutions have been identified:

1. **Maintain existing infrastructure:** A minimum-cost approach that maintains the existing transportation assets and avoids the cost of any new significant infrastructure. Minor operational improvements, new policy directions and travel demand management measures are included under this planning solution.
2. **Improve the road network:** Focus investment on growing and upgrading the road network. Widen roads where traffic growth becomes an issue and construct new roads such as the downtown bypass and the new east-west connection in southern Meaford. Additional focus would entail upgrading rural roads to a higher standard, paving gravel roads and accelerating bridge rehabilitation work.
3. **Invest in active transportation:** Focus on growing active transportation and transit usage through infrastructure investment and travel demand management policies. Construct on-street cycling facilities in the urban area, paved shoulders in the rural area and expand the off-street trail network. Complete the sidewalk network in the urban area, including a focus on providing first and last mile connections to transit stops.

These preliminary solutions will be refined and evaluated in the next step of the TMP study. This is detailed in the Alternative Solutions report, where a preferred solution is identified.

6 Summary and Next Steps

This document forms the second of four major deliverables in the development of the Meaford Transportation Master Plan. It builds on the Existing Conditions report and incorporates the first round of public and stakeholder input. Through an examination of projected future conditions and the development of the TMP's vision and specific objectives, needs and opportunities were identified that the TMP should address. They are as follows:

- Adapting the road network to accommodate growth;
- Supporting active transportation as a community health objective;
- Supporting regional transit initiatives;
- Improving the rural road network to better support the agricultural economy;
- Improving management of truck movements;
- Improving maintenance practices;
- Prioritizing bridge and structure renewal;
- Addressing speeding concerns;
- Improving safety at intersections; and
- Monitoring emerging transportation technologies.

Responding to these needs and opportunities, a wide range of potential strategies were developed that support the TMP's vision and goals. These were grouped into themes as follows:

- **Mobility:** Strategies to provide enhanced travel choice and connections within Meaford (e.g. new sidewalks, upgraded pedestrian crossings, new cycling routes, new or upgraded roads, operational upgrades) to accommodate growth and tourism.
- **Goods movement**: Strategies to maintain and improve the rural road network (e.g. rural paved loop, new east-west connection) and to reduce the adverse impacts of trucks (e.g. downtown bypass).
- **Maintenance:** Strategies to improve maintenance and operations practices for roads and bridges.
- **Safety:** Strategies to address speeding concerns (e.g. traffic calming) and other safety needs (e.g. roadside safety devices, intersection reviews).
- **New technology:** Strategies to leverage new technologies, (e.g. new service providers, transit-on-demand, electric vehicles and connected and autonomous vehicles).

Among these, several key potential initiatives were identified to be further explored in subsequent phases of the study:

- Undertake a core area traffic study,
- Upgrade rural roads to better support increased year-round traffic, the agricultural industry and goods movements, including a “paved loop”, new east-west road, and downtown truck bypass;
- Implement intersection improvements through operational changes, safety reviews, and roundabout construction; and
- Proceed with key tasks under the scope of this TMP, including development of pedestrian and cycling network, goods movement strategy and traffic calming policy.

The next step in the study is to develop an evaluation framework and assess the preliminary planning solutions developed to address these needs and opportunities. The planning alternatives will be assessed against the vision and goals of the study as well as environmental assessment criteria in order to identify the preferred solution. Recommendations for infrastructure, policies and strategies will be refined, forming the ultimate Transportation Master Plan based on the preferred solution.

Appendix A – Plan and Policy Excerpts

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Appendix A: Plan and Policy Excerpts

The following vision statements, goals, objectives and other passages were influential in the development of the Meaford TMP's vision and goals.

Meaford TMP Re uest for Proposals

- The goal will be to develop and enhance the transportation network to help establish the Municipality of Meaford as a leader in: building, preserving and enhancing livable communities; economic development; tourism; sustainable transportation practices; and the emerging shared economy.

Meaford Official Plan

- **A2.6.1 Goal:** It is a goal of this Plan to ensure that all infrastructure, including […] pedestrian and cycling supportive facilities and roads meet the needs of present and future residents and businesses.
- **A2.6.1 Strategic Ob ective 3:** To encourage the establishment of an integrated transportation system that safely and efficiently accommodates various modes of transportation including walking, cycling, other human-powered modes, automobiles and trucks.
- **A2.9.2 Strategic Ob ective 7:** To encourage reductions in the use of private automobiles by promoting active transportation and the use of Transportation Demand Management measures, such as public transit, cycling and walking.
- **D2.1 Transportation Ob ectives:** It is the intent of this Plan to:
  - facilitate the movement of both people and goods to and from the various communities within the Municipality and to and from adjacent municipalities.
  - provide for facilities that support active transportation within the Municipality of Meaford
- **D2.6.1 Active & Alternative Transportation Ob ectives:**
  - To recognize that public safety and security must be encouraged in the planning and design of sidewalks and walkways
  - To ensure that that the design of transportation facilities considers the need to provide safe, convenient and attractive sidewalks and walkways.
  - To design roads that ensure the safety of all users.
  - To develop a connected system of regional trails and bike-friendly streets/lanes/paths to permit linkages between municipalities.

Meaford Council Strategic Priorities 2019-2022

- **Vision:** THE place to be on Southern Georgian Bay.
- **Mission:** Provide leadership and effective governance in the delivery of quality, sustainable services.
- **Values:** Respect – Inclusive, Open and Empathetic, Integrity – Honest, Ethical and Accountable, Community – Common Good, Resilient and Authentic
- **Strategic Focus Areas:**
  - Ensuring Sustainability
  - Growing our Economy
  - Investing in Infrastructure
  - Strengthening our Community

Sustainable Meaford

- **Goal:** Develop an accessible, efficient, integrated, multi-modal transportation network.
- **Goal:** Ensure Meaford's municipal transportation system is environmentally and economically responsible
- **Goal:** Create a multi-modal transportation network which strongly supports active transportation and the ages and abilities of all residents to promote a healthy community

Grey County Official Plan

- **Move Grey** considers how we move people, goods, and information into, out of, and through the County. Grey County is a large area and moving around the County can be a challenge. We need to ensure that we have the transportation, services, and technology in place to support the needs of our residents, tourists, and businesses, so we can grow and thrive.

Grey County Transportation Master Plan

- **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).

Grey County Council Strategic Plan 2017-2019

- **Vision:** To be the place where people feel genuinely at home and naturally inspired - enjoying an exceptional blend of active healthy living and economic opportunity.
- **Goal 2 – Support Healthy, Connected Communities:** Improve the physical, operational and virtual connections between Grey County's municipalities and areas beyond to strengthen communities and improve the quality of life for residents.

Appendix B – Traffic Generation Estimates

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Appendix B – Traffic Generation Estimates

Appendix B.1: Proposed Development Trip Generation Estimates by Development Phasing and Traffic Peak Hour

ID	Pro ect Name	Phasing	Trip Rates			Trips		
			AM	PM	SAT	AM	PM	SAT
1	18 Boucher Street West	Short	0.47 / room	0.60 / room	0.72 / room	3	4	4
2	Cook Street	Short	0.46 / unit	0.56 / unit	0.70 / unit	5	6	8
3	Golf Course	Short	0.46 / unit	0.56 / unit	0.70 / unit	18	22	28
4	Meaford Community School	Short	0.46 / unit	0.56 / unit	0.70 / unit	12	15	18
			0.19 / bed (Long Term Care)	0.26 / bed (Long Term Care)	0.27 / bed (Long Term Care)	24	33	35
			0.20 / unit (Seniors Residence)	0.26 / unit (Seniors Residence)	0.33 / unit (Seniors Residence)	24	31	40
5	School	Short	0.67 / student (Elem. School)	0.17 / student (Elem. School)	-	215	55	-
			0.52 / student (Sec. School)	0.14 / student (Sec. School)	0.10 / student (Sec. School)	370	100	71
6	Terrace Wood	Short	0.74 / unit	0.99 / unit	0.93 / unit	19	26	24
7	Trowbridge Street West Commercial/ Residential	Short	0.46 / unit	0.56 / unit	0.70 / unit	1	1	1
8	Collingwood St	Medium	0.36 / unit	0.44 / unit	0.44 / unit	25	31	31
9	Knights of Meaford	Medium	0.36 / unit	0.44 / unit	0.44 / unit	41	51	51
10	Legion	Medium	0.46 / unit	0.56 / unit	0.70 / unit	28	34	42
11	Loon Call	Medium	0.74 / unit	0.99 / unit	0.93 / unit	155	208	195
12	Golf Course	Long	0.46 / unit	0.56 / unit	0.70 / unit	14	17	22
13	Meaford Haven	Long	0.46 / unit	0.56 / unit	0.70 / unit	184	224	280
14	Nelson Street East (25-39)	Long	0.30 / unit	0.36 / unit	0.86 / unit	14	16	39
15	Sykes St (35-47)	Long	0.30 / unit	0.36 / unit	0.86 / unit	16	19	45
16	Pinehurst	Long	0.74 / unit	0.99 / unit	0.93 / unit	20	27	25
					Short Term	**691**	**293**	**229**
					Medium Term	**249**	**324**	**319**
					Long Term	**248**	**303**	**411**

Appendix B.2 Proposed Development Trip Generation Estimates by Development Phasing and Traffic Peak Hour

ID	Pro ect Name	Phasing	Trip Rates			Trips		
			AM	PM	SAT	AM	PM	SAT
17	Back Forty Glamping	Short	-	-	-	-	12	24
18	Chatsworth Cidery	Short	-	-	-	20	40	N/A
19	Georgian Heights Church	Short	0.33 / 1,000 sq.ft.	0.49 / 1,000 sq.ft.	2.78 / 1,000 sq.ft.	2	2	14
20	Queen's Bush Estates - Phase 2	Short	0.74 / unit	0.99 / unit	0.93 / unit	30	40	37
21	Parkbridge	Short	0.46 / unit	0.56 / unit	0.70 / unit	23	28	35
		Medium	0.46 / unit	0.56 / unit	0.70 / unit	115	140	175
		Long	0.46 / unit	0.56 / unit	0.70 / unit	322	392	490
					Short Term	**75**	**122**	**110**
					Medium Term	**115**	**140**	**175**
					Long Term	**322**	**392**	**490**

Appendix C – Development Details and Assumptions

November 20, 2020

IBI GROUP REPORT
Meaford Transportation Master Plan: Needs and Opportunities
Prepared for Municipality of Meaford

November 20, 2020

Appendix C – Development Details and Traffic Impacts

Exhibit C.6.1: Proposed Development Details and Assumptions in Meaford as of February 2020

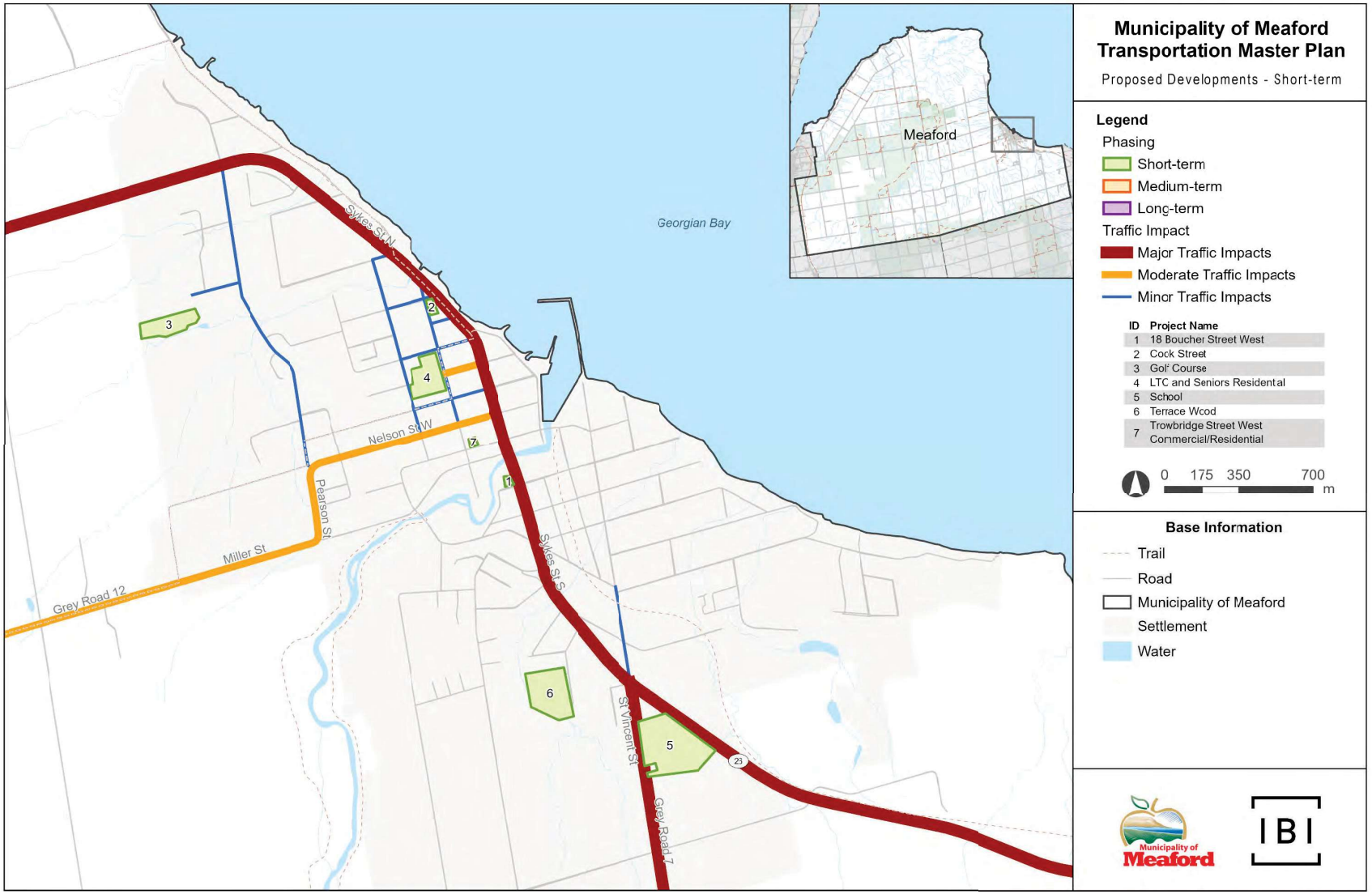
ID	Pro ect Name	Status	Res. Units	Phasing	Area	Pro ect Description
1	18 Boucher Street West	Awaiting Site Plan		Short	Urban	6-unit boutique hotel
2	Cook Street	Awaiting Site Plan	11	Short	Urban	Residential development
3	Golf Course	Site Plan Approved (In Construction)	40	Short	Urban	Residential development
4	Meaford Community School	Pre-consultation	274	Short	Urban	274-unit seniors care campus
5	School	Site Plan Approved (In Construction)		Short	Urban	Consolidated elementary and secondary school
6	Terrace Wood	Registered (In Construction)	26	Short	Urban	Residential development
7	Trowbridge Street West Commercial/Residential	Site Plan Approved	2	Short	Urban	Mixed-use development with 2 dwelling units and ground floor commercial uses
8	Collingwood St	Pre-consultation (Advertised for sale)	70	Medium	Urban	Residential condominium development
9	Knights of Meaford	Pre-consultation (Advertised for sale)	115	Medium	Urban	Residential development
10	Legion	Pre-consultation (Advertised for sale)	60	Medium	Urban	Residential development
11	Loon Call	Pre-consultation	210	Medium	Urban	Residential development
12	Golf Course	Applications in Progress	31	Long	Urban	Residential development
13	Meaford Haven	Draft Plan Approved (Advertised for sale)	400	Long	Urban	Residential development
14	Nelson Street East (25-39)	Awaiting Site Plan	45	Long	Urban	Mixed-use development with 45 dwelling units and ground floor commercial uses.
15	Sykes Street (35-47)	Awaiting Site Plan	52	Long	Urban	Mixed-use development with 52 dwelling units and ground floor commercial uses.
16	Pinehurst	Unknown	27	Long	Urban	Residential development

ID	Pro ect Name	Status	Res. Units	Phasing	Area	Pro ect Description
17	Back Forty Glamping	Applications in Progress		Short	Rural	8-unit private cabin rental establishment
18	Chatsworth Cidery	Applications in Progress		Short	Rural	On-farm cidery
19	Georgian Heights Church	Applications in Progress		Short	Rural	Shared place of worship and private school
20	Queen's Bush Estates – Phase 2	Registered (In Construction)	43	Short	Rural	Residential development
21	Parkbridge – Phase 1	Pre-consultation (EA in process)	50	Short	Rural	Large-scale residential neighbourhood development
	Parkbridge – Phase 2		250	Medium		
	Parkbridge – Phase 3		700	Long		
22	Plaza Redevelopment	Pre-consultation		Short	Urban	Commercial development
23	Stanley Knights	Pre-consultation		Medium	Urban	n/a
24	Mac-Lads Industrial	Pre-consultation		Medium	Urban	Industrial development
25	142 Susan Street - Tosello	Awaiting Site Plan		Long	Urban	n/a
26	365 Sports	Awaiting Site Plan		Long	Urban	n/a
27	74 Bayfield Street	Pre-consultation (Advertised for sale)		Long	Urban	n/a
28	Mac-Lads Commercial/Industrial Lot	Awaiting Site Plan		Long	Urban	Commercial/industrial development
29	Meaford Highlands Resort	Applications in Progress (Dormant)		Long	Rural	n/a
30	Winery	Applications in Progress		Long	Rural	n/a

Short-term phase = built by 2025 Medium-term phase = built by 2030 Long-term phase = built by 2045.

Note: The Parkbridge development is a ma or pro ect expected to take over 20 years to fully build out. It has been divided into three phases for the purposes of this study.

Short-Term Development Traffic Impacts to Meaford Urban Area



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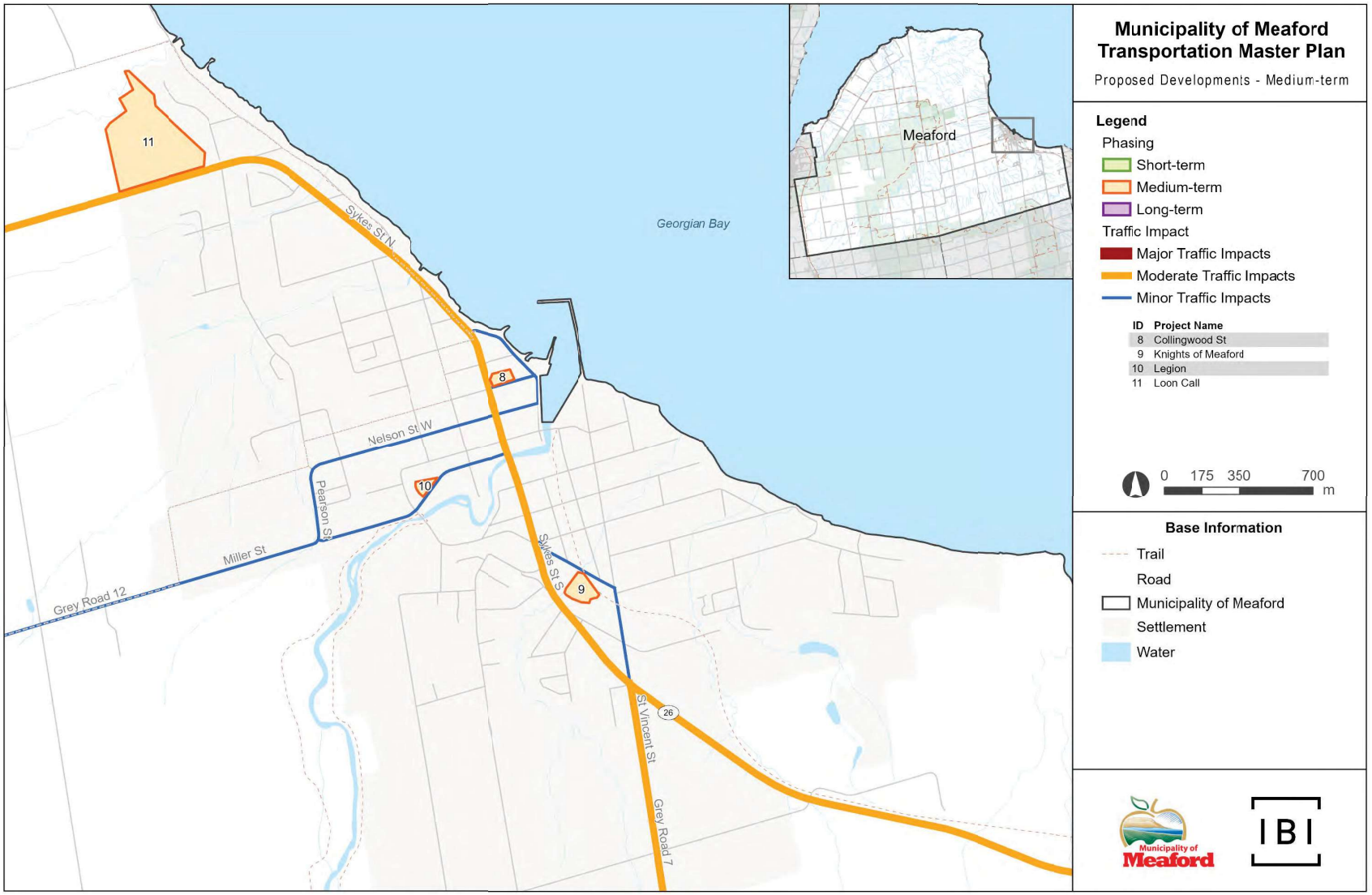
Medium-Term Development Traffic Impacts to Meaford Urban Area



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Long-Term Development Traffic Impacts to Meaford Urban Area