Springwater Transportation Master Plan

Township of Springwater
R.J. Burnside & Associates Limited | April 2025

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L4N 8J6

Distribution List

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2	October 8, 2024	Draft ESR
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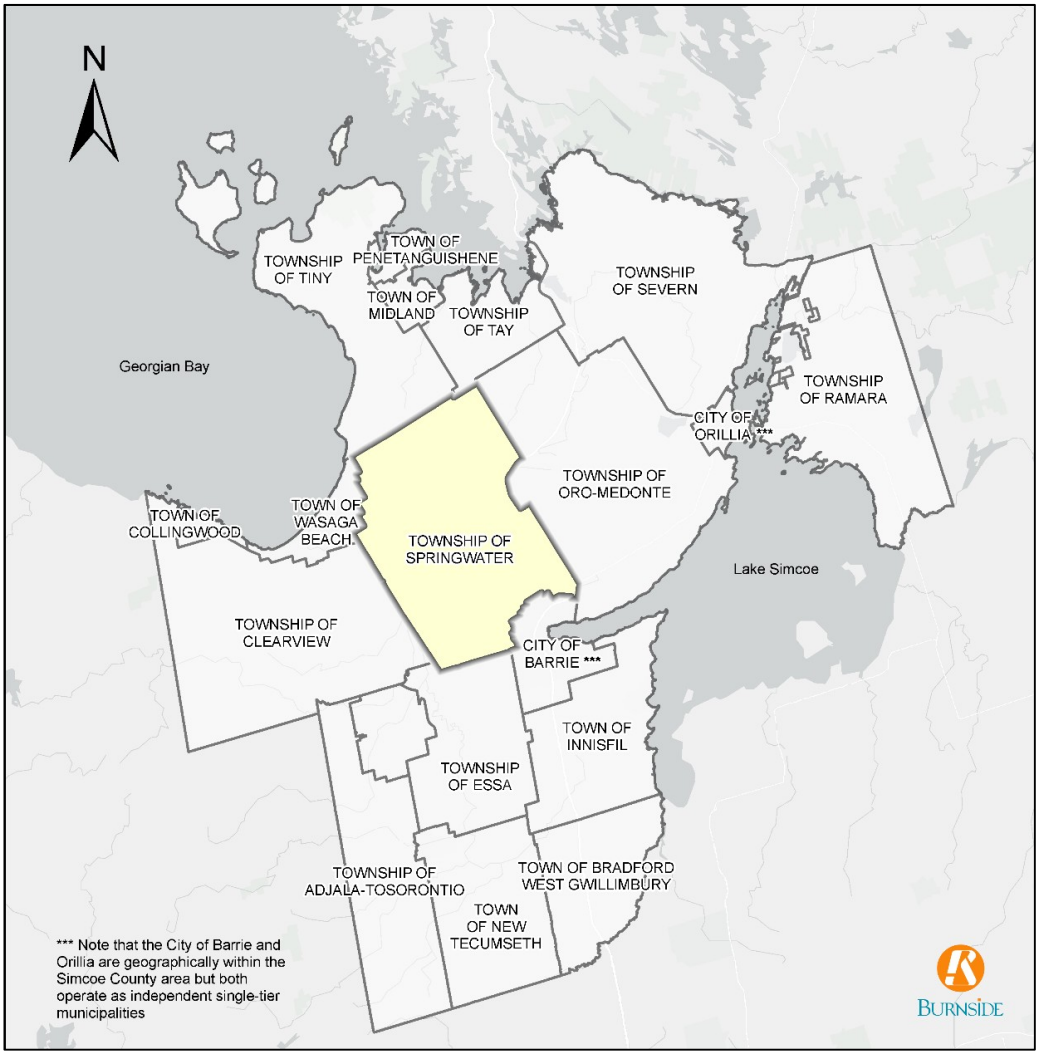
Executive Summary

In August 2023, the Township of Springwater (Township) initiated a Transportation Master Plan (TMP) to address existing and future vehicular, cycling, pedestrian and transit needs within Springwater. The plan is guided by federal policies and commitments to mitigate climate change, provincial policies, infrastructure and services provided by other levels of government, and the inter-relationship between Springwater, its municipal neighbours and the upper tier (Simcoe County). A location map is presented in Figure ES-1 that illustrates the location of the Township and neighbouring municipalities.

Figure ES-1: Township of Springwater Geographic Context



This TMP is a multi-modal strategy for the Township's planned growth in population and employment to the year 2041. The plan was developed with guidance from the

Township and industry “best practices” following the Municipal Class Environmental Assessment (MCEA) process.

A. Engaging Stakeholders

A comprehensive consultation process was undertaken to gather community and stakeholder input within the master plan process. The TMP follows Phases 1 and 2 of the MCEA process (October 2000, as amended in 2007, 2011 & 2015), including a public consultation component.

The scope of the study followed Section 2.7 (Master Plans) in the Municipal Class EA guidelines, following Master Plan Approach #1. The following summarizes the public announcements and opportunities for public and agency input and participation in the study:

- Notice of Study Commencement on August 16, 2023.
- Publishing in the local newspaper August 16, 2023.
- Public and social media posts August 16, 2023.
- Public meeting activities to survey travel behaviour, needs, issues and priorities.
- Updates and references to the study through the Township of Springwater website at: https://www.springwater.ca/en/living-here/transportation-master-plan.aspx.
- Two public open houses, held in person on December 7, 2023, and June 25, 2024. Public open house materials can be found in Appendix A.
- Consultation with identified Indigenous Communities: Chippewas of Rama First Nation, Chippewas of Georgina Island First Nation, Beausoleil First Nation, Huron-Wendat Nation, Métis Nation and Willams Treaties First Nation Coordinator.
- Two Technical Agencies Committee (TAC) meetings with Township staff and external stakeholders were held on October 5, 2023, and June 5, 2024.

B. Recognizing the Environmental Context

The Township of Springwater is home to forests, wildlife, geological formations, farms, mineral and water resources. Transportation strategies were developed and evaluated considering natural heritage features as environmental assets, including Areas of Natural and Scientific Interest (ANSI), significant wetlands, woodlands and valleylands, habitat for wildlife, fish and species at risk and source water protection areas.

The Transportation Master Plan was developed recognizing the need to protect Springwater’s cultural environment including 15 designated properties and 13 listed properties.

C. Establishing the Current Transportation Needs

The Township of Springwater's existing transportation network includes Provincial highways, County roads and Township roads, cycling routes, trails, paved shoulders, sidewalks and transit serviced by Simcoe County.

A review of existing travel conditions indicated that the Township's Road network is operating well with excess capacity and low delays with the exception of the following:

- Highway 26 (Bayfield Street) between Spence Avenue and Barrie.
- Highway 26 (Bayfield Street) and Glen Echo Drive.
- Highway 26 (Bayfield Street) and Spence Avenue.

A collision review was undertaken based on data collected over the last 5-years. Although intersections and road segments did not experience a significant number of collisions, several "hot spot" locations were identified where opportunities for safety and operational improvements were identified.

The Township's active transportation network consists primarily of off-road recreational trails and paved shoulders along County of Simcoe roads. Sidewalk infrastructure is present in the urban settlement areas.

The Township does not operate a local transit service and there are no GO Transit connections to Springwater. Transit availability in the Township is limited to the Penetanguishene / Midland to Barrie (Route 1) LINX bus operated by Simcoe County. Existing LINX transit routes are further supported by the County-operated LINX PLUS+ specialized transit system, which is pre-arranged door-to-door and / or service to and from fixed transit routes.

Other forms of transportation include air and rail. There is one airport within the Township's boundary, the Springwater (Barrie Airpark) Aerodrome, which mainly services small recreational aircrafts and one Canadian Pacific (CP) freight rail corridors.

D. Assessing Growth and Mobility Opportunities

In 2018, the Township of Springwater completed a Growth Management Strategy (GMS) as part of its Official Plan review process, following the direction of the Provincial Planning Statement (PPS, 2024) to centralize growth and development. The GMS forecasts Springwater's population to double from 21,701 people in 2021 (Census) to approximately 45,860 people by 2041. The Township's employment is estimated to grow from approximately 6,730 jobs to 8,360 jobs in 2041.

The allocation of growth between settlement areas is determined by the Township. The major communities of Midhurst and Elmvale are intended to accommodate the majority of the population and employment growth to 2041.

E. Defining a Policy Direction and TMP Vision

The Springwater Transportation Master Plan builds upon and implements the existing policy framework provided by several Provincial planning policies. The Provincial Planning Statement (PPS, 2024) provides specific direction for the planning and development of trails and other public lands supporting health active communities, support of a multi-modal transportation system and identifies the need for connectivity in transportation systems. It is the Township's Official Plan objective to provide for safe and efficient movement of people of all ages and abilities.

The vision statement was developed with the supporting policy framework in mind and is as follows:

> ***"The Township of Springwater transportation system strives to facilitate safe and efficient movement of people, traffic and goods to and from communities, through long-range planning of transportation infrastructure improvements to 2041 that addresses current needs, growth, the environment, and natural heritage."***

F. Evaluating Planning Alternatives

Planning alternatives were developed in accordance with Phase 2 of the Environmental Assessment process to address growth needs and support the transportation vision for the Township. In addition to the "Do Nothing" or "Business-As-Usual" (BAU) alternative, which incorporates previously planned improvements identified from County and Township plans and capital budgets, four planning alternatives were identified below:

1. **Roads Focused**: This alternative focusses on investing in new road infrastructure, road widenings and intersection improvements with the goal of alleviating auto congestion and providing residents with better access to the higher order road network, such as highways and major arterials.

2. **Active Transportation Focused**: This alternative focusses on implementing proposed active transportation improvements that provide safer, dedicated infrastructure to key areas within the Township and enhanced walking and cycling connectivity throughout.

3. **Transit Focused**: This alternative focusses on implementing proposed transit improvements that provide better local service and connections to inter-regional transit services.

4. **Combination of All**: This alternative is a combination of all proposed roads, active transportation and transit improvements.

The evaluation of these alternatives was conducted based on criteria related to transportation service, transportation equity, supporting Township objectives, environmental impact, and cost. These criteria were presented at the second public open house and Technical Agency Committee (TAC) meetings.

G. Recommended Transportation Strategy

An assessment of the alternative strategies based on established criteria indicates that **Alternative 4 – Combination of All** is the preferred strategy. This scenario proposes a transportation network that focuses on road improvements and the development of active transportation infrastructure and transit service along key corridors. Along with transportation infrastructure improvements, the preferred strategy is supported by operational policies, studies and Township-initiated actions related to all modes as well as goods movement and emerging technologies. This multi-modal transportation network is anticipated to accommodate the planned population and employment growth within the Township of Springwater, promote economic development and Township priorities, while supporting climate change objectives. Any impacts to environmental features are expected to be minimized through future studies.

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1.0 Introduction

1.1 Study Purpose

The Transportation Master Plan (TMP) was developed with the guidance of the Township of Springwater (Township) planning documents and industry "best practices" to provide policies and strategies that will guide the Township's transportation network to the year 2041. The primary objectives of the TMP are to:

- Provide safe and efficient traffic flow for people and goods from various communities consistent with road patterns.
- Facilitate long-range planning of transportation infrastructure improvements and enhancements.
- Identify the interventions necessary to accommodate growth to 2041.
- Satisfy Phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA) process.

1.2 Study Approach

This study was carried out through an open public process as a Master Plan study under the *Environmental Assessment Act* to serve as direct input to any subsequent MCEA studies that may be deemed appropriate. The scope of the study followed Section 2.7 (Master Plans) in the MCEA guidelines, following Master Plan Approach #1. The TMP further provides the basis of approval for 'Exempt' MCEA studies.

It will also provide the needs and justification of subsequent Schedule B (Phases 1 and 2) and Schedule C (Phases 1 through 4) MCEAs. The TMP will inform future Official Plan updates. It may identify transportation targets, network strategies, new infrastructure, and policies affecting transportation and urban form (e.g., complete streets treatments in centres).

1.3 Stakeholder Engagement

Consultation is an important part of the MCEA process to ensure that anyone with an interest in the project has an opportunity to provide input into the decision-making process.

The key features of the consultation and engagement process include:

- Identifying key Stakeholders, agencies and other interested or potentially affected parties that need to be consulted during the MCEA Study.
- Notifying key Stakeholders, agencies and other interested or potentially affected parties of the study at key points of the MCEA process.

- Engaging key Stakeholders, agencies and other interested or potentially affected parties at key points of the MCEA process to gather input and help inform key decision making.
- Responding to inquiries or comments in an efficient and timely manner.

1.3.1 Identification of Interest Groups

A Project Contact List was developed as a mailing list to distribute project Notices. The Project Contact List consisted of technical and provincial agencies, municipalities and utilities, local interest groups, developers, businesses and Indigenous communities that may have an interest in the project. Throughout the TMP process, the Project Contact List was used to maintain contact information for interested stakeholders, as well as to summarize comments received about the project and related responses. A copy of the Project Contact List is provided in Appendix A. Correspondence with Indigenous communities is provided in Appendix A. Technical Advisory Group correspondence is provided in Appendix A. A copy of general correspondence received from agencies, developers and the public are provided in Appendix A.

1.3.2 Notification

The Schedule C MCEA requirements include mandatory public points of contact during the MCEA process. The mandatory points of contact for this project included a Notice of Commencement, Notice of Public Information Centre (PIC) and a Notice of Completion. An additional point of contact was provided through PIC#2 to present the preferred design concepts and obtain input from interested stakeholders.

Project Notices were published in the local newspaper, the Springwater Link Newsletter, that was directly mailed and emailed to subscribed residents in the Township. Notices were also emailed or mailed to those on the Project Contact List, published on a project webpage on the Township website, and on Township social media channels.

The Notice of Commencement for the Project was advertised in the Springwater Link Newsletter on August 16, 2023.

The Notice for the PIC#1 inviting public input from December 7, 2023, to January 22, 2024, was advertised in the Springwater Link Newsletter on November 23, 2023, and December 7, 2023.

The Notice for the PIC#2 inviting public input from June 26, 2024, to July 25, 2024, was advertised in the Springwater Link Newsletter on June 5, 2024.

Additional methods of notification are described below.

Project Specific Website (https://www.springwater.ca/en/living-here/transportation-master-plan) – The project website posted project notices, project information and opportunities to provide comment.

Social Media – Townships Facebook and Twitter accounts.

A copy of the Notice of Commencement and Notice of PIC#1, and PIC#2 is provided in Appendix A. A Notice of Completion will be published in the Springwater Link Newsletter, the Townships' project specific website and social media accounts as well as mailed / emailed to all on the Project Contact List at the conclusion of the MCEA process for the project.

1.3.3 Consultation and Engagement Activities

1.3.3.1 Indigenous Communities

Ministry of the Environment, Conservation and Parks (MECP) has developed guidance on the steps to rights-based consultation with Indigenous communities. Indigenous communities with a potential interest in the project were identified through correspondence and direction provided by the MECP (correspondence: Chunmei Liu, Regional Environmental Planner, MECP, dated May 16, 2023). A copy of this correspondence with MECP is provided in Appendix A.

Individual letters and the notices were sent by email / mail to Indigenous communities. Follow-up phone calls were made to identified Indigenous communities following the Notice of Commencement to:

- Confirm receipt of Notice.
- Ensure the appropriate contact has been identified.
- Ensure the community is aware of the project and the opportunity to participate.
- Determine the community's level and type of interest in the project and their wish for further engagement.
- Confirm the community's preferred methods to communicate project information.

A summary of communication with identified Indigenous communities was maintained by Burnside on the Project Contact List and is summarized in Appendix A.

1.3.3.2 Public

Two PICs were conducted throughout the TMP study. Visualization techniques (AODA compliant) were employed including presentation of display materials and illustrated project conditions using maps, tables, photos, etc. An online Comment Form was made available and included questions related to issues and suggestions for consideration within the Study Area.

The PIC#1 presentation material informed the public of the purpose of the project, provided background information on the existing transportation network, modes of travel, expected growth, the needs, opportunities, and the approach for the TMP.

The PIC#2 presentation material reviewed the approach of the TMP, the feedback received from PIC#1, summarized baseline conditions and assessed the future needs, leading to the proposed alternative strategies with supporting policy recommendations. The conclusion of PIC#2 identified the next steps in the TMP process.

Following each PIC, comments received during the 30-day comment period were summarized in a PIC Summary Report. Where necessary, responses to questions or comments were provided by the method in which they were received or summarized and addressed in the PIC Summary Report. The PIC Summary Reports were then posted to the project specific website.

The comments received during the PIC#1 comment period included the following themes:

- Active Transportation.
- Transit Expansion.
- Safety.

The comments received during the PIC#2 comment period included the following themes:

- Craig Road.
- Alternative Option 4 (Combination of Improvements).
- Transit.
- Connectivity and Safety.

Details of the PICs, along with the comments received, are provided in the PIC Summary Reports available in Appendix A.

1.3.3.3 Technical Advisory Committee

A Technical Advisory Committee (TAC) was formed to engage in proactive consultation with regulatory agencies, provincial ministries, municipalities, utilities and the local conservation authority. A Stakeholder Advisory Group was also intended to be formed comprising of local residents, community groups, and other interested parties. These groups were contacted at the commencement of the study and invited to participate. Based on the level of interest in the study, the stakeholder advisory group was combined with the technical advisory group to form only one advisory group for the project known as the TAC. Membership of the TAC consisted of representatives from:

- City of Barrie.
- Township of Oro-Medonte.

- Township of Springwater.
- County of Simcoe.
- Nottawasaga Valley Conservation Authority.
- Simcoe Muskoka District Health Unit.

TAC meetings were held to gather input on the project, discuss issues / concerns and inform members of the technical details at various decision-making points throughout the Environmental Assessment (EA) process. Two TAC meetings were scheduled in advance of each of the PICs to obtain input from participants on the project information. Copies of the minutes of meetings are provided in Appendix A.

2.0 Study Context

2.1 Environmental Context

Environmental features, protected properties, and natural features within the Township of Springwater have been identified based on a review of available provincial, County and municipal databases. Key elements are summarized in the following sections.

2.1.1 Protected Properties

Protected properties are properties with public ownership that are protected for the purposes of conservation and nature-based recreation. The Minesing wetlands, Edenvale, Fort Willow, and Springwater Provincial Park, along with Crown Land properties are identified as protected property or conservation areas in the Township of Springwater.

2.1.2 Natural Heritage System

The Township of Springwater is subject to a variety of land use plans and policies that shape how transportation systems are to be developed within and around natural features. The Provincial Planning Statement (PPS, 2024), Lake Simcoe Protection Plan, and Township and County Official Plans all include policies to protect significant natural features, including the following:

- Provincially Significant Wetlands.
- Coastal Wetlands.
- Significant Woodlands.
- Significant Valleylands.
- Significant Wildlife Habitat.
- Significant Areas of Natural and Scientific Interest (ANSIs).
- Fish Habitat.
- Habitat of Endangered and Threatened Species.

With respect to lands within the Lake Simcoe Protection Plan, natural areas abutting Lake Simcoe are also protected. In the Township of Springwater, the Lake Simcoe Region Conservation Authority (LSRCA) has jurisdiction over hazard lands within a very limited section in the southeast corner of the Township, northwest of Barrie adjacent to County Road 40 (Sunnidale Road). The much larger majority of the Township of Springwater is under the jurisdiction of the Nottawasaga Valley Conservation Authority (NVCA).

Although policies exist to protect these features, not all features have been identified. For example, habitats of species-at-risk (SAR) are not always known. However, the majority of the listed features are protected within Natural Heritage Systems (NHS)

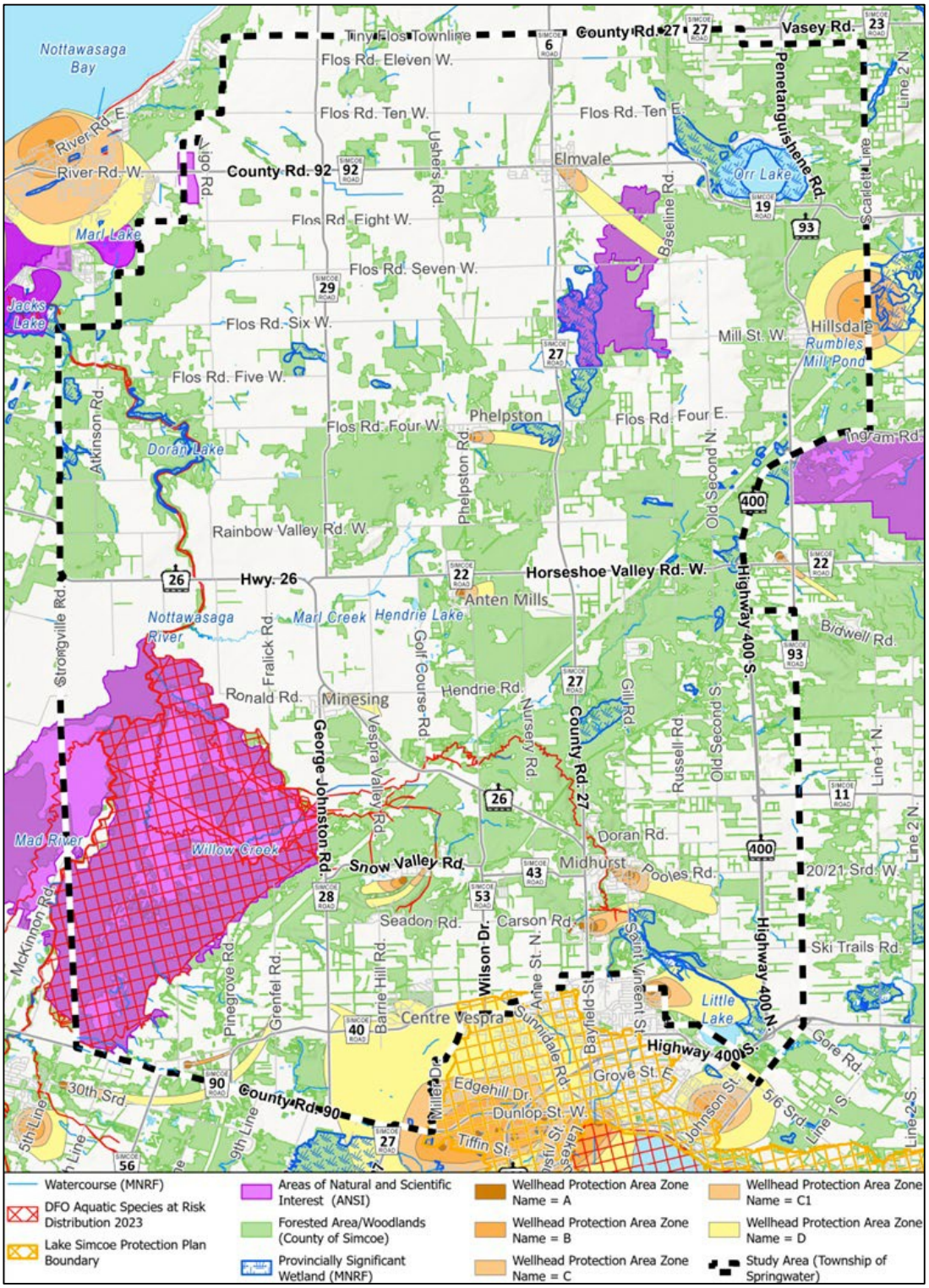
identified through the various provincial plans and upper and lower tier municipal Official Plans. The NHS is a network of interconnected natural features designed to identify and protect features at the landscape scale. The various NHSs developed under provincial and municipal plans are intended to protect the significant natural features listed above, even where all have not been specifically identified.

Figure 2-1 illustrates the following NHSs:

- Natural Heritage System.
- Lake Simcoe Protection Plan Area.
- Township of Springwater Official Plan Schedule A1, Schedule A2, Schedule A3, Schedule B, and Schedule E.

Note that the Core Areas of the Greenlands System are not depicted on the map but can be found in the County's Official Plan.

Figure 2-1: Natural Heritage System



Most of the Township's Natural Heritage policies and mapping mirror that of the various other provincial plans. The Springwater Official Plan schedules identify the following land use designations: Natural Heritage (EP category 1 and 2), Woodlots (>30 ha), Water bodies, constraint and hazard lands, greenbelt, ANSI, evaluated wetlands, and special policy areas.

2.1.3 Wetlands

The Province of Ontario identifies wetlands that have been evaluated using the Ontario Wetland Evaluation System as provincially significant or non-provincially significant, as well as wetlands that have not been evaluated, but have been mapped using other procedures. Wetlands are protected through policies of the various provincial plans and Official Plans in effect. Wetlands are also regulated through the Development, Interference with Wetlands, and Alterations to Shorelines and Watercourses Regulations administered by conservation authorities.

Provincially Significant Wetlands and other wetlands that have been mapped by the province are illustrated in Figure 2-1. Development is regulated within 120 m of a Provincially Significant Wetland or 30 m of all other wetlands.

2.1.4 Significant Woodlands

The Township of Springwater Significant Woodlands are identified on Figure 2-1. The Township's Official Plan states that Significant Woodlands may be determined by the Township in accordance with the evaluation procedures recommended in the Ministry of Natural Resources and Forestry Natural Heritage Reference Manual or other Provincial Guidelines.

Woodlands include treed areas, woodlots, or forested areas and vary in their level of significance at the local, regional, and provincial levels. Woodlands may be delineated according to the *Forestry Act* definition or the Province's Ecological Land Classification system definition for "forest". The delineation of the woodlot area to be protected and the mitigative measures required, if applicable, shall be based on an evaluation of the ecological importance and function of the feature with regard to its size and form, health and quality, species composition and diversity, areas of core habitat, history of use, including presence or absence of areas of plantation, and the presence of rare or endangered species.

Within settlement areas, development may be permitted within 120 m of and within significant woodlands subject to the completion of an Environmental Impact Study (EIS) to the satisfaction of the Township and applicable approval and commenting agencies. The EIS shall demonstrate that the proposal will not negatively impact the woodland and its ecological functions.

2.1.5 Significant Valleylands

The Province of Ontario identifies Significant Valleylands as a valleyland which is ecologically important in terms of features, functions, representation, or amount, and contributing to the quality and diversity of an identifiable geographic area or natural heritage system. Significant Valleylands within the Township are identified as Significant Ravines and Watercourses as part of the Township's Natural Heritage System. Significant Ravines and Watercourses are to be kept in as natural a state as possible and not developed. A minimum setback distance of 20 m from the top of a watercourse or ravine bank is required for all buildings or structures in the Township without a satisfactory geotechnical investigation and consideration by the municipality. Significant Ravines and Watercourses are illustrated on Figure 2-1.

2.1.6 Significant Wildlife Habitat

Significant Wildlife Habitat within the Township are areas identified by the Ministry of Natural Resources and included as part of the Township's NHS, illustrated on Figure 2-1. It is the policy of the Township's official plan to maintain the biodiversity and integrity of the NHS through the protection and management of significant biologically sensitive wildlife habitat. This is outlined in the official plan as those areas where species concentrate at a vulnerable point in their annual or life cycle, areas which are important to migratory or non-migratory species, rare or specialized habitats, and habitats of species of conservation concern, specifically deer wintering yards, fish spawning and nursery areas, and waterfowl production and staging areas.

Development may be permitted within 50 m of and in significant biologically sensitive wildlife habitat, subject to further evaluation (e.g., the completion of an Environmental Impact Assessment) and agency approval.

2.1.7 Areas of Natural and Scientific Interest (ANSI)

ANSIs are areas of land and water containing unique natural landscapes or features. These features have been scientifically identified by the Province of Ontario as having life or earth science values related to protection, scientific study, or education.

Two Life Science and one Earth Science ANSIs were identified in the Township of Springwater. Life science ANSIs represent biodiversity and natural landscapes. They include specific types of forests, valleys, prairies, wetlands, native plants, native animals, and their supportive environments. Life science ANSIs contain relatively undisturbed vegetation and landforms and their associated species and communities. Earth Science ANSIs are geological in nature and contain significant examples of bedrock, fossils, landforms, or ongoing geological processes. ANSIs of provincial and regional significance present in the Township of Springwater, include:

ANSIs – Life Science:

- Minesing Swamp (Provincial).
- Fergusonvale North (Provincial).

ANSI – Earth Science:

- Langman Farm (Regional).

The locations of these are illustrated in Figure 2-1. Development is not permitted within 30 m of any ANSI.

2.1.8 Fish Habitat

The federal *Fisheries Act, 1985*, as amended in 2019, is administered by Fisheries and Oceans Canada (DFO) and provides protection for fish and fish habitat across Canada.

Section 34.4 of *The Act* states that:

> *No person shall carry on any work, undertaking, or activity other than fishing, that result in the death of fish.*

Section 35 (1) of *The Act* states that:

> *No person shall carry on any work, undertaking, or activity that results in the harmful alteration, disruption, or destruction of fish habitat.*

The Act defines fish habitat as waters frequented by fish and any other areas on which fish depend directly or indirectly to carry out their life processes, including spawning grounds and nursery, rearing, food supply, and migration areas.

Fish habitat is present within the various waterbodies present throughout the Township. Fish habitat, including fish spawning and nursery areas within the Township are identified as part of the Township's NHS, illustrated on Figure 2-1. Construction of new transportation infrastructure and improvements to existing transportation infrastructure that have the potential to impact fish or fish habitat must be constructed and operated in compliance with the federal *Fisheries Act*. If Works will proceed below the annual high-water mark, an assessment of potential impacts to fish and fish habitat is required. Proponents are required to ensure that activities meet the criteria outlined on the Fish and Fish Habitat Protection Program website (http://www.dfompo.gc.ca/indexeng.htm) and are responsible for the implementation of best management practices (i.e., Codes of Practice) into the project design. If the death of a fish by means other than fishing, or the harmful alteration, disruption, or destruction (HADD) of fish habitat will likely result from a project, even following the application of feasible avoidance and mitigation strategies, then DFO review is recommended, and authorization may be required. The proponent responsible for the activities is required to obtain an Authorization from the Minister of

Fisheries and Oceans Canada (DFO) as per Paragraph 34.4(2) and 35(2)(b) of the *Fisheries Act*.

2.1.9 Habitat For Species at Risk (SAR)

The *Endangered Species Act, 2007 (ESA)* is the provincial legislation that provides protection for SAR and their habitat in Ontario. The *Species at Risk Act (SARA)* is the federal species at risk legislation which applies to SAR and their habitat on federal lands or where federal jurisdiction applies.

SAR have been recorded in the Township and were identified through review of various publicly available databases as having potential to be present in the Township of Springwater. The habitat for SAR may be contained within the Township's NHS or elsewhere in the Township of Springwater.

Impact to potential habitat of SAR should be avoided where possible. Proposed transportation works would be subject to mitigation measures to avoid direct impact to SAR which may include rules in regulation, timing restrictions for the removal of vegetation, minimizing the footprint of construction, and exclusion of the construction area.

2.1.10 Source Water Protection Areas

As a result of the *Clean Water Act* (O. Reg. 287/07), communities in Ontario are required to develop Source Protection Plans to protect their municipal sources of drinking water. These plans identify risks to local drinking water sources and develop strategies to reduce or eliminate these risks.

Ontario's Source Water Protection initiative is focused on protecting municipal drinking water sources. Key areas include Wellhead Protection Areas (areas that drain down toward municipal wells), Highly Vulnerable Aquifers (where groundwater lies close to ground surface), and Significant Groundwater Recharge Areas (areas that feed aquifers).

The Source Water Protection Information Atlas indicates three Source Protection Areas (SPA) are located within the Township of Springwater. The majority of the Township falls under the Nottawasaga SPA. There is a very limited area in the southeast corner of the Township which is located in the Lake Simcoe and Couchiching / Black River SPA. The northeast section of the Township, north of Flos Road 6 at Highway 27 is within the Severn Sound SPA.

The Township also contains several Wellhead Protection Areas, Significant Groundwater Recharge Areas, and Highly Vulnerable Aquifers. Any future transportation projects recommended by the Transportation Master Plan (TMP) will need to consider impacts to the SPAs.

2.2 Land Uses

The Township is one of 16 lower-tier municipalities located within the County of Simcoe, as shown in Figure 2-2, Figure 2-3, and Figure 2-4. The Township consists of a large rural agricultural area but is also home to urban settlement, rural residential, aggregate extraction, open space, and natural heritage areas, as described below. Details and policies governing each type of land use can be found in the Township's Official Plan.

2.2.1 Agricultural

Agriculture makes up the majority of the designated land uses in Springwater, with 253 different farms in Springwater as of 2016. Being a key driving factor in the Township's economy, the agricultural industry must be protected as urban growth and development intensifies. Environmental conservation, reforestation, forestry, and hunting are all permitted uses under the 'Agricultural' designation alongside agriculture itself.

2.2.2 Urban Settlement Areas

There are eight urban settlement areas within Springwater, as illustrated in Figure 2-5. These settlement areas are categorized as Major, Intermediate, and Minor to signify the magnitude of growth accommodated. Midhurst, Elmvale, and Hillsdale are designated as Major; Snow Valley and Centre Vespra as Intermediate; and Anten Mills, Minesing, and Phelpston as Minor. The majority of the growth within the Township is to be directed towards the Major Settlement Areas of Midhurst and Elmvale. Hillsdale is to be an option for long-term focused growth.

Figure 2-2: Land Use Context (Schedule A-1)

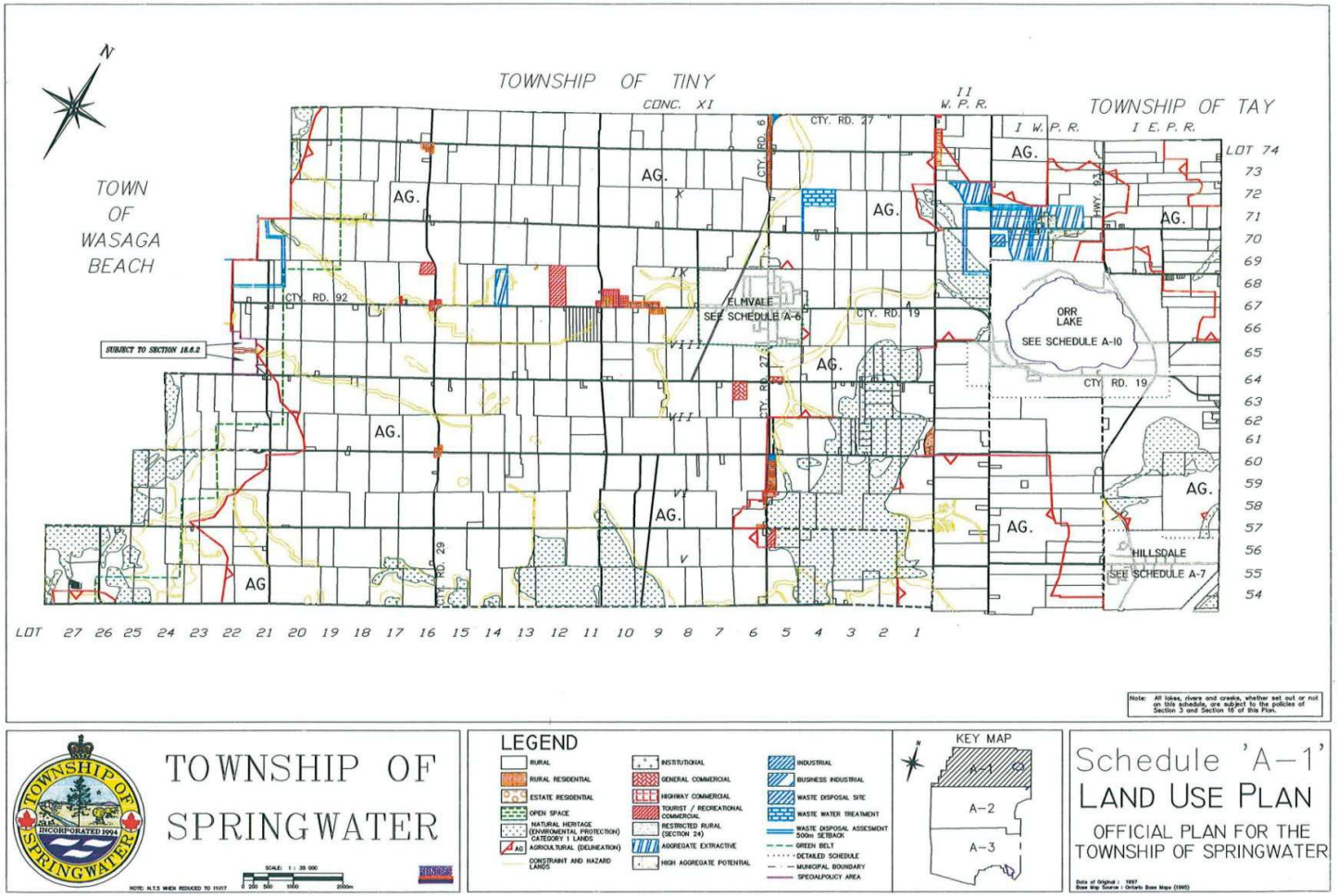


Figure 2-3: Land Use Context (Schedule A-2)

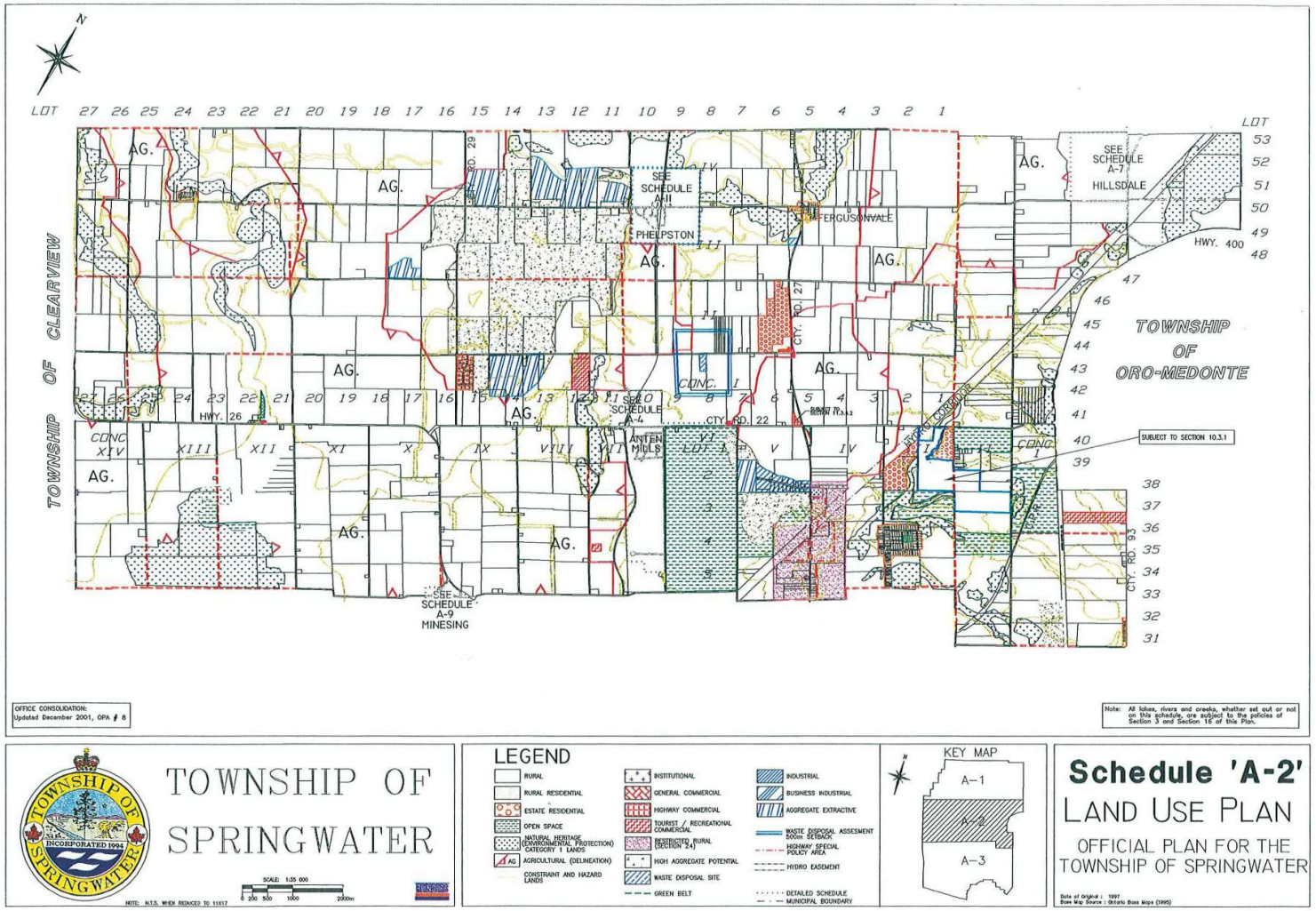


Figure 2-4: Land Use Context (Schedule A-3)

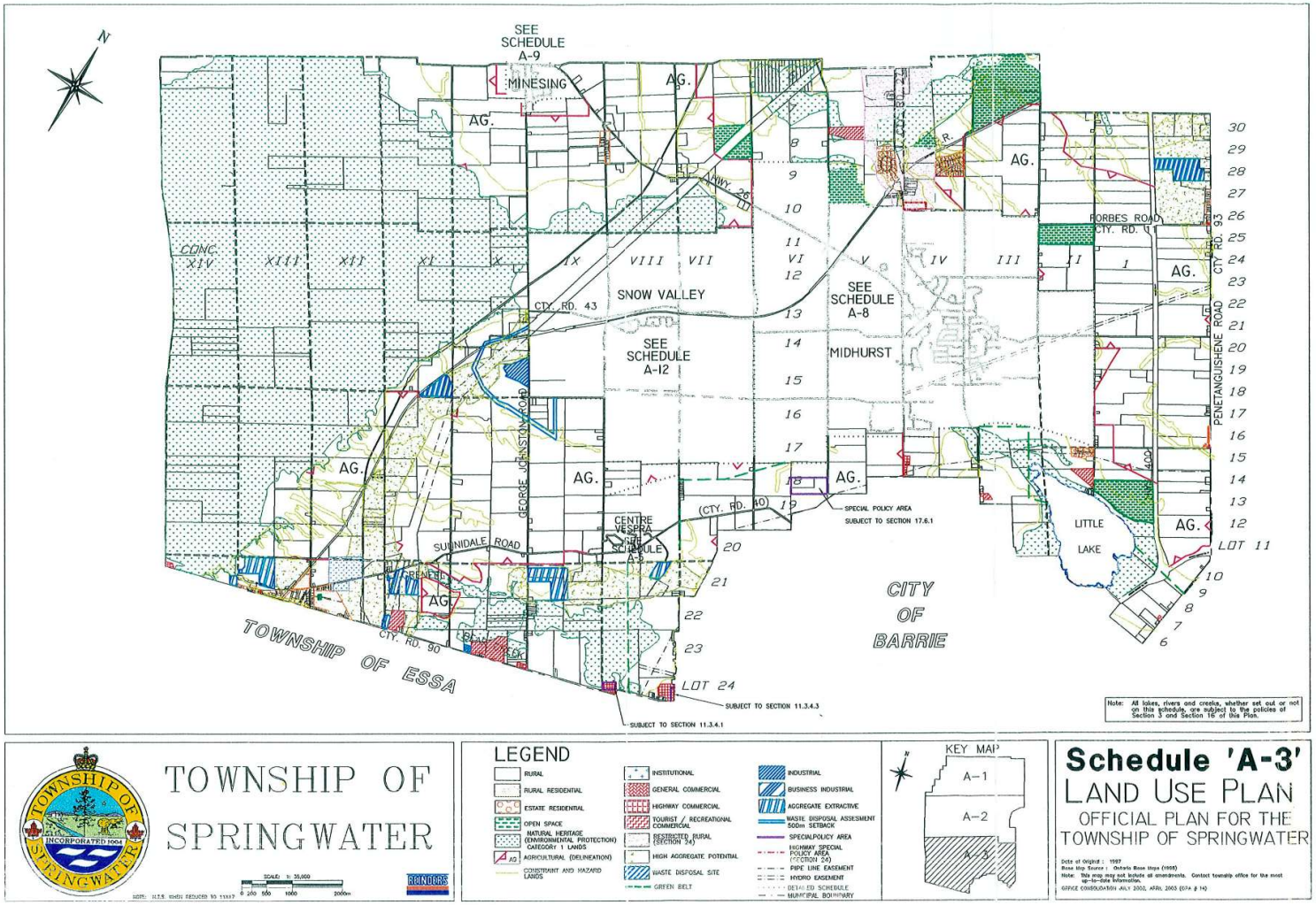
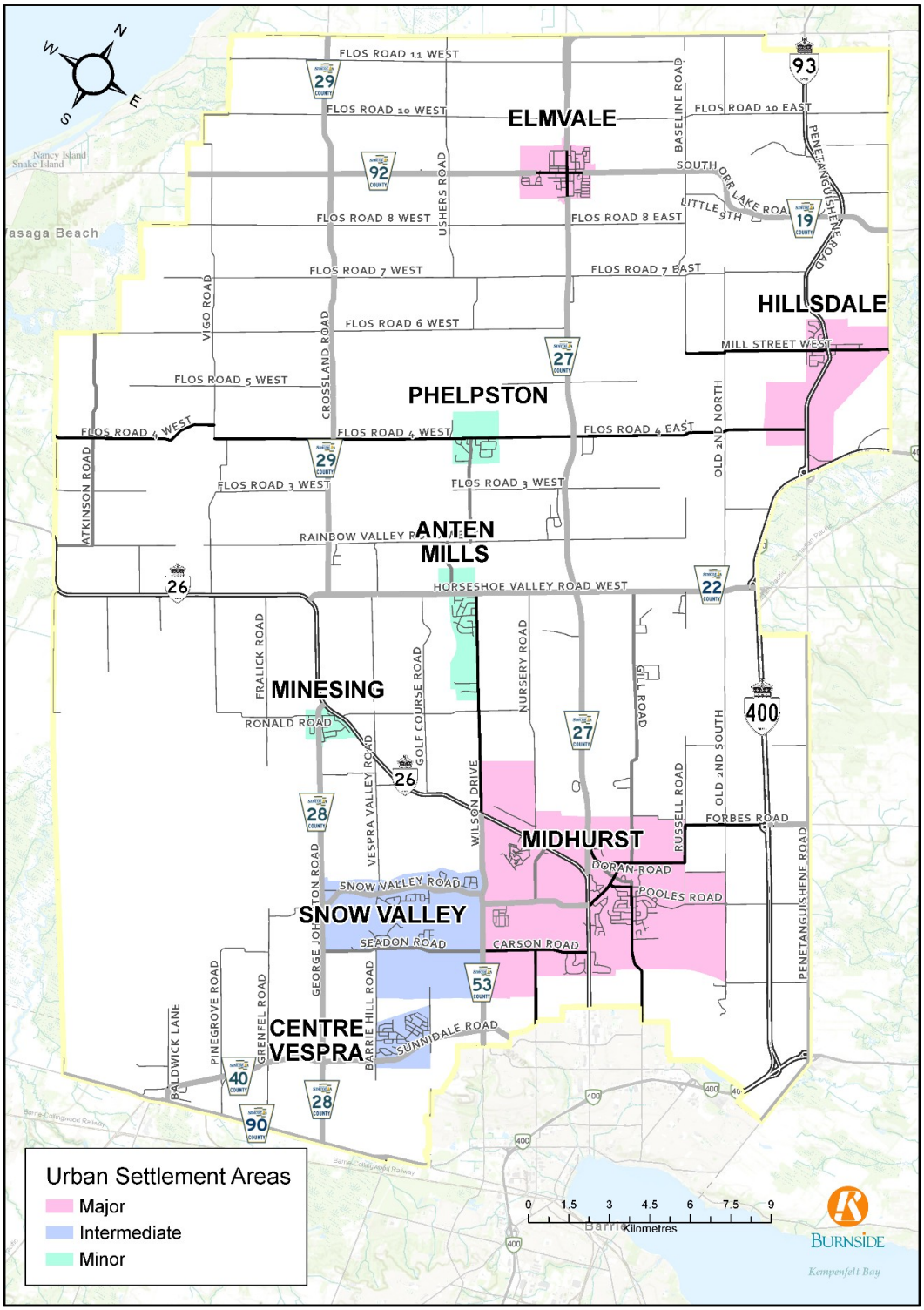


Figure 2-5: Urban Settlement Areas



2.2.3 Rural Residential Areas

Within the Township there are over 20 locations designated as Rural Residential Areas. These areas typically consist of clusters of residential units with limited or non-existent supporting facilities and exist outside of urban settlement or prime agricultural areas. Estate Residential and Adult Lifestyle Community areas have been incorporated into the rural residential land use, and the expansion of these uses is prohibited. The expansion of rural residential areas is also discouraged by the Township's Official Plan.

2.2.4 Aggregate Extraction Areas

Within Springwater, there are areas with mineral aggregate resources. These areas are protected for long-term use to support the Township's economy. Aggregate extraction areas permit quarries and pits, as well as accessory or ancillary services such as crushing plants, stockpiles, asphalt plans and more.

2.2.5 Park, Open Space and Recreation Areas

Open space areas consist of parks, fairgrounds, arenas, community centres, trails, playing fields and many more uses to enhance and support complete communities. These areas are identified to be preserved by limiting the range and intensity of allowed uses.

2.2.6 Environmental Protection Areas

Springwater's environmental protection areas are intended to protect, maintain and enhance natural heritage features through the conservation of the natural state of the land to the greatest extent possible.

2.2.7 Cultural Heritage Landscapes

A Cultural Heritage Landscape, as defined in the Provincial Planning Statement (PPS, 2024), can include buildings, structures, spaces, views, archaeological sites, or natural elements that are valued together for their interrelationship.

Cultural heritage landscapes may be properties that have been determined to have cultural heritage value or interest under the *Ontario Heritage Act* or have been included on federal and / or international registers, and / or protected through official plan, zoning by-law, or other land use planning mechanisms.

The Provincial Planning Statement (PPS, 2024) outlines the identification, protection, management and use of built heritage resources, cultural heritage landscapes and archaeological resources in a manner that ensures retention of their cultural heritage value or interest under the *Ontario Heritage Act*. This can be achieved by the implementation of recommendations set out in a conservation plan, archaeological

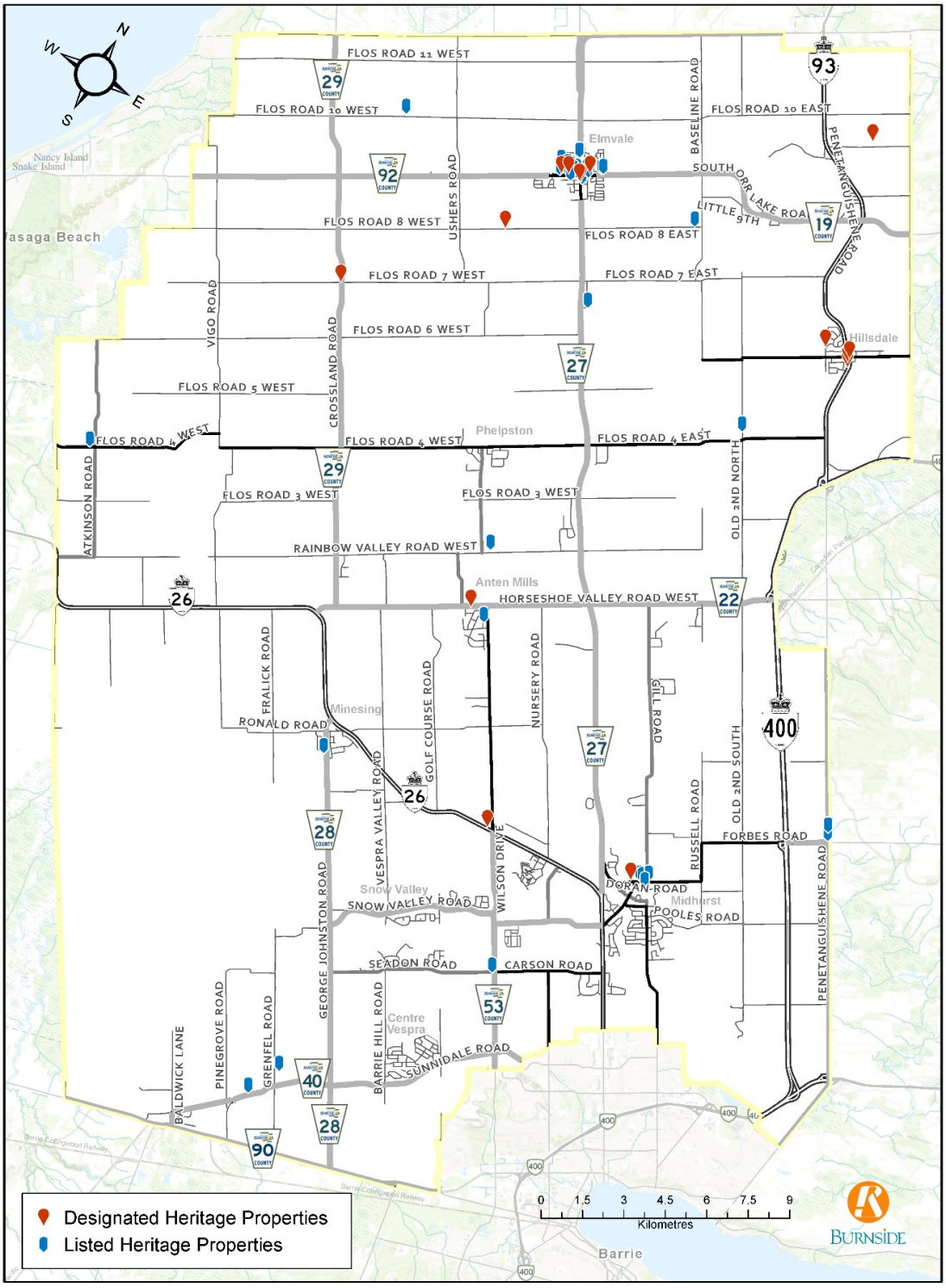
assessment, and / or heritage impact assessment. Mitigation of impacts to these features and / or alternative approaches can be included in these plans and assessments.

Heritage designation is public recognition of the heritage value of buildings, sites, or cultural features in a community. The *Ontario Heritage Act (OHA)* helps a community to either designate individual buildings (under Part IV of the *Act*) or several buildings as a district (under Part V of the *Act*). In the Township, there are:

- 15 designated properties (Section 29, OHA).
- 13 listed properties (Section 27, OHA).

The Township's listed and designated properties are shown in Figure 2-6.

Figure 2-6: Heritage Properties



2.2.8 Archaeology Resources

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

Archaeological potential is defined in the Provincial Planning Statement (PPS, 2024) as:

> *"…areas with the likelihood to contain archaeological resources, as evaluated using the processes and criteria that are established under the Ontario Heritage Act"*

The County of Simcoe has created an Archaeological Management Plan which was adopted in 2019. In addition to this report, the County has the following supporting technical documents available for viewing:

- Thematic History of Simcoe County and Colonial Period Archaeological Potential.
- Contingency Plan for the Protection of Archaeological Resources in Urgent Situations.
- Histories of Indigenous Communities with Interest in Simcoe County.

The County of Simcoe has identified areas of Archaeological Potential within the Township of Springwater, available on the County of Simcoe interactive Geographical Information Systems (GIS) based platform. This map is publicly available and can be used to help determine need for archaeological assessment in advance of soil disturbance.

In addition to the County of Simcoe's recognition of the histories of Indigenous Communities in the area, the Township of Springwater recognizes that the Township is located on lands within Treaty 16 Lake Simcoe and Treaty 18 Lake Simcoe – Nottawasaga between the Crown and the Chippewas.

Future transportation projects recommended in the Township of Springwater Transportation Master Plan within and located in an area of archaeological potential will require (at minimum) a Stage 1 archaeological assessment to determine if archaeological potential survives within the area. Public development projects (i.e., highway or road construction) require an archaeological assessment under the requirements of the *Environmental Assessment Act* or through a Class Environmental Assessment. An EA often will determine the need for an archaeological assessment, and it is completed as part of the overall environmental assessment process.

2.3 Existing Transportation System

This section describes the existing transportation conditions. The Township's transportation network includes roadways, transit, active, and inter-regional methods. Mobility characteristics such as the Township's travel patterns are assessed to understand the major sources of and movement of traffic throughout the Township.

2.3.1 Roads

The road system serves as the transportation backbone within the Township, particularly given that the vast majority of residents use their personal vehicle as their main and preferred form of transportation. The following sections provide an overview of the existing road network, performance, and safety.

2.3.1.1 Road Classifications

Within the Township of Springwater, roads are either maintained and operated by the Ministry of Transportation Ontario (MTO), Simcoe County, the Township of Springwater, neighbouring municipalities (for boundary roads), or private owners.

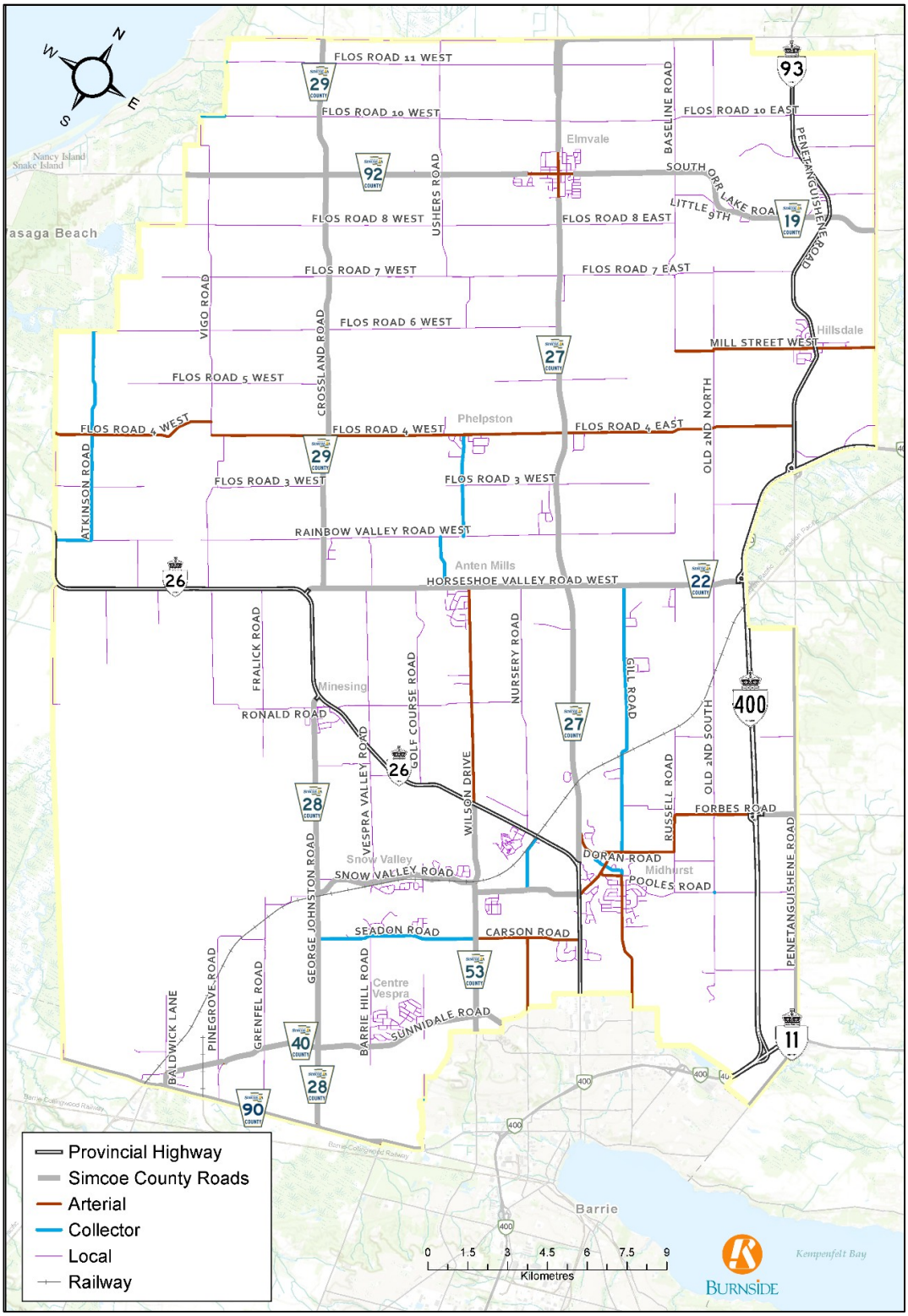
Highways 400, 11, 93, and 26 form the provincial road network within and near the Township. Highways 400 and 11 are controlled access highways, whereas Highways 93 and 26 are arterial highways. Near the Springwater-Barrie border, there is an interchange between Highways 400 and 11. Highway 400 extends southward toward Barrie and Toronto, whereas Highway 11 extends eastward toward the Township of Oro-Medonte and Orillia.

Penetanguishene Road is provincially operated as Highway 93 north of Highway 400 and connects to Midland and Penetanguishene further north. Highway 26 travels through Midhurst and Minesing in the Township to connect to Highway 400 in the City of Barrie and municipalities located in the northwest including Stayner, Collingwood and Owen Sound.

There are 12 roads located within the Township that are under County jurisdiction. These County roads form connections between adjacent municipalities and urban settlement areas within the Township of Springwater.

The existing road network and respective ownership within the Township are illustrated in Figure 2-7.

Figure 2-7: Road Network



Township of Springwater

BURNSIDE

2.3.1.2 Network Performance

The existing road network performance was assessed using traffic count data collected for this study. Traffic counts were collected by Pyramid Traffic Inc., on behalf of Burnside, at almost 200 intersection and midblock locations within the Township during August 2023. Figure 2-8 illustrates the existing traffic volumes based on the data collected. Detailed traffic count data locations are provided in Appendix B.

Existing road network performance was reviewed as a function of intersection and midblock level of service (LOS) criteria provided in Table 2-1 and Table 2-2, respectively.

Table 2-1: Intersection Level of Service (LOS) Criteria

Level of Service (LOS)	Control Delay per Vehicle (s)		Performance
	Signalized Intersection	Unsignalized Intersection	
A	≤ 10	0 – 10	Excellent
B	> 10 – 20	> 10 – 15	Good
C	> 20 – 35	> 15 – 25	Acceptable
D	> 35 – 55	> 25 – 35	Decent
E	> 55 – 80	> 35 – 50	Undesirable
F	> 80	> 50	Unacceptable

Source: Highway Capacity Manual (HCM) 2000 Measures of Performance
Note: Intersection operations and LOS were determined using the software program Synchro, which employs methodology from the HCM. Synchro accounts for the spacing, interaction, queues, and operations between intersections.

Table 2-2: Midblock Level of Service (LOS) Criteria

Volume to Capacity (v/c) Ratio	Performance
≤ 0.70	No Congestion
0.70 to 0.80	Minimal Congestion
0.80 to 0.90	Some Congestion
0.90 to 1.0	Verge of Congested Conditions
> 1.0	Congested Conditions

As shown above, two separate measures of performance are considered:

- The level of service (LOS) for the overall intersection and critical movements, which is based on the average delay calculated using Synchro software and HCM methodology.
- The volume to capacity (v/c) ratio at midblock road segments using the following assumed capacities measured in vehicles per hour per lane (vphpl), established based a function of typical free-flow speed and access management:
  - Provincial Highway (Controlled-Access): 1,800 vphpl.

- Provincial Highway (Arterial): 1,200 vphpl.
- County Road: 900 vphpl.
- Township Arterial: 800 vphpl.
- Township Collector: 600 vphpl.
- Township Local: 500 vphpl.

Performance measures serve to indicate locations with congestion (delays) and operational issues, which will inform which roads and intersections should be considered for improvement.

The results of the performance review are summarized below.

- All County and Township arterial, collector and local roads are operating with excess midblock capacity (less than 0.80 volume to capacity ratio).
- Highway 26 (Bayfield Street) between Spence Avenue and Barrie is approaching capacity (between 0.90-0.95 volume to capacity ratio).
- Most surveyed intersections are operating with a LOS A or B, with the exception of the following two intersections along Highway 26 (Bayfield Street), which are experiencing operational issues related to high delays along the side streets:
  - Highway 26 (Bayfield Street) and Glen Echo Drive.
  - Highway 26 (Bayfield Street) and Spence Avenue.

2.3.1.3 Collision Review

Available collision data over the last 5-year period (January 2018 and December 2022) was provided by the Township and visualized in the “hot spot” map shown in Figure 2-9. There were close to 3,000 reported collisions over this timeframe. Higher posted speed limits, road alignment and poor sightlines are some of the many factors that impact traffic safety and create environments that are more collision prone.

The Ontario Traffic Manual (OTM) – Book 12 Traffic Signals indicate that intersections with 15 recorded collisions over the course of three years meet the threshold for traffic signals, assuming that the collision types are susceptible to correction through signalization. While no intersection locations within the Township were noted to experience an average of at least five collisions per year, it is clear that there are still defined hot spot collision locations, particularly at major road intersections or in the communities where the traffic volume is high and consequently, where there are more opportunities for conflict.

Figure 2-8: Existing Road Performance

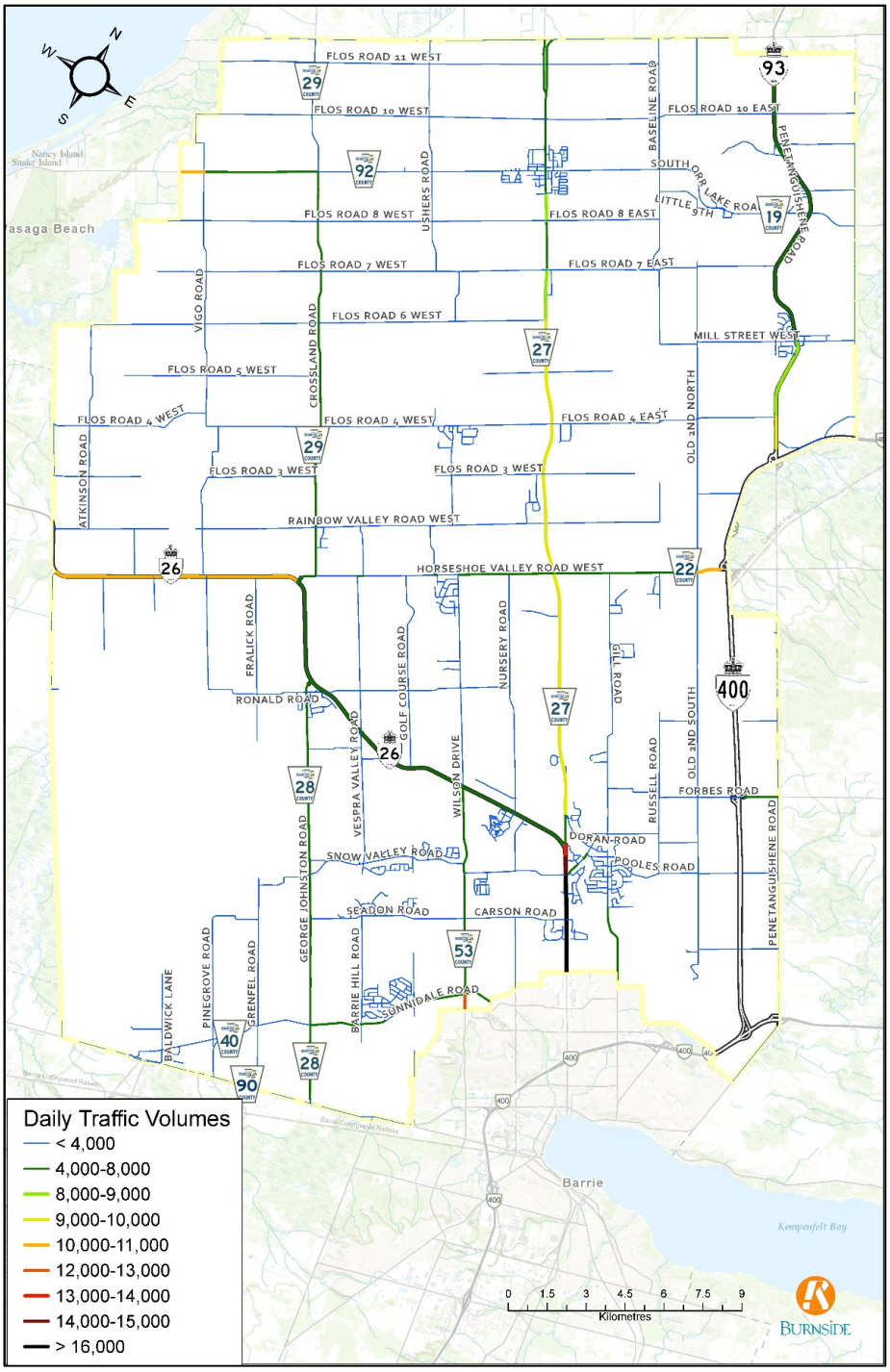
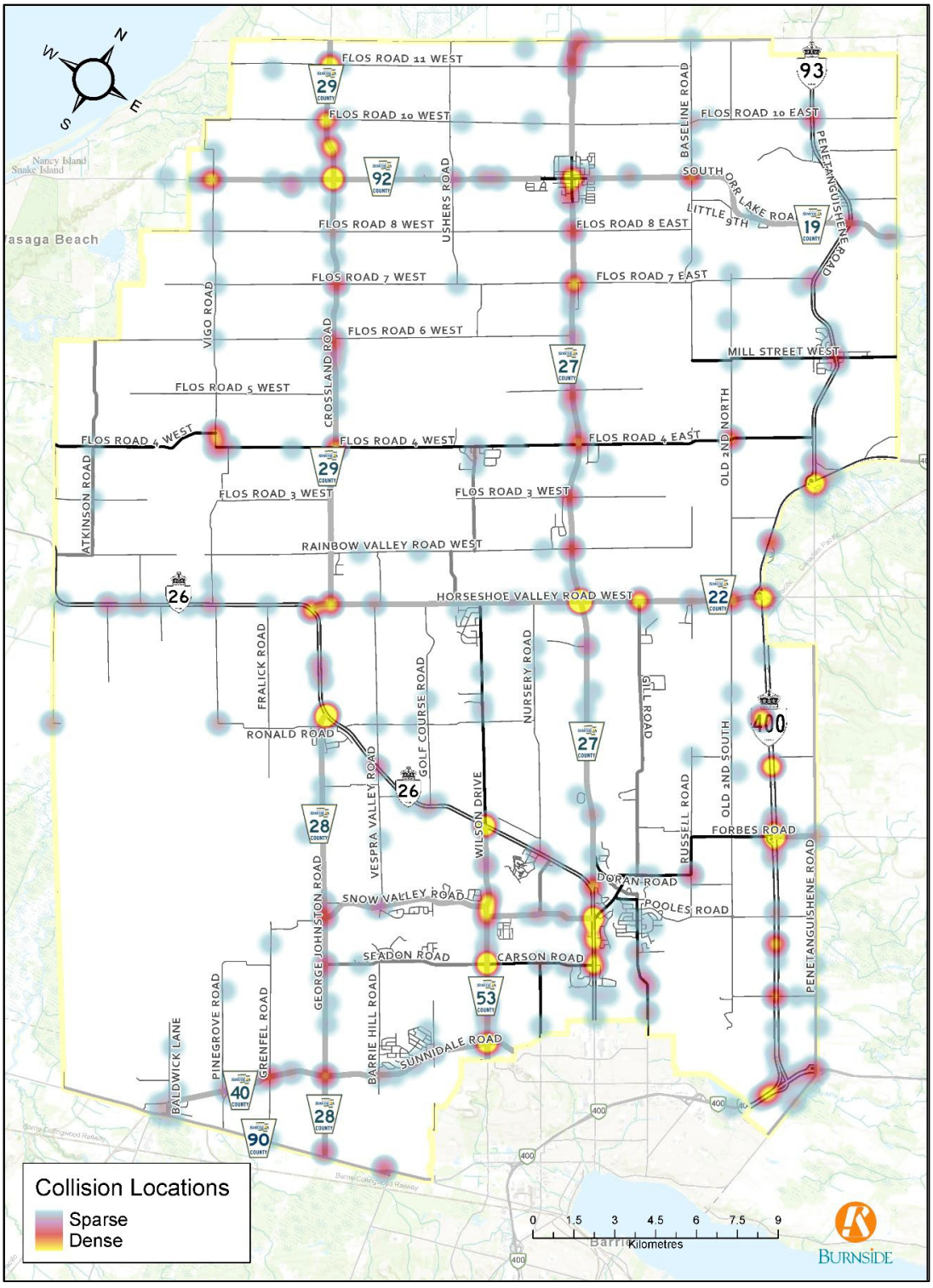


Figure 2-9: Collision Hot Spots



2.3.1.4 Existing Intersection Needs

As shown in the previous analysis, several intersections within the Township could benefit from further study and / or improvements to address operational and / or safety concerns. Some of these intersections are under County or MTO jurisdiction.

Locations identified for an intersection study are listed in Table 2-3. Intersection studies can include a more detailed location-specific assessment of the operational and safety constraints that is beyond the scope of this Transportation Master Plan. The scope of an intersection study can include:

- Intersection operations analysis and recommended improvements (e.g., provision of additional turn lanes, etc.).
- Safety features to address poor visibility or sightlines (e.g., flashing beacons, treed vegetation, intersection pedestrian signal).
- Detailed collision review, which requires information such as the road / weather conditions, impact type, etc. of the incident, to derive a suitable mitigation measure.
- Active transportation crossing facilities or protection.

It is recommended that the Township initiate a data-driven **Vision Zero strategy** with an overarching goal of preventing future collisions and reducing injuries and fatalities. The Vision Zero strategy can establish tailored programming and improvements to address the context-specific nature and causes of collisions.

Table 2-3: Existing Intersections Recommended for Further Assessment

Road / Intersection	Justification	Responsibility
Flos Road 10 / Baseline Road	Collision hot spot	Township
County Road 92 (Queen Street) / County Road 27 (Yonge Street)	Collision hot spot	Township
Flos Road 4 / Vigo Road	Collision hot spot	Township (future County Road)
Flos Road 4 / Old 2nd North	Collision hot spot	Township (future County Road)
Doran Road / Russell Road	Collision hot spot	Township
St Vincent Street approximately 650 m south of Jodies Lane*	Collision hot spot	Township
County Road 92 (Queen Street) / County Road 29 (Crossland Road)	Collision hot spot	County
County Road 22 (Horseshoe Valley Road) / County Road 27 (Bayfield Street)	Collision hot spot	County
Highway 26 / County Road 28 (George Johnston Road)	Poor intersection operations	MTO

Road / Intersection	Justification	Responsibility
Highway 26 / County Road 53 (Wilson Drive)	Collision hot spot	MTO
Highway 26 (Bayfield Street) / Spence Avenue	Collision hot spot	MTO
Highway 26 (Bayfield Street) / Glen Echo Drive / Currie Drive	Poor intersection operations	MTO
County Road 53 (Wilson Drive) / County Road 40 (Sunnidale Road)	Collision hot spot	County

* While not at an intersection, this location is noted to be at a bend in the road, where geometric / sightline deficiencies should be investigated to minimize the collision frequency.

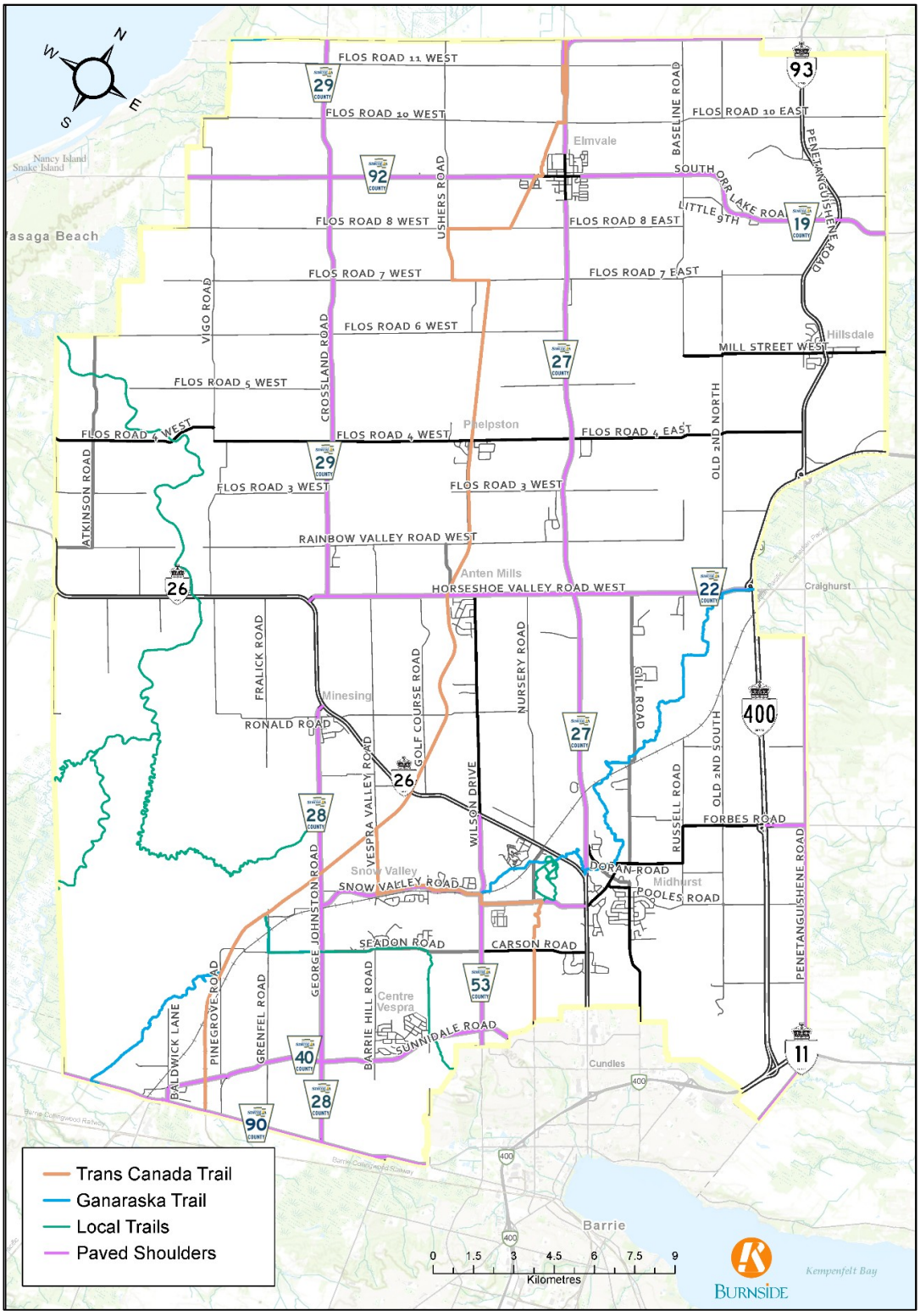
2.3.2 Active Transportation

Active transportation facilities, including trails, sidewalks and cycling routes, serve to promote sustainable modes and are important components of a multi-modal transportation system. The Township's active transportation network consists primarily of off-road recreational trails and paved shoulders along County of Simcoe roads, as illustrated in Figure 2-10.

Both the Trans Canada Trail and the Ganaraska Trail form a major component of the active transportation network within the Township, providing inter-municipal north-south and east-west connectivity.

Most of the active transportation facilities within Springwater, including paved shoulders and major trails, are owned and operated by the County. The Township maintains approximately 47 km of sidewalks and two trail systems. Sidewalks on County roadways are the Township's responsibility to maintain and construct, as per Section 55 of the *Municipal Act*.

Figure 2-10: Active Transportation Network

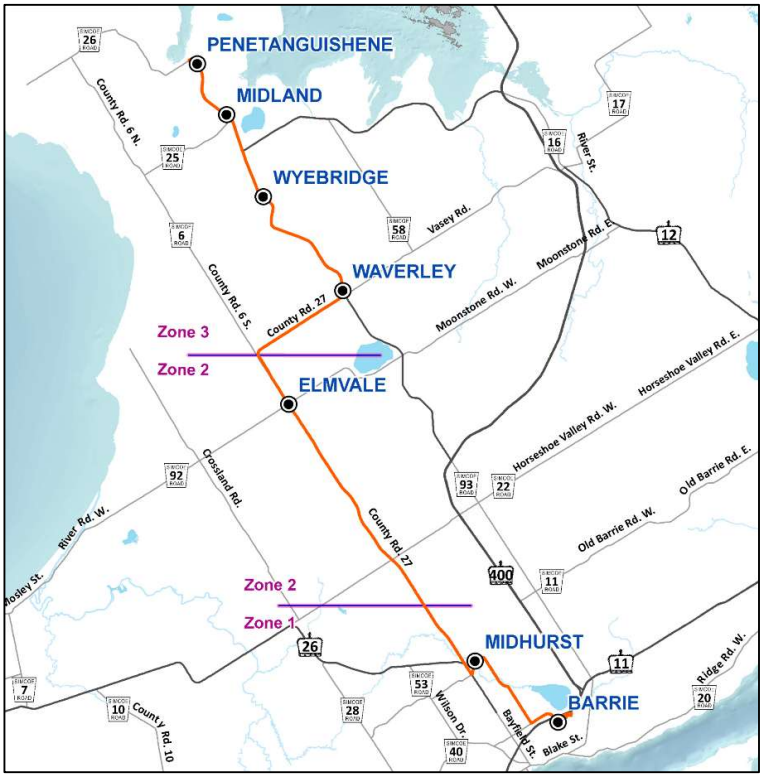


2.3.3 Transit Services

The Township does not operate a transit service of its own and there are no GO Transit connections to Springwater. Transit availability in the Township is limited to the Penetanguishene / Midland to Barrie (Route 1) LINX bus operated by Simcoe County, as shown in Figure 2-11. This service operates from 5:45 a.m. to 5:45 p.m. with a bus leaving once every hour. LINX transit stops within Springwater are located in Midhurst at St. Vincent Street / Cedar Creek Road and near the Midhurst Library, along with Yonge Street and Kerr Street in Elmvale.

Existing LINX transit routes are further supported by the County-operated LINX PLUS+ specialized transit system, which is pre-arranged door-to-door and / or service to and from fixed transit routes. This service is currently offered within 1 km of existing transit service. It is available to Township residents but requires registration to confirm eligibility, which is determined on a case-by-case basis.

Figure 2-11: Simcoe County (LINX) Transit Route 1



Source: Simcoe County LINX Transit Service

2.3.4 Inter-Regional Transportation

Other forms of transportation within the Township include air and rail. There is one airport, the Springwater (Barrie Airpark) Aerodrome, which mainly services small recreational aircrafts. There is also one rail freight corridor in the Township, which is operated by Canadian Pacific (CP).

2.4 Demographics

2.4.1 Population

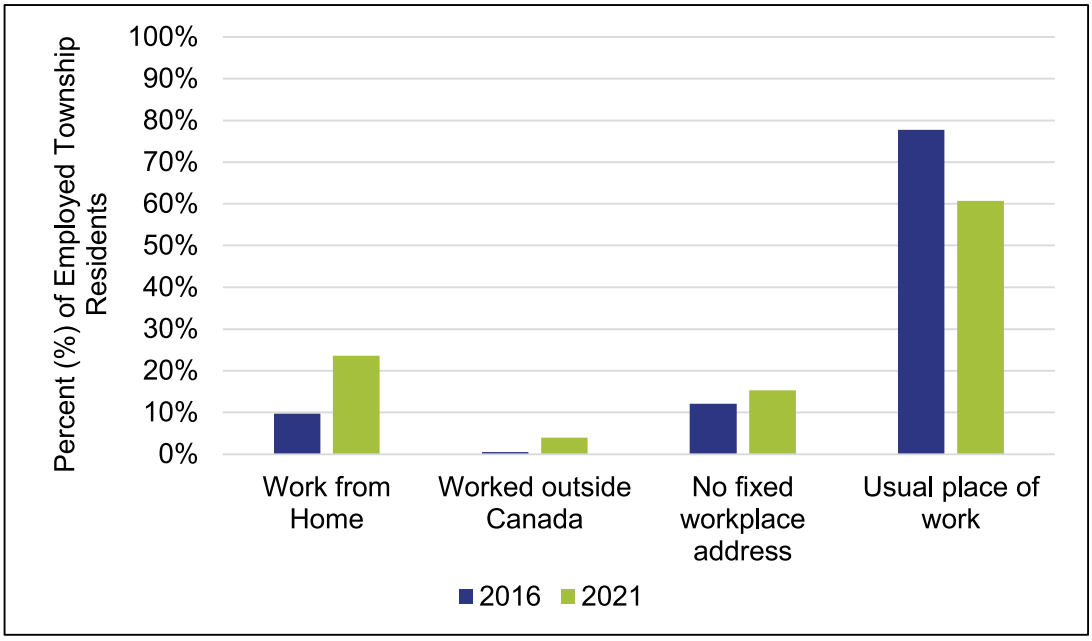
According to Statistics Canada's 2021 Census, the population of the Township of Springwater was estimated at approximately 21,701 residents. From 2016 to 2021, the population increased by 13.9%, with much of this growth occurring within the eight settlement areas of the Township. This is comparatively higher than the provincial increase of 5.8% and national increase of 5.2%.

2.4.2 Employment

The workforce in Springwater consists primarily of those employed in health care and social assistance, retail trade, construction, and manufacturing industries (Statistics Canada, 2021). Agriculture and manufacturing also form a key part of Springwater's economic base activities (Draft Growth Management Strategy, 2018).

Of those employed in 2021, the majority (61%) of residents were reported to work at their usual workplace and approximately one-quarter of employed residents worked from home. Telecommuting is becoming more popular amongst residents due to the onset of the COVID-19 pandemic in 2020, with the proportion of work-from-home employees more than doubling in recent years. The place of work comparison of Township residents between 2016 and 2021 is provided in Figure 2-12.

Figure 2-12: Place of Work Status



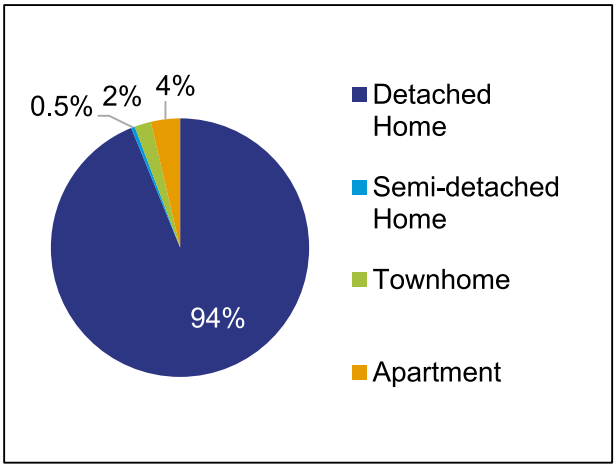
Source: Statistics Canada, 2021 Census

2.4.3 Dwelling Types

A significant proportion of the existing residential built form in Springwater consists of detached homes. Only 6% of Township residents live in semi-detached homes, townhomes or apartments, as shown in Figure 2-13.

This paints a picture of a municipality that relies heavily on cars to travel due to its sparsely spaced and lower density housing, as well as the vast greenfields that occupy the land.

Figure 2-13: Dwelling Types



Source: Statistics Canada, 2021 Census

2.5 Travel Patterns

Future transportation improvements are informed by existing travel patterns. Origin-destination trip patterns and trip purposes were summarized based on Transportation Tomorrow Survey (TTS) data (Data Management Group, University of Toronto) and Census data.

2.5.1 Origin-Destination Trips

More than 80% of daily Township trips are external, reflecting trips that either leave the Township or are destined for the Township. The origin and destination patterns of these external trips are illustrated in Figure 2-14. The remaining 20% are internal trips, reflecting travel within the Township.

The 80% / 20% split for external and internal Springwater trips does not include those that pass through the Township. A review of pre-pandemic (2019) StreetLight data, which uses GPS / cell phone-based location services to generate travel demand trends, shows that approximately 40% of the trips using the roads within Springwater are passing through only, reflecting trips starting and ending outside of the Township. However, a significant proportion of these pass-through trips are noted to be travelling along the provincial highways and County roads within Springwater.

A comparison between the magnitude of trips starting from and ending in the Township indicates similar origin-destination patterns. A large proportion of daily trips start or end in the southwestern quadrant (including Anten Mills, Minesing, Snow Valley and Centre Vespra) of the Township and the Midhurst settlement area. Most of these external trips start or end in the City of Barrie, particularly the area surrounding the Bayfield Street corridor. Other external trip origins / destinations, although not as prevalent, include abutting boundary areas in the Township of Oro-Medonte, Township of Tiny and Town of Wasaga Beach.

2.5.2 Reasons for Travel

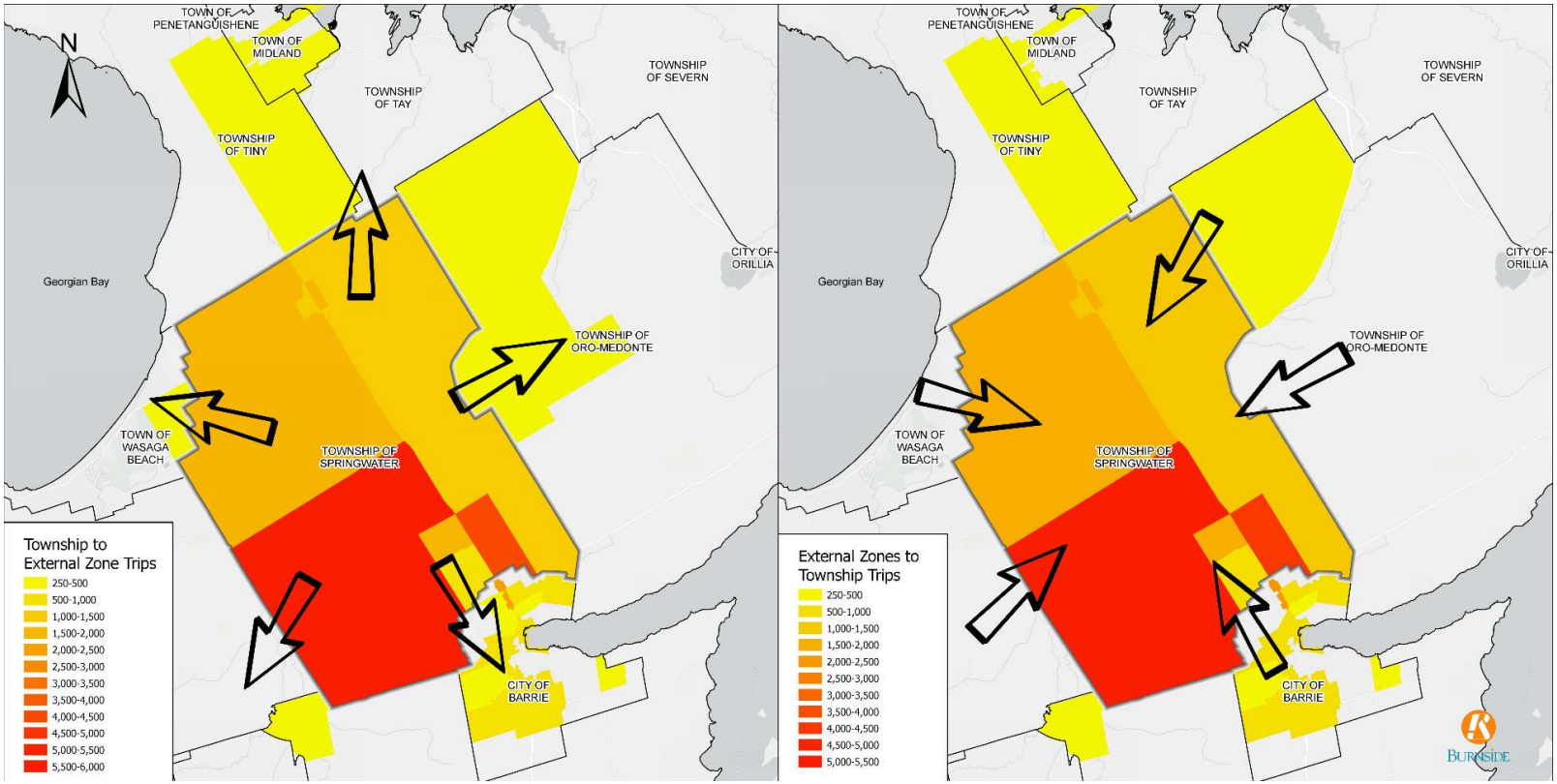
Township residents may travel for work, school, errands, and recreation. Understanding travel purposes serves to inform the frequency, time-period, and origin / destination of trips, on a high-level.

Trips between home and school reflect the most consistent type of trips, as they are made twice per day on an almost daily basis. Trips that are work-related are no longer as consistent ever since the onset of the pandemic from 2020 to 2022, as telecommuting and hybrid work models (such that employees may only be required to travel to the office on select days of the week) are becoming more common. Both work and school related trips are commonly made during the morning and evening peak periods of the day. In

comparison, recreational and errand-related (e.g., groceries, shopping) trips are typically more infrequent and occur during midday or off-peak periods during the day.

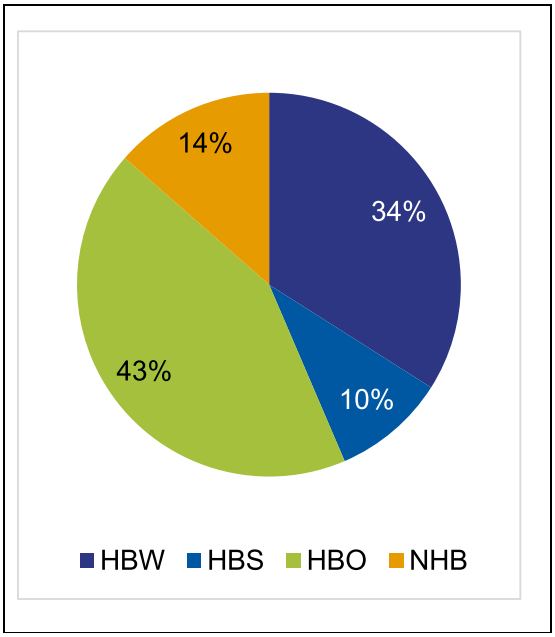
Figure 2-15 provides a breakdown of daily trip purposes for those living within the Township. The majority (57%) of residents' daily trips do not serve the primary purpose of travelling for work or school. These trips likely reflect demand that is driven, in part, by recreational or leisure activities, given that the Township is home to several hiking trails, golf courses and a ski resort.

Figure 2-14: Township Origin-Destination Patterns



Source: Transportation Tomorrow Survey Data (2016)
Note: The geographic limits of the TTS data do not include regions west of Collingwood (e.g., Grey and Bruce County)

Figure 2-15: Trip Purposes



Source: Transportation Tomorrow Survey Data (2016)

Home-Based Work (HBW) trips: Work-related trips that start or end at home.

Home-Based School (HBS) trips: School-related trips that start or end at home.

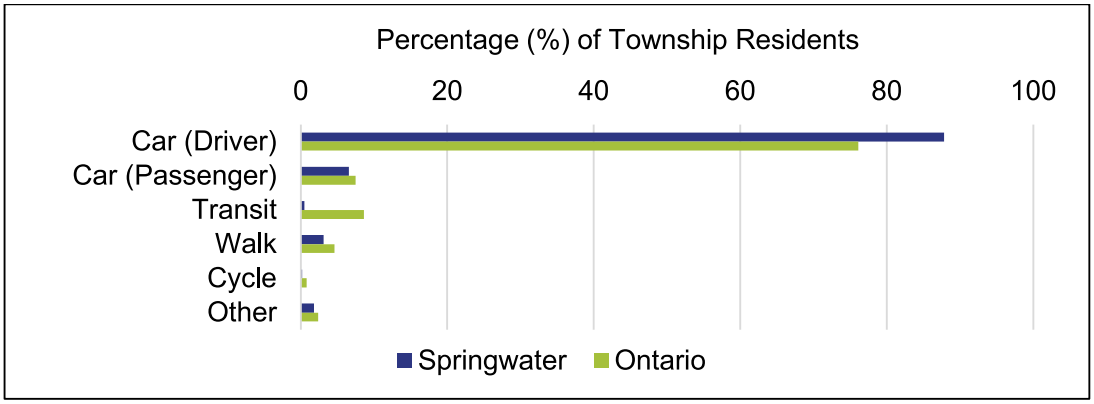
Home-Based Other (HBO) trips: Trips that start or end at home and are made for a purpose other than work (such as for shopping, recreation and errands).

Non-Home-Based (NHB) trips: Other discretionary trips that do not start or end at home. For example, this can include trips between work and the mall or a gas station to daycare.

2.5.3 Modes of Travel

The car is the preferred mode of travel for residents in Springwater, as shown in Figure 2-16, with transit and cycling making up a very small proportion of the mode share. In comparison to the average mode share for Ontario, Springwater has a greater proportion of drivers and significantly lower transit share. Although this is not surprising considering there is only one County-operated transit bus and no local buses currently servicing Springwater.

Figure 2-16: Commuting Mode



Source: Statistics Canada, 2021 Census

3.0 Background and Supporting Policy, Plans and Studies

This section provides an overview of Federal, Provincial, County, and Township policies from existing plans and studies. These documents influence the direction the Township is moving in when developing its transportation system. Transportation-related policies from these plans and studies serve as high-level guidance for this Transportation Master Plan, particularly for the development of its goals, objectives, vision, and assessment criteria. This Transportation Master Plan is also informed by specific transportation improvements recommended out of these plans and studies.

3.1 Federal and Provincial

3.1.1 Federal Climate Change Plan

A Healthy Environment and a Health Economy is a plan introduced by the Government of Canada in December 2020. Building from the 2016 Pan-Canadian Framework on Clean Growth and Climate Change, it works to *"[achieve] both our environmental goals and our economic hopes: clean air, clean water, and long-term secure jobs"*. This plan looks to exceed Canada's 2030 Paris Agreement emission reduction goal of 30% and aims for a net-zero Canada by 2050.

The transportation sector is the source of 25% of greenhouse gas emissions. A key component of the plan is that of making clean and affordable transportation available in every community. Containing a total of 64 strengthened and new federal policies, programs, and investments, many work to address the following:

- Long-term infrastructure planning.
- Investing money into zero-emission vehicles (ZEVs).
- Providing rebates for ZEVs.
- Investing money into electric charging infrastructure.
- Electrifying public transit.

The Federal Government has established sales targets for ZEVs of 10% by 2025, 30% by 2030, and 100% by 2040. This governmental pressure, alongside already changing industrial focuses and consumer preferences, will have effects on the future of transportation that are important to recognize. The need to support electric vehicles (EVs) has become vital as their role in achieving a net-zero future grows.

Embracing EVs, electrified transit, and clean infrastructure allows the Township to play an important part in moving towards the future. This will also allow the Township to contribute towards Federal targets, as well as be a leader towards net-zero goals. It is further necessary to fulfil the changing needs of the public as demands shift.

3.1.2 Provincial Planning Statement

The Provincial Planning Statement (PPS) came into effect on October 20, 2024, and was issued under Section 3 of the *Planning Act*. The *Planning Act* directs municipal decisions affecting planning matters, stating they "shall be consistent with" the PPS. The statement is a key part of Ontario's planning system, setting the foundation for the efficient use of land, resources, and public investment in infrastructure.

These policies direct growth for settlement areas and rural lands, development of infrastructure and facilities (including transportation systems and trails) and protection for environmental features and resources.

The PPS provides guidance for the planning and development of the following relevant items:

- Rural Lands in Municipalities (Section 2.6).
- Public Spaces, Recreation, Parks, Trails, and Open Space (Section 3.9).
- Transportation Systems (Section 3.2).
- Transportation and Infrastructure Corridors (Section 3.3).
- Natural Heritage (Section 4.1).

3.1.3 Province-Wide Cycling Network Study

In April 2018, Ontario completed and released a study that identified a recommended province-wide cycling network. The province also announced the intent to develop a long-term implementation plan for the network as part of the #CycleON Action Plan 2.0, of which the key strategies and initiatives are listed in the following section.

The network study aimed to identify a continuous and connected provincial network of on- and off-road cycling routes to connect municipal cycling facilities and places of interest, promote recreational cycling and cycling tourism in Ontario, and help prioritize future cycling investments in provincial highways.

Identification of a network represents the first step in a long-term aspirational plan. The network does not provide a prescriptive set of route alignments and facility interventions that the province and its partners are bound to. It involves a preliminary identification of a province-wide cycling network intended to inform and guide future cycling infrastructure decisions with the goal of establishing a connected and consistent network.

The results from the study identified a network of over 9,800 km of cycling routes, for which the province is now in the process of developing an implementation plan. While there is no provincial cycling facilities identified within Springwater, cycling infrastructure can be considered where it would connect to proposed cycling networks in adjacent municipalities such as Barrie and Wasaga.

3.1.4 #CycleON Action Plan

The #CycleON Action Plan is a 20-year vision that aims to promote cycling as a respected and valued mode of transportation within Ontario. It includes the following five strategic directions to guide action by the government and partners across Ontario.

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

The Action Plan has been built in stages rolled out every five years. Action Plan 1.0 was the first released in 2014 and outlined a plan to work towards the five strategic goals of the vision. Some highlights of the initiatives completed under this plan include:

- Launching the $10 million Ontario Municipal Cycling Infrastructure Program.
- Investing $15 million in provincial cycling infrastructure.
- Releasing Ontario Traffic Manual Book 18.
- Engaging stakeholders and communities across the province to identify a draft province-wide cycling network.
- Investing more than $3.5 million in trails.
- Reviewing opportunities to support cycling in reviews of the Greenbelt Plan.

Action Plan 2.0 is the second Plan in the series and is stated to be implemented between 2018 and 2023. Action Plan 2.0 sets out a wave of initiatives to achieve the vision of Ontario's Cycling Strategy. This Plan outlines actions across the five strategic directions and guides efforts across ministries with strategies and initiatives to ensure a collaborative effort towards the visions and goals of #CycleON.

3.2 County

3.2.1 Simcoe County Official Plan

The County of Simcoe Official Plan was most recently consolidated in February 2023. Prepared under the *Planning Act* R.S.A 1990 c.P.13, as amended, of the Province of

Ontario, the plan provides policy for land use planning. Taking into consideration the economic, social, and environmental impacts of land use and developmental decisions, the plan is designed to assist in growth management.

The goals of the Official Plan are as follows:

- To protect, conserve, and enhance the County's natural / cultural heritage.
- To achieve wise management and use of the County's resources.
- To implement growth management to achieve lifestyle quality, and efficient / cost-effective municipal servicing, development, and land use.
- To achieve coordinated land use planning among the County's local municipalities, and other jurisdictions.
- To further community economic development which promotes economic sustainability.
- To positively influence the creation of built environments for people of all ages and abilities, to establish healthy communities and enhance quality of life.
- To promote socially and physically accessible rural and urban communities.
- To promote, protect, and enhance public health and safety.

Section 3 of the plan outlines the County's growth management strategy. This strategy is based on the four following themes:

- The direction of a significant portion of growth and development to settlements where it can be effectively serviced, with a particular emphasis on primary settlement areas.
- Enabling and managing resource-based development including agriculture, forestry, aggregates, and tourism / recreation.
- The protection and enhancement of the County's NHS, cultural features, and heritage resources, including water resources.
- The development of communities with diversified economic functions and opportunities, and a diverse range of housing options.

Section 4 of the plan is comprised of policy statements to support the Official Plan. Section 4.8 is dedicated to transportation specifically. These policies relate to the planning and development of a comprehensive, accessible, and sustainable transportation system. They provide guidance to support a road network, along with alternate transportation infrastructure. Policies on supporting transportation methods such as walking, cycling, and public transit are included.

3.2.2 Regulated Area

On April 1, 2024, the 36 distinct conservation authority regulations were revoked and consolidated under a single Minster's regulation governing prohibited activities, exemptions, and permits under the *Conservation Authorities Act* (O. Reg. 41/24). Changes included updates to the definition of "watercourse" and defined scope regarding development restrictions around wetlands.

The Study Area is located mainly within the regulated area of the Nottawasaga Valley Conservation Authority. The Lake Simcoe Region Conservation Authority (LSRCA) has jurisdiction over hazard lands within a very limited section in the southeast corner of the Township, northwest of Barrie adjacent to County Road 40 (Sunnidale Road). Development or alterations within both jurisdictions are prohibited without permission of the respective conservation authorities.

3.2.3 Simcoe County Transportation Master Plan

The County of Simcoe Transportation Master Plan (TMP) update was endorsed by Simcoe County Council on November 28, 2023. The update was completed in four phases. Phase 1 was completed in October 2021, and Phase 2, 3 and 4 were completed in between September and October 2023.

Phase 1 identifies transportation needs and opportunities. This phase describes the strategic direction of the TMP including its vision, goals, and guiding principles. The vision of the plan is *"A safe, efficient and accessible multi-modal transportation system that responds to the County's vast geography, provides the connectivity needed for its growing and changing populations and businesses, and supports community and environmental health"*. To achieve this vision the following goals have been set forth:

- Connected communities.
- Efficient goods movement.
- Transit as a viable choice for everyday travel.
- Safe and connected active transportation.
- Responsible, forward-looking stewardship.
- Protected natural environment.

This first phase also established guiding principles for the TMP, issues of the municipalities and public, as well as potential needs and opportunities.

Phase 2 of the TMP was completed in June 2023 and details the development process of the proposed transportation network. This phase covered an assessment of preferred road, transit, and active transportation improvements in Sections 2, 3 and 4, respectively. Section 5 details the evaluation framework used to assess network alternatives and Section 6 presents the preferred multi-modal network alternative. Section 7 summarizes the recommendations, which are listed briefly below:

- Road Network: Various capacity improvements, road jurisdiction changes, support for provincial road projects, and east-west capacity improvement study.
- Transit: Connectivity and coordination, accessibility, fare integration, governance funding and operation models, and sustainable infrastructure / vehicles.
- Active Transportation: Cycling network prioritization.

Phase 3 of the TMP update detailed strategies and policies to support the recommended network. This phase consisted of 10 sections, as listed below, with Sections 2 to 9 outlining recommendations.

- The County's Road classification system, design guidelines, roadway cross-sections, and road rationalization framework (Section 2).
- Commercial vehicles and rail, reinforcing the County's role in supporting goods movement (Section 3).
- Realizing the opportunities provided by the Lake Simcoe Regional Airport (Section 4).
- Active transportation and Trails (Section 5).
- Road safety (Section 6).
- Emerging technologies (Section 7).
- Travel demand management (Section 8).
- Carpool lots in the county (Section 9).

Phase 4 of the TMP update provided a Transportation Master Plan Update Summary report. The report summarizes the overarching direction, recommendations, and actions the County of Simcoe will implement to direct transportation investments. The recommendations include transportation solutions, infrastructure projects and strategies developed to guide Simcoe County into the future. The summary report also includes an implementation plan, including timing, cost and monitoring.

3.2.4 Simcoe County Trails Strategy

The Simcoe County Trails Strategy (2014) was derived from the recommendations of the Simcoe County 2008 Transportation Master Plan. The strategy outlines a vision of a County-wide network of connected trails, along with the necessary goals and objectives for achieving a regional trail system. The vision of the strategy is *"to create a world class network of multi-purpose passive-use trails that connects the County's communities while providing linkages to natural, cultural, and tourism assets to increase visitation, recreational, and active transportation opportunities, thereby improving the quality of life for County residents and visitors."*

In order to achieve this vision, the document outlines five goals:

1. Support a variety of passive trail uses through an accessible, connected trail network that links communities and places of interest.
2. Maximize trail investments.
3. Enhance trail-user experience.
4. Collaborate with stakeholders.

5. Promote awareness of Simcoe County trails.

The goals are supported by several strategic objectives and outcomes that outline the actions that are required to achieve the overall vision. The outcome of the Simcoe County Trails Strategy was a recommended short- and long-term trail network as shown in Figure 3-1.

Figure 3-1: Simcoe County Proposed Trails Strategy

Source: Simcoe County Trails Strategy (2014)

3.2.5 Transit Feasibility and Implementation Study

The Simcoe County Transit Feasibility and Implementation Study was completed in 2016 and builds upon the County's 2014 Transportation Master Plan update. The study

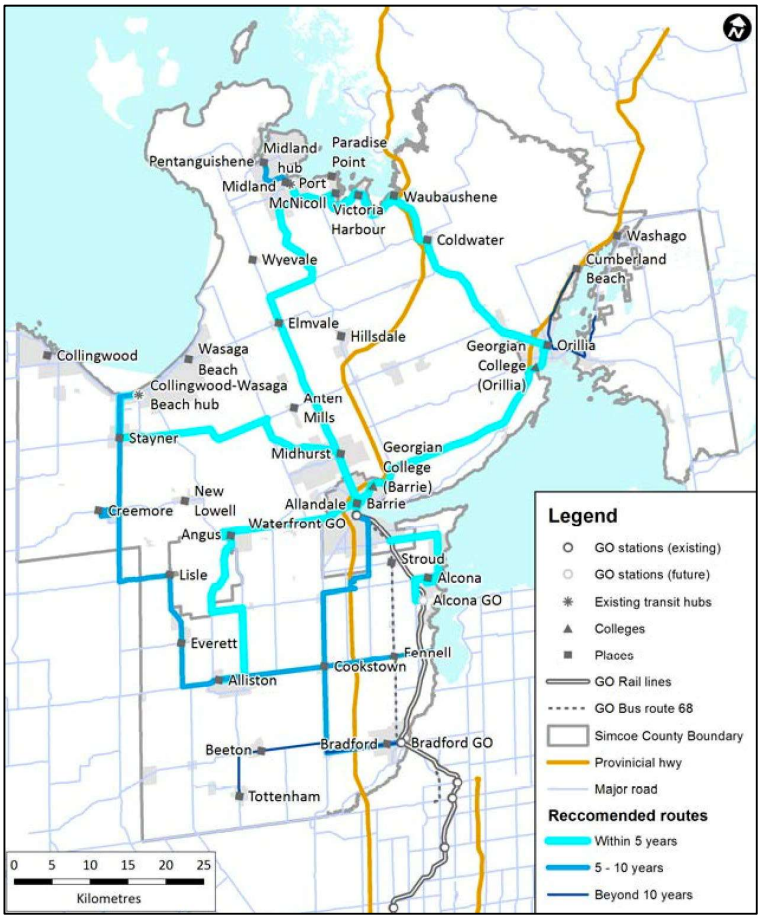
investigates the feasibility of transit partnerships, service options, delivery methods and identifies a phased implementation and monitoring strategy.

The study highlights transit systems as a desirable opportunity in rural and small urban areas as they are oftentimes considered valuable community assets due to the service it provides to mobility-restricted individuals such as students and seniors.

A service plan, including five inter-municipal hub-to-hub routes, was identified for implementation by the County. These conceptual routes and their phasing strategy is shown in Figure 3-2. As shown, two County-operated transit routes were proposed to travel through and stop within Springwater, including a Midland-Barrie route and a Collingwood-Wasaga Beach-Barrie route. The short-term service plan, reflecting higher-priority routes, was derived and evaluated based on feedback from Transit Advisory Committee, stakeholders, and the public.

Following the completion of the study, the County has since implemented the Midland-Barrie service via Route 1 (Figure 2-11), which facilitates travel between Barrie and Penetanguishene through Springwater. Further, the County implemented the Wasaga Beach-Barrie service via Route 2; however, this route uses County Road 10 and 90 to travel through Brentwood and Angus instead of passing through Springwater as was previously proposed. Both routes have 60 min headways.

Figure 3-2: Recommended Simcoe County Transit Routes



Source: County of Simcoe Transit Feasibility and Implementation Study (2016)

3.2.6 Lake Simcoe Protection Act

As part of the government's overall strategy to protect and restore the ecological health of the Lake Simcoe watershed, the *Lake Simcoe Protection Act, 2008 (Act)* was passed by the Legislature and received Royal Assent in December 2008. This *Act* provides the authority for the establishment of and amendments to a Lake Simcoe Protection Plan (LSPP). This Plan generally applies to the Lake Simcoe watershed, which is defined in the *Act* as Lake Simcoe and the parts of Ontario, the water of which drains into Lake Simcoe. The General Regulation made under the *Act* provides a description of the boundaries of the watershed.

The objectives of the Plan as set out in the *Lake Simcoe Protection Act, 2008* are to:

- Protect, improve or restore the elements that contribute to the ecological health of the Lake Simcoe watershed, including, water quality, hydrology, key natural heritage features and their functions, and key hydrologic features and their functions.

- Restore a self-sustaining cold-water fish community in Lake Simcoe.
- Reduce loadings of phosphorus and other nutrients of concern to Lake Simcoe and its tributaries.
- Reduce the discharge of pollutants to Lake Simcoe and its tributaries.
- Respond to adverse effects related to invasive species and, where possible, to prevent invasive species from entering the Lake Simcoe watershed.
- Improve the Lake Simcoe watershed's capacity to adapt to climate change.
- Provide for ongoing scientific research and monitoring related to the ecological health of the Lake Simcoe watershed.
- Improve conditions for environmentally sustainable recreation activities related to Lake Simcoe and to promote those activities.
- Promote environmentally sustainable land and water uses, activities and development practices.
- Build on the protections for the Lake Simcoe watershed that are provided by provincial plans that apply in all or part of the Lake Simcoe watershed, including the Oak Ridges Moraine Conservation Plan and the Greenbelt Plan, and provincial legislation, including the *Clean Water Act, 2006*, the *Conservation Authorities Act*, the *Ontario Water Resources Act*, and the *Planning Act*.
- Pursue any other objectives set out in the Lake Simcoe Protection Plan.

A small southern portion of the Study Area is located within the Lake Simcoe Protection Plan boundary.

3.3 Township

3.3.1 Springwater Official Plan

The Township of Springwater passed by-law 2023-075 to adopt a new Official Plan for the Township, dated July 5, 2023, subject to approval by the County of Simcoe. The Official Plan provides direction for managing growth, improving transportation, facilitating economic development, protecting / enhancing natural heritage, as well as supporting and building the strengths of Springwater over the next 25 years. The purpose of the plan is to manage and direct growth up until the year 2031. The plan aims to achieve its vision of a vibrant, healthy, and complete community that prioritizes the delivery of public service facilities, essential infrastructure, and access to services, while protecting our natural environment, agricultural lands and cultural heritage, through the following goals:

- Creating healthy and complete communities.
- Protecting agricultural land and continued agricultural production.
- Protecting the environment and natural resources.
- Conserving cultural heritage resources.
- Enhancing community services, facilities, and amenities.
- Encouraging continued economic development and growth.
- Reducing impacts related to climate change.

Section 2 of the plan provides the following key policies for growth management to meet the above goals:

- Growth in the Township will be strategic to ensure municipal services are efficiently used, and all development within major settlement areas will be connected to municipal services.
- Midhurst will serve as the focus of new development to accommodate a significant proportion of anticipate growth and create a hub for commercial and residential uses.
- That growth in the Township results in complete communities where residents of all ages and abilities have access to a range of services, housing, employment, and a range of transportation options.
- That traffic be directed to the designated arterial and collector roads, to avoid any significant increase in traffic volumes on local residential streets, and to ultimately provide other transportation linkages to settlement areas.

Section 11 of the Official Plan gives directions and policies for infrastructure within the Township. The transportation-related objectives are as follows:

- To provide for the safe and efficient movement of people of all ages and abilities.
- To facilitate the movement of people and goods between the various communities within the Township and provide connections to neighbouring municipalities.
- To improve railway crossings and other related transportation facilities for greater safety and more efficient vehicular movement.
- To recognize noise impacts created by road and rail transportation and encourage adjacent developers to reduce the effects through appropriate design.
- Improve opportunities to safely travel in the Township without a personal vehicle.
- Considering the undertaking an Active Transportation Master Plan.
- The Township will improve accessibility and equity within transportation systems and networks.

Supporting transportation-related policies under Section 11.4.1 are as follows:

- The Township will reduce through traffic as much as possible, directing the majority of traffic to a few main routes and to avoid the development of large traffic volumes on local residential streets.
- The creation of new lots and new development on vacant lots shall front on an existing public road which is maintained year around and is of a reasonable standard of construction as may be defined by the Township.
- Adequate and appropriate building setbacks from all roads will be established in the Township Zoning by-law.
- For the purposes of this Plan, a road within a Registered Plan of Subdivision that has not yet been assumed by the Township is recognized as a road.
- The County of Simcoe's requirements for development along County Roads relating to building and structure setbacks, access, road widening and sight triangles will apply to development in the Township of Springwater.

- Existing and planned major goods movement facilities and corridors will be protected from development that may create traffic hazards.
- Transportation Demand Management strategies will be employed in the planning of major development to create a more balanced and efficient transportation system that addresses current and future needs and resources.
- Multi-modal transit is encouraged to support development and intensification to improve the mix of employment and housing uses and to shorten commute journeys and decrease transportation congestion.
- Simcoe County LINX provides existing transit service between Penetanguishene and Barrie (Route 1), with stops in the Township. The Township will promote the use of this transit service as an alternative to the use of private motor vehicles while also supporting active transportation.
- The Township will work with the County and MTO to help improve access to and availability of transit service to help realize the province's goal of delivering local and intercommunity bus services through Connecting the GGH: A Transportation Plan for the Greater Golden Horseshoe.

3.3.2 Local Climate Change Action Plan

As of May 2024, the Township of Springwater, in collaboration with the Severn Sound Environmental Association, is working towards developing a Local Climate Change Action Plan to provide strategic guidelines to continue to enhance efficiency and improvements across municipal facilities, fleet and equipment. This plan forms part of the Township's commitment to achieving five milestones in the next ten years for the Partners for Climate Protection program.

3.3.3 20-Year Community-Based Strategic Plan for the Township of Springwater

The 20-Year Community Based Strategic Plan was put into effect March 2023. The plan's vision is to *"provide for modern sustainable communities that offers services, businesses and required infrastructure to support its residents, while still maintaining its traditions and small-town charm"*. This vision is achieved through the implementation of goals and objectives based on community feedback. The plan's goals and relevant derivative objectives are as follows:

- Leveraging growth to improve Springwater as a community:
  - Build complete communities to support the local population, including the necessary infrastructure for people of different ages and abilities.
- Leveraging growth to improve Springwater's economy:
  - Revive the main streets of each core community, maintaining their uniqueness and heritage.
  - Continue to build Midhurst, including the Bayfield Street Corridor, as the major urban centre and gateway area.

- Building community unity to support a sense of place.
- Addressing climate change while embracing environmental sustainability:
  - Lead the way by setting the example.
  - Protect existing climate and natural beauty of Springwater.
- Corporate Actions.

3.3.4 Growth Management Strategy

The draft Growth Management Strategy, dated August 2018, is a part of the Township's Official Plan Review. This strategy highlights the need to confirm that there are sufficient lands designated in the Township's Official Plan, working to achieve this through characterizing the extent and nature of land demand projected to 2031; review of the adequacy of Springwater's designated land supply; and providing recommendations regarding the growth management framework to be established in the Official Plan. The plan verified that the Township is on track to achieve its approved alternative minimum residential intensification, and minimum greenfield density targets.

3.3.5 Midhurst Secondary Plan

The Midhurst Secondary Plan, consolidated in October 2018, provides a land use plan and policies for the regulation of land use and development within the Midhurst secondary area. The goal of the plan is to *"provide a policy framework for detailed land use planning to guide the future development of a new community in the Midhurst Secondary Plan Area"*. Objectives are established for: land use; urban design; residential development; employment development; community facilities; the greenlands system; transportation; and services / infrastructure. The transportation objectives are listed as follows:

- To develop an active transportation system that provides a variety of connections within the community and Township.
- To create an inter-connected network of roads and lanes that provide for ease of access, orientation, and safety for pedestrians, cyclists, and vehicles.
- To create a linked trails system composed of roads, lanes and open spaces, sidewalks, off-road trails, and bicycle lanes.
- To ensure that the required components of the transportation system for any portion on the secondary plan area are committed to be in place and operative prior to or coincident with development.
- To facilitate the phased implementation of transit services based on acceptable operation and financial criteria.

Appendix 1 of the Secondary Plan is the Midhurst Urban Design Guidelines, dated September 2008. These guidelines provide some additional policies related to transportation with Section 2.2 and Section 2.3 detailing road and transit-supportive guidelines, respectively.

3.3.6 Midhurst Water, Wastewater, and Transportation Class Environmental Assessment Study

Phase 1 and 2 of the Class Environmental Assessment Study was completed in July 2009 as a single report. The purpose was to provide a Master Plan for the provision of water, wastewater, and transportation upgrades to service future growth in the Midhurst area. The Phase 3 and 4 Environmental Study Report (ESR) is dated March 2020. The purpose of this report was to document the planning process leading to the selection of preferred water, wastewater, and transportation servicing solutions to meet the needs of the future development. The Phase 3 and 4 ESR also provided revisions to the Phase 1 and 2 predecessors.

The Phase 1 and 2 report put forth a preferred solution. As a part of this solution, numerous road network improvements were proposed. These comprised of road / lane reconstructions, new interchanges, and intersection improvements. Sections 6 and 8 of the plans covered a review of the transportation system and traffic projections, respectively. Section 12 proposed six transportation options, with one being selected as the preferred. The proposed improvements associated with the preferred alternative will be summarized as part a subsequent section in this study. The preferred alternative was chosen as it: provided an optimal road network system; accommodated future growth; and minimized impact on operational considerations, social impacts on residences, air quality, noise, fisheries, and flood plain restoration. Section 18 provides further discussion on the transportation network, transit facilities, bikeway networks, pedestrians, and travel demand management.

Phase 3 and 4 of the ESR also contains recommended transportation improvements, consisting of road widenings, interchange upgrades, intersection improvements, and road linkage projects. Section 7 of the report provides a detailed analysis of the existing and future traffic conditions, as well as a summary of the required road improvements. Section 15 details a summary of all recommended projects, including transportation-specific improvements, which will be detailed as part of a subsequent section of this study.

3.3.7 Bayfield Street Corridor Study

The Bayfield Street Corridor Study, dated February 2021, was undertaken as part of the Township's Official Plan Review. The study provides a land use analysis and demonstration of permitted mixed uses and will further develop urban design criteria as a next step. The plan aims to revision Bayfield Street as being a new focal point for the Midhurst community and a destination point for the Township as a whole.

To achieve this vision, the plan targets the following goals through a review of current conditions, review of opportunities and challenges, recommendations, and policy direction:

- Support the major intersection of Bayfield Street / County Road 43 (Snow Valley Road) / Finlay Mill Road, establishing a community focal point.
- Identify land uses considered appropriate for the high order community focus area.
- Accommodate a mix of retail, commercial, and residential uses scaled to pedestrians and cyclists.
- Consolidate and limit the number of vehicular access locations.
- Further develop urban design guidelines specific to the corridor.

3.3.8 Trails Master Plan Update

In March 2025, the Township of Springwater provided an update to the 2008 Trails Master Plan to guide the future planning of trails, trail development and long-term maintenance over the next ten years to 2035. As the municipality continues to grow, the plan will assist the Township in guiding and managing existing and future goals for trails in a cost effective and sustainable manner.

3.3.9 Ten Year Capital Plan

The Township of Springwater is responsible for acquiring, maintaining, and rehabilitating its infrastructure and assets to ensure that reliable service is provided to businesses and residents. Major infrastructure in the Township consists of roads, bridges and culverts, sewers, watermains (including water and wastewater treatment plants) and pumping stations, and facilities including recreation centres, libraries, parks, pavilions, fire stations and an administration centre. Capital projects are prioritized by need and outlined in the Township's Ten Year (2021-2030) Capital Plan.

4.0 Master Plan Vision

The Township of Springwater has initiated this Transportation Master Plan to consider solutions that meet the needs of continued forecasted growth to 2041, and safe, efficient flow of traffic through the Township and between its communities, with consideration of active transportation and efficient goods movement.

With the intent of establishing a robust and well-connected transportation system in Springwater, the following vision and supporting goals and objectives were developed based upon the planning policies and plans that govern the Township, as summarized in the previous section.

Vision Statement

A broad, inspirational statement for the future transportation system

"The Township of Springwater transportation system strives to facilitate safe and efficient movement of people, traffic and goods to and from communities, through long-range planning of transportation infrastructure improvements to 2041 that addresses current needs, growth, the environment, and natural heritage."

Goals

Overarching aims or targets to be achieved to support the vision

- Support growth to 2041 and capitalize on related opportunities.
- Develop a sustainable transportation system to facilitate regional linkages and travel to and from the various communities within the Township.
- Support the safe and efficient movement of goods and people in a manner consistent with provincial and regional transportation plans.

- Facilitate long-range phasing of transportation infrastructure improvements and enhancements.
- Develop a future-ready transportation plan that expands the multi-modality of the transportation system including driving, transit, walking, cycling, and other emerging mobility options.
- Build a safe and inclusive transportation system that supports age-friendly communities and promotes healthy living.

Objectives

Specific, measurable steps toward the goals

- Develop an overall road system and standard that is integrated with the existing and proposed road patterns of the adjoining municipalities, the County Road system, as well as with the Provincial Highway system.
- Enhance the Township's traffic forecasting capabilities through the creation of a traffic demand simulation model.
- Provide a framework to support evidence-based decisions regarding the Township's transportation-related improvements.
- Develop transportation policies to inform decision-making and reduce traffic infiltration onto local roads and into neighbourhoods.
- Deliver sustainable strategies that protect natural heritage assets while reducing transportation’s effects on climate change.

5.0 Future Planned Conditions

5.1 Planned Transportation Improvements

In developing the Springwater Transportation Master Plan for the next 20 years, it is important to build the existing planned and strategic opportunities as they relate to transportation. To this effect, the above studies assessed and recommended the transportation improvements listed in Table 5-1, of which the projects proposed by 2041 were carried forward into the baseline transportation network for this Transportation Master Plan.

Table 5-1: Planned Improvements

Improvement Type	Road Segment / Location	From	To	Proposed Improvement	Proposed Phasing	Responsibility	Source
Active Transportation	North Simcoe Rail Trail	Flos Rd 7	Flos Rd 8	Trail	N/A	County	County Trails Strategy
Active Transportation	North Simcoe Rail Trail	Elmvale North Link	Tiny Trail	Trail	N/A	County	County Trails Strategy
Roads	Midhurst			Collector roadway network	Varies	Township / Developer	Midhurst Secondary Plan
Transit	Collingwood-Wasaga Beach-Barrie			Transit route	Short	County	County Transit Feasibility and Implementation Study
Intersection	Yonge St / Train Avenue East Crosswalk			Traffic signals	Short	Township	Township Ten Year Capital Plan
Roads	Flos Road 4	Clearview / Springwater Boundary	Highway 93	Transfer jurisdiction to Simcoe County	Medium	Township / County	County TMP
Roads	Craig Rd	Russell Road	County Road 27 (Bayfield Street)	Extension	Medium	Township	Midhurst Class EA
Roads	St. Vincent St	Belmont Cres	Park Trail	Extension	Medium	Township / Developer	Midhurst Class EA
Roads	Finlay Mill Rd	Wattie Rd	Highway 26	Centre two-way left-turn lane	Medium	Township / Developer	Midhurst Class EA

Improvement Type	Road Segment / Location	From	To	Proposed Improvement	Proposed Phasing	Responsibility	Source
Intersection	County Road 53 (Wilson Dr) / County Road 43 (Snow Valley Road)			Traffic signal	Implemented (2023)	County	Midhurst Class EA
Intersection	County Road 53 (Wilson Dr) / Carson Rd			Traffic signal *(Post Midhurst Class EA study note: this is now designated as a roundabout)*	Implemented (2024)	County	Midhurst Class EA
Intersection	Highway 26 / County Road 43 (Snow Valley Road) / Finlay Mill Rd			Exclusive left-turn lane at eastbound approach	Medium	MTO	Midhurst Class EA
Intersection	Russell Rd / Forbes Rd / Craig Rd			Traffic signal	Medium	Township	Midhurst Class EA
Intersection	Russell Rd / Doran Rd			Traffic signal	Medium	Township	Midhurst Class EA
Intersection	Finlay Mill Rd / Wattie Rd			Exclusive turn lane(s)	Medium	Township / Developer	Midhurst Class EA
Active Transportation	Trans Canada Trail			Facility upgrades	Medium	County	County TMP
Active Transportation	County Road 43 (Snow Valley Road)	County Rd 28 (George Johnston Road)	Highway 26	Paved shoulders (with buffers)	Medium	County	County TMP

Improvement Type	Road Segment / Location	From	To	Proposed Improvement	Proposed Phasing	Responsibility	Source
Roads	Forbes Rd	Russell Rd	Highway 400	Widen to 4 lanes	Long	County	Midhurst Class EA
Roads	Russell Rd	South of Walt Rd	Forbes Rd	Widen to 4 lanes	Long	Township	Midhurst Class EA
Intersection	County Road 53 (Wilson Dr) / County Road 43 (Snow Valley Road)			Traffic signal	Long	County	Midhurst Class EA
Intersection	Highway 26 / County Road 43 (Snow Valley Road) / Finlay Mill Rd			Exclusive right-turn lane at southbound approach	Long	MTO	Midhurst Class EA
Intersection	Highway 26 / Carson Rd			Exclusive turn lane(s)	Long	MTO	Midhurst Class EA
Intersection	Doran Rd / St. Vincent St			Traffic signal	Long	Township	Midhurst Class EA
Intersection	St. Vincent St / Pooles Rd			Traffic signal	Long	Township	Midhurst Class EA
Intersection	Russell Rd / Pooles Rd			Traffic signal	Long	Township	Midhurst Class EA
Intersection	Forbes Rd / Russell Rd			Exclusive turn lane(s)	Long	Township	Midhurst Class EA
Intersection	Forbes Rd / Highway 400 southbound off-ramp			Exclusive turn lane(s)	Long	Township / County / MTO	Midhurst Class EA

Improvement Type	Road Segment / Location	From	To	Proposed Improvement	Proposed Phasing	Responsibility	Source
Intersection	Forbes Road / Highway 400 northbound off-ramp			Exclusive turn lane(s)	Long	Township / County / MTO	Midhurst Class EA
Roads	County Road 53 (Wilson Dr)	County Road 43 (Snow Valley Road)	Barrie / Springwater Boundary	Widen to 4 lanes	2051	County	County TMP
Roads	County Road 43 (Snow Valley Road)	County Rd 53 (Wilson Dr)	Highway 26	Widen to 4 lanes	2051	County	County TMP
Roads	Forbes Rd	County Rd 27 (Bayfield Street)	Highway 400	Transfer jurisdiction to Simcoe County	2051	Township / County	County TMP
Roads	County Road 40 (Sunnidale Road)	Dobson Rd	Barrie City Limit	Future study	Beyond 2051	County	County TMP
Roads	County Rd 53 (Wilson Dr)	Highway 26	Carson Rd	Future study	Beyond 2051	County	County TMP
Roads	County Rd 27 (Bayfield Street)	County Rd 22 (Horseshoe Valley Road)	Mills Cir	Future study	Beyond 2051	County	County TMP
Roads	County Rd 93 (Penetanguishene Road)	County Rd 11 (Old Barrie Road)	Barrie City Limit	Future study	Beyond 2051	County	County TMP

Notes: 1. Only projects associated with new construction were included from the Township Ten Year Capital Plan. Rehabilitation, reconstruction and maintenance improvements were excluded for the purposes of this study.
2. Proposed phasing: Short=by 2028; Medium=by 2031; Long=by 2041. Improvements 2051 or beyond are not within the scope of this study.
3. Some of the proposed improvements recommended by from the source document may have changed due to subsequent investigations and studies.
4. The previously proposed Intersection Pedestrian Signal (IPS) at Highway 93 / Albert Street in Hillsdale was implemented since the completion of these plans and studies.

5.2 Planned Growth

In 2018, the Township of Springwater completed a Growth Management Strategy (GMS) as part of its Official Plan review process, following the direction of the Provincial Planning Statement (PPS, 2024) to centralize growth and development. The GMS forecasts Springwater's population to double from 21,701 in 2021 (Census) to approximately 45,860 by 2041. The Township's employment is estimated to grow from approximately 6,730 jobs to 8,360 jobs in 2041. This expected growth in population and employment will increase commuter and local traffic on the roadways and active transportation systems throughout the Township.

The allocation of growth between settlement areas, as summarized in Figure 5-1 and detailed in Table 5-2, was provided by the Township. Consistent with the Township's Growth Management Strategy, the major communities of Midhurst, Hillsdale and Elmvale, including the designated greenfield areas and delineated built-up areas as shown in Figure 5-2, is intended to accommodate the majority of the population and employment growth to 2041. Planned residential developments are illustrated in Figure 5-3.

Figure 5-1: Planned Settlement Area Population Growth

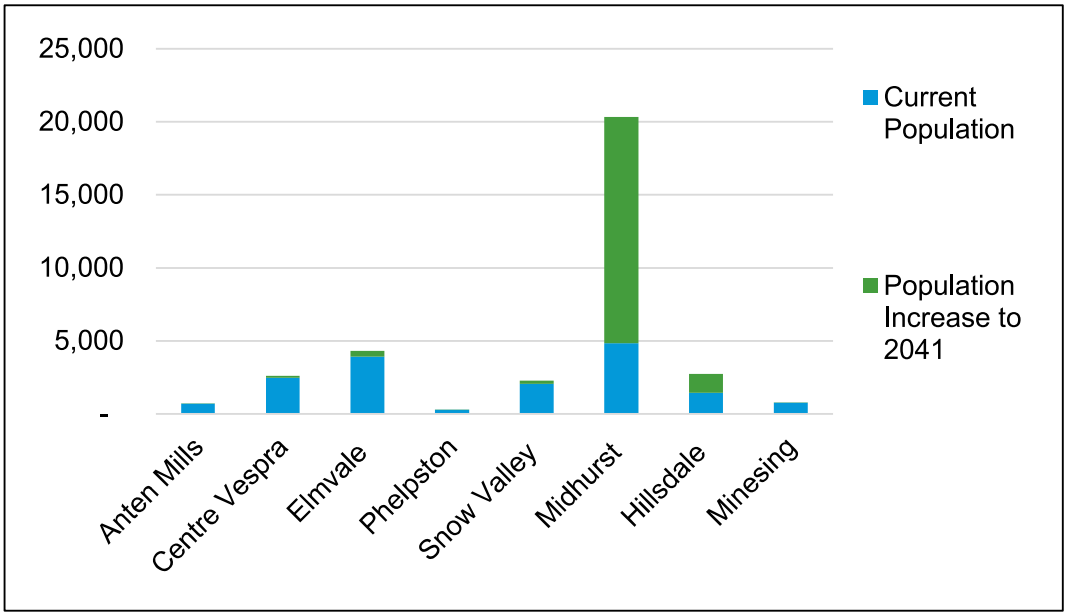
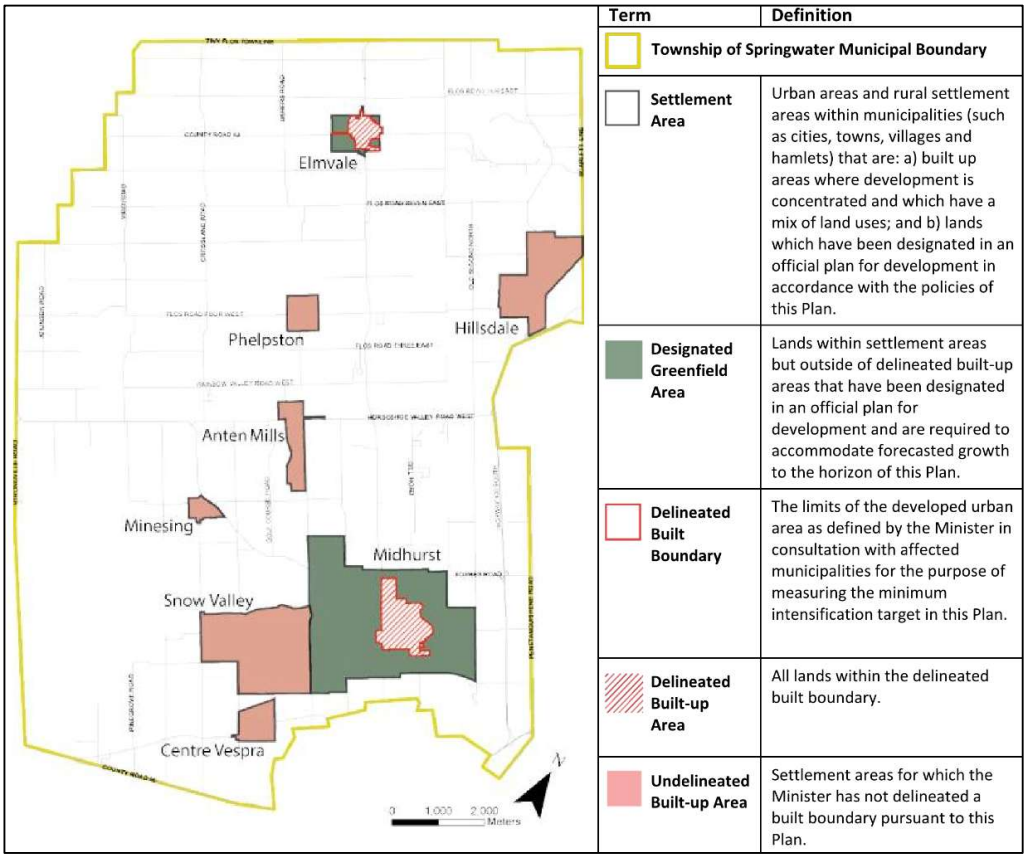


Table 5-2: Planned Settlement Area Population Growth

Settlement Area	Current Population	2041 Population	% 2041 Population
Anten Mills	684	715	2%
Centre Vespra	2,478	2,610	8%
Elmvale	3,913	4,308	13%
Phelpston	267	267	1%
Snow Valley	2,055	2,275	7%
Midhurst	4,823	20,336	60%
Hillsdale	1,434	2,735	8%
Minesing	763	763	2%
Subtotal	16,417	34,009	100%
Other Rural Areas	5,284	10,546	-
Total	**21,701**	**44,555**	-

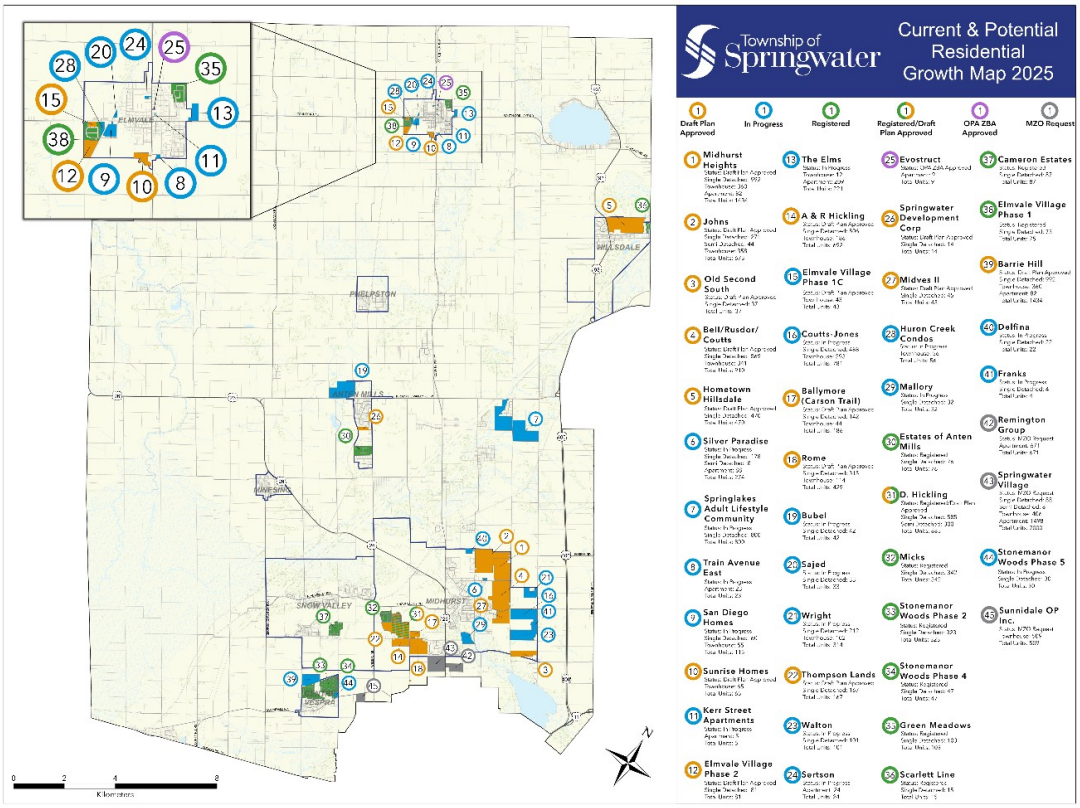
Note: The current population was adjusted proportionally to match the 2021 Census population

Figure 5-2: Designated Development Areas



Source: Township of Springwater Draft Growth Management Strategy (August 2018)

Figure 5-3: Planned Residential Development Growth

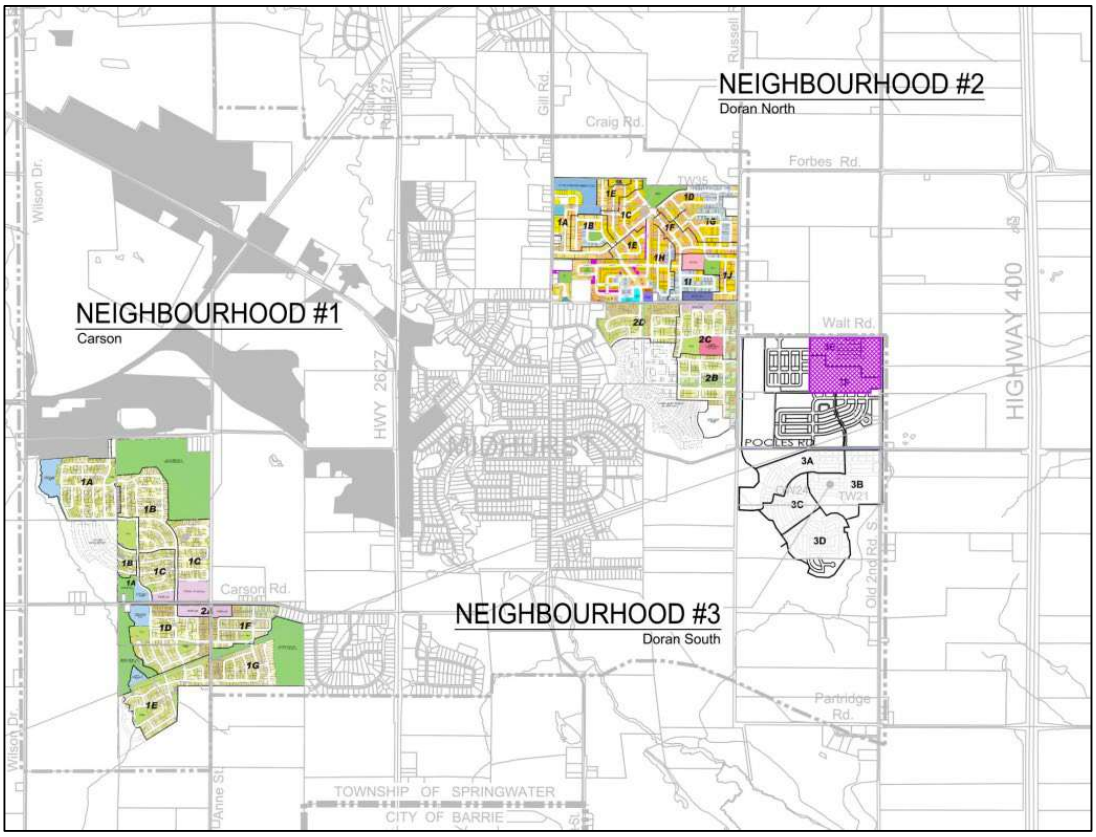


5.2.1 Midhurst Secondary Plan

As mentioned, the majority of future development is allocated to the Midhurst area. The Township completed a Master Servicing Plan for water, wastewater and transportation upgrades to accommodate anticipated population growth in Midhurst following the approval of the Midhurst Secondary Plan (OPA 38). Phase 1 and Phase 2 of the Master Servicing Plan were completed in 2009 in accordance with the MCEA process. Phase 3 and 4 of the Master Servicing Plan was completed in 2020. Table 5-1 includes improvements as recommended from the Master Servicing Plan.

According to the plan, the proposed development will be implemented in two phases within the 2031 and 2041 planning horizons. The proposed communities, referred to as the Carson Development Area 1, and the Doran Development Areas 2 and 3 are situated along the east and west limits of the Midhurst Secondary Plan as shown in Figure 5-4. The total projected growth from the Midhurst development is 8,208 units by 2041. This development can significantly alter the volumes and direction of traffic flows within and throughout the Township.

Figure 5-4: Midhurst Planned Communities



5.2.2 Adjacent Municipality Growth

Growth in adjacent and neighbouring municipalities to Springwater will also contribute to the future traffic levels within the Township, although most of this added traffic is anticipated to be through traffic travelling along the Provincial and County Road network.

Simcoe County, excluding the City of Barrie and City of Orillia, is forecasted to grow from the existing (2021) population of 351,929 to 497,000 people by 2041, amounting to an annual growth rate of 2%.

As mentioned, the Simcoe County Transportation Master Plan was completed and endorsed in 2023. The City of Barrie, Clearview Township and Town of Wasaga Beach are in the process of updating their Transportation Master Plan. The Township of Oro-Medonte and the Township of Essa are also in the process of initiating a Transportation Master Plan.

6.0 Transportation Assessment

A transportation assessment was undertaken considering the Township, County and Provincial plans and strategies to 2041. The assessment evaluated the performance, needs, and opportunities of the Township's transportation network as it pertains to roads, active transportation and transit.

6.1 Road Network

The Township's Road network can facilitate land access, support the movement of people and goods by vehicles (including public transit), and allocate space for other infrastructure such as utilities and active transportation (such as sidewalks and paved shoulders). The demand for road capacity and potential improvements depends on how effectively and conveniently the roads serve public commuting, public transit, and handle the movement of goods.

An effective road network consists of facilities to accommodate traffic growth and patterns, a well-defined classification and hierarchy for road mobility, and geometric alignments and designs that align with corridor-specific functions.

6.1.1 Alternate Route Analysis

For a functional and effective road network, the majority of traffic passing through the Township should be directed to the major routes (i.e., County and Provincial Road systems), whose purpose is to facilitate high volumes of traffic, to minimize traffic infiltration onto the local streets in Springwater.

A review of alternate routes was conducted based on traffic projections to the 2041 horizon year. The purpose of these alternative routes is to divert traffic away from major settlement areas, preserving the liveability of the communities and their residents.

6.1.1.1 Travel Demand Forecast

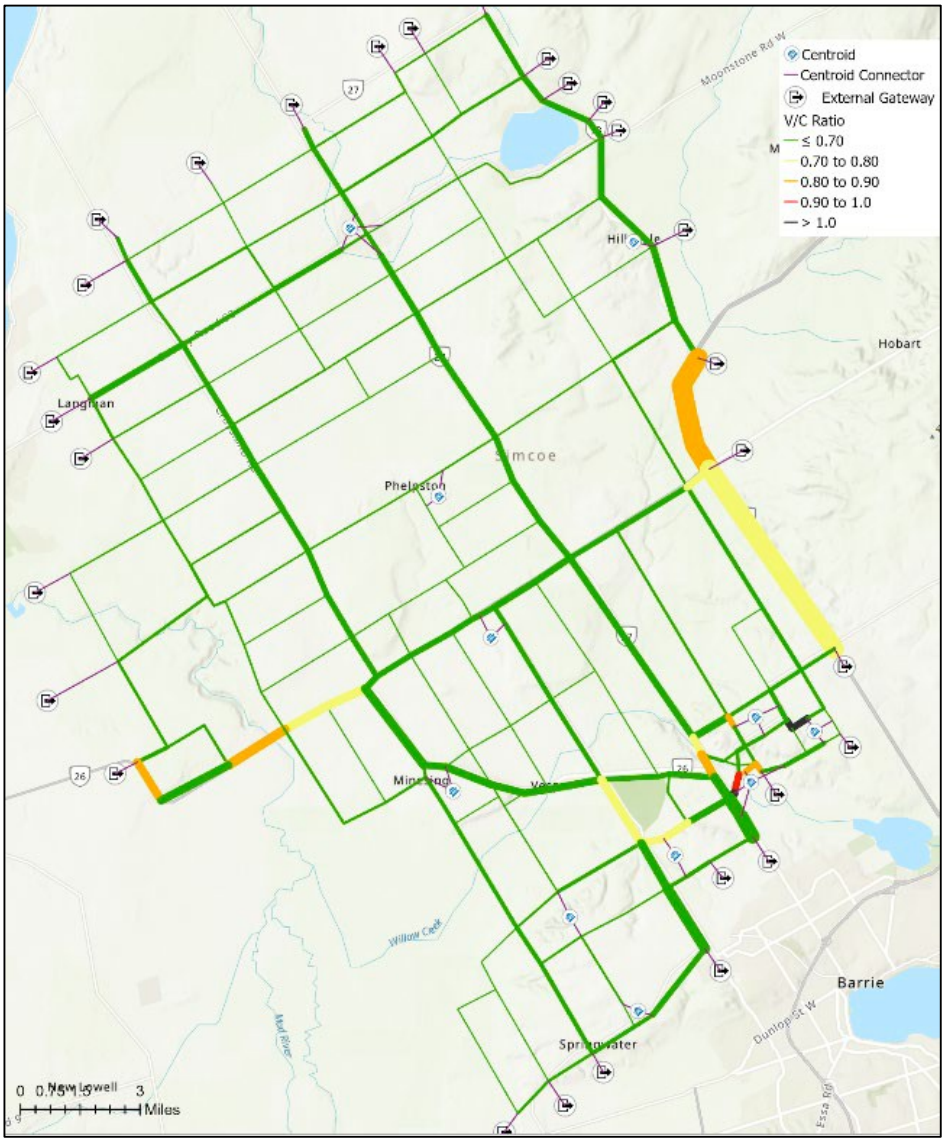
The future road network performance was assessed using a macro travel demand model, which was developed using QRS II. A travel demand model acts as an analytical tool to quantitatively estimate the effects of planned transportation improvements and future development. QRS II takes a set of available input data to establish parameters for factors such as travel behaviour and socioeconomic characteristics and converts it to a set of output data using a set of mathematical functions. Inputs used to develop the Springwater travel demand model include:

- The road network layer for Springwater.
- Future population and dwelling forecasts to 2041, by settlement area.
- Socioeconomic data.

- Traffic counts.
- Passthrough trip data.
- Planned road infrastructure improvements as identified from previous studies and / or secondary plans (see Table 5-1).

This macroscopic daily travel demand model was validated and calibrated to 2023 baseline counts. The models auto travel demand for the road network within Springwater only, with gateway zones located at the Township boundaries to account for external trips. The model forecasted future road volumes to the 2041 horizon, with a daily to peak hour conversion factor applied to derive PM peak hour traffic conditions. The resulting forecasted 2041 volume to capacity ratios is shown in Figure 6-1. Detailed documentation related to the model forecasting process is provided in Appendix C.

Figure 6-1: Modelled (2041) PM Peak Hour Volume to Capacity Ratios



6.1.1.2 Constrained Corridors

Roads forecasted to approach or exceed capacity by 2041 consist primarily of County or Provincial roads, including Highway 400, Highway 26 west of County Road 22 (Horseshoe Valley Road), County Road 53 (Wilson Drive) between Highway 26 and County Road 43 (Snow Valley Road) and County Road 27 (Bayfield Street) between Highway 26 and future Craig Road (Forbes Road extension).

This is understandable given that Highway 400 is the major corridor feeding into the City of Barrie (the largest trip attractor / generator external to Springwater), Township of Oro-Medonte and south to the Greater Toronto Area (GTA). Highway 26 also facilitates

travel between the area's northwest of Springwater (such as Collingwood, Wasaga Beach and Stayner) and Barrie, where it then connects to Highway 400. Simcoe County roads identified to approach capacity are situated within or near the Midhurst expanded settlement area, which is planned to represent more than half of the Township's population by 2041.

Constrained Township roads are listed below, all of which were identified to be located near the Midhurst Secondary Plan area:

- Gill Road between Forbes Road and Doran Road.
- Finlay Mill Road between Highway 26 and Wattie Road.
- Wattie Road between Finlay Mill Road and St. Vincent Street.
- Walt Road between Russell Road and Old Second Road.

The Midhurst Master Servicing Plan has already identified transportation improvements to accommodate future intensification, which are subject to further study with feasibility, alignment and corridor-specific needs addressed through detailed design. However, with these planned road improvements incorporated in the model, there are still corridors within the Township that are forecasted to be operating under constrained conditions. Therein lies the opportunity for the Township to improve road network efficiency through the identification of and improvement to alternative routes, as summarized in Table 6-1.

Table 6-1: Road Network Improvement Opportunities

Road / Intersection	From	To	Improvement	Justification	Proposed Phasing
Craig Road	Russell Road	County Road 27 (Bayfield Street)	Extension [1]	New roadway link required to accommodate growth.	Short
Forbes Road / Craig Rd Extension	County Road 27 (Bayfield Street)	Highway 400	Road Transfer to County [2]	Transfer to be coordinated with the construction of the Craig Road extension and ultimately serve as an alternate east-west connection to address forecasted (2041) congestion along Finlay Mill Road and Wattie Road.	Medium

Road / Intersection	From	To	Improvement	Justification	Proposed Phasing
County Road 53 (Wilson Drive)	County Road 43 (Snow Valley Road)	Highway 26	Widening to 4 Lanes [2]	Alternate north-south connection to relieve Bayfield Street congestion.	Medium
Carson Road	Highway 26	St. Vincent Street	Extension	Alternate east-west connection to address forecasted (2041) congestion along Finlay Mill Road and Wattie Road.	Long
County Road 43 (Snow Valley Road)	County Road 53 (Wilson Dr)	Highway 26	Widening to 4 Lanes [1]	Address forecasted (2041) congestion along County Road 43 (Snow Valley Road).	Long

Notes: 1. The Craig Road extension to County Road 27 (Bayfield Street) was identified as an improvement for the medium-term (by 2031) in the Midhurst Class EA. This connection should be considered as an immediate need. Therefore, it is recommended that the improvement be implemented in the short term (by 2028), as explained further in the section below.
2. Identified in the Simcoe County TMP (2023) as an improvement for the 2051 horizon, it is recommended that the improvement be investigated for implementation within an earlier timeframe (medium-term) as noted.

6.1.1.3 Forbes Road / Craig Road Extension

The proposed Craig Road extension between Russell Road and County Road 27 (Bayfield Street) was identified as an improvement for the medium-term (by 2031) in the Midhurst Class EA. This road extension will act as a major east-west route as it facilitates a direct connection between County Road 27, which transitions to Highway 26, and Highway 400, thereby accommodating travel to / from the City of Barrie, the Greater Toronto Area (GTA) and municipalities to the east including the Township of Oro-Medonte.

In the short-term (by 2028), the neighbourhood designated as the Doran Road North Development (per Midhurst Class EA) is expected to be approximately 70% built out. This development will consist of 1815 residential units and will occupy the area of Midhurst south of Craig Road and west of Russell Road. Without the extension of Craig Road, residents of the new development looking to access County Road 27 will need to take Doran Road and / or Findlay Mill Road, both of which are Township roads with direct property access.

This connection should be considered an immediate need as it is a key route for new residents in the expanded Midhurst area. Therefore, it is recommended that the improvement be implemented in the short-term (by 2028).

6.1.1.4 Flos Road 4 Transfer

Flos Road 4 is currently designated as a Township arterial road and planned to be uploaded to the County of Simcoe by 2031. The road services will continue to service the settlement area of Phelpston, including six residential road accesses and an access to the Trans Canada Trail, after the road is uploaded.

With the upgrades to County Road standards (including pavement widening), additional traffic will be attracted to the road, impacting both local vehicular and foot traffic within the community. Further, since the County Road system serves a goods movement purpose, there will likely be an increase in truck traffic, additional to those already using Flos Road 4 to access the nearby pit just west of the community.

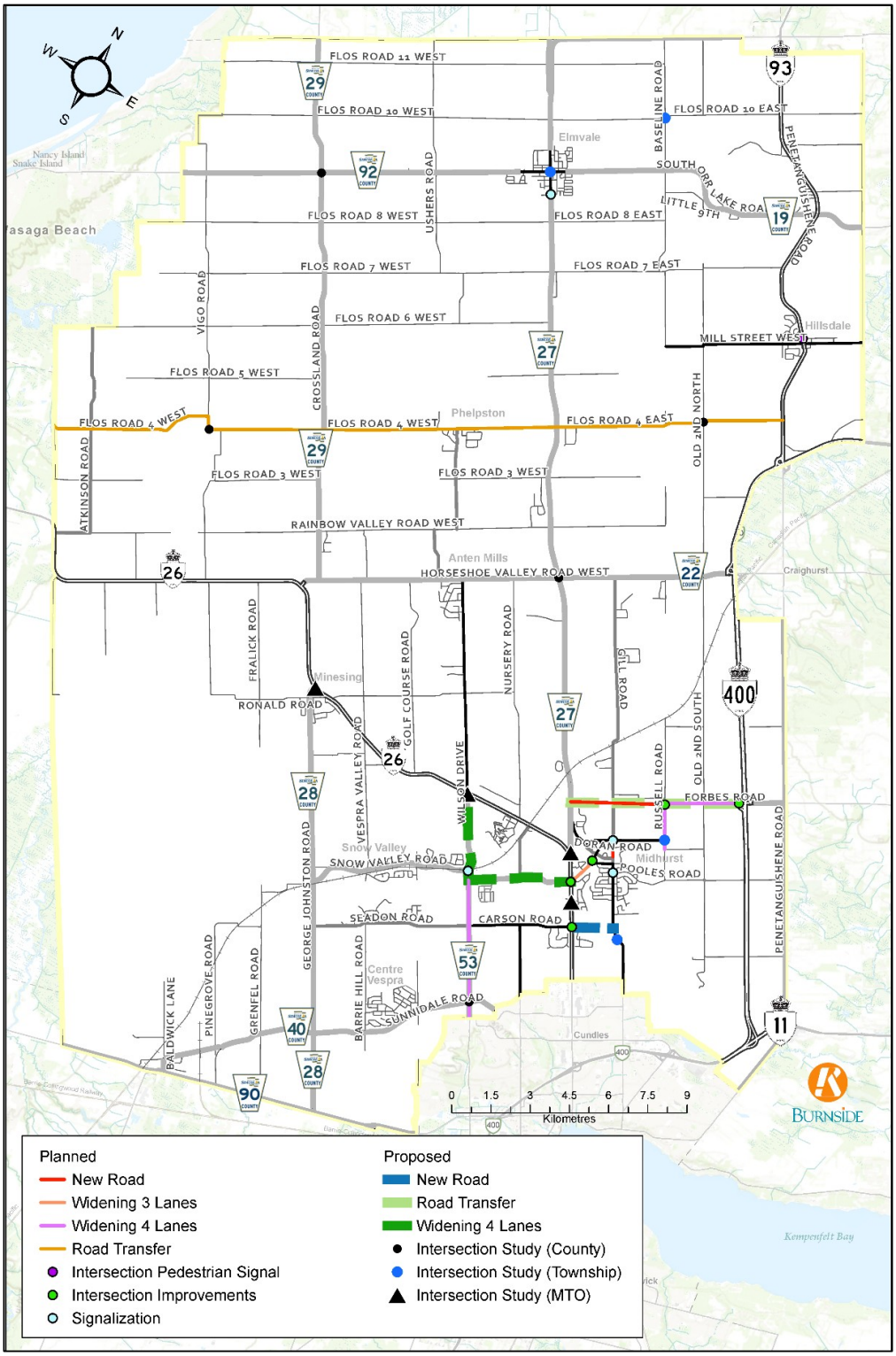
Traffic levels along Flos Road 4 within the Phelpston community should be monitored once upgraded to assure the safety of residents, facilitate safe crossing to / from the major north-south Trans Canda Trail, preserve the liveability of the community, and minimize through traffic infiltration.

It is recommended that the Township collaborate with the County of Simcoe to monitor traffic levels along Flos Road 4 within Phelpston following the upgrade to County standards to preserve the livability and safety of residents and active transportation users.

6.1.1.5 Road Network Improvements

The planned and proposed road improvements, including new opportunities identified as part of the existing and future conditions assessment, are shown in Figure 6-2.

Figure 6-2: Road Network Improvement Opportunities



6.1.2 Road Design Standards

Municipalities categorize their roads into hierarchical functional classifications based on the type or magnitude of mobility it intends to service. Supporting road rights-of-way (ROW) is established for each classification to ensure that transportation assets such as pavement / lane widths and pedestrian / cyclist facilities required to meet the function of the road are accommodated. In the case of most municipalities, including Springwater, these road classifications are documented in the Official Plan.

Road design standards and policies as it pertains to transportation were reviewed to identify opportunities for updates to the Township's current road classification system and associated designated ROW widths to address context-sensitive needs of all modes of transportation.

The Township categorizes roads under their jurisdiction as Arterial, Collector or Local roads, and are subject to the Official Plan (2023) policies summarized in Table 6-2.

Table 6-2: Current Road Classification Policies

Road Class	Function / Description	Direct Access to Properties	Right-of-Way (ROW) Width (m)	Facilities
Arterial	Major transportation routes carrying significant volumes of through or local traffic.	Restricted wherever possible.	30	Sidewalks and separated bicycle facilities on urban roads connecting residential to commercial areas.
Collector	Collect traffic from individual local roads and direct traffic to arterial roads, County roads or Provincial highways.	Carefully considered and where appropriate.	20-25	Sidewalks and bicycle facilities on urban roads.
Local	Remainder of the roads in Springwater.	Designed primarily to provide access to abutting properties.	20	Sidewalks will be provided along urban roads.

Note: Summarized from the Township Official Plan (2023)

The Township's Engineering Design Standards and Specifications Manual (2019), which predates the Official Plan update (2023), prescribes the following design standards related to roadways:

- Ontario Provincial Standard Specifications (OPSS) and Ontario Provincial Standard Drawings (OPSD) shall apply together with these Township Standards. Where there are any apparent conflicts or discrepancies, the Township Engineering Standards and Standard Drawings shall take precedence.
- ROWs shall be a minimum of 20 m wide for local streets, 26 m for minor and major collectors and 30 m for arterial roadways.
- A 23 m ROW conforming to STD R12 and STD R13 will be permitted, at the Township's discretion, for minor collector roads specifically for developments within the Midhurst Secondary Plan.

The Engineering Design Standards and Specifications Manual also prescribes geometric standards for road design as summarized in Table 6-3. As shown, these standards are established for road classifications that differ from the Official Plan.

Table 6-3: Current Geometric Design Standards

Road Class (Cross-Section)	ROW Width (m)	Design Speed (km/h)	Pavement Width (m)
Arterial (Urban)	30	100	14
Collector (Major – Urban)	26	90	14
Collector (Minor – Urban)	26	70	12
Industrial (Urban)	26	60	10
Industrial (Rural)	26	60	7.5
Collector (Minor – Urban)	23	60	11
Local (Urban)	20	60	8.5
Local (Rural)	20	60	6.5

Note: Summarized from Table 2 of the Township's Engineering Design Standards and Specifications Manual (2019)

Despite the fact that the Township's Official Plan was updated more recently, its proposed road classifications remain unchanged. In addition, unlike the geometric design standards, the classifications from the Official Plan do not explicitly distinguish the varying function and design requirements of a road in the urban versus rural setting. Thus, there is an opportunity to build on the Geometric Standards for Road Design in the Township's Engineering Design Standards and Specifications Manual to establish an updated road classification system that provides more comprehensive criteria to address context-sensitive and multi-modal requirements.

Table 6-4 summarizes the proposed update to the Township's Road design criteria and policies associated with each road classification. The update considers existing design standards and provides more explicit direction on the provision for key cross-sectional

elements within the road ROW, including active transportation facilities, boulevard features, provision of transit, and traffic calming measures.

It is recommended that the Township consider the updated road design criteria and policies identified in Table 6-4 as part of the next update to the Official Plan and / or Engineering Design Standards and Specifications Manual

Table 6-4: Proposed Road Classification Standards and Criteria

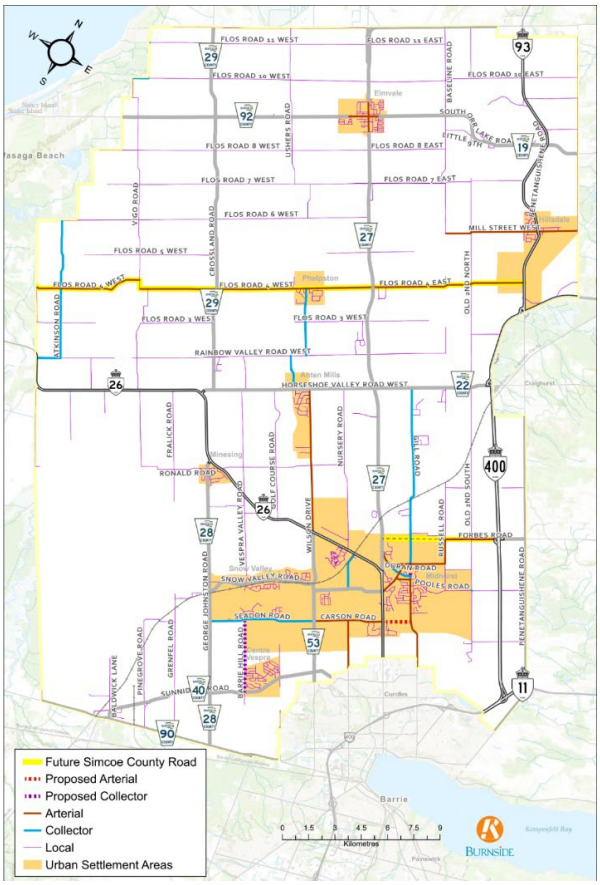
Road Class	Context	ROW Width (m)	Pavement Width (m)	Lanes	Traffic Volumes	Boulevard Features	Transit	Pedestrian Facilities	Cycling Facilities	On-Street Parking
Arterial	Urban	30	14	2 to 4	Moderate to High	Street furniture / streetscaping, landscaping / trees, lighting	Permitted	Enhanced pedestrian zone and AODA-compliant sidewalks on both sides	Physically separated cycling facilities	Encouraged in business areas
	Rural	30	14	2 to 4	Moderate to High	Rural swales	Permitted	Not required	Paved shoulders	None
Collector	Urban	25	12	2	Moderate	Street furniture / streetscaping, landscaping / trees, lighting	Permitted	AODA-compliant sidewalks on both sides	Separated cycling facilities	Encouraged in business areas
	Rural	25	14	2	Moderate	Rural swales	Permitted	Not required	Paved shoulders	None
	Industrial	25	10	2	Moderate	Stormwater management and drainage features	Permitted	Not required	Separated cycling facilities or paved shoulders	None
Local	Urban	20	8.5	2	Low	Street furniture / streetscaping, landscaping / trees, lighting	Generally avoided	Sidewalks on one or both sides	Separated or shared cycling facilities	Permitted
	Rural	20	6.5	2	Low	Not required	Generally avoided	Not required	Paved shoulders	None
	Industrial	20	7.5	2	Low	Stormwater management and drainage features	Generally avoided	Not required	Separated cycling facilities or paved shoulders	None

Note: Urban roads require provision for 0.5 m curb and gutter per OPSD 600.070, which is not included in the pavement width

6.1.3 Road Classification Updates

Figure 6-3 illustrates proposed updates to the current road class designations to align with updated road standards and criteria and account for planned improvements.

Figure 6-3: Road Classification Updates



The road classification map can be supported by the following policies:

- The Township aims to achieve the midblock ROW widths and provide the appropriate number of lanes to support the road classifications as shown. These ROW widths are not intended to specify that such roads will necessarily be widened for additional lanes, or intersections be improved.
- Necessary ROW widths will be acquired through the Secondary Plan process and / or conditions of approval for subdivisions, severance, or site plans, or through purchase, expropriation, gift, bequeathment or other appropriate means.
- Any road that has less than the designated ROW width requirements will be considered for widening pursuant to the relevant sections of the *Planning Act*, dealing with road widenings as a condition of development approvals.

- Intersection road allowances may be required in excess of the designated road allowances to provide for daylight triangles, lane channelization, or traffic control devices.
- Road widenings in excess of road allowance requirements may be required along roads to provide lands for environmental considerations, culvert accommodation, cut and fill requirements, bridges, utilities, landscape features, overpasses and for auxiliary turn lanes to provide better access and improve traffic operations.
- Where existing developments, road alignments, or topography make it impractical to obtain desired road widenings, road improvements may be designed within the existing ROW.

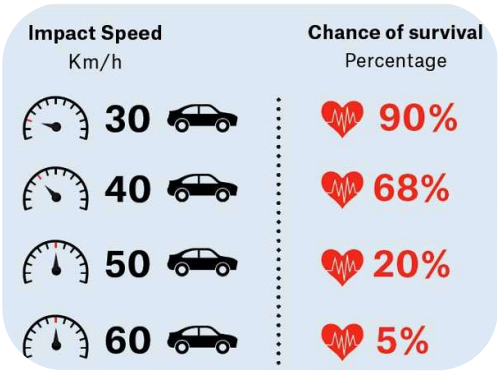
It is recommended that the Township adopt the road classification map and supporting policies as part of the next Official Plan update.

6.1.4 Speed Limit Policy

The Highway Traffic Act (HTA) requires that roads within a built-up area have a statutory speed of 50 km/h, unless otherwise designated. Outside of these areas (i.e., in rural areas), the statutory speed limit is 80 km/h, unless otherwise designated. The Township is required to place signage where the speed limit varies from the statutory requirement.

The Safer School Zones Act (Bill 65) came into effect in May 2017, which grants municipalities the authority to change the speed limit below 50 km/h for an entire area that is within its jurisdiction, provided that a speed limit sign be installed at the entrance and exit of each roadway into the area. Under this regulatory framework, an area-wide 30 km/h speed limit can be considered for school zones, should safety concerns be expressed by the community.

Establishing enforceable and appropriate speed limits is important in both urban and rural settings to provide drivers with a sense of what speed is safe for prevailing conditions. Any changes to posted speeds should also prioritize the safety of vulnerable road users such as pedestrians and cyclists, due to the exponential correlation between vehicular speed and the severity of collision impact, as shown in the image on the right.



Source: Selwyn District

Conducting surveys to collect data on the operating and 85th percentile speeds is an important factor in informing the decisions for speed adjustments or traffic control improvements along a roadway. The operating speed refers to the speed at which vehicles are observed to be driving under free-flow (uncongested) conditions, with the 85th percentile distribution representing the speed at or below which 85% of vehicles were surveyed to travel. Operating speeds are typically a function of the surrounding built environment, as road characteristics such as horizontal / vertical alignment, lane width, roadside hazards, pedestrian / cyclist exposure and driveway accesses impact the driving speed.

The following speed policy was developed for the Township to help define the circumstances and conditions in which an adjustment to the posted speed limit and / or implementation of traffic control measures are required.

The Township may consider a change in the posted speed limit under the condition that:

- The surveyed operating 85th percentile speed differs (+/- 5 km/h) from the posted speed limit, OR
- The road is:
  - Constrained by physical or geometric road characteristics that may impact driver sightlines,
  - Located near sensitive areas requiring heightened safety such as schools, playgrounds, community centres, retirement homes and construction zones,
  - A local residential road within a settlement area,
  - Highly trafficked by cyclists and / or pedestrians,
  - Designated as a shared use path (between motorists and cyclists) with no protected facilities, and / or
  - Within an area of influence (1.5 km) of a County Road with a lower posted speed, in which case the posted speed limit should be reduced to the same or a lower posted speed, OR
- There is a significantly higher than normal frequency of, or severity of, near-misses or collisions attributable to excessive speeds, AND
- The change in speed limit does not create an incremental speed change of more than 10 km/h per the Transportation Association of Canada (TAC) Guidelines for Establishing Posted Speed Limits.

It is recommended that the Township consider the speed limit policy above to account for context-sensitive conditions warranting a reassessment of posted speed limits.

For drivers to abide by the posted speed limits, signage alone cannot be relied on and should be complimented with direct traffic control measures and / or enforcement to effectively reduce vehicle speeds.

The Township has an established Traffic Calming Policy, approved February 2020, that defines a process for addressing traffic calming requests, including an implementation guide for traffic calming measures. The effectiveness of implemented measures and their respective impacts are to be monitored by Township staff. The permanency of such traffic calming features depends on the success of a trial (3-month) installation and public feedback. This policy and its supporting processes should continue to be followed for the consideration of traffic calming measures at new locations to ensure a consistent and uniform implementation approach.

It is recommended that the Township continue to consider the Traffic Calming Policy (February 2020) in concert with the speed limit policy.

6.2 Active Transportation Network

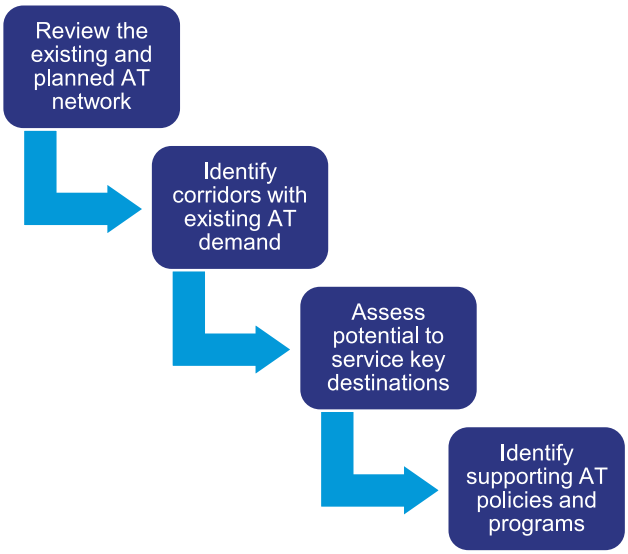
Investing in the active transportation network offers several health, economic and societal benefits. Beyond the obvious and documented health benefits of minimizing the risk of heart diseases, strokes, diabetes and cancer, a shift toward sustainable modes of travel, especially for shorter distance trips, incurs less personal financial costs as well as less capital investment compared to an auto-dependent community where more road widenings / infrastructure and parking facilities are required. Safe trails for cycling and walking can also contribute to community livability, tourism, and improved recreation.

Greenhouse Gases (GHG) emitted from motor cars are one of the primary contributors to climate change. Promoting active travel can be a key element to climate change mitigation strategies.

6.2.1 Route Assessment

Envisioning and developing the future active transportation network for the Township involved the fundamental steps as shown in Figure 6-4. The assessment is detailed in the sections that follow it.

Figure 6-4: Active Transportation Assessment Process



Review the existing and planned active transportation network

Establishing good continuity and connectivity is important in establishing a reliable, low stress active transportation network. In order to identify missing links and address continuity gaps in the network, existing and planned active transportation routes were reviewed.

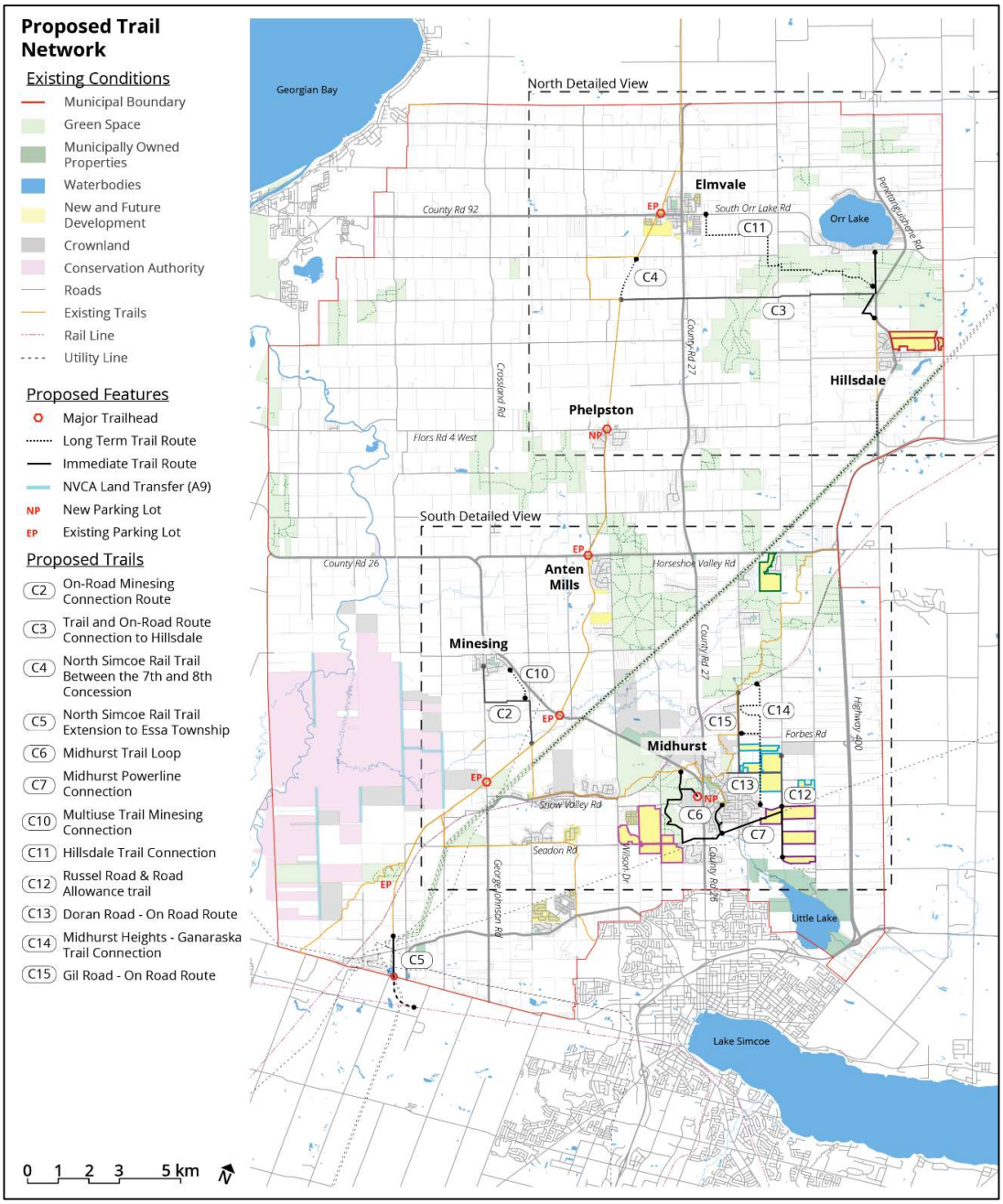
The existing active transportation network is illustrated in Figure 2-10. Planned active transportation improvements were identified from the County Trails Strategy, Simcoe County Transportation Master Plan and Township's Trails Master Plan Update (March 2025), as listed below:

- Trans Canada Trail facility upgrades.
- Paved shoulders with buffers along County Road 43 (Snow Valley Road) between County Road 28 (George Johnston Road) and Highway 26.
- North Simcoe Rail Trail extending between Flos Road 7 and Flos Road 8.
- North Simcoe Rail Trail extending between Elmvale North Link and Tiny Trail.
- Additional trail routes as shown in Figure 6-5.

The planned improvements listed above fulfil some existing gaps in the County-wide (North Simcoe Rail Trail) and Provincial (Trans Canada Trail) active transportation system. The additional off-road trails proposed as part of the Trails Master Plan Update also provide shorter-distance active transportation links within or near settlement areas. There is still, however, areas within Springwater, particularly along Township-owned

roads, that are lacking in connectivity between settlement areas and to the higher-order County and Provincial network.

Figure 6-5: Proposed Trail Network (Trails Master Plan Update)

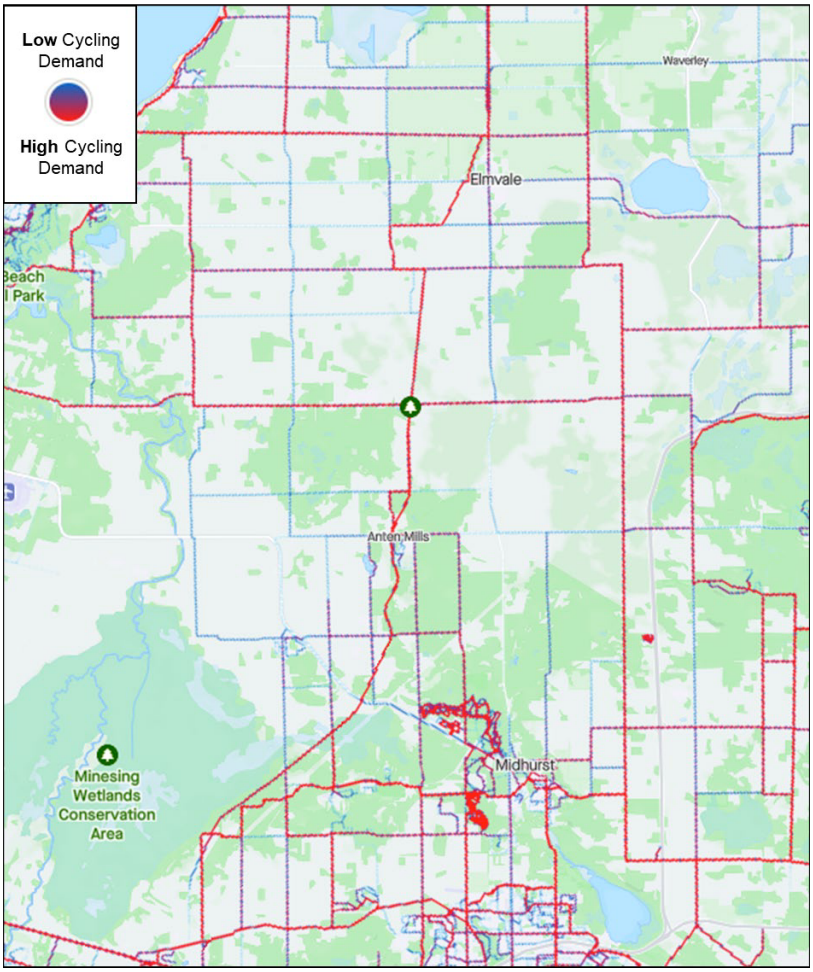


Source: Township of Springwater Trails Master Plan Update (March 2025)

Identify corridors with existing active transportation demand

Identifying roads that currently already generate active transportation demand can directly inform the allocation of new and improved facilities, as the existing demand will benefit from and use the dedicated active transportation infrastructure. A GPS-based application to track physical exercise called Strava was leveraged to identify frequented cycling corridors in Springwater as shown in Figure 6-6.

Figure 6-6: Cycling Heat Map



Source: Strava

Beyond the highly used Trans Canada Trail, there is notably high cycling demand along Township roads. This is understandable given that County roads typically service much higher vehicular traffic volumes, making Township roads a much more attractive cycling option.

Assess potential to service key destinations

Connectivity between communities and key destinations across an active transportation system is important as it ensures that travel needs (related to recreation, leisure, commuting and errands) are met. This may take the form of connections between settlement areas, transit facilities, neighbouring municipalities, and recreational destinations. The active transportation network was developed to assure connectivity to / from these major trip attractors / generators.

Identify supporting active transportation policies and programs

A successful active transportation network does not only consist of new infrastructure but should also be supported by policies and programming initiatives that help promote walking and / or cycling as viable alternate modes of travel. These opportunities are summarized below.

Opportunity #1: Integration with the Township Trails Master Plan Update

In March 2025, the Township completed the Trails Master Plan Update, which aims to guide the future of trail development and trails policy in Springwater. Among the administrative and policy recommendations, the plan proposed that the Township:

- Create a trails committee made up of key stakeholders.
- Develop a Township GIS trails database.

Considering on-road cycling facilities and off-road trails should be integrated and act as a connected system, both the committee and GIS database should be expanded to reflect that.

It is recommended that the Township expand the scope of the recommended trails committee and GIS database (per the Trails Master Plan Update) to include on-road cycling routes.

Opportunity #2: Cycling-Supportive Amenities

The Township's active transportation network is noted to attract a substantial number of experienced or 'touring' riders who typically take longer routes with scenic views. These trips usually take place between urbanized areas and / or key destinations, which may also require route planning beforehand. This user group generally consists of more experienced cyclists who do not mind travelling along higher speed roads.

Bike parking and amenities, including repair stations and rest areas, can help enhance the cycling experience, contribute to cyclists' convenience, and promote tourism if installed near recreational attractions or retail / commercial areas.

It is recommended that the Township allocate funding for the installation of bicycle parking and amenities along cycling corridors and near key destinations.

Opportunity #3: Policies for Development and New Infrastructure

There are opportunities to proactively plan for active transportation infrastructure through the development review process. This includes active transportation strategies with the expansion and development of major settlement areas such as Midhurst. Guiding Official Plan policies related to new development or infrastructure can assist in establishing effective cycling and pedestrian connections, including the following:

- Provide cycling facilities within settlement areas, where possible.
- Provide safe active transportation facilities to connect between settlement areas.
- Providing safe pedestrian and cycling facilities in the vicinity of transit stops.
- Design sidewalks and cycling facilities to meet or exceed *Accessibility for Ontarians with Disabilities Act* standards to achieve a barrier-free network accessible for all ages and abilities.
- Ensure that active transportation facilities are supported through appropriate design, signage and consistent safety enforcement.
- Provision for active transportation facilities as part of development applications, and when designing and constructing / reconstructing roads, bridges, intersections, etc., while also considering the impact to the character of the community and surrounding land uses and design.
- Schools situated along arterial roads or collectors facilitating a major connection are discouraged, as it does not create a conducive environment for community safety.
- The construction and reconstruction of new streets will apply complete streets design principles to support the integration of pedestrian and bicycle users, and enhanced streetscaping.
- Adopt requirements for minimum bicycle parking spaces, bicycle storage facilities and other active transportation amenities in conjunction with all high / medium density residential developments, commercial areas and other appropriate locations, as part of the next Township Zoning by-law update.

It is recommended that the Township incorporate the policies as detailed above as part of the next Official Plan update to support active transportation connectivity.

Opportunity #4: Sidewalk Prioritization Policy

For Springwater residents, sidewalks act primarily as local linkages and connections for access to places of recreation, leisure and socialization within a community. Investing in a cohesive sidewalk network can help foster interaction, support local businesses, and create aesthetic and functional streets. Sidewalks also enhance safety by separating pedestrians from vehicle traffic and promote active transportation.

Sidewalk requirements within settlement areas are prescribed as part of the road design standard update summarized in Table 6-4. However, there is no established prioritization framework to guide the phasing and implementation of new sidewalks. The Township can consider developing a sidewalk prioritization policy based on scoring criteria shown in Figure 6-7, as an example. Candidate sidewalk locations with a higher points score should be implemented sooner than those with a lower score. This assessment could also address requests for rehabilitation or reconstruction of existing sidewalks to a higher standard.

Figure 6-7: Sidewalk Prioritization Framework Example

Prioritization Criteria	Points Scored
Sidewalk fulfils a gap in the network	☐ / 20
Sidewalk is located along a road that provides direct access to a key destination (e.g., community centre, school, trail, etc.)	☐ / 30
Sidewalk is located along a road that services a transit stop	☐ / 10
Sidewalk receives majority support from local residents	☐ / 40
Total	☐ / 100

It is recommended that the Township establish a sidewalk prioritization policy and allocate funding for the implementation of new sidewalks in the Township.

6.2.2 Facility Selection

The type of bicycle facilities to be implemented within Springwater were informed by the following:

- Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities (Updated 2021).
- User comfort and ability.
- “Vision Zero” principles.

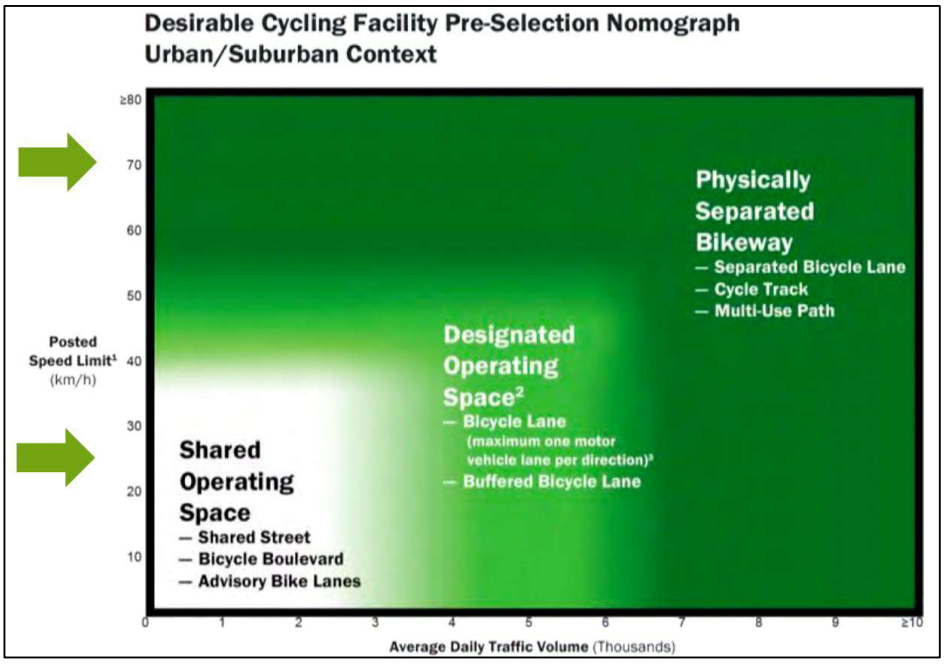
6.2.2.1 Ontario Traffic Manual (OTM) Book 18

The 2021 update to Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities recommends that a preliminary assessment of bicycle facility requirements be conducted using nomographs for urban / suburban and rural conditions, as shown in Figure 6-8 and Figure 6-9, respectively. These nomographs inform the level of protection required for a bicycle facility, which is contingent on the Average Annual Daily Traffic (AADT) and posted speed limit along the road.

The OTM references three overarching categories for bicycle facilities:

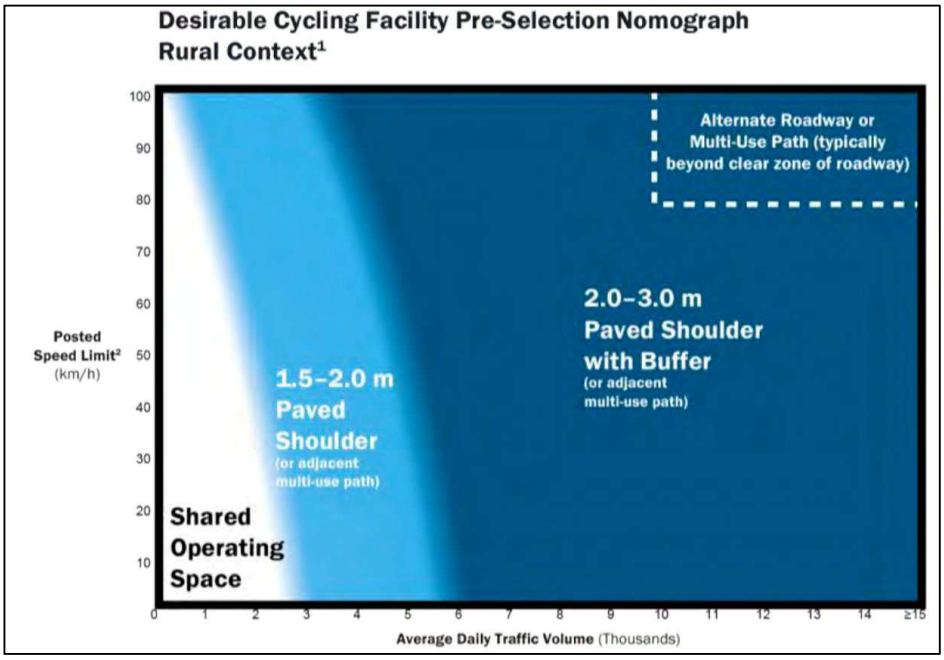
- **Physically separated bikeways**, which include elements such as curbs, planters or bollards to provide physical separation between people riding bikes and motor vehicle traffic.
- **Bicycle lanes**, which include designated space for cyclists (through painted lanes) but no physical separation.
- **Shared cycling facilities**, which provide no distinct operating space for cyclists but can provide other supporting features such as traffic calming and wayfinding.

Figure 6-8: Nomograph for Cycling Facilities in Urban / Suburban Context



Source: Ontario Traffic Manual Book 18

Figure 6-9: Nomograph for Cycling Facilities in Rural Context



Source: Ontario Traffic Manual Book 18

The requirement for physically separated bicycle lanes in urban / suburban areas or buffered paved shoulders in rural areas are a function of both high posted speed limits and / or high daily traffic volumes. While these measures can act as acceptable preliminary guidance, the surveyed 85th percentile operating speeds reflect the actual speeds along the corridor and should be used instead to define the facility type. Further, the facility type should be designed to consider future anticipated volumes. Currently, all Township roads are operating with daily traffic volumes of less than 8,000 vehicles, but future allocated population and employment growth will add traffic along these roads.

For the purposes of this study, the desired bicycle facility was determined as a function of road class, as shown in Table 6-6, whereby traffic volumes and speeds are inherent in its classification criteria. The proposed active transportation network applies this high-level strategy, which addresses the anticipated urbanization of road corridors as a result of changes in the urban and rural context, to determine desirable facility types within the Township.

Table 6-5: Desired Facility Type by Road Classification

Road Class	Context	Characteristics		Desired Facility Type
		Average Daily Traffic	Posted Speed Limit	
Arterial	Urban	Moderate to High	Moderate to High	Physically Separated Facilities.
	Rural	Moderate to High	Moderate to High	Paved Shoulder with Buffer or Physically Separated Facilities.
Collector	Urban	Moderate	Moderate	Bicycle Lanes.
	Rural	Moderate	Moderate	Paved Shoulder with Buffer.
Local	Urban	Low	Low	Shared Facilities.
	Rural	Low	Low	Shared Facilities.

A list of potential facility types to be considered for implementation in the Township, including suggested and desired lane width guidelines according to the OTM, is summarized in Table 6-6.

Table 6-6: Cycling Facility Types

Category	Facility Type	Description	Width Requirements
Physically Separated Bikeways	Physically Separated Cycling Lanes	Cycling lane separated from vehicle lanes with a physical buffer such as bollards and concrete barriers.	**One-way** Minimum: 1.5 m + 0.3 m buffer Desired: 1.8 m + 1.0 m buffer **Two-way** Minimum: 2.7 m + 0.3 m buffer Desired: 3.5 m + 1.0 m buffer
	Cycle Tracks	Cycling lane separated from vehicle lanes with a curb and buffer, oftentimes located parallel to a sidewalk.	**One-way** Minimum: 1.5 m Desired: 2.0 m to 2.5 m **Two-way** Minimum: 3.0 m Desired: 3.5 m to 4.0 m
	In-Boulevard Multi-Use Paths	Two-way path shared between cyclists and pedestrians, separated from vehicle lanes with a curb and buffer.	**Low-to-moderate volume (<100 users / hour)** Minimum: 3.0 m + 0.3 m to 0.6 m buffer[1] Desired: 3.5 m + 0.6 m to 2.5 m buffer[1] **High volume (100 users / hour)** Minimum: 3.0 m + 0.6 m buffer Desired: ≥4.0 m + 1.5 m to 2.5 m buffer

Category	Facility Type	Description	Width Requirements
Bicycle Lanes	Conventional Bicycle Lanes	One-way bicycle lane separated from vehicle lanes solely by a painted white line.	Minimum: 1.5 m Desired: 1.8 m
	Conventional Bicycle Lanes (Adjacent to On-Street Parking)	One-way bicycle lane separated from vehicles lanes by an on-street parking lane.	Minimum: 1.5 m + 0.6 m buffer Desired: 1.5 m + 1.0 m buffer
	Buffered Bicycle Lanes	One-way bicycle lane separated from vehicle lanes solely by a painted buffer and no vertical separation elements.	Minimum: 1.5 m + 0.3 m buffer Desired: 1.8 m + 1.0 m buffer
	Buffered Bicycle Lane (Adjacent to On-Street Parking)	One-way bicycle lane separated from vehicle lanes by a painted buffer and on-street parking lane.	Minimum: 1.5 m + 0.6 m buffer Desired: 1.5 m + 1.0 m parking buffer + 0.3 m buffer
Shared Cycling Facilities	Advisory Bicycle Lanes[2]	Shared cycling space delineated by a dashed line on a roadway that contains no centreline.	Minimum: 1.5 m Desired: 1.8 m to 2.0 m
	Advisory Bicycle Lanes (Adjacent to On-Street Parking)[2]	Shared cycling space delineated by a dashed line on a roadway that contains no centreline adjacent to an on-street parking lane.	Minimum: 1.5 m + 0.6 m buffer Desired: 1.8 m + 1.0 m buffer
	Neighbourhood Bikeways	Bicycle travel encouraged through treatments including traffic calming measures, traffic reduction, signage, pavement markings and intersection crossing treatments on low-volume, low-speed streets.	Not applicable – Neighbourhood Bikeways support cycling by implementing traffic calming and intersection treatment measures to create low-volume and low-speed streets.

Category	Facility Type	Description	Width Requirements
Shared Cycling Facilities	Paved Shoulders	A space delineated by a painted line, and sometimes a buffer zone, to accommodate stopped motor vehicles, emergency uses, pedestrians and cyclists along higher-speed and higher-volume roads.	**No Buffer** Minimum: 1.2 m Desired: 1.5 m to 2.0 m **With Marked Buffer** Minimum: 1.5 m + 0.5 m buffer Desired: 1.5 m to 2.0 m + 0.5 m to 1.0 m buffer

Source: Ontario Traffic Manual (OTM) Book 18

Notes: 1. Suggested / minimum width depends on the posted / operating speeds.

2. Advisory Bicycle Lanes can be considered in constrained roadway environments.

6.2.2.2 User Comfort and Ability

Preferences for facility types and route characteristics vary between individuals based on their respective cycling abilities and comfort levels, as described in Table 6-7. Recognizing the preferences of distinct user groups allows decisionmakers to design facilities and networks that reflect a range in ability and trip purposes (sport, leisure and commuting).

Table 6-7: Cycling User Groups

User	Route Preferences	Facilities Used
Experienced Cyclist	✓ Longer routes with scenic views ✓ Connects settlement areas and key destinations	✓ Shared cycling facilities ✓ Paved shoulders ✓ Off-road trails
Commuter Cyclist	✓ Connects key destinations for work, school and errands ✓ Direct, quick routes	✓ Multi-use paths ✓ Physically separated bike lanes ✓ Bicycle lanes
Recreational Cyclist	✓ High level of cyclist protection ✓ Shorter routes	✓ Multi-use paths ✓ Physically separated bike lanes ✓ Off-road trails

The Township active transportation network was developed with these road users and their needs in mind.

6.2.2.3 Vision Zero Principles

The “Vision Zero” initiative highlights the need to consider human factors in the design of the infrastructure. The goal of Vision Zero is to achieve zero fatalities and serious injuries on roadways. The initiative advocates for a different approach to road safety whereby all collision outcomes are perceived as preventable and there is a recognized shared responsibility between road users and transportation planners. Vision Zero plans have been adopted by local municipalities in Ontario, including Toronto, London and Kingston, along with regions including Peel and Durham.

Vision Zero prioritizes the safety of vulnerable road users such as children, seniors and people with visual or physical disabilities. The Township has an opportunity to provide safer infrastructure for vulnerable road users, through the provision of dedicated cycling infrastructure and supporting traffic calming features along designated active transportation routes.

6.2.3 Active Transportation Improvements

New active transportation opportunities, beyond previously planned improvements, are listed in Table 6-8 and illustrated in Figure 6-10. These connections were identified as an output to the route assessment and facility selection process as detailed in Section 6.2.1 and Section 6.2.2, respectively.

Given the rural nature of most Township arterial and collector roads, a significant proportion of new route opportunities are paved shoulders. Paved shoulder bicycle routes can be a reasonably cost-effective alternative to providing connections between communities and key destinations.

To better accommodate commuter and recreational cyclists, the paved shoulder may include a painted buffer zone with rumble strips to provide greater protection and comfort for cyclists. In-boulevard multi-use paths can even be considered in the case that the route attracts or is anticipated to attract significant demand. However, it is noted that this would incur a greater cost.

It is recommended that the Township monitor active transportation demand along rural roads to identify high activity corridors that would benefit from added physical separation features.

These projects are subject to a detailed design review to confirm the facility type and feasibility of implementation, as well as to mitigate any location-specific conflicts or concerns. For instance, other factors that may impact the facility design include the volume of larger trucks expected to use adjacent travel lanes, presence on-street parking, pedestrian activity, intersection frequency, traffic operations and ROW constraints.

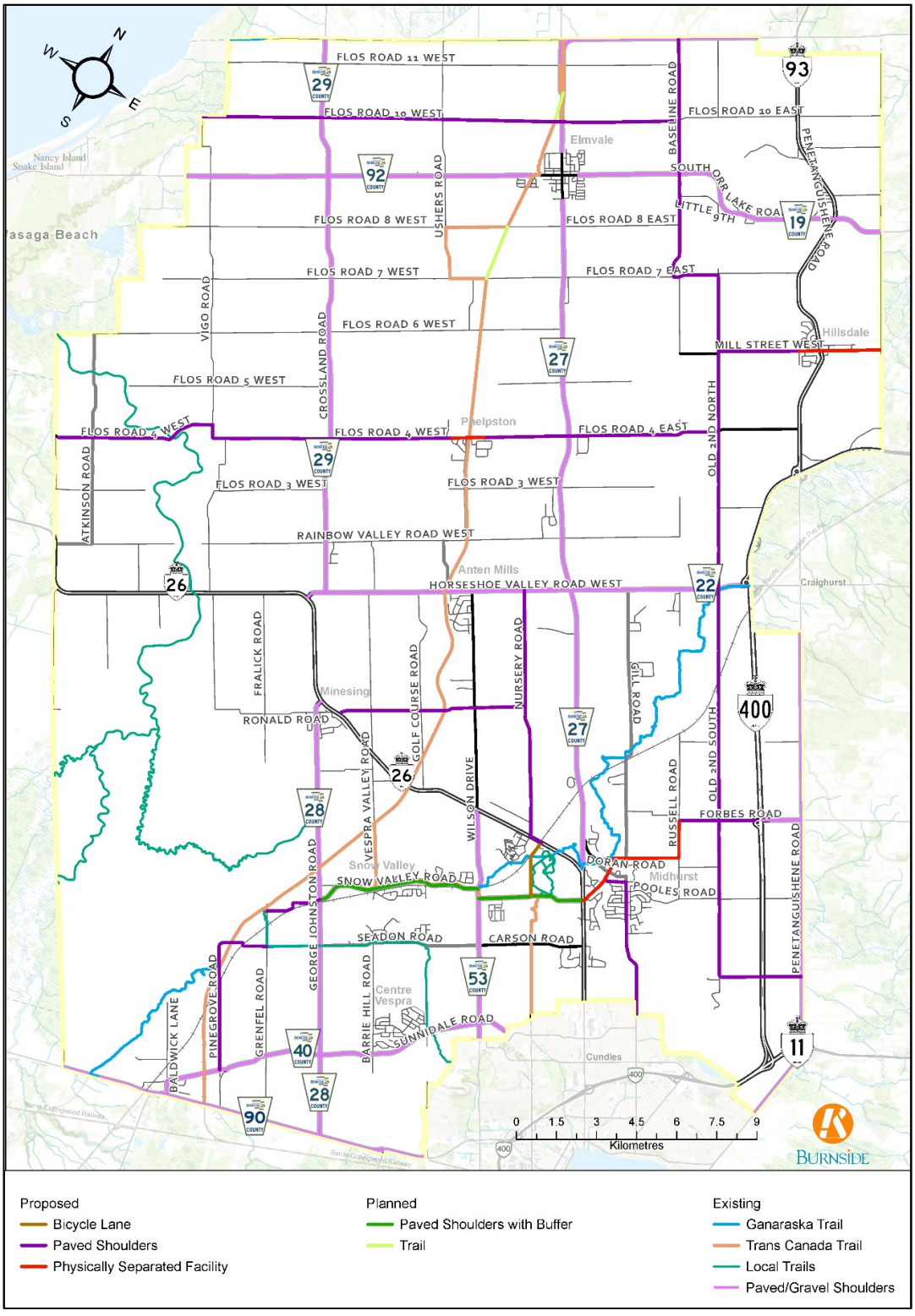
Table 6-8: Active Transportation Routes

Road	From	To	Facility Type	Existing Route Connections	Key Destination Connections	Cycling Demand (Strava)	Proposed Phasing
Flos Road 10	Township boundary	County Road 27	Paved shoulder	Trans Canada Trail	Public water fountain	High	Medium
Flos Road 10	County Road 27	Baseline Road	Paved shoulder	Trans Canada Trail	Public water fountain	High	Medium
Flos Road 4	N Sunnidale Sideroad 15	St Patricks Drive	Paved shoulder	-	Phelpston Pit	High	Medium
Flos Road 4	St Patricks Drive	Leo Marley Way	Physically separated facility	Trans Canada Trail	Phelpston	High	Medium
Flos Road 4	Leo Marley Way	County Road 27	Paved shoulder	-	Springwater Garden Centre	High	Medium
Flos Road 4	County Road 27	Old Second Road	Paved shoulder	-	Springwater Garden Centre	High	Medium
Hendrie Road	Highway 26	Nursery Road	Paved shoulder	Trans Canada Trail	Springwater Golf Course	Medium	Medium
Portage Trail	Grenfel Road	County Road 28 (George Johnston Road)	Paved shoulder	9 Mile Portage Trail	Internal Snow Valley	High	Medium
Old Orchard Road	Pinegrove Road	Grenfel Road	Paved shoulder	9 Mile Portage Trail, Ganaraska Trail	-	High	Medium
Pinegrove Road	Old Orchard Road	County Road 40 (Sunnidale Road)	Paved shoulder	Ganaraska Trail	-	High	Medium

Road	From	To	Facility Type	Existing Route Connections	Key Destination Connections	Cycling Demand (Strava)	Proposed Phasing
Nursery Road	County Road 22 (Horseshoe Valley Road)	Highway 26	Paved shoulder	-	Springwater Provincial Park, Township of Springwater Office, Barrie Community Sports Complex, Tree Nursery Sports Park.	Medium	Short
Highway 26	Nursery Road	Anne Street	Paved shoulder	-	Midhurst	High	Medium
Anne Street	Highway 26	County Road 43 (Snow Valley Road)	Bicycle lane	Ganaraska Trail, Local Trails	Midhurst	High	Short
Baseline Road	County Road 27	Flos Road 7	Paved shoulder	-	-	High	Long
Flos Road 7	Baseline Road (West)	Old Second Road	Paved shoulder	-	-	High	Long
Old Second Road	Flos Road 7	County Road 22 (Horseshoe Valley Road)	Paved shoulder	Ganaraska Trail	-	High	Medium
Old Second Road	County Road 22 (Horseshoe Valley Road)	Walt Road	Paved shoulder	Ganaraska Trail	Midhurst	High	Short
Old Second Road	Walt Road	Partridge Road	Paved shoulder	-	Midhurst	High	Medium
Mill Street	Old Second Road	Old Penetanguishene Road	Paved shoulder	-	Hillsdale	High	Medium

Road	From	To	Facility Type	Existing Route Connections	Key Destination Connections	Cycling Demand (Strava)	Proposed Phasing
Mill Street	Old Penetanguishene Road	Scarlett Line	Physically separated facility	-	Hillsdale	High	Medium
Finlay Mill Road	Highway 26	Doran Road	Physically separated facility	Ganaraska Trail	Midhurst	High	Short
Doran Road	Finlay Mill Road	Russell Road	Physically separated facility	Ganaraska Trail	Midhurst	Medium	Medium
Russell Road	Forbes Road	Doran Road	Physically separated facility	-	Midhurst	Medium	Long
Forbes Road	Russell Road	Highway 400	Paved shoulder	-	-	Medium	Long
Partridge Road	Old Second Road South	Penetanguishene Road	Paved shoulder	-	-	High	Long
Wattie Road	Finlay Mill Road	St. Vincent Street	Paved shoulder	-	Barrie	High	Short
St. Vincent Street	Wattie Road	Township boundary	Paved shoulder	-	Barrie	High	Short

Figure 6-10: Active Transportation Improvements



All active transportation improvements shown are located along Township roads, with the exception of the paved shoulders along Highway 26 between Nursery Road and Anne Street North. This route serves an important connection to assure north-south continuity. The Springwater Provincial Park is also located opposite Nursery Road. However, since this portion of road is under provincial jurisdiction, there will need to be collaboration between the Township and the Ministry of Transportation Ontario (MTO) to investigate opportunities for dedicated cycling facilities and wayfinding / signage to facilitate a safer crossing.

It is recommended that the Township collaborate with the Ministry of Transportation Ontario (MTO) to investigate opportunities for dedicated cycling facilities and wayfinding / signage along Highway 26 between Nursery Road and Anne Street to facilitate a continuous north-south active transportation route.

6.3 Transit Network

The Township of Springwater currently does not operate its own transit system. Those travelling to / from Springwater rely on the County's LINX transit system to access major urban centres outside of the Township. However, local residents have no transit options to travel within or between settlement areas.

6.3.1 Transit Strategy Goals

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

Service Higher Density Areas
How can the Township service residents travelling within and between settlement areas as well as to / from growth centres outside Township boundaries?

Support Mobility Needs
How can the Township better service people who cannot drive (such as students) or are mobility impaired?

Leverage Existing Services
How can the Township leverage and expand on existing services to improve travel coverage?

Support First and Last Mile Connections
How can the Township support connections to / from major transit hubs and bus stops?

6.3.2 Service Higher Density Areas

Transit strategies should be developed to service the established settlement areas within the Township, where there is greater potential to generate travel demand. Services should accommodate travel:

- Within settlement areas.
- Between settlement areas.
- Between settlement areas and urban growth centres in adjacent municipalities.

The availability of transit service within settlement areas fosters complete communities that are “age-friendly”. Complete communities represent safe and healthy neighbourhoods that offer easy access to recreation, employment and social activities. Transit can be integral in creating communities that are more complete and sustainable.

For medium and longer distance trips, such as those travelling between urban settlement areas within and outside of the Township, transit services can be offered to drive economic growth, environmental balance and social progress while minimizing the carbon footprint. Facilitating travel through sustainable modes such as transit can be a key element to climate change mitigation strategies.

Each settlement area within Springwater is projected to grow to achieve the target population of almost 46,000 people by 2041. While Midhurst is projected to experience the largest change in growth, there are opportunities to enhance transit coverage for all Township residents, especially the underserved communities such as Hillsdale and Minesing. In order to capture ridership demand and for residents to be considered accessible to transit, routes should be planned such that the population and / or employment uses serviced between a 400 m to 800 m walking distance of the corridor is maximized.

6.3.3 Support Mobility Needs

Seniors, youth and people with disabilities may be unable or have difficulty operating motor vehicles and are therefore more likely to require accessible and economically viable alternatives for transportation.

LINX PLUS+, Simcoe County’s specialized on-demand service, can accommodate wheelchairs and scooters. This service is not exclusive to a group of people; however, it does require an application for eligibility based on principles of fairness, equality and

equity. Further, while this service provides much more flexibility than fixed-route transit, it is limited to trips to / from conventional transit (LINX) and currently only operates within 1 km of existing LINX transit routes.

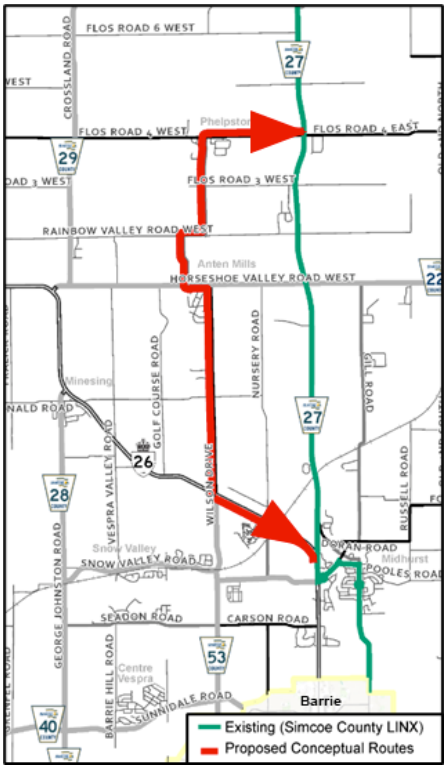
6.3.4 Leverage Existing Services

There are cost efficiencies that can be achieved by leveraging currently available transit services. Pilot opportunities to measure effectiveness prior to permanent implementation also becomes a more feasible and attractive option when it builds off an existing established system and fleet.

Existing LINX transit services focus on providing County-wide coverage. LINX Route 1 primarily services the communities of Elmvale and Midhurst via County Road 27 (Bayfield Street). However, there are opportunities to encourage the County to reroute this existing route to service Phelpston and Anten Mills to provide more coverage and increase the ridership potential, as shown in Figure 6-11 for conceptual purposes only.

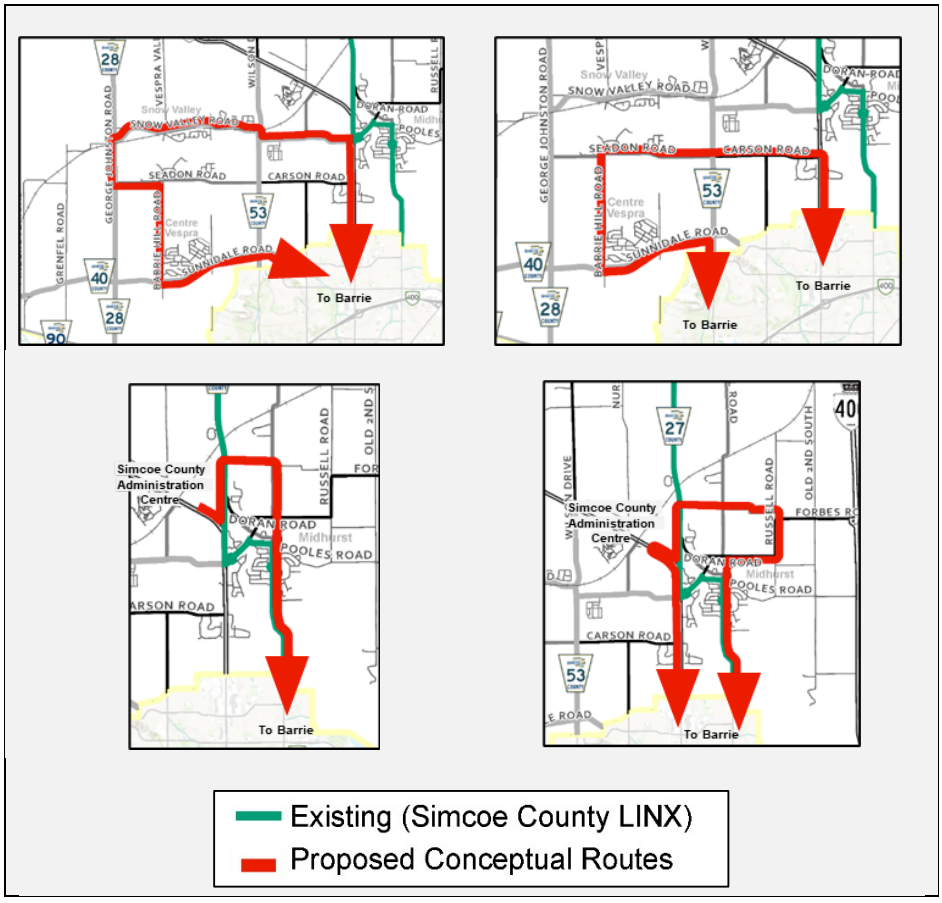
Similarly, Barrie Transit operates just south, but not within the Township boundary.

Figure 6-11: Conceptual LINX Transit Route



Given the anticipated growth within Midhurst and the number of frequented daily trips between the Township and the City of Barrie, expanding the City's transit services to extend routes into Springwater would benefit both parties. Conceptual routes servicing Centre Vespra, Snow Valley and Midhurst that could be accommodated by existing Barrie Transit buses are illustrated in Figure 6-12 for consideration. These routes could also provide Township residents with a more direct access to Allandale Waterfront GO Transit station to facilitate higher order (rail) transit connectivity to the rest of the Greater Toronto Area (GTA).

Figure 6-12: Conceptual Barrie Transit Route



It is recommended that the Township collaborate with Simcoe County and the City of Barrie to expand and establish cost-sharing opportunities for extended LINX and Barrie Transit bus services.

6.3.5 Support First and Last Mile Connections

First-mile connectivity refers to the initial trip made to connect to a central hub or network, an example being carpooling to the GO Transit station. Last-mile connectivity is the final trip connecting the central hub or network to the end destination, an example being walking home from the GO Transit station. Both are crucial for ensuring efficient access and seamless service delivery, with first-mile connections getting users to the main network and last-mile connections getting users to their final destination.

Simcoe County operates LINX fixed-route bus service between Penetanguishene and Barrie via Route 1, with stops in Midhurst and Elmvale. The transportation policies from the Township Official Plan recognize the need to promote the use of this transit service

as an alternative to the private automobile. Facilitating the first and last mile connection to this transit service can be one key component of fulfilling this policy.

As mentioned, LINX PLUS+ partially helps facilitate these first and last mile connections for Springwater residents, provided that they are deemed eligible and located within 1 km of Route 1. More can be done to make door-to-hub / hub-to-door, on-demand services available to more residents and improve the geographic scope of such services.

Township residents also have the option of using the Uber app, a ride-hail service that can facilitate first and last mile connections. The pricing model of Uber is primarily controlled by demand. Depending on the ratio of riders and available drivers, rideshare prices can experience a temporary surge to rebalance the market. Since the price of these ride hailing services can be expensive, it is typically not a competitive and reliable option for many commuters to facilitate regular commuting patterns.

6.3.6 Transit Service Opportunities

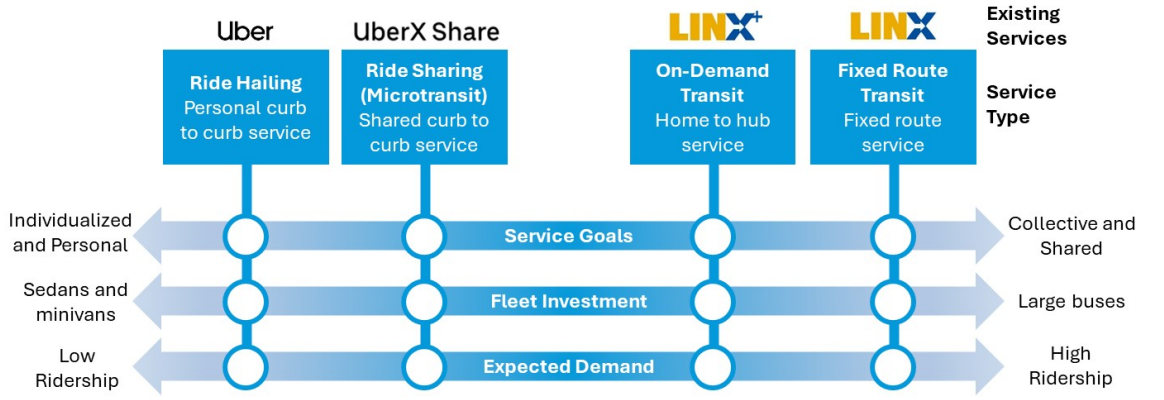
There is an opportunity to better service settlement areas, especially the underserved communities that are not within accessible walking or cycling distances to the existing transit route (Route 1) operating along County Road 27 (Bayfield Street).

The Township is also lacking in connections between settlement areas and major hubs like the GO Transit station in Barrie. Fixed-route transit could address these gaps; however, this can be expensive to implement and may not be cost-effective if the anticipated ridership is low. As a more cost-effective alternative, existing services such as Barrie Transit can be expanded, but opportunities to extend this coverage are still limited to the southern areas of Springwater.

In considering the above, it was determined that the most beneficial transit opportunity for the Township is the provision of on-demand services. On-demand transit offers a flexible and cost-efficient alternative to traditional fixed-route mass transit. It allows riders to book their trip via an app, which uses an algorithm to program the fastest and fuel-efficient route for the bus driver to pick up and drop off passengers. An on-demand transit system is particularly effective for rural, low-to-medium density areas that have a lower demand for transit, which is consistent with existing urban structure of Springwater.

The types of on-demand services the Township can consider vary, based on service goals, desired fleet size and expected demand. On-demand services can also evolve as travel needs change, as shown in Figure 6-13.

Figure 6-13: Evolution of On-Demand Services



Adapted from Transit Services Spectrum (The State of Demand-Responsive Transit in Canada, Klumpenhouwer, W, July 2020)

In the absence of an existing Township-operated local transit system, an on-demand home-to-hub service to connect to transit stops and / or key destinations, including the Allandale Waterfront GO Transit station, can be considered.

Further, the Township will need to consider the following in developing an on-demand model:

- **Fleet Type**: The Township can choose to invest in a dedicated fleet in the form of smaller municipally-operated vehicles or crowdsourced rides through a partnership with Uber, for example.
- **Service Coverage**: The Township can choose to operate a municipal-wide service, dedicated service within specific zones.
- **Service Connections**: The Township can choose to provide door-to-door service or limit connections to transit stops and / or major destinations. Hybrid on-demand routes that make scheduled stops at major destinations, such as senior homes, may also be considered.

This can take the form of a pilot and can be made permanent or expanded, subject to its success. If, over the medium to long term, these on-demand services garner significant ridership, the Township can then consider options for a fixed-route transit system.

It is recommended that the Township establish an on-demand transit strategy and pilot.

6.4 Goods Movement

Efficient and reliable goods movement can support the local Township economy by ensuring businesses receive the goods and materials they need to operate. Freight activity throughout the Township also supports businesses in adjacent municipalities. Goods movement planning helps ensure traffic congestion and environmental impacts such as noise and pollution are minimized while supporting economic growth.

6.4.1 Policy Considerations

There are a number of policies from the Province, Region, County, and Township that guide the development of a truck network within the Township, as summarized below.

Greater Golden Horseshoe Transportation Plan (2022)

The Greater Golden Horseshoe Transportation Plan was developed by the MTO and provides a 30-year vision for mobility across the region to guide and align planning and investments by the province and other transportation providers. Key policies from the plan include:

- Plan for and manage the movement of freight on the key routes and corridors and at facilities identified in the Strategic Goods Movement Network (SGMN) for all modes, including road, rail, air and marine, working in partnership with those who own, maintain and use the network, so that the region is economically competitive.
- Utilize new logistics practices and technologies, including low- and zero-carbon urban goods delivery and use of off-peak delivery hours, to improve the environmental sustainability and efficiency of freight movement.

The SGMN is a framework designed to optimize the efficiency and reliability of freight transportation across the province. This network identifies key corridors and a supporting arterial road network. The key purpose of this arterial road network is to connect major freight generators across the region to each other and to the highway network and to provide reliable access for freight to multi-modal nodes.

MTO Freight Supportive Guidelines (2016)

The MTO Freight-Supportive Guidelines are a set of recommendations developed by MTO to assist in developing freight-supportive communities. These recommendations aim to balance the needs of the freight industry with other municipal objectives. Key policies from these guidelines include:

- Ensure industrial sites, mixed-use areas, and rural and urban areas are designed to facilitate efficient movement of trucks.
- Municipalities should recognize the importance of freight movement and provide leadership in planning and implementing freight-supportive policies. Collaboration and communication between municipalities and the private sector are encouraged.
- Ensure that employment areas and adjacent lands are protected to support current and future freight needs.
- Develop strategies to minimize the impact of freight movement on sensitive land uses and address freight movement needs in both urban and rural areas. Implement strategies to improve freight mobility and access in high-density urban areas and ensure seamless freight movement across jurisdictions.

County of Simcoe Transportation Master Plan (2023)

Key recommendations from the County of Simcoe Transportation Master Plan include:

- The County of Simcoe and MTO should refine the SGMN within the Simcoe County boundaries to reflect current and anticipated commercial vehicle travel patterns. One objective of this alignment is to ensure that the Provincial highway network be designed to continue to carry a high proportion of inter-regional commercial vehicle traffic, reducing the amount of "spillover" onto County and local roads.
- The County of Simcoe and local municipalities should work together to establish a consolidated truck route network information platform, which would also enable a centralized resource for both members of the public and members of the trucking industry.

Township of Springwater Official Plan

Per Section 11.4: Transportation Policies, key policies related to goods movement include:

- The Township will reduce through traffic as much as possible, directing the majority of traffic to a few main routes and to avoid the development of large traffic volumes on local residential streets.
- Existing and planned major goods movement facilities and corridors will be protected from development that may create traffic hazards.

Township of Springwater By-Law 2009-079	The Township has a series of roads that require a reduced load period between March 1 and April 30. These Township-owned roads are identified in by-law 2009-079.

6.4.2 Goods Movement Context

From Springwater's perspective, the truck network should consider the following within the context of the Township:

- Existing truck routes.
- Roadway classification and jurisdiction.
- Road and bridge conditions and design.
- Major goods movement generators.
- Social and environmental considerations.

Existing Truck Routes

New truck routes within the Township should consider existing truck routes. All major highway networks are part of the core SGMN. Therefore, within the Township, Highway 400 is part of the core SGMN.

The supporting arterial road network from the SGMN within and in close vicinity of the Township include:

- County Road 90 from Highway 400 to County Road 28 (George Johnston Road).
- County Road 28 (George Johnston Road) from County Road 90 to Highway 26.
- Highway 26 from County Road 28 (George Johnston Road) to beyond Springwater's western boundary limits.

Roadway Classification and Jurisdiction

Based on Provincial, Regional, and Township policies, the majority of freight traffic should be on the Provincial highways with connections to and from the highways using the SGMN's supporting arterial road network. The remainder of the truck traffic should be on other County roads with only local truck traffic on Township roads.

Road and Bridge Conditions and Design

Heavy trucks exert significant pressure on asphalt surfaces leading to accelerated wear and tear and therefore, have more of an impact on the deterioration of roads and bridges

compared to personal vehicles. Existing road and bridge conditions, specifically roads that are in a good state of repair, should be considered for truck routes. Additionally, the road design (e.g., structural and geometric design) should be considered. As it relates to construction standards, roads that have sufficient pavement thickness and load-bearing capacity should be considered for truck routes. For geometric design, sufficient lane widths, turning radii at intersections, and manageable grades and slopes should be considered for truck routes.

Land Use and Goods Movement Generators

Understanding key goods movement generators can help identify new truck routes as these generators are major destinations for trucks. Within the Township, the local truck traffic should be supporting businesses. Most notably, Elmvale is an active community that is busy with festivals, farmer's markets, and other recreational sites. Additionally, Elmvale is supported as a Business Improvement Area (BIA).

Pits and quarries are key goods movement generators. There are several existing pits and quarries within the Township, primarily near Essa and Grenfel. Other major goods movement generators include industrial destinations, agricultural lands, pits and quarries, and trucking companies.

There are also planned commercial and industrial hubs within the Township, including:

- Bertram Industrial Park.
- Hillsdale and Cassel Drive Business Park.
- Snow Valley Industrial Lands.
- 528 and 540 Penetanguishene Road.
- Elmvale Settlement Area.

Social and Environmental Considerations

Since trucking activity does provide some level of increased visual, safety, noise, vibration, and traffic impacts, there should be considerations associated with avoiding:

- Residential neighbourhoods.
- Active transportation routes.
- Institutions such as community centres or schools.

Last-Kilometre Deliveries

Planning for last-mile deliveries is essential for maintaining the efficiency and sustainability of the local economy. As e-commerce and just in-time delivery services continue to grow, the demand for timely and reliable last mile-deliveries increases. Effective planning ensures that these deliveries can be made without causing significant disruptions to local traffic, reducing congestion, and minimizing environmental impacts. Planning for last-mile deliveries also helps improve the quality of life by reducing noise and pollution associated with delivery traffic.

Consistent with Simcoe County's TMP recommendation, it is recommended that the Township collaborate with the County and other local municipalities to develop a coordinated and refined goods movement network building upon the Provincial SGMN and supporting arterial road network.

6.4.3 Goods Movement Opportunities

The following goods movement policies are recommended for the Township's consideration:

- The Township should support the refinement of the Provincial Strategic Goods Movement Network through collaboration with the County of Simcoe, adjacent municipalities, and MTO.
- The Township should ensure that the majority of truck traffic travels on Provincial highways and County roads. Township roads should support local truck traffic to their final destination.
- Truck routes within the boundaries of the Township should consider road and bridge conditions and designs.
- Truck routes within the boundaries of the Township should consider adjacent land uses and goods movement generators.
- Truck routes within the boundaries of the Township should not be adjacent to residential areas, major active transportation routes, and important institutions like schools or community centres.
- During the development review process, the Township can ensure there are sufficient delivery facilities in new or reconstructed non-residential developments. This could include off-street loading spaces or ensuring there is a sufficient supply of municipal on-street loading spaces in proximity to the development. The Township can consider the use of adjacent alleyways as a possible location for deliveries to / from the development.
- In more urban areas of Springwater, the Township can consider the use of designated on-street loading areas.
- The Township can consider installing bike racks where the use of cargo bikes for last-mile deliveries is feasible.

- The Township can consider working with businesses and courier companies for off-peak deliveries that shift delivery times to periods when traffic is not congested.

It is recommended that the Township consider the goods movement policies above to support an efficient truck network.

6.5 Emerging Technologies

Planning for the Township's future transportation system should consider the rapidly evolving development of emerging mobility technologies. These emerging technologies include the increased adoption of zero emission vehicles, ride-hailing services, and micromobility solutions. Additionally, mobility hubs and Mobility-as-a-Service (MaaS) are growing areas that can support the shift to more sustainable modes of transportation. The Township should ensure that the transportation system is future ready for technologies such as autonomous and connected vehicles, delivery robots, drones, and autonomous taxis.

6.5.1 Zero Emission Vehicles

Zero Emission Vehicles (ZEVs) are a class of vehicles that produce no tailpipe emissions. This category includes electric vehicles powered by batteries or hydrogen fuel cell. Zero emission vehicles provide an environmentally friendly alternative to conventional internal combustion engine vehicles which can support a more sustainable transportation system.

The federal government, through the 2030 Emission Reduction Plan, has set a target of achieving 100% new light-duty zero emission vehicles sales by 2035. The key initiatives include:

- Offering incentives for purchasing ZEVs.
- Investments in charging stations.
- Support for innovation and research.
- Awareness and education.

To support the adoption of zero emission vehicles, it is recommended that the Township consider expanding the network of EV charging stations across the Township.

The County plans to install two EV charging stations in Springwater including the County Museum (1151 Highway 26) and the County Administration Office (1110 Highway 26). Expanding the network of EV charging stations within Springwater can include expanding charging stations at key institutions such as community centres and

Township Administrative Centre. The Township can also consider amending their zoning by-law so that a percentage of parking spaces require EV-ready equipment. This EV-ready requirement for new developments has been a growing trend amongst municipalities across Canada.

It is recommended that the Township consider collaborating with the County and other municipalities for the Provincial government to provide incentives at the point of sale for ZEVs.

6.5.2 Mobility-as-a-Service (MaaS)

Mobility-as-a-Service (MaaS) is an innovative approach or operating model that integrates various transportation services into a single accessible platform, allowing users to plan, book, and pay for trips seamlessly. This type of service can be provided publicly or privately and typically leverages several transportation operators operating various modes such as transit, ride-hailing, and car share. The service is typically provided through a mobile application. This service can support a sustainable transportation system due to users being able to understand the full breadth of options available to them to complete the entirety of the journey as well as to conveniently pay for their preferred options under one platform.

Although the real-world applications of MaaS are in their infant stages in North America, the Township can support the future development of MaaS in the County and in the Township by supporting the County's Open Data platform through data sharing and information sharing.

It is recommended that the Township support the County's Open Data platform through data sharing and information sharing.

6.5.3 Micro-Mobility

Micromobility solutions, such as e-scooters and electric cargo bikes, are flexible and sustainable alternatives for short-distance travel or first / last-mile trips. These modes can be beneficial as they can replace trips that would have been made in personal vehicles or provide a way to make last-mile connections for transit trips.

Regulations and definitions for micromobility options can vary between municipalities but generally align with the province. For example, the existing Provincial definition of an e-scooter is a vehicle that has the following:

- Two wheels (one at the front and one at the back).
- A platform to stand on, a handlebar for steering.

- An electric motor that does not exceed 500 watts.
- A maximum speed of 24 km/h on a level surface.

Currently, many municipalities within Ontario such as the City of Hamilton and the City of Brampton have been participating in Ontario's e-scooter pilot program that allows municipalities to choose where and how e-scooters may be used. This program ran from January 1, 2020, to November 27, 2024. Municipalities that participated are responsible for choosing where e-scooters may operate (for example, on roads, bike paths, or trails), where they can park, and other regulations. The City of Toronto has continued to decline participating in the pilot since 2021. Reasons include concerns with safety, equity amongst users, and financial stability of private operators.

On the other hand, the City of Toronto and other municipalities such as Haldimand County and the City of Ottawa, have decided to participate in the province's low-speed vehicle (LSV) pilot. This pilot began in 2017 and ends on June 29, 2027. An LSV is a four-wheeled electric mini-car that does not have the same safety standards as a typical car. An LSV seats two to four people and has a maximum speed of 40 km/hr. They are permitted on roads with a maximum posted speed limit of 50 km/hr. The City has decided to participate in this pilot in 2024 due to their safety, expanding options for travel using lower-emission vehicles, supports environmental objectives, and reduced liability to the City due to existing legal frameworks.

The Township should consider and assess the future potential for micromobility options. To assess this potential, the Township can:

- Review the findings and conclusion from municipalities currently participating in the e-scooter pilot. These conclusions should be available in 2025 since the pilot ended November 2024.
- Assess the potential for e-scooters from a safety, environmental, public health, economic, cost, and liability perspective.
- Review the existing findings from municipalities currently participating in the LSV pilot. After this review, the Township can consider participating in Ontario's existing LSV pilot program or in a future pilot.

It is recommended that the Township consider participating in the Provincial LSV pilot program or in a future pilot program.

6.5.4 Mobility Hubs

Mobility hubs are strategic locations where various transportation modes converge allowing for travellers to make seamless transitions between various modes. For example, in the Township, a mobility hub in the future could facilitate the transition from a transit stop and e-scooter or a transit stop and ride-hailing. This interconnectedness

can increase the attractiveness of sustainable modes of transportation due to the increased accessibility and reduction of time to get to the next mode. The Township can support the future development of mobility hubs by identifying possible locations based on demand and connectivity needs. Future locations can consider:

- Curbside space to integrate ride hailing with shared micromobility modes.
- Carpool lots.
- Transit stops.

It is recommended that the Township identify strategic locations and supporting amenities for mobility hubs, particularly at transit stops, to improve connections between modes

6.5.5 Monitoring Emerging Trends

The Township should stay informed about emerging trends as many of these technologies are in the early stages of development and not yet fully understood from a planning perspective. Autonomous and connected vehicles, delivery robots, drones, and autonomous taxis are rapidly evolving innovations that can significantly impact future transportation systems. While there is currently lack of data, findings, and conclusions and practical applications in rural settings like the Township, these technologies can still benefit mobility, logistics, and accessibility.

Autonomous and connected vehicles (AVs and CVs) are technologies that enable vehicles to communicate with each other and infrastructure which can reduce traffic accidents and mitigate congestion. Delivery robots and drones for last-mile delivery is emerging as a promising solution to logistics challenges and freight operators and couriers. These technologies can reduce delivery times, lower costs, and decrease the environmental impact of traditional delivery methods. Autonomous taxis have the potential to offer convenient, cost-effective, and efficient transportation services without human drivers.

7.0 Alternative Strategies

A fundamental component of Phase 2 of Municipal Class Environmental Assessment process is the identification and assessment of a range of reasonable alternative strategies. This requirement stems from the recognition that a single proposed strategy may not comprehensively capture the diverse perspectives and objectives of the community. Types of alternative strategies considered in this study are presented in the following section.

7.1 Identification of Alternative Strategies

Alternative 0 – "Do Nothing" / Business-As-Usual (BAU) Scenario: Maintaining the status quo is an alternative that the Township can consider. It would be a strategy that addresses the regulatory responsibilities of the Township in maintaining the roads and cycling / trails system, including addressing operational needs. It would not, however, include new solutions beyond what is currently planned and identified in capital budgets.

Alternative 1 – Roads Focused: In addition to meeting the growth needs and regulatory responsibilities of the BAU scenario, the Township would focus on investing in new road infrastructure, road widenings and intersection improvements with the goal of alleviating auto congestion and providing residents with better access to the higher order road network, such as highways and major arterials.

Alternative 2 – Active Transportation Focused: In addition to meeting the growth needs and regulatory responsibilities of the BAU scenario, the Township would focus on implementing proposed active transportation improvements that provide safer, dedicated infrastructure to key areas within the Township and enhanced walking and cycling connectivity throughout.

Alternative 3 – Transit Focused: In addition to meeting the growth needs and regulatory responsibilities of the BAU scenario, the Township would focus on implementing proposed transit improvements that provide better local service and connections to inter-regional transit services.

Alternative 4 – Combination of All: In addition to meeting the growth needs and regulatory responsibilities of the BAU scenario, the Township would develop a combined implementation plan for roads, active transportation and transit services.

7.2 Evaluation Criteria

Evaluation criteria and sub-criteria, as detailed in Table 7-1, have been developed for the alternative strategies based on typical requirements of the Environmental Assessment process. Indicators are measures of these criteria that reflect insights on

qualitative measures or available quantitative data. The criteria and indicators were chosen based on the Transportation Master Plan's vision statement and objectives.

Table 7-1: Evaluation Criteria and Indicators

Sub-Criteria	Criteria Indicators
Transportation Service	
Improves capacity and reduces delay	Degree to which alternative: • Maintains sufficient road capacity to meet traffic demands. • Improves traffic flow and operations at intersections.
Supports connectivity	Degree to which alternative: • Improves connectivity between settlement areas. • Improves connectivity to higher order facilities or major transportation corridors.
Transportation Equity	
Protects vulnerable road users	Degree to which alternative: • Addresses misaligned intersections and poor sightlines. • Consider safety improvements.
Provides viable alternative mobility options	Degree to which alternative: • Considers a prioritization of transportation modes based on the rural or urban structure of the community. • Improves connectivity between settlement areas and destinations with active transportation. • Promotes more attractive walking and cycling environments.

Sub-Criteria	Criteria Indicators
Supports Township Objectives	
Mitigates effects of climate change	Degree to which alternative: • Reduces greenhouse gas emissions. • Promotes active transportation. • Increases carbon resilience. • Supports clean energy initiatives.
Creates healthy communities	Degree to which alternative: • Support established residential communities. • Supports the development of communities. • Supports healthy living by encouraging walking and cycling.
Supports economic development	Degree to which alternative: • Promotes opportunities for local business development.
Environmental Impact	
Minimizes impact to environmental features	Degree to which alternative minimizes the potential impacts to: • Protected properties. • Natural heritage system. • Wetlands. • Significant woodlands, valleylands and wildlife habitat. • Areas of Natural and Scientific Interest (ANSI). • Fish habitats. • Habitat for Species at Risk (SAR). • Source water protection areas.
Cost	
Minimizes Township capital costs	Degree to which alternative requires: • Capital investment for construction and engineering support. • Capital investment for acquisition of property, fleet and equipment.
Minimizes Township operating and maintenance costs	Degree to which alternative requires: • Additional staff resources. • Outsourced contract services. • Funding for operations and maintenance of all modes of travel and support systems.

7.3 Assessment of Alternative Strategies

The evaluation of the alternative strategies is summarized in Table 7-2.

Legend

Least Preferred ○ ◔ ◑ ◕ ● Most Preferred

Table 7-2: Evaluation of Alternative Strategies

Evaluation Criteria	Alternative 0 "Do Nothing" / Business-As-Usual	Alternative 1 Road Focus	Alternative 2 Active Transportation Focus	Alternative 3 Transit Focus	Alternative 4 Combination of All
Transportation Service	◔	◕	◑	◑	●
Improves capacity and reduces delay	• No additional improvements beyond what is planned to address future congestion.	• New roads, widenings, and intersection improvements address capacity needs.	• Active transportation improvements promote mobility choices.	• Transit improvements promote mobility choices.	• Improves capacity for all modes.
Supports connectivity	• No additional improvements beyond what is planned to provide greater connectivity between settlement areas and key destinations.	• New roads provide connections to higher order networks.	• Expanded cycling network provide connections between settlement areas and key destinations.	• Expanded transit network provide more local connections within major settlement areas and neighbouring municipalities.	• Improved connectivity for all modes between and within major settlement areas and to / from neighbouring municipalities.
Transportation Equity	◔	◔	◕	◕	●
Protects vulnerable road users	• Limited safety improvements for vulnerable road users.	• Safety improvements can be addressed through proposed intersection studies.	• Dedicated cycling infrastructure provides greater protection and separation from vehicles.	• Transit connections provide mobility choices for seniors and children / youth.	• Dedicated infrastructure for all types of road users.
Provides viable alternative mobility options	• No new mobility options for road users.	• Limited mobility options for road users.	• Increased mobility options for all road users.	• Increased mobility options for all road users.	• Provides the greatest mobility options for road users.
Supports Township Objectives	◔	◔	◑	◔	◕
Mitigates effects of climate change	• No additional improvements beyond what is planned to reduce GHG emissions. • Congestion will increase GHG emissions and GHG emissions per capita.	• Limited reduction to GHG emissions. • Increased roadway supply can potentially cause more driving and more emissions.	• Moderate reduction to GHG emissions through new infrastructure for walking and cycling. • Supports clean energy travel.	• Some reduction to GHG emissions through investment in more transit routes. • Opportunities for zero emission transit vehicles.	• Most reduction to GHG emissions through balancing all modes of transportation.
Creates healthy communities	• Limited promotion of healthy communities.	• Limited promotion of healthy communities.	• Significant promotion of healthy communities through walking and cycling.	• Moderate promotion of healthy communities through transit ridership.	• Significant promotion of healthy communities through promotion of all modes of transportation.

Evaluation Criteria	Alternative 0 "Do Nothing" / Business-As-Usual	Alternative 1 Road Focus	Alternative 2 Active Transportation Focus	Alternative 3 Transit Focus	Alternative 4 Combination of All
Supports economic development	• No additional opportunities to support economic growth.	• Limited opportunity for economic growth through new road infrastructure.	• Support for local businesses, social spaces and connectivity achieved through new active transportation infrastructure.	• Support for local businesses and economic growth achieved through improved transit connectivity to major hubs and within major settlement areas.	• Greatest potential for economic growth through new infrastructure for all modes.
Environmental Impact	◕	◑	◑	◕	◔
Minimizes impact to environmental features	• Minimal impacts are associated with maintenance requirements.	• Potential impacts associated with new road construction maintenance requirements.	• Potential impacts are associated with widenings to accommodate active transportation facilities.	• Minimal impacts are associated with new transit routes and supporting facilities (e.g., bus bays, transit stops).	• Highest potential impact on environmental features due to construction of new roads and active transportation facilities.
Cost	◕	◑	◑	◕	◔
Minimizes Township capital costs	• Least impact on capital costs as no additional improvements are recommended beyond what is planned.	• Moderate level of investment is associated with new road infrastructure and studies.	• Moderate to high level of investment associated with new active transportation facilities.	• Less capital investment, such as cost sharing efficiencies, can be achieved with other agencies operating proposed routes.	• Highest level of infrastructure investments.
Minimizes Township operating and maintenance costs	• Least impact on operating and maintenance costs as no additional improvements are recommended beyond what is planned.	• Moderate level of investment is associated with new road infrastructure.	• Moderate level of investment is associated with new active transportation facilities.	• Less operating and maintenance investment as well as cost sharing efficiencies can be achieved with other agencies operating proposed routes.	• Highest level of operating and maintenance costs for additional road projects, active transportation facilities, and transit services.
Overall Assessment	**Not preferred**	**Not preferred**	**Not preferred**	**Not preferred**	**Recommended**

7.4 Preferred Strategy

An assessment of the alternative strategies based on established criteria indicates that **Alternative 4 – Combination of All** is the preferred strategy. This scenario proposes a transportation network that focuses on road improvements and the development of active transportation infrastructure and transit service along key corridors. This multi-modal transportation network is anticipated to accommodate the planned population and employment growth within the Township of Springwater, promote economic development and Township priorities, while supporting climate change objectives. Any impacts to environmental features are expected to be minimized through future studies.

Along with improvements to the transportation infrastructure, the preferred strategy is supported by operational policies, studies and Township-initiated actions which are summarized in the next section.

8.0 Implementation Strategy

8.1 Infrastructure Improvements

The implementation of improvements, particularly in rural environments, may be challenging given the constraints of the topography, the limitations of the corridor and the natural and cultural heritage features. Assessments will be needed at a corridor level to determine:

- The extent of geometric changes necessary to expand the road base to accommodate active transportation facilities.
- The viability of those changes relative to cost and property impact.
- The natural environment impacts and mitigation.
- The cultural heritage feature impacts and mitigation.

A list of all proposed infrastructure improvements, beyond the planned improvements identified in Section 5.1, associated with the preferred transportation strategy is provided in Table 8-1, including the improvement type, location, proposed phasing, and responsible jurisdiction. Infrastructure improvements are phased as short term (by 2028), medium term (by 2031), and long term (by 2041) projects.

Table 8-1: Recommended Infrastructure Improvements

No.	Improvement Type	Road / Intersection	From	To	Improvement	Proposed Phasing	Responsibility
1	Roads	Craig Road	Russell Road	County Road 27 (Bayfield Street)	Extension [1]	Short	Township
2	Roads	Forbes Road / Craig Road Extension	County Road 27 (Bayfield Street)	Highway 400	Road Transfer to County [2]	Medium (or upon completion of the Craig Road Extension)	County
3	Roads	County Road 53 (Wilson Drive)	County Road 43 (Snow Valley Road)	Highway 26	Widening to 4 Lanes [2]	Medium	County
4	Roads	Carson Road	Highway 26	St. Vincent Street	Extension	Long	Township
5	Roads	County Road 43 (Snow Valley Road)	County Road 53 (Wilson Dr)	County Road 27 (Bayfield Street)	Widening to 4 Lanes [2]	Long	County
6	Active Transportation	Flos Road 10	Township boundary	County Road 27	Paved shoulder	Medium	Township
7	Active Transportation	Flos Road 10	County Road 27	Baseline Road	Paved shoulder	Medium	Township
8	Active Transportation	Flos Road 4	N Sunnidale Sideroad 15	St Patricks Drive	Paved shoulder	Medium	County (future road transfer)
9	Active Transportation	Flos Road 4	St Patricks Drive	Leo Marley Way	Physically separated bike lane	Medium	County (future road transfer)
10	Active Transportation	Flos Road 4	Leo Marley Way	County Road 27	Paved shoulder	Medium	County (future road transfer)

No.	Improvement Type	Road / Intersection	From	To	Improvement	Proposed Phasing	Responsibility
11	Active Transportation	Flos Road 4	County Road 27	Old Second Road	Paved shoulder	Medium	County (future road transfer)
12	Active Transportation	Hendrie Road	Highway 26	Nursery Road	Paved shoulder	Medium	Township
13	Active Transportation	Portage Trail	Grenfel Road	County Road 28 (George Johnston Road)	Paved shoulder	Medium	Township
14	Active Transportation	Old Orchard Road	Pinegrove Road	Grenfel Road	Paved shoulder	Medium	Township
15	Active Transportation	Pinegrove Road	Old Orchard Road	County Road 40 (Sunnidale Road)	Paved shoulder	Medium	Township
16	Active Transportation	Nursery Road	County Road 22 (Horseshoe Valley Road)	Highway 26	Paved shoulder	Short	Township
17	Active Transportation	Highway 26	Nursery Road	Anne Street	Paved shoulder	Medium	Province
18	Active Transportation	Anne Street	Highway 26	County Road 43 (Snow Valley Road)	Conventional bike lane	Short	Township
19	Active Transportation	Baseline Road	County Road 27	Flos Road 7	Paved shoulder	Long	Township
20	Active Transportation	Flos Road 7	Baseline Road (West)	Old Second Road	Paved shoulder	Long	Township
21	Active Transportation	Old Second Road	Flos Road 7	County Road 22 (Horseshoe Valley Road)	Paved shoulder	Medium	Township

No.	Improvement Type	Road / Intersection	From	To	Improvement	Proposed Phasing	Responsibility
22	Active Transportation	Old Second Road	County Road 22 (Horseshoe Valley Road)	Walt Road	Paved shoulder	Short	Township
23	Active Transportation	Old Second Road	Walt Road	Partridge Road	Shared facility	Medium	Township
24	Active Transportation	Mill Street	Old Second Road	Old Penetanguishene Road	Paved shoulder	Medium	Township
25	Active Transportation	Mill Street	Old Penetanguishene Road	Scarlett Line	Physically separated bike lane	Medium	Township
26	Active Transportation	Finlay Mill Road	Highway 26	Doran Road	Physically separated bike lane	Short	Township
27	Active Transportation	Doran Road	Finlay Mill Road	Russell Road	Physically separated bike lane	Medium	Township
28	Active Transportation	Russell Road	Forbes Road	Doran Road	Physically separated bike lane	Long	Township
29	Active Transportation	Forbes Road	Russell Road	Highway 400	Paved shoulder	Long	Township
30	Active Transportation	Partridge Road	Old Second Road South	Penetanguishene Road	Paved shoulder	Long	Township

Notes: 1. The Craig Road extension to County Road 27 was identified as an improvement for the medium-term (by 2031) in the Midhurst Class EA. As detailed in Section 6.1.1.3, this connection should be considered as an immediate need. Therefore, it is recommended that the improvement be implemented in the short term (by 2028).
2. Identified in the Simcoe County TMP (2023) as an improvement for the 2051 horizon, it is recommended that the improvement be investigated for implementation within an earlier timeframe as noted.

8.2 Recommended Initiatives

A list of all proposed initiatives associated with the preferred transportation strategy is provided in Table 8-2, including the initiative type, supporting mode, and the responsible jurisdiction. The initiatives are classified as:

- **Study**: Recommendation requires further investigation through a more detailed study that the Township may choose to complete internally or externally (through a consultant).
- **Policy**: Recommendation involves an update to Township planning, standards, guidelines or policy documents.
- **Action**: Recommendation requires a Township-led action or collaboration that may lead to further study or implementation.

Table 8-2: Recommended Initiatives

No.	Type	Mode	Initiatives	Responsibility
33	Study	Roads	Initiate an Intersection Study to address operational and safety concerns identified at locations listed in Table 2-3.	Township / County
34	Study	Roads	Initiate a data-driven Vision Zero strategy with an overarching goal of preventing future collisions and reducing injuries and fatalities.	Township
35	Policy	Roads	Incorporate proposed road design criteria and policies identified in Table 6-4 as part of the next update to the Official Plan and / or Engineering Design Standards and Specifications Manual.	Township
36	Policy	Roads	Adopt the road classification map and supporting policies (Section 6.1.3) as part of the next Official Plan update.	Township
37	Policy	Roads	Adopt the proposed speed limit policy in Section 6.1.3 to account for context-sensitive conditions warranting a reassessment of posted speed limits.	Township
38	Action	Roads	Continue to consider the Traffic Calming Policy (February 2020) in concert with the speed limit policy.	Township

No.	Type	Mode	Initiatives	Responsibility
39	Action	Roads	Collaborate with the County of Simcoe to monitor traffic levels along Flos Road 4 within Phelpston following the upgrade to County standards to preserve the liveability and safety of residents and active transportation users.	Township / County
40	Action	Roads	Collaborate with the County of Simcoe to investigate earlier implementation of the County Road projects as identified in Table 8-1.	Township / County
41	Action	Active Transportation	Expand the scope of the recommended trails committee and GIS database (per the Trails Master Plan Update) to include on-road cycling routes.	Township
42	Action	Active Transportation	Allocate funding for the installation of bicycle parking and amenities along cycling corridors and near key destinations.	Township
43	Policy	Active Transportation	Incorporate the policies as detailed in Section 6.2.1 as part of the next Official Plan update to support active transportation connectivity.	Township
44	Policy	Active Transportation	Establish a sidewalk prioritization policy and allocate funding for the implementation of new sidewalks in the Township.	Township
45	Study	Active Transportation	Collaborate with the Ministry of Transportation Ontario (MTO) to investigate opportunities for dedicated cycling facilities and wayfinding / signage along Highway 26 between Nursery Road and Anne Street to facilitate a continuous north-south active transportation route.	Township / MTO
46	Action	Active Transportation	Monitor active transportation demand along rural roads to identify high activity corridors that would benefit from added physical separation features.	Township

No.	Type	Mode	Initiatives	Responsibility
47	Action	Transit	Collaborate with Simcoe County and the City of Barrie to expand and establish cost-sharing opportunities for extended LINX and Barrie Transit bus services.	Township / County / City of Barrie
48	Study	Transit	Establish an on-demand transit strategy and pilot.	Township
49	Study	Goods Movement	Collaborate with the County and other local municipalities to develop a coordinated and refined goods movement network building upon the Provincial Strategic Goods Movement Network (SGMN) and supporting arterial road network.	Township / County
50	Policy	Goods Movement	Consider the goods movement policies in Section 6.4.3 to support an efficient truck network.	Township / County
51	Action	Emerging Technology	Consider expanding the network of EV charging stations across the Township.	Township
52	Action	Emerging Technology	Consider collaborating with the County and other municipalities for the Provincial government to provide incentives at the point of sale for Zero Emission Vehicles.	Township / County
53	Action	Emerging Technology	Support the County's Open Data platform through data sharing and information sharing.	Township / County
54	Action	Emerging Technology	Consider participating in the Provincial Low Speed Vehicle (LSV) pilot program or in a future pilot program.	Township
55	Action	Emerging Technology	Identify strategic locations and supporting amenities for mobility hubs, particularly at transit stops, to improve connections between modes.	Township

The Municipal EA process suggests that Master Plans should be reviewed every five years to assess the need for a comprehensive formal review and / or update. A significant change to the allocation of future population and employment forecasts, for example, may trigger the need for an update to the Transportation Master Plan, at which

point new count data should also be collected to update baseline travel conditions. As such, the Township should review the Transportation Master Plan every five years to assess the need for an update.

8.3 Capital Cost Estimates

Incorporating the costs of transportation improvements into budget plans will be key in ensuring the implementation and delivery of proposed projects. Capital costs associated with the additional improvements and studies from the preferred transportation strategy (Combination of All), not including previously planned and / or budgeted improvements, were estimated as input for the Township's budget planning needs.

Benchmark costs from development charges studies and bid documents were used to inform unit costs, converted to 2024 dollars to account for inflation. Costs associated with utilities relocation / replacement, engineering / design work, EA studies and contingencies of roadwork projects were also accounted for. Table 8-3 provides a capital cost breakdown of recommendations from this Transportation Master Plan to 2041 by improvement type for the Township. The detailed capital cost summary is provided in Appendix D.

Table 8-3: Capital Cost Summary

Phasing	Roads	Active Transportation	Transit	Total
Short Term	$92,000	$7,506,000	$118,000	**$7,716,000**
Medium Term	-	$14,905,000	-	**$14,905,000**
Long Term	$15,440,000	$6,114,000	-	**$21,554,000**
Total	**$15,532,000**	**$28,525,000**	**$118,000**	**$44,175,000**

The costs provided in this section reflect estimates only and will vary subject to more detailed studies and potential property acquisitions required for construction. The cost estimates are also subject to the following caveats and assumptions:

- Phasing of projects were categorized under the short (by 2028), medium (by 2031) and long (by 2041) term, based on the anticipation of existing and future needs. However, projects may be implemented sooner based on subsequent studies or further assessment and to help balance capital costs and funding strategies.
- The costs shown are incurred by the Township only. For studies or projects that require collaboration with and / or approval from the County and / or MTO, it is assumed that a cost sharing agreement will be established based on jurisdictional ownership of the infrastructure proposed for improvement. Similarly, any infrastructural improvements triggered by growth will allow the Township to recover some costs through development charges.
- Studies may trigger further improvements that will need to be costed and budgeted.

- Inflation rates used to derive 2024-dollar values account for the significant increase (~15%) in construction costs experienced between 2021 to 2022, and 2023 to 2024.
- Active transportation costs were estimated based on the proposed network shown in Figure 6-10. It includes a preliminary recommended route type based on corridor characteristics and road user needs. These routes; however, will need to be 'ground proofed' to confirm cost and environmental feasibility and to confirm the appropriate facility type based on OTM Book 18 and roadway conditions.
- The anticipated Municipal Class Environmental Assessment (MCEA) schedule was identified for each project, to be confirmed based on the need for land acquisition, etc. The projects will be carried forward following the latest (2024) update to the MCEA process.

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