Active Innisfil

Town of Innisfil

Trails Master Plan

November 2016

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planning consultants

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Acknowledgements

The Master Plan is a product of the vision and dedication of the Town of Innisfil, Council, and Staff. We also extend our thanks to the many residents, organizations, and community groups who provided valuable insights and opinions and whose feedback has made the Plan a document that reflects local opportunities and that identifies strategies to capitalize on them.

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1. Introduction

1.1 About the Master Plan

The Town of Innisfil has recognized the importance of local leisure opportunities and has responded through the 'Active Innisfil' project. This initiative involved the preparation of the Parks, Recreation, and Culture Master Plan, which guides the development of facilities, services, and programs over the next 20 years. As a separate but closely related component to the Parks, Recreation, and Culture Master Plan, the Town commissioned the development of this Trails Master Plan.

The Trails Master Plan provides Council, Town Staff, developers, and community partners with a guiding document that will advance the Town's trail network over the next 10 years and beyond. The Master Plan focuses on off-road linkages such as multi-use trails, pathways, and sidewalks in key areas. On-road cycling routes are not a primary focus of this Master Plan as they have been well covered in previous studies, although this Plan advances strategies to assist cycling infrastructure development and implementation. Equestrian trails and motorized forms of transportation are beyond the scope of this Master Plan.

At present, the Town offers nearly 20 kilometres of off-road walking trails, including the Trans Canada Trail and the Innisfil Beach Park trail. In addition, the Town maintains over 70 kilometres of sidewalks. To ensure that the Town's active transportation network continues to move forward, this Master Plan identifies recommended pedestrian and cycling routes, which are supported by policy considerations, development standards, and other key strategies to promote active transportation in Innisfil.

1.2 Master Plan Drivers

Section 4.8.47 of Simcoe County's 2015 Official Plan requires that local municipalities shall develop an Active Transportation Plan to inform local official plan policies. The County indicates that the Plan shall consider proposed pedestrian and cycling routes, and policies for trail and sidewalks standards and locations, safety measures, and more. It is the intent of this Master Plan to address these requirements.

The Town's 2013 Transportation Master Plan provides a solid foundation for the preparation of this Trails Master Plan. The 2014 County of Simcoe Transportation Master Plan Update and 2014 Trails Strategy also provide

additional high-level support for connecting Innisfil with surrounding communities. Further, the Town's Official Plan and Strategic Plan are supportive of the development of a Trails Master Plan that promotes a continuous trail system linking parks and community facilities.

The Town's Transportation Master Plan revealed that there is a high level of support for recreational trails; however, the local trail network was identified as under-developed (and what trails exist are not well connected). While the Transportation Master Plan provides guidance for future connections between Innisfil's various communities, it lacks precision in trail development priorities within urban areas, future urban areas, and parks and open spaces. These are the areas that will receive emphasis through the Trails Master Plan. Policy recommendations that are essential to facilitating and implementing the proposed trail network are also advanced for consideration through the 'Our Place' Official Plan Review. Lastly, insights into trail development standards within urban areas are explored to serve as a toolkit for Town staff and the development industry as new subdivisions are built.

1.3 Benefits of Trails

The importance of a cohesive and comprehensive trail network in any community cannot be understated. In light of emerging evidence that reveals increasing rates of physical inactivity, communities across the Province are striving to promote healthier lifestyles through accessible physical activity opportunities. Walking and hiking is one of the simplest forms of physical activity and it is often one of the most popular leisure activities pursued by all residents. As a result, trails and sidewalks are some of the most desirable neighbourhood amenities as they form a key component of quality of life and contribute immeasurable community benefits; some of these benefits are described below. Additional details and trends in trails are described in Section 2.2 of this Master Plan.

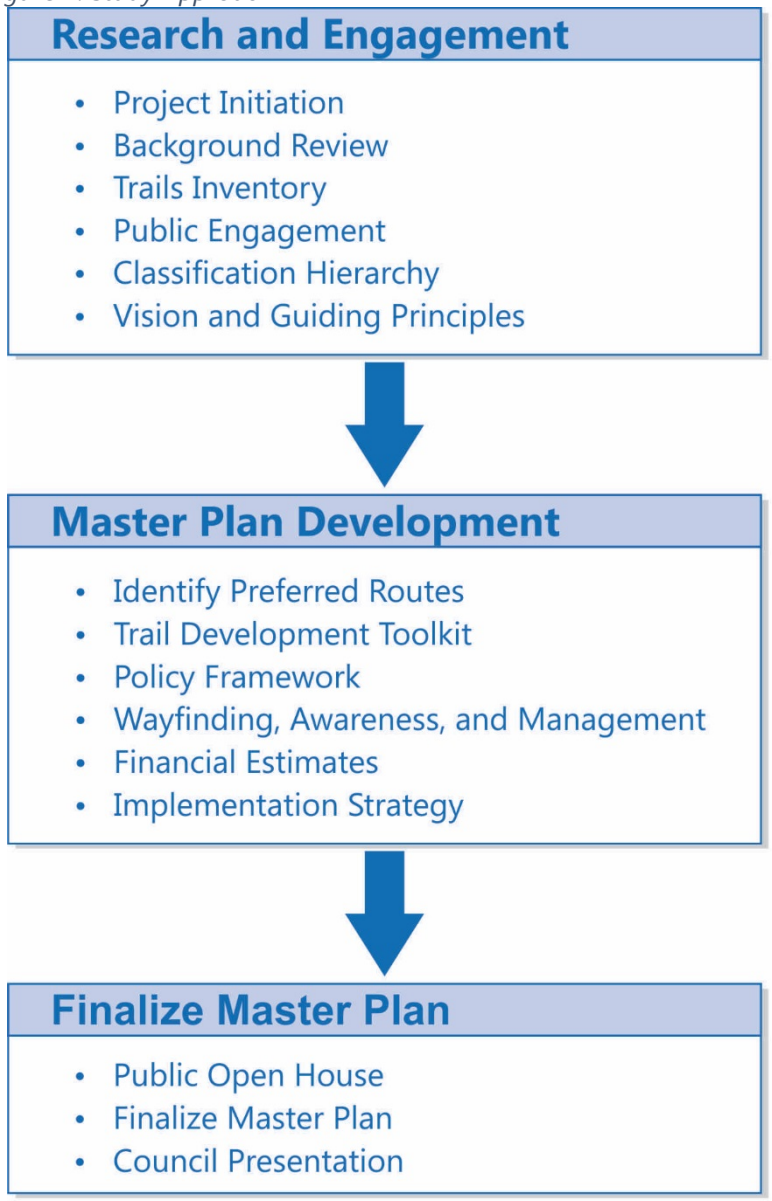
- **Physical health and well-being** can be improved by a brisk walk in the local park or bike trip around the block. Physical health and well-being is a top-of-mind issue due to increasingly busy schedules and the wide variety of sedentary activities that contribute to physical inactivity.
- **Utilitarian transportation** through the use of sidewalks and trails provides those without access to a vehicle (including youth and children) a safe environment to travel from one destination to another.
- **Environmental benefits** are vast when people choose to travel on foot, thereby reducing greenhouse gas emissions. Pedestrians and trail users are able to appreciate the surrounding natural heritage features and become stewards of their community.

- **Economic goals** can be achieved as trails and sidewalks create more desirable places to live, work, and play. This is particularly significant in commercial core areas with limited parking opportunities or where trails form an important part of a tourism strategy.

1.4 Study Approach

The primary goal of this Master Plan is to develop a realistic, fiscally responsible, and integrated trail network that is supported by relevant trends, guiding principles, public engagement, policy development, and design standards. This has been accomplished through three project phases as expressed in Figure 1.

Figure 1: Study Approach



1.5 Report Organization

The Trails Master Plan is organized as follows:

Section 1: Introduction

Describes the Master Plan's purpose, key drivers, approach, and report organization.

Section 2: Local Context

Provides an overview of Innisfil's socio-demographic profile, trends and benefits of trails, inventory of existing trails, key policy documents, and opportunities and constraints.

Section 3: Community Engagement

Provides a summary of consultation findings collected for the Master Plan and through other recent processes, which contains the opinions, preferences, and priorities of the general public, stakeholders, staff, and Town representatives.

Section 4: The Trail Network

Contains the recommended trail network based on the inputs contained in the previous sections.

Section 5: Trail Development Toolkit

Contains the building blocks for developing Innisfil's trail infrastructure, including technical regulations and standards, guiding policies, and other key considerations.

Section 6: Implementation Strategy

Prioritizes the timing of recommendations contained in this Master Plan, along with implications on municipal resources, partnership opportunities, acquisition strategies, capital and operating estimates, potential funding sources, and processes for monitoring and updating the Master Plan.

2. Local Context

This section provides a broad overview of Innisfil's community profile (based on data drawn from Statistics Canada and the Town), which includes a look at the key growth areas that may benefit from future trail development. National trends related to the provision of trails in Innisfil are also explored, along with their implications in the local context. An inventory of existing trails is provided, in addition to a summary of guiding policy documents and supporting master plans. Based on these inputs and the fieldwork conducted, an overview of opportunities and constraints is then presented.

2.1 Community Profile

Over the past decade, the Town of Innisfil has experienced modest population growth, but is poised to grow considerably in the future. Statistics Canada reported a population of 33,079 for the 2011 Census year, representing growth of approximately 15% since 2001 (an average of 441 persons per year). According to Innisfil's Development Charges Background Study (2013), the 2015 population is estimated at 35,090[1], which will be used as the baseline estimate for the Master Plan. This population estimate includes the number of seasonal residents that descend upon Innisfil each year, which often generate increased pressures during the summer. It is estimated that seasonal residents make up approximately 10% of population. It is important to note that Innisfil is a rural/urban mix community that covers a large geographic area, which will have impacts on trail provision and distribution.

The Town's 2012 Water and Wastewater Master Servicing Plan contains a breakdown of population by community area, which is contained in Table 1. Alcona is the largest settlement area with approximately 14,000 residents. Given that the Town's Servicing Plan was developed in 2012, it can be suggested that this figure is now greater due to recent residential activity in this area.

[1] Town of Innisfil Development Charges Background Study, 2013

Table 1: 2012 Population by Community Area

Community	Population	Community	Population
Alcona	13,870	Gilford	1,471
Big Bay Point	2,743	Innisfil Heights	321
Big Cedar Point Shoreline	806	Lefroy-Belle Ewart	3,063
Churchill	620	Leonard's Beach	1,232
Cookstown	1,431	Sandy Cove	3,405
Degrassi Point Shoreline	355	Stroud	2,239
Fennell's Corner	196	**Total**	**31,752**

Source: Town-wide Water & Wastewater Master Servicing Plan, 2012

The Town's population forecasts are changing to due annexation. In 2010, 2,293 hectares of land were annexed from the northern portion of Innisfil and added to Barrie[2]. It is estimated that this expansion will accommodate approximately 40,000 new residents in Barrie, just beyond Innisfil's northern boundary.

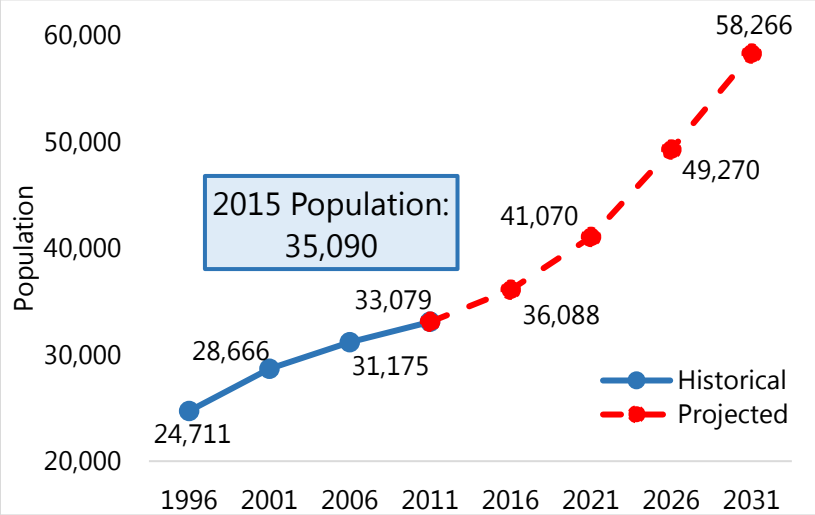
Looking towards 2031, the Development Charges Background Study articulates a projected population of 58,266. This estimate is consistent with the planned population allocated to Innisfil in the Growth Plan for the Greater Golden Horseshoe,[3] together with the population for Sleeping Lion (situated in Alcona), a community identified subsequent to the Growth Plan. A summary of historical and forecasted population growth is illustrated in Figure 2.

The Town is also home to Friday Harbour, a private recreational resort situated along Lake Simcoe in the northern portion of Innisfil. Currently under development, this planned community is expected to accommodate approximately 7,356 seasonal residents by 2031 and will include privately owned (but publicly accessible) facilities including a promenade and pier, marina, recreation centre, parks, trail network, and more.

[2] Barrie-Innisfil Boundary Adjustment Act, 2009 (Bill 196).

[3] The Growth Plan for the Greater Golden Horseshoe is currently being reviewed.

Figure 2: Historical & Forecasted Population, 1996 – 2031



Source: Statistics Canada, 1996 – 2011; Town of Innisfil Development Charges Background Study (2013)

In assessing where growth is expected to occur, subdivision development information provided by the Town's Planning Services Department provides a clear indication of the future distribution of growth for the near term. There are several active subdivision plans located within the Town's high growth settlement areas. These are anticipated to yield over 3,000 new residential units in the short-term, with future growth potential beyond this time period. Alcona is poised to remain the primary urban settlement area in the Town with the greatest share of future population growth. Notable growth is also anticipated for Lefroy, Sandy Cove, Cookstown, and Gilford.

This growth drives the need to ensure that adequate and high quality trails are in place to serve existing and future residents, particularly as these emerging areas are likely to attract young families with children, while established areas are more likely to experience aging trends. Irrespective of these growth patterns, a connected trails system is required to serve all settlement areas in Innisfil in order to promote physical activity, accessibility, and healthy communities.

2.2 Trail-Related Trends

This section explores a broad range of trends that have been observed across the Province and their implications on the Town's trail network.

Physical Inactivity

Mounting research has revealed a growing trend in physical inactivity. This can be linked to a number of factors such as busy lifestyles that are reliant on vehicular transportation and an increasing array of passive choices for leisure. The latter is particularly relevant to the demise of physical activity during this digital age, resulting in a dominance of sedentary activities. Canadians who are not getting an adequate level of physical activity are more

likely to lead unhealthy lifestyles, resulting in an increased risk of obesity and other health problems. By contrast, studies report that those who regularly use active transportation for recreational or utilitarian purposes are generally healthier and are at a reduced risk of obesity and other diseases.

Figure 3: Physical Inactivity Among Children and Youth

Canadian Physical Activity Guidelines recommends that children and youth get a minimum of 60 minutes of moderate to vigorous physical activity per day, as well as 150 minutes per week for adults and older adults. Research has shown, however, that 85% of adults and 93% of children and youth are not meeting these minimum guidelines.[4]

Implementing programs that encourage active participation will provide an opportunity to curb declining physical activity rates in Simcoe County and facilitate long-term improvements in physical activity levels. Encouraging local governments and community partners to promote healthy lifestyles through affordable recreation opportunities such as a connected trail network is an effective solution for combating obesity and physical inactivity at all age levels.

Active Transportation

Active transportation infrastructure is a critically important part of an efficient and sustainable transportation system. The number of motorized vehicles on the road can be reduced which in turn alleviates road congestion and minimizes greenhouse gas emissions, land consumption, and the costs for road construction and maintenance. In addition to economic and environmental benefits, there are many other inherent benefits to active transportation, particularly when it comes to physical activity and positive impacts on personal wellness. Active transportation has also been found to heighten community and social

[4] R.C. Colley, D. Garriguet, I. Janssen, C.L. Craig, J. Clarke, M.S. Tremblay. (2011). Physical activity of Canadian children, youth, and adults: Accelerometer results from the 2007 to 2009 Canadian Health Measures Survey. Health Reports 22(1):7-24.

vibrancy by encouraging compact developments and more livable communities where people are more likely to have personal contact with each other. Through an improved active transportation system, all of these benefits combined have the potential to contribute to an improved quality of life for Innisfil's residents.

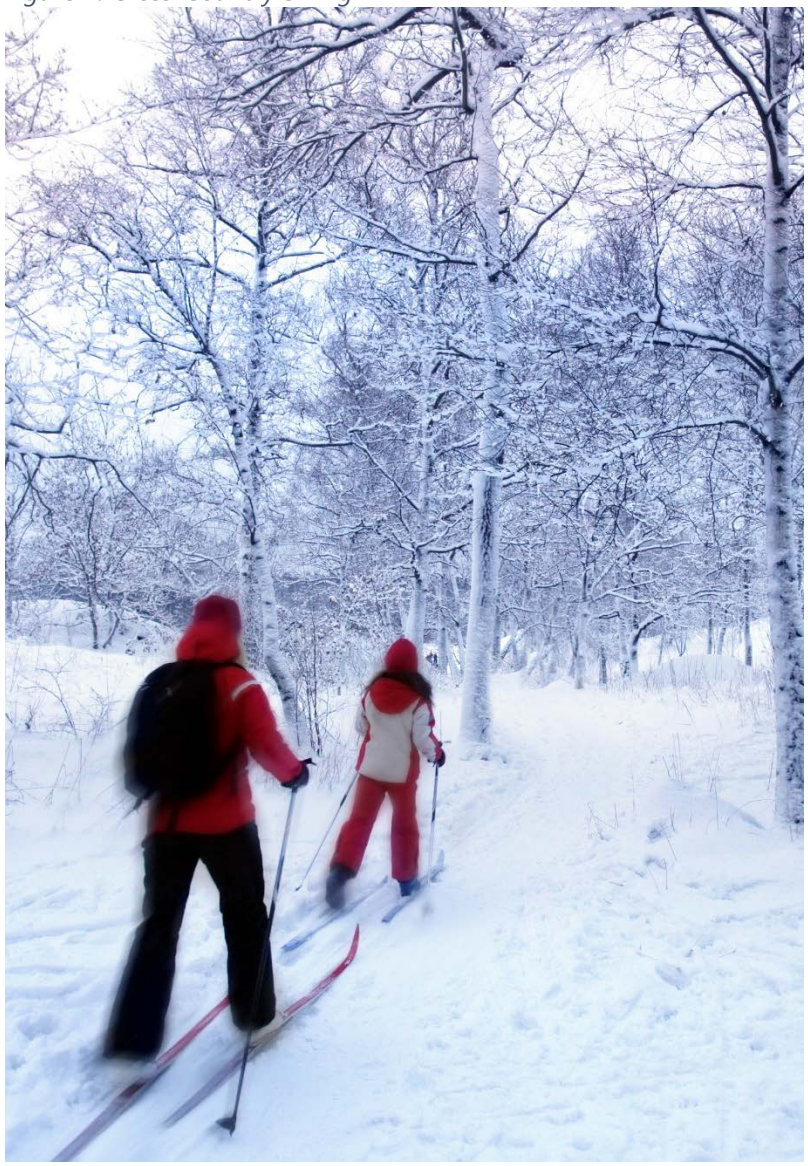
Opportunities for active transportation are dependent on the proximity and connections between residential areas and destinations such as commercial, recreational, institutional and employment areas. Research has shown that residents in rural areas are less likely to use active transportation methods given the spatial distribution of destinations and the lack of supporting infrastructure (e.g., sidewalks, bikeways, showers, etc.), resulting in a greater reliance of automobiles. By contrast, urban residents are more likely to choose non-motorized forms of transportation in high density areas, particularly where driving and parking may be more difficult. Urban areas also tend to have a greater presence of pedestrian infrastructure such as sidewalks and cycling lanes, destination routes, and walkable neighbourhoods. Regardless of geographic characteristics, active transportation opportunities can be further enhanced by maximizing necessary infrastructure that facilitates safe, comfortable, and convenient transportation choices.

Multi-Use Trails

The heightened awareness of fitness and physical activity has led to the growing importance of multi-use trails. Trails are often one of the most desired features in a community as they facilitate low cost physical activity and can be more cost-effective in relation to multi-million dollar recreation facilities. Not only do trails and pathways facilitate recreation activities and support positive interactions between the community and the natural environment, they provide links between destinations and in many cases, provide alternative commuting means if strategically linked to key employment areas.

The multi-use trail is a popular trail typology as it is often the most visible in a community. Given this profile, multi-use trails are designed and maintained to the highest standard to accommodate the widest range of uses including, but not limited to, walking and hiking, roller-blading, cycling, snowshoeing, cross-country skiing. By contrast, unpaved trails do not support activities such as roller blading and skateboarding. Multi-use trails can be used year-round to provide residents with outdoor physical activity during the winter, although municipalities may be required to take additional precautions in winter maintenance and management, such as frequent snow clearing, to ensure that multi-use trails are safe.

Figure 4: Cross-Country Skiing



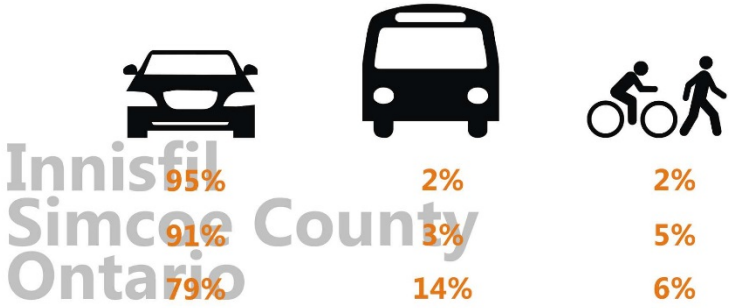
Historically, the provision of trails in local neighbourhoods has not been a priority, resulting in a lack of pedestrian connectivity and a reliance on automotive travel. Municipalities are now challenged with providing trails in these areas, which are met with obstacles such as the cost of acquiring lands, nimbyism, and other factors. Nevertheless, communities continue to evaluate all opportunities to provide this value neighbourhood amenity to encourage physical activity. In new residential areas, best practices suggest that trails are best established (or designated) prior to home construction to maximize desired routes, heighten awareness of the local trail network, and avoid potential conflicts.

Modes of Transportation

As illustrated in Figure 5, as of 2011, the majority (95%) of Innisfil's labour force travelled to work by a private vehicle and 2% used public transportation. Approximately 80% of residents commute out of Innisfil for work. The location of the future GO Station is currently being considered which, when in place, is likely to increase the number of residents who utilize public transportation to access communities to the south. The use of private vehicles is expected given the Town's geography and it is estimated that much of the labour force works in other municipalities. Approximately 2% of the labour force uses active transportation modes

(e.g., walking and cycling) to travel to work, which is on par with the County but less than the Province (6%). Although research on active transportation is widely promoted for both recreation and utilitarian uses, it is expected that local trails in Innisfil are largely used for recreation purposes.

Figure 5: Modes of Transportation to Work



Data Source: National Household Survey, 2011

Innisfil's mix of rural and urban landscapes presents challenges in providing an integrated active transportation network that connects the Town's settlement areas and those in adjacent municipalities. Given funding constraints, many municipalities focus on connections that serve the greatest number of persons, such as those within built-up settlement areas.

Universal Design and Safety

The *Accessibility for Ontarians with Disabilities Act* (A.O.D.A.) requires that all municipalities design new and redeveloped recreational trails (as well as sidewalks and boardwalks) to meet accessible standards (where possible). This requires incorporating design elements that address items such as appropriate grades, surface materials, widths, and cross-slopes, as well as the need to consult with persons with disabilities and the local Accessibility Advisory Committee.[5]

Figure 6: Paved Park Pathway in Warrington Park

[5] Passo, M. (2007). Accessible Trails. National Trails Training Partnership. Retrieved from http://www.americantrails.org/resources/accessible/SustainPpasso.html

While it may be impractical to ensure that all recreational trails are accessible (nature trails are largely exempt, as are trails that are in place prior to 2016), the development of accessible trails can be focused in locations where high levels of utilization are anticipated and the terrain is suitable. Such locations may include trail spines, park trails, and other high volume routes near residential areas. In addition, experiences in other communities suggest that the development of supporting amenities (such as washrooms, rest areas, parking, way-finding signage, etc.) may encourage usage, regardless of one's age or ability.

There are also a number of challenges that affect trail usage, not the least of which is Ontario's highly varied climatic and weather conditions. Whether in the form of rain, snow, or extreme heat or cold, people's choices will differ particularly if trail routes are not designed for multiple seasons or are not adequately shielded from the elements. The Active Innisfil Online Survey (2015) revealed support for a broad range of trail designs including, but not limited to, unpaved nature or hiking trails, paved recreational multi-use trails, sidewalks, and cycling routes.

Supporting Comfort Amenities

Ensuring that Innisfil's trail network provides attractive and comfortable experiences to the user is paramount in ensuring successful utilization and attracting users. The presence of informative signage and visible trail heads is the first impression that a user will have of the trail and trail system as a whole. Without proper signage, users may be confused about their direction and divert from public lands. Signs develop a sense of place and, combined with good urban design, can create unique districts and foster aesthetic development. They also provide interpretive information that connects a user to the trail and may encourage the person to take further interest in their surroundings, including environmental stewardship initiatives. A good sign is clear, attractive, and designed in context of its surroundings.

Figure 7: Sample Comfort Amenities at Cookstown Community Park

Figure 8: Sample Accessible Trail with Signage

An effective active transportation network typically incorporates a number of convenience and comfort-based features at strategic locations along major routes and trail heads. Users might be looking for amenities such as natural landscaping, shade, benches, bathrooms and rest areas, showers, fitness equipment, and pavilions. The Active Innisfil Online Survey revealed that respondents were supportive of many of these trail amenities. Site visits to Innisfil's parks revealed the presence of several outdoor amenities such as trash cans, seating, shade, and on-site parking; however, only a limited number of parks provided signage. Some of these amenities were in need of rejuvenation due to their age and/or condition.

The provision of parking is also a convenience that many residents look for in accessing trails, though parking is best suited for locations that are more intensively used, such as those containing parks, community centres, or conservation areas. The provision of parking lots to serve neighbourhood and some community level trails may not be necessary given that these routes serve a smaller catchment area and tend to be walk-to destinations. The provision of parking at these locations may be counter-productive to goals which promote walkable communities. Parking, however, may be necessary for higher volume trails serving Town-wide or regional systems that may be drive-to destinations. Innisfil Beach Park is a notable example, which offers several parking areas and receives numerous visitors during the summer. The presence of supporting amenities can be found along several other trails and pathways throughout Innisfil.

2.3 Local Active Transportation Inventory

Nearly 20 kilometres of multi-use trails and park pathways are available in Innisfil, most of which are located within the Town's settlement areas. This inventory includes trails located in woodlots, parks, and residential areas, in addition to prominent trail systems such as the Innisfil Park Beach trail and Trans Canada Trail, which are described in greater detail in this section.

In addition to the Town's trail inventory, the Town boasts 72.6 kilometres of sidewalks within its settlement boundaries, as well as in some rural areas. A majority of Innisfil's sidewalks are found in Alcona, Cookstown, and Stroud also boast a moderate supply of sidewalks. Limited sidewalks are found in Lefroy and Gilford as the Town has not historically provided pedestrian infrastructure in these communities given that most local roads in these areas accommodate low volume traffic. A complete inventory of the Town's active transportation network can be found in Table 2 and Figure 14. Proposed network routes from previous plans are also shown and described in more detail in Section 2.6 of this Master Plan.

Table 2: Existing Active Transportation Inventory

Municipal Trails (km)	
Innisfil Beach Park Trail	2.0
Park Trails and Pathways	3.7
Woodlot and Other Trails	6.4
Sub-Total	**12.1**
Non-Municipal Trails (km)	
Trans Canada Trail	7.2
Sub-Total	**7.2**
Sidewalks (m)	
Alcona	52.8
Churchill	1.7
Cookstown	7.8
Gilford	0.2
Lefroy	1.9
Stroud	7.2
Rural	1.0
Sub-Total (km)	**72.6**
Cycling Lane (km)	**6.1**
Total Active Transportation Network (km)	**98.0**

Cycling infrastructure in the Town is limited. The only dedicated cycling lanes are located along both sides of Innisfil Beach Road between 20th Sideroad and 25th Sideroad, totalling 6 kilometres in length. Other off-road multi-use trails that support cycling are found throughout Alcona. Outside of Alcona, cycling is accommodated within the travelled right-of-way or along shoulders of roads throughout the Town. There are currently no signed cycling routes in Innisfil.

Innisfil Beach Park Trail

The Town's most prominent trail system is located at Innisfil Beach Park, which draws thousands of local residents and outside visitors each year. This 2 kilometre trail provides scenic views of Lake Simcoe and guides residents to some of the recreation facilities located throughout the park, including playgrounds, soccer fields, tennis courts, basketball court, and shade pavilion. The lit trail is asphalt and paved extra wide with designated pedestrian and cycling markings to separate the active transportation traffic. Unpaved, informal trails also exist within this park.

Figure 9: Multi-Use Trail in Innisfil Beach Park

Trans Canada Trail

Noted as one of the longest recreational trails in the world, the Trans Canada Trail is approximately 17,000 kilometres long and stretches from Prince Edward Island in the east to Vancouver Island to the west and Yukon to the north. Approximately 7.2 kilometres of the Trans Canada Trail is located in Innisfil, which is also known as the Thornton-Cookstown Trail and follows a former rail line. This trail traverses through Cookstown towards Thornton (in the Township of Essa), prior to entering back into Innisfil before terminating at Innisfil Heights.

Figure 10: Thornton-Cookstown Trans Canada Trail

This granular trail follows an abandoned rail line and accommodates a spectrum of active transportation activities including walking, cycling, snow shoeing, horseback riding, and snowmobiling. The Trans Canada Trail organization currently proposes that the trail will continue north along 5 Sideroad to complete a link with another portion of the trail in Barrie.

Rotary Trail (proposed)

The Rotary Club is proposing to develop a trail at the Innisfil Recreation Complex. This 5 kilometre trail would extend from the Innisfil Recreation Complex to Innisfil Town Hall and towards 7th Line to the south, through the adjacent woodlot.

Figure 11: Proposed Rotary Trail Route, Innisfil Recreation Complex

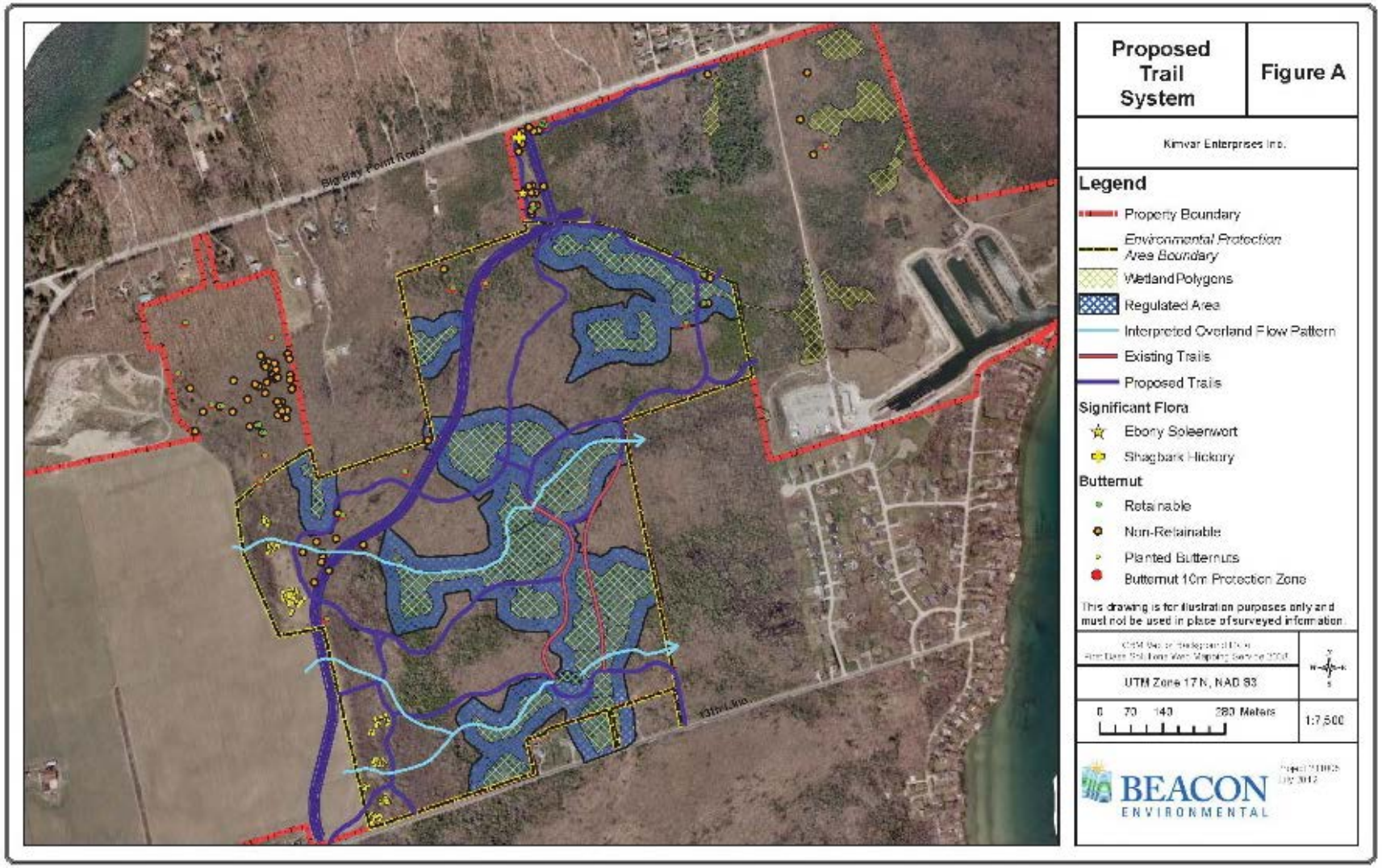
The Rotary Club envisions that this trail would be accessible by residents and the surrounding community and be designed as a multi-use system to accommodate walking and cycling. This trail would also support local Town initiatives such as environmental stewardship.

Friday Harbour Trail (proposed)

A trail has been proposed as a part of the Friday Harbour. This trail is proposed to be located within an Environmental Protection Area, bounded by 13th Line to the South and Big Bay Point Road to the north. 20th Sideroad bounds the trail property to the west and the Marina village is located to the east. The trail system consists of approximately 6.5 kilometres of walking routes that range in granular and natural surface types, including portions of boardwalk. The trail's development was crafted to connect residents and users with the natural environment, while protecting sensitive ecological functions. Low impact uses are permitted including hiking, snowshoeing and cross-country skiing; cycling and motorized vehicles (e.g., golf carts and all-terrain vehicles are prohibited).

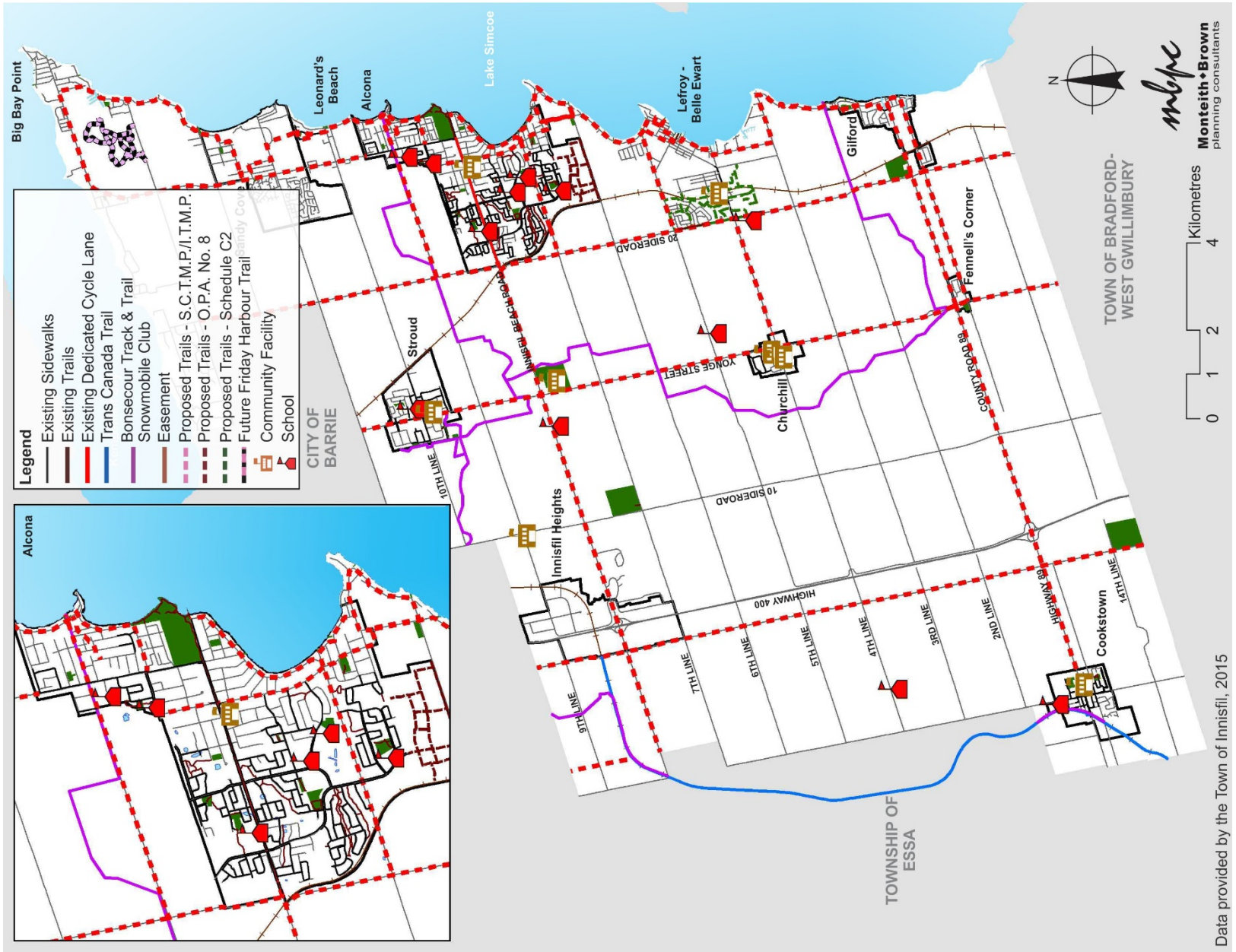
Figure 12: Family Walking Along a Multi-Use Trail

Figure 13: Proposed Friday Harbour Trail Route



Source: Trail Impact and Management Study, 2012

Figure 14: Existing Trail Network



2.4 Policy Framework

Policies that support the development of trail, pedestrian, and cycling infrastructure can be found in a number of guiding documents. This section explores key policies that are pertinent to the development of this Master Plan.

Ontario *Planning Act*

The Ontario *Planning Act* contains policies regarding matters of provincial interest with respect to land use planning, including how land is used and controlled. With respect to the development of trail and pedestrian infrastructure in communities, section 51 of the *Planning Act* allows municipalities to require the dedication of land for the development of pedestrian and bicycle pathways as a condition of plan of subdivision approval. This tool ensures that communities have access to non-vehicular modes of transportation that connect residents within neighbourhoods as well as with adjacent communities throughout Simcoe County.

Supporting Ontario's Trails Act

To protect and expand Ontario's extensive trails network, in 2016 the Province passed the *Supporting Ontario's Trails Act*, which will assist municipalities and the general public in four key areas:

- Provide the trails community with enhanced tools to effectively develop, operate, and promote trails.
- Remove barriers to help connect and expand trails across the Province.
- Increase trail awareness and promote local tourism by enabling the recognition of Ontario trails of distinction, supporting communities and jobs across Ontario.
- Enable the development of a classification system to help users find trails that match their interest and ability.[6]

In addition to providing clarification on existing legislation that addresses trespassing, liability, property rights, and snowmobiling, the new trails act provides direction on granting easements for the purposes of trails and related activities. An easement is a formal agreement arranged between two bodies (e.g., the municipality and the land owner) to secure lands for a specific purpose (e.g., public trail access). Additional details on securing easements and

[6] Ministry of Tourism, Culture and Sport. (2016). Province passes act to support Ontario's trails. Retrieved from: https://news.ontario.ca/mtc/en/2016/06/province-passes-act-to-support-ontarios-trails.html?utm_source=ondemand&utm_medium=email&utm_campaign=p

other land acquisition strategies available to municipalities is described in Section 6.2 of this Master Plan.

Provincial Policy Statement (P.P.S.)

The 2014 P.P.S. (*Provincial Policy Statement*) is a land use planning document that provides policy direction on land use planning to support the development of strong, vibrant communities. Examples of policies contained in the P.P.S. that have regard for trails and pedestrian infrastructure include:

1.4.3 Planning authorities shall provide for an appropriate range and mix of housing types and densities to meet projected requirements of current and future residents of the regional market area by:

d) promoting densities for new housing which efficiently uses land, resources, infrastructure and public service facilities, and support the use of active transportation and transit in areas where it exists or is to be developed

1.5.1 Healthy, active communities should be promoted by:

a) planning public streets, spaces and facilities to be safe, meet the needs of pedestrians, foster social interaction and facilitate active transportation and community connectivity

b) planning and providing for full range of equitable distribution of publically-accessible built and natural settings for recreation, including facilities, parklands, public spaces, open space areas, trails and linkages, and where practical, water-based resources

1.6.6 Public service facilities should be co-located in community hubs, where appropriate, to promote cost-effectiveness and facilitate service integration, access to transit and active transportation

1.6.7.4 A land use pattern, density and mix of uses should be promoted that minimize the length and number of vehicle trips and support current and future use of transit and active transportation.

Simcoe County Official Plan

Guided by the *Planning Act*, an Official Plan is a policy document that directs how land in a community is used over an established planning horizon, including direction on where new growth should be located and what community services are needed to serve emerging areas. The new Simcoe County Official Plan was approved by the Ontario Municipal Board in August 2015. The Official Plan provides a wealth of support for the development of pedestrian and cycling trails, and requires the dedication of land for such use in accordance with the *Planning Act*.

As required by section 4.8.47 of the County Official Plan, it is required that local municipalities shall develop an Active Transportation Plan to inform local official plan policies. The County indicates that the Plan shall consider proposed trail and sidewalk routes and policies for sidewalk and trail standards and locations, safety measures, and more. It is the intent of this Master Plan to address these requirements.

Other policies in the County Official Plan facilitate the provision of active transportation infrastructure, which include, but are not limited to:

- Bicycle and pedestrian paths shall generally be parallel but separated from the traveled portion of the roadway along existing and planned County roads. Where required and feasible, County Road shoulders may be adapted to provide safe cycling routes between settlement areas and other major activity nodes.
- Abandoned rail rights-of-way and utility corridors should be examined for opportunities that would facilitate active transportation.
- Appropriate traffic control devices should be provided on trails and off-road cycling facilities where they cross existing roadways or other locations.

Inspiring Innisfil 2020 Strategic Plan

The Inspiring Innisfil 2020 Strategic Plan, which was recently updated, suggests that the Town promote itself as a destination for outdoor recreation. The Strategic Plan is supportive of opportunities that create and expand opportunities for walking (among other outdoor activities such as cycling, ice/sports fishing, and snowmobiling). As a result, the Strategic Plan outlines several key actions to achieve this goal, which includes the creation of a trails master plan, promoting trails in Simcoe County, identifying cycling routes, establishing a cycling event (The Innisfil Road Race) to gain profile, and identifying and promoting a golf trail with regional partners.

Through the update to this Strategic Plan, the Town identifies a number of objectives to achieve the goal of connecting residents in a meaningful way. Among these objectives, those that have relevance to this Trails Master Plan include:

- (2.1.2.) Develop opportunities for enhanced active transit, including the creation of appropriate access paths and support infrastructure.
- (2.5.3.) Develop an accessible system of connecting trails and walkways between communities.

Town of Innisfil Official Plan (2006)

The Town is currently undertaking an update to its Official Plan, which will incorporate recommendations emerging from this Master Plan.

The Town of Innisfil Official Plan (2006) identifies several polices that support and promote the development of trails and sidewalks. The Official Plan recognizes the importance of pedestrian and cycling facilities as they connect people with neighbourhoods, community amenities, commercial core areas, and Lake Simcoe.

While the Official Plan indicates that trails may be developed within the Town's open space system – utilizing natural features, buffers, parks, stormwater management facilities, rail and street corridors – the Official Plan maintains that sidewalks should be provided on at least one side of all streets. Specifically, policies contained in the Official Plan establish that within Urban Settlements, Village Settlements, and the Shoreline, sidewalks are required along both sides of Core Commercial Areas (within the Alcona settlement area) and along arterial and collector roads to facilitate a safe walking environment. Sidewalks are also required along one side of the street on all new local roads; however, the Town may also require that sidewalks be located along both sides of certain local roads within the vicinity of schools. In addition, the Official Plan indicates that the Town may designate certain arterial and collector roads in rural areas as pedestrian and cycling routes, in which the Town will provide an off-road pedestrian/cycling trail within the road allowance. The design of subdivisions in a fashion that increases opportunities for pedestrian and cycling movement is also encouraged.

Section 8.4 of the Official Plan speaks to the provision of pedestrian and cycling routes. It maintains that the development of pedestrian and cycling facilities shall be guided by a Trails Master Plan, which includes both on and off-street routes. Where appropriate, it is indicated that the implementation of pedestrian and bicycling options contained in the Trails Master Plan shall be considered through development proposals, secondary plan areas, and draft plans of subdivisions. Exploring options to extend the Trans Canada Trail is also supported in cooperation with the Trans Canada Trail foundation.

Section 13 of the Official Plan also contains specific trail and sidewalk policies for the Lefroy Secondary Plan area. Supported by a conceptual pedestrian network map on

Schedule C2, this section encourages the provision of a pedestrian and cycling trail system to link parks, community facilities, and other features along public right-of-way. Specific locations have been identified for pedestrian crossings at rail lines and access to a potential future GO station, as well as the need for a wide, paved, and lit trail north of Carson Creek to the north end of Church Drive. Other design considerations include establishing appropriate buffers adjacent to sensitive land uses (e.g., natural heritage features and residential areas), and encouraging north-south and east-west connections.

Official Plan Amendment No. 8 (O.P.A. No. 8) (2013)

The purpose of Town of Innisfil O.P.A. No. 8 (2013) was to implement land use designations and policies for the Alcona South Urban Policy Area. Incorporated into the Town's Official Plan as Section 14, policies regarding the development of trails are described in Section 14.3.9, which require that trails be planned or identified prior to planning approvals and shall be identified on all draft plans of subdivision. Consideration shall be given to creating a continuous pedestrian and cycling network, and linking users with key features, destinations, and land uses. Pedestrian crossings at rail corridors shall also be considered, in coordination with the appropriate parties such as the rail authority.

Section 14.4 d) provides additional supporting policies that encourage opportunities that facilitate pedestrian and cycling movement within Sleeping Lion. Design criteria proposed for this designated area include:

- A modified grid system of roads;
- Block lengths generally not exceeding 250 metres;
- A connected and efficient pedestrian and cycling network;
- Strong connections between the residential neighbourhoods and existing residential neighbourhoods to the north and east;
- Incorporation of mixed uses where feasible;
- Creation of pleasant pedestrian walking environments through wide sidewalks, landscaping, lighting, streetscape character and animated street life; and
- Including all walkways having a width up to six metres to provide linkages to transit services and for pedestrians between streets and neighbourhoods.

Similarly, Section 14.6 i) supports the development of pedestrian infrastructure, with specific reference to a multi-use trail along the north side of 6th Line.

Accessibility for Ontarians with Disabilities Act (A.O.D.A.)

The Accessibility for Ontarians with Disabilities Act was enacted in 2005 to remove accessibility barriers in public and private spaces in the Province. This is achieved by "developing, implementing, and enforcing accessibility standards in order to achieve accessibility for Ontarians with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises on or before January 1, 2025." The A.O.D.A. also requires that groups including persons with disabilities, government agencies, and other organizations be involved in decision making processes.

The A.O.D.A. establishes accessibility standards for five key areas – customer service, employment, information and communications, transportation, and the design of public spaces. As required by the Act, Innisfil has established an accessibility policy to express their commitment to providing accessible services. An Accessibility Advisory Committee and Multi-Year Accessibility Plan have also been developed to identify opportunities to remove accessible barriers to meet the requirements of this legislation.

By 2016, the Town of Innisfil is required to meet the requirements of the Design of Public Spaces Standard (D.O.P.S.) under the Integrated Accessibility Standards (I.A.S.) of the A.O.D.A. These regulations identify the standards that the Town must align with for the design and construction of new or redeveloping recreational trails or exterior paths of travel (e.g., sidewalks). These standards apply to public trails that are intended for recreational and leisure purposes, but exclude trails provided specifically for other uses such as cross-country skiing, mountain biking, equestrian, motorized recreational activity vehicles, wilderness and backcountry trails, and portage routes.

Standards for the design and construction of recreational trails and pathways are described in Section 80.6 of the I.A.S., which includes standards for a variety of trail considerations such as width, cross and running slope, clearance height, amenities, and more. Section 80.21 of the I.A.S. outlines the standards for the design of exterior paths of travel. Prior to the construction of this infrastructure, the I.A.S. identifies that communities must consult with the public, persons with disabilities, and the Accessibility Advisory Committee during the decision making process. These standards have been taken into consideration in the preparation of the Trail Development Toolkit described in Section 5.0 of this Master Plan and should be used in conjunction with other standards and guiding documents such as the Ontario Building Code, Ontario Traffic Manual: Book 18, and the Town of Innisfil Engineering Standards and Specification Manual.

2.5 Existing Active Transportation Plans

The Town and County have previously undertaken studies that guide the development of Innisfil's trail network and connections to adjacent communities. These documents contain proposed trail and cycling routes (portions of these routes are duplicated/reinforced) and supporting recommendations to implement each plan. This Master Plan builds upon these documents to provide the Town with detailed direction and the required tools to form a trail network that promotes and encourages recreational and utilitarian physical activity.

Simcoe County Transit Study (ongoing)

The County is currently preparing a Transit Study that will build upon the Transportation Master Plan Update (2014) and focus on the feasibility of partnerships, service options, delivery methods, and implementation and monitoring strategies. While this Study is currently underway at the time of writing this Master Plan, the interim report contains a proposed transit service concept, with strong ridership potential along the easterly boundary of Innisfil, as well as towards Fennell's Corner. An urban fringe connection has also been identified along the northern periphery if Innisfil, which includes Stroud. This Study maintains that linkages between transit and active transportation should be considered to maximize connections throughout Simcoe County.

Figure 15: Paved Trail

Simcoe County Transportation Master Plan Update (2014)

The Simcoe County Transportation Master Plan (S.C.T.M.P.) focused primarily on roads and motorized transportation. An active transportation plan was developed based on an assessment of background studies and analysis of opportunities and constraints. The network proposed in this plan built off of the proposed routes contained in the Town's I.T.M.P., and identified a County-wide network of nearly 1,200 kilometres consisting of on and off-road trails.

Several recommendations were identified relating to infrastructure development, coordination, policy development, and promotion. Approximately 97 kilometres of proposed on and off-road routes were proposed along key roads in Innisfil including Yonge Street, Innisfil Beach Road, 20 Sideroad, 5 Sideroad, and local roads.

Simcoe County Trails Strategy (2014)

The Simcoe County Trails Strategy (S.C.T.S.) does not identify proposed trail routes, rather it was developed to complement the S.C.T.M.P. to assist with the development and implementation of a County-wide network of passive use trails. Five goals were established to realize this strategy; strategic objectives and outcomes (not listed) were identified for each of the five goals:

- Support a variety of passive trail uses through an accessible, connected trail network;
- Maximize trail investments;
- Enhance trail user experience;
- Collaborate with stakeholders; and
- Promote awareness of Simcoe County trails.

Innisfil Transportation Master Plan (2013)

The Innisfil Transportation Master Plan (I.T.M.P.) contained an active transportation component, which focused on identifying low-cost active transportation facilities such as paved-shoulders, multi-use trails, sidewalks, and on-road bike lanes. Several key recommendations were identified in this plan, such as coordinating with Simcoe County to implement active transportation routes along County Roads to connect settlement areas (e.g., along Innisfil Beach Road and Yonge Street).

The I.T.M.P. recommended prioritizing and rehabilitating existing sidewalks to improve accessibility, particularly around schools. In total, nearly 82 kilometres of new soft and hard surface multi-use trails were proposed. This includes approximately 42 kilometres within the Town's jurisdiction, while the remaining portions are proposed to be undertaken in partnership with the Province or County.[7]

The trails proposed in the I.T.M.P. have been considered as a part of this Master Plan's recommended active transportation network given that a majority of the routes have yet to be implemented. Implementation of the I.T.M.P. should be undertaken in coordination and with reference to this Trails Master Plan as it provides additional

[7] Town of Innisfil. (2013). Table 10-7: Trails Capital Projects by 2031. Transportation Master Plan.

supporting details regarding routing locations, design standards, maintenance, phasing, and other key implementation considerations.

Lefroy Secondary Plan Area

As previously described, Section 13 of the Town of Innisfil Official Plan contains policies guiding the development of the Lefroy Secondary Plan. A conceptual trail network for the Secondary Plan is illustrated on Schedule C2 of the Official Plan that identifies potential linkages and connections to key destinations including residential areas, parks, and schools. Approximately 12 kilometres of on and off-road pedestrian trail routes are identified in addition to potential pedestrian crossings.

Alcona South Secondary Plan (Official Plan Amendment No. 8)

The purpose of Official Plan Amendment No. 8 (O.P.A. No. 8) was to implement land use designations and policies for the Alcona South Urban Policy Area. Also known as "Sleeping Lion", the Town has identified over six kilometres of trails and sidewalks to link the residential neighbourhood, planned parks, and adjacent community.

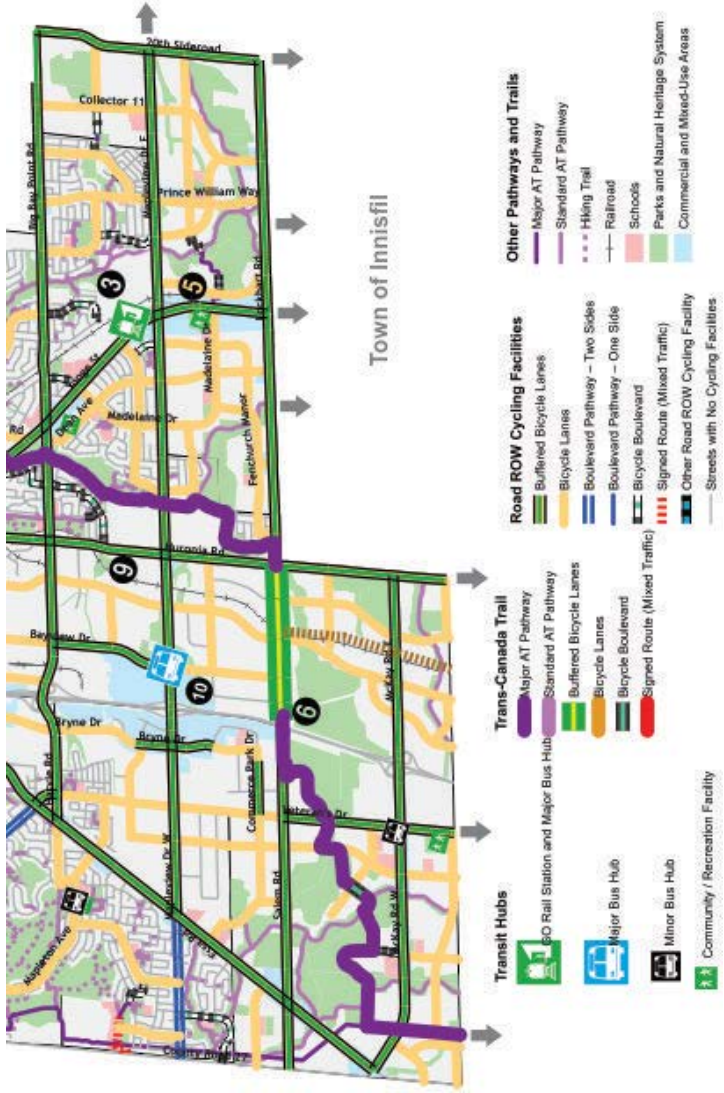
Other Active Transportation Master Plans

This Trails Master Plan has taken into consideration of other active transportation plans published by adjacent municipalities to better understand where abutting linkages currently exist. Awareness of these connections are essential in order to develop an trails plan that connects residents with abutting municipalities and allows communities to collaborate and work in unison towards an integrated county-wide active transportation network.

The City of Barrie developed a Multi-Modal Active Transportation Plan (2014), which is an update to the City's previous Transportation Master Plan. This update reflects the recently expanded City boundaries, including the annexation of land from the Town of Innisfil.

Figure 16: Paved Trail

Figure 17: Excerpt of Exhibit 5-6 Cycling, Pathway, and Trail Network Proposed Preferred Scenario – 2051, City of Barrie



Source: City of Barrie Multi-Modal Active Transportation Master Plan, 2014.

This plan recommended key major active transportation linkages involving Innisfil, including the Trans Canada Trail pipeline to the west. A number of secondary trail linkages to Innisfil have also been identified that intersect 9th Line, 20th Sideroad, and Lockhart Road. On-road bicycle lanes have also been identified along Veteran's Drive (5th Sideroad in Innisfil), Huronia Road (10th Sideroad), Lockhart Road, and Yonge Street. A potential connection along a rail corridor was also recommended (Figure 16).

The Town of Bradford West Gwillimbury developed a Trails System Master Plan (2010) to guide the development of recreational trails in the Town to facilitate alternative modes of transportation. The Master Plan identified a number of regional and urban trail routes, including a multi-use pathway along Yonge Street towards Innisfil. A trail along the GO rail line was also identified.

2.6 Opportunities & Constraints

Through site investigations and findings from the public engagement phase, a number of preliminary opportunities and constraints were identified in connection with the development of the Town's trail network. The following opportunities and constraints are presented in no particular order and are explored further in subsequent sections of this Master Plan.

Opportunities

- Extend the Trans Canada Trail within Innisfil and completing connections to the City of Barrie.
- Maximize accessibility along trails and sidewalks.
- Connect residents to key destinations such as schools and commercial areas, parks (e.g., Innisfil Beach Park), recreation facilities (e.g., I.R.C.), GO Station, and Big Bay Point.
- Reallocate space within wider rights-of-way along key roads (e.g., Webster and Jans Boulevard) to retrofit cycling lanes.
- Provide safe and convenient connections between settlement areas and adjacent municipalities.
- Identify future trails and connections within draft and future plans of subdivisions.
- Develop a trail loop within existing parks such as the I.R.C., Innisfil Beach Park, Centennial Park, and/or South Innisfil Arboretum (Luck Conservation Area), as well as around storm water management ponds.
- Identify safe cycling routes along roads with low traffic volume.
- Establish policies, guidelines, and standards for the future planning, design, construction, and management of Innisfil's trail network.
- Coordinate with Simcoe County and other community partners for the development and/or management of trails.

Key Constraints

- Lack of appropriate trail amenities such as consistent signage, seating, shade, etc., as well as accessible trails for persons with disabilities.
- The dispersed geographic locations of Innisfil's settlement areas presents spatial challenges in linking communities together as well as with adjacent municipalities.
- Non-contiguous municipal / public land ownership along desired trail corridors (e.g., Lake Simcoe waterfront). Non-municipal and informal trail routes located may be hazardous and unsafe, and may also result in conflicts between land-owners and trail users regarding access and liability.
- Crossing uncontrolled, high volume roads (e.g., Jans Boulevard) and rail lines.
- Fragmented trails and sidewalks, resulting in a lack of connectivity in established areas.
- Limited financial resources and lack of a prioritized implementation strategy.
- Inconsistent trail construction and management standards; some trails are becoming overgrown (e.g., pedestrian routes within stormwater management facilities).

3. Community Engagement

3.1 Public Open Houses

As part of the Active Innisfil initiative, a public open house was held on May 14, 2015 at the Innisfil Recreation Complex. This informal event provided an opportunity for residents to meet the Consultants and review a number of display boards presenting the background information collected to date. This event also provided an opportunity to promote the Active Innisfil Online Survey and sign up for project updates. Participants at the Open House were asked to respond to a broad range of questions regarding improvements to the Town's trails network.

It was clear that there is strong support for more bike and pedestrian trails in Innisfil. It was suggested that a well-connected trail system was vital to linking pedestrians with key destinations such as the Innisfil Beach Park, Innisfil Recreation Complex, and schools, particularly for those without access to a vehicle (e.g., youth). Other trail ideas expressed by participants included a trail from Alcona to Friday Harbour, an outdoor fitness and cross country skiing trail, and a waterfront trail along Lake Simcoe. Support for a trail at the Innisfil Recreation Complex (proposed by the Rotary Club) was also received. Comments regarding trail maintenance and amenities were also expressed, including signage to improve way-finding, seating, trail lighting, and year-round maintenance to heighten accessibility.

A second Public Open House was held on August 24, 2016 at the Innisfil Recreation Centre to present the draft Trails Master Plan to the public and stakeholders. Staff and comment sheets were available to encourage participants to provide their feedback. Comments received through this process included a desire for a paved shoulder along Roberts Road and Crystal Beach Road, as well as a sharrow along Harbour Street to connect 3rd Line and Killarney Beach Road. Concerns were also raised regarding recommended routes along private roads; however, it was emphasized that these routes are long term goals that are conceptual in nature and the Town will be required to

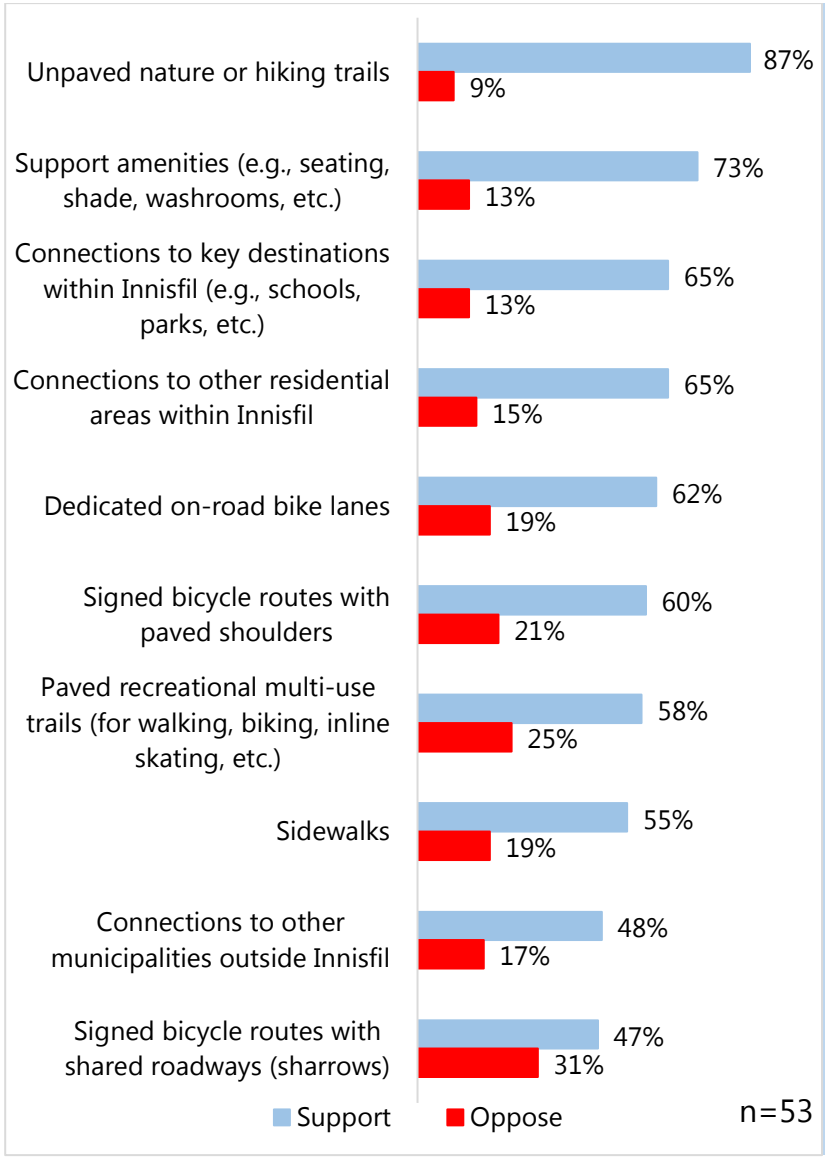
engage the neighbourhood associations to further explore routing opportunities at the appropriate time.

3.2 Online Community Survey

The Active Innisfil Online Survey was available between May 15, 2015 and July 31, 2015, collecting residents' input with respect to trail usage, preferences, opinions, and priorities. A total of 53 surveys were completed and analyzed. Of note, this was a self-administered, non-random survey and thus results cannot be considered to be statistically significant or representative of the opinions of all residents. As with other consultation tools, the survey findings should not be considered in isolation, but instead factored in the context of other community input and assessment methodologies.

The popularity of trails was evident throughout the survey. As previously identified, walking and hiking for leisure was reported as the most popular activity (amongst other recreational activities) over the past 12 months (65%). A majority of respondents utilize trails for fitness, recreation, and nature appreciation, while a small proportion use trails to access parks and recreation facilities, and travel to work or school. Half (52%) of respondents reported regular use of trails in Innisfil; the remainder indicated that there were barriers that prevented them from using local recreational trails. The most common barrier articulated was the lack of

Figure 18: Support for Investment in Trail Infrastructure



available trails. To compensate for the lack of trails in Innisfil, 43% of respondents indicated that they utilize trails outside of Innisfil as they are seeking more variety, longer trails, nature appreciation, and looped trails.

To improve the provision of trails in Innisfil, respondents felt that emphasis should be placed on appropriate locations, maintenance, safety, and connections to other local trails, among other features. Respondents also identified demand for various trail features including, but not limited to, unpaved nature or hiking trails, support amenities, connections to destinations and residential areas, and on-road cycling lanes (see Figure 18).

3.3 Focus Group & Interviews

A Trails Focus Group was held on July 22, 2015 with 19 representatives of service clubs, conservation authorities, municipal and county staff, and other community representatives. Telephone interviews were held with group representatives who were unable to attend the Focus Group. Participating stakeholders included:

- ARG Group Inc.
- Barrie Cycling
- Bonsecour Track & Trail Snowmobile Club
- City of Barrie
- Innisfil District Association
- Lake Simcoe Region Conservation Authority
- Lormel Homes
- Rotary Club of Innisfil
- Simcoe County Trails
- Simcoe Muskoka District Health Unit
- Trans Canada Trail Ontario

The purpose of this focus group was to explore opportunities for trail development and management in Innisfil and included discussions around topics such as connections and linkages, guidelines for trail use and design, management and maintenance strategies, partnership opportunities, and other related considerations. The following is a summary of key themes that emerged, which have been considered as part of this Trails Master Plan.

Existing Trails in Innisfil

Participants expressed that the trails at Innisfil Beach Park are highly valued as they provide a safe and family-friendly environment to engage in casual physical activities such as walking and cycling. Another key route in Innisfil is the Trans Canada Trail, which connects users between communities as well as with the natural environment. The snowmobile network in Innisfil was also described as a unique local feature, which is made possible through agreements between the Bonsecour Track and Trail Snowmobile Club and private landowners.

A number of participants felt that the existing network is fragmented. Potential solutions included greater marketing and awareness, partnership development, integrated subdivision planning, and strategically acquiring lands for trail development such as along the waterfront and the hydro corridor.

Future Trails in Innisfil

Participants collectively developed a vision for future trails in Innisfil. It was generally felt that there should be a main trail spine with secondary connections linking key destinations. A broad range of destinations and key points of interest were identified such as Innisfil Beach Park, I.R.C., parks, settlement areas, waterfront, Trans Canada Trail, and more. Ensuring that a link to the future GO Station was also identified as a priority.

Planning for New Trails

When planning for the development, management, and maintenance of trails, participants identified a broad range of considerations that should be addressed. These features were discussed through an urban and rural context given Innisfil's varied geographic characteristics and the fact that these environments require distinct planning perspectives. In urban settlements, participants assembled an array of design features for trails such as separating trails from the traveled right-of-way, accessibility requirements, trail loops, connections to destinations, and impervious surfaces. Suggested urban amenities include shade, lighting, signage, waste receptacles, trail heads, washrooms, and more. Some routes should also be multi-use to accommodate varying active transportation modes. Given that trails in settlement areas often exhibit higher levels of use, participants felt that these trails should have a higher standard of maintenance with the potential to share this responsibility with community partners.

Looking at the rural context, participants expressed a preference for natural trails designed with a width of up to four metres to accommodate the widest range of uses such as walking, biking, snowmobiling, and horseback riding. Suggested amenities include parking, signage, trail heads, washrooms, shade, and waste receptacles. Given the location of these trails, participants advised that they should be designed as simple as possible to keep maintenance low.

Suggested Trail Implementation Strategies

To assist with implementing Innisfil's trail network, participants brainstormed a series of strategies to assist with advancing the Town's trail system. These strategies can be broken down into four distinct categories – policy, education and awareness, partnerships, and funding.

- **Policy** strategies included bolstering Official Plan policies and creating by-laws, long range planning through secondary plans, developer credits for trail provision and subdivision design, acquisition and easement strategies, and consideration of accessibility requirements.
- **Education and awareness** strategies consisted of exploring online and print mediums (e.g., maps), marketing programs through schools and libraries, signage and way-finding, safe cycling, share the road initiatives, and environmental stewardship.
- **Partnership** opportunities included building upon and solidifying relationships with community partners (Simcoe Muskoka Health Unit, Rotary Club of Innisfil, etc.) and forming a Trails Council or Committee to oversee implementation of the Master Plan.
- **Funding** considerations comprised of raising funds through community partners and seeking grants from all levels of government.

3.4 Other Consultation Initiatives

In addition to these community engagement tools, consultations previously undertaken through other municipal processes have been reviewed. This section provides a brief overview of some of these studies and associated public input.

Our Place Official Plan Review

The Town is undertaking an 'Our Place' Official Plan Review concurrently with the Master Planning process. To date, the Official Plan Review has utilized several public consultation tools that engaged nearly 500 residents, including pop-up workshops throughout the Town, high school workshops, and a Community Visioning Day. These strategies gathered input and feedback regarding how Innisfil should look in the future with a strong focus on placemaking, creating a sense of place, improving opportunities, and enhancing quality of life for residents. The role of community trails is particularly crucial in each of these focus areas and as such, there is a need to ensure that this Master Plan aligns to the Our Place Official Plan process.

Input provided from participants revealed that there is a desire to strengthen connections between settlement areas, specifically with respect to active transportation (e.g., pedestrian trails and cycling infrastructure). It was also articulated that this system should be supported with directional signage and other appropriate amenities. Specific references were made to the need for connections between Innisfil Beach Park and the Innisfil Recreation Complex given the challenges associated with transportation for youth and other groups without access to a vehicle.

Innisfil Transportation Master Plan (I.T.M.P.)

Key findings from the public consultation survey undertaken for the 2013 I.T.M.P. include:

- A lack of sidewalks, trails, and paths was identified by residents as one of the most important issues.
- There was strong public support for developing and promoting active transportation alternatives (e.g., sidewalks, cycling lanes, and trails).
- 74% of respondents indicated that they would use active transportation to get around Town.
- Trails and paths would assist youth in accessing to schools, libraries, recreation centres, and extracurricular activities.
- There is demand for connections between the urban villages for recreational purposes including biking and walking in the spring, summer and fall, and snowmobiling in the winter.
- Improvements could be made to sidewalk maintenance.
- There was also a strong desire for more active transportation connections to schools, recreation centres, and parks.
- Cycling lanes should be provided to facilitate a safe cycling environment.

Active Transportation Workshop

In partnership with the Simcoe Muskoka District Health Unit, the Town of Innisfil hosted an Active Transportation Workshop in fall 2013. This workshop brought together key stakeholders to discuss the community's vision for Active Transportation and to identify potential policies for the Town's Official Plan. The input is summarized below:

- Develop active transportation connections from Innisfil Beach Park to the Trans Canada Trail.
- Consider trail connections between Barrie and Bradford along Yonge Street.
- Signage is a key consideration in developing the active transportation network as it helps to create awareness, among other benefits.
- Active transportation can be encouraged by providing bike racks and amenities at community facilities and commercial destinations.
- Safe active transportation choices can be achieved through traffic calming measures and removing trails and pathways from the road.
- Avoid cul-de-sacs and dead ends – require walkways if unavoidable.

It was suggested that the Official Plan should consider a 'complete streets' policy and clear design guidelines to illustrate how active transportation could be supported on each street type.

4. The Trail Network

4.1 Vision

In order to guide the development of Innisfil's trail network, a vision statement was crafted to reflect the Town's intent to facilitate accessible active transportation opportunities and respond to community needs expressed throughout this process.

"Innisfil's trail network will provide both residents and visitors with recreational opportunities and healthy alternatives for sustainable transportation by connecting them with local points of interest and regional networks."

4.2 Guiding Principles

Eight guiding principles have been developed to assist with realizing the Town's vision for building capacity for the trail network in Innisfil. These principles were built upon an understanding of trail development trends and best practices, together with local input to ensure that the recommended trail network is responsive to community needs. These guiding principles were considered in the selection of recommended trail routes (described later in this section) and it is recommended that the Town apply these guiding principles when planning for new or expanding route opportunities and their ongoing management.

1. Connectivity / Linkages to Destinations and Regional Systems

The trail network should provide direct linkages to a broad range of existing and future destinations within settlement areas, such as schools, residential areas, commercial shopping, and more. Where possible, trail routes should be designed to form continuous loops within parks and communities, and ensure residents are connected to regional trail systems, such as the Trans Canada Trail or networks in adjacent municipalities.

2. Safety

The trail network should be designed to minimize and reduce user risk and injury by emphasizing Crime Prevention Through Environmental Design (C.P.T.E.D.) principles. Examples may include routing trails through open areas, ensuring unobstructed sight-lines, and properly maintaining parks and vegetation.

3. Visibility and Awareness

The trail network should be promoted within the Town and Simcoe County as a whole to ensure that residents and visitors are aware of the recreational and utilitarian options in the area.

4. Multi-Modal

Where appropriate, the trail network should be designed to maximize a multitude of human-powered transportation options including, but not limited to, walking and cycling.

5. Accessible

The trail network should be designed to be free of barriers to enhance accessibility and be inclusive of persons with disabilities, wherever possible.

6. Placemaking

The trail network should assist with creating vibrant places that connect people by supporting the four attributes that are key to making a great place – offering and supporting activities, accessible and linking destinations, comfortable and inviting, and facilitating social interaction.

7. Cost-Effective

The trail network should make efficient use of municipal resources, focusing on the provision and maintenance of high traffic priority routes as new trails are phased in over time.

8. Supporting Amenities

The trail network should have regard for supporting amenities such as informative and way-finding signage, seating, parking, and more in order to provide the creature comforts that users desire.

9. Partnership Possibilities

Relationships with new and existing community partners and land owners should be encouraged in the expansion, maintenance, and promotion of the active transportation network.

Recommendations

1. Consider the vision and guiding principles contained in this Master Plan in the development of Innisfil's active transportation network and in the planning of new pedestrian and cycling opportunities.

4.3 Recommended Trail Hierarchy

The Town does not currently have a trail classification system in place. A trail hierarchy system responds to the user and desired function, and identifies standards regarding surface type, width, clearance widths, and other design considerations to assist the Town in implementing the recommended trail network. Table 3 establishes a Town-wide trail hierarchy system that should be considered for all routes developed in Innisfil moving forward. It should be noted that uses such as motorized recreational vehicles and equestrian riding are excluded from the hierarchy as these uses should generally be prohibited from using any of these trails.

Figure 19: Family on a Trail

Table 3: Recommended Trail Hierarchy

Trail Hierarchy	Characteristics
Multi-Use Trail	Multi-use trails are largely located within settlement areas and support the widest range of uses. These off-road trails are used year-round, and may be located adjacent to arterial and collector roads, and serve recreational and utilitarian uses. **Permitted Uses** Walking, hiking, cycling, cross-county skiing, and other non-motorized forms of transportation. **Amenities** Parking, signage, trail head, washrooms, seating, trash receptacles. **Minimum Width** 1.8 m – 3.0 m **Surface Type** Asphalt, concrete, limestone screening, or other firm and stable surface.

Trail Hierarchy	Characteristics
Secondary Trail	Secondary trails are short pathways or loops located off-road or within parks. Secondary trails serve as connectors to multi-use trails. **Permitted Uses** Walking, hiking, and cycling. **Amenities** Signage and seating. **Minimum Width** 1.8 m **Surface Type** Asphalt, limestone screening, or other firm and stable surface.
Sidewalks	Sidewalks are pedestrian foot paths located along the traveled right-of-way within settlement areas. Sidewalks may connect to secondary and multi-use trails, and also facilitate social interactions in areas with high pedestrian volumes such as along main street corridors. **Permitted Uses** Walking and hiking **Amenities** Signage, outdoor patios, seating, lighting, trash receptacles **Minimum Width** 1.5 m – 1.8 m **Surface Type** Concrete
Cycling Routes **Paved Shoulder**	Paved shoulders are generally provided along arterial and collector roads in rural areas to support the flow of traffic and may be used as emergency stopping lanes or multi-use trails to serve active transportation purposes.
Sharrow	Sharrows are cycling routes along local roads that share the right-of-way with vehicular traffic and are typically supported by pavement markings and signage. Sharrows are most suitable for low volume roads.

Trail Hierarchy	Characteristics
Dedicated Lane	Dedicated cycling lanes are located within the traveled right-of-way of arterial and collector roads, removed from vehicular traffic and commonly denoted by pavement markings and signage. Dedicated bike lanes are most suitable for higher volume urban roads. **Permitted Uses** Recreational and utilitarian cycling **Minimum Width** 1.5 m – 2.0 m **Surface Type** Asphalt

Recommendations
2. Have regard for the recommended Trail Hierarchy in the planning, design, and development of Innisfil's active transportation network.

4.4 Recommended Active Transportation Network

The recommended active transportation network identifies approximately 217 kilometres of new pedestrian and cycling routes to be developed, designated, or formalized in Innisfil. This includes nearly 100 kilometres of off-road multi-use and secondary trails, while the balance consists of paved shoulders, sharrow routes, and sidewalks. If completed in full, the Town's active transportation network will span nearly 314 kilometres. Several inputs were considered in the creation of this network including background research, community input, existing trails and active transportation documents (including local, county, and neighbouring municipal plans), and other key considerations.

Table 4: Summary of Recommended Active Transportation Network

Type	Proposed Length (km)
Multi-Use	65.0
Secondary	33.5
Sidewalk	12.1
Paved Shoulder	67.8*
Sharrow	29.3
Dedicated Cycling Lane	9.9
Total Length (km)	**217.6**

*Length of road to have paved shoulders in both directions.

The recommended trail network consists of on and off-road routes in new and existing areas of Innisfil. Proposed routes will be phased in based on priority, development activity, available resources, capital projects where efficiencies can be achieved, and other factors. Excluded from the active transportation network are sidewalks to be developed through new subdivisions as these will be completed by the developer. Key sidewalk connections in future residential areas are shown, however, to illustrate desired connectivity to other proposed routes. Where appropriate, it is recommended that the Town coordinate with Simcoe County, transportation authorities, the public, and other relevant groups in the location, design, and development of safe pedestrian crossings at key points along trail routes; such locations may include busy, uncontrolled roads, railways, and water courses.

Recognizing the conceptual nature of the recommended active transportation network, unique terrain characteristics, and other land constraints, deviations from the recommended routes may be permitted provided that the guiding principles and general intent are maintained. Revisions and updates to the network should be made, as necessary, to recognize missing linkages and to explore new trail opportunities (on Town-owned or private lands) as they arise during the life of the Master Plan. A summary of the recommended trail network is contained in Table 4.

Key linkages and actions associated with the recommended trail network include:

Multi-Use Trails

- Extending and formalizing the trail round Innisfil Beach Park to form a complete loop and connect other areas of the park.
- Establishing an off-road trail within the Innisfil Beach Road right-of-way from Alcona to the I.R.C. and eventually to the Innisfil Heights urban area.
- Buildings an off-road multi-use trail loop around the I.R.C. in coordination with the Rotary Club of Innisfil.
- Developing an off-road trail along Yonge Street connecting to Barrie and Bradford-West Gwillimbury.
- Constructing a trail along the southern boundary of Sleeping Lion, extending westward towards the future GO Station and eastward towards Lake Simcoe.
- Requiring developers to provide multi-use trails along recommended routes contained in this Master Plan or at the Town's discretion.

Secondary Trails

- Establishing trail loops through several existing and future parks and storm water management facilities, and other municipally-owned lands.
- Support the Rotary Club of Innisfil in developing a trail loop around the I.R.C. and explore the potential to extend the trail network around the InnPower and Town Operations buildings.
- Exploring opportunities to connect existing off-road trails in urban areas through open space areas.
- Considering opportunities to establish trails along municipal easements and drains.
- Examine opportunities to enhance pedestrian trail routes to the future GO Station through future planning processes.

Sidewalks

- Pursuing opportunities to establish sidewalks in built up urban areas.
- Requiring sidewalks in the general area delineated in the recommended trail network to connect other proposed and existing trails.
- Requiring developers to provide sidewalks on at least one side of local roads and on both sides of local roads that connect to schools, libraries, and other community facilities (as per the current Official Plan policy).

Cycling Routes

- Providing paved shoulders in both directions along designated local roads and coordinating with Simcoe County to explore opportunities to install paved shoulders along selected County Roads.
- Retrofitting the existing right-of-way along Webster and Jans Boulevard to include dedicated cycling lanes using paint markings and signage to connect the existing cycling lanes along Innisfil Beach Road to the proposed multi-use trail along 6th Line in Sleeping Lion.
- Formalizing a connection along 5th Sideroad to complete the connection of the Trans Canada Trail between Innisfil and Barrie.
- Erecting cycling / share the road signage together with paint markings along paved shoulders and sharrows to enhance cycling and pedestrian safety (where applicable, the Town will be required to engage local neighbourhood associations to explore opportunities to establish routes along private roads).

Recommendations

3. Support the phased implementation of the recommended trail network identified in this Master Plan. Modifications from the recommended network may be permitted provided that the general principles and intent are maintained. The Town may augment the recommended trail network with new opportunities as they arise in order to enhance connectivity and active transportation choices (e.g. trails within new subdivisions, connections to the future GO Station, etc.).

4. Ensure that paved shoulders along designated routes (as revised from time to time) are implemented when reconstructing Town roads. Coordination with Simcoe County will be required regarding paved shoulders along County roads. Paved shoulders and sharrows will be supported by cycling / share the road signage.

5. Coordinate with Simcoe County, transportation authorities, the public, and relevant groups in the location, design, and development of safe pedestrian crossings at key locations.

Figure 20: Winter Hiking

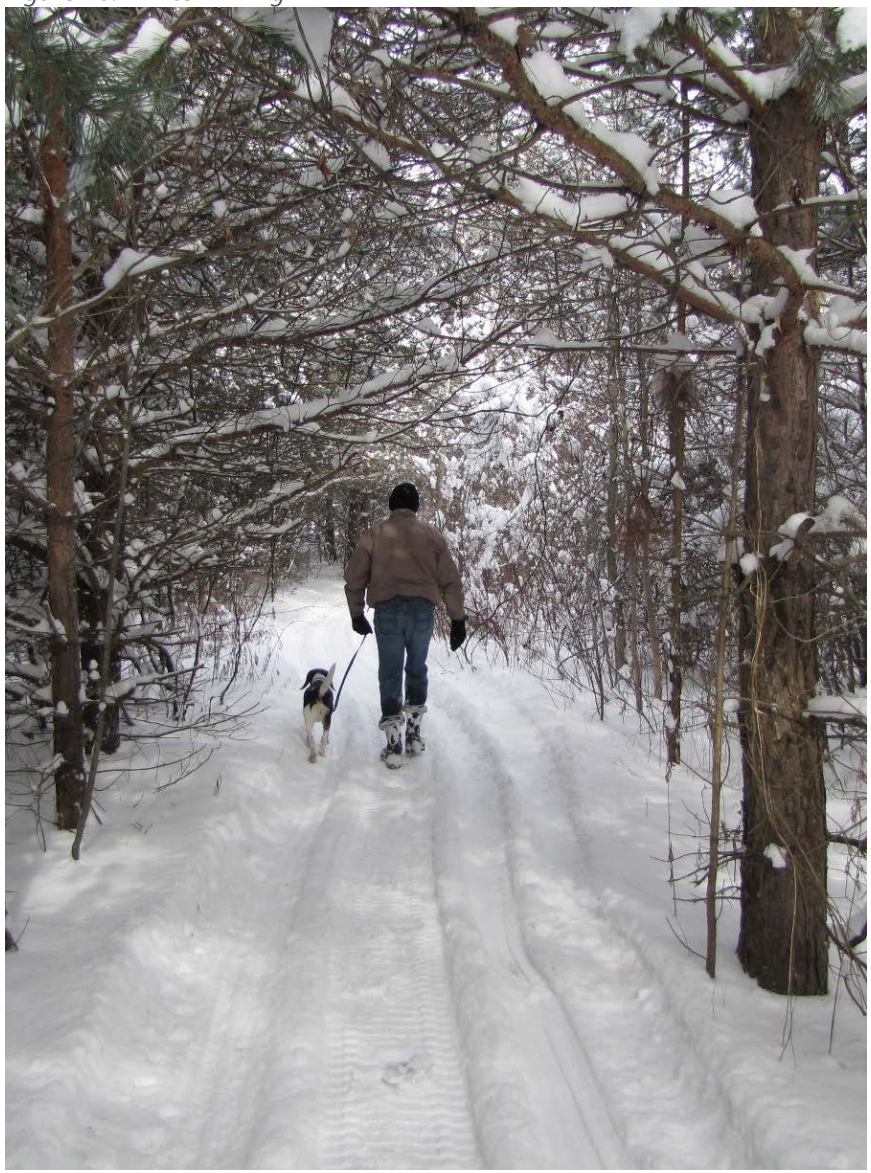


Figure 21: Recommended Active Transportation Network – Town-wide

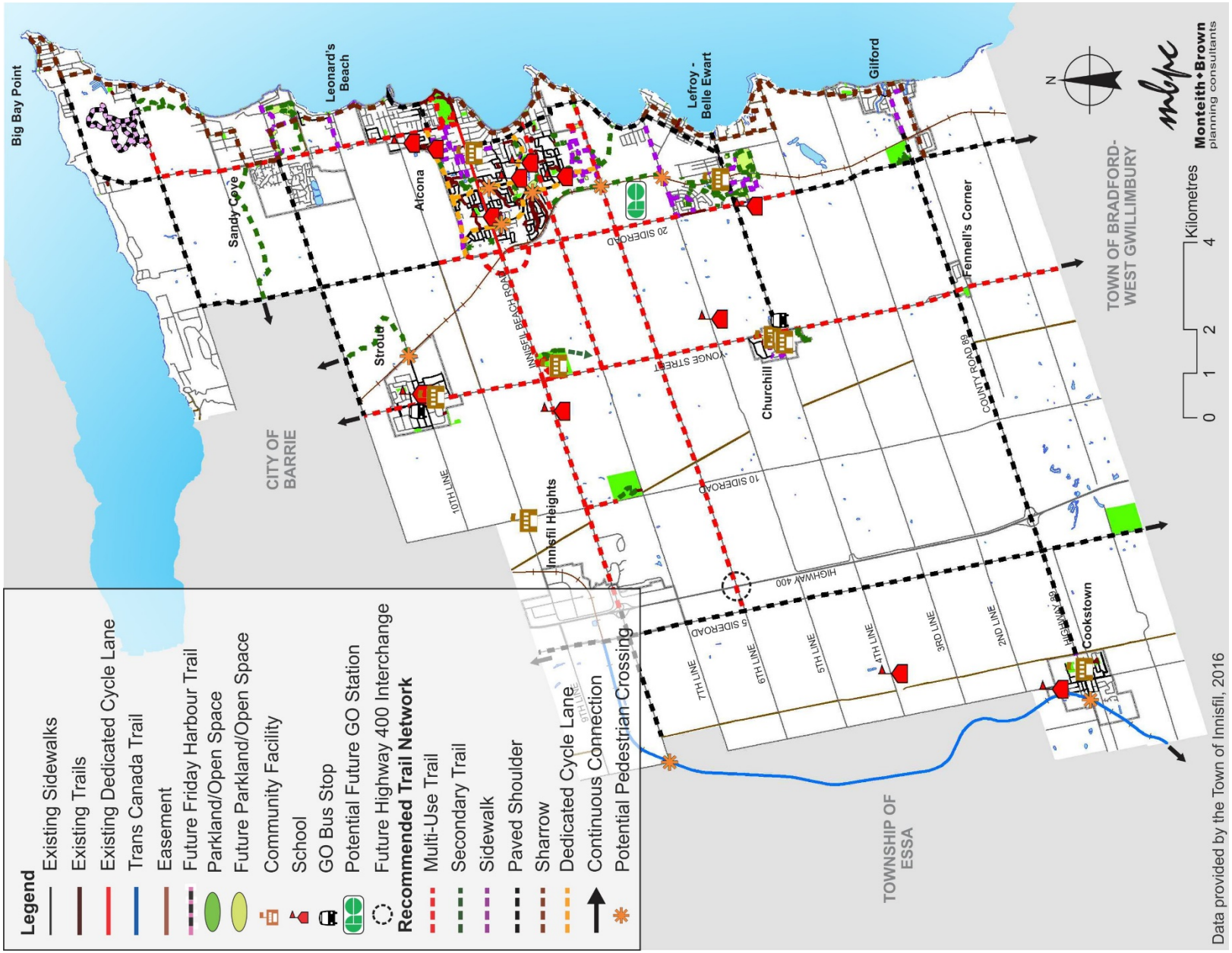
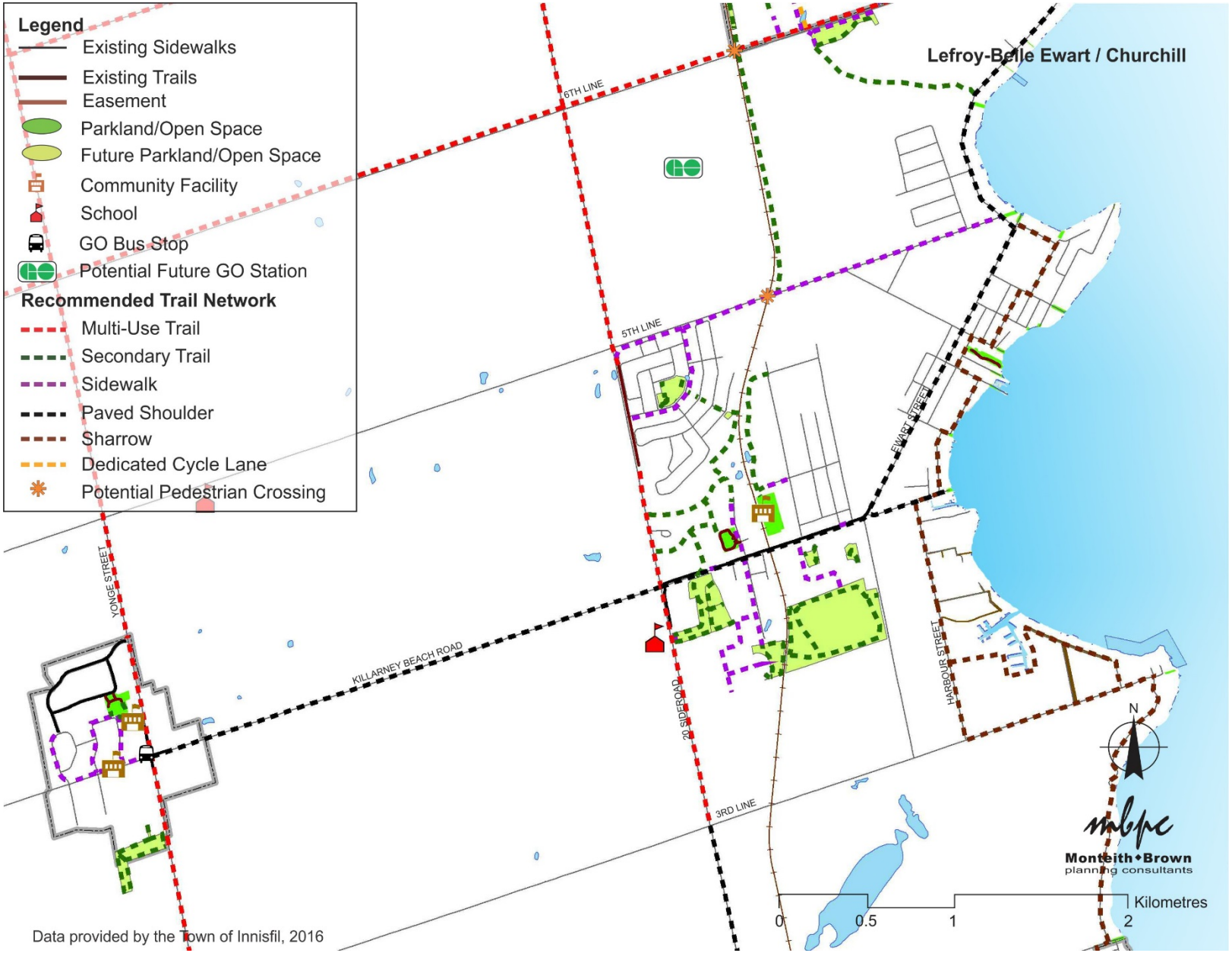


Figure 22: Recommended Active Transportation Network – Alcona

Figure 23: Recommended Active Transportation Network – Lefroy-Belle Ewart / Churchill



5. Trail Development Toolkit

5.1 Design Standards, Requirements, and Guidelines

Understanding the standards, requirements, and guidelines associated with the development of trails is fundamental to providing a safe and accessible active transportation network. This section contains an overview of the features that Innisfil must consider in order to implement the recommended trail network identified in this Master Plan. This Toolkit only applies to trail and cycling routes that are maintained by the Town and excludes informal trails on private lands, wilderness and equestrian trails, trails for motorized recreational vehicles, portage routes, or any other non-municipal trail routes that do not support pedestrian activities. It should be recognized that there may be unforeseen instances where terrain and physical constraints pose challenges to comply with the standards in this toolkit. As a result, exceptions may be permitted.

This toolkit has been developed utilizing several key documents including Ontario Regulation 413/12 (Design of Public Spaces Standards – Accessibility for the Built Environment Standards) made under the Accessibility for Ontarians with Disabilities Act, 2005, the Ontario Building Code, Town of Innisfil Engineering Design Standards and Specifications Manual, and accessibility standards prepared by the City of London and York Region. The Town should refer to the Innisfil Beach Road Urban Design Study and Guidelines for specific design standards and guidance with respect to Innisfil Beach Road. Supporting provincial and local construction standards (as revised from time to time) shall be considered in the design and development of all future active transportation routes in consultation with persons with disabilities and the Town's Accessibility Advisory Committee. The Town shall also have regard for this Toolkit as future projects are identified involving the upgrade and rehabilitation of existing trail and cycling routes.

5.1.1 Trails

Trail Surfaces

A range of trail surface types may be utilized as described in the recommended trail classification hierarchy, provided that they are firm and stable, and contain no tripping hazards. Recommended surface types include asphalt, concrete, limestone screening, or other firm and stable

surface. Paving with asphalt or concrete is appropriate for highly developed areas and the use of woodchip surfaces should only be considered for woodland trails and sensitive areas. The trail surface may be selected at the discretion of the Town with consideration given to the trail hierarchy, trail type, location and resources available.

Trail Width

The width of trails in Innisfil is subject to the classification system. A minimum width of 3,000 mm (3 m) shall be maintained along all multi-use trails as these routes accommodate the widest range of transportation modes and facilitate bi-directional movement with ease. Secondary trails shall maintain a minimum width of 1,800 mm (1.8 m). The entrance to a trail must have a minimum clear opening of 850 mm (0.85 m), whether the entrance includes a gate, bollard, or other entrance design. At the Town's discretion, trail widths may be designed up to 8,000 mm (8.0 m) to serve as servicing corridors, such as around stormwater management ponds.

Figure 24: Conceptual Multi-Use Trail

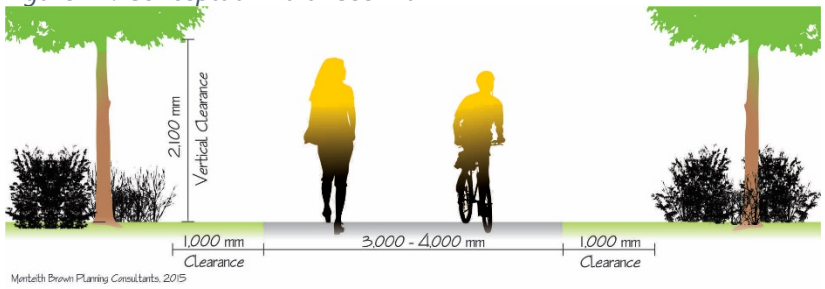
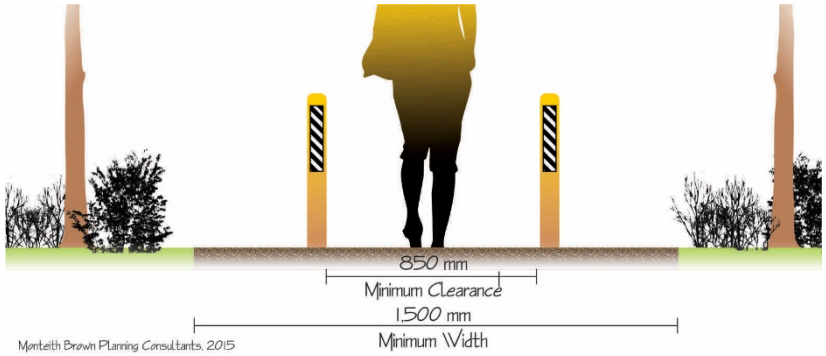


Figure 25: Conceptual Secondary Trail



Vertical Height

A minimum vertical clearance of 2,100 mm (2.1 m) above grade shall be maintained along all trail routes.

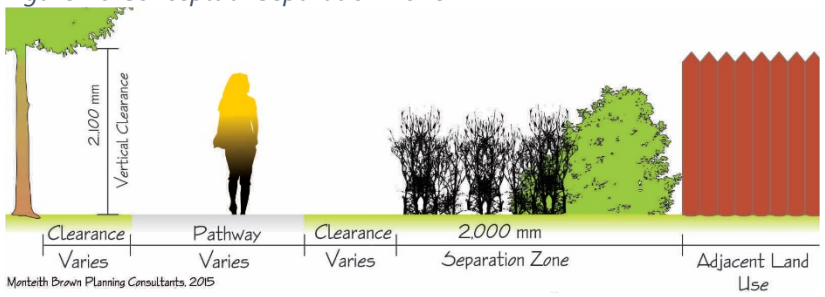
Separation Zone / Buffer

Separation zones should be provided to partition trail routes with competing activities or sensitive lands uses. A common concern raised among pedestrians is the unsafe feeling of sharing the right-of-way with vehicular traffic which makes them less likely to choose active forms of mobility. Separation zones physically remove pedestrians and trail users from vehicular traffic and establish a defined walking pathway. Communities typically establish a range of separation distances depending on the width of the right-of-way and can vary between 2,000 mm (2 m) and 6,000 mm (6 m). Wherever possible, the Town shall target a minimum separation of 2,000 mm (2 m) from the vehicular travel lane or shoulders along County and local

roads. In some cases, a ditch, swale, or grass boulevard may also serve as an acceptable separation zone. Recognizing that the target separation width may require a considerable deviation from existing conditions (in addition to obstacles such as utilities and trees within the planned walking route), the Town shall exercise discretion in determining separation widths on a case-by-case basis.

The Town shall also strive to achieve a minimum separation zone of 2,000 mm (2 m) in areas where a proposed trail route abuts the property boundary. This separation zone will provide a sufficient zone of separation to maintain privacy of all land uses. To further bolster the separation of uses, the Town shall consider the use of landscaping or vegetative buffering.

Figure 26 Conceptual Separation Zone



Clearance Width

A clearance width should be provided along all sides of trails to accommodate manoeuvrability and minimize intrusions along the walking path, such as hanging vegetation or signage. Clearance widths vary depending on the trail classification. A 1,000 mm (1 m) clearance width should be maintained along multi-use trails and 500 mm (0.5 m) along secondary trails, and 250 mm (0.25 m) along sidewalks.

Trail Cross and Running Slope

The A.O.D.A. does not identify specific guidelines for the slope of recreational trails, recognizing that the terrain may vary considerably across most routes. On a project-specific basis it is recommended that the Town consult with the Accessibility Advisory Committee for guidance on this matter.

Boardwalks

Boardwalks are typically raised pathways constructed over waterways or areas that experience continuous moisture such as marshes and wetlands. The following design regulations shall apply for the construction of boardwalks:

- Minimum width of 1,000 mm (1.0 m)
- Minimum vertical clearance of 2,100 mm (2.1 m)
- Constructed with firm and non-slip materials
- No openings along the boardwalk greater than 20mm
- If the boardwalk is located adjacent to water or a drop-off, a curbed edge / edge protection shall be provided with a minimum height of 50 mm

- If a boardwalk has a slope greater than 1:20, it must be treated as a ramp

Ramps

Ramps for recreational trails shall have regard for the following regulations and be designed to meet with the requirements for tactile walking surface indicators:

- Minimum clear width of 900 mm (0.9 m)
- Height clearance of 2,100 mm (2.1 m)
- Firm and stable surface
- Running slope no greater than 1:10 for recreational trail ramps
- Landings must be provided:
    - at top and bottom of all ramps
    - when there is a change in direction of ramp
    - at horizontal intervals not greater than 9,000 mm (9.0 m) apart
- Landings must be designed to a minimum of 1,670 mm (1.67 m) by 1,670 mm (1.67 m) wherever they are required to be provided
- Landings must have maximum cross slope of 1:50
- Handrails must be included on both sides of the ramp and must:
    - Be continually graspable along the entire length of the ramp and have a circular cross-section with a minimum outside diameter of 30 mm and maximum outside diameter of 40mm, or any non-circular shape with a graspable portion that has a perimeter not less than 100 mm and not more than 155 mm and whose largest cross-sectional dimension is not more than 57 mm
    - Be 865 mm to 965 mm in height, measured vertically from the surface of the ramp
    - Terminate in a manner that will not obstruct pedestrian travel or create a hazard
    - Extend horizontally not less than 300 mm (0.3 m) beyond the top and bottom of the ramp
    - Be provided with clearance of not less than 50 mm between the handrail and any wall to which it is attached
- For ramps greater than 2,200 mm (2.2 m) in width:
    - One or more intermediate handrails which are continuous between landings must be provided and located so that there is no more than 1,650 mm between handrails
- The ramp must have a wall or guard on both sides and where a guard is provided, it must:
    - Be not less than 1,070 mm measured vertically to the top of the guard from the ramp surface
    - Be designed so that no member, attachment or opening located between 140 mm and

900 mm (0.9 m) above the ramp surface being protected by the guard will facilitate climbing

- The ramp must have the same edge protection as a boardwalk

Trailheads

Trailheads should be located along major roads, at key entrances and access points to a trail. The Town's Our Place Official Plan Review process suggested that trailheads should be designed with placemaking amenities in mind to draw in users and generate activity. This can be achieved by incorporating trailheads together with outdoor cafes, food and beverage trucks, seating, and more. Trailheads not only signify a point of entry to a trail, they serve as staging areas and locations for users to meet. As a result, trailheads should be accessible, conveniently located in open areas, and be highly visible. All existing and new trailheads should be designed to suit the scale of the intended trail experience and the expected level of use.

There is no standard for trailhead requirements as the amenities are dependent upon site-specific needs, resources available, surrounding context, environmental conditions, and other variances. Best practices across Ontario suggest that trailheads should be designed to incorporate placemaking amenities and comfort features that encourage trail use such as sufficient parking, signage, seating, waste receptacles, temporary washrooms, bicycle racks, contact information, and other amenities that are typically desired by active transportation users. More intensive amenities such as permanent washrooms and showers are not typically provided, unless the trailhead can be located near community facilities or within parks where existing amenities can be shared. For this reason, it is preferred that trailheads leverage existing infrastructure to the greatest degree possible.

Figure 27: Trailhead Signage - Thornton-Cookstown Trans Canada Trail

Signage

Signage should be clear, consistent, and accessible, serving many purposes including, but not limited to:

- Identifying the name of the trail with the Town's logo to signify municipally-own lands.
- Providing information regarding trail length, surface, and difficulty, accompanied by a map.
- Travel time to key destinations or approximate time to complete a trail loop.
- Identifying key points of interest along the trail.
- Identifying permitted uses (hiking, cycling, etc.).
- Describing rules pertaining to the use of the trail.
- Hours of operation.

Effective signage plays an important role in the trail network as it attracts, guides, and directs users along designated pathways. Trail signage can generally be categorized into six types, as described in greater detail below. Each signage type should be considered for the Town's existing and future trail routes. To ensure that signage is accessible, signage text shall have a high tonal contrast with its background and use a 'sans serif' font style.

Trailhead

Trailhead signage must be provided at the primary entrance to each recreational trail, although there may be more than one trailhead for each trail. Trailhead signage should be located in highly visible areas that commonly serve as meeting places, located near parking, and be co-located with other amenities, features, or uses, or be located near a main or frequently traveled road. Trailheads must include the following information: trail length, type of surface, average and minimum trail width, average and maximum running slope and cross slope, and location of amenities where provided.

Figure 28: Regulatory Sign at Previn Court Park

Regulatory Signs

Rules of the trail are generally located at all trailheads or all access points. These signs dictate the rules and law of the trail, which the user must abide by. These laws are typically enforced by provincial law or municipal by-law, and should be stated on the sign. Regulatory signage may also describe an assortment or rules, information, and conduct in which the user must follow, including permitted uses, hours of operation, trail etiquette, as well as key contact information should a user wish to report a hazard or unsafe use of the trail.

Way-finding

These signs provide users with a general overview of the trail including direction, length, key points of interest, settlement areas, and feature other key details. Way-finding signs should be displayed prominently at all access points to the trail and inform users of their current location.

Interpretive

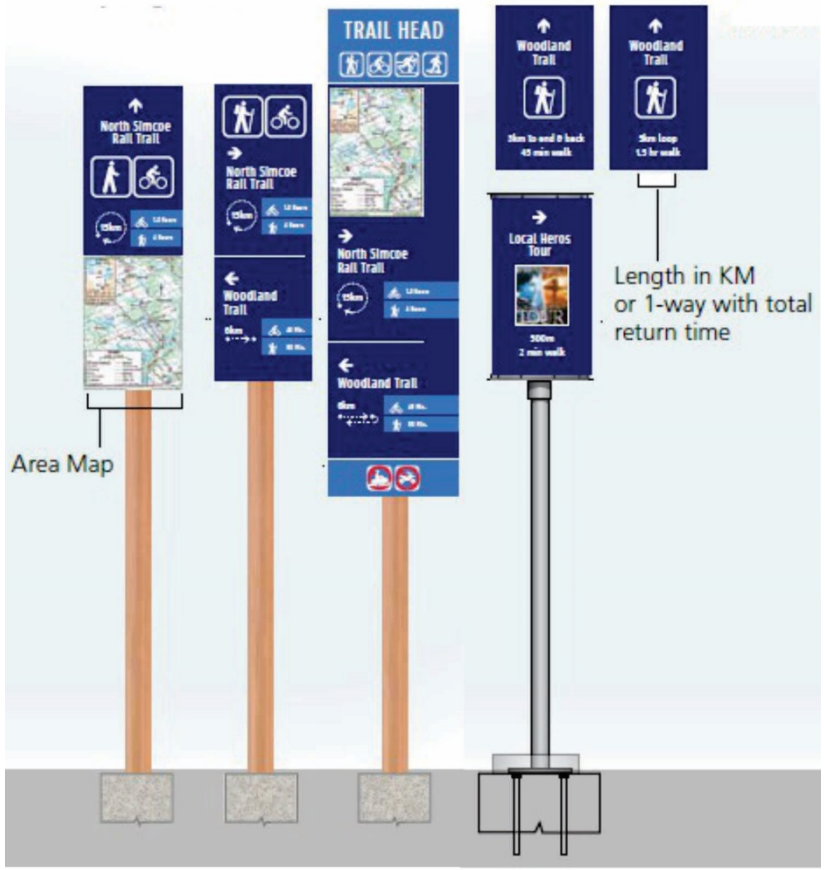
Interpretive signs may serve as an opportunity to showcase information that relates to the trail and its environment. The information presented on the interpretive sign may vary and including, but not be limited to, the history of the trail or environment it is located in, native fauna and flora, or other historical, cultural, or environmental facts that may interest the user. While interpretive signs should be consistent with the Town's branding strategy (e.g., colours, other design language, etc.), opportunities may exist to utilize some creative flair to the sign's design to generate excitement and interest. As a result, these signs should be attractive and located in prominent areas such as at key points of interest, look-outs, or rest areas along the trail.

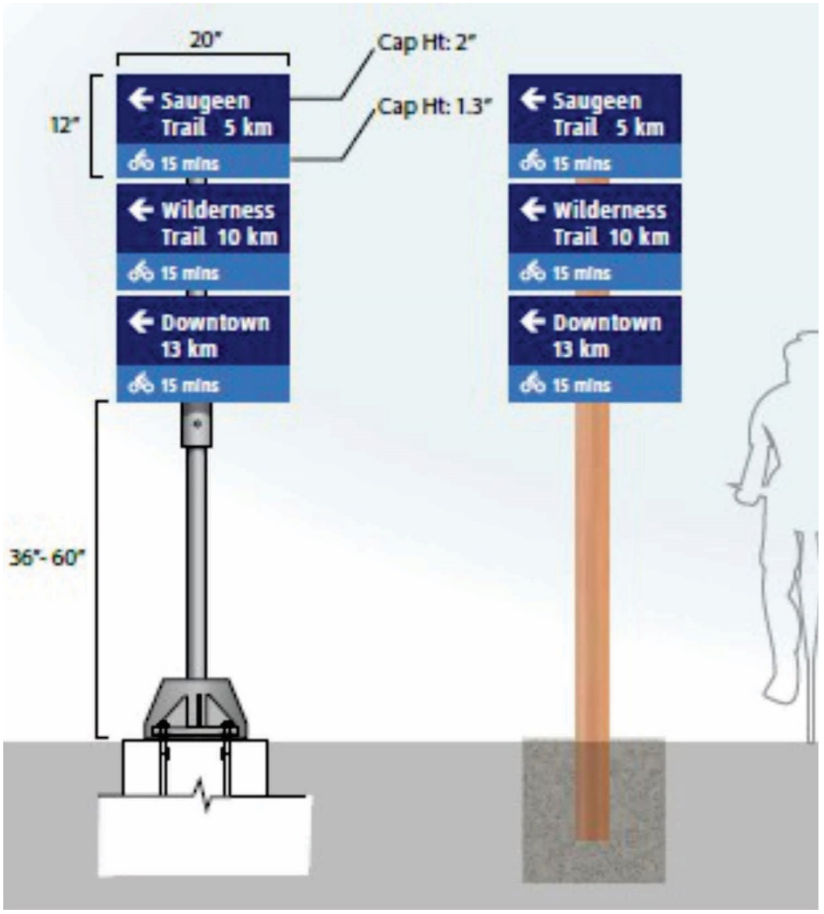
Route Markers

Route markers provide users with information pertaining to the distance from a specified reference point, typically to a key point of interest or trail head. Route markers should be located at regular intervals along the trail (e.g., 100 metres), although the interval may vary depending on the trail type.

Figure 29: Example Bike Route Signage

Figure 30: Example Signage Types





Source: Regional Tourism Organization, 2014

Warning Signs

Warning signs should be displayed in the most visible locations to warn users of potentially hazardous areas due a range of possibilities that may include, but not be limited to, to uneven trail surfaces, or naturally occurring hazards from changing weather conditions.

Regional Tourism Organization 7 (R.T.O.7) has developed a signage strategy to be implemented across Bruce, Grey and Simcoe County. The purpose of this strategy was to achieve a consistent way-finding system across multiple communities and to direct walkers and cyclists along a safe and appropriate active transportation network. The Town is encouraged to work in partnership with R.T.O.7 in the provision of supporting signage to maintain consistency in signage design, colour, type face, and other branding requirements. Examples of recommended signage are illustrated in Figure 30.

Washrooms

Where possible, the Town shall encourage the use of existing washroom facilities, particularly those located at multi-use community facilities and parks. The provision of permanent or temporary (i.e., portable) washroom facilities shall be provided at the Town's discretion. Regard shall be given to the Ontario Building Code and National Building Code for standards relating to the construction and design of accessible washrooms.

Benches & Seating

Benches and seating areas are particularly important features, especially for persons with disabilities, older adults, and those with children. As such, convenient seating areas are key amenities that should be located along trail routes, but not within the walking path, as they provide opportunities for users to rest and enjoy the outdoors. Seating areas shall be located on firm, level surfaces in meaningful locations including (but not limited to) trailheads, along high traffic trail routes, areas with high visibility, and viewing points. To further visibility of seating areas, the design should give consideration to a high contrast to the walking path including colour, texture, and materials.

To ensure that seating areas are accessible, the design of benches shall have regard for the following:

- Have back and arm rests
- Be designed with a contrasting colour to the surroundings
- Be located on a firm and stable surface that is a minimum of 920 mm x 1,370 mm in size

Lighting

Lighting shall only be provided in key areas identified by the Town. For example, lighting may be desirable along well-used trail routes, sidewalks along major roads, trails within park settings and public spaces, trailheads and seating areas, or trails that intersect with streets and present benefits such as increased visibility and deterring illicit activities. Lighting trails may not be appropriate for more secluded trails as lighting provides an illusion of safety and should not be used where safety concerns exist. When considering the installation of lights along trails or at trailheads, the Town should consider safety, intensity of use, impact on adjacent uses (light pollution), costs, maintenance, and impact on the environment.

Landscaping & Screening

In many instances, the existing natural environment will provide ample landscaping and screening. However, there may be some cases in new trail construction that may require buffering such as in cases where a trail route abuts the rear of residential properties. The Town shall consider the use of landscaping or vegetative buffering to provide adequate screening and maintain residential privacy.

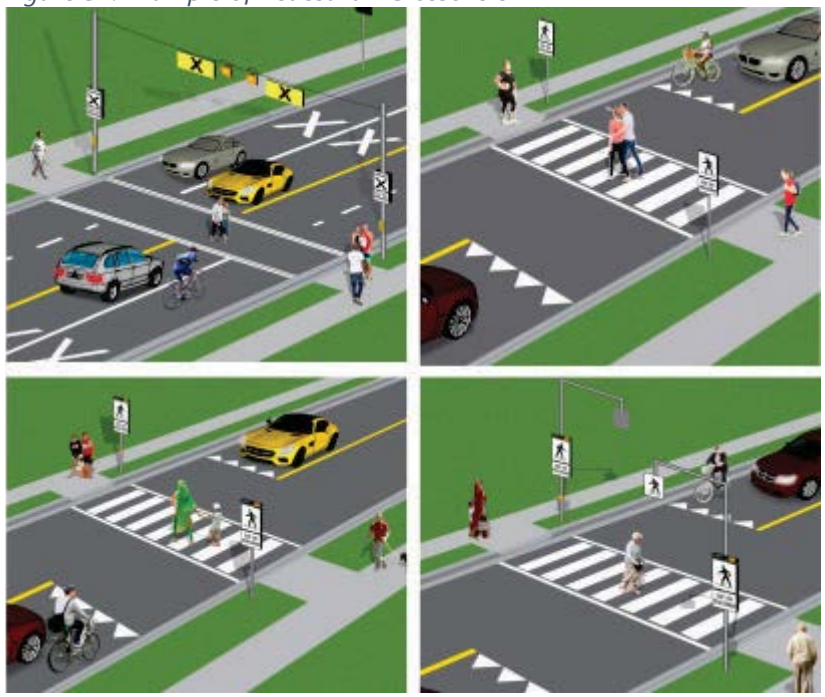
Further, landscaping may also be considered in areas where shade is limited, such as in open spaces, or be combined with other trail amenities such as benches and signage. Elements of landscaping and screening may also be considered in areas of new construction where trails are proposed, and should be included in reviews of proposed plan of subdivisions. Vegetation shall not be located within the traveled pathway and a vertical clearance of 2,100 mm shall be maintained.

Pedestrian Crosswalks and Crossovers

Providing designated crossings can be a safe opportunity for pedestrians to cross high volume roads and they should be designed and constructed according to the appropriate standards. Generally speaking, there are two types of pedestrian crossings – crosswalks and crossovers.

There are several factors to consider when determining if pedestrian crossings are required, including traffic volumes, speed limits, distance to other signalized intersections, and more. This decision is guided by O.T.M. Book 12 (Traffic Signals) and Book 15 (Pedestrian Crossing Facilities). The Town should refer to these documents for greater detail as they provide more in depth details regarding these facility types. The following is a high-level summary of pedestrian crossings that should be considered at key locations where high traffic volumes are experienced.

Figure 31: Example of Pedestrian Crossovers



Source: Ministry of Transportation.
http://www.mto.gov.on.ca/english/safety/pedestrian-safety.shtml

Pedestrian crosswalks are provided at signalized intersections and are denoted by marked pedestrian pathways, signage, and signals. Pedestrian crossovers are marked mid-block connections between intersections to provide pedestrians with safe opportunities to cross the street. Pedestrian crossovers can be provided if the walking distance to a crosswalk is too great or not practical for commonly traveled pedestrian routes. Generally speaking, crossovers may be considered where crosswalks are more than 215 metres apart. Pedestrian crossovers can also be provided near major pedestrian destinations such as community facilities and schools, and for connecting multi-use and secondary trails.

Pedestrian Railway Crossing

Grade level railway crossings should be discouraged; however, it is recognized that this is not always possible. Crossing railways may be required to maintain desired walking routes or to connect pedestrians with key destinations. A grade separated crossing, such as a pedestrian bridge, is the preferred method for crossing railways as this provides the highest level of safety, although this usually comes at a high cost and may not be suitable for the surrounding environment. As a result, grade crossings are used more commonly.

As the Barrie GO Transit line is expected to become more active during the life of this Master Plan, controlled pedestrian crossings may be warranted. The recommended trail route identifies potential pedestrian crossings at key points along the GO Transit railway, although the Town should also explore railway crossings at other locations in Innisfil. The Town should engage the appropriate authorities (e.g., GO Transit, Transport Canada, CN/CP Rail, etc.) to determine the most appropriate pedestrian crossing solution.

Transport Canada indicates that when determining what type of crossing is necessary, there are a number of factors that should be considered to heighten pedestrian safety such as high pedestrian volumes, proximity to schools and other destinations, access to the commuter station, railway characteristics (e.g., width, visibility, etc.), and more. Transport Canada[8] highlights several potential treatments that should be considered to enhance pedestrian safety including:

- Marked and/or texturized pedestrian pathways with stop lines 5,000 mm (5 m) ahead of the nearest rail or 2,000 (2 m) ahead of the nearest crossing sign or signal.
- Dedicated pedestrian signals indicating when it is safe for pedestrians to cross.
- Guide fencing to prevent short-cutting around gates.
- Signage indicating pedestrians to stop when lights are flashing and to look both ways before crossing.
- Slow down devices such as swing gates and maze barriers.
- Adult crossing guard in school zones.

With respect to design, Transport Canada maintains that the crossing surface must be smooth and continuous to allow for safe transition over the rail tracks. Further guidance regarding railway crossings can be found in O.T.M. Book 15, Ministry of Transportation Geometric Design Standards for Highways, and resources available through Transport Canada.

5.1.2 Sidewalks

Sidewalk Surface

The preferred sidewalk surface shall be concrete or asphalt.

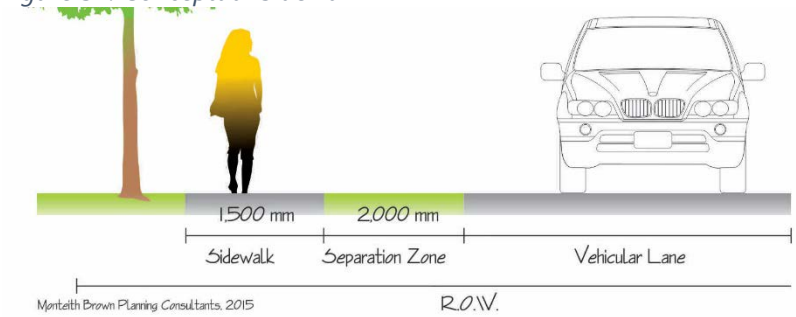
Sidewalk Width

Sidewalks located within settlement areas shall be physically separated from the road of travel with a grass boulevard or separation zone, although sidewalks adjacent to curbs are acceptable. In accordance with the Town's sidewalk design standards, sidewalks shall have a minimum width of 1,500 mm (1.5 m) when a separation zone exists. Wider sidewalks with a width of 1,800 mm (1.8 m) or greater may be considered in areas with higher pedestrian volumes such as in commercial areas, or where

[8] Transport Canada. (2007). Pedestrian Safety at Grade Crossing Guide. https://www.tc.gc.ca/media/documents/railsafety/PedestrianSafety-publications.pdf

a greater width is necessary to enhance walkability or safety, such sidewalks that directly abut the road of travel.

Figure 32: Conceptual Sidewalk



Vertical Height

A minimum vertical clearance of 2,100 mm (2.1 m) above grade shall be maintained along all sidewalks.

Ramps

Requirements for sidewalk ramps mirror the standards for trail ramps described in Section 5.1.1 of this Master Plan, with the exception running slope. The running slope of sidewalk ramps shall be no greater than 1:15.

Sidewalk Grade and Crossfall

The Town's Engineering Design Standards and Specifications Manual articulates that sidewalks should have a maximum grade of 5% and a crossfall of 4%; however, the Town shall strive to achieve a grade and crossfall of 5% and 2%, respectively. Sidewalks may have a slope greater than 1:20 provided the slope is not greater than the slope of the adjacent roadway.

Tactile Walking Surface Indicators

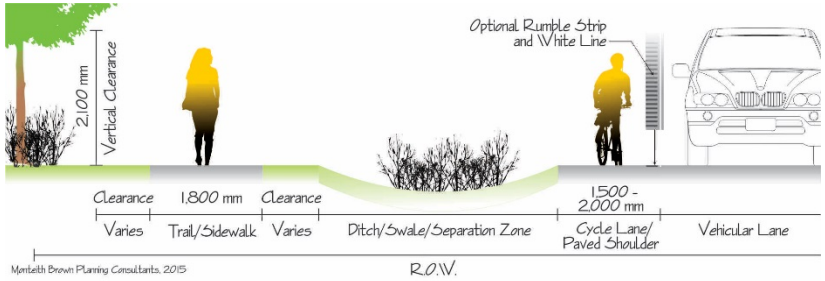
Where necessary, the Town may utilize tactile surface indicators to assist visually impaired pedestrians of upcoming hazards such as edges and curbs, changes in walking direction, intersections, and more. The design and construction of these indicators shall conform to O.P.S.S. 351.

Figure 33: Sample Tactile Walking Surface Indicator

5.1.3 Cycling Infrastructure

Design guidelines for cycling infrastructure are documented in the Town's Transportation Master Plan and Engineering Design Standards and Specifications Manual. Cycling infrastructure plays a pivotal role in enhancing the Town's active transportation network and can often times be integrated with pedestrian routes to create multi-use trails. This section provides a brief summary of existing guidelines contained in the aforementioned documents. Consistency with O.T.M. Book 18 should also be considered in the development of future cycling infrastructure.

Figure 34: Conceptual Dedicated Cycling Lane



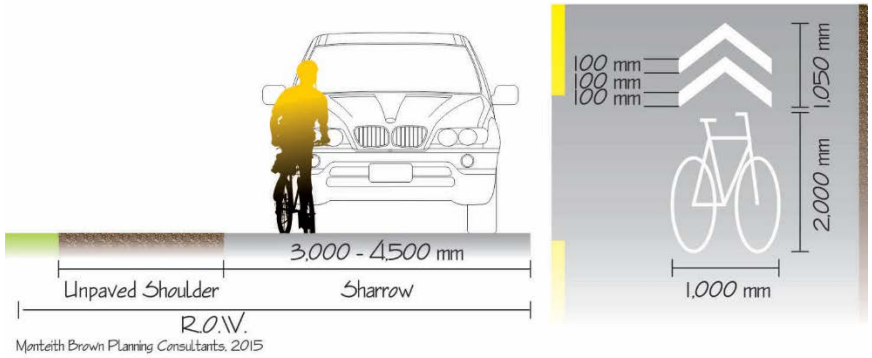
Cycling Lanes

There are several cycling solutions that the Town can utilize; however, in order for cycling infrastructure to be effective, the most appropriate solution must respond to the surrounding context as well as available resources. The three most common on-road cycling solutions are paved shoulders, shared roadways (sharrows), and dedicated cycling lanes. Each solution can be provided in a relatively cost-effective manner as some cycling routes proposed in this Master Plan may simply require a combination of paint markings and supporting signage along the existing right-of-way. The application of each facility type should be considered on a case-by-case basis together with the County and other stakeholders, where appropriate. Regardless of the cycling facility selected, it is essential that Innisfil's cycling network is supported by the appropriate cycling signage and education initiatives to heighten awareness and maximize the safety of cyclists.

Shared Roadway (Sharrows)

Bicycles are identified as vehicles under the Ontario Highway Traffic Act and as such, have a right to share the roadway with other vehicles. This type of cycling currently exists along roads without paved shoulders and where there are no dedicated cycling lanes. Cycling signage or "Sharrows" shall be clearly posted on all roadways that have been identified as a cycling route to notify both motorists and cyclists to share the road appropriately. Along narrow roads, cyclists are permitted to utilize the centre of the road; however, should the roadway be wide enough, cyclists should be encouraged to use the right side of the roadway to allow vehicles to safely pass.

Figure 35: Conceptual Sharrow



Paved *Shoulder* Lane

A limited selection of roads in Innisfil currently have paved shoulders. Paved shoulders are generally provided along arterial and collector roads to support the flow of traffic by serving many purposes such as an emergency stopping lane, slower moving traffic (e.g., agricultural equipment), or for active transportation purposes. According to the O.T.M. Book 18 and the Highway Traffic Act, cycling along paved shoulders is permitted and is the preferred facility type to encourage safe cycling in Innisfil, particularly in the Town's rural areas.

O.T.M. Book 18 identifies that the preferred paved shoulder width should range between 1,500 mm to 2,000 mm (1.5 m to 2.0 m), although the minimum width is 1,200 mm (1.2 m). A wider width should be provided along roads that exhibit greater volume, speed and traffic. It is also suggested that for paved shoulders with a width of 2,000 mm (2.0 m) or more, a buffer zone of 500 mm (0.5 m) be provided between the paved shoulder and the roadway to provide for greater separation between vehicular traffic and cyclists. This may be facilitated through the provision of painted markings or a rubble strip to alert drivers that they are diverting from the travelled lane. These standards should be interpreted together with applicable construction and design standards.

Dedicated Cycle Lane

A dedicated cycle lane physically removes cyclists from other motorists and provides users with a designated lane exclusively for cyclists. These lanes are typically unidirectional and located on the right side of arterial and collector roads and are commonly separated from vehicular traffic by pavement markings.

According to the Town's Engineering Design Standards and Specifications Manual, the minimum width of a dedicated cycling lane shall be 1,500 mm (1.5 m) on each side of the road. Should the Town consider implementing bi-directional cycling lanes

on one side, the minimum width shall be 3,000 mm (3.0 m). In addition to this standard, cyclists should be encouraged to utilize paved road shoulders. Where space permits, paved shoulders should be provided alongside dedicated cycle lanes to provide cyclists with additional separation from vehicular traffic.

Similar to the design guidelines for paved shoulder lanes, the Town may consider the use of buffer zones to provide cyclists with added separation from vehicular traffic to heighten user safety. In addition to painted markings or rumble strips, other buffer zones include concrete curbs, planters or landscape strips, parking lanes, flex bollards, and concrete medians (Figure 36). These buffers should range between 500 mm and 1,500 mm in width and their application shall be evaluated on a case-by-case basis.

Figure 36: Example Buffer Zones for Cycle Lanes

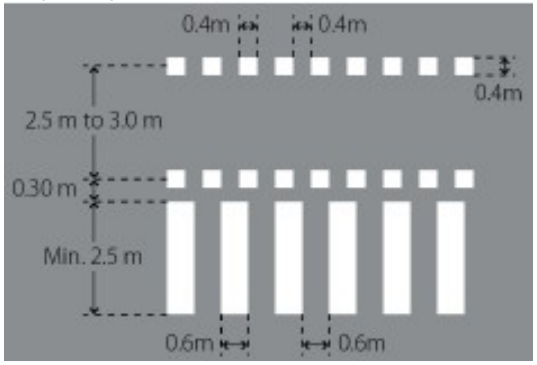
Bicycle Crossride

The Highway Traffic Act requires that cyclists dismount and walk their bicycle across intersections. This action can disrupt the flow of travel and can be avoided with the placement of a crossride. Crossrides are similar to pedestrian crosswalks and crossovers as they provide a designated location where cyclists can cross safely without dismounting. O.T.M. Book 18 describes four types of crossrides, which includes the following:

- A separate crossing, with separate space for cyclists and pedestrians.
- A full-sized combined crossing, with cyclist crossing areas on both sides of the pedestrian crossing.
- A mixed crossing shared by cyclists and pedestrians.
- A midblock crossings combined with a pedestrian crossover.

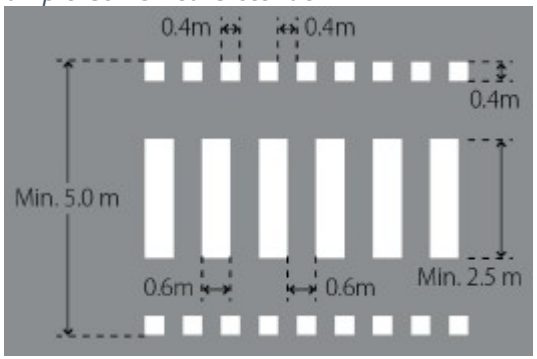
The appropriateness of these treatments should be evaluated for each location where crossrides should be provided.

Figure 37: Example Separated Crossride



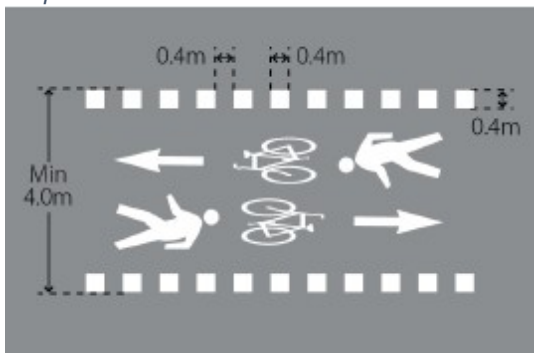
Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012

Figure 38: Example Combined Crossride



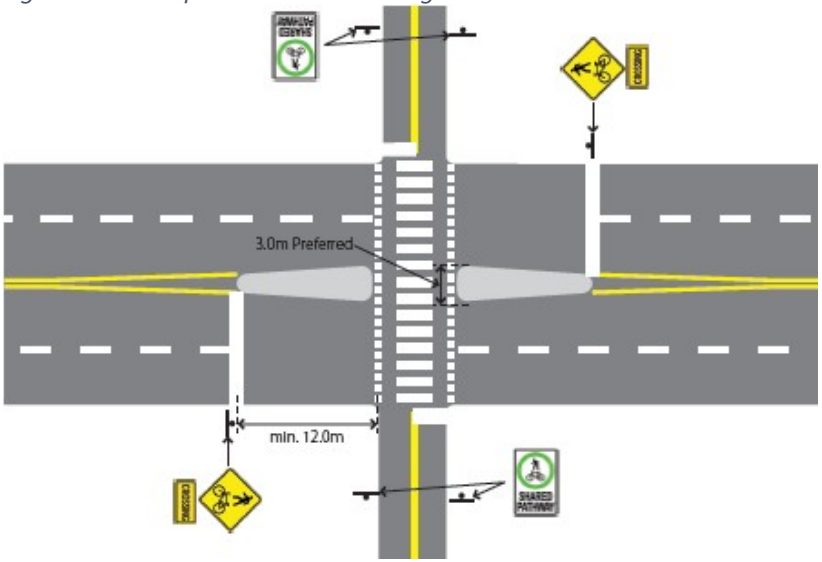
Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012

Figure 39: Example Mixed Crossride



Source: MMM/ALTA, 2013

Figure 40: Example Midblock Crossing

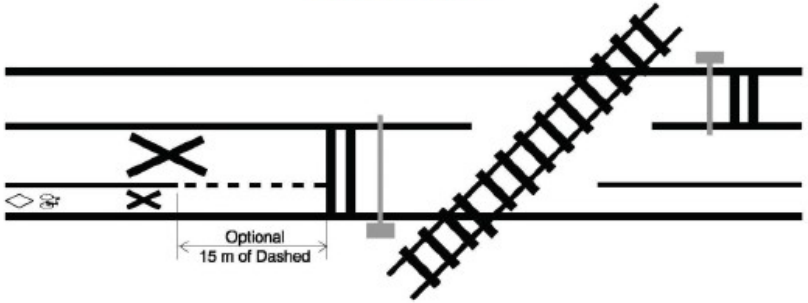


Source: Ontario Traffic Manual Book 18 Cycling Facilities

Bicycle Railway Crossing

Given that bicycles are considered vehicles and travel within the right-of-way, they are subject to the same laws as other vehicles when approaching a railway crossing such as obeying signage, signals, pavement markings, gates, and stopping distances. Extra precaution must be taken to maximize cyclist safety as railways provide additional hazards such as uneven grade, gaps between tracks, and slippery surfaces. As such, Transport Canada maintains that crossing surfaces should be smooth and continuous to allow for a safe transition.

Figure 41: Example Bicycle Lane at a Gate Controlled Railway Crossing

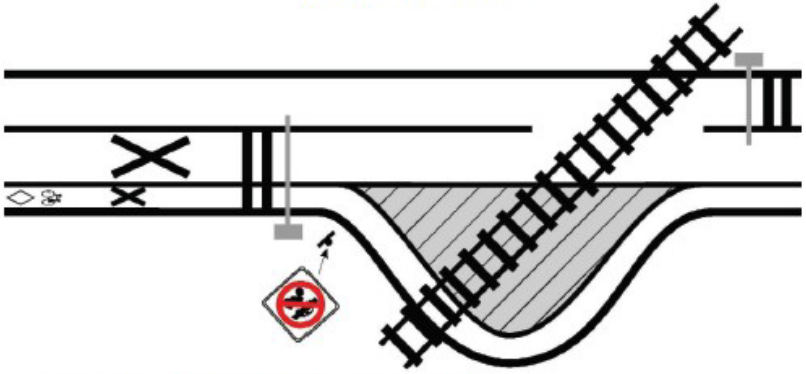


Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012

Railways may not be perpendicular to the traveled right-of-way, which may cause cyclists to lose control of the bicycle. Given this challenge, additional consideration should be taken when designing bicycle crossings. O.T.M. Book 18 indicates that where possible, bicycles should

cross railways at right-angles. To achieve this, consideration may be given to constructing a bicycle lane "jug handle" at a railway crossing, which re-orients the cycling route to meet the railway perpendicularly. Alternatively, the Town may consider widening the crossing surface to allow for safe passage over the railway.

Figure 42: Example Bicycle Lane Jug Handle at a Gated Controlled Railway Crossing



Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012

Recommendations

6. Utilize the Trail Development Toolkit in the planning, design, and development of new and existing trails and cycling routes in Innisfil, in consultation with the public, including persons with disabilities and the Town's Accessibility Advisory Committee. The standards and guidelines contained in this Toolkit should be read in conjunction with other Provincial, County, and Town construction documents.

5.2 Policy Development

The new Simcoe County Official Plan was approved in August 2015, which provides an abundance of support for the provision of pedestrian and cycling infrastructure. As described in Section 2.4 of this Master Plan, the Simcoe County Official Plan contains direction for enhancing the active transportation network in each lower-tier municipality (including Innisfil). These requirements are described in Section 4.8.37 of the County Official Plan, which indicates that local municipalities shall develop an Active Transportation Master Plan to inform local official Plan policies and guide overall development of the active transportation network, with consideration given to design standards, locations, safety measures, and more. It is the intent of this Master Plan to address these requirements.

The Town's Official Plan currently provides policies that encourage the planning and design of trails and sidewalks, although further guidance can be advanced through this Master Plan to ensure that Innisfil continues to develop as an active transportation-friendly community. Greater emphasis and support for active transportation policies are crucial in any community in light of trends highlighting the

vast benefits of active transportation, together with public input received through this process, which suggests that a well-connected trail network is highly desirable in Innisfil.

Given that the 'Our Place' Official Plan Review process is currently underway, the creation of this Master Plan provides an opportunity to influence its development by strengthening existing policies and introducing new policies that are consistent with the Simcoe County Official Plan, assist with facilitating implementation of this Master Plan, and create active transportation awareness.

This section contains recommendations for the Town to consider in bolstering policy areas that have regard for active transportation infrastructure. These additions to the Official Plan will arm the Town with the tools required for building upon its existing trail network and will ensure that future network development is appropriate and that the construction is consistent with relevant standards and guidelines.

Dedication for Pedestrian and Bicycle Pathways

There are a number of tools that the Town can consider in acquiring corridors for trail development. Chief among them is Section 51 of the *Planning Act*, which requires the dedication of parkland and encourages the provision of trail infrastructure by allowing municipalities to require the dedication of pedestrian and bicycle pathways as a condition of subdivision approval.

While the Town's Official Plan requires parkland dedication as a part of development approval, there are currently no policies requiring the dedication of land for active transportation infrastructure. It is recommended that a new policy in this regard be considered, as it provides the Town with an opportunity to identify desired lands for trail dedication, with consideration given to the recommended trail network described in this Master Plan. The provision of supporting amenities such as signage, seating, lighting, parking, and other facilities should be considered at the Town's discretion during the review and evaluation of development approvals.

To ensure that the Town has flexibility in the design of active transportation facilities, this policy shall allow variations to the recommended trail network provided that the intent of this Master Plan is maintained. While it may not be possible to identify all potential routes in the area, the Town should be cognizant of identifying linkages through future development proposals with consideration given to connectivity with the overall active transportation network via trails and sidewalks.

Minimum Requirements for Sidewalk Provision

The Simcoe County Official Plan indicates that municipalities must outline a minimum number of development units for which sidewalks would be required. The Town's Official Plan currently requires that for all new local roads, sidewalks will be required on one side of the street; sidewalks may be required along both sides of certain local roads in the vicinity of schools (S.8.1.6.5). As a result, it can be suggested that the Town's current Official Plan meets this requirement; however, there is an opportunity to re-examine this policy given that the Town is currently undertaking an Official Plan Review.

A policy scan in other communities found that many municipal Official Plans provide similar direction regarding sidewalks along local roads, although additional guidance is provided regarding cul-de-sacs, which allow municipalities to waive the sidewalk requirement for cul-de-sacs with fewer than 30 to 40 dwelling units, unless the cul-de-sac has a walkway connection to the pedestrian network. Official Plan policies also require that wherever possible, municipalities should ensure that all future development projects provide sidewalks or walkways between building entrances and the public sidewalk, parking areas, transit stops, parks, and connections to the active transportation network. It is recommended that these policies be considered as the Town's Official Plan Review moves forward.

Enhancing Public Engagement

Creating public awareness and opportunities to receive input early in the process is crucial to achieving community support as the provision of pedestrian and cycling infrastructure can often generate cause for concern. Based on the following considerations, the Town should explore crafting policies to ensure that meaningful public engagement opportunities are provided in advance of future active transportation projects, with emphasize placed on the important and benefits of active transportation.

Public engagement is particularly important in established areas as residents are often opposed to community changes, particularly if it affects their properties and local neighbourhoods.

With respect to new residential areas, the Town should encourage developers to disclose future trail routes within the development proposal or in the surrounding areas to potential home buyers so they are well informed of future trail development plans prior to purchase. Developers should be encouraged to convey this information through a number of means such as subdivision renderings, information packets, and Purchase Agreements. To avoid

conflicts with new residents, trail routes should be constructed concurrently together with other community services, infrastructure, and homes. Existing residents within proximity of development areas should also be engaged early in the process to inform them of trail development opportunities and to solicit public opinions to achieve community support.

To further enhance active transportation awareness on a broader scale in Innisfil, the Town currently illustrates potential trail routes in Lefroy on Schedule C2 of the Official Plan. This should be extended to integrate the Master Plan's recommended trail network on a schedule to the Town's Official Plan to serve as a guide for Town staff, developers, planners, and interested members of the public. Integrating the recommended network as part of the Town's Official Plan would be complementary to the vision, guiding principles, Trail Development Toolkit, and Trail Hierarchy established in this Master Plan.

Closing the Gap on Active Transportation

Establishing connections through existing built up, urban areas is often a challenge to create an effective active transportation network as trails and sidewalks may not have been considered through previous development. Due to a greater awareness of the benefits they provide, access to safe and convenient active transportation routes has become an increasingly desirable amenity in communities of all sizes. As a result, the importance of these facilities cannot be overstated.

It is recommended that the Town establish policies to pursue opportunities to connect pedestrians and fragmented sidewalks in built up urban areas for the purposes of advancing the Town's trail network. Focus should be given to existing local roads with increasing vehicular volumes that have no sidewalks, but are commonly traveled by pedestrians or those that connect to existing linkages and key destinations such as parks, schools, community facilities, and commercial areas.

This policy should describe the land acquisition strategies available to the Town including land dedication, easements, purchase, donation/bequests, or other means, as described in Section 6.2 of this Master Plan. The development of trails and sidewalks in existing urban areas should also have regard for the Trail Development Toolkit to ensure that they are constructed to a suitable standard and meet A.O.D.A. requirements.

Strengthening Cycling Policy

There are currently several policies contained in the Town's Official Plan that support and encourage the development of cycling routes in Innisfil. Enhanced cycling language can elevate the importance of non-vehicular modes of

transportation. The Town's Official Plan shall have regard for the recommended cycling routes described in this Master Plan and where possible, identify future cycling routes as opportunities arise. Policies should be considered to establish that cycling is permitted within the traveled right-of-way and, where available, cycling should be encouraged along dedicated bicycle lanes, paved shoulders, and designated sharrows. This policy can be supported by this Master Plan's Trail Hierarchy.

It has been identified that there are existing rights-of-way in Innisfil with sufficient width to incorporate a cycling lane in each direction without extensive road construction or realignment, such as along Webster and Jans Boulevard. This Master Plan recommended the provision of dedicated cycling lanes along these roads and, given the existing width of the right-of-way, this goal can be achieved through the application of paint markings and supporting signage. Establishing policies that encourage the Town to identify dedicated cycling lanes along similar rights-of-way that boast sufficient width without extensive reconstruction should be considered in order to enhance the Town's cycling infrastructure in a timely and fiscally responsible manner.

Where this Master Plan has identified recommended on-road cycling routes, the Town should establish policies requiring the erection of supporting signage to remind motorists and cyclists to share the road and exercise caution in designated areas. Cycling signage (and trails signage, in general) should be coordinated with R.T.O.7 to ensure that it meets the appropriate signage requirements.

At the Town's discretion, cycling routes should also be supported by amenities including bicycle racks, lockers, showers, parking, change rooms, and other facilities. Ideally, these amenities should be located at community facilities along the cycling route such as multi-use community facilities, libraries, schools, and other key destinations. Employment and commercial development proposals may also be required to integrate some of these cycling amenities as a part of their facility design to encourage active modes of transportation.

Support for Existing Municipal Standards

Supporting the provision of cycling infrastructure in Innisfil is the Town's Engineering Design Standards and Specifications Manual. This document provides limited language on the cycling lanes, although Section 2.4.17 of the Manual establishes that cycling lanes should be designed in accordance with O.T.M. Book 18 and be provided along roads that exceed 5,000 vehicles per day (one direction), or roads that do not meet this threshold provided it aligns with the I.T.M.P.

The Manual currently maintains that cycling lanes along local roads are not required. It is recommended that at a time of review, this Manual has regard for the Trails Master Plan and revisit the requirements, standards, and specifications related to cycling and other active transportation infrastructure. For example, it is recommended that, through this review, the Town adopt a complete streets approach to constructing new or redeveloped roads in Innisfil. Complete streets are designed to incorporate all modes of transportation including pedestrians, cycling, and motorists, which will influence how Innisfil will grow over the foreseeable future.

The design of complete streets will require the Town to reconsider the provision of cycling lanes along local roads. There are several factors to consider in addition to traffic volume when determining if cycling lanes should be provided, such as connectivity to other cycling routes, the presence of key destinations such as schools and parks, and the desire to heighten cycling safety. Incorporating specifications for retrofitting existing rights-of-way should also be considered given that it was previously identified that there are currently a number of existing rights-of-way with sufficient width to incorporate a cycling lane in each direction.

Other Policy Considerations

The Town should also endeavour to investigate other opportunities to strengthen Official Plan policies to emphasize the commitment to active transportation planning. Policies that may be considered include, but are not limited to:

- Where appropriate, new and existing parks and storm water management ponds (of sufficient size and configuration) shall have a trail loop and/or connections to existing or future trail routes.
- Coordinate with the County, transportation authority, public, and other relevant group in the location, design, and development of safe pedestrian crossings at key points along trail routes. Such locations may include busy, uncontrolled roads, railways, and water courses.
- Where trail routes are located adjacent to residential areas, a buffer or landscaped screening shall be provided to preserve privacy.
- Utility corridors, municipal easements, and former rail lines shall be incorporated into the trail network, where meaningful and feasible connections and linkages can be established.

Supplemental to these policy considerations, the Phase 1 Discussion Paper on Healthy Communities articulated

additional policy recommendations to be considered through the Town of Innisfil Official Plan Review, which included the following:

- Include alternate modes of transportation in the vision.
- Create a separate active transportation mode section.
- Link active transportation policies to an active transportation plan or strategy.
- Encourage compact urban form to facilitate active transportation for communities.
- Consider connectivity to potential transit.

These recommendations are largely supported by this Master Plan in order to strengthen and broaden Innisfil's active transportation network and to ensure that the Town continues to grow in a manner that emphasizes a higher quality of life and sustainable transportation choices.

Recommendations

7. Ensure that the Official Plan has regard for this Trails Master Plan, particularly in regard to the recommended active transportation network, vision and guiding principles, Trail Hierarchy, and Trail Development Toolkit in the planning of future pedestrian and cycling routes.

Recommendations

8. Establish policies requiring the dedication of land for pedestrian and bicycling facilities as a condition of plan of subdivision approval, with consideration given to the recommended active transportation network contained in the Trails Master Plan.

9. Integrate the recommended active transportation network as a part of an Official Plan schedule to serve as an awareness tool for Town staff, developers, planners, and interested members of the public.

10. Explore opportunities to bolster sidewalk policies with consideration given to sidewalk requirements in cul-de-sacs, sidewalks in existing areas to fill gap areas, walkway connections between buildings and the public sidewalk, and more.

11. Create Official Plan policies that strengthen support for active transportation, trail and cycling infrastructure development, and supporting amenities such as bicycle racks and shelters, showers and change rooms, and signage.

12. Pursue opportunities to connect pedestrians and fragmented sidewalks in existing built up, urban areas for the purposes of advancing the Town's trail network. Particular focus should be placed on local roads with no sidewalks, but that are commonly

Recommendations

traveled by pedestrians or connect to existing linkages and key destinations such as parks, schools, community facilities, and commercial areas.

13. During a review of the Innisfil Engineering Design Standards and Specifications Manual, consider updates such as adopting a complete streets approach in the design of all new and redeveloping roads in order to enhance opportunities for pedestrian, cyclists, and motorists.

5.3 Management & Maintenance

Innisfil's diligence in managing and maintaining its active transportation network is essential to maintaining user safety and reducing exposure to any liabilities it may face. By identifying and resolving deficiencies early on, Innisfil can reduce long term costs and extend the life of the active transportation network.

Given that some of the recommended routes and paved shoulders are located along the travelled right-of-way, maintenance is completed through regular street and snow clearing. Where available, however, bicycle pavement markings and signage should be inspected on an annual basis to ensure that they are visible to motorists and cyclists. Town sidewalk maintenance is also generally minimal throughout the year, with the exception of sidewalk snow clearing during the winter, which may be more involved.

Figure 43: Winter Sidewalk Usage

The Town also conducts snow clearing along the multi-use trails at Innisfil Beach Park, providing residents and visitors with safe access to outdoor activities during the winter. Consideration should be given to extending this maintenance practice to all or select future multi-use trails, such as the proposed multi-use trail between Alcona and the I.R.C., to heighten winter trail usage and activities. In addition, the Town should place a priority on clearing sidewalks that connect pedestrians to key destinations, particularly schools, to ensure that walking routes are safe and clear.

Ontario Trails suggests that pedestrian trails should be designed with easy maintenance in mind to minimize

future maintenance issues, which may include routing or the use of construction materials that are more durable and environmentally friendly, especially given the Town's climatic variations and naturally sensitive areas.

A number of communities have implemented a Trail Maintenance Policy to ensure that local trails are maintained regularly and appropriate. These policies cover a broad range of practices and procedures including actions required to manage trail routes, which may involve a number of tasks including grass-cutting, vegetation control, litter and debris clearing, and more. It is recommended that a Trail Maintenance Policy be developed to ensure that Innisfil's trails are consistently maintained to a high standard.

The frequency of inspections and performance of these tasks generally vary and can be based on the type of trail and the volume it receives. At a minimum, trails should be inspected on an annual basis, which is similar to the requirements of Ontario Regulation 239/02. This Regulation requires that all municipalities undertake a sidewalk inspection on an annual basis to identify surface deficiencies, which must be addressed and remediated within fourteen days. It is recommended that trails and sidewalks be inspected together so that inspections and repairs can be coordinated and remediated in an appropriate manner. Table 5 contains a sample Trail Inspection Form that may be used to guide inspections. When complete, the Trail Maintenance Policy and Trail Inspection Form should be incorporated within the Town's Parks Operations Maintenance Manual.

Table 5: Sample Trail Inspection Form

Trail Name:	
Inspector Name:	Date:
Signage	
Trail Head	
Surface Condition	
Horizontal Clearance	
Vertical Clearance	
Drainage	
Bridge	
General Comments	

Recommendations
14. Consider winter maintenance along select future multi-use trails to provide opportunities for outdoor physical activity during the winter. A higher priority should be placed on snow clearing along sidewalks

Recommendations

that connect pedestrians to key connections, particularly schools.

15. Prepare a Trail Maintenance Policy to establish a framework for maintaining Innisfil's trail network. This policy should consider tasks required to manage trail routes and the frequency of documented inspections, which may be based on factors such as the type of trail and the volume of use it receives.

16. Develop a Trail Inspection Form to guide the inspection of trails in Innisfil. This document, together with the Trail Maintenance Policy, should be integrated within the Town's Parks Operations Maintenance Manual.

17. Monitor the quality and condition of Innisfil's trail network and identify improvements, as necessary, with regard for the Trail Development Toolkit and Guiding Principles outlined in this Master Plan.

5.4 Minimizing Risk & Liability

Recognizing that safety is a guiding principle in the planning and selection of trail routes, minimizing the risk of injury should be of upmost importance in the development of Innisfil's trail network. Ensuring that trail routes are appropriately designed, constructed, and maintained can minimize risk and offer the best protection against potential liability concerns. As such, the Town should ensure that all existing and planned trails located on publically owned lands are appropriately managed and maintained in accordance with the directions and recommendations contained throughout this Master Plan and in concert with other relevant Town maintenance policies.

In addition to the maintenance of Town trails, it is essential to educate users on safe trail and cycling etiquette. This can be achieved with the appropriate signage or other means of active transportation education (which is explored in the following section). Utilizing any of the six signage types described in the Trail Development Toolkit provides an opportunity to communicate key safety information such as encouraging users to remain on designated trail and cycling routes and to report hazards or deficiencies.

Additionally, informal trails located on private lands often raise concerns from private landowners regarding liability. While this concern is not only specific to Innisfil, it is recognized that there are several undocumented trails that meander through rural and agricultural properties throughout Innisfil. It is anticipated that all trails and cycling routes recommended in this Master Plan will be

established on public lands, rights-of-way, easements, or acquired using the land acquisition tools described in Section 6.2 of this Master Plan.

The Occupiers Liability Act maintains that a person who enters the premises of lands for recreational activity shall be deemed to have willingly assumed all risks provided that no fee is paid for entry or activity and the person is not being provided with living accommodations. The occupiers, defined as a person who is in physical possession of the premises or a person who has responsibility for and control over the condition of premises or the activities carried out on the premises, has no duty of care other than to not create a danger with deliberate intent of doing harm or damage to the person or person's property and to not act with reckless disregard in the presence of the person or the person's property. Given that it is unlikely that this information is known to landowners or trail users, it is recommended that the Town educate the public regarding this legislation to provide greater clarity on the roles and responsibilities of landowners around discussions on public access for trails located on privately owned lands.

As previously described, Innisfil's climatic variations poses particular challenges with respect to maintenance. The Town currently offers snow clearing along sidewalks and the trails in Innisfil Beach Park. As the Town's trail network becomes more advanced, a decision needs to be made to identify whether or not this snow clearing practice should be expanded to other areas. It is recommended that the Town erect the appropriate signage at trail heads to identify those trails that are not maintained during the winter season.

In addition to regular maintenance and the appropriate safety precautions, public education plays a pivotal role in minimizing risk and injury. Broad strategies for educating and promoting safe active transportation use are described in the following section.

Recommendations

18. Ensure that Innisfil's active transportation network is maintained in accordance with the maintenance strategies (including procedures for preventative and emergency maintenance) described in this Master Plan and other leading guidelines in order to minimize user risk and Town liability.

19. To minimize risk and liability, establish the recommended active transportation network on public lands, rights-of-ways, easements, or lands acquired using the land acquisition tools described in this Master Plan.

5.5 Education & Promotion

Promoting and educating the public on safe active transportation is essential to ensuring that pedestrians and cyclists are aware of where the active transportation network is located and how to use it safely. As previously discussed in Section 1.3 of this Master Plan, active transportation contributes to a number of community and personal benefits including:

- Improved physical health and well-being
- Utilitarian transportation
- Environmental benefits
- Economic goals

Raising awareness through public outreach also promotes outdoor physical activities, social interaction, and healthy lifestyles. There are a number of tools that the Town can utilize to encourage active transportation. Some may be as simple as the following:

- Informing users of the risks assumed when using trails and cycling routes.
- Educating users on safe trail and cycling etiquette.
- Encouraging users to remain on designated trail routes at all times.
- Reporting issues and deficiencies to the Town and do not attempt to address concerns themselves.
- Contacting 911 in case of an emergency.

There are a number of other strategies available to the Town, which can be utilized to market the Town's active transportation system to residents as well as visitors. As outdoor tourism continues to grow, effectively marketing Innisfil's active transportation network is essential to its success. Several initiatives have been tested in other communities to raise awareness about active transportation. It is recommended that the Town explore these strategies (in partnership with others, where appropriate) to encourage the use of trails and cycling routes in Innisfil.

Accessing Active Transportation in Innisfil

Today's digital age has transformed how most people receive information. This has proven to be beneficial for many municipalities in engaging residents as there are numerous options for conveying information about active transportation use, mapping, maintenance alerts, closures, photographs, and more. Some of the most popular online mediums available to Innisfil include interactive active transportation mapping routes and loops on the Town's or other community organization's (e.g., Ontario Trails, Rotary Club of Innisfil) website, mobile mapping applications, Facebook, YouTube, Twitter, Instagram, and more. The Town currently utilizes some of these options to varying degrees, with a webpage dedicated to promoting some of

the Town's parks and trails, and a Twitter account with more than 3,000 followers.

While online resources generally cater to younger generations and tech savvy residents, alternative mediums should also be made available for those who desire traditional materials such as hardcopy maps, newsletters, and brochures. Given that these materials are not readily accessible as online resources, efforts should be made to provide hardcopies at as many civic locations as possible to enhance visibility, such as at municipal buildings, libraries, and schools, in addition to distributing them to community organizations. Ensuring that mapping of the Town's active transportation network is up to date and accurate will also be essential. Partnerships with other community groups may be an option in this regard to maximize the scale of the audience.

Programming and Special Events

There are a number of programming opportunities for the Town to get involved in to promote active transportation. Organized walking or cycling groups provide residents an opportunity to participate in a leisure activity and socialize with a group of friends, family, and other participants who share a common interest in staying active. Other programs can be implemented to promote active transportation facilities in Innisfil, such as volunteer patrols, Adopt-a-Trail, clean up days, or tree plantings, in order to emphasize environmental stewardship and encourage residents to take ownership of local trails. Some of these programs may already exist in the community. As such, the Town may be involved in assisting with coordinating events or liaising with interested community organizations in potential program areas. The Innisfil District Association, for example, expressed an interest in becoming more involved with promoting active transportation opportunities in Innisfil.

Youth Engagement

Children and youth are often regarded as a vulnerable segment of the population for being inactive and engaging in sedentary activities. As a result, outreach in Innisfil's schools and libraries can be explored to encourage children and youth to get active by using trails and cycling routes. Engaging this age segment can also serve as an opportunity to assist the Town in planning future network routes to connect destinations that matter to a specific target market, and educate students on safe active transportation practices and etiquette through the Active & Safe Routes to School (A.S.R.T.S.) Initiative.

A.S.R.T.S. is a community-led initiative that promotes physical activity by using transportation choices to travel to school, rather than being driven or taking the school

bus. This initiative would be particularly beneficial to children and youth in Innisfil as there are a number of schools within walking distance of residential areas. The Simcoe County District School Board and the Simcoe Muskoka Catholic District School Board have recognized the importance of encouraging walking to school (or by other means) by providing transportation only to those who live more than 1.6 kilometres from their elementary school or 3.2 kilometres from their secondary school. The initiative encourages programs targeted at promoting safe active transportation choices to school such as School Travel Planning, International Walk to School Day/Month, and Walking School Bus. These, and similar programs, should be explored in partnership with the Simcoe Muskoka District Health Unit, which already provides a wealth of public health programs in schools across Innisfil.

Cycling Safety

While cycling infrastructure in Innisfil is currently limited, the need to provide and promote safe cycling routes is crucial to encouraging the public to choose cycling over other forms of transportation. The Ontario Highway Traffic Act identifies bicycles as a vehicle, and requires cyclists to share the road with other motorists. This presents a number of safety concerns, particularly with large transportation trucks, slow-moving farm vehicles, and County roads with higher speed limits. This Master Plan recommends and supports a number of cycling routes that utilize low-volume roads or County roads with the potential to add supporting cycling infrastructure such as paved shoulders and/or signed routes (some of these routes may already have paved shoulders). It is essential that these cycling routes are promoted to raise awareness in the Town and that cyclists, motorists, and the general public are educated in safe cycling practices, which may include, but not be limited to, encouraging cyclists to wear helmets and use hand signals, and reminding motorists to slow down and maintain an appropriate separation distance (1,000 mm / 1.0 m) when passing cyclists.

Implementing a Share the Road signage program has also proven to be an effective method of encouraging safe cycling along roads. This program has been successfully implemented in other communities across Ontario and it is recommended that the Town engage the County, Simcoe Muskoka District Health Unit, Cycling Simcoe, R.T.O.7 in initiating a similar program in Innisfil.

Recommendations

20. Explore opportunities to promote active transportation in Innisfil to raise awareness about the trails network, together with encouraging outdoor physical activity and educating the public on safe active transportation practices.

Recommendations
21. Engage potential community groups and organizations to leverage resources in delivering the education and promotion strategies contained in this Master Plan.
22. Maintain and regularly update trails and cycling mapping in GIS for use in promotion materials (e.g., trail and cycling maps) to share with community partners.

Figure 44: Cycling Pathway

6. Implementation Strategy

6.1 Phasing

Ideally, the proposed trail network would be implemented immediately. However, municipalities are constrained by available resources and must strategically plan for the construction, replacement, and maintenance of new and existing infrastructure. The provision of a well-planned trail network ensures that linkages are provided to key destinations, promoting the use of non-motorized and active forms of transportation, while recognizing those without access to a vehicle.

In order to assist the Town in the provision of an effective active transportation network, this section identifies the timing and phasing for each proposed route in this Master Plan based on short, medium, and long-term priorities. Routes that have been identified as short-term trails are those that are located in high demand areas as identified by staff and the public, as well as those within various stages of the land development process. The timing of constructing or expanding each trail is organized as follows:

- Short-term (1-5 years) – 2016 to 2021
- Medium-term (6-15 years) – 2022 to 2031
- Long-term (beyond 16 years) – 2032+

Figure 45: Summary of Active Transportation Implementation

Term	Short Term (km)	Medium Term (km)	Long Term (km)	Total (km)
Multi-Use Trail	20.0	17.1	27.9	65.0
Secondary Trail	12.1	12.6	8.8	33.5
Sidewalk	4.0	8.1	-	12.1
Paved Shoulder	7.3	28.4	32.1	67.8
Sharrow	24.0	-	5.3	29.3
Cycling Lane	8.2	1.7	-	9.9
Total (km)	**75.6**	**67.9**	**74.1**	**217.6**

A variety of factors may require the Town to adjust project costing, funding, or timing. For example, budget pressures, timing of residential development, coordination with public works or roadway projects, availability of volunteers or resources, and other factors may impact implementation of the proposed recommendations. Due to limited staff resources, it is not possible for all recommendations to be implemented immediately. The Town should reconcile the recommendations with its fiscal capacity and focus on the highest priority items.

It bears noting that the recommendations are based upon what is needed and not necessarily what is financially

achievable by the Town at the present time. The full implementation of this Plan may require the pursuit of external funding opportunities and partnerships that are more fully discussed later in this section.

Recommendations
23. Implement the recommended trail network as opportunities allow, with reference to the proposed phasing. Modifications to trail phasing may be required to recognize budget pressures, timing of residential development, coordination with public works or roadway projects, availability of volunteers or resources, and other key factors.

Figure 46: Paved Trail

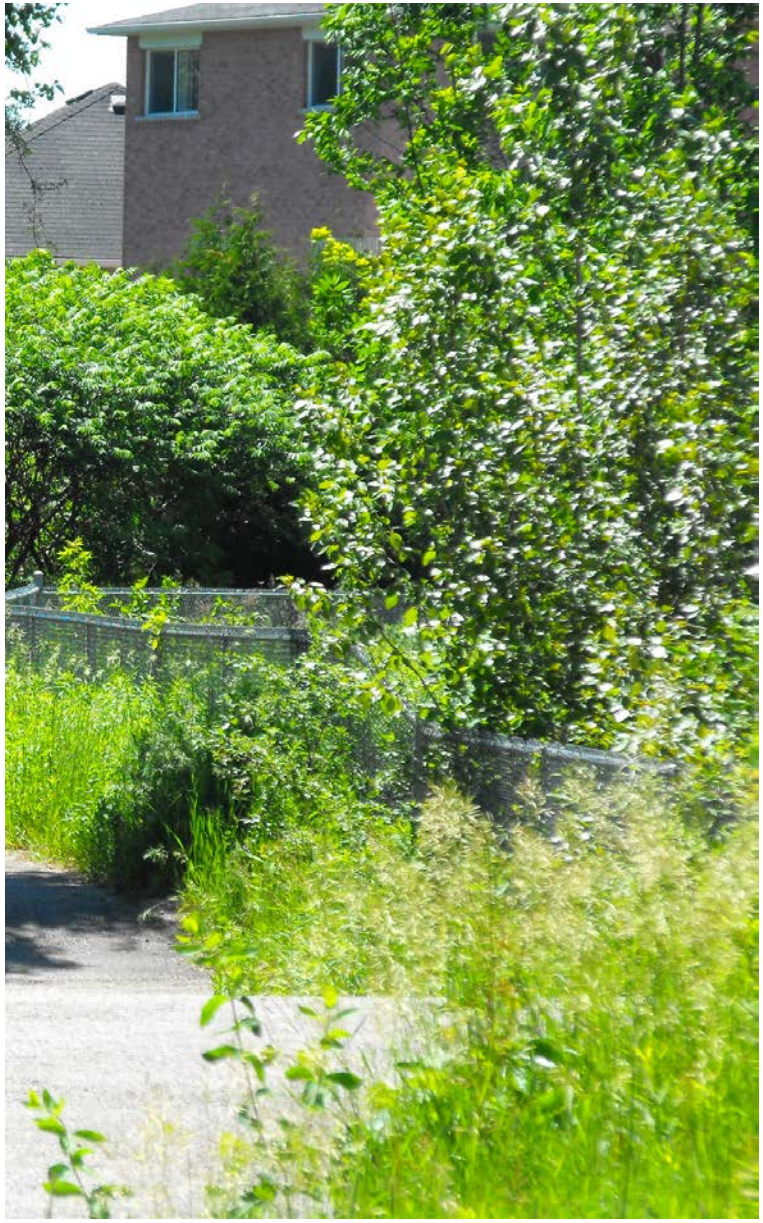


Figure 47: Recommended Phasing Plan – Town-wide

Figure 48: Recommended Phasing Plan - Alcona

Figure 49: Recommended Phasing Plan – Lefroy-Belle Ewart / Churchill

6.2 Land Acquisition Strategies

The recommended trail network contained in this Master Plan includes routes on municipal and non-municipal lands, including lands that have not yet been developed. It is in the best interest of the Town to acquire access to any lands not owned by the Town for the purposes of expanding trail opportunities in order to maximize connectivity throughout Innisfil and Simcoe County. To achieve this, there are a number of mechanisms that the Town can deploy to secure future lands, such as purchasing land or gaining access to privately-owned lands through formal agreements and easements.

It is recognized that informal trails on private properties, which have been created by trail users, exist throughout the Town. Informal strategies to acquiring lands for network development, such as verbal agreements, should be discouraged as there are a number of challenges that may arise with regard to access, pathway routing, and safety and liability. It is recommended that the Town exercise the following acquisition tools to secure future lands to expand the trail network, many of which are supported by the *Municipal Act* and the *Planning Act*. It should be noted that each tool is unique and should be applied on a situational basis.

Dedication through Plan of Subdivision

As identified by section 51 of the *Planning Act*, this strategy allows the Town to require the dedication of lands for pedestrian and bicycle pathways as a condition of draft subdivision approval and ensures protection of lands within settlement areas for the purposes of enhancing the active transportation network. This acquisition strategy will prove to be the most appropriate in developing new portions of the Town's growing settlement areas.

Easement

Securing an easement with a voluntary property owner gives the Town the right to use lands for a specified activity without purchasing the lands. This method is typically used to protect municipal service corridors or conservation or heritage lands as governed by the *Conservation Lands Act* and the *Ontario Heritage Act*. This formal agreement is registered on the title of the property and the right to access the lands remains through the length of the agreement should the ownership of the property change. This low cost strategy may ensure public access and provide flexibility in the use of the lands. There are a number of easements that exist within Innisfil that may be utilized in enhancing Innisfil's trail network.

Land Purchase

This strategy allows the Town to purchase all or a portion of land at fair market value. Although this strategy ensures protection for public access, it can be financially challenging to purchase significant amounts of privately-owned lands for the purposes of constructing a connected trail network. The land-owner must be a willing seller and an agreeable purchase price must be identified.

Land Exchange / Land Swap

The Town may make an exchange (or swap) of lands with a private land-owner for lands that may lie within the proposed trail route. While this strategy will guarantee public access, the lands proposed to be exchanged must be agreeable to both parties. Land exchanges are typically based on the appraised value, not the size of land.

Right of First Refusal

The Right of First Refusal is an agreement established by the Town and the land-owner that grants the Town an opportunity to match another party's offer to purchase a specific property. This agreement may not give the Town immediate access to the lands but provides an opportunity to purchase property at a later date and discourage competition from other potential buyers.

Donation or Bequest of Land

The Town may accept a donation of land from a land-owner, at which point the land owner receives a tax receipt at an appraised value for their charitable donation, provided the donation meets the requirements under the *Federal Income Tax Act*. This strategy is typically used for the donation of environmentally sensitive lands as a part of the Ecogifts Program, while donations outside this program are subject to capital gains. Alternatively, land-owners may choose to bequeath lands to the Town after death, which is more advantageous from a tax perspective.

Lease / License Private Lands

Similar to an easement, the Town may enter into a lease or license agreement with a land-owner to establish public access through private lands. By contrast, this form of agreement does not bind future land-owners and, as a result, public access is not guaranteed. This option should generally be discouraged.

Recommendations
24. Utilize a range of strategies to secure new lands for active transportation network development.

6.3 Capital Cost Estimates

An estimate of order of magnitude costs has been identified in order to provide the Town with a high level overview of the capital costs required for implementing the recommendations of this Master Plan. These estimates should be used to identify long-term financial planning needs and should not be considered as absolute. Detailed costs should be identified through the planning process and confirmed on a project-by-project basis. Order of magnitude estimates are based on a blend of costs contained in the I.T.M.P. and best practices found in comparable communities. Cost estimates are based on 2016 dollars and are subject to change over the life of this Master Plan. Estimates also exclude and do not consider inflation, design, administration, inspection, material testing, and labour. The estimates represented in Table 6 and Table 7 reflect the costs that are anticipated to be borne by the Town (and can be partially offset by development charges) and excludes costs to construct proposed routes along County roads. A complete breakdown of cost estimates can be found in Appendix B.

Sidewalks located within plans of subdivisions have also been excluded as it is expected that these pathways will be constructed by the developer as a condition of plan of subdivision approval. Secondary trails located in future parks and stormwater management ponds have been included in the estimates, although the party responsible for the construction of these pathways may also be subject to the subdivision approval process.

It should be recognized that these estimates reflect potential construction costs, but exclude the purchasing of amenities such as benches and waste receptacles, in addition to the costs associated with acquiring lands. Construction methods for developing the recommended active transportation network shall be at the discretion of the Town given that there are a number of variables to consider such as the surface type and thickness, subgrade material, and more. For example, the cost to construct a concrete pedestrian pathway may be greater compared to asphalt or limestone; however, it may offer a longer lifespan. Conversely, limestone may be a more affordable surface material, although it may necessitate additional maintenance (e.g., annual topdressing) to ensure that it is safe and accessible. Regardless of the material selected, consideration shall be given to the recommended Trail Development Toolkit.

As part of the Plan's implementation the Town should evaluate the maintenance implications associated with the recommended network and consider the maintenance recommendations contained in Section 5.3 of this Master Plan.

Table 6: Total Capital Cost Estimates - Recommended Active Transportation Network (Town Portion Only)

	$ / Km	Short Term 2016-2021		Medium Term 2022-2031		Long Term 2031+		Total Cost
		Length (km)	Sub-Total	Length (km)	Sub-Total	Length (km)	Sub-Total	
Multi-Use Trails	$250,000	13.2	$3,300,000	17.1	$4,275,000	9.2	$2,300,000	$9,875,000
Secondary Trails	$75,000	12.1	$907,500	12.6	$942,750	8.8	$660,000	$2,510,250
Sidewalks (within established areas)	$75,000	4.0	$297,750	8.1	$607,500	-	-	$905,250
Total		29.3	$4,505,250	37.8	$5,825,250	18.0	$2,960,000	$13,290,500
Average Per Year		4.9	$750,875	3.8	$582,525			

Estimates exclude costs for land acquisition, design, inspection, labour, administration, material testing, support amenities, and inflation. Sidewalks within future plans of subdivision are excluded. Costs for routes along County Roads are also excluded.

Table 7: Total Capital Cost Estimates - Recommended Cycling Infrastructure (Town Portion Only)

	$ / Km	Short Term 2016-2021		Medium Term 2022-2031		Long Term 2031+		Total Cost
		Length (km)	Sub-Total	Length (km)	Sub-Total	Length (km)	Sub-Total	
Paved Shoulder	$80,000	7.3	$584,000	25.4	$2,032,000	23.4	$1,872,000	$4,360,000
Sharrow	$3,500	24.0	$84,000	-	-	5.3	$18,550	$102,550
Cycling Lane	$5,000	8.2	$41,000	1.7	8,500	-	-	$49,500
Total		39.5	$709,000	25.5	$2,040,500	28.7	$1,890,550	$4,640,050
Average Per Year		6.6	$118,167	2.6	$204,050			

Estimates exclude costs for land acquisition and inflation. Estimates for paved asphalt include both sides. Estimates for Sharrow and Cycling Lanes include both sides, as well as costs for painting and supporting signage. Costs for routes along County Roads are also excluded.

The total cost for realizing the recommended active transportation network articulated in this Master Plan is nearly $18 million over the next 15 years and beyond. The cost for implementing the trails portion of the recommended active transportation network is approximately $13 million, including $4.5 million over the next six years. The medium and long term costs are both estimated to be $8.5 million. The Town should focus on the highest priority recommendations based upon its fiscal capacity.

The cost for implementing the cycling portion of the Master Plan is approximately $4.6 million. This includes $0.7 million spent over the short term, $1.9 million during the medium term, and $1.9 million beyond 2031. A large portion of this cost is dedicated to the provision of paved shoulders. The implementation of sharrows and cycling lanes represents a relatively fair reasonable investment in Innisfil that can be achieved quickly and economically given that the recommended sharrow and cycling routes do not require extensive reconstruction.

It is recognized that the Town has allocated $20,000 per year towards trail development, largely through development charges. Additional municipal investment will be required and/or this funding should be augmented with grants available to support the enhancement of trails, cycling, and general physical activity, in addition to potential partnerships. It is further recommended that the Town increase the parks maintenance budget over time in line with active transportation network development projects to ensure that new and existing routes can be adequately maintained.

Recommendations

25. Evaluate opportunities to increase the Town's parks and trails maintenance budget over time (in line with active transportation network development projects) to ensure that new and existing routes can be adequately maintained.

26. Full implementation of this Master Plan will require additional investment in trail development. The Town should allocated additional municipal funding to support trail development, augmented by other funding sources.

6.4 Funding Options

The availability of sustainable funding will be a critical factor in the implementation of Innisfil's trail network. Fortunately, there are a number of funding opportunities available at all levels of government and within the community to offset taxpayer costs. With approximately 217 kilometres of routes proposed to be added to the

existing active transportation network, it is recommended that the Town seek potential funding from a variety of sources. The funding programs listed in this section are not an exhaustive list; it is essential that the Town regularly explore new funding sources and grant programs as opportunities emerge throughout the life of this Master Plan.

Federal

Federal / Provincial Gas Tax Fund

The Gas Tax Fund is collected based on fuel sales and distributed to every municipality in Canada for infrastructure projects that contribute clean air, water, and greenhouse gas emissions.

Green Municipal Fund

The Green Municipal Fund is a program initiated by the Federation of Ontario Municipalities to support municipally-led initiatives that focus on enhancing air, water, and soil, and mitigating the impacts of climate change.

Provincial

Ontario Municipal Cycling Infrastructure Program

The Ontario Municipal Cycling Infrastructure Program (a part of the #CycleON Action Plan) is one of the Province's newest grant programs. This program dedicates $10 million towards expanding local cycling routes, connecting provincial cycling routes, and supporting emerging programs targeted at improving cycling infrastructure. Application submission for this program has now ended.

Ontario Trillium Foundation

The Ontario Trillium Foundation funds a variety of groups and initiatives that work to enhance the quality of life of residents across Ontario. This program provides funding to support a broad range of programs and causes that focus on promoting physical activity, building inclusive communities, environmental sustainability, arts and culture, economic well-being, and developing youth and children.

Municipal / Local

Development Charges

Many communities accept development charges for the development of trails. The Town anticipates annual development charge revenues of $20,000 (including the 10% municipal co-payment) for trail development.

Trails & Sidewalks in New Development

Policy recommendations to the Official Plan described in this Master Plan will provide opportunities for the Town to require the dedication of lands for the purposes of pedestrian and bicycle pathways as a condition for plan of subdivision approval, thereby minimizing land acquisition

costs to the Town. However, the operational costs for any portion of the trail or sidewalk assumed thereafter are the responsibility of the Town.

Donations & Contributions

Monetary or other resource donations and contributions from businesses and private groups, service clubs and community groups, and residents can enhance community ties and should be encouraged to promote a sense of ownership and pride.

Other Funding Programs

There are a number of funding programs that the Town can explore as there are several organizations dedicated to bolstering active transportation opportunities in Simcoe County. For example, the County is currently running a Trails Connecting Communities program, which assists local municipalities with funding trail projects through a 50/50 matching structure of up to $30,000. Additionally, R.T.O.7 provides a similar program with matching funds towards to implementation of trail signage.

Recommendations
27. The Town shall pursue external sources and cost-sharing opportunities to supplement municipal funding for the development of the Innisfil's active transportation network.

6.5 Active Transportation Committee & Partnerships

Effective implementation of this Master Plan is required to ensure that this document remains relevant to Innisfil's evolving needs. This may prove to be a challenging task due to resource constraints and more pressing community priorities that may hinder implementation progress.

Best practices in other communities suggest that the formation of an advisory committee has proven to be successful in advancing active transportation projects, coordinating development projects, seeking funding, and fundraising. It is recommended that a not-for-profit Active Transportation Committee be formed, which would be responsible for overseeing the recommendations described in this Master Plan. These Committees generally consists of interested community volunteers, with a minimum of one Town Council member.

Not-for-profit Active Transportation Committees offer a number of benefits compared to Town-led initiatives. In addition to being able to champion active transportation projects more efficiently, Committees have the ability to apply for additional external funding sources, receive donations, fundraise, and operate independently from the Town. As these groups are made up of dedicated volunteers with a shared interest in enhancing the active

transportation network, they are generally inexpensive to operate. The Town is encouraged to provide assistance in coordinating the assembly of the Active Transportation Committee and provide initial guidance (including the preparation of a Terms of Reference), as necessary. A municipal staff member should also be assigned to work with the Committee and other Town departments on capital projects, grant applications, and education and awareness initiatives.

Pursuing partnership opportunities with local service clubs, community groups, government bodies, agencies, and private businesses also provides an opportunity to leverage resources, celebrate active transportation, and encourage physical activity in Innisfil. A number of active community partners have been described throughout this Master Plan and it is recommended that the Active Transportation Committee and the Town build upon these relationships and explore future projects to strengthen the Town's active transportation network.

The Town should exercise caution when entering into partnerships with community groups as not all organizations possess similar visions and desires regarding specific projects, roles, and responsibilities, depending on the abilities and resources of those involved. As a result, it may be necessary to establish mutually agreed upon terms through a formal partnership agreement.

Recommendations

28. Work with community partners to establish an Active Transportation Committee to assist in implementing the Master Plan and to provide guidance on future trail and cycling projects.

29. Develop a policy for community funding and management contributions to active transportation projects that are aligned with the Master Plan.

6.6 Monitoring & Updating the Master Plan

It is recommended that this Master Plan be adopted in principle to serve as a guide to the Town and the community. Implementation will occur on a project-specific basis, dependent on opportunity, funding, partners, and related factors. To ensure that this Master Plan is implemented in a timely fashion, an annual review should be undertaken to confirm that its recommendations are reflective of Town goals and objectives for establishing active transportation opportunities in Innisfil. This may include evaluating and revising recommended routes and priorities based on new information, capital projects, development applications, funding and other resources, and other linkage

opportunities. The following tasks should be considered when monitoring and updating this Master Plan:

- Prepare an annual staff report to Council on the status of the implementation strategy, including completed trail routes, partnerships, newly acquired lands, funding opportunities, as well as a strategy to advance the Master Plan for the upcoming year.
- Undertake an update to the Trails Master Plan in five to ten years. This process should include a community engagement process to solicit input from the public, municipal staff, council, and stakeholders.

Recommendations

30. Adopt this Trails Master Plan in principle to serve as a guide to the Town and the community. Implementation will occur on a project specific basis, dependent on opportunity, funding, partners, and related factors.

31. Working with the proposed Active Transportation Committee, prepare an annual staff report to Council on the status of the implementation strategy, including completed trail and cycling routes, partnerships, newly acquired lands, funding opportunities, and a strategy to advance the Master Plan for the upcoming year.

Recommendations

32. Undertake an update to the Trails Master Plan in five to ten years. This process should include a community engagement process to solicit input from the public, municipal staff, Council, and stakeholders.

6.7 Implementation Schedule

This Plan provides guidance on community priorities and sets a general course for meeting the needs as they are presently defined. Throughout the body of this Master Plan, recommendations have been identified at the end of each subsection or topic area. This is not intended to be a definitive list, as additional capital items, operating expenditures, and other initiatives outside the scope of this Plan may arise and keep the Town from implementing every recommendation or undertaking projects in the timing indicated. **It is expected that the Town will make decisions on individual projects and funding sources annually through the capital budget process.**

Implementation Considerations

This implementation strategy provides guidance for ensuring that the most critical recommendations are dealt with in a timely fashion, while the less critical (yet important) recommendations are implemented over time. The timing of the projects proposed in this Master Plan recognizes the need for phased implementation as some

recommendations are based upon what is needed and not necessarily what may be financially achievable at the present time. As part of the annual budget process, this Master Plan will be reviewed to identify areas where the availability of resources may affect the timing of implementation.

Determining priorities is an exercise that should be revisited each year prior to the Town's budget development exercise. Readjusting resource allocations is critical in a climate where base funding is not increasing substantially and resources need to be maximized in order to garner the greatest gain to the community.

In addition to funding availability, factors that might change priorities year to year may include:

- Capital lifecycle and considerations of safety;
- Legislation and mandated requirements;
- Development applications;
- Changes to service standards;
- Public input and community interests;
- Coordination with other capital projects (e.g., road reconstruction);
- Partnership and grant applications; etc.

The Town has limited resources and cannot afford to do everything that the community desires; thus meeting the widest range of needs possible through the efficient use of resources is paramount. Although the Town may be challenged in providing the appropriate financial resources to meet the Master Plan's recommendations, the Town has an obligation to make every reasonable effort to implement these strategies through a variety of appropriate and acceptable means. The full implementation of this Master Plan will require the pursuit of development charges, grants, alternate funding, and the establishment of various partnerships and collaborations with the development community, community organizations, agencies, and other partners.

Summary of Recommendations

The following table contains the recommendations numbered according to the order in which they are presented in the body of this Master Plan. They are not listed in priority order.

Recommendation
Guiding Principles
1. Consider the vision and guiding principles contained in this Master Plan in the development of Innisfil's active transportation network and in the planning of new pedestrian and cycling opportunities.
Recommended Trail Hierarchy
2. Have regard for the recommended Trail Hierarchy in the planning, design, and development of Innisfil's active transportation network.
Recommended Trail Network
3. Support the phased implementation of the recommended trail network identified in this Master Plan. Modifications from the recommended network may be permitted provided that the general principles and intent are maintained. The Town may augment the recommended trail network with new opportunities as they arise in order to enhance connectivity and active transportation choices (e.g. trails within new subdivisions, connections to the future GO Station, etc.).
4. Ensure that paved shoulders along designated routes (as revised from time to time) are implemented when reconstructing Town roads. Coordination with Simcoe County will be required regarding paved shoulders along County roads. Paved shoulders and sharrows will be supported by cycling / share the road signage.
5. Coordinate with Simcoe County, transportation authorities, the public, and relevant groups in the location, design, and development of safe pedestrian crossings at key locations.
Trail Development Toolkit
6. Utilize the Trail Development Toolkit in the planning, design, and development of new and existing trails and cycling routes in Innisfil, in consultation with the public, including persons with disabilities and the Town's Accessibility Advisory Committee. The standards and guidelines contained in this Toolkit should be read in conjunction with other Provincial, County, and Town construction documents.

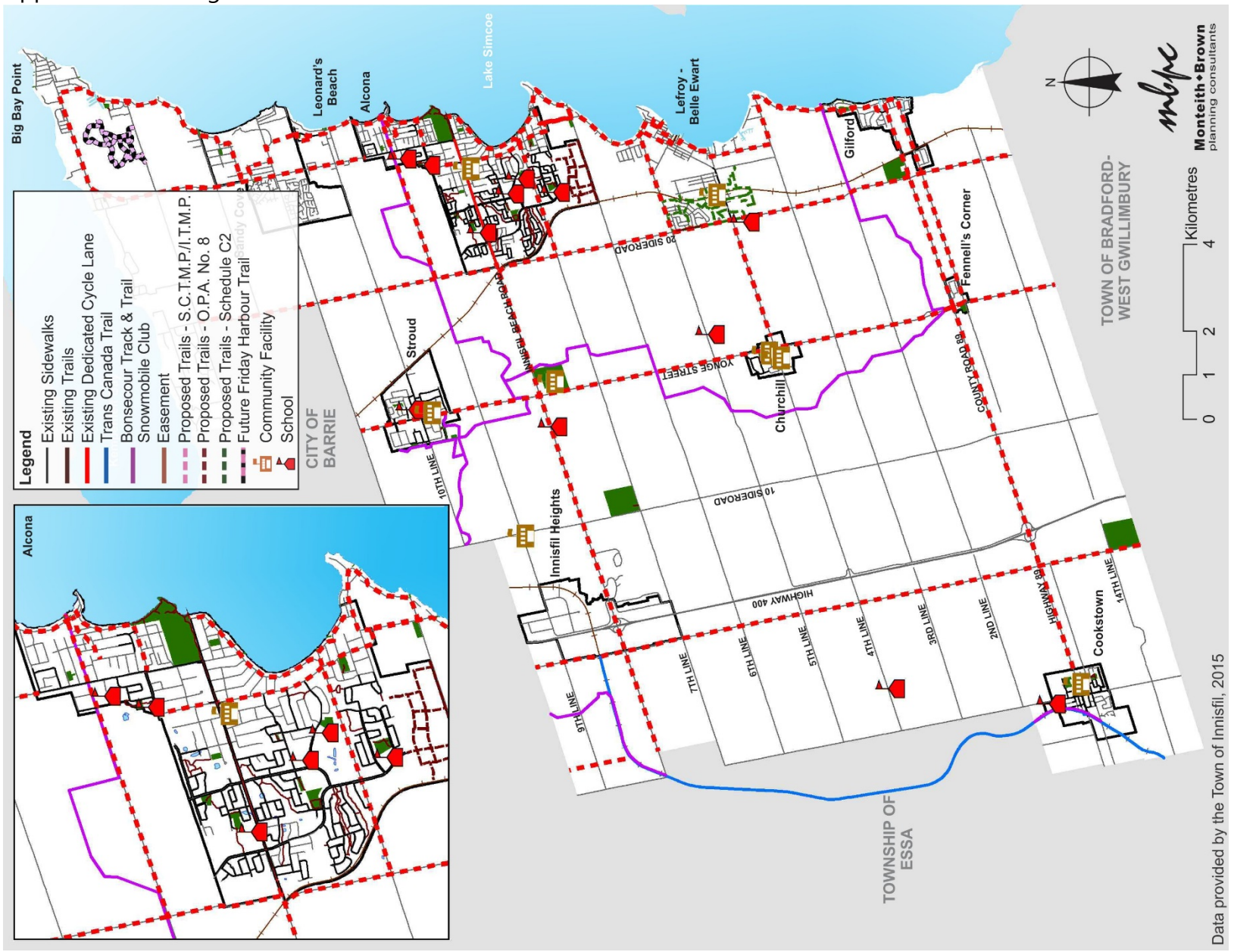
Recommendation
Policy Development
7. Ensure that the Official Plan has regard for this Trails Master Plan, particularly in regard to the recommended active transportation network, vision and guiding principles, Trail Hierarchy, and Trail Development Toolkit in the planning of future pedestrian and cycling routes.
8. Establish policies requiring the dedication of land for pedestrian and bicycling facilities as a condition of plan of subdivision approval, with consideration given to the recommended active transportation network contained in the Trails Master Plan.
9. Integrate the recommended active transportation network as a part of an Official Plan schedule to serve as an awareness tool for Town staff, developers, planners, and interested members of the public.
10. Explore opportunities to bolster sidewalk policies with consideration given to sidewalk requirements in cul-de-sacs, sidewalks in existing areas to fill gap areas, walkway connections between buildings and the public sidewalk, and more.
11. Create Official Plan policies that strengthen support for active transportation, trail and cycling infrastructure development, and supporting amenities such as bicycle racks and shelters, showers and change rooms, and signage.
12. Pursue opportunities to connect pedestrians and fragmented sidewalks in existing built up, urban areas for the purposes of advancing the Town's trail network. Particular focus should be placed on local roads with no sidewalks, but that are commonly traveled by pedestrians or connect to existing linkages and key destinations such as parks, schools, community facilities, and commercial areas.
14. During a review of the Innisfil Engineering Design Standards and Specifications Manual, consider updates such as adopting a complete streets approach in the design of all new and redeveloping roads in order to enhance opportunities for pedestrian, cyclists, and motorists.
Management & Maintenance
14. Consider winter maintenance along select future multi-use trails to provide opportunities for outdoor physical activity during the winter. A higher priority should be placed on snow clearing along sidewalks that connect pedestrians to key connections, particularly schools.

Recommendation
15. Prepare a Trail Maintenance Policy to establish a framework for maintaining Innisfil's trail network. This policy should consider tasks required to manage trail routes and the frequency of documented inspections, which may be based on factors such as the type of trail and the volume of use it receives.
16. Develop a Trail Inspection Form to guide the inspection of trails in Innisfil. This document, together with the Trail Maintenance Policy, should be integrated within the Town's Parks Operations Maintenance Manual.
17. Monitor the quality and condition of Innisfil's trail network and identify improvements, as necessary, with regard for the Trail Development Toolkit and Guiding Principles outlined in this Master Plan.
Minimizing Risk & Liability
18. Ensure that Innisfil's active transportation network is maintained in accordance with the maintenance strategies (including procedures for preventative and emergency maintenance) described in this Master Plan and other leading guidelines in order to minimize user risk and Town liability.
19. To minimize risk and liability, establish the recommended active transportation network on public lands, rights-of-ways, easements, or lands acquired using the land acquisition tools described in this Master Plan.
Education & Promotion
20. Explore opportunities to promote active transportation in Innisfil to raise awareness about the trails network, together with encouraging outdoor physical activity and educating the public on safe active transportation practices.
21. Engage potential community groups and organizations to leverage resources in delivering the education and promotion strategies contained in this Master Plan.
22. Maintain and regularly update trails and cycling mapping in GIS for use in promotion materials (e.g., trail and cycling maps) to share with community partners.
Trail Phasing
23. Implement the recommended trail network as opportunities allow, with reference to the proposed phasing. Modifications to trail phasing may be required to recognize budget pressures, timing of residential development, coordination with public works or roadway projects, availability of volunteers or resources, and other key factors.

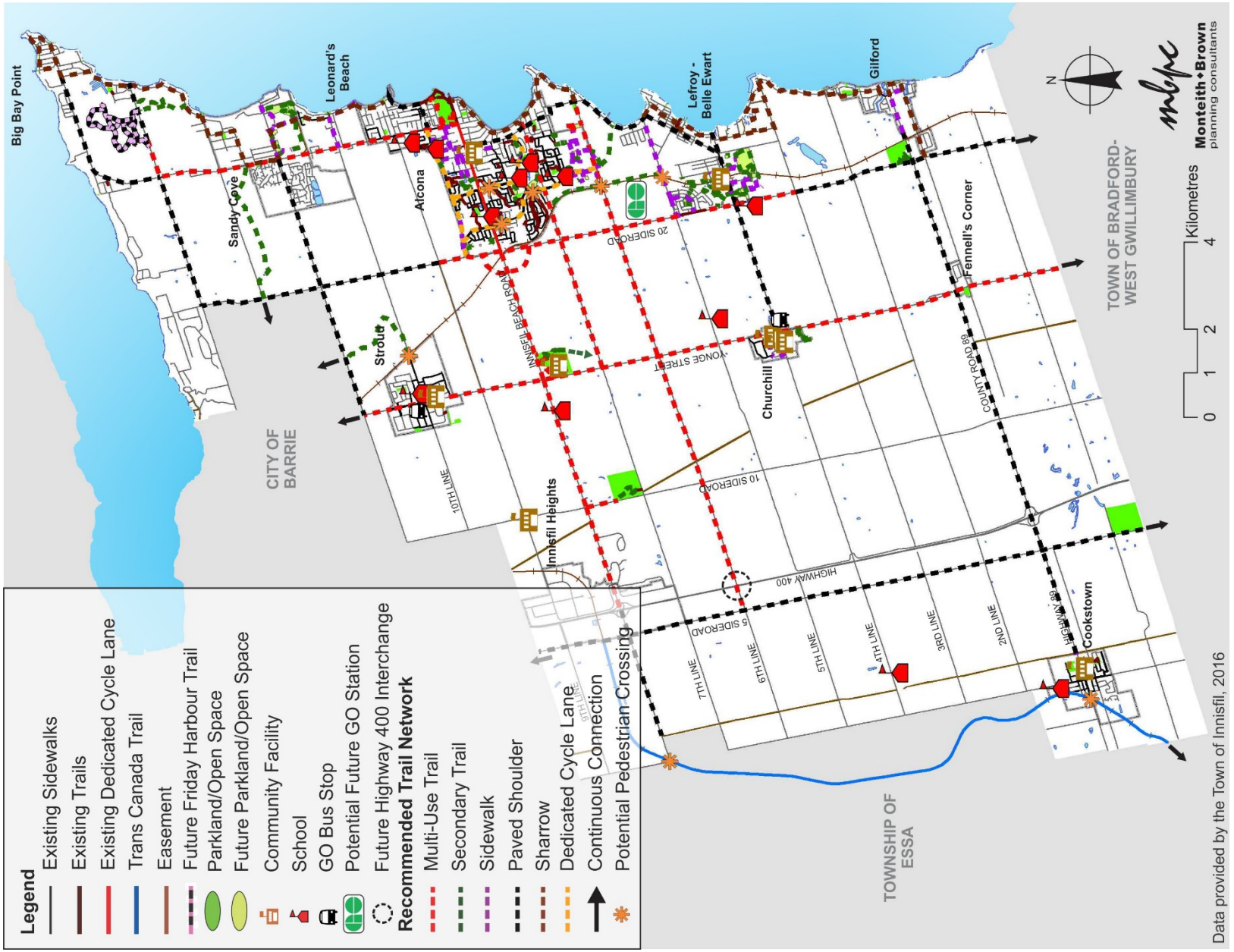
Recommendation
Land Acquisition Strategies
24. Utilize a range of strategies to secure new lands for active transportation network development.
Capital cost Estimates
25. Evaluate opportunities to increase the Town's parks and trails maintenance budget over time (in line with active transportation network development projects) to ensure that new and existing routes can be adequately maintained.
26. Full implementation of this Master Plan will require additional investment in trail development. The Town should allocated additional municipal funding to support trail development, augmented by other funding sources.
Funding Options
27. The Town shall pursue external sources and cost-sharing opportunities to supplement municipal funding for the development of the Innisfil's active transportation network.
Active Transportation Committee & Partnerships
28. Work with community partners to establish an Active Transportation Committee to assist in implementing the Master Plan and to provide guidance on future trail and cycling projects.
29. Develop a policy for community funding and management contributions to active transportation projects that are aligned with the Master Plan.
Monitoring & Updating the Master Plan
30. Adopt this Trails Master Plan in principle to serve as a guide to the Town and the community. Implementation will occur on a project specific basis, dependent on opportunity, funding, partners, and related factors.
31. Working with the proposed Active Transportation Committee, prepare an annual staff report to Council on the status of the implementation strategy, including completed trail and cycling routes, partnerships, newly acquired lands, funding opportunities, and a strategy to advance the Master Plan for the upcoming year.
32. Undertake an update to the Trails Master Plan in five to ten years. This process should include a community engagement process to solicit input from the public, municipal staff, Council, and stakeholders.

Appendix A – Recommended Active Transportation Network Maps

Appendix A: Existing Trail Network



Appendix A: Recommended Active Transportation Network – Town-wide

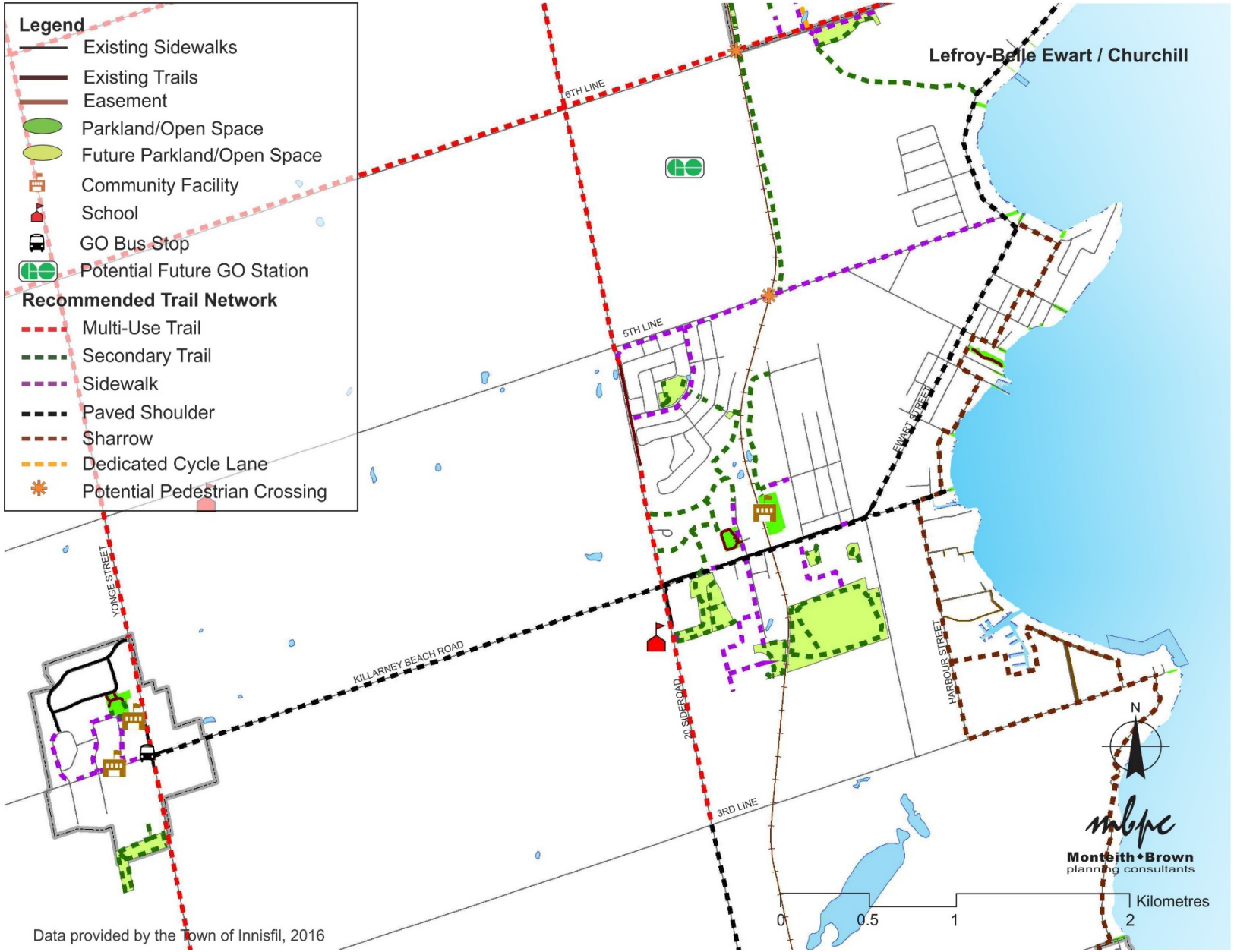


Appendix A: Recommended Phasing Plan – Town-wide

Appendix A: Recommended Active Transportation Network – Alcona

Appendix A: Recommended Phasing Plan – Alcona

Appendix A: Recommended Active Transportation Network – Lefroy-Belle Ewart / Churchill



Appendix A: Recommended Phasing Plan – Lefroy-Belle Ewart / Churchill

Appendix B – Summary of Estimated Project Cost

The following is a summary of estimated project costs incurred for implementing the recommended active transportation network. The estimated costs should be used to identify long-term financial planning needs and should not be considered as absolute. Detailed costs should be identified through the planning process and confirmed on a project-by-project basis. The estimates reflect potential order of magnitude construction costs, but exclude the purchasing of amenities such as benches and waste receptacles, in addition to the costs associated with acquiring lands.

Short-Term Projects (1-5 years) – 2016 to 2021

Multi-Use Trails

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
I.R.C. Loop	Innisfil Beach Road	-	1.9	$475,000	Town
10 Sideroad	Innisfil Beach Road	Centennial Park	0.7	$175,000	County
Innisfil Beach Road	10 Sideroad	20 Sideroad	6.1	$1,525,000	County
Alcona					
6th Line	20 Sideroad	St. John's Road	3.0	$750,000	Town
7th Line	Yonge Street	St. John's Road	6.0	1,500,000	Town
Innisfil Beach Park Trail	25 Sideroad	-	1.6	$400,000	Town
Sleeping Lion Loop	6th Line	-	0.7	$175,000	Town
		Total Length	**20.0**	**-**	
		Cost ($250,000 / km)	**$250,000**	**$5,000,000**	
		Town	**13.2**	**$3,300,000**	
		County	**6.8**	**$1,700,000**	

Secondary Trails

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
Centennial Park	-	-	0.88	$66,000	Town
Innisfil Recreation Complex	-	-	1.10	$82,500	Town
Luck Conservation Area	-	-	0.93	$69,750	Town
Alcona					
Alcona Community Park & Webster Park	Laurand Street	Future Street	0.56	$42,000	Town
Andrade Memorial Park	Lebanon Drive	Goshen Road	0.12	$9,000	Town
Anna Maria Park	Anna Maria Avenue	-	0.41	$30,750	Town
Woodlot Walkway	Maclean Street	Existing Walkway	0.37	$27,750	Town
Future Park / Open Space Trail	Webster Boulvard	Anna Maria Park	0.95	$71,250	Town

Location	From	To	Length (km)	Cost	Jurisdiction
Future Sleeping Lion Park Trail	Future Street	Future Street	0.07	$5,250	Town
Future Sleeping Lion Walkways	Future Street	Future Street	0.16	$12,000	Town
Future Stormwater Management Pond (Alcona Capital)	Future Street	Webster Boulevard	0.40	$30,000	Town
Future Stormwater Management Pond (Alcona Capital)	Future Street	Innisfil Beach Road / Taggart Court	0.36	$27,000	Town
Unnamed Stormwater Management Pond Trail	Nantyr Drive	Booth Avenue	0.23	$17,250	Town
Unnamed Trail	Jack Crescent	Warrington Way	0.27	$20,250	Town
Churchill					
Coral Woods Park	-	-	0.19	$14,250	Town
Future Stormwater Management Pond (Churchill Downs)	Broderick Way	-	1.18	$88,500	Town
Sandy Cove					
Future Park / Open Space Trail (Innis Village West)	Lillian Street	Future Street	0.86	$64,500	Town
Future Park / Open Space Trail (Innis Village West)	Future Street	Future Street	0.51	$38,250	Town
Future Park / Open Space Trail	Lockhart Road	Innis Village East Stormwater Management Pond	0.60	$45,000	Town
Future Stormwater Management Pond (Innis Village East)	Lillian Street	-	1.19	$89,250	Town
Future Stormwater Management Pond (Innis Village West)	Lockhart Road	Future Street	0.25	$18,750	Town

Location	From	To	Length (km)	Cost	Jurisdiction
Lefroy					
Future Park / Open Space	Lormel Gate Avenue	Wharram Way	0.36	$27,000	Town
Future Walkways	Lormel Gate Avenue	Bardeau Street	0.19	$14,250	Town
		Total Length	**12.1**	**-**	
		Cost ($75,000 / km)	**$75,000**	**$907,500**	
		Town	**12.1**	**$907,500**	

Sidewalks*

Location	From	To	Length (km)	Cost	Jurisdiction
Alcona					
Spring Street	Innisfil Beach Road	Lebanon Drive	0.29	$21,750	Town
Maclean Street	Proposed Secondary Trail	Anna Maria Avenue	0.04	$3,000	Town
Cookstown					
Church Street	Albert Street	Settlement Boundary	0.32	$24,000	Town
Gilford					
Neilly Road	Shore Acres Drive	Gilford Road	0.31	$23,250	Town
Shore Acres Drive	Settlement Boundary	Neilly Road	0.93	$69,750	Town
Lefroy					
Belle Aire Beach Road	Maple Road	Lormel Gate Avenue	1.93	$144,750	Town
Killarney Beach Road	20 Sideroad	Ferrier Avenue	0.13	$9,750	Town
		Total Length	**4.0**	**-**	
		Cost ($75,000 / km)	**$75,000**	**$297,750**	
		Town	**4.0**	**$297,750**	

Excludes sidewalks to be constructed by developers.

Cycle Lane Retrofit (Pavement Markings and Signage Only)

Location	From	To	Length (km)	Cost	Jurisdiction
Alcona					
Anna Maria Avenue	Jans Boulevard	St. John's Road	1.2	$5,800	Town
Jans Boulevard	Leslie Drive	Webster Boulevard	1.9	$9,450	Town
Webster Boulevard	20 Sideroad	6th Line	4.1	$20,600	Town
Leslie Street	Webster Boulevard	Jans Boulevard	1.0	$5,000	Town
		Total Length	**8.2**	**-**	
		Cost ($5,000 / km)	**$5,000**	**$41,000**	
		Town	**8.2**	**$41,000**	

Shoulder*

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
Shore Acres Drive	20 Sideroad	Gilford Boundary	0.7	$56,000	Town
Alcona / Lefroy					
Ewart Street	Belle Aire Beach Road	Killarney Beach Road	1.8	$144,000	Town
St. John's Road	Innisfil Beach Road	7th Line	1.4	$112,000	Town
St. John's Road / Maple Road	7th Line	Belle Aire Beach Road	3.4	$272,000	Town
		Total Length	**7.3**	**-**	
		Cost ($80,000 / km)	**$80,000**	**$584,000**	
		Town	**7.3**	**$584,000**	

*Reflects cost to pave both sides, assuming minimum width of 1.5 m.

Sharrow (Pavement Markings and Signage Only)

Location	From	To	Length (km)	Cost	Jurisdiction
Rural / Big Bay Point / Sandy Cove					
25 Sideroad	Pinegrove Avenue	Lockhart Road	0.8	$2,800	Town
Big Bay Point Road	West Street	30 Sideroad	2.6	$9,100	Town
Maple Drive / Cove Avenue / Pinegrove Avenue	Crescent Harbour Road	25 Sideroad	1.9	$6,650	Town

Location	From	To	Length (km)	Cost	Jurisdiction
Lockhart Road / Lillian Street / Ireton Street / Leonard Street	25 Sideroad	Rose Lane	2.8	$9,800	Town
West Street / Maple Road	Big Bay Point Road	13th Line	1.7	$5,950	Town
Alcona					
Cross Street / Cedar Grove Avenue / Cedarvale Drive / Chandos Avenue	7th Line	St. John's Road	2.5	$8,750	Town
Lakelands Avenue / Adams Road / Simcoe Boulevard	Innisfil Beach Road	7th Line	2.0	$7,000	Town
Leonard Street	Rose Lane	9th Line	0.7	$2,450	Town
Lefroy					
Claver Avenue / Frederick Street / Sheppards Trail / Wisker Avenue / Barry Avenue / Harbour street / 3rd Line	Ewart Street	3rd Line	4.9	$17,150	Town
Gilford					
Dempsey Street / Parkview Drive / Lakeshore Boulevard / Acres Street / Beach Road / Gilford Road	2nd Line	20 Sideroad	4.1	$14,350	Town
		Total Length	**24.0**	**-**	
		Cost ($3,500 / km)	**$3,500**	**$84,000**	
		Town	**24.0**	**$84,000**	

Medium-Term Projects (6-15 years) – 2022 to 2031

Multi-Use Trails

Location	From	To	Length (km)	Cost	Jurisdiction
Alcona					
25 Sideroad	Innisfil Beach Road	13th Line	7.7	$1,925,000	Town
Lefroy					
20 Sideroad	9th Line	Innisfil Beach Road	1.4	$350,000	Town
20 Sideroad	Innisfil Beach Road	5th Line	4.2	$1,050,000	Town
20 Sideroad	Existing Multi-Use Trail	3rd Line	2.1	$525,000	Town
20 Sideroad Proposed Realignment	-	-	1.7	$425,000	Town
		Total Length	**17.1**	**-**	
		Cost ($250,000 / km)	**$250,000**	**$4,275,000**	
		Town	**17.1**	**$4,275,000**	

Secondary Trails*

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
Unnamed Trail	13th Line	Crescent Harbour Road	2.14	$160,500	Town
Alcona					
Future Sleeping Lion Park Trail	Future Street	Future Street	0.10	$7,500	Town
Future Sleeping Lion Trail	6th Line	7th Line	1.31	$98,250	Town
Future Stormwater Management Pond (Sleeping Lion)	6th Line	Webster Boulevard	0.40	$30,000	Town
Leslie Drive	Adullam Avenue	Willard Avenue	0.47	$35,250	Town
Unnamed Park Loop	Jans Boulvard	Innisfil Beach Road	0.99	$74,250	Town
Lefroy					
Future Park / Open Space Trail (LSAMI P3)	Pine Avenue	Future Street	1.94	$145,500	Town

Location	From	To	Length (km)	Cost	Jurisdiction
Future Park / Open Space Trail (LSAMI P3)	Killarney Beach Road	Future Street	0.22	$16,500	Town
Future Park / Open Space Trail (LSAMI P4)	20 Sideroad / Killarney Beach Road (south)	Future Street	1.31	$98,250	Town
Future Park / Open Space Trail (LSAMI P4)	Church Drive Dead End	Future Street	0.62	$46,500	Town
Future Stormwater Management Pond (LSAMI P3)	Stewart Road	Future Street	0.15	$11,250	Town
Future Trail	Squire Street	Walter Street / Lefroy Arena	0.83	$62,250	Town
Future Trail (LSAMI P2)	20 Sideroad / Killarney Beach Road (north)	Bardeau Street / Church Street Park / Church Street Drive	2.06	$154,500	Town
		Total Length	**12.6**	**-**	
		Cost ($75,000 / km)	**$75,000**	**$942,750**	
		Town	**12.6**	**$942,750**	

*Includes trails that may be constructed by developers as a part of the subdivision agreement such as stormwater management pond loops.

Sidewalks*

Location	From	To	Length (km)	Cost	Jurisdiction
Alcona					
25 Sideroad	Lebanon Drive	Innisfil Beach Road	0.25	$18,750	Town
Goshen Road	Spring Street	Deadend	0.59	$44,250	Town
Lebanon Drive	Willard Avenue	Andrade Memorial Park	0.70	$52,500	Town
Lebanon Drive	Willard Avenue	25 Sideroad	0.52	$39,000	Town
Mildred Avenue	Leslie Drive	Lebanon Drive	0.37	$27,750	Town
Mountbatten Avenue	Westmount Avenue	Lakeshore Branch Library	0.50	$37,500	Town
Richard Street	Leslie Drive	Lebanon Drive	0.37	$27,750	Town
Spring Street	Lebanon Drive	Leslie Drive	0.33	$24,750	Town
Willard Avenue	Innisfil Beach Road	Leslie Drive	0.63	$47,250	Town

Location	From	To	Length (km)	Cost	Jurisdiction
Churchill					
4th Line	Sloan Circle	Yonge Street	0.44	$33,000	Town
Sloan Circle	4th Line	Meadowland Street	0.34	$25,500	Town
Valleyview Drive	4th Line	4th Line	0.74	$55,500	Town
Lefroy					
Walter Street	Corner Avenue	Lefroy Arena	0.14	$10,500	Town
Leonard's Beach					
10th Line	25 Sideroad	Ireton Street	0.73	$54,750	Town
Leonard Street	10th Line	Rose Lane	0.68	$51,000	Town
Killarney Beach Road	20 Sideroad	Church Drive	0.08	$5,850	Town
Killarney Beach Road	Carson Avenue	Ferrier Avenue	0.05	$4,050	Town
* Excludes sidewalks to be constructed by developers.		**Total Length**	**8.1**	**-**	
		Cost ($75,000 / km)	**$75,000**	**$607,500**	
		Town	**8.1**	**$607,500**	

Cycle Lane Retrofit (Pavement Markings and Signage Only)

Location	From	To	Length (km)	Cost	Jurisdiction
Alcona					
Leslie Street	Jans Boulvard	25 Sideroad	1.7	$8,500	Town
		Total Length	**1.7**	**-**	
		Cost ($5,000 / km)	**$5,000**	**$8,500**	
		Town	**1.7**	**$8,500**	

Shoulder*

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
13th Line	25 Sideroad	Glenhaven Beach Road	1.4	$112,000	Town
20 Sideroad	Big Bay Point Road	Innisfil Beach Road	5.5	$440,000	Town
20 Sideroad	3rd Line	Southerly Town Boundary	5.2	$416,000	Town
Big Bay Point Road	13th Line	West Street	3.8	$304,000	Town
Big Bay Point Road	20 Sideroad	25 Sideroad	3.1	$248,000	Town
Innisfil Beach Road	County Road 27 / Barrie Street	10 Sideroad	3.0	$240,000	County
Killarney Beach Road	Yonge Street	25 Sideroad	3.1	$248,000	Town
Alcona					
Roberts Road	25 Sideroad	Crystal Beach Road	0.62	$49,600	Town
Crystal Beach Road / Goodfellow Avenue	Roberts Road	9th Line	1.0	$80,000	Town
Lefroy					
Killarney Beach Road	20 Sideroad	Killarney Beach Road End	1.7	$136,000	Town
		Total Length	**28.4**	**-**	
		Cost ($80,000 / km)	**$80,000**	**$2,270,000**	
		Town	**25.4**	**$2,032,000**	
		County	**3.0**	**$240,000**	

*Reflects cost to pave both sides, assuming minimum width of 1.5 m.

Long-Term Projects (beyond 16 years) – 2032+

Multi-Use Trails

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
6th Line	5 Sideroad	20 Sideroad	9.2	$2,300,000	Town
Innisfil Beach Road	Highway 400	10 Sideroad	2.5	$625,000	County
Yonge Street	Lockhart Road	Southerly Town Border	16.2	$4,050,000	County
		Total Length	**27.9**	**-**	
		Cost ($250,000 / km)	**$250,000**	**$6,975,000**	
		Town	**9.2**	**$2,300,000**	
		County	**18.7**	**$4,675,000**	

Secondary Trails

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
Unnamed Trail	6th Line	Belle Aire Beach Road	1.42	$106,500	Town
Unnamed Trail	6th Line	Maple Road	1.00	$75,000	Town
Unnamed Trail	Lockhart Road	10th Line	2.49	$186,750	Town
Unnamed Trail	20 Sideroad	25 Sideroad	3.39	$254,250	Town
Alcona					
Future Sleeping Lion Park Trail	Webster Boulvard	-	0.25	$18,750	Town
Future Sleeping Lion Walkways	Future Street	Future Street	0.26	$19,500	Town
		Total Length	**8.8**	**-**	
		Cost ($75,000 / km)	**$75,000**	**$660,000**	
		Town	**8.8**	**$660,000**	

*Includes trails that may be constructed by developers as a part of the subdivision agreement such as stormwater management pond loops.

Shoulder *

Location	From	To	Length (km)	Cost	Jurisdiction
Rural					
5 Sideroad	Northerly Town Boundary	Southerly Town Boundary	14.1	$1,128,000	Town
Highway 89 / Shore Acres Drive	Yonge Street	20 Sideroad	3.1	$248,000	Town
Highway 89 / Shore Acres Drive	Highway 400	Yonge Street	6.2	$496,000	County
Highway 89 / Shore Acres Drive	Cookstown Boundary	Highway 400	2.5	$200,000	Provincial
Lockhart Road	Yonge Street	25 Sideroad	6.2	$496,000	Town
		Total Length	**32.1**	**-**	
		Cost ($80,000 / km)	**$80,000**	**$2,568,000**	
		Town	**23.4**	**$1,872,000**	
		County	**6.2**	**$496,000**	
		Province	**2.5**	**$200,000**	

*Reflects cost to pave both sides, assuming minimum width of 1.5 m.

Sharrow (Pavement Markings and Signage Only)

Location	From	To	Length (km)	Cost	Jurisdiction
Rural / Big Bay Point / Sandy Cove					
Glenhaven Beach Road / Crescent Harbour Road*	Mapleview Drive	Big Bay Point Road	2.0	$7,000	Private
Lefroy					
Harbour Street / 3rd Line / Lefroy Harbour Resorts	Harbour Street	3rd Line	1.6	$5,600	Private
Limerick Street / Innisfree Place	2nd Line	3rd Line	1.7	$5,950	Private
		Total Length	**5.3**	**-**	
		Cost ($3,500 / km)	**$3,500**	**$18,550**	
		Town/Private	**5.3**	**$18,550**	

*Given that these routes are located along private roads, the Town is encouraged to engage the appropriate neighbourhood associations to explore routing opportunities.