Town of Collingwood Cycling Plan

October 2019

paradigm
TRANSPORTATION SOLUTIONS LIMITED

Executive Summary

Overview

The **Town of Collingwood Cycling Plan** provides a long-term vision, strategy and implementation plan to develop, strengthen and support a cycling culture in Collingwood. The plan identifies policies, programs and facilities needed to help make cycling an attractive everyday mobility option for residents ranging from 8 to 80 years old with a wide range of abilities. Existing and potential cycling tourism opportunities in Collingwood and surrounding areas are also explored.

Collingwood already has an extensive network of over 60 kilometres of trails and bike lanes that connect residents and visitors to major destinations within the Town. Cycling only accounts for a small portion of local trips currently, suggesting opportunities exist to increase the overall percentage of residents choosing to cycle. Such improvements could include better connections, more supporting facilities and cycling infrastructure (e.g., wayfinding signs, bike parking, washrooms and drinking fountains), and improved user and motorist education.

Communities like Collingwood benefit from investing in cycling for many reasons. Foremost, creating a safe cycling network that is connected yet direct helps make people more comfortable to cycle, which leads to increased bicycle use and shifts travel away from automobiles.

The Cycling Plan was developed following a three-phase approach:

- The **Foundation Building** phase (Phase 1) set the stage for developing the Cycling Plan;
- The **Plan Formulation** phase (Phase 2) involved:
  - Analysis of the data (primarily using the GIS database);
  - Assessment of alternative network options; and
  - Policy, network and guideline development; and
- The **Strategy Confirmation** phase (Phase 3) brought together the foundational elements summarized through Phase 1 and the recommended networks, policies and strategies defined during Phase 2 into this comprehensive Cycling Plan document.

Community Engagement

The Town conducted three community engagement initiatives as part of the study:

- Workshop with the Trail Advisory Committee to obtain their feedback on cycling in the Town;
- Online survey on the Town's website to gather input from the public about cycling in Collingwood; and
- Presentation to the Accessibility Advisory Committee to explore universal access considerations.

Vision

The following Vision was developed for the Cycling Plan and cycling in Collingwood:

> **The Town of Collingwood aspires to create a safe, well-connected and convenient cycling network. Reaching all corners of the Town and connecting with surrounding municipalities, cycling aims to contribute to this community's development as a world-class destination. The network will be supported by policies and programs that promote a healthy and active lifestyle for all ages and abilities.**

The Cycling Plan highlights the benefits of creating a well-connected, sustainable community through cycling, targeting individuals that live, work and play within Collingwood. The plan also provides insights to applicable educational opportunities.

Network Development

The process to develop the future cycling network for Collingwood involved:

- Identifying a series of continuous east-west and north-south corridors through Town based on the following five route selection criteria:
  - Connected and Integrated;
  - Accessible;
  - Context Sensitive and Cost Effective;
  - Safe and Comfortable; and
  - Interesting and Enjoyable; and
- Resolving any remaining gaps and discontinuities in the network through location-specific treatments.

Aimed at promoting cycling for all ages and abilities of users, the Cycling Plan route selection process prioritized existing off-road routes over on-road facilities in instances where the option existed. While this may detract from the ease and speed of cycling for more confident users, safety and implementation considerations took precedence.

Corridors

The first step in establishing the future cycling network for Collingwood was to identify the primary east-west and north-south corridors. The Town's existing street system lends itself favourably to a grid cycling network, providing shorter, quicker and more convenient connections between origin and destination points from the cyclist's perspective.

Table ES.1 summarizes the primary east-west and north-south corridors recommended to form the future cycling network. The recommended facility types for the corridors were developed based on the:

- Established route selection criteria;
- The Bicycle Facility Selection Process outlined in Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities;
- Guidance provided in OTM Book 15 – Pedestrian Crossing Facilities and Book 12A – Bicycle Traffic Signals;
- Information contained in the Transportation Association of Canada (TAC) *Bikeway Traffic Control Guidelines for Canada* and *Geometric Design Guide for Canadian Roads;*
- Guidelines summarized in the U.S. Federal Highway Administration publication entitled *Small Town and Rural Multimodal Networks*; and;
- Information provided by the Town.

In cases where a facility not conforming to OTM Book 18 currently exists, recommendations to change the design, signs and/or pavement markings to achieve consistency with these guidelines are provided.

Gaps and Discontinuities

The corridors identified in **Table ES.1** provide the foundation for a connected and complete cycling network in Collingwood. Inevitably, gaps and discontinuities will remain, most commonly in locations with higher potential for motorist-cyclist conflicts. Resolving these connectivity issues helps enhance safety and can encourage the "interested but concerned" individual to choose cycling over other travel options.

Table ES.2 summarizes the location-specific treatments to address the most significant gaps and discontinuities remaining in the cycling network within Town and connecting to nearby communities.

Future Cycling Network

Figure ES.1 illustrates the future cycling network for the Town of Collingwood. Building on the existing grid of Town roads, the network provides a permeable and connected system of routes facilitating travel throughout the municipality. Opportunities to travel beyond the Town's boundaries are also facilitated by the network plan.

Cycling Facility Design Guidelines

Cycling facility design guidelines were developed based on current best practices and a review of the Town's infrastructure-related engineering and planning design standards and policies. The guidelines contained in the plan are not intended to be prescriptive or replace sound engineering judgement and should be used in combination with other design guidelines and documents such as OTM Book 18 and the TAC *Bikeway Traffic Control Guidelines for Canada*.

Facility Types

The two main categories of facilities recommended for the Town's cycling network are:

- **Shared Facilities:** Shared Use Lanes, Paved Shoulders and Bicycle Priority Streets
- **Separated Facilities:** Bike Lanes and Trails

Crossrides

A crossride is a part of the roadway intended as a crossing for pedestrians and cyclists where cyclists are permitted to ride within the crossing. Crossrides should be used in Collingwood to facilitate bike crossings of roadways in locations meeting the criteria specified in OTM Book 18.

Roundabouts

There are several roundabout intersections in the Town of Collingwood that cyclists may need to traverse in travelling through the community. OTM Book 18 and the TAC *Canadian Roundabout Design Guide* provide guidance on how to safely and efficiently integrate bicycle facilities into roundabouts.

OTM Book 15 provides guidance on pedestrian crossing control at roundabouts. Cyclists uncomfortable riding through a roundabout can walk their bicycles across the intersection with the presence of pedestrian-oriented traffic control devices, which include Level 2 Types B and C Pedestrian Crossovers. These devices are distinctly defined by the prescribed use of regulatory and warning signs (side mounted and/or overhead mounted crossover signs), rapid rectangular flashing beacons, and ladder and “shark’s tooth” pavement markings.

Signing and Pavement Markings

It is important that each facility be signed and marked appropriately, consistent with recommended practices in OTM Book 18, the Transportation Association of Canada (TAC) *Bikeway Traffic Control Guidelines for Canada* and other accepted guidelines. Effective delineation should be provided to clarify the proper use of each facility and minimize potential confusion between motorists and cyclists.

End-of-Trip Amenities

Attractive, safe and conveniently located end-of-trip amenities are essential to a successful cycling system. For some users, the availability, accessibility and security of facilities and services such as bicycle parking and change rooms can be the determining factor in deciding whether to cycle to work, school, shopping and other destinations.

Safe, secure and accessible bicycle parking is the most essential end-of-trip amenity. Potential riders can be deterred from cycling simply because there is nowhere to leave their bicycle upon arrival at their destination. A minimum number of short and long duration bicycle parking spaces should be provided consistent with the proposed supply rates and design guidelines provided in the plan.

Other proposed end-of-trip amenities include:

- Change rooms and lockers;
- Showers and washrooms;
- Courtesy items such as hairdryers, irons and ironing boards, washing machines and dryers, towel service, clothing hooks, fans and electrical outlets;
- Repair equipment and supplies such as pumps, plyers, oil and puncture repair kit; and
- Delivery service.

In many cases, end-of-trip amenities can be implemented/secured through development applications if provisions are included in the Town's Zoning By-law and guideline documents.

Implementation

The phased implementation strategy presented in the plan includes both infrastructure and outreach initiatives. The strategy is intended to be integrated with and build on existing and planned initiatives already underway by the Town, Simcoe County and other interested parties. Specific implementation timing and details will evolve through the environmental assessment, planning and capital budget processes.

Recommended Phasing Plan

The proposed implementation plan separates the future cycling network improvements into short-term (0 – 5 years) and long-term (beyond 5 years) horizons. Implementation of the cycling routes was prioritized using the following criteria:

- **Link to Capital Projects** by scheduling network improvements concurrently with planned roadway projects;
- **Close Gaps** in the network, especially ones that create a safety risk or that cause uncomfortable actions for cyclists. Gaps that when completed resulted in continuous routes and/or important links were also a focus;
- **Reallocate Space**, where possible, to develop bike lanes through lane reallocation and repainting of pavement markings;
- **Establish a Network** by completing continuous north-south and east-west connections;
- **Respond to Demand** by focussing on areas with higher existing or projected cyclist volumes (e.g., routes that lead to/from major pedestrian generators such as schools, parks, retail establishments or employment districts); and
- **Achieve Quick Wins** by implementing short duration, cost-effective measures first (e.g., signs or pavement markings).

Table ES.1 (corridors) and **Table ES.2** (gaps and discontinuities) summarize the recommended phasing plan.

Roles and Responsibilities

An efficient and structured decision-making process is vital to the effective implementation of the Cycling Plan. Involving all relevant participants, defining responsibilities and removing obstacles to the flow of information will ensure continued improvement of the cycling network and its complementary facilities in Collingwood. A formal reporting structure to effectively facilitate implementation of the Cycling Plan is provided.

Implementation Process

Implementation of the Cycling Plan will be accomplished through a series of short- and long-term actions aimed at creating a safe, well-connected and convenient cycling network. The four-step process for implementing the recommended cycling facilities is structured to:

- Identify the network implementation opportunity;
- Confirm the feasibility of the route and facility type at the time implementation is proposed and revise the concept if necessary;
- Design the facility and supporting features based on the guidelines recommended in the plan and construct or install the facility per the design;
- Maintain the facility, monitor its use and operation and refine the design if needed.

The identification and development of required end-of-trip amenities is an important element of the implementation process.

Maintenance

Cycling facilities need to be properly maintained after implementation to remain safe, effective and in a state of good repair. This helps to improve rideability, alleviate potential safety hazards, maximize utility, minimize lifecycle costs, reduce risk, limit exposure to liability and enhance the cycling experience.

A regular, ongoing cycling network maintenance program is recommended consistent with recommended practice and applicable legislation. Summer and winter maintenance requirements for cycling infrastructure are largely defined in O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways (as amended), a regulation under the *Municipal Act, 2001*.

Additional ongoing funding will be needed to support growing maintenance activities resulting from expansion of the cycling network. Priority should be given to maintenance on the main north-south and east-west corridors identified in the recommended network.

Risk Management

The Town can minimize its exposure to liability by properly designing, constructing and maintaining the cycling facilities implemented by the municipality. While it is not possible to completely avoid risk, since on-road facilities can have similar liability exposure as roadways, steps can be taken to safeguard the Town. Accepted methods to proactively manage risk and limit liability related to cycling facilities should be employed.

Community Outreach

Implementing the recommended infrastructure improvements will not alone achieve a successful and safe cycling environment in Collingwood. The network plan must be accompanied by a complementary and comprehensive outreach strategy aimed at promoting bike use and fostering community support for cycling initiatives.

A successful cycling network is actively and properly used by a range of people of all ages and abilities. A Cycling Outreach Strategy is needed to define the broad audiences and recommend tactics to engage the community through:

- **Education:** Ongoing education will be a critical element, helping new cyclists gain confidence and providing motorists a better understanding of how to interact with cyclists on the road. Education on proper use of cycling facilities for all roadway users should be

included in the program. Wayfinding signs and mapping will also be important elements to help build community awareness of cycling.

- **Encouragement:** Encouragement efforts can help to shift attitudes of cyclists, motorists and the public to produce a safer and more sustainable community for all. The focus should be creating a culture that celebrates cycling, inspiring and motivating people of all ages to cycle more through tools such as Community-Based Social Marketing (CBSM) and outreach to specific groups.
- **Enforcement:** Regular enforcement helps to encourage and promote safe cycling. Local enforcement officers (bylaw and police) play an important role, not only ensuring compliance with applicable regulations and bylaws, but also serving as role models and ambassadors for safe cycling.

Financial Implications

Investing in cycling infrastructure for the Town of Collingwood has the potential to improve the health and quality of life of area residents, draw more tourism to the Town, allow the Town to be more sustainable and decrease overall road improvement costs.

Table ES.3 outlines the estimated costs to implement the Cycling Plan based on indicative benchmark unit costs obtained from other recently completed cycling plans in Ontario. The total investment to implement the plan recommendations will be approximately:

- $0.803 M in the short-term (0 to 5 years)
- $9.562 M in the long-term (beyond 5 years)

Timely implementation will require an increase in funding over current levels and rely on a broad range of financing sources, including:

- Development Charges;
- Developer funding;
- Capital projects;
- Additional municipal funding specifically for cycling infrastructure; and
- Provincial/Federal programs.

Proposed phasing and funding of the Cycling Plan should be reviewed on an annual basis, revisiting potential funding sources and opportunities to implement the network, including partnerships with agencies and other groups.

Monitoring

Ongoing monitoring of cycling use and characteristics will enable the Town to evaluate the effectiveness and overall contribution of the implemented facilities in achieving desired changes in travel behaviour. The monitoring program should examine user preference for facilities, levels of use and other key factors over an extended timeframe to avoid immediate response bias (which occurs right after a new improvement is implemented). Data should be collected every two to three years (maximum every five years) and at the same time/season during each cycle. Specific performance measures and targets should be set to provide direction for implementation and to measure the success of the Cycling Plan in achieving the Vision.

Regular public and stakeholder consultation should also be carried out to help collect information about community satisfaction and potential barriers and motivators to increased bicycle use. Other key factors to continuously improve and grow the network such as facility preference and network gaps can also be identified from these consultations.

N

Town of Collingwood Cycling Plan

Figure ES.1
Future Cycling Network

Legend

- Crossride
- Dog Park
- Hospital
- Municipal Building
- Police
- Recreation
- Theatre
- Parking Area
- Playground
- Washroom
- Schools
- Place of Worship
- Parks

Separated (Off-Road) Facilities

- UnpavedTrail
- Paved Trail
- Multi-Use Sidewalk
- Proposed Paved Trail
- Proposed Multi-Use Sidewalk
- Proposed Multi-Use Trail (In Boulevard)

Shared (On-Road) Facilities

- Signed Bike Lane
- Proposed Shared On-Street Bike Route
- Proposed Bike Lanes (New/Upgraded)

September 2019

Data provided by the Town of Collingwood

Georgian Bay

Collingwood Harbour

THE BLUE MOUNTAINS

CLEARVIEW

WASAGA BEACH

0 1.25 2.5 Kilometers

TABLE ES.1: RECOMMENDED CORRIDOR IMPROVEMENTS AND IMPLEMENTATION PHASING

Corridor	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
East-West Corridors			
Harbourview Trail/ East Circle Route	Widen or separate cyclists and pedestrians on Harbourview Trail portion		●
	Pave (with asphalt) loose top sections		●
	Improve signs and pavement markings at trail crossings	●	
Third Street/ Ontario Street	Install bike lane signs and pavement markings	●	
	Install share-the-road signs and pavement markings (sharrows) on Third Street as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution		●
Sixth Street (Simcoe County Road 32 part)/ Hume Street	Pave any loose top sections of multi-use trail on Simcoe County Road 32	●	
	Install multi-use trail on north side of Sixth Street (Simcoe County Road 32) from High Street to Grey County Road 19		●
	Install bike lane signs and pavement markings on Sixth Street from High Street to Hurontario Street		●
Cameron Street/ Collins Street	Explore protected cycling facility in the longer term		●
	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
Campbell Street/ Lockhart Road	Designate and redesign for Bicycle Priority Street		●
	Install share-the-road (sharrows) signs and pavement markings as an **interim** measure	●	
Findlay Drive/ Clark Street (north-south)	Designate and redesign for Bicycle Priority Street		●
	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
Poplar Sideroad (Simcoe County Road 32)/ Hamilton Drain Trail	Complete trail on north side of road from Clark Street to Saunders Street		●
	Pave any loose top sections		●
	County to undertake capital road improvements on Simcoe County Road 32 to add bike lanes and widen bridge over Pretty River as the **ultimate** solution		●

TABLE ES.1: RECOMMENDED CORRIDOR IMPROVEMENTS AND IMPLEMENTATION PHASING

Corridor	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
North-South Corridors			
Balsam Street/ High Street	Complete missing sections with a multi-use trail (shared between pedestrians and cyclists)	●	
Walnut Street/ Cedar Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution		●
Maple Street/ Pine Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution		●
Ste. Marie Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Install bike jug handle (lay-by) to aid eastbound cyclists turning left from Hume Street to Ste. Marie Street	●	
	Consider installing buffered bike lanes in the future		●
Train Trail	Widen and pave loose top sections		●
	Review roadway/trail crossings and install proper signing and pavement markings	●	
Peel Street/ Lynden Street (east-west)	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution		●
Raglan Street	Pave shoulder on west side between Ron Emo Road and Poplar Sideroad		●
	Install wayfinding signs	●	
	Install bike lane signs and pavement markings from Hume Street to Poplar Sideroad		●

TABLE ES.2: RECOMMENDED GAP AND DISCONTINUITY IMPROVEMENTS AND IMPLEMENTATION PHASING

Location	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
Sixth Street and Hume Street Connection	Install share-the-road signs and pavement markings (sharrows) and wayfinding signs on Hamilton Street as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes along Hamilton Street as the **ultimate** solution		●
	Widen and pave trail through Central Park starting at Hamilton Street and intersecting with the Train Trail	●	
	Construct crossing treatments at the intersection of Hamilton Street/Central Park parking lot and Paterson Street	●	
Train Trail and Harbourview Trail Connection	Install signs along the route for wayfinding and to indicate shared facility on Heritage Drive and advise pedestrians and cyclists which sidewalk to use on Side Launch Way	●	
	Provide crossing treatments and signs along Side Launch Way at N. Pine Street	●	
East Connection to Wasaga Beach	Install wayfinding signs from Hume Street bike lanes to sidewalk on north side of Hume Street at Highway 26	●	
	Improve wayfinding signs and sharrows on Huronia Pathway and Georgian Manor Drive	●	
	Install signs and pavement markings (compliant with OTM Book 18) on Beachwood Road to demarcate bike lanes	●	
	Install multi-use sidewalk on north side of Highway 26 from Marine View Drive to Beachwood Drive		●
Northwest Connection to Blue Mountains	Provide on or off-road connection from the east end of Vacation Inn Trail (west of Lighthouse Lane) to the west end of Cranberry Inn Trail		●
	Install share-the-road signs and pavement markings (sharrows) on Cranberry Inn Trail (road)		●
West Connection to Blue Mountain Village	Construct multi-use (urban) trail along south side of First Street Extension from High Street to Black Ash Trail		●
	Widen bridge over Black Ash Creek (longer term solution)		●

TABLE ES.3: ESTIMATED IMPLEMENTATION COSTS

Initiative	Estimated Cost (2019$)	
	Short (0-5)	Long (5+)
Corridor Improvements		
East-West Corridors		
Harbourview Trail/East Circle Route	$ 38,000	$ 1,250,000
Third Street/Ontario Street	$ 8,000	$ 12,000
Sixth Street (Simcoe County Road 32 part)/Hume Street	$ 8,000	$ 895,000
Cameron Street/Collins Street	$ 8,000	
Campbell Street/Lockhart Road	$ 10,000	$ 242,000
Findlay Drive/Clark Street (north-south)	$ 6,000	$ 149,000
Poplar Sideroad (Simcoe County Road 32)/ Hamilton Drain Trail		$ 297,000
North-South Corridors		
Balsam Street/High Street	$ 473,000	
Walnut Street/Cedar Street	$ 9,000	$ 1,198,000
Maple Street/Pine Street	$ 14,000	$ 1,831,000
Ste. Marie Street	$ 13,000	$ 13,000
Train Trail	$ 16,000	$ 294,000
Peel Street/Lynden Street (east-west)	$ 8,000	$ 16,000
Raglan Street	$ 4,000	$ 57,000
Gap and Discontinuity Improvements		
Sixth Street and Hume Street Connection	$ 34,000	$ 3,000
Train Trail and Harbourview Trail Connection	$ 6,000	
East Connection to Wasaga Beach	$ 23,000	$ 318,000
Northwest Connection to Blue Mountains		$ 253,000
West Connection to Blue Mountain Village		$ 2,631,000
Sub-Total – Network Improvements	**$ 669,000**	**$ 9,120,000**
Other Plan Elements		
End of Trip Facilities ($5,000 per year)[1]	$ 25,000	$ 25,000
Outreach Initiatives ($15,000 per year)[1]	$ 75,000	$ 75,000
Monitoring Program ($5,000 per year)[1]	$ 25,000	$ 25,000
Total	**$ 803,000**	**$ 9,562,000**

Note: 1. Assumes five-year program

Recommendations

The following summarizes the recommendations of the **Town of Collingwood Cycling Plan**:

1.	Section 3.4 Recommended Network	Adopt the future cycling network illustrated in Figure 3.7 **(Figure ES.1)** and as further detailed in Tables 3.2 to 3.4 **(Tables ES.1 and ES.2)**.
2.	Section 4.1 Cycling Facility Design Guidelines	Adopt the guidelines specified in Tables 4.1 and 4.2 and Figure 4.2 for the design and installation of cycling facilities.
3.	Section 4.1 Cycling Facility Design Guidelines	Introduce a Traffic Calming Policy supporting the development of traffic calming plans and identifying the types of measures acceptable for use on roads in Collingwood to enable the introduction of Bicycle Priority Streets in suitable locations.
4.	Section 4.2 Crossrides	Use crossrides to aid cyclists in crossing the road at locations meeting the criteria specified in Ontario Traffic Manual Book 18 – Cycling Facilities.
5.	Section 4.4 Signing and Pavement Markings	Apply the signing and pavement marking guidelines specified in Ontario Traffic Manual Book 18 – Cycling Facilities and the Transportation Association of Canada *Bikeway Traffic Control Guidelines for Canada* in the design and installation of cycling facilities.
6.	Section 4.5 End-of-Trip Amenities	Introduce standards into the Town's Zoning By-law (or guidelines if more appropriate) for the provision of adequate, well-designed bicycle parking.
7.	Section 4.5 End-of-Trip Amenities	Introduce guidelines (or standards through the Town's Zoning By-law if more appropriate) for the provision of specified end-of-trip amenities.
8.	Section 5.2 Recommended Phasing Plan	Adopt the phasing plan specified in Tables 5.1 and 5.2 **(Tables ES.1 and ES.2)** to guide the prioritization of cycling facility implementation.
9.	Section 5.3 Implementing the Network	Establish a formal reporting structure to effectively facilitate implementation of the Cycling Plan.
10.	Section 5.4 Maintenance	(Continue to) engage in a regular, ongoing maintenance program for the cycling network consistent with the requirements of O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways (as amended) unless specifically defined otherwise.

11.	Section 5.4 Maintenance	Provide additional ongoing funding to support growing maintenance activities resulting from expansion of the cycling network.
12.	Section 5.4 Maintenance	Prioritize maintenance on the main north-south and east-west corridors identified in the future cycling network.
13.	Section 5.5 Risk Management	(Continue to) employ accepted methods to proactively manage risk and limit liability related to cycling facilities.
14.	Section 5.6 Community Outreach	Develop a robust Cycling Outreach Strategy capable of engaging a diverse audience.
15.	Section 5.6 Community Outreach	Continue to work with Active and Safe Routes to School and the School Boards to incorporate active transportation education into the curriculum and to encourage children to cycle to and from school more often.
16.	Section 5.6 Community Outreach	Develop and implement a system of wayfinding signs and mapping to help build community awareness of cycling.
17.	Section 5.6 Community Outreach	Explore opportunities to apply Community Based Social Marketing techniques to encourage greater use of cycling.
18.	Section 5.6 Community Outreach	Request the Collingwood Cycling Club for their assistance in organizing cycling rides around the community.
19.	Section 5.6 Community Outreach	Work with the local Ontario Provincial Police detachment to appoint a bicycling liaison officer.
20.	Section 5.7 Financial Implications	Reassess the proposed phasing and funding of the recommended cycling facility improvements on an annual basis, revisiting potential funding sources and investigating other opportunities to implement the network.
21.	Section 5.7 Financial Implications	Continue to explore partnering with agencies and other groups to fund implementation of the Cycling Plan.
22.	Section 5.8 Monitoring	Implement a regular, ongoing monitoring program and set performance measures and targets to track progress.

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CHAPTER 1
Introduction

Source: Town of Collingwood Website
(www.collingwood.ca/culture-recreation-events/festivals-events/festival-canada)

1.1 Overview

The Town of Collingwood is situated along the shoreline of Nottawasaga Bay (Georgian Bay) in the northwest corner of Simcoe County. The municipality covers a total area of approximately 3,300 hectares (8,150 acres) and has a permanent population of about 21,000 people that grows to approximately 26,000 people when inhabitants of recreational properties are included.

Collingwood is located approximately midway between the Cities of Barrie and Owen Sound on Highway 26, providing access to Grey and Bruce Counties in the west, and to Toronto, via Highway 400, in the southeast. With its strategic location, friendly atmosphere and four seasons amenities and services, Collingwood functions as the major commercial centre for northwest Simcoe County and northeast Grey County. While the Town is still home to several manufacturing plants, the municipality has experienced a significant shift toward service industries given its growing popularity as a tourist and retirement destination for residents of southern Ontario. Collingwood has been identified as a growth node for the South Georgian Bay area and is expected to experience rapid residential growth over the next 10 years.

The 2015 Community Based Strategic Plan identified the development of an Active Transportation Plan as a component of building Healthy Lifestyles in Collingwood. Currently, the municipality has over 60 kilometres of recreational trails and bikeways that lead residents and visitors to every major point of interest in the Town. The Town has been working towards a plan to help maintain and expand these facilities in hopes of encouraging a vibrant and active community.

In 2017, Town Council adopted an Active Transportation Framework to prioritize initiatives and improvements to walking and cycling in Collingwood. The framework provides nine guiding principles for decision making and evaluation with the goal of advancing implementation of local active transportation improvements.

Consistent with the Active Transportation Framework, the municipality has prepared the **Town of Collingwood Cycling Plan**. This document provides a long-term vision, strategy and implementation plan to develop, strengthen and support a cycling culture in Collingwood. The plan identifies policies, programs and facilities needed to help make cycling an attractive everyday mobility option for residents ranging from 8 to 80 years old with a wide range of abilities. Existing and potential cycling tourism opportunities in Collingwood and surrounding areas are also explored.

1.2 Why a Cycling Plan?

Collingwood already has an extensive network of trails and bike lanes that connect residents and visitors to major destinations within the Town. Cycling only accounts for a small portion of local trips currently, suggesting opportunities exist to increase the overall percentage of residents choosing to cycle. Such improvements could include better connections, more supporting facilities and cycling infrastructure (e.g., wayfinding signs, bike parking, washrooms and drinking fountains), and improved user and motorist education.

Communities like Collingwood benefit from investing in cycling for many reasons. Foremost, creating a safe cycling network that is connected yet direct helps make people more comfortable to cycle, which leads to increased bicycle use and shifts travel away from automobiles. **Table 1.1** lists the many benefits of cycling more and driving less.

TABLE 1.1: BENEFITS OF INVESTING IN CYCLING

Benefit	Description
Economic Development	A bicycle friendly community can be a major draw for tourism and/or hosting major events within the Town. Drawing these additional visitors to the Town will create further spending and growth in the community.
Quality of Life	Increasing the number of people biking within a community can create a stronger sense of place and freedom of mobility. Increased social interactions and improved safety are also typical results.
Health	Not only does cycling improve physical health, getting people moving and outdoors more often can lead to improved mental health.
Decreased Costs	The per kilometre construction cost of on- or off-road bicycle facilities is typically much lower than new road construction. Also, the facilities tend to cost less to maintain.
Environment	By increasing bike use, vehicular trips are reduced and thus, air pollution (GHGs) and traffic congestion are diminished. This enables the Town to become more sustainable and helps preserve the surrounding natural environment.

1.3 Study Approach

The Cycling Plan was developed following a three-phase approach:

- The **Foundation Building** phase (Phase 1) set the stage for developing the Cycling Plan. This first phase involved assembling available information about the Town and the surrounding municipalities, including traffic and cycling count data, collision histories, travel patterns, previous active transportation studies and relevant Town policies and background reports. Geographic Information Systems (GIS) data of existing facilities and key Town features was also assembled to generate mapping for use in developing the plan. A site visit was carried out to examine the existing network, identify gaps and classify other areas for improvement.
- The **Plan Formulation** phase (Phase 2) involved:
  - Analysis of the data (primarily using the GIS database);
  - Assessment of alternative network options; and
  - Policy, network and guideline development.

  Different facility options and locations were identified and evaluated in this phase. Policies, programs and guidelines needed to implement, support and promote the Cycling Plan were also denoted; and
- The **Strategy Confirmation** phase (Phase 3) brought together the foundational elements summarized through Phase 1 and the recommended networks, policies and strategies defined during Phase 2 into this comprehensive Cycling Plan document. The final plan will be presented to Town Council for approval.

1.4 Community Engagement

The Town conducted three community engagement initiatives as part of the study:

1.4.1 Trails Advisory Committee

A workshop was held with the Trail Advisory Committee on May 10, 2018 to obtain their feedback on cycling in the Town. The following summarizes the strengths, opportunities for improvement, aspirations, and specific results that would indicate achieved aspirations as identified by the committee:

- Strengths:
  - Exceptional and well-maintained off-road network that includes lots of interesting historical information;
  - Good trails map;
  - Strong tourist component;
  - Good online information for the network;
  - Collingwood Cycle Club provides cycling lessons;
  - New development is required to consider trail connections and the Trails Advisory Committee has a lot of influence regarding these connections;
  - The network includes four fix-it stations for emergency bicycle repair or tune-ups;
  - The network provides for good connections to adjacent communities; and
  - Bronze Level Bicycle Friendly Community
- Opportunities:
  - More designated bike routes/lanes;
  - Require all new road construction to provide bike lanes;
  - Provide covered bicycle parking;
  - More education of cyclists, motorists, and the general public on the benefits of bicycling (health and sustainability), proper trail and road etiquette, and the potential for easily shifting to cycling for commuting;
  - Improved signing, wayfinding and indication of cycling facilities (for all road users);
  - Improved spring and winter maintenance of cycling infrastructure;
  - Improved midblock crossings;
  - Provide vehicle parking at trail heads;
  - Convert roads to one-way or close select roads to vehicular traffic;
  - Improve connection from the Town to the Blue Mountains;
  - Pave stone dusted trails;

- Provide safer cycling links to downtown.

- Aspirations:
  - Improve the network every year;
  - Make Collingwood a well-known hub for recreational cycling (create a circle route);
  - Be comparable to a Dutch community;
  - Mandatory cycling training for children;
  - Create a well-connected network of fully separated cycling facilities;
  - Create a Learn to Bike program geared toward new cyclists;
  - Decreased tension between cyclists and non-cyclists;
  - In three years achieve Gold Level Bicycle Friendly Community; and
  - In 10 years achieve Platinum Level Bicycle Friendly Community.
- Results:
  - Town events have more bicycles than vehicles
  - Town events require bicycle valets;
  - Increase the ratio of cycle routes to vehicle routes;
  - With new development, cycling infrastructure is built before vehicle infrastructure;
  - Decrease in cycling collisions per capita;
  - A noticeable increase in the number of children cycling to school; and
  - Achieve Gold Level Bicycle Friendly Community.

1.4.2 Online Survey

The Town hosted an online survey on its website to gather input from the public about cycling in Collingwood. **Appendix A** provides the detailed questions and summary of responses. The conclusions drawn from the survey are as follows:

- The opinions expressed in the survey were representative of the community (rather than the surrounding region);
- Even though people can bike to their most traveled to destination (because of the short distance), they do not;
- The Cycle Plan should focus on initiatives that increase commuter cycling;
- To target the biggest audience, the Cycling Plan should focus on improvements to cycling network facilities within the Town, with an emphasis on improving cyclist safety and providing direct routing;
- The most frequently mentioned locations to improve cycling in Collingwood included:
  - Connections to Blue Mountain Road and better facilities along Mountain Road;
  - More connections to downtown and Wasaga Beach; and

- Better facilities on Beachwood Road, High Street/Highway 26, Popular Sideroad and Hurontario Street.

- The most frequently mentioned challenges to improving the network included:
  - Political interest (i.e., convincing council that cyclist infrastructure is important);
  - Tension between motorists and cyclists, lack of respect for each other and lack of education/disregard for the rules;
  - Lack of Town budget for cycling infrastructure;
  - Amount of traffic;
  - Lack of safe bike connections within and outside of Collingwood;
  - Poor design of existing facilities;
  - Lack of consideration for proper cycling facilities.

1.4.3 Accessibility Advisory Committee

A presentation was made to the Accessibility Advisory Committee on June 27, 2018 to explore universal access considerations. The committee offered the following comments:

- More bike racks should be provided. Their design should be standardized;
- Cycling facilities should be designed to properly integrate and interface seamlessly with walking routes. Education and signing would help;
- Scooters should be allowed to use cycling facilities;
- Consideration should be given to tricycles, especially for parking; and
- The Town should strive for a high level of cycling use and recognition as a bicycle-friendly community (think Copenhagen).

1.5 Report Organization

The remainder of the Cycling Plan is organized into the following chapters:

- **Chapter 2 – Foundations** documents the existing cycling network and local and regional contexts, synthesizes current best practices in cycling network development and sets out the Vision and Objectives Statements for the Plan;
- **Chapter 3 – Developing the Network** summarizes the process and steps followed to define the future cycling network for Collingwood;
- **Chapter 4 – Cycling Facility Design Guidelines** details the different types of cycling facilities and supporting amenities and recommends guidelines for their application; and
- **Chapter 5 – Implementation** presents the recommended network phasing plan, the steps for implementing the network, maintenance, liability and risk management considerations, communication and outreach initiatives, financial implications of the Plan and a monitoring strategy.

Recommended actions are identified in **Chapters 3, 4 and 5** in **bolded blue font**, with the corresponding recommendation number in brackets.

CHAPTER 2
Foundations

Source: Explore Ontario By Bike! Website
(https://www.ontariobybike.ca/150-events-collingwood#/)

2.1 Existing Cycling Network

2.1.1 Local Network

The Town of Collingwood currently has over 60 kilometres of recreational trails and bikeways that connect its residents and visitors to major points of interest in the municipality.

Figure 2.1 shows the existing local cycling network. The network consists of the following typical facility types:

- **Signed Dedicated Bike Lane** – An on-road bikeway separated from traffic by a solid white line. The facility is marked on the pavement with a painted bicycle symbol and signs adjacent to the road posted at regular intervals;
- **Off-Road Trail** – An off-road, unpaved facility. Fully separated from traffic, this facility is shared with pedestrians and typically has a stone dusted surface; and
- **On-Road Bike Route** – A bike route on a roadway that typically has lower vehicular traffic volumes. The route is not separated from traffic.

The Town also considers the following features cycling facilities:

- **Unsigned Bike Lane** – An on-road bikeway separated from traffic by a solid white line. The facility is not marked with regulatory signs or pavement markings (other than the solid white line).
- **Multi-Use Urban Trail** – A paved (concrete) off-road facility adjacent to the roadway. This facility is principally a sidewalk but has been widened to accommodate the simultaneous use of multiple active transportation modes.

2.1.2 Connections to Adjoining Communities

At present, there are four main trail connections to communities adjoining Collingwood, being:

- **Georgian Trail**, which extends westward from the commercial district on the west end of Town towards The Blue Mountains (but not into Blue Mountain Village);
- **Beachwood Road** on-road bike route, which extends east to Wasaga Beach;
- **Train Trail**, which extends from Huron Street to the southern most limit of the Town at Poplar Sideroad. This trail continues south into Stayner; and
- **Mountain Road Trail**, which extends west from First Street towards The Blue Mountains.

With the Town situated between several major tourist destinations (i.e. The Blue Mountains and Wasaga Beach), convenient and accessible linkages to adjoining communities are important to ensuring the type of continuous and connected network needed to increase utilitarian and recreational cycling to destinations within and external to Collingwood. Although not the focus of this Cycling Plan, guidance and future initiatives for improving connections to key external destinations are noted in **Section 3.3.2**.

N

Town of Collingwood Cycling Plan

Figure 2.1
Existing Cycling Network

Legend

- Dog Park
- Hospital
- Municipal Building
- Police
- Recreation
- Theatre
- Parking Area
- Playground
- Washroom
- Schools
- Place of Worship
- Parks

Separated (Off-Road) Facilities

- UnpavedTrail
- Paved Trail
- Multi-Use Sidewalk

Shared (On-Road) Facilities

- Signed Bike Lane

September 2019

paradigm

Data provided by the Town of Collingwood

Long Point Rd
Silver Creek Dr
Highway 26 W
Princeton Shores Blvd
Osler Bluff Rd
Thornbury (16 km)
Conservatory Wy
Mariners Wy
Cranberry Trail E
Dawson Dr
Holly Crt
Laurel Blvd
Eleventh Ln
Harbour St W
Mariners Hv
Heritage Dr
Collingwood Harbour
Georgian Bay
Blue Mountain Village (2 km)
Mountain Rd
Trails End
Kells Cres
Tenth Ln
Lawrence St
Huron St
Simcoe St
Ontario St
Erie St
Pretty River Pkwy
First St
Second St
Third St
Fourth St
Elm St
Spruce St
Hickory St
Walnut St
Cedar St
Oak St
Birch St
Beech St
Maple St
Pine St
Stewart Rd
Hume St
St Clair St
Sixth St
Seventh St
Eighth St
Ninth St
Tenth St
Davis St
Hurontario St
St. Marie St
Peel St
Raglan St
Pine View Dr
Cambridge St
Collins St
Cameron St
High St
Campbell St
Ron Emo Rd
Sanford Fleming Dr
Georgian Manor Dr
Highway 26 E
Sixth Ln
Summer View Av
Findlay Dr
Tracey Ln
Kirby Av (Future)
Stanley St
Hughes St
Mary St
Wilson St
Clark St
Stayner (12 km)
Poplar Sideroad
Indian Trl
Beachwood Rd
Lane D
Glen Rd
HIGHWAY 26
Broadview St
Braeside St
Wasaga Beach (11 km)
Toner St
4th Ln
Grey Rd 19
Simcoe County Rd 32
THE BLUE MOUNTAINS
CLEARVIEW
WASAGA BEACH

0 1.25 2.5 Kilometers

2.2 Local Context

2.2.1 Demographics

The Town of Collingwood currently has a population of approximately 21,000. The Town has an older population when compared with other municipalities in Ontario. The median age within the Town is 48, which is seven years older than the median age in the province. Despite the aging population, the Town is experiencing high mobility rates, with 16.5% of residents having moved to the community in the last year (as of 2015) compared to 11.7% for the rest of Ontario.

Tourism statistics for Collingwood are not readily available. However, it is well known that tourism is one of Town's key industry sectors. Being situated between the Blue Mountains to the west and summer beach attractions to the east, the Town is increasingly becoming both a summer and winter recreational destination.

2.2.2 Travel Behaviour

The results of the 2016 Transportation Tomorrow Survey[1] (TTS) were reviewed to gain further understanding of the travel patterns in Collingwood. The TTS database is compiled from a time series telephone survey on travel behaviour in the Greater Toronto and surrounding area. Data are categorized into household, person and trip tables. The database is structured so that it can be accessed by traffic analysis zone (TAZ) and trip mode to produce area-specific results.

According to the TTS database:

- Approximately 63% of employed Collingwood residents commute within Simcoe County. Of this segment, 82% commute within Collingwood; and
- Cycling and walking comprise 2% and 3% of trips made within Collingwood, respectively.

The relatively high number of residents commuting locally, and the shorter trip lengths suggest cycling could become a more attractive and viable transportation mode for travel within Collingwood, especially with the Town's growing population and draw for tourism. A well connected and accessible cycling network with supporting amenities and programs can help to encourage increased use of this more sustainable travel option.

2.2.3 Policy and Planning Influences

The Cycling Plan aligns with federal, provincial and municipal land use and transportation planning policies and initiatives supportive of or pertaining to active transportation. **Figure 2.2** summarizes the policy and planning framework influencing the plan, with **Appendix B** providing more detailed reviews of each document.

[1] 2016 Transportation Tomorrow Survey (TTS), Data Management Group, University of Toronto.

Province of Ontario	Simcoe County and Adjacent Municipalities	Town of Collingwood
▶ Provincial Policy Statement ▶ *Places to Grow Act* and Growth Plan for the Greater Golden Horseshoe ▶ *Accessibility for Ontarians with Disabilities Act* ▶ #CycleON ▶ Ontario Trails Strategy	▶ Simcoe County Transportation Master Plan ▶ The Blue Mountains Comprehensive Transportation Strategic Plan ▶ Stayner and Area Transportation Plan - Township of Clearview	▶ Official Plan ▶ Active Transportation Framework ▶ Active Transportation Plan ▶ Urban Design Manual ▶ Community Based Strategic Plan

FIGURE 2.2: POLICY AND PLANNING FRAMEWORK FOR CYCLING PLAN

2.3 State of the Practice Review

2.3.1 Ontario Municipalities

The cycling plans of other Ontario municipalities were reviewed to identify practices potentially applicable to Collingwood. Practices with merit include:

- Integrate networks with surrounding municipalities;
- Establish an Active Transportation Advisory Group including:
  - A cycling advisory committee that allows public input to the development process; and
  - A Committee Terms of Reference to provide guidance in plan implementation (see **Appendix C** for examples of Active Transportation Advisory Committee Terms of Reference);
- Appoint an Active Transportation Coordinator to facilitate program implementation;
- Design and construct network facilities consistent with relevant industry guidelines and standards. Key documents such as Ontario Traffic Manual (OTM) Book 18 – Cycling Facilities and the Transportation Association of Canada (TAC) *Bikeway Traffic Control Guidelines* should be referenced. **Section 2.3.2** provides further information on applicable reference documents;
- Provide online resources, including web pages providing cycling information and allowing users to report issues and suggestions;
- Develop trails and bikeway maps. Both high level (showing routes only) and detailed maps (showing grades, level of difficulty and surface type) should be provided;
- Develop a wayfinding strategy. The strategy should include direction for branding and signing for both on and off-road systems in the Town. The strategy should be coordinated with surrounding municipalities to ensure consistency;

- Ensure ongoing cycling network promotion using creative and context sensitive outreach programs and coordination with:
  - Police services to offer safe cycling training;
  - Local groups to introduce bicycle-friendly designation and business programs;
  - Representatives from tourism, public health and local school boards to create a strategy to provide seasonal active transportation and recreation information; and
  - Local cycling clubs and interest groups to distribute information about the network;
- Create short- and long-term horizon plans including:
  - An implementation strategy to help guide the development of the plan year by year;
  - A funding strategy that allows cycling infrastructure to be implemented within the specified timeframe; and
  - An Active Transportation Charter to facilitate and promote active transportation in a consistent manner; and
- Schedule development of cycling facilities with new construction or reconstruction.

2.3.2 Reference Documents

The following reference documents provided guidance in preparing the Cycling Plan:

- ***OTM Book 18 – Cycling Facilities*** **(December 2013)** provides practical guidance on the planning, design and operation of on and off-road cycling facilities specific to Ontario. Of note, the Bicycle Facility Selection Tool included in the document provides a three-step facility selection process.
- ***OTM Book 15 – Pedestrian Crossing Facilities*** **(June 2016)** provides practical guidance on the planning, design, and operation of pedestrian roadway crossing treatments in Ontario. Specifically, the document includes guidelines for the justification, treatment system selection and treatment system design of pedestrian crossovers on lower-volume roads with a maximum posted speed of 60 km/h and maximum four lanes of two-way traffic.
- ***Bikeway Traffic Control Guidelines for Canada*** **(TAC, February 2012)** outlines the appropriate traffic control for the installation of signs and pavement markings on bikeways (primarily within the public right-of-way) and contains diagrams of typical installations. Many of the guidelines may be applicable to both on-road and off-road bikeways.
- ***Geometric Design Guide for Canadian Roads*** **(TAC, June 2017)** provides guidance in developing roadway design solutions that meet the needs of a range of users while addressing the context of policy decisions and the surrounding environment. Design guidelines are included for roads in both urban and rural locations as well as for integrated bicyclist and pedestrian design.
- ***Small Town and Rural Multimodal Networks*** **(U.S. Department of Transportation Federal Highway Administration, December 2016)** provides transportation practitioners in small town and rural communities with multimodal designs drawn from successful case studies in the United States.

- ***Pedestrian and Bicycle Planning – Guide to Best Practice*** **(Victoria Transportation Planning Institute, 2009)** – This document provides a detailed template for policy makers, planners and advocates to implement active transportation planning design and concepts. Recommendations include establishing an active transportation committee and creating performance indicators to evaluate cycling suitability on different roadways.

2.4 Vision

Building on the foundational elements described in this chapter, the following Vision was developed for the Cycling Plan and cycling in Collingwood:

> **The Town of Collingwood aspires to create a safe, well-connected and convenient cycling network. Reaching all corners of the Town and connecting with surrounding municipalities, cycling aims to contribute to this community's development as a world-class destination. The networks will be supported by policies and programs that promote a healthy and active lifestyle for all ages and abilities.**

The Cycling Plan detailed in the following chapters highlights the benefits of creating a well-connected, sustainable community through cycling, targeting individuals that live, work and play within Collingwood. The plan also provides insights to applicable educational opportunities.

CHAPTER 3
Developing the Network

3.1 Network Development Process

The process to develop the future cycling network for Collingwood involved:

- Identifying a series of continuous east-west and north-south corridors through Town based on the following five route selection criteria:
  - Connected and Integrated
  - Accessible
  - Context Sensitive and Cost Effective
  - Safe and Comfortable
  - Interesting and Enjoyable

  Table 3.1 describes each criterion and outlines its considerations for implementation.
- Resolving any remaining gaps and discontinuities in the network through location-specific treatments.

Aimed at promoting cycling for all ages and abilities of users, the Cycling Plan route selection process prioritized existing off-road routes over on-road facilities in instances where the option existed. While this may detract from the ease and speed of cycling for more confident users, safety and implementation considerations took precedence.

3.2 Corridors

The first step in establishing the future cycling network for Collingwood was to identify the primary east-west and north-south corridors. The Town's existing street system lends itself favourably to a grid cycling network, providing shorter, quicker and more convenient connections between origin and destination points from the cyclist's perspective.

Table 3.2 summarizes the primary east-west and north-south corridors recommended to form the cycling network, with an assessment of the opportunities and challenges posed by each. The recommended facility types for the corridors were developed using the:

- Route selection criteria in **Table 3.1**;
- *Bicycle Facility Selection Process* outlined in OTM Book 18;
- Guidance provided in OTM Book 15 – Pedestrian Crossing Facilities and Book 12A – Bicycle Traffic Signals;
- Information contained in the Transportation Association of Canada (TAC) *Bikeway Traffic Control Guidelines for Canada* and *Geometric Design Guide for Canadian Roads;*
- Guidelines summarized in the FHWA *Small Town and Rural Multimodal Networks* document; and;
- Information provided by the Town.

TABLE 3.1: ROUTE SELECTION CRITERIA

Criteria	Description	Considerations for Implementation
Connected and Integrated	Route should provide direct linkages between residents and their essential day-to-day activities. Transitions between facilities are smooth.	The route connects significant destinations and attractions. The route has been identified by cyclists as an important component of the network.
Accessible	The route in question has adequate space to develop a facility that meets *Accessibility for Ontarians with Disabilities Act* (AODA) requirements. Route should serve a wide range of users, regardless of differences in capabilities and socio-economic circumstances.	Wayfinding and accessibility signs should be implemented on and nearby route access points. Routes should reach all points of interest, from public parks and libraries to major employment centers and entertainment venues.
Context Sensitive and Cost Effective	Facility design should comply with Town approved standards and policies. Routes and corresponding facilities should be appropriate based on the expected volume and type of cyclist traffic (tourist versus commuter).	Routes should build on existing infrastructure where possible. Higher volume routes should be given priority. Cycling infrastructure should be coordinated with construction and other road improvement projects.
Safe and Comfortable	Routes should minimize risk and provide adequate comfort to users.	Bike lanes and bicycle-friendly routes should be clearly marked. On-road routes should be visible to motorists and provide users with safe facilities, separate from vehicles where possible. Surfaces should be adequately paved and maintained to provide comfort at higher speeds.
Interesting and Enjoyable	The journey needs to be given equal consideration to the destination. Routes should incorporate direct and indirect connections.	Direct routes through parks or residential areas should be favoured over locations in industrial areas or with high traffic volumes. Appropriate signs and separation should be provided on routes in less desirable locations.

In cases where a facility not conforming to OTM Book 18 currently exists, recommendations to change the design, signs and/or pavement markings to achieve consistency with these guidelines are provided.

Interim measures are noted in certain locations to allow time for further investigation and consultation with potentially affected parties. These measures are not intended to remain, as share-the-road signs and pavement markings (sharrows) are not effective long-term treatments.

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
East-West Corridors			
Harbourview Trail/East Circle Route	▶ Widen or separate cyclists and pedestrians on Harbourview Trail portion ▶ Pave (with asphalt) loose top sections ▶ Improve signs and pavement markings at trail crossings ▶ *See **Table 3.4** for improvements to resolve route gaps*	▶ Leverages existing infrastructure ▶ Provides fully separated route from vehicular traffic ▶ Connects to other routes and key destinations along the waterfront and in downtown including the Train Trail ▶ Offers more attractive and enjoyable route	▶ Construction work is required ▶ No direct route east of Train Trail ▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings introduce potential conflicts with motor vehicles
Ontario Street/Third Street	▶ Install bike lane signs and pavement markings ▶ Install share-the-road signs and pavement markings (sharrows) on Third Street as an **interim** measure ▶ Undertake capital road improvements to add bike lanes on Third Street as the **ultimate** solution	▶ Leverages existing infrastructure ▶ Provides separate space on road (Ontario Street section initially) ▶ Connects to other routes and key downtown destinations ▶ Provides signalized crossing of Hurontario Street ▶ Slows vehicular traffic on a residential road	▶ Some removal of on-street parking required ▶ Does not provide direct connections to routes leading outside of Collingwood ▶ Difficult to change driver behaviour and prevent stopping or parking in bike lanes ▶ Stop-controlled intersections along the route, which may deter some cyclists

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
East-West Corridors			
Sixth Street (Simcoe County Road 32 part)/Hume Street	▶ Install bike lane signs and pavement markings on Sixth Street ▶ Pave loose top sections of multi-use trail on Simcoe County Road 32 ▶ *See **Table 3.3** for improvements to resolve corridor discontinuities*	▶ Leverages existing infrastructure ▶ Forms primary east-west spine of network, providing longest route across Town ▶ Wide road rights-of-way allows separated facilities ▶ Provides separate space on road ▶ Connects to other routes including routes leading outside of Collingwood ▶ Provides signalized crossing of High Street	▶ New construction is required ▶ Not a continuous route. Gap exists in the current alignment at Hurontario Street. ▶ Higher volumes and speeds possible due to design and operation of road
Cameron Street/ Collins Street	▶ Explore protected cycling facility in the longer term ▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	▶ Connects to other routes, schools and residential areas including the Train Trail ▶ Provides signalized crossing of Hurontario Street ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Higher volumes and speeds possible due to design and operation of road
Campbell Street/ Lockhart Road	▶ Designate and redesign for Bicycle Priority Street ▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	▶ Connects to other routes and residential areas including the Train Trail ▶ Provides signalized crossing of Hurontario Street ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Higher volumes and speeds possible due to design and operation of road

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
East-West Corridors			
Findlay Drive/ Clark Street (north-south)	▶ Designate and redesign for Bicycle Priority Street ▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	▶ Connects to other routes, schools and residential areas ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Does not provide direct connections to routes leading outside of Collingwood ▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road
Poplar Sideroad (Simcoe County Road 32)/ Hamilton Drain Trail	▶ Complete trail on north side of road from High Street to Train Trail ▶ Pave any loose top sections ▶ County to undertake capital road improvements on Simcoe County Road 32 to add bike lanes and widen bridge over Pretty River as the **ultimate** solution	▶ Leverages existing infrastructure ▶ Provides separated route from vehicular traffic ▶ Connects to other routes including routes leading outside of Collingwood	▶ New construction is required ▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings and driveways introduce potential conflicts with motor vehicles ▶ Not a direct route ▶ Does not connect east of Raglan Street

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
North-South Corridors			
Balsam Street/High Street	▶ Complete missing sections with a multi-use trail (shared between pedestrians and cyclists)	▶ Leverages existing infrastructure ▶ Wide road rights-of-way allows separated facilities ▶ Provides separated route from vehicular traffic ▶ Connects to other routes including routes leading outside of Collingwood and key destinations in downtown ▶ Provides direct route from commercial district to residential area with signalized crossings of main roads	▶ New construction is required ▶ Travels through commercial/ industrial area, which is not as attractive and enjoyable for cyclists ▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings and driveways introduce potential conflicts with motor vehicles
Walnut Street/Cedar Street	▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure ▶ Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution	▶ Connects to other routes and residential areas ▶ Provides signalized crossing of First Street ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Does not provide direct connections to routes leading outside of Collingwood ▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Not a direct route with jog at Third Street ▶ Stop-controlled intersections along the route, which may deter some cyclists

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
North-South Corridors			
Maple Street/ Pine Street	▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure ▶ Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution	▶ Connects to other routes, residential areas and key destinations in downtown. Adjacent to shops and services along Hurontario Street. ▶ Provides signalized crossing of First Street ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Does not provide direct connections to routes leading outside of Collingwood ▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Not a direct route with jog at Third Street ▶ Stop-controlled intersections along the route, which may deter some cyclists
Ste. Marie Street	▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure ▶ Install bike jug handle (lay-by) to aid eastbound cyclists turning left from Hume Street to Ste. Marie Street ▶ Consider installing buffered bike lanes in the future	▶ Connects to other routes, residential areas and key destinations in downtown. Adjacent to shops and services along Hurontario Street. ▶ Provides signalized crossing of Hume Street ▶ Provide safer left-hand turns for cyclists at Hume Street ▶ Slows vehicular traffic on a residential and commercial road ▶ Offers lower cost solution	▶ Construction work required for jug handle ▶ Some removal of on-street parking required in the future ▶ Does not provide direct connections to routes within and leading outside of Collingwood ▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Potential for dooring of cyclists with parked vehicles on both sides of Ste. Marie Street ▶ Jug handle a new feature in Collingwood, which may require education for road users

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
North-South Corridors			
Train Trail	▶ Widen and pave loose top sections ▶ Review roadway/ trail crossings and install proper signing and pavement markings ▶ *See **Table 3.4** for improvements to resolve route gaps*	▶ Leverages existing infrastructure ▶ Forms primary north-south spine of network, providing longest route across Town ▶ Provides fully separated route from vehicular traffic ▶ Connects to other routes including routes leading outside of Collingwood and key destinations along the waterfront and in downtown ▶ Offers more attractive and enjoyable route ▶ Provides signalized crossings of Hume and Huron Streets nearby	▶ Construction work is required ▶ Improved crossing facilities (specifics to be defined) needed at locations where the trail intersects roads ▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings introduce potential conflicts with motor vehicles ▶ Higher cost solution
Peel Street/ Lynden Street (east-west)	▶ Install share-the-road signs and pavement markings (sharrows) as an **interim** measure ▶ Undertake capital road improvements to add bike lanes as the **ultimate** solution	▶ Connects to other routes, residential areas, schools and hospital. ▶ Provides signalized crossing of Hume Street ▶ Slows vehicular traffic on a residential road ▶ Offers lower cost solution	▶ Does not provide direct connections to routes within and leading outside of Collingwood ▶ Some cyclists may be hesitant to use a shared on-road facility ▶ Drivers may not be comfortable with shared road ▶ Higher speeds possible due to design and operation of road

TABLE 3.2: CORRIDOR ASSESSMENT

Corridor	Improvements	Opportunities	Challenges
North-South Corridors			
Raglan Street	▶ Pave shoulder on west side between Ron Emo Road and Poplar Sideroad ▶ Install wayfinding signs as an **interim** measure ▶ Install bike lanes as the **ultimate** solution	▶ Leverages existing infrastructure ▶ Provides a visually separated bike lane on the shoulder of a relatively low volume road ▶ Connects to other routes, industrial areas and Georgian College including Hume Street and the Siding Trail to Beachwood Road ▶ Provides signalized crossing of Hume Street ▶ Slows vehicular traffic ▶ Offers lower-cost solution if paved shoulders used	▶ Travels through industrial area, which is not as attractive and enjoyable for cyclists ▶ Some cyclists may be hesitant to use a shoulder facility ▶ Drivers may not be comfortable with cyclists on the shoulder ▶ Higher speeds possible due to design and operation of road

3.2.1 East-West Corridors

The following describes the east-west roadway corridors forming the future cycling network (from north to south):

Harbourview Trail/East Circle Route

The Harbourview Trail (see right) is located immediately north of First Street. While the route is narrower and slightly less direct than the multi-use urban trail in the First Street/Huron Street boulevard, it provides full separation from vehicular traffic and is less interrupted by driveway and roadway crossings. This enhances safety and comfort for all users. The route crosses most recommended north-south corridors, enhancing network connectivity. Additionally, the recreational and tourism opportunities available along the route have made its development a priority for the Town, so upgrading the facility would be consistent with municipal goals. The primary disadvantage of this corridor is the inevitable conflict between commuter cyclists and recreational users and pedestrians, who would be travelling at different speeds.

To improve the route in this area for commuter cyclists, unpaved sections of the Harbourview Trail should be paved, and the trail should be divided into separate pedestrian and bike facilities to the extent possible. Signing and pavements markings should be provided to ensure users travel on their designated portion of the facility. Additionally, each roadway/trail crossing should be reviewed to ensure that proper signing and pavement markings have been installed both on-road and on-trail. This review should include, but not be limited to, cyclist and pedestrian volumes, vehicular volumes and sight distance investigations. Guidelines established in OTM Book 15 and Book 18 should be applied in this review.

Section 3.3.1 assesses options for resolving the gap between the Harbourview Trail and the Train Trail.

Ontario Street/Third Street (High Street to Pretty River Parkway)

Ontario Street currently provides unsigned bike lanes from Pretty River Parkway to Ste. Marie Street. Third Street is shown as an on-street bike route on the Town's Trail Map, but also not signed. Bike lanes should be designated on both collector roadways through proper regulatory signs and pavement markings (including no stopping signs) to legally demarcate the route for cyclists and thus inform road users. If bike lanes cannot be implemented on Third Street at the same time as on Ontario Street, share the road signs and pavement markings (sharrows) should be used as an interim measure.

Sixth Street/Hume Street (Osler Bluff Road to Pretty River Parkway)

Sixth Street/Hume Street is currently the main east-west cycling corridor through Collingwood. This arterial/collector road corridor spans from the west side of town, at the intersection of Osler

Bluff Road and Sixth Street, to the east side, at the intersection of Hume Street and Raglan Street.

The existing Sixth Street cycling facility consists of unsigned bike lanes on both sides of the roadway east of High Street and a partial off-road multi-use trail to the west (Sixth Street becomes Simcoe County Road 32 west of Tenth Line). Recently upgraded Hume Street has signed and delineated bike lanes on both sides of the roadway. But for users without knowledge of the Town's Trails Map, it would be unclear if the painted white lines on Sixth Street are bike lanes or on-street parking. Bike lanes should be designated on Sixth Street through proper regulatory signs and pavement markings, like on Hume Street, to legally demarcate the route for cyclists and inform road users. The Town may also wish to consider paving the loose top sections of the multi-use trail on the north side of Sixth Street (Simcoe County Road 32) when demand warrants in the future.

The Sixth Street/Hume Street corridor is well located within the Town, providing a connected and central route that intersects with several north-south corridors. The route also intersects one of the Town's main activity centres, Hurontario Street, which allows for connections to the downtown and waterfront. In addition, Sixth Street and Hume Street are wider roadways and have lower average daily traffic volumes (8,000 and 13,500 vehicles per day, respectively) compared to other roadways, such as First Street (26,500 vehicles per day). This helps cyclists feel safer and provides users with a more enjoyable experience than they would have on a higher volume roadway. Further, the Town has already invested in well integrated bike lanes on Hume Street, making continuation of the facility logical and cost effective.

Section 3.3.1 assesses options for resolving the discontinuity in the Sixth Street/Hume Street corridor.

Cameron Street/Collins Street (Walnut Trail to Peel Street)

Cameron Street and Collins Street are two-lane, predominately residential collector roadways that extend from the Walnut Trail to Peel Street. Traffic data was not available, but its unlikely volumes are very high given its location in the Town and the abutting land uses.

The number of adjacent schools and churches, the tangent (straight) alignment of the roadways and connections to other routes make these streets a preferred cycling corridor. The number of vulnerable road users suggests a protected cycling facility may be warranted, notwithstanding traffic volumes. The merit of providing a higher-order cycling facility (e.g., protected bike lanes, cycle track) should be explored in the future. The need for and type of protected facility should be considered if the Town reconstructs the road. Until a higher order facility can be implemented, share the road signs and pavement markings (sharrows) should be used as an interim measure.

Campbell Street/Lockhart Road (High Street to Collins Street)
Findlay Drive/Clark Street (north-south) (Poplar Sideroad to Hurontario Street)

The Campbell Street/Lockhart Road and Findlay Drive/Clark Street corridors are two-lane, predominately residential local road sections in the south end of Collingwood. Traffic data was not available, but its unlikely volumes are very high given their location in the Town and abutting land uses, which are primarily residential, and school uses. The relatively low traffic volumes and connections to other routes make these streets preferred cycling corridors.

OTM Book 18 identifies a *Bicycle Priority Street* as an appropriate solution for a local street with low volumes and speeds. Designed to offer priority for cyclists operating in mixed traffic, a Bicycle Priority Street combines road marking, traffic calming measures, and crossing improvements to enhance the cycling experience. **Figure 3.1** illustrates a sample design.

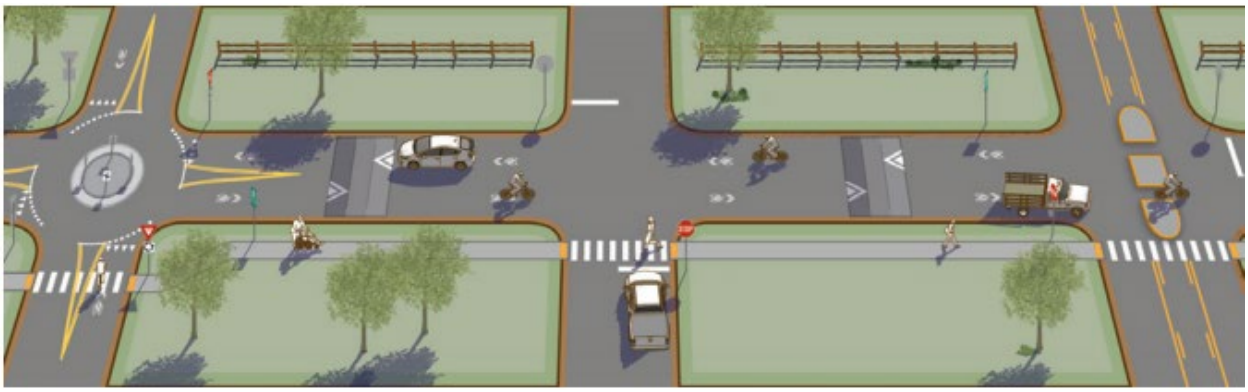


FIGURE 3.1: BICYCLE PRIORITY STREET
(Source: *Small Town and Rural Multimodal Networks*, Figure 2.5, p. 2-11)

The Town does not currently implement traffic calming measures on roads under its jurisdiction. A recommendation is provided in **Section 4.1** that the Town introduce a Traffic Calming Policy, which would enable implementation of Bicycle Priority Streets on these corridors. Until the Town adopts such a policy, shared on-street signs and pavement markings (sharrows) should be installed along the routes as an interim measure to inform motorists to anticipate bicycle traffic. **Table 4.1** in **Chapter 4** shows a typical sharrow installation. Alternatively, the Town may prefer to simply post signs indicating that the roadways are bike routes, along with wayfinding signs indicating the direction cyclists should travel to reach specific destinations (such as Town Hall or downtown). The routes should become Bicycle Priority Streets through the introduction of traffic calming measures in the longer term.

Poplar Sideroad/Hamilton Drain Trail (High Street to Raglan Street)

Poplar Sideroad (Simcoe County Road 32) provides a continuous arterial road connection across the south limit of Collingwood from east to west. The roadway carries about 6,000 to 7,000 vehicles per day based on average daily traffic volumes from 2014. The posted speed limit is 60 kilometers per hour. Used commonly by confident cyclists, Poplar Sideroad is not suitable for all riders given traffic volumes, speeds and the somewhat narrow platform.

The Town has already taken steps to create an alternate east-west off-road cycling route through the provision of a multi-use trail on the north side of Poplar Road and development of the Heather Pathway/Hamilton Drain Trail. Although not direct, these trails form a continuous route parallel to Poplar Road, which can be described as follows:

- Multi-use trail (paved) on the north side of Poplar Sideroad from High Street to Saunders Road.
- Shared on-street bike route on Saunders Road from Poplar Sideroad to Stephens Street.
- Shared on-street bike route on Stephens Street from Saunders Street to the end of Stephens Street.

- Hamilton Drain Trail from Stephens Street to Train Trail.
- Train Trail from Hamilton Drain Trail to Poplar Sideroad.
- Multi-use trail (paved) on the north side of Poplar Sideroad from Train Trail to Raglan Street.

Most of the multi-use trails on this route are currently unpaved (stone dust surface). The trails should be paved to improve the comfort of riders along the route. Additionally, this route crosses Hurontario Street, one of the main routes into downtown. A pedestrian-activated signal was recently installed in this location to help users cross the road more safely.

3.2.2 North-South Corridors

The following describes the north-south roadway corridors forming the future cycling network from west to east:

Balsam Street/High Street (Georgian Trail to Poplar Sideroad)

High Street south of Sixth Street has an average daily traffic volume of approximately 7,000 vehicles per day. North of Sixth Street, the volume on Balsam Street/High Street, an arterial road, increases to about 16,000 vehicles per day. The roadway has a posted speed limit of 50 kilometers per hour and, for the most part, its cross-section consists of wide boulevards on both sides of the roadway. From the Georgian Trail to the south leg of Chamberlain Crescent, High Street features concrete multi-use urban trail (west side) and pedestrian sidewalk (east side) except between Third Street and Fifth Street (west side) and Old Mountain Road and the most northerly commercial driveway (east side). From there, the High Street Trail provides an unpaved and unmaintained connection to Poplar Sideroad.

High Street is a preferred north-south route for the cycling network, as it provides a direct connection from the north end of Town near the commercial district to the south end where many residents live. The wide boulevards and intersections with other recommended routes also make the corridor convenient and desirable.

The concrete multi-use urban trail in the west boulevard provides a protected facility for cyclists in the Balsam Street/High Street corridor, albeit not as convenient, comfortable or fast as a dedicated cycling-only route such as a cycle track or even on-road bike lanes. Assuming this trail continues as the cycling facility in the corridor, the missing section between Third Street and Fifth Street should be constructed as a multi-use urban trail and the High Street Trail should be improved and paved.

In the future, the Town may wish to consider introducing dedicated cycling facilities in the Balsam Street/High Street corridor if cycling volumes increase, undesirable interference with pedestrians occurs and/or significant driveway conflicts happen. Options include:

- A two-way cycle track on one side of the roadway in the boulevard exclusively for cyclists; or
- Designated bike lanes on both sides of the roadway.

Facility type consistency is a key consideration in selecting the preferred treatment. The facility should remain consistent throughout the extent of the route to avoid confusion and provide a safe and comfortable experience for users.

Walnut Street/Cedar Street (Harbourview Trail to Tenth Street)
Maple Street/Pine Street (Harbourview Trail to Campbell Street)

Walnut Street and Cedar Street are two-lane, low volume, predominately residential local roadways. Cedar Street has an average daily traffic volume of approximately 2,400 vehicles per day. Traffic data was not available for Walnut Street, but likely experiences similar volumes as Cedar Street. The relatively low traffic volumes and connections to other routes make these streets preferred cycling corridors.

Maple Street and Pine Street are two-lane residential local and collector roadways, respectively. Maple Street has an average daily traffic volume of approximately 900 vehicles per day. Low volumes, intersection controls at collector roads (all-way stops at Sixth Street and Third Street and traffic control signals at First Street), proximity to Hurontario Street and connections to three schools and several churches, also make these streets a preferred cycling corridor.

Walnut Street and Maple Street are the preferred links for these corridors south of Third Street, providing continuous connections to Tenth Street and Campbell Street (and beyond by trail in both cases), respectively. North of Third Street, Walnut Street only extends as far as First Street and does not connect to the Harbourview Trail. As well, the Walnut Street and Maple Street intersections with First Street are unsignalized, making crossings of this busy highway challenging at these locations. For these reasons, the preferred routes jog from Walnut Street to Cedar Street and from Maple Street to Pine Street via Third Street, allowing cyclists destined to the Harbourview Trail to cross First Street at signalized intersections.

Until the Town revises its traffic calming policy, shared on-street signs and pavement markings (sharrows) should be installed along both routes as an interim measure to inform motorists to anticipate bicycle traffic. Alternatively, the Town may prefer to simply post signs indicating that the roadways are bike routes, along with wayfinding signs indicating the direction cyclists should travel to reach specific destinations (such as Town Hall or downtown). The routes should become conventional bike lanes or Bicycle Priority Streets through the introduction of traffic calming measures in the longer term.

Ste. Marie Street (First Street to Hume Street)

Ste. Marie Street provides a parallel north-south corridor to Maple Street to the east of Hurontario Street. North of Hume Street, this two-lane residential collector roadway carries an average daily traffic volume of approximately 2,500 to 3,000 vehicles per day.

A cycling facility on Ste. Marie Street will provide access to downtown shops, restaurants and other popular establishments primarily for cyclists travelling to and from the east. The route intersects the Third Street/Ontario Street and Hume Street bike lanes providing additional network connectivity.

The cross-section for this segment of Ste. Marie Street is wide enough to accommodate a separated bicycle facility, but only if on-street parking is removed from one side of the street. The Town does not intend to change parking restrictions at this time, so share-the-road bike signs and pavement markings (sharrows) should be provided on both sides of Ste. Marie Street north of Hume Street. Pavement markings should be placed far enough from parked vehicles to avoid potential dooring of passing cyclists. In the future, the Town may wish to consider introducing dedicated cycling facilities in the corridor, such as buffered bike lanes, if this position changes.

FIGURE 3.2: BIKE JUG HANDLE AT A T-INTERSECTION
(Source: OTM Book 18, Figure 4.52, p. 85)

To assist eastbound cyclists turning left from Hume Street to Ste. Marie Street, a bike jug handle should be provided on the south side of Hume Street. As **Figure 3.2** shows, the jug handle provides cyclists with a refuge area, separated from the sidewalk, while waiting for the traffic control signals to change.

Train Trail

The Train Trail (see right) is an unpaved recreational multi-use trail that provides a direct north-south route through the Town. The trail crosses all recommended east-west corridors, improving network connectivity. Except for road crossings, the Train Trail is a fully separated facility within its own, forested right-of-way. By all accounts, the facility is safe, interesting and enjoyable for bicycle travel.

To increase use by commuter cyclists and improve the experience for all users, the Train Trail should be paved and the road crossings along the trail should be improved based on guidelines recommended in OTM Book 18 and Book 15, as well as Book 12 and Book 12A if traffic control signals are considered. Vehicular, pedestrian and cyclist volumes will determine the appropriate crossing treatments at each roadway. These improvements will enhance user safety and efficiency, increase cyclist comfort and minimize delay at crossings. It will also help to make the crossings more visible to motorists.

Signs and/or pavement markings should also be used along the trail to indicate that the facility is for the shared use of cyclists and pedestrians. **Figure 3.3** provides an example of the appropriate pavement markings.

Section 3.3.1 assesses options for resolving the gap between the Train Trail and the Harbourview Trail.

FIGURE 3.3: SAMPLE PAVEMENT MARKINGS FOR TWO-WAY SHARED USE PATH
(Source: OTM Book 18, Figure 4.98, p. 120)

Peel Street/Lynden Street (Ontario Street to Train Trail)

Peel Street runs parallel and to the east of the Train Trail. Traffic data was not available for this collector roadway, but volumes are not likely to be overly high given its location in the Town and abutting land uses, which are primarily residential, school and hospital. The relatively low traffic volumes and connections to other routes make this street preferred for a cycling corridor.

The alignment and location of Peel Street, the important land uses served by the road and connections to other routes make this street a preferred cycling corridor and a candidate for a protected cycling facility. The merit of providing a higher-order cycling facility (e.g., protected bike lanes, cycle track) should be explored in the future. The need for and type of protected facility should be considered if the Town reconstructs the road. Until a higher order facility can be implemented, share the road signs and pavement markings (sharrows) should be used as an interim measure.

Raglan Street (Hume Street to Poplar Sideroad)

Raglan Street is a rural, industrial road with a statutory (unposted) speed limit of 50 kilometres per hour and a fall average daily traffic volume of about 3,000 vehicles per day. The road provides a direct connection from Hume Street to Poplar Sideroad. Currently, Raglan Road has paved shoulders on both sides from Hume Street to Ron Emo Road. South of Ron Emo Road, the paved shoulder on the west side terminates while the east side shoulder continues south to Poplar Sideroad.

According to the Desirable Cycling Facility Pre-selection Nomograph in OTM Book 18, the most appropriate facility would be a shared roadway. However, since paved shoulders already exist on the full length of the east side of the roadway and most of the west, the treatment should be continued along the remainder of the west side between Ron Emo Road and Poplar Sideroad to maintain consistency. If a paved shoulder cannot be provided and a transition is required, the

transition area should be denoted through signs and pavement markings per OTM Book 18. Long-term plans should include upgrading the facility to conventional bike lanes.

3.3 Gaps and Discontinuities

The recommendations summarized in **Section 3.2** provide the foundation for a connected and complete cycling network in Collingwood. Inevitably, gaps and discontinuities will remain, most commonly in locations with higher potential for motorist-cyclist conflicts. Resolving these connectivity issues helps enhance safety and can encourage the "interested but concerned" individual to choose cycling over other travel options.

3.3.1 Local Network

The following describes the preferred approach for resolving the identified cycling network gaps and discontinuities within Town:

Sixth Street and Hume Street Connection

Table 3.3 assesses two options for connecting Sixth Street to Hume Street, as illustrated in **Figure 3.4**. Based on this assessment, Option 2 – Hamilton Street, Central Park and Train Trail should be implemented. This option involves:

- Transitioning the Sixth Street bike lanes to sharrows at Hurontario Street;
- Installing shared road signs and pavement markings on Hamilton Street between Sixth Street and Central Park/Paterson Street directing cyclists to the Central Park Trail;
- Providing proper crossing treatment at the intersection of Hamilton Street/Central Park parking lot and Paterson Street;
- Repaving and widening the Central Park Trail; and
- Installing wayfinding signs along the route.

Train Trail and Harbourview Trail Connection

Table 3.3 also assesses two options for connecting the Train Trail to the Harbourview Trail, as illustrated in **Figure 3.5**. Based on this assessment, Option 1 – Train Trail Terminus, Heritage Drive, Side Launch Way should be implemented. This option involves:

- Extending the Train Trail wayfinding signs to the intersection of Heritage Drive and Side Launch Way to inform users of the interconnection;
- Providing signs along Side Launch Way to advise pedestrians and cyclists which sidewalk to use;
- Providing marked crosswalks and signs for cyclists and vehicles at each road crossing along Side Launch Way; and
- Providing wayfinding signs along the route.

FIGURE 3.4: ROUTE ALTERNATIVES FOR SIXTH STREET AND HUME STREET CONNECTION
(Map Source: Google Earth)

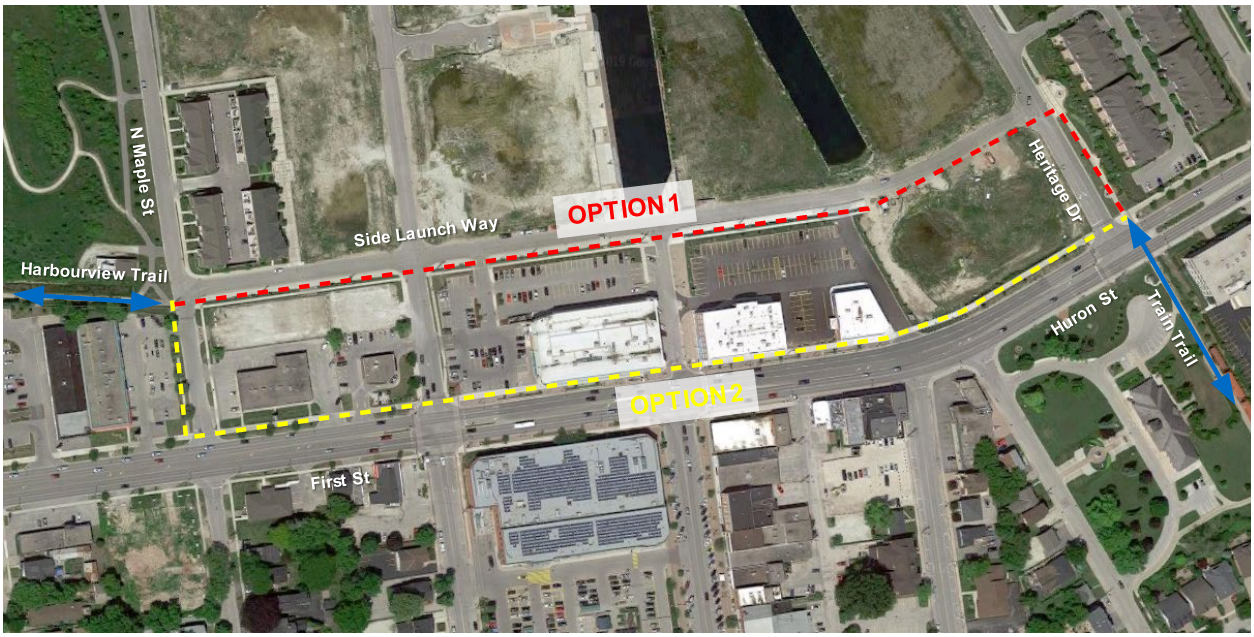


FIGURE 3.5: ROUTE ALTERNATIVES FOR TRAIN TRAIL AND HARBOURVIEW TRAIL CONNECTION
(Map Source: Google Earth)

TABLE 3.3: ASSESSMENT OF ROUTE CONTINUITY ALTERNATIVES – LOCAL NETWORK

Option	Description	Opportunities	Challenges
Sixth Street and Hume Street Connection (per Figure 3.4)			
Option 1 Ste. Marie Street	▶ Install share-the-road signs and pavement markings (sharrows) and wayfinding signs on Hamilton Street and Ste. Marie Street ▶ Install bike jug handles to aid cyclists turning left at Hume Street and Ste. Marie Street	▶ Makes use of existing infrastructure including the traffic control signals at Hurontario Street and Sixth Street and Hume Street and Ste. Marie Street, plus the bike lanes on Hume Street ▶ Relies on low volume roadways for connection (Hamilton Street and Ste. Marie Street), reducing stress for cyclists and potential conflicts	▶ Cyclists must share part of the route with vehicles on the roadway (Hamilton Street and Ste. Marie Street) ▶ Requires non-conventional facility design to accommodate the off-set intersection of Ste. Marie Street with Hume Street
Option 2 Hamilton Street, Central Park and Train Trail	▶ Install share-the-road signs and pavement markings (sharrows) and wayfinding signs on Hamilton Street as an **interim** measure ▶ Undertake capital road improvements to add bike lanes along Hamilton Street as the **ultimate** solution ▶ Widen and pave trail through Central Park starting at Hamilton Street and intersecting with the Train Trail ▶ Construct crossing treatments at the intersection of Hamilton Street/ Central Park parking lot and Paterson Street	▶ Makes use of existing infrastructure including the traffic control signals at Hurontario Street and Sixth Street and Hume Street and Minnesota Street, plus the Train Trail ▶ Relies on low volume roadways for connection (Hamilton Street) and trail through Central Park, reducing stress for cyclists and potential conflicts ▶ Fully separated trail offers more attractive and enjoyable route through Central Park and along Train Trail	▶ Eastbound connection from end of Hamilton Street to the trail through Central Park could be difficult to access during periods of high activity in the park ▶ Cyclists must share part of the route with vehicles on the roadway (Hamilton Street) ▶ Requires construction of crossing treatments on Paterson Street and improvements to trail through Central Park

TABLE 3.3: ASSESSMENT OF ROUTE CONTINUITY ALTERNATIVES – LOCAL NETWORK

Option	Description	Opportunities	Challenges
Train Trail and Harbourview Trail Connection (See Figure 3.5)			
Option 1 Train Trail Terminus, Heritage Drive, Side Launch Way	▶ Travel along the multi-use urban trail (existing) on the east side of Heritage Drive to Side Launch Way and on the south side of Side Launch Way from Heritage Drive to Harbourview Trail ▶ Install signs along the route for wayfinding and to indicate shared facility on Heritage Drive and advise pedestrians and cyclists which sidewalk to use on Side Launch Way ▶ Provide crossing treatments and signs along Side Launch Way at N. Pine Street	▶ Makes use of existing infrastructure ▶ Can separate pedestrian and cyclist traffic with two sidewalks along the south side of Side Launch Way ▶ Relies on low volume roadways for connection (Harbour Drive and Side Launch Way), reducing stress for cyclists and potential conflicts ▶ Offers more attractive and enjoyable route next to the lake ▶ Offers lower cost solution	▶ Requires several road crossings which creates potential for vehicular-cyclist collisions ▶ Cyclists may not find the sidewalks enjoyable at higher speeds ▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings and driveways introduce potential conflicts with motor vehicles
Option 2 Train Trail Terminus, First Street, Maple Street	▶ Provide wayfinding signs on First Street multi-use urban trail directing cyclists to N. Maple Street ▶ Install share-the-road signs and pavement markings (sharrows) on Maple Street to connect to Harbourview Trail	▶ Makes use of existing infrastructure ▶ Offers lower cost solution	▶ Shared facility with pedestrians slows cyclists and introduces potential conflicts ▶ Road crossings and driveways introduce potential conflicts with motor vehicles

3.3.2 Connections to Adjacent Communities

Although not the focus of this Cycling Plan, the following describes the preferred approach for improving connections to key destinations near to Collingwood, as identified in **Section 2.1.2**:

East to Wasaga Beach

The Hume Street bike lanes continue to the intersection of Pretty River Parkway and Highway 26. If travelling east towards Wasaga Beach from this point, cyclists must cross to the north side of Hume Street to continue along the multi-use urban trail (3.0-metre wide concrete sidewalk), which terminates at Marine View Drive. The route then continues north on residential roads, following Barrington Trail, Huronia Pathway and Georgina Manor Drive to Lakeview Avenue and Beachwood Road (formerly Highway 26).

As described in **Table 3.4**, the preferred approach for improving cycling connections to Wasaga Beach and other points east entails:

- Exploring the possibility of forming a direct route from Marine View Drive to Beachwood Road along Highway 26. If feasible, proper crossing treatments should be provided at the Highway 26 and Beachwood Road intersection to assist cyclists getting to the eastbound bike lanes on the south side of Beachwood Road; and
- Marking buffers and installing Reserved Bicycle Lane signs (Rb-94A OTM) on Beachwood Road to designate the lanes and increase motorist awareness.

Northwest to the Blue Mountains

The Town has experienced considerable development on the west side of the community and north of Mountain Road in recent years. While several recreational trails exist, a direct cycling route to downtown and other central destinations is needed. As described in **Table 3.4**, the prepared approach to serving this area and improving cycling connections to the Blue Mountains and other points northwest entails:

- Providing a separated on- or off-road connection from west of Lighthouse Lane to Cranberry Trail East within the Highway 26 corridor. If on-road, a protected facility (i.e. physically separated by a concrete median or other barrier) should be provided due to the higher vehicular speeds and volumes; and
- Providing a shared route on Cranberry Trail.

West to Blue Mountain Village

In 2017, Grey County, Simcoe County, the Town of Blue Mountains and the Town of Collingwood completed a study to identify the preferred cycling route between the Town of Collingwood and Blue Mountain Village[2]. The route extends west along Mountain Road from the termination of the existing trail at the cul-de-sac of Thomas Drive. However, the study did not specify how the Mountain Road Trail would link to the Town's cycling network, as the facility currently ends at the Black Ash Trail and does not connect directly to east.

[2] *Collingwood to Blue Mountain Village Trail Study*, Final Report, August 2017, WSP Group.

TABLE 3.4: ASSESSMENT OF ROUTE CONTINUITY ALTERNATIVES – CONNECTIONS TO ADJACENT COMMUNITIES

Option	Description	Opportunities	Challenges
East Connection to Wasaga Beach			
Connection from Hume Street Bike Lanes (2.5 km from Hume Street to Lakeview Avenue)	▶ Install wayfinding signs from Hume Street bike lanes to sidewalk on north side of Hume Street at Highway 26 ▶ Improve wayfinding signs and sharrows on Huronia Pathway and Georgian Manor Drive ▶ Install signs and pavement markings (compliant with OTM Book 18) on Beachwood Road to demarcate bike lanes	▶ Providing separated facility in combination with shared use on low volume roadways improves safety and comfort for cyclists ▶ Paved multi-use pathway improves comfort for cyclists ▶ Provides connections to/from the centre of Town ▶ Preserves future opportunity to extend sidewalks on Highway 26 from Marine View Drive to Beachwood Road	▶ Not the most direct connection, which could lead cyclists to travel quicker, but less safe routes ▶ A portion of the route parallels Highway 26, increasing stress for cyclists ▶ Cyclist and vehicle interactions required at driveway accesses along Highway 26
Northwest Connection to Blue Mountains			
Highway 26	▶ Provide on or off-road connection from the east end of Vacation Inn Trail (west of Lighthouse Lane) to the west end of Cranberry Inn Trail ▶ Install share-the-road signage and pavement markings (sharrows) on Cranberry Trail (road)	▶ Provides direct route ▶ Completes connections to new developments	▶ Insufficient right-of-way may not allow for a fully separated facility

TABLE 3.4: ASSESSMENT OF ROUTE CONTINUITY ALTERNATIVES – CONNECTIONS TO ADJACENT COMMUNITIES

Option	Description	Opportunities	Challenges
West Connection to Blue Mountain Village (see Figure 3.6)			
Option 1 Connection from Heather Pathway and/or Harbourview Trail	▶ Install wayfinding signs from Heather Pathway and/or Harbourview Trail to Georgian Trail and Black Ash Trail ▶ Install crossride(s) over Balsam Street at Old Mountain Road and/or Canadian Tire parking lot entrance ▶ Provide crossing over Mountain Road at Black Ash Trail	▶ Makes use of existing infrastructure ▶ Offers more attractive and enjoyable route ▶ Low cost	▶ Not a direct route, especially for cyclists travelling to/from the south (High Street)
Option 2 Old Mountain Road	▶ Provide on or off-road route leading from Harbourview Trail to First Street Extension on Old Mountain Road ▶ Construct multi-use trail on the north side of First Street Extension from Old Mountain Road to Black Ash Trail ▶ Install crossrides over Balsam Street at Old Mountain Road ▶ Provide crossing over Mountain Road at Black Ash Trail	▶ Provides either a fully separated facility or a visually separated facility for cyclists (adjacent to a low volume road) ▶ Provides direct route if travelling from Harbourview Trail	▶ Not direct if travelling from the south (High Street) ▶ Crossride required on a high-volume street, which may pose safety concerns ▶ Multi-use trail requires a narrow crossing over Black Ash Creek, which may pose safety concerns
Option 3 First Street Extension	▶ Construct multi-use (urban) trail along south side of First Street Extension from High Street to Black Ash Trail ▶ Widen bridge over Black Ash Creek (longer term solution)	▶ Most direct option ▶ Moderate costs in the short term	▶ Multi-use trail parallels a high-volume street (First Street Extension) and requires a narrow crossing over Black Ash Creek, which may pose safety concerns

TABLE 3.4: ASSESSMENT OF ROUTE CONTINUITY ALTERNATIVES – CONNECTIONS TO ADJACENT COMMUNITIES

Option	Description	Opportunities	Challenges
Option 4 Third Street	▶ Construct multi-use trail from Third Street bike route to Black Ash Trail ▶ Install crossride over High Street at Third Street ▶ Provide creek crossing over Black Ash Creek	▶ Provides a fully separated facility ▶ Offers more attractive and enjoyable route ▶ Connects to main cycling corridor into downtown	▶ High cost due to new trail, traffic signals and bridge construction ▶ Property acquisition likely required ▶ Crossride required on a high-volume street, which may pose safety concerns ▶ Not a direct route

Table 3.4 assesses four options for addressing this discontinuity, as illustrated in **Figure 3.6**. Based on this assessment, Option 3 is the preferred approach, which entails:

- Constructing a multi-use (urban) trail along south side of the First Street Extension from High Street to Black Ash Trail; and
- Widening the bridge over Black Ash Creek, which is a longer-term initiative tied to the planned improvements to Mountain Road.

3.4 Future Cycling Network

Figure 3.7 illustrates the future cycling network for the Town of Collingwood. Building on the existing grid of Town roads, the future network provides a permeable and connected system of routes facilitating travel throughout the municipality. Opportunities to travel beyond the Town's boundaries are also facilitated by the plan.

It is recommended that the Town adopt the cycling network illustrated in Figure 3.7 and as further detailed in Tables 3.2 to 3.4 (#1).

FIGURE 3.6: ROUTE ALTERNATIVES FOR MOUNTAIN ROAD TRAIL CONNECTION
(Map Source: Google Earth)

N

Town of Collingwood Cycling Plan

Figure 3.7
Future Cycling Network

Legend

- Crossride
- Dog Park
- Hospital
- Municipal Building
- Police
- Recreation
- Theatre
- Parking Area
- Playground
- Washroom
- Schools
- Place of Worship
- Parks

Separated (Off-Road) Facilities

- UnpavedTrail
- Paved Trail
- Multi-Use Sidewalk
- Proposed Paved Trail
- Proposed Multi-Use Sidewalk
- Proposed Multi-Use Trail (In Boulevard)

Shared (On-Road) Facilities

- Signed Bike Lane
- Proposed Shared On-Street Bike Route
- Proposed Bike Lanes (New/Upgraded)

September 2019

paradigm

Data provided by the Town of Collingwood

0 1.25 2.5 Kilometers

THE BLUE MOUNTAINS

CLEARVIEW

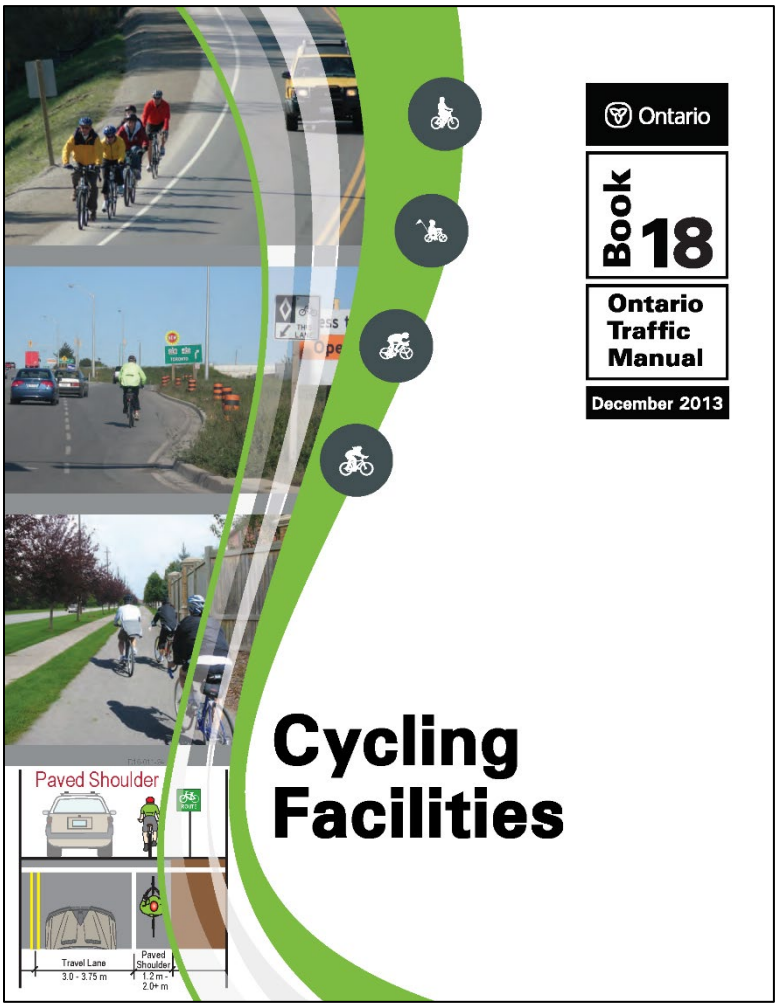
WASAGA BEACH

Georgian Bay

Collingwood Harbour

Long Point Rd
Silver Creek Dr
Highway 26 W
Princeton Shores Blvd
Vacation Inn Trail
Mariners Wy
Osler Bluff Rd
Thornbury (16 km)
Conservatory Wy
Cranberry Trail E
Georgian Trail
Dawson Dr
Cranberry Inn Trail
Holly Crt
Laurel Blvd
Eleventh Ln
Harbour St W
Mariners Hv
Heritage Dr
Blue Mountain Village (2 km)
Trails End
Mountain Rd
Mountain Road Trail
Kells Cres
Grey Rd 19
Tenth Ln
Stewart Rd
Simcoe County Rd 32
Black Ash Trail
Davis St
High St
Elm St
Spruce St
Hickory St
Walnut St
Cedar St
Oak St
Birch St
Beech St
Maple St
Pine St
Huron St
First St
Second St
Third St
Fourth St
Sixth St
Seventh St
Eighth St
Ninth St
Tenth St
Cameron St
Campbell St
Findlay Dr
Stanley St
Mary St
Wilson St
Clark St
Hamilton Drain Trail
Tracey Ln
Kirby Av (Future)
Hughes St
Hurontario St
St. Marie St
Fairview St
Collins St
Siding Trail
Train Trail Stayner (12 km)
Peel St
Raglan St
Hume St
Erie St
Ontario St
Simcoe St
Lawrence St
Prelty River Pkwy
St Clair St
Marine View Dr
Highway 26 E
Georgian Manor Dr
Ron Emo Rd
Sanford Fleming Dr
Sixth Ln
Summer View Av
Poplar Sideroad
Indian Trl
Beachwood Rd
Lane D
Glen Rd
HIGHWAY 26
Broadview St
Braeside St
Toner St
4th Ln
Sunds Rd

CHAPTER 4
Cycling Facility Design Guidelines



Source: OTM Book 18, Queen's Printer for Ontario

4.1 Facility Types

Cycling facility guidelines were developed based on current best practices and a review of the Town's infrastructure-related engineering and planning design standards and policies. The guidelines summarized below are not intended to be prescriptive or replace sound engineering judgement and should be used in combination with recommended guidelines and reference documents such as OTM Book 18 and the TAC *Bikeway Traffic Control Guidelines for Canada*.

It is recommended that the Town adopt the guidelines specified in Tables 4.1 and 4.2 and Figure 4.2 for the design and installation of cycling facilities (#2). Two main categories of cycling facilities are recommended for the cycle network – shared and separated. The following sections summarize the characteristics of facilities within each category. **Tables 4.1 and 4.2** provide more detailed descriptions, applications and specifications of the various shared and separated facility types, respectively. **Section 4.4** and **Figure 4.2** outline the signing and pavement marking provisions referenced in the tables.

4.1.1 Shared Facilities

Shared Use Lanes

Technically all roadways are shared routes unless signed otherwise. That said, routes expressly forming part of a cycle network should be signed and marked properly for awareness, consistency and wayfinding.

Shared use lanes are typically only considered for local and (sub)urban roads where traffic volumes and motor vehicle operating speeds are low. Signs and pavement markings (sharrows) should be installed on these routes to remind drivers and cyclists to share the road.

Paved Shoulders

Paved shoulders on rural roads are also considered shared routes. In addition to serving stopped, disabled and emergency vehicles, cyclists can also use the shoulder.

Bicycle Priority Streets

A Bicycle Priority Street (or Bicycle Boulevard) is another form of shared roadway facility, offering priority for cyclists operating alongside motor vehicle traffic. This type of facility is ideal for low-speed and low-volume traffic conditions, providing convenient and often direct access through neighbourhoods. Infrastructure and signing specific to a bicycle boulevard include sharrows, speed humps, wayfinding signs, chicanes and crossing enhancement tools.

The Town does not currently use these types of **traffic calming** measures on roads under its jurisdiction. "Traffic calming is the broad term used to describe the process and measures applied by road authorities to address concerns about the behaviour of motor vehicle drivers travelling on streets within their jurisdictions."[3] **It is recommended that the Town introduce a Traffic Calming Policy supporting the development of traffic calming plans and identifying the types of measures acceptable for use on roads in Collingwood to enable the introduction of Bicycle Priority Streets in suitable locations (#3).**

[3] Transportation Association of Canada, *Canadian Guide to Traffic Calming*, 2018.

TABLE 4.1: SHARED CYCLING FACILITIES

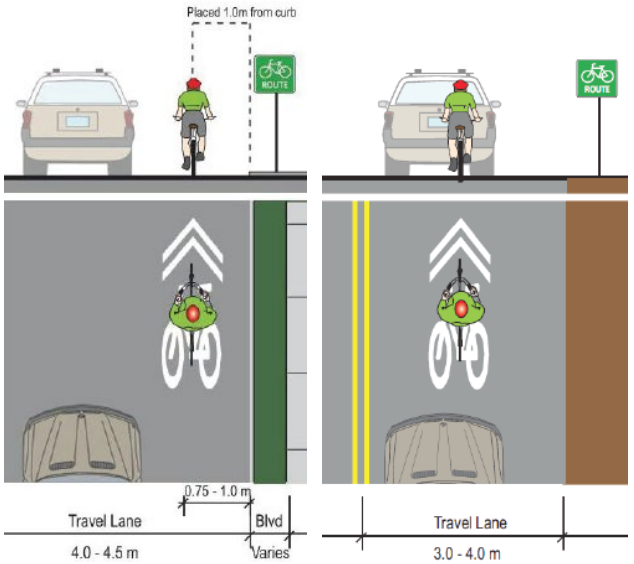
Sharrows		
Description	▶ A roadway shared by motor vehicles and cyclists ▶ Route denoted with shared use lane markings (or "sharrows") and bicycle route green marker road signs ▶ Sharrows indicate the appropriate travel location for cyclists ▶ Option to include: • Wayfinding signs to guide cyclists • Warning signs to remind motorists to share the road	 Source: OTM Book 18  Source: OTM Book 18
Application	▶ Local urban and (sub)urban roadways ▶ Low traffic volumes and speeds	
Specifications	▶ Lane Width: • Desired – 4.5m • Minimum – 3.0m ▶ Signs and Markings: S3, S6, S7, P2	 Source: OTM Book 18  Source: City of Barrie

TABLE 4.1: SHARED CYCLING FACILITIES

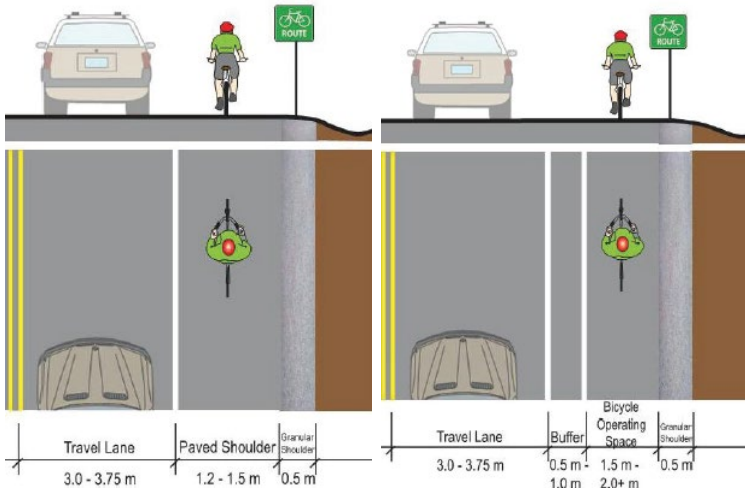
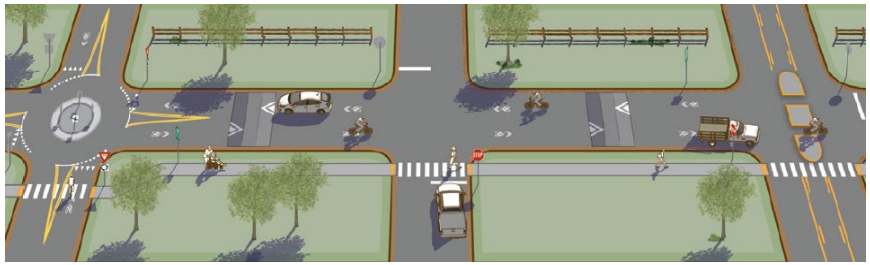
Paved Shoulder		
Description	▶ A roadway shared by motor vehicles and cyclists ▶ Route denoted with bicycle route green marker road signs ▶ Cyclists travel on the paved shoulder portion of the roadway and should yield to stopped, disabled and emergency vehicles ▶ Option to include: • Painted buffer zone to provide cyclists with greater separation from motorists. • Bicycle friendly rumble strips between the paved shoulder and vehicle travel lane.	 Source: OTM Book 18
Application	▶ Rural secondary highways, arterial roadways and collector roadways ▶ Low traffic volumes and speeds ▶ May be used as first step towards dedicated bike lanes	  Source: OTM Book 18
Specifications	▶ Shoulder Width < 4,500 AADT • Desired – 1.5m • Minimum – 1.2m ▶ Shoulder Width > 4,500 AADT • Desired and Minimum – 2.0m ▶ Signs and Markings: S3, S6, S7, P2	

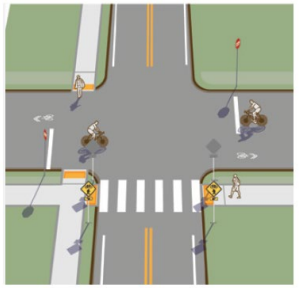
TABLE 4.1: SHARED CYCLING FACILITIES

Bicycle Priority Street (or Bicycle Boulevard)	
Description	▶ Shared roadway offering priority for cyclists ▶ Route denoted with shared use lane markings (or "sharrows") and share the road warning signs ▶ Sharrows indicate the appropriate travel location for cyclists ▶ Centre line is not marked
Application	▶ Low volume, low speed local roadway near schools and other destinations
Benefits	▶ Increases comfort for cyclists ▶ Connects residential streets to commercial corridors and community services ▶ Improves conditions for pedestrians (assuming sidewalks also provided) ▶ Can reduce serious injuries and collisions ▶ Improves quality of life for residents ▶ Less visually impactful than separated facilities
Considerations	▶ May require additional paved surface to provide sidewalk ▶ Several design treatments available to offer priority for cyclists over cross-street traffic. Type and detail of design will depend on vehicle and pedestrian volumes.

Standard Bicycle Boulevard



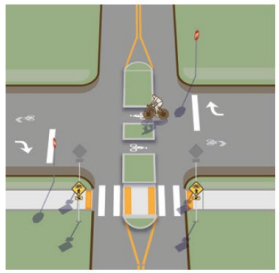
Crossing Treatments



Crosswalk Markings and Crossing Warning Signs

Curb Extensions

Active Warning Beacons



Median Islands

Pedestrian Hybrid Beacons

Source: FHWA Small Town & Rural Multimodal Networks

TABLE 4.2: SEPARATED CYCLING FACILITIES

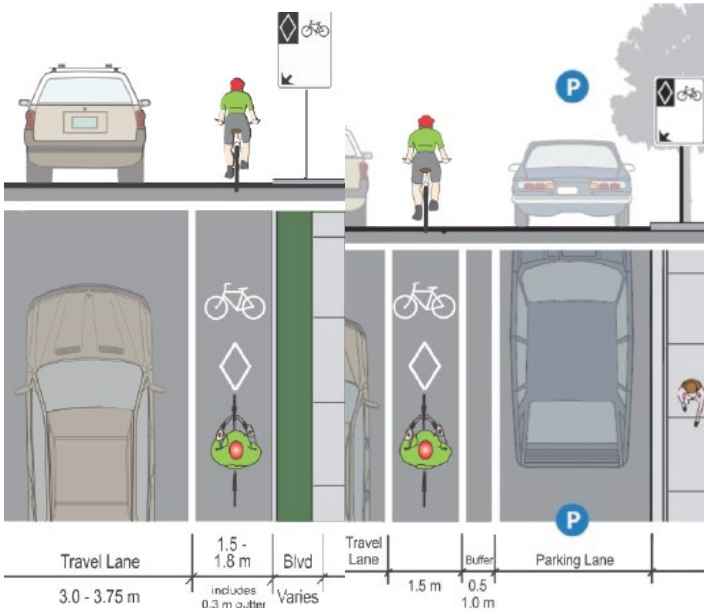
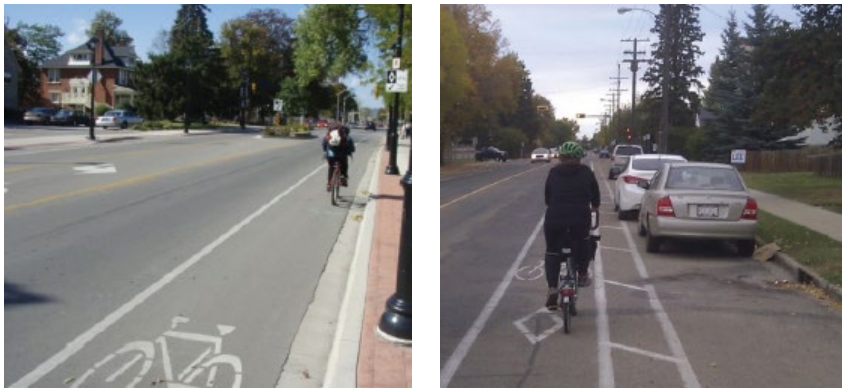
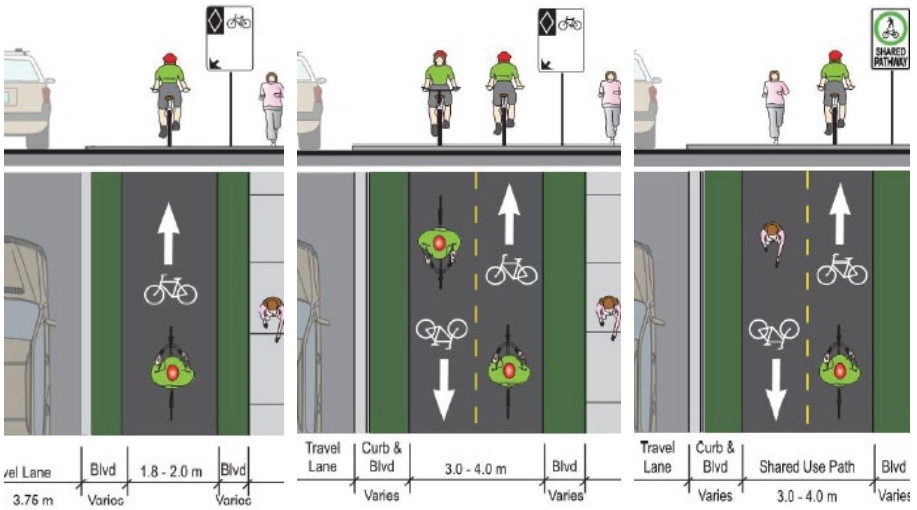
Bike Lanes		
Description	▶ A portion of the roadway that has been separated from motor vehicle traffic by two longitudinal solid white lines and a diamond followed by a bicycle symbol and is for preferential or exclusive use by cyclists ▶ Signed with no stopping signs, bike lane signs and pavement markings ▶ Option to include greater separation/delineation with: • Bollards, planters or vehicle parking • Painted buffer zone • Bicycle friendly rumble strips between the paved shoulder and vehicle travel lane	 Source: OTM Book 18
Application	▶ Urban arterial and collector roadways ▶ Higher traffic volumes and operating speeds	 Source: bikecalgary.org
Specifications	▶ Lane Width: • Desired – 1.8+m • Minimum – 1.5m ▶ Optional Buffer Width – 0.5 to 1.2m ▶ Signs and Markings: S4, P1	

TABLE 4.2: SEPARATED CYCLING FACILITIES

Trails		
Description	▶ Paved or unpaved paths physically separated from motor vehicle traffic by: • The boulevard if located within the road allowance, or • Other properties if situated outside the right-of-way ▶ Trail is not for use by motorized vehicles ▶ Trail may be for exclusive cyclist use or shared with pedestrians and other active travel modes (e.g. skateboards, scooters) ▶ Wayfinding signs typically provided along the trail to guide users ▶ Appropriate for both experienced and inexperienced cyclists	 Source: OTM Book 18
Application	▶ Popular tourist destinations ▶ Parallel to high volume, high speed roadways where a shared facility is not feasible or desirable ▶ Direct commuter route in corridors not served by on-road bicycle facilities	 Source: City of Toronto  Source: The Torontoist
Specifications	▶ Facility Width: • Desired – 4.0m • Minimum – 3.0m ▶ Signs and Markings: S1, S2 or S3	

4.1.2 Separated Facilities

Bike Lanes

Bike lanes are a portion of the roadway separated from motor vehicle traffic by signs, pavement markings and sometimes physical buffers (such as a line of bollards or parked vehicles) reserved for bicycle use. On a two-way roadway, bike lanes are typically provided on both sides of the street, which cyclists travelling in the same direction as vehicular traffic. Additional no stopping signs are provided along the lane to ensure vehicular traffic does not use the lane for parking or drop-off/pick up activities.

Bicycle lanes are typically located on urban arterial or collector roadways that have higher traffic volumes and operating speeds. The separated facility can be a cost-effective solution to lowering vehicle speeds (through the reduction in lane widths) and increasing comfort and safety for cyclists.

Trails

Trails are paved (asphalt or concrete) or unpaved (stone dusted) paths physically separated from motor vehicle traffic by the boulevard (if located within the road allowance) or other properties (if situated outside the right-of-way).

Trails often offer more scenic and indirect routes for recreational cyclists but can also provide a direct commuter link in corridors not served by on-road bicycle facilities. In Collingwood, the Town has constructed 3.0-metre wide concrete multi-use urban trails in several corridors for this purpose. These facilities are intended for use by both pedestrians and cyclists, requiring users to be more attentive to potential conflicts given the speed differential.

4.2 Crossrides

A crossride is a part of the roadway intended as a crossing for pedestrians and cyclists where cyclists are permitted to ride within the crossing. This is indicated by signs, pavement markings and a traffic signal if the crossing is signalized. **Table 4.3** provides more detailed descriptions, applications and specifications of the four types of crossrides based on guidance contained in OTM Book 18.

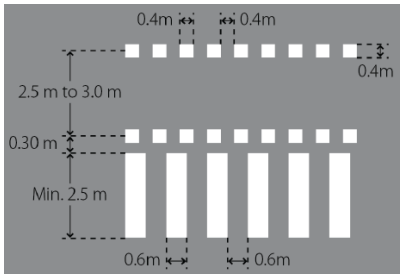
It is recommended that the Town use crossrides to aid cyclists in crossing the road at locations meeting the criteria specified in OTM Book 18 (#4).

4.3 Roundabouts

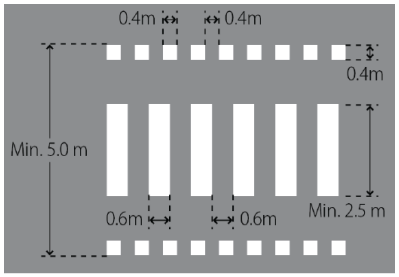
There are several roundabout intersections in the Town of Collingwood that cyclists may need to traverse in travelling through the community. OTM Book 18 and the TAC *Canadian Roundabout Design Guide* provide guidance on how to safely and efficiently integrate bicycle facilities into roundabouts. According to Section 5.3 of OTM Book 18:

TABLE 4.3: CROSSRIDES

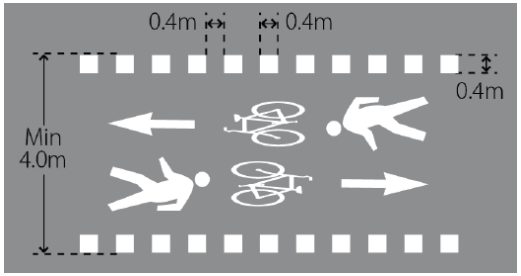
Description	▶ Designated location for riders to travel across a roadway without having to dismount. ▶ Four types of crossrides: • Separated – Cyclist and pedestrian crossings separated • Combined – Cyclist crossing locations provided on either side of pedestrian crosswalk • Mixed – Cyclists and pedestrians share same space • Midblock – More direct link between adjacent facilities
Benefits	▶ Increases convenience for cyclists ▶ Provides more visible and direct connection between cycling facilities that cross higher volume and/or speed roadways ▶ Can reduce serious injuries and collisions
Considerations	▶ Channelized right-turns should be removed to increase safety ▶ Pathway organization signs or guidance signs and markings on how to navigate the crossride should be provided ▶ Cyclist pushbuttons should be provided in a location that does not require riders to dismount ▶ Option to include bicycle signals ▶ Where a pedestrian signal is not provided, the pedestrian pavement markings should not be applied to avoid confusion regarding right-of-way.



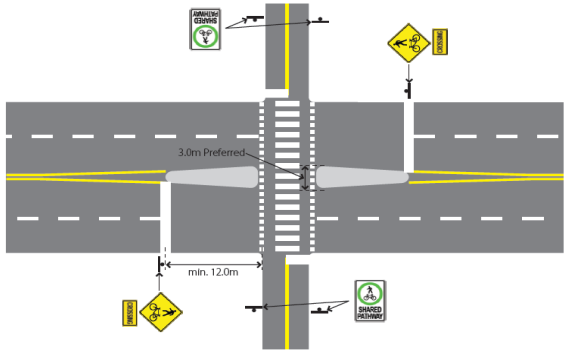
Separate Crossride



Combined Crossride



Mixed Crossride



Midblock Crossride

Source: OTM Book 18

- At **single-lane roundabouts**, cyclists are expected to share the roadway with motorists. The bicycle lane should transition to a shared roadway in advance of the roundabout. Share-the-road signs and pavement marking (sharrows) should be provided to remind users of the expected positioning of the cyclist within the roundabout. As an option where cyclists are likely to take the first exit of the roundabout, a bypass may be provided in the form of an in-boulevard shared use path. Cyclist access to and from the bypass facility should be provided by tapered ramps.
- For **multi-lane roundabouts**, cyclists should be given a choice between sharing the roadway with motorists and transitioning to a shared use pathway. This bypass should be surfaced with asphalt, have a desired width of 4 metres (which may be reduced to 3 metres under constrained conditions) and have a yellow directional dividing line. Cyclists should yield to pedestrians where their paths cross.

Figure 4.1 illustrates the recommended design of bicycle lanes at roundabouts per OTM Book 18.

OTM Book 15 provides guidance on pedestrian crossing control at roundabouts. Cyclists uncomfortable riding through a roundabout can walk their bicycles across the intersection with the presence of pedestrian-oriented traffic control devices, which include Level 2 Types B and C Pedestrian Crossovers. These devices are distinctly defined by the prescribed use of regulatory and warning signs (side mounted and/or overhead mounted crossover signs), rapid rectangular flashing beacons, and ladder and “shark’s tooth” pavement markings.

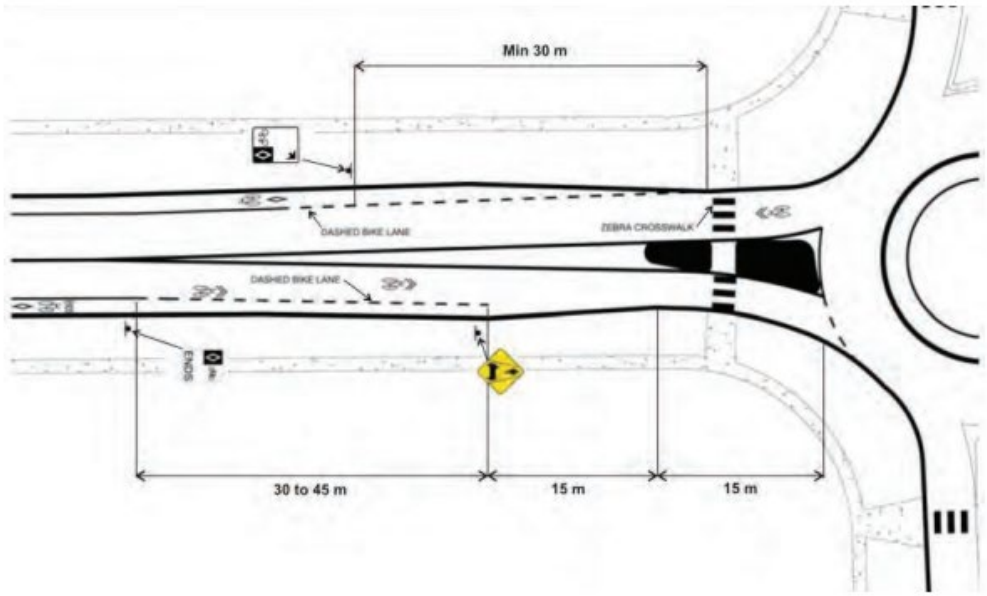
4.4 Signing and Pavement Markings

It is important that each facility be signed and marked appropriately, consistent with recommended practices in OTM Book 18, the TAC *Bikeway Traffic Control Guidelines for Canada* and other accepted guidelines. Effective delineation will help clarify the proper use of each facility and minimize potential confusion between motorists and cyclists.

It is recommended that the Town apply the signing and pavement marking guidelines specified in OTM Book 18 and the TAC *Bikeway Traffic Control Guidelines for Canada* in the design and installation of cycling facilities (#5). **Figure 4.2** summarizes the recommended guidelines for use on cycling facilities in Collingwood.

Figure 5.9 – Bicycle Lane at a Single Lane Roundabout, No Bicycle Bypass

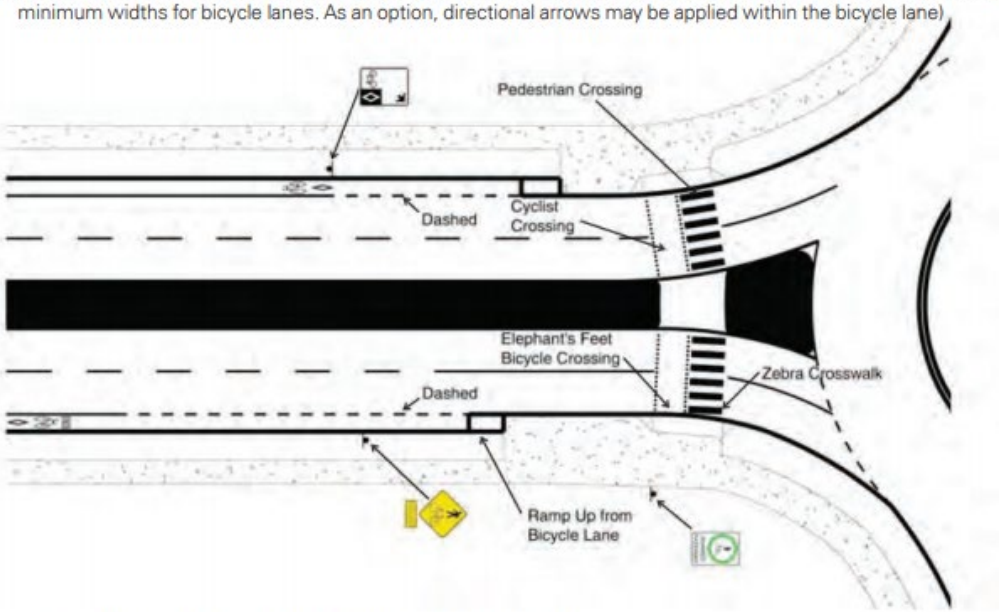
(Signs not directly related to the bicycle facilities have been omitted for clarity. See Table 4.3 for desired and suggested minimum widths for bicycle lanes. As an option, directional arrows may be applied within the bicycle lane)



Source: Based on TAC Bikeway Traffic Control Guidelines for Canada, 2012 (Figure 34, p. 88)

Figure 5.11 – Bicycle Lane at a Multi-lane Roundabout with Bicycle Bypass

(Signs not directly related to the bicycle facilities have been omitted for clarity. See Table 4.3 for desired and suggested minimum widths for bicycle lanes. As an option, directional arrows may be applied within the bicycle lane)



Source: TAC Bikeway Traffic Control Guidelines for Canada, 2012 (Figure 35, p. 89)

FIGURE 4.1: BICYCLE LANES AT ROUNDABOUTS
(Source: OTM Book 18, Figures 5.9 and 5.11, pp. 137 and 139)

S1. Shared Pathway Sign

OTM RB-71
300 x 450

S2. Pathway Organization Sign

OTM RB-72a
300 x 450

OTM RB-72b
300 x 450

S3. Bicycling Route Marker Sign

OTM M511
450 x 450

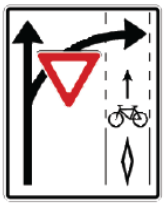
S4. Reserved Bicycle Lane Signs

TAC RB-90
600 x 750

TAC RB-91
600 x 750

TAC RB-92
600 x 750

S5. Running Vehicles Yield to Bicycles Signs



TAC RB-37
600 x 750

S6. Share the Road Sign

OTM WC-19
600 x 600

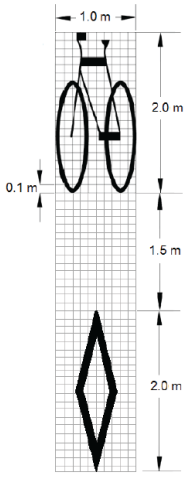
OTM WC-19t
300 x 600

S7. Shared Use Lane Single File Sign

OTM WC-24
600 x 600

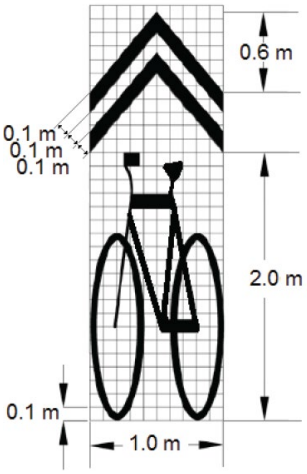
OTM WC-24t
300 x 600

P1. Bicycle Lane Pavement Markings



TAC Table 7-1

P2. "Sharrow" Pavement Marking



TAC Section 7.4.3

P3. Trail Pavement Markings (optional)

OTM Book 18 (Figure 4.98)

FIGURE 4.2: BICYCLE FACILITY SIGNS AND PAVEMENT MARKINGS

4.5 End-of-Trip Amenities

Attractive and conveniently located end-of-trip amenities are essential to a successful cycling system. For some users, the availability of facilities and services such as bicycle parking and change rooms can be the determining factor in deciding whether to cycle to work, school, shopping and other destinations.

4.5.1 Bicycle Parking

Safe, secure and accessible bicycle parking is the most essential end-of-trip amenity. Potential riders can be deterred from cycling simply because there is nowhere to leave their bicycle upon arrival at their destination.

It is recommended that the Town introduce standards through its Zoning By-law (or guidelines if more appropriate) for the provision of adequate, well-designed bicycle parking (#6), to be implemented primarily through development applications. **Table 4.4** provides the proposed bicycle parking standards by land use for Collingwood. The table defines parking rates for both short and long duration parking. Additional guidance for the application and design of both types of bicycle parking is provided below:

Short Duration Parking

Short duration parking facilities offer a secure, public area for visitors and others to park their bicycles. These facilities usually consist of post and ring or larger bike racks positioned near building entrances or public spaces. Overhead protection of the area may be offered with little to no surveillance.

The following criteria should be considered in the design of short duration bicycle parking facilities:

- Each parking space should be provided on a permanently anchored rack;
- Aisles between bicycle racks and other pedestrian facilities (i.e. sidewalks, entrances, etc.) should be a minimum of 1.2 metres wide; and
- The parking spaces should be placed in convenient, accessible and well-lit areas.

Long Duration Parking

Long duration parking facilities are usually located in multiple unit residential buildings, schools, office buildings or transit hubs. These facilities offer a secure area for users to park their bike for longer periods of time (typically all day or overnight). This type of parking is typically located in enclosed rooms, lockers, or covered and fenced areas.

The following criteria should be considered in the design of long duration bicycle parking facilities:

- Each parking space should have at least 1.9 metres vertical clearance and be a minimum of 0.6 metres wide and:
  - 1.8 metres in length if the bicycles are to be parked horizontally (on two wheels); or
  - 1.0 metres in length if the bicycles are to be placed vertically (resting on one wheel);

TABLE 4.4: PROPOSED BICYCLE PARKING STANDARDS

Land Use	Long Duration Parking	Short Duration Parking
Commercial		
Commercial (including Retail Store, Sales and Service Repair Shop, Personal Service Shop, Factory Outlet, Merchandise Service Shop, Light Equipment Rental Establishment, Bakery, Printing and Processing Service Shop) Financial Institution	1 space per 750 m^2 of gross floor area (GFA)	A minimum of 6 spaces for any building with 1,000m^2 or more of GFA
Business Office	1 space per 500 m^2 of GFA	A minimum of 6 spaces for any building with 2,000m^2 or more of GFA
Institutional		
Museum, Art Gallery, Artisan Operation, Artist Studio and Gallery	1 space per 500 m^2 of GFA	A minimum of 6 spaces for any building with 1,500m^2 or more of GFA
Community Centre, Sports Arena, Wellness Centre, Fitness Centre, Club	1 space per 250 m^2 of GFA	A minimum of 6 spaces at each public entrance
Hospital	1 space per 1,000 m^2 of GFA	A minimum of 6 spaces at each public entrance
Place of Worship or Assembly	No requirement	A minimum of 6 spaces at each public entrance
School	Elementary – 1 space per 200 m^2 of GFA Secondary – 1 space per 100 m^2 of GFA	1 space per 300 m^2 of GFA
Industrial		
Warehouse (retail or wholesale) Industrial	1 space per 1,000 m^2 of GFA	No requirement

- Aisles between parked bicycles should be a minimum of 1.5 metres wide;
- Bicycle racks/storage lockers should be securely anchored and allow the bicycle frame to be locked;
- The parking spaces should be securely enclosed by solid opaque walls or a compound enclosed by a metal fence to maximize security;
- The parking spaces should be located at building grade or within one storey of building grade in an area that provides convenient access to main entrances or well used areas (i.e. no more than 50 metres from an elevator or building entrance); and
- For accessibility purposes, a minimum of 50% of the parking spaces should allow for bicycles to be parked horizontally.

Access to Parking

Safe and convenient access to and from bicycle parking is imperative to maximizing its utility and use. Effective parking design should consider:

- **Location** – Bicycle parking should be located within 30 metres of the end-of-trip destination or amenity. The location should also provide convenient and safe access to and from nearby bicycle routes and primary entry points.
- **Point of Access** – The safest and most direct route for users to access bicycle parking should be delineated and signed where necessary. Access to facilities may be via parking lots, loading bays, building entries, internal elevators or other access points depending on the nature of the site.
- **Route Design** – Access routes to bicycle parking should be designed to:
  - Provide adequate overhead clearance (mounted cyclists are taller than pedestrians and most motor vehicles);
  - Avoid steep ramps, speed humps, catchbasins and other hazards to cyclists;
  - Provide appropriate levels of surveillance and lighting;
  - Avoid interference with emergency access, loading bays and other infrastructure; and
  - Avoid hazard and impedance to pedestrians.

4.5.2 Other Amenities

Providing change rooms, showers and other end-of-trip amenities in addition to bicycle parking can further encourage people to cycle (longer distances) to work, school and other destinations. These facilities also benefit people other than cyclists. Potential end-of-trip amenities to consider include:

- Change rooms and lockers;
- Showers and washrooms;
- Courtesy items such as hairdryers, irons and ironing boards, washing machines and dryers, towel service, clothing hooks, fans and electrical outlets;

- Repair equipment and supplies such as pumps, plyers, wrenches, oil and puncture repair kits. Often this will take the form of a bicycle repair (or "fix-it") station as shown in **Figure 4.3**; and
- Delivery service.

It is recommended that the Town introduce guidelines (or standards through the Zoning By-law if more appropriate) for the provision of specified end-of-trip amenities (#7), to be implemented primarily through development applications. **Table 4.5** summarizes the types of amenities proposed for different locations.

FIGURE 4.3: BICYCLE REPAIR STATION

TABLE 4.5: OTHER PROPOSED END-OF-TRIP AMENITIES

Amenity	Location		
	Workplace	School	Commercial[1]
Change Rooms	●		
Lockers	●	●	
Showers	●		
Washrooms	●		●
Courtesy Items	●		
Repair Equipment	●		●
Delivery Service			●

1 Includes retail stores and shops, shopping centres, business centres, customer service centres, etc.

The selection and design of other end-of-trip amenities should consider:

- **Location** – Amenities should be located close to bicycle parking and/or primary building entrances;
- **Segregation** – Separate, individual change rooms, lockers, showers and/or washrooms for males and females are preferred, although unisex design allows for greater accessibility and flexibility.
- **Safety and Security** – Well-designed facilities have non-slip surfaces, hooks and/or benches to keep belongings off the floor, adequate lighting and ventilation and regularly cleaned and maintained. Facilities that can be locked and/or are access controlled are preferred.

Change Rooms and Showers

Table 4.6 summarizes the proposed number of showers to provide with new and retrofit developments, should the property owner/developer wish to include these end-of-trip amenities on site. If it is not possible to provide change rooms and showers on-site, access to facilities within an adjoining building or a nearby gym should be pursued.

TABLE 4.6: PROPOSED NUMBER OF SHOWERS

Total Staff	Number of Showers
0-19	One
20-49	Two, 1 male and 1 female in separate change rooms
50-149	Four, 2 male and 2 female in separate change rooms
150-299	Six, 3 male and 3 female in separate change rooms
300-500	Eight, 4 male and 4 female in separate change rooms
>500	Additional showers at a rate of 1 female and 1 male shower for every 250 staff

Lockers

If provided, lockers should be placed in change rooms (preferably) or adjacent to bicycle parking. Alternatively, additional storage space can be provided within bicycle lockers. Other factors to consider include:

- **Supply** – One locker should be provided for each bicycle parking space. Additional lockers may be provided for other users of the facility and visitors.
- **Design** – Lockers should be secure (with locking mechanisms to protect belongings), well ventilated and have adequate space to store cycling attire and equipment and a range of clothing (coats, skirts, shirts, pants).
- **Maintenance** – Like showers, lockers should be regularly maintained to remain clean and functional.

CHAPTER 5
Implementation

Source: Kitchener Post
(https://www.kitchenerpost.ca/news-story/9513262-what-s-going-on-here-separated-bike-lanes-in-kitchener/)

5.1 Overview

The phased implementation strategy outlined in this chapter includes both infrastructure and outreach initiatives. The strategy is intended to be integrated with and build on existing and planned initiatives already underway by the Town, Simcoe County and other interested parties. Specific implementation timing and details will evolve through the environmental assessment, planning and capital budget processes.

5.2 Recommended Phasing Plan

The proposed implementation plan separates the recommended cycling facility improvements identified in **Figure 3.7** into two timeframes (or phases):

- Short-Term (0 – 5 years)
- Long-Term (beyond 5 years)

This recommended phasing plan was developed based on feedback provided by the Town, the public and the Trails Advisory Committee, and insight gained from the review of other cycling plans developed by municipalities across the country. From this input, implementation of the cycling routes was prioritized using the following criteria:

- **Link to Capital Projects** by scheduling network improvements concurrently with planned roadway projects;
- **Close Gaps** in the network, especially ones that create a safety risk or that cause uncomfortable actions for cyclists. Gaps that when completed resulted in continuous routes and/or important links were also a focus;
- **Reallocate Space**, where possible, to develop bike lanes through lane reallocation and repainting of pavement markings;
- **Establish a Network** by completing continuous north-south and east-west connections;
- **Respond to Demand** by focussing on areas with higher existing or projected cyclist volumes (e.g., routes that lead to/from major pedestrian generators such as schools, parks, retail establishments or employment districts); and
- **Achieve Quick Wins** by implementing short duration, cost-effective measures first (e.g., signs or pavement markings).

Table 5.1 (corridors) and **Table 5.2** (gaps and discontinuities) summarize the recommended phasing plan. **It is recommended that the Town adopt the phasing plan specified in Tables 5.1 and 5.2 to guide the prioritization of cycling facility implementation (#8).** The criteria listed above should be applied when network priorities are being reviewed and/or updated.

TABLE 5.1: RECOMMENDED PHASING OF CORRIDOR IMPROVEMENTS

Corridor	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
East-West Corridors			
Harbourview Trail/ East Circle Route	Widen or separate cyclists and pedestrians on Harbourview Trail portion		●
	Pave (with asphalt) loose top sections		●
	Improve signs and pavement markings at trail crossings	●	
Third Street/ Ontario Street	Install bike lane signs and pavement markings	●	
	Install share-the-road signs and pavement markings (sharrows) on Third Street as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution		●
Sixth Street (Simcoe County Road 32 part)/ Hume Street	Pave any loose top sections of multi-use trail on Simcoe County Road 32	●	
	Install multi-use trail on north side of Sixth Street (Simcoe County Road 32) from High Street to Grey County Road 19		●
	Install bike lane signs and pavement markings on Sixth Street from High Street to Hurontario Street		●
Cameron Street/ Collins Street	Explore protected cycling facility in the longer term		●
	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
Campbell Street/ Lockhart Road	Designate and redesign for Bicycle Priority Street		●
	Install share-the-road (sharrows) signs and pavement markings as an **interim** measure	●	
Findlay Drive/ Clark Street (north-south)	Designate and redesign for Bicycle Priority Street		●
	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
Poplar Sideroad (Simcoe County Road 32)/ Hamilton Drain Trail	Complete trail on north side of road from Clark Street to Saunders Street		●
	Pave any loose top sections		●
	County to undertake capital road improvements on Simcoe County Road 32 to add bike lanes and widen bridge over Pretty River as the **ultimate** solution		●

TABLE 5.1: RECOMMENDED PHASING OF CORRIDOR IMPROVEMENTS

Corridor	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
North-South Corridors			
Balsam Street/ High Street	Complete missing sections with a multi-use trail (shared between pedestrians and cyclists)	●	
Walnut Street/ Cedar Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution		●
Maple Street/ Pine Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes or create Bicycle Priority Street as the **ultimate** solution		●
Ste. Marie Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Install bike jug handle (lay-by) to aid eastbound cyclists turning left from Hume Street to Ste. Marie Street	●	
	Consider installing buffered bike lanes in the future		●
Train Trail	Widen and pave loose top sections		●
	Review roadway/trail crossings and install proper signing and pavement markings	●	
Peel Street/ Lynden Street (east-west)	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution		●
Raglan Street	Pave shoulder on west side between Ron Emo Road and Poplar Sideroad		●
	Install wayfinding signs	●	
	Install bike lane signs and pavement markings from Hume Street to Poplar Sideroad		●

TABLE 5.2: RECOMMENDED PHASING OF GAP AND DISCONTINUITY IMPROVEMENTS

Location	Recommended Improvement	Implementation Timing (years)	
		Short (0-5)	Long (5+)
Sixth Street and Hume Street Connection	Install share-the-road signs and pavement markings (sharrows) and wayfinding signs on Hamilton Street as an **interim** measure	●	
	Undertake capital road improvements to add bike lanes along Hamilton Street as the **ultimate** solution		●
	Widen and pave trail through Central Park starting at Hamilton Street and intersecting with the Train Trail	●	
	Construct crossing treatments at the intersection of Hamilton Street/Central Park parking lot and Paterson Street	●	
Train Trail and Harbourview Trail Connection	Install signs along the route for wayfinding and to indicate shared facility on Heritage Drive and advise pedestrians and cyclists which sidewalk to use on Side Launch Way	●	
	Provide crossing treatments and signs along Side Launch Way at N. Pine Street	●	
East Connection to Wasaga Beach	Install wayfinding signs from Hume Street bike lanes to sidewalk on north side of Hume Street at Highway 26	●	
	Improve wayfinding signs and sharrows on Huronia Pathway and Georgian Manor Drive	●	
	Install signs and pavement markings (compliant with OTM Book 18) on Beachwood Road to demarcate bike lanes	●	
	Install multi-use sidewalk on north side of Highway 26 from Marine View Drive to Beachwood Drive		●
Northwest Connection to Blue Mountains	Provide on or off-road connection from the east end of Vacation Inn Trail (west of Lighthouse Lane) to the west end of Cranberry Inn Trail		●
	Install share-the-road signs and pavement markings (sharrows) on Cranberry Inn Trail (road)		●
West Connection to Blue Mountain Village	Construct multi-use (urban) trail along south side of First Street Extension from High Street to Black Ash Trail		●
	Widen bridge over Black Ash Creek (longer term solution)		●

5.3 Implementing the Network

5.3.1 Roles and Responsibilities

An efficient and structured decision-making process is vital to the effective implementation of the Cycling Plan. Involving all relevant participants, defining responsibilities and removing obstacles to the flow of information will ensure continued improvement of the cycling network and its complementary facilities in Collingwood.

It is recommended that the Town establish a formal reporting structure to effectively facilitate implementation of the Cycling Plan (#9). **Figure 5.1** illustrates the proposed structure, which offers a strategic and coordinated approach to implementation based on defined communication channels between Town staff and all parties involved in the process.

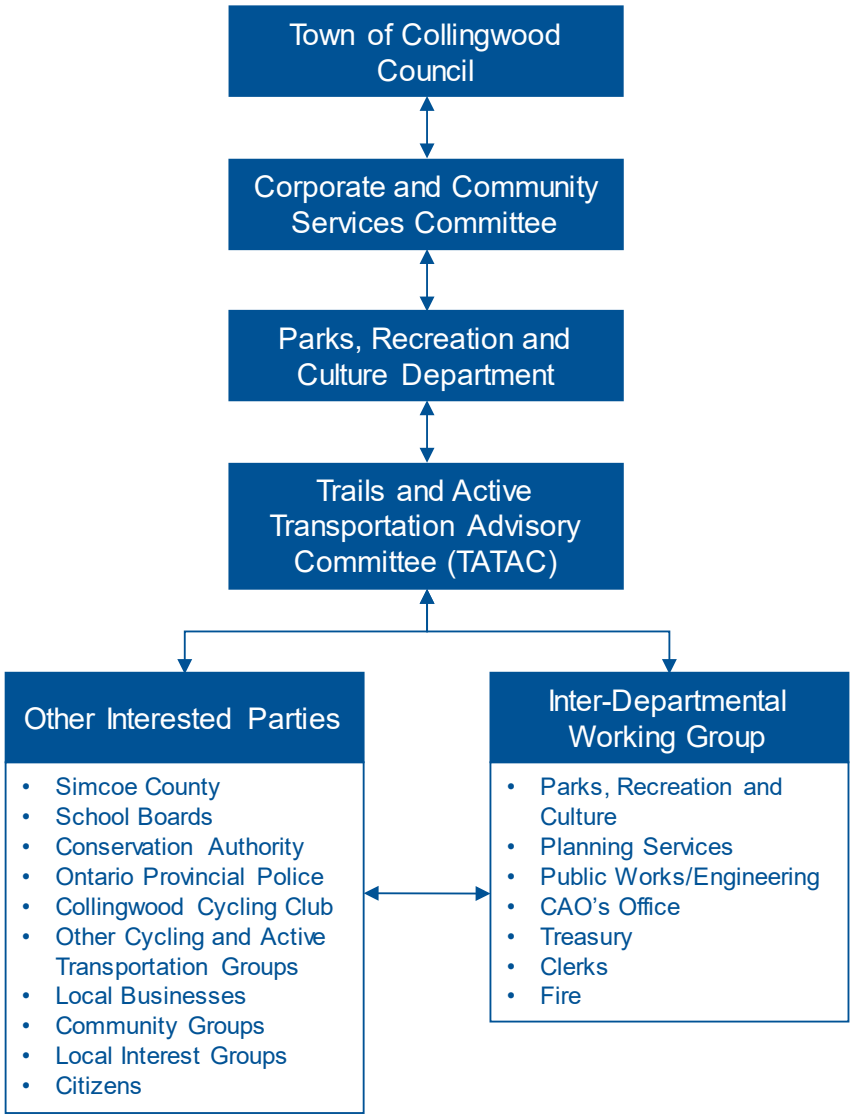


FIGURE 5.1: PROPOSED REPORTING STRUCTURE

In the proposed structure, the Parks, Recreation and Culture Department would lead implementation of the Cycling Plan, with support from an Inter-Departmental Working Group designed to facilitate meaningful participation by other Town departments. The Trails and Active Transportation Advisory Committee (TATAC) would provide guidance as a Council-appointed body. Ongoing communication with various interested parties involved with cycling in Collingwood would continue and be enhanced.

The Town will need to confirm the reporting structure, as well as the composition and function of the Inter-Departmental Working Group and TATAC. As envisioned:

- The **Parks, Recreation and Culture Department** would champion and guide implementation of the Cycling Plan. This would include responsibility for communicating and coordinating with the Inter-Departmental Working Group and serving as the staff lead for TATAC. Other duties could include:
  - Providing updates to the Corporate and Community Services Standing Committee and TATAC on Cycling Plan implementation status;
  - Liaising with the public and local stakeholders on cycling-related initiatives; and
  - Proposing annual budgets for implementation of the plan in conjunction with other Town departments, as appropriate.

  Initially, duties related to the Cycling Plan could be assigned to existing staff in the Department, with the need for additional resources monitored over time.
- The **Inter-Departmental Working Group** would collaborate on implementation of the Cycling Plan. Comprised of at least one staff member from each relevant department, the Working Group would meet regularly to discuss upcoming projects and initiatives to advance the goals of the plan. Providing a formal communication structure will help to ensure opportunities to implement the cycling network and supporting facilities are not precluded by unintended actions.
- **TATAC** would provide timely advice and recommendations to Town staff and the Corporate and Community Services Standing Committee on cycling-related matters, in accordance with approved corporate strategic objectives and terms of reference. This could include involvement with specific initiatives or goals related to the Cycling Plan and offering/obtaining public feedback on such activities.

  In forming the Advisory Committee, the Town may wish to collapse the existing Trails Advisory Committee plus expand the mandate to include all active transportation matters. With staff support provided by the Parks, Recreation and Culture Department, the Advisory Committee may also wish to draw upon expert advisors and local resources in meeting its mandate.
- Various **Interested Parties** would serve an important role in implementing the Cycling Plan, ensuring the network is developed in an efficient and consistent manner. Through ongoing communication and coordination, the Town and other parties could share resources, coordinate efforts and convey priorities about the cycling network during all phases of implementation.

5.3.2 Implementation Process

As noted above, implementation of the Cycling Plan will be accomplished through a series of short- and long-term actions aimed at creating a safe, well-connected and convenient cycling network. **Figure 5.2** details the proposed four-step process for implementing the recommended cycling facilities identified in the plan. The process is structured to:

- **Identify** the network implementation opportunity;
- **Confirm** the feasibility of the route and facility type at the time implementation is proposed **and revise** the concept if necessary;
- **Design** the facility and supporting features based on the guidelines recommended in Chapter 4 and **construct or install** the facility per the design;
- **Maintain** the facility, **monitor** its use and operation **and refine** the design if needed.

Each step in the process is described as follows. The Inter-Departmental Working Group (or other appropriate party) should review and adapt this process as necessary to guide implementation:

Step 1: Identify

The first step is to identify and communicate opportunities to implement the future cycling network. To identify possible opportunities, the Inter-Departmental Working Group should monitor Town and Simcoe County:

- Capital projects scheduled in both annual and forecasted budgets;
- Acquisition and disposition of land; and
- Operating budgets relevant to the cycling network.

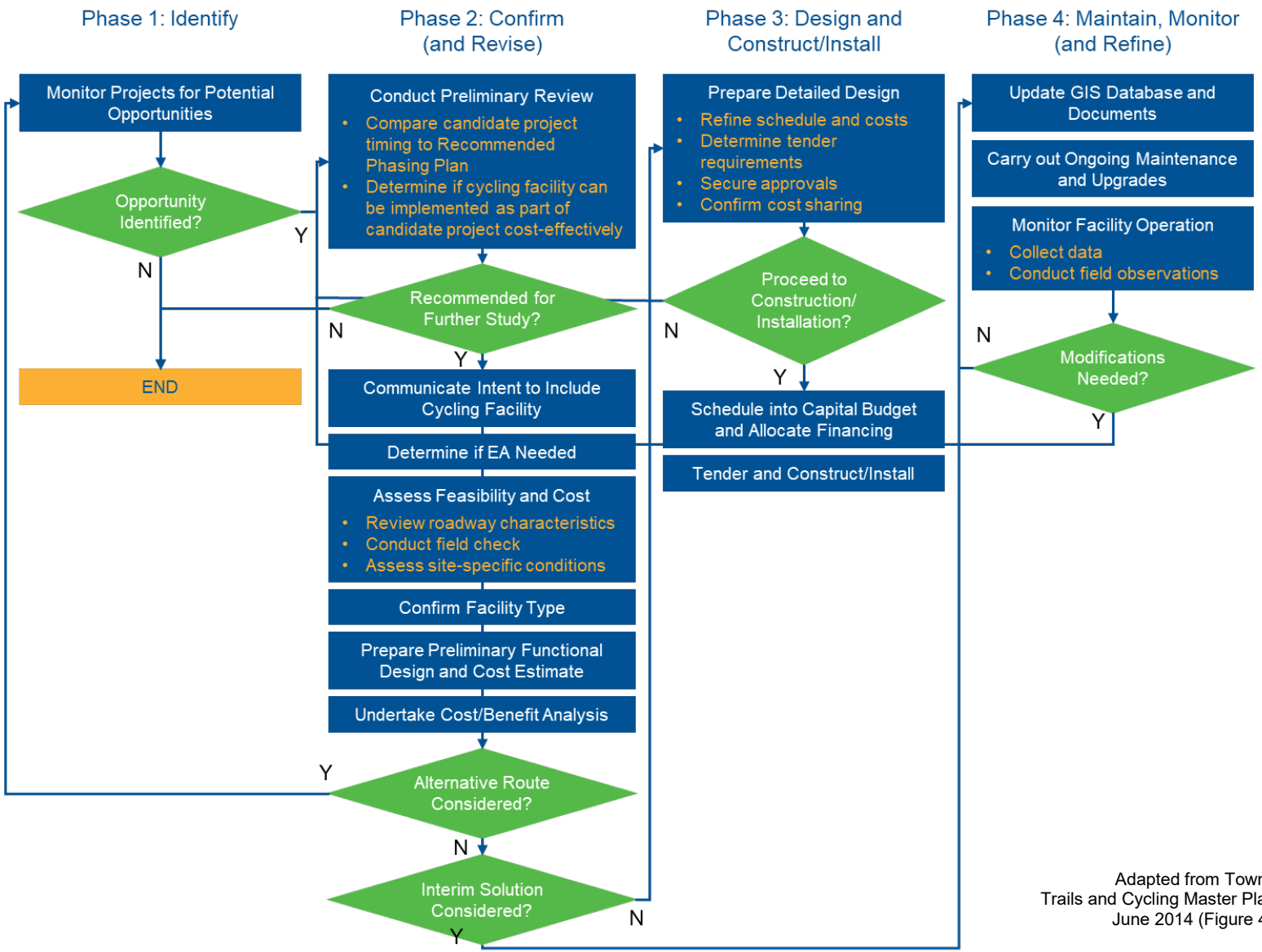
If a potential project is identified, the Inter-Department Working Group should:

- Identify the departments, jurisdictions and/or organizations involved in the project;
- Compare the timing of the project to the priorities identified in the recommended phasing plan contained in **Section 5.2**;
- Determine if the project would permit implementation of the preferred cycling facility type in a cost-effective manner; and
- Advise the affected department, jurisdiction and/or organization that the project may be a candidate for a cycling facility.

Step 2: Confirm (and Revise)

The second step is to confirm the feasibility and costs for implementing the proposed cycling route as part of the candidate project. For each candidate project, Town staff (led by Parks, Recreation and Culture) should:

- Review current roadway characteristics including traffic volumes, collision history and commercial vehicle percentage;



Adapted from Town of Milton Trails and Cycling Master Plan Update June 2014 (Figure 4.2, p.4-8)

FIGURE 5.2: FOUR-STEP IMPLEMENTATION PROCESS

- Conduct a field check to identify potential site-specific implementation challenges, such as sight distance limitations;
- Confirm facility type;
- Prepare a preliminary functional design and cost estimate. The design should follow the guidelines recommended in Chapter 4; and
- Undertake a high-level cost/benefit analysis to assess whether the proposed implementation is fiscally prudent at this time, or if another option may be more practical.

This step may take place in conjunction with or as input to a Municipal Class Environmental Assessment (EA) or functional design for the candidate project.

Phasing should generally comply with the plan outlined in **Section 5.2**, but priorities can be altered in response to community demand and/or the desire of another party to advance a specific route segment.

If site-specific circumstances preclude construction of the recommended facility type as part of the candidate project, consider:

- Altering the facility type to better fit the corridor. The facility selection process should follow the guidelines detailed in **Chapter 3** to ensure an appropriate solution;
- Assessing nearby parallel routes for suitability as an alternative (return to Step 1); or
- Implementing an interim solution such as installing sharrow pavement markings as a precursor to a bike lane.

Step 3: Design and Construct/Install

The third step is to prepare detailed design for the recommended facility. The design is typically completed in conjunction with the candidate project and should not require additional resources. Where required, the project schedule, cost estimate and tender documents should also be refined. External approvals, property acquisition and potential cost sharing opportunities should be confirmed as well.

In most cases, the candidate project with the cycling facility will need to be scheduled into the Capital Budget and financing allocated. Coordination with other department initiatives should be explored with the Inter-Departmental Working Group.

Finally, the candidate project is issued for tender where required. Construction/ installation proceeds once financing is authorized.

It is possible that the Town may decide not to proceed with the facility due to costs and/or constraints that arise during the detailed design process. If this occurs, alternative routes or facilities should be considered (return to Step 2).

Step 4: Maintain, Monitor (and Refine)

The fourth and final step is to maintain and monitor the implemented facility.

Ongoing maintenance and upgrades to the facility should be carried out to ensure continued safe and efficient use by cyclists. **Section 5.4** details recommended maintenance practices.

Once implemented, the route should be monitored regularly to ensure the facility operates as planned. Monitoring will involve data collection and field observations to evaluate safety and operational efficiency. **Section 5.8** outlines recommended monitoring procedures.

If the monitoring program identifies the need for modifications, alternative routes or facilities may need to be considered (return to Step 2) or revisions to the design (return to Step 3).

The Town's Geographic Information System (GIS) database and relevant municipal documents should also be updated once the facility is opened to use. The database should be used to track new and upgraded network segments as they occur:

- Streamlining the replacement of network maps posted in the field and handed out in hard copy to residents and visitors; and
- Allowing the cycling network to be posted as an interactive map on the Town's website.

5.3.3 End-of-Trip Amenities

As noted in **Section 4.6**, end-of-trip amenities are a key factor for some potential users in deciding whether to cycle for their trip. The identification and development of suitable amenities is an important element of the implementation process and should be addressed in Step 3 (Design and Construct/ Install) and Step 4 (Maintain, Monitor (and Refine)).

5.4 Maintenance

Cycling facilities need to be properly maintained to remain safe, effective and in a state of good repair. This helps to improve rideability, alleviate potential safety hazards, maximize utility, minimize lifecycle costs, reduce risk, limit exposure to liability and enhance the cycling experience.

Summer and winter maintenance requirements for cycling infrastructure are largely defined in O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways (as amended), a regulation under the *Municipal Act, 2001* (the MMS). **It is recommended that the Town (continue to) engage in a regular, ongoing maintenance program for the cycling network consistent with the MMS requirements unless specifically defined otherwise (#10).** The program should comprise the following activities:

- **Sweeping** – Cycling facilities located at the edge of the roadway should be swept to remove accumulating debris. Currently, the Town's budget allows for a spring clean-up of all hard-surfaced roads and periodic sweeping of the downtown core in advance of special events and long weekends. The Town may wish to consider increasing sweeping frequency on priority cycling facilities subject to additional funding.
- **Surface Repairs** – The Town repairs typical cycling facility surface issues, such bumps and depressions, cracking, potholes and pavement drop-offs at shoulders, through its ongoing maintenance operations until such time as the road (including the bike lane) is resurfaced. Continuing to perform interim treatments such as patching and catchbasin repairs on cycling facilities is recommended.
- **Vegetation Management** – Roadside vegetation maintenance activities, including the installation of root barriers and trimming of shrubs and trees, should be carried out to

avoid encroachment onto cycling facilities and maintain sightlines. Removal of obstructions at intersections should be prioritized.

- **Sign and Pavement Marking Maintenance** – Sign and pavement marking inspections, repainting of faded pavement markings, and replacement of discoloured and damaged signs and signs that have lost reflectivity should be conducted regularly per the MMS.
- **Drainage Improvements** – Drainage features along or adjacent to cycling facilities should be cleaned. Locations with greater vegetation will need more attention.
- **Winter Control** –Cycling facilities and amenities designated for winter use should be cleared of snow and ice, with on-road routes maintained along with other travel lanes per the MMS. The Town may wish to consider enhancing winter control in select locations, such as priority cycling routes, intersections, crossrides and bike racks, subject to additional funding.
- **Parking** – Bicycle parking facilities should be regularly inspected. Bikes parked for extended periods of time should be tagged for removal and removed if remaining after the specified time. Severely damaged or stripped bikes should also be removed.

It is recommended that the Town provide additional ongoing funding to support growing maintenance activities resulting from expansion of the cycling network (#11). The additional budget will depend on the facility types added, with typical estimated annual maintenance costs ranging from[4]:

- $5,000 to $9,000 per kilometre for on-road facilities; and
- $4,000 to $6,000 per kilometre for off-road multi-use trails in greenways and parks, depending on the level of service standard and trail condition.

Appendix C of OTM Book 18 provides further guidance on maintenance related matters.

It is recommended that the Town prioritize maintenance on the main north-south and east-west corridors identified in the future cycling network (#12). Higher volumes of cyclists and riders with diverse experience are expected to frequent these spine routes, necessitating the highest level of maintenance service.

5.5 Risk Management

The Town can minimize its exposure to liability by properly designing, constructing and maintaining the cycling facilities implemented by the municipality. While it is not possible to completely avoid risk, since on-road facilities can have similar liability exposure as roadways, steps can be taken to safeguard the Town.

It is recommended that the Town (continue to) employ accepted methods to proactively manage risk and limit liability related to cycling facilities (#13). Typical methods include:

- Improving the physical environment, increasing public awareness of the rights and obligations of users and improving access to educational programs;
- Conducting regular, scheduled maintenance of its facilities;

[4] Town of Milton Transportation Master Plan, Appendix A: Active Transportation Strategy, April 2018

- Selecting, designing, operating and maintaining facilities in compliance with prevailing provincial, national and industry regulations, standards, guidelines and best practices;
- Considering safety explicitly in all decisions. Hazards that cannot be removed should be isolated with a barrier or demarcated by clear warning signs;
- Monitoring facilities through regular patrols, identifying and documenting potential deficiencies, and promptly responding as needed;
- Maintaining written records of all patrol and maintenance activities;
- Avoiding using descriptions such as “safe” or “safer” for facilities and amenities; and
- Maintaining proper insurance coverage.

5.6 Community Outreach

Implementing the recommended infrastructure improvements will not alone achieve a successful and safe cycling environment in Collingwood. The network plan must be accompanied by a complementary and comprehensive outreach strategy aimed at promoting bike use and fostering community support for cycling initiatives.

A successful cycling network is actively and properly used by a range of people of all ages and abilities. **It is recommended that the Town develop a robust Cycling Outreach Strategy capable of engaging a diverse audience (#14).** The strategy should:

- Raise community awareness of cycling and promote bike use as a normal, convenient option for individuals of all ages and abilities;
- Develop consistent messaging that can be used across a variety of platforms and audiences;
- Illustrate the value (e.g., health, tourism, environmental, safety) of cycling to the community; and
- Educate individuals about their responsibilities as cyclists, pedestrians and motorists when interacting with other modes.

It is noted that the Town and several local groups have already undertaken outreach programs and initiatives aimed at encouraging cycle use in Collingwood. For example, the Town has previously identified several outreach recommendations in their Bicycle Friendly Communities Workshop Summary Report. The proposed Cycling Outreach Strategy will build on what is already underway and coordinate existing efforts.

5.6.1 Education

Ongoing education will be a critical element of the Cycling Outreach Strategy. An education program could help new cyclists gain confidence and provide motorists a better understanding of how to interact with cyclists on the road. Education on proper use of cycling facilities for all roadway users should be included in the program.

Currently there are several cycling education opportunities offered within the Town. The programs range from Bike Month activities to summer bike camps to weekly rides with the Collingwood Cycle Club (CCC). Further emphasis is still required on educating students on cycling safety and advocacy in partnership with the local Ontario Provincial Police detachment.

Active and Safe Routes to School (ASRTS) is a program administered by the Environment Network that promotes the use of active and efficient transportation for the daily trip to school. **It is recommended that the Town continue to work with ASRTS and the School Boards to incorporate active transportation education into the curriculum and to encourage kids to cycle to and from school more often (#15).**

The Town should also apply wayfinding strategies to further educate the community on cycling. Wayfinding is a comprehensive process to familiarize people with a physical space and provide directional assistance to travel from point A to point B. Messages and guidance presented on wayfinding signs and mapping help to minimize a user's natural confusion when navigating a new and unfamiliar location. There are five core principles that should be considered in designing an effective wayfinding system:

- Create an identity at each location;
- Use landmarks to provide orientation cues;
- Define well-structured routes;
- Denote areas of differing visual character; and
- Limit the number of navigational choices.

It is recommended that the Town develop and implement a system of wayfinding signs and mapping to help build community awareness of cycling (#16).

5.6.2 Encouragement

Encouragement efforts can help to shift attitudes of cyclists, motorists and the public to produce a safer and more sustainable community for all. The focus should be creating a culture that celebrates cycling, inspiring and motivating people of all ages to cycle more.

Community-Based Social Marketing (CBSM) is a practical approach that focuses on removing barriers that prevent people from changing their behaviour. Through CBSB methods, individuals can be encouraged to adopt more sustainable transportation habits. **It is recommended that the Town explore opportunities to apply CBSM techniques to encourage greater use of cycling (#17).**

There are several great encouragement suggestions outlined in the Town's Bicycle Friendly Communities Workshop Summary which should continue to be implemented. One specific opportunity that has not been pursued to date involves the CCC. While the club has over 400 members and welcomes riders of all abilities, their activities are more oriented toward confident/experienced cyclists. **It is recommended that the Town request the CCC for their assistance in organizing cycling rides around the community (#18).** Rides like these allow more hesitant/novice cyclists to participate in a more controlled and safer environment.

5.6.3 Enforcement

Regular enforcement helps to encourage and promote safe cycling. Local enforcement officers (bylaw and police) play an important role, not only ensuring compliance with applicable regulations and bylaws, but also serving as role models and ambassadors for safe cycling.

It is recommended that the Town work with the local Ontario Provincial Police detachment to appoint a bicycling liaison officer (#19). The liaison would have specific cycling-related responsibilities including:

- Sharing information about safe cycling usage and behaviour;
- Meeting regularly with community members to hear concerns;
- Passing along bicycling community concerns to other officers;
- Helping resolve conflicts between cyclists and motorists;
- Organizing or participating in safety programs such as Bike to School; and
- Observing and reporting traffic and no-compliance issues at specific cycling infrastructure locations.

5.7 Financial Implications

5.7.1 Investment Cost

Investing in cycling infrastructure for the Town of Collingwood has the potential to improve the health and quality of life of area residents, draw more tourism, increase sustainability and decrease overall road improvement costs.

The financial cost of implementing the Cycling Plan and recommended cycling facilities has been estimated based on indicative benchmark unit costs obtained from other recently completed cycling plans in Ontario[5,6]. **Table 5.3** summarizes the unit costs for cycling facilities, while **Table 5.4** provides the costs for crossings and other features. The following assumptions were made in determining the unit costs:

- Normal/average construction conditions;
- Unless otherwise stated, bi-directional routes for on-road cycling facilities; and
- Exclude costs for property acquisition, utility relocations, engineering design, contingency and taxes.

Table 5.5 outlines the estimated costs to implement the Cycling Plan based on the unit costs and assumptions above. The estimate includes an annual allowance for end-of-trip amenities (such as bike racks), outreach initiatives per the Cycling Outreach Strategy and monitoring. The total investment to implement the Cycling Plan recommendations will be approximately:

- $0.803 M in the short-term (0 to 5 years)
- $9.562 M in the long-term (beyond 5 years)

Appendix D provides more detailed costing of the recommended cycling facilities and other elements of the plan.

5 Town of Milton Transportation Master Plan, Appendix A: Active Transportation Strategy, April 2018
6 Town of Oakville Active Transportation Master Plan, Technical Appendix I, June 2017

TABLE 5.3: UNIT COSTS FOR CYCLING FACILITIES

Route Type	Cost per Kilometre (2019)	Comments
On-Road Routes		
Signed on-road bike route in urban area	$2,100	Assumes route signs every 330m.
On-road bike route with sharrows	$4,000	Assumes route signs every 330m and sharrow stencils every 75m. Assumes conventional paint.
On-road bike lane (1.5 to 1.8m) markings and signs without edge line	$6,000	Includes signs and stencils. Assumes conventional paint.
On-road bike lane (1.5 to 1.8m) markings and signs	$8,200	Includes signs, stencils and edge line. Assumes conventional paint.
Buffered bike lane with hatched pavement markings (1.5m plus 0.8m buffer)	$16,000	Assumes no road construction/widening required. Includes line paint, hatching paint, symbols and signs
Paved shoulder (1.5m) on scheduled resurfacing of existing road	$60,000	Cost of 1.5m asphalt. Assumes road project already includes other costs (i.e. granular shoulder, any ditch/drainage works, pavement marking, etc.).
Retrofit of existing two-lane road to include bicycle boulevard features	$93,000	Includes features such as neighbourhood traffic circles, through restrictions for automobiles, etc.
On-road bike lane (1.5 to 1.8m) by retrofitting/widening existing road	$763,000	Both sides of the road. Includes excavation, catch basin adjustments, lead extensions, new curb/driveway ramps, asphalt and subbase, pavement markings and signs.
Off-Road Routes		
Off-road multi-use trail outside of road right-of-way in an urban setting	$105,000	3.0m wide hard surface pathway (asphalt) as upgrade from existing granular surface. Some new base work (approximately 25%), with half of the material excavated removed from site. Includes trail marker signs.
Two-way multi-use trail/active transportation path within road right-of-way	$281,000	3.0m wide hard surface pathway (asphalt) within road right-of-way (no utility relocations). Does not include trail lighting.
Two-way multi-use trail/active transportation path within road right-of-way on one side with removal of existing sidewalk	$292,000	3.0m wide hard surface pathway (asphalt) within road right-of-way on one side of road in place of 1.5m concrete sidewalk
Multi-use Sidewalks within road right-of-way in an urban setting	$475,000	3.0m wide concrete sidewalk
Off-road multi-use trail outside of road right-of-way in an urban setting (e.g. park or open space)	$500,000	3.0m wide hard surface pathway (asphalt) within pipeline corridor. Includes trail lighting.

* Sources: Town of Milton Transportation Master Plan (April 2018) and Town of Oakville Active Transportation Master Plan (June 2017), adjusted to 2019 dollars.

TABLE 5.4: UNIT COSTS FOR CROSSINGS AND OTHER FEATURES

Feature	Units	Cost	Comments
Pathway directional sign	each	$270	Assumes bollard/post (100mm x 100mm marker) with graphics on one side only
Trail/road transition at unsignalized intersection (crossride)	each	$5,400	Typically includes warning signs, curb cuts and minimal restoration (3.0m pathway).
Trail/road transition at signalized intersection (crossride)	each	$27,200	Typically includes installation of 4 signal heads, 2 poles, 2 foundations, 2 controller connector and 2 arms.

* Sources: Town of Milton Transportation Master Plan (April 2018) and Town of Oakville Active Transportation Master Plan (June 2017), adjusted to 2019 dollars.

TABLE 5.5: ESTIMATED IMPLEMENTATION COSTS

Initiative	Estimated Cost (2019$)	
	Short (0-5)	Long (5+)
Corridor Improvements		
East-West Corridors		
Harbourview Trail/East Circle Route	$ 38,000	$ 1,250,000
Third Street/Ontario Street	$ 8,000	$ 12,000
Sixth Street (Simcoe County Road 32 part)/Hume Street	$ 8,000	$ 895,000
Cameron Street/Collins Street	$ 8,000	
Campbell Street/Lockhart Road	$ 10,000	$ 242,000
Findlay Drive/Clark Street (north-south)	$ 6,000	$ 149,000
Poplar Sideroad (Simcoe County Road 32)/ Hamilton Drain Trail		$ 297,000
North-South Corridors		
Balsam Street/High Street	$ 473,000	
Walnut Street/Cedar Street	$ 9,000	$ 1,198,000
Maple Street/Pine Street	$ 14,000	$ 1,831,000
Ste. Marie Street	$ 13,000	$ 13,000
Train Trail	$ 16,000	$ 294,000
Peel Street/Lynden Street (east-west)	$ 8,000	$ 16,000
Raglan Street	$ 4,000	$ 57,000
Gap and Discontinuity Improvements		
Sixth Street and Hume Street Connection	$ 34,000	$ 3,000
Train Trail and Harbourview Trail Connection	$ 6,000	
East Connection to Wasaga Beach	$ 23,000	$ 318,000
Northwest Connection to Blue Mountains		$ 253,000
West Connection to Blue Mountain Village		$ 2,631,000
Sub-Total – Network Improvements	**$ 669,000**	**$ 9,120,000**
Other Plan Elements		
End of Trip Facilities ($5,000 per year)[1]	$ 25,000	$ 25,000
Outreach Initiatives ($15,000 per year)[1]	$ 75,000	$ 75,000
Monitoring Program ($5,000 per year)[1]	$ 25,000	$ 25,000
Total	**$ 803,000**	**$ 9,562,000**

Note: 1. Assumes five-year program

5.7.2 Potential Funding

Timely implementation of the Cycling Plan will require an increase in funding over current levels and rely on a broad range of financing sources, including:

- Development Charges;
- Developer funding;
- Capital projects;
- Additional municipal funding specifically for cycling infrastructure;
- Provincial/Federal programs such as:
  - Ontario Municipal Commuter Cycling Fund;
  - Provincial and Federal Gas Tax Funds;
  - Infrastructure Canada Funding Programs; and
  - Corporate Environmental Funds.

It is recommended that the Town reassess the proposed phasing and funding of the recommended cycling facility improvements on an annual basis, revisiting potential funding sources and investigating other opportunities to implement the network (#20). It is further recommended that the Town continue to explore partnering with agencies and other groups to fund implementation of the Cycling Plan (#21).

5.8 Monitoring

Ongoing monitoring of cycling use and characteristics will enable the Town to evaluate the effectiveness and overall contribution of the implemented facilities in achieving desired changes in travel behaviour. Data collected through monitoring along with information gathered through ongoing public consultation (e.g. user and public attitudes surveys) can be analyzed to:

- Measure the success of implementing various types of facilities;
- Evaluate the achievement of objectives;
- Adjust project prioritization and programming to better meet local needs;
- Aid in developing annual implementation plans;
- Provide accountability to the public and other stakeholders;
- Increase community support for cycling.

The monitoring program should examine user preference for facilities, levels of use and other key factors over an extended timeframe to avoid immediate response bias (which occurs right after a new improvement is implemented). Data should be collected every two to three years (maximum every five years) and at the same time/season during each cycle. Specific data to collect could include:

- Bicycle mode share for all trips;
- Bicycle share of all commute trips;

- Residents within 0.5 kilometers of cycling facilities;
- Bicycle trips less than 5 kilometres in length;
- Transit stops with direct links to the cycling network;
- Residents that feel safe and comfortable on cycling facilities;
- Increase of funding for cycling projects;
- Increase in students cycling to school;
- Increase in students trained in bike safety;
- Schools that provide adequate bike parking;
- Reduction in per-trip rate of serious and fatal injury crashes;
- Increase in cycling related jobs and businesses;
- Tourists that participate in cycling activity;
- Residents meeting the recommended level of physical activity through transportation;
- Reduction of vehicle kilometres travelled or percent reduction in greenhouse gas emissions.

Some of this data is already collected through the TTS.

Regular public and stakeholder consultation should also be carried out to help collect information about community satisfaction and potential barriers and motivators to increased bicycle use. Other key factors to continuously improve and grow the network such as facility preference and network gaps can also be identified from these consultations.

Specific performance measures and targets should be set to provide direction for implementation and to measure the success of the Cycling Plan in achieving the Vision and Objectives. For example, in 2009, the City of Portland, Oregon committed to achieving a cycling mode share of at least 15% and reducing the risk of fatal bike crashes by 50% by 2020. The Town should set realistic targets based on the existing trends summarized in **Chapter 2**. These benchmarks can also be used in marketing campaigns and events to help motivate the Collingwood community.

Monitoring results could be reported to Council and the community through information reports and other publications. The report could highlight progress made in implementing the Cycling Plan, summarize the performance measures and targets for the previous period and outline upcoming initiatives. It would also provide the Town the opportunity to explain progress in achieving Gold Bicycle Friendly Community status.

It is recommended that the Town implement a regular, ongoing monitoring program and set performance measures and targets to track progress (#22).

APPENDIX A

Online Survey Results

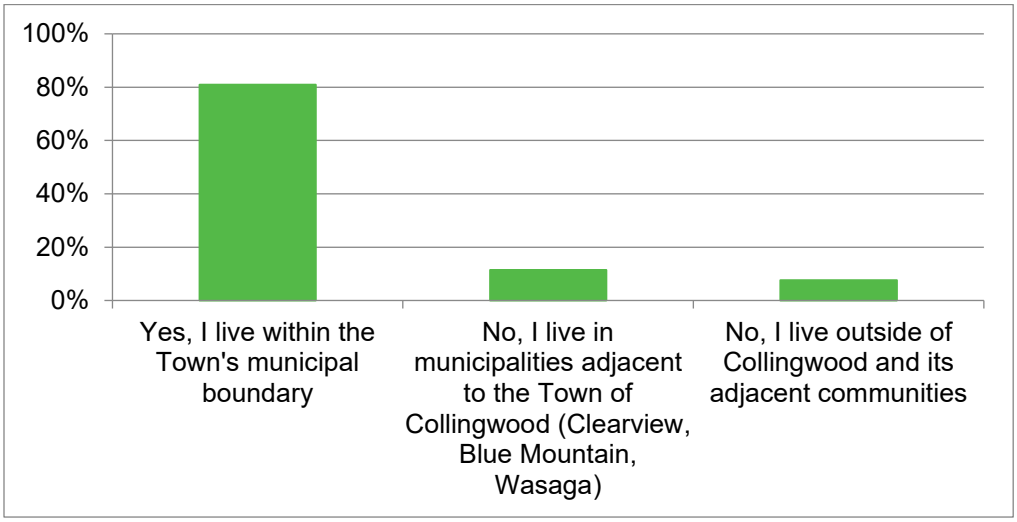
Appendix A

Online Survey Results

The Town hosted an online survey on its website between May 2018 and July 2018 to gather input from the public about cycling in Collingwood. The following provides the detailed questions and summary of responses.

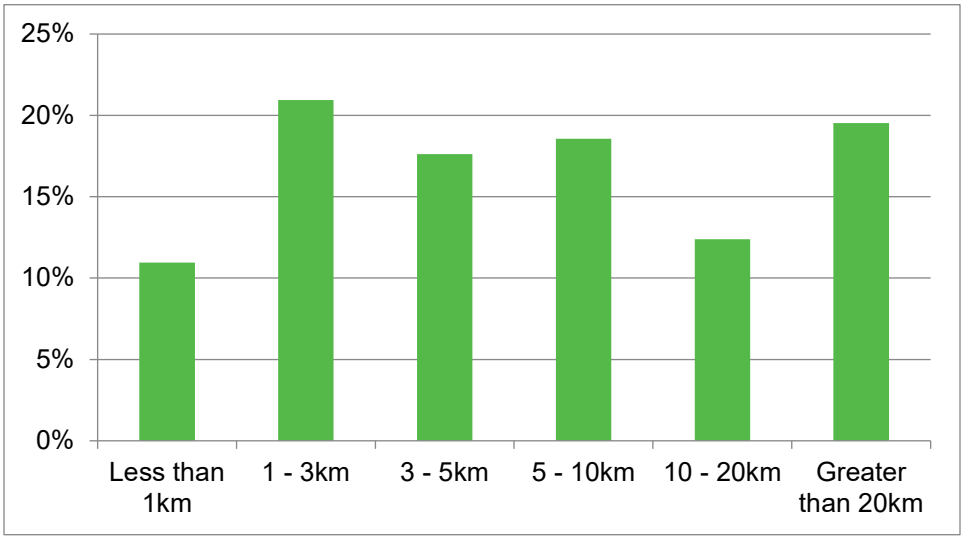
Question 1: Do you live within the Town's municipality boundary?

The majority (80%+) of respondents live within the Town's municipal boundary.



Question 2: What is approximate distance that you travel from home most often?

57% of respondents travel between 1 km and 10 km from their home to their most frequent destination.



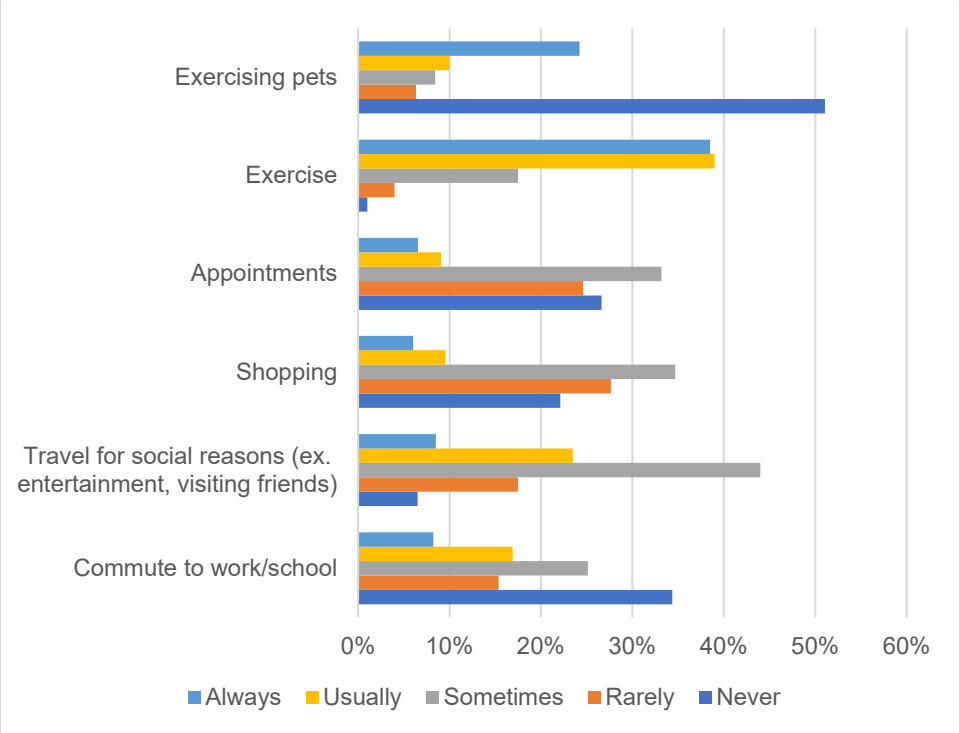
Question 3: For each of the following trip types, select how often you choose active transportation (Never, rarely, sometimes, usually, always)?

Of the respondents, about 50% rarely or never commute to school or work by active transportation and an additional 25% only sometimes use active transportation for their commute;

44% of respondents indicated that they sometimes use active transportation for traveling for social reasons;

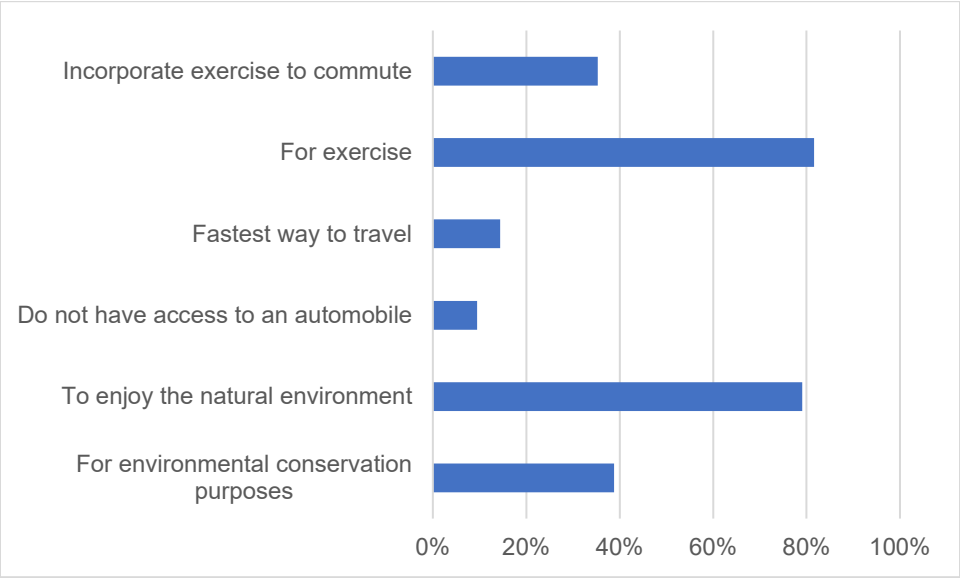
About 85% of respondents indicated that they never, rarely, or sometimes use active transportation for shopping. This statistic was similar for those traveling to appointments;

For exercising, about 78% respondents indicated that they usually or always use active transportation.



Question 4: Why do you use the Town's cycling facilities (check all that apply)?

The most common reasons among respondents were "to enjoy the natural environment" and "for exercise" (79% and 82%, respectively).

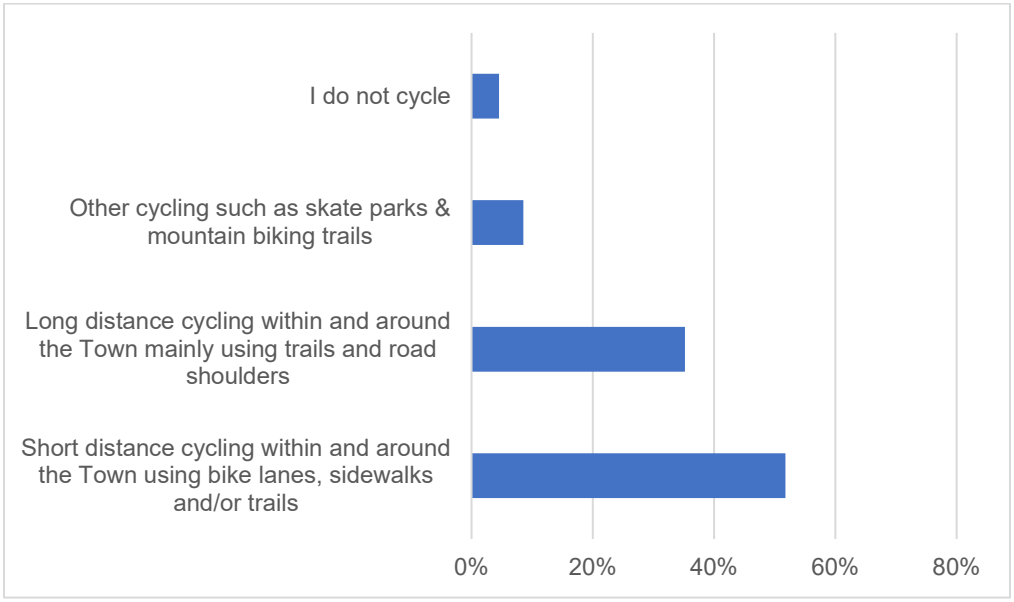


Question 5: What type of cycling do you mainly participate in?

About 50% of the respondents participate in short-distanced cycling using bike lanes, sidewalks and/or trails;

About 35% of the respondents participate in long distance cycling within and around the town uses trails and road shoulders;

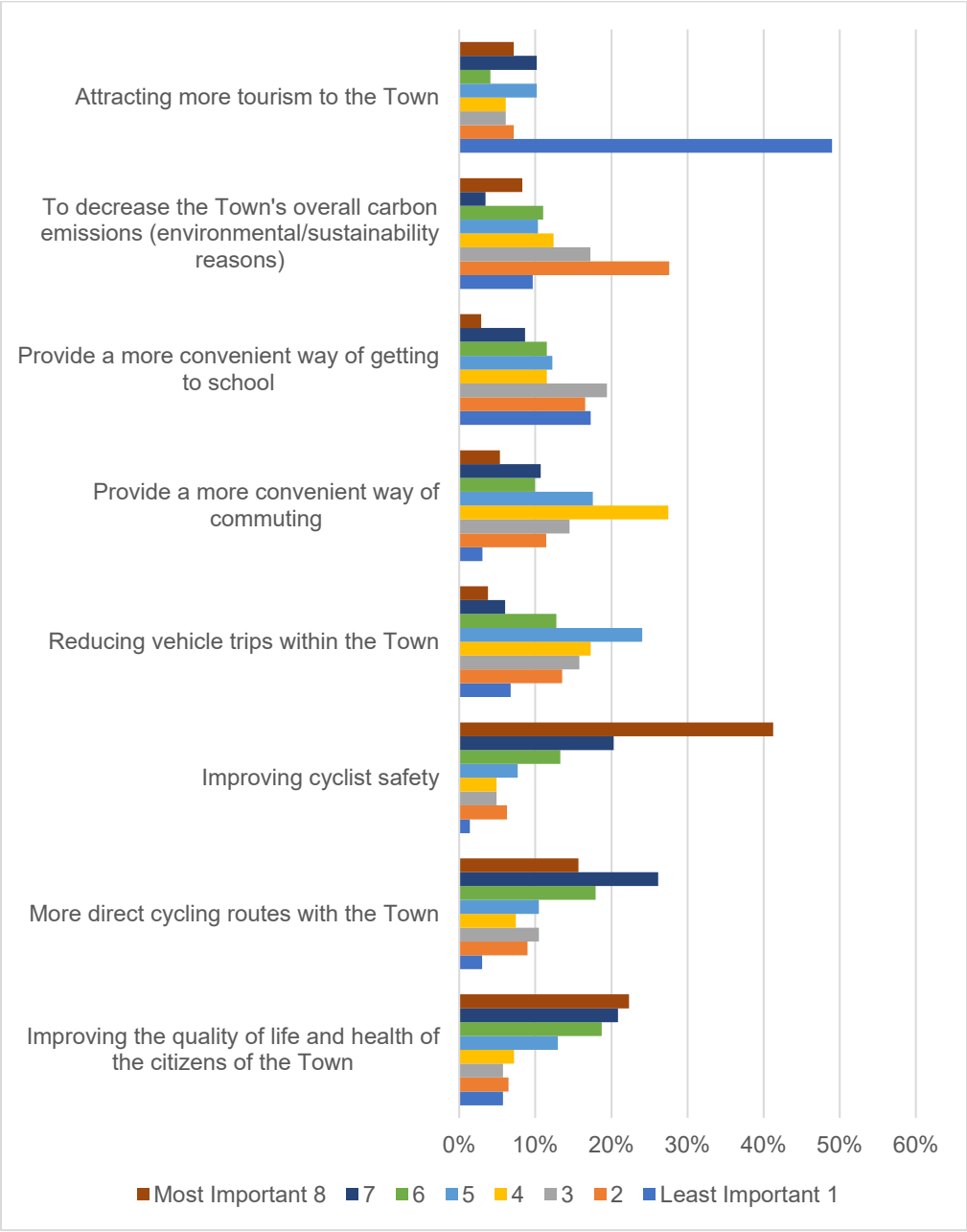
About 4% of the respondents do not cycle.



Question 6: Respondents were asked to rank a set of possible outcomes of the Cycling Plan in order of most important to least important.

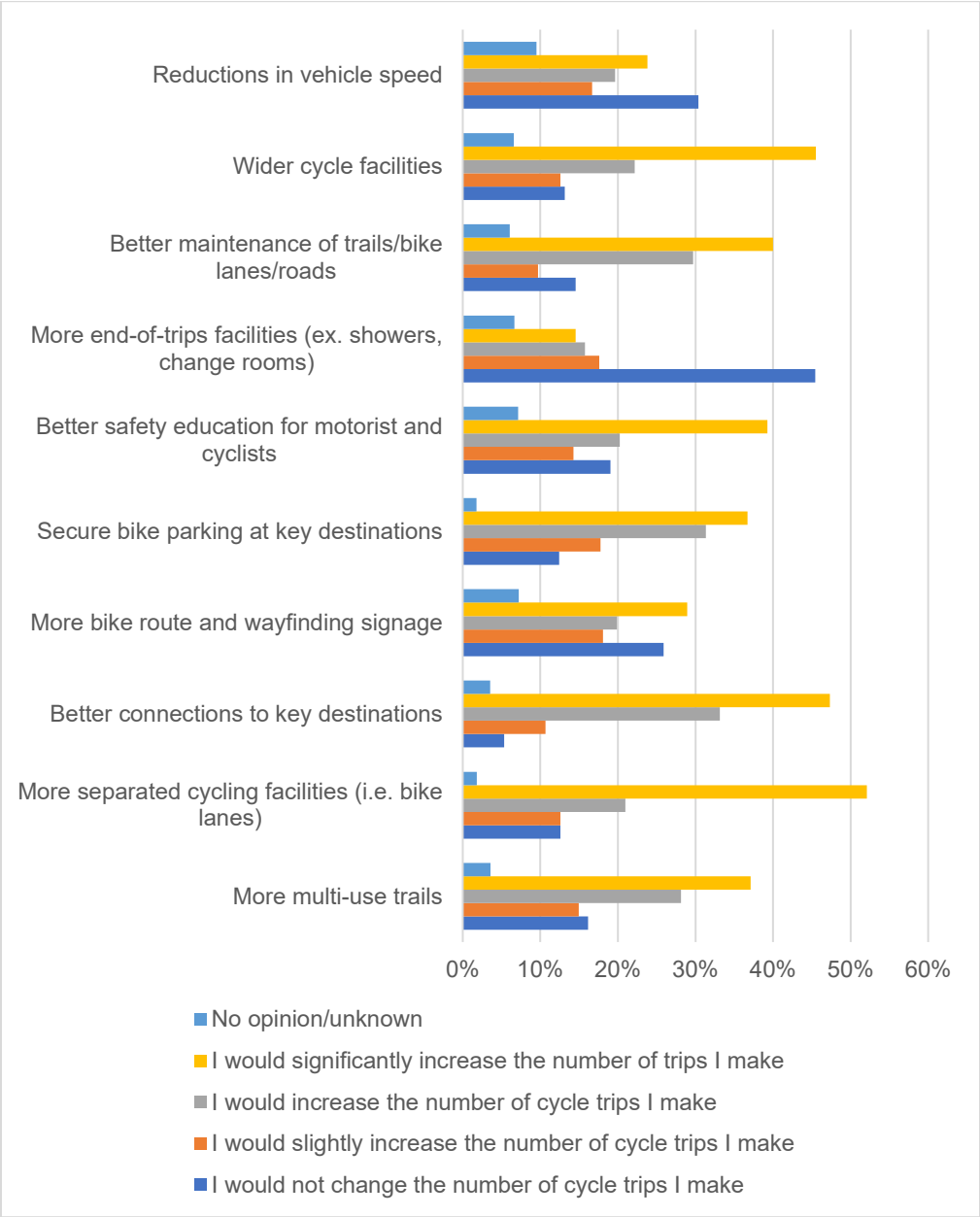
The most commonly rated “most important” outcomes were “Improving cyclist safety”, “Improving the quality of life and health of the citizens of the Town”, and “More direct cycling routes within the Town”.

The most commonly rated “least important” outcome was “attracting more tourism to the Town”.



Question 7: How much would the following improvements to the cycling network influence the number of cycling trips you make?

Of the improvements listed, none stood out over the others.



Question 8: What are the two locations or corridor in Collingwood that requires new/better cycling facilities?

The most common comments included:

- Connections needed to Blue Mountain Road/better facilities along Mountain Road,
- More connections to downtown and Wasaga; and
- Better facilities on Beachwood Road, High Street/Highway 26, Popular Sideroad and Hurontario Street.

Question 9: What are the two biggest challenges to improving the cycling network in Collingwood?

The most frequently mentioned challenges included:

- Political interest (i.e., convincing council that cyclist infrastructure is important);
- Tension between motorists and cyclists, lack of respect for each other and lack of education/disregard for the rules;
- Lack of Town budget for cycling infrastructure;
- Amount of traffic;
- Lack of safe bike connections within and outside of Collingwood;
- Poor design of existing facilities;
- Lack of consideration for proper cycling facilities.

APPENDIX B

Policy Context

Appendix B

Policy Context

The Cycling Plan aligns with federal, provincial and municipal land use and transportation planning policies and initiatives supportive of or pertaining to active transportation. The following sections provide brief summaries of the documents that were reviewed and the specific policies that pertain to the planning, design, construction and operations of cycling infrastructure within the Town.

Province of Ontario

Provincial Policy Statement (2014)

Ontario's Provincial Policy Statement (PPS) provides policy direction matters of provincial interest related to land use planning and development, including transportation facilities. The *Planning Act* requires that all planning decisions "shall be consistent with" the PPS. With respect to Infrastructure and Public Service Facilities, the PPS policies indicates municipalities should:

- Provide infrastructure and public service facilities in a coordinated, efficient and cost-effective manner, considering climate change impacts while accommodating projected growth;
- Coordinate and integrate with land use planning to ensure financial viability and ability to meet current and projected needs;
- Promote green infrastructure in complement with infrastructure;
- Consider optimization and adaptive re-use of current infrastructure and public service facilities before developing new;
- Strategically locate to support effective and efficient delivery of emergency management systems; and
- Co-locate public service facilities in community hubs to promote cost-effectiveness, facility service integration and access to transit and active transportation.

Furthermore, the PPS sets out Transportation Systems policies which focus on the movement of people and goods through a safe and energy efficient transportation system, and promotes a multimodal transportation system, which includes transit and active transportation. This direction is supported through compact, mixed land uses and transportation demand management initiatives that minimize the length and amount of required motor vehicle trips.

Finally, with respect to transportation and infrastructure corridors, the PPS directs municipalities to:

- Plan and protect corridors and rights-of-way for transportation, transit and infrastructure facilities to meet current and projected needs;
- Restrict development in planned corridors that could preclude or negatively affect the use of the corridor for the purpose(s) for which it was identified;
- Encourage preservation and reuse of abandoned corridors for purposes that maintain the corridor's integrity and continuous linear characteristics; and

- Consider the environmental impacts when planning for corridors and rights-of-way for significant transportation infrastructure facilities.

Places to Grow Act and Growth Plan for the Greater Golden Horseshoe (Growth Plan 2017)

The Growth Plan is a Provincial growth management plan that articulates a long-term strategic vision and tools for how the Greater Golden Horseshoe and surrounding areas should grow over the next 20 years. The Plan was developed to guide planning decisions in a way that will promote economic development and strong communities. The Plan directs municipalities to optimize the use of existing and new infrastructure to support growth, as well as coordinate infrastructure planning, land use planning and infrastructure investment in order to implement the Growth Plan.

Many policies in the Growth Plan deal with planning for transportation infrastructure, with emphasis on encouraging municipalities to plan for transportation systems that are adequate for the level of anticipated growth, offer multi-modal access to destinations, provide safety for users, and are interconnected and planned for in a coordinated manner. The Growth Plan also mirrors policies found in the PPS with respect to transportation corridors.

The Growth Plan also focuses heavily on planning for transit service levels that support higher density areas and increasing the modal share of transit. Further, municipalities are directed to integrate pedestrian and bicycle networks into transportation planning for both existing and new communities.

The Growth Plan contains a series of policies regarding community infrastructure. These policies provide direction for community infrastructure planning, land use planning and community infrastructure investment to be coordinated, to use such community infrastructure efficiently, and to plan for an appropriate range of community infrastructure to accommodate population changes.

Accessibility for Ontarians with Disabilities Act (2005)

The *Accessibility for Ontarians with Disabilities Act, 2005* (AODA) was enacted for the purpose of improving accessibility standards for Ontarians by 2025. The AODA outlines mandatory standards for private, public and non-profit sectors to remove barriers and ensure equitable access for all individuals with disabilities. Ontario Regulation 191/11 under the AODA establishes accessibility standards to apply when planning, designing and building transportation facilities, which will be referenced as part of the Town's Cycling Plan.

Ontario Cycling Strategy #CycleON (2013)

Ontario's Cycling Strategy (#CycleON) is the province's 20-year plan designed to encourage the growth of cycling and improve the safety of people who cycle across the province. The Strategy's vision is to have cycling in Ontario recognized, respected and valued as a core mode of transportation that provides individuals and communities with health, economic, environmental, social and other benefits by 2033. Achieving the Strategy's vision requires a commitment from all partners for integrated action to:

- Design healthy, active and prosperous communities;
- Improve cycling infrastructure;

- Make highways and streets safer;
- Promote cycling awareness and behavioural shifts; and
- Increase cycling tourism in Ontario.

Ontario Trails Strategy

The Ontario Trails Strategy is a long-term plan that establishes strategic directions for planning, managing, promoting and using trails in Ontario. The Strategy recognizes trails as key economic and tourism assets for Ontario communities that, in addition to their economic benefits, bring important health benefits and contribute to a high quality of life. With a vision to develop a world-class system of diversified trails, planned and used in an environmentally responsible manner, that enhances the health and prosperity of all Ontarians. The Strategy focuses on the following:

- Improving collaboration among stakeholders;
- Enhancing the sustainability of Ontario's trails;
- Enhancing the trail experience;
- Educating Ontarians about trails; and
- Fostering better health and a strong economy through trails.

Simcoe County and Adjacent Municipalities

Simcoe County Transportation Master Plan (2008)

The active transportation section of the TMP focuses on supporting recreational participation and developing infrastructure to promote active transportation at the municipal level.

Noteworthy policies mentioned in the TMP include the following:

- Creation of promotional material, development of a County trails map and a safety guide;
- County should facilitate ongoing consultation with adjoining municipalities to promote cycling awareness;
- Several recommendations were made for the County to coordinate with the local municipalities to provide better connections and signing and to coordinate trail development with other improvement projects; and
- Trail/sidewalk facilities should be planned to encourage crossing locations at intersections rather than midblock.

The Blue Mountains Comprehensive Transportation Strategic Plan (2010)

The plan details policies to support walking and cycling including, but not limited to, specific cycling facilities to use on specific road types, TDM measures, specific network connections and increased signing.

Noteworthy connections and policies mentioned in the Plan include the following:

- Provide a trail linkage southward from the intersection of Grey County Roads 19 and 21 to the existing cycling facility along Grey County Road 19;

- Design of new facilities should anticipate likely future demand for bicycling facilities and not preclude the provision of future improvements;
- Provide bike lanes on all County roads;
- Trail/sidewalk facilities should be planned to encourage crossing locations at intersections rather than midblock; and
- The design of intersections and interchanges shall accommodate bicyclists in a manner that is safe, accessible and convenient.

Stayner and Area Transportation Plan – Township of Clearview (2009)

The Stayner and Area Transportation Plan was created to help with developing a new Official Plan for the Township. The focus of the plan is on the road system and pedestrian/trail system. Specific cycling facility recommendations include:

- Provide secure bike racks/shelters;
- Provide benches and rest stops at regular intervals;
- Highlight the benefits of being active, provide an updated trails map and provide general operational guidelines;
- Coordinate between the municipality, the County and private organizations/individuals to establish trails improvements/development;
- Provide appropriate signing along trail routes; and
- Trail/sidewalk facilities should be planned to encourage crossing locations at intersections rather than midblock. If midblock crossings are required, adequate design measures should be included to ensure safety.

The major connection identified in the Plan was the trail connection to Collingwood along the old rail line. This connection has since been completed (Train Trail).

Collingwood to Blue Mountain Village Trail Study (2017)

This report provides several potential cycle route options for connecting Collingwood and Blue Mountain Village. The Recommended Route identified through the study is structured as follows:

- Route begins on the south side of First Street Extension and continues west toward Tenth Line;
- The trail crosses tenth line at a signalized intersection along Mountain Road and continues west on the south side of Mountain Road;
- The trail then continues in-boulevard along Mountain Road adjacent to the stormwater management pond. Then it crosses Kells Crescent before crossing onto the north side of Mountain Road at Hill Street and joining and existing segment of off-road trail;
- The route then continues north on Eleventh Line to the Deer Trail head. From here it turns west and stretches to connect with Evergreen Road, just north of Laurel Boulevard. Then it turns north, continuing on-road, on Evergreen Road to the end of the cul-de-sac;

- An off-road trail will begin at the cul-de-sac and stretch west to cross Osler Bluff Road (Grey County Road 21) where it will intersect with an existing trail. This trail continues west toward the future extension of Crosswinds Boulevard and the in-boulevard trail on the southwest side of Crosswinds Boulevard;
- The route follows the future extension of Crosswinds Boulevard, crossing Grey County Road 19 at Jozo Weider Boulevard; and
- The final segment runs along Jozo Weider Boulevard, adjacent to the Blue Mountain Village Conference Centre and connects to the existing asphalt trail segments northeast of the conference centre.

Town of Collingwood

Town of Collingwood Official Plan (2019)

The Official Plan (OP) recognizes that the future growth and prosperity of Collingwood will require a balance between the needs of the recreational marketplace and the preferences of the permanent population to retain the small-town characteristics of the municipality that make it so popular.

The growth management strategy in the OP outlines the importance of complete communities and compact urban form. These concepts refer to the efficient use of land and community planning so that access to jobs, food, community services and open space is convenient to all residents. By improving and expanding the cycling network, the Town will be supporting growth toward a complete community and compact urban form. Specific goals and objectives relating to cycling within the Town include the following:

- To create vibrate and viable neighbourhoods where basic needs for daily living can be accessed by residents using active and public transportation;
- To emphasize well connected, accessible and transit supportive neighbourhoods with a sense of place and belonging as the primary building blocks of achieving complete communities;
- To establish a variety of opportunities for intensification and revitalization throughout the built-up area of the Town and especially older neighbourhoods with existing infrastructure and proximity to existing services, amenities and convenient commercial uses;
- To emphasize universal design principles for housing and neighbourhoods to ensure that the needs of all Town residents, throughout the life cycle, are met, with an emphasis on older adults and residents with physical challenges and special needs.

The plan further notes the importance of respecting, maintaining and strengthening the waterfront and the downtown core as the community's most important assets.

A co-operative approach amongst Neighbouring municipalities is highlighted as many planning issues stretch across borders. The proposed cycling network should consider neighbouring municipality's concerns and goals.

Further goals related to cycling within the OP include the following:

- To maintain a transportation system that permits the safe and efficient movement of people and goods within the Town;
- To foster an integrated transportation system in co-operation with the Town's neighbouring municipalities.
- To establish a system of pathways and trails linking major development areas and public uses as an alternative to the vehicular network of roads.

Further objectives related to cycling within the OP include the following:

- To integrate, where appropriate, traffic calming measures into plans for road improvements throughout the community;
- To develop a system of multi-purpose trails connecting the significant community facilities which are scattered throughout the municipality;
- To promote suitable separations between pedestrian, cyclist and vehicular traffic; and
- To explore all opportunities for the physical improvement of the existing rail line and for increasing freight and passenger traffic, and that lands within the railway right-of-way be utilized in whatever manner deemed most beneficial to the community and its residents.

Town of Collingwood Active Transportation Framework (2017)

The Active Transportation Framework (ATF) was created to help make active transportation in Collingwood a safer, easier, more convenient and more desirable transportation choice that continues to grow in popularity. The framework includes nine guiding principles for active transportation decision making and evaluation (connectivity, integration, accessibility, safety, affordable and flexible, interesting and enjoyable, people-oriented design, communicative, and comprehensive planning and design). The guiding principles will provide the basis for the final Cycling Plan.

Town of Collingwood Active Transportation Plan (2013)

The ATP identified several objectives for the Cycling Plan:

- Ensure the many policies, guidelines and regulations already adopted by the Town are followed for any future active transportation initiatives;
- Design arterial street corridors to make them safe for all users while also considering that there is no single solution for all roads and not every mode can optimally be accommodated;
- Considering all reasons for (utilitarian versus recreation) and ways of (cycling versus walking) using the network;

Although the plan was not adopted by Council, it did provide implementation projects that will be considered in the development of the Cycling Plan.

Town of Collingwood Urban Design Manual (2010)

The manual was created to encourage the design of a complete, effective and sustainable built environment consistent with Collingwood's character and future vision. Any recommendations within the final Cycling Plan will consider any standards outlined in the UDM.

Town of Collingwood Community Based Strategic Plan (2015)

The Town's Community Based Strategic Plan (CBSP) examined the County's goals: accountable local government, public access to a revitalized waterfront, culture and the arts, healthy lifestyle, and support for economic growth. The mission of the CBSP is "Collingwood is a responsible, sustainable, and accessible community that leverages its core strengths: a vibrant downtown, a setting within the natural environment, and an extensive waterfront. This offers a healthy, affordable, and four-season lifestyle to all residents, businesses, and visitors."

Investing in cycling infrastructure and initiatives align with the responsible, sustainable and accessible mission and will also propel the Town toward achieving several of its goals. Specific goals or objectives related to cycling include:

- Maintain and improve indoor and outdoor recreational facilities including trail networks, arenas, pools and parks;
- Promote a balanced and healthy lifestyle.

APPENDIX C

Active Transportation Advisory Committee Terms of Reference Examples

Amended by City Council November 23, 2015

Active Transportation Advisory Committee (ATAC)

Terms of Reference

As part of the action plans set out in the City of Stratford Bike and Pedestrian Master Plan – 2014, the City of Stratford is currently taking steps to create an Active Transportation Advisory Committee (ATAC) to address the need for active transportation systems for residents, businesses, and visitors.

MANDATE

ATAC will serve as a forum for the public to raise their viewpoints on particular active transportation issues and/or findings, and to bring these interests to the attention of the appropriate staff, departments or standing committees. The ATAC would also act to educate, promote and enhance active transportation in the City of Stratford.

RESPONSIBILITIES AND SCOPE

The Active Transportation Advisory Committee, upon request of the City of Stratford or the Director of Infrastructure and Development Services will:

a) Advise on measures and policies required to implement the City's commitment to active transportation as referenced in the Transportation Master Plan, Bike and Pedestrian Master Plan, Official Plan, and any other related plans or reports;
b) Monitor the implementation of said plans, and evaluate their effectiveness;
c) Provide, as part of an annual report, the ATAC list of recommended on and off-road bikeway, walkway and trails network implementation priorities for the subsequent year;
d) Advise on by-laws, legislations and regulations that have an impact on the pedestrian, trails and cycling network, and its applicable users;
e) Advise on matters pertaining to education of pedestrian, cycling and trails safety, and the development of policies and programs in accordance with its mandate;
f) Liaise with outside agencies on matters of common interest (i.e.: local school boards, health units, special interest groups, government ministries, etc);
g) Advise in addressing active transportation issues received from other governments and agencies (i.e., studies, policies, programs, legislation, etc.);
h) Make recommendations regarding financial and policy programs that help to increase utilitarian active transportation participation as alternatives to the private automobile;
i) Endeavour to increase public awareness and understanding of active transportation matters, and assist in developing new active transportation policies, strategies and programs.

COMPOSITION

Membership on the ATAC includes, or as otherwise established by City Council:

- Four (4) City Councillors
- Two (2) representatives from the Energy and Environment Committee
- Four (4) citizens-at-large

TOTAL VOTING MEMBERS: 10

The members shall be appointed by City Council and in accordance with the "Policy on Council Appointed Advisory Committees" and any other policies or practices of the City of Stratford. Staff representatives shall be non-voting members.

Membership nominations from the Energy and Environment Committee and citizens-at-large may be asked to provide profile information on their areas of expertise, walking, cycling, active transportation experience, and other special project interests. ATAC members will be appointed on the basis of experience, how their knowledge and skills complement the expertise of the ATAC, diversity of age and gender, and their availability to attend ATAC meetings. This will help to ensure that membership is balanced and that members can focus on all active transportation issues.

STAFF RESOURCES

- One (1) staff from the Community Services Department, in a non-voting role
- One (1) staff from the Infrastructure and Development Services Department, in a non-voting role.
- One (1) recording secretary

QUORUM

Quorum for the conduct of business at ATAC meetings shall be as determined by the 'Policy on Council Appointed Advisory Committees'. Non-voting positions on the Advisory Committee shall not be counted when determining quorum.

Quorum is the number of people required to be present at a meeting to validate the transaction of the ATAC's business. Quorum is a majority of the whole number of members of the Committee (more than 50%) and is required whenever a vote, recommendation or other decision is taken by the committee. Official business of the ATAC cannot be conducted when there is a lack of quorum.

MEETINGS

The ATAC will hold regular meetings or as deemed necessary at the call of the Chair or Vice-Chair in the absence of the Chair. Meetings shall be open to the public.

The ATAC will liaise and report to Council through the Public Works Sub-committee of Council and by forwarding the minutes and relevant documents to the City Clerk for distribution to Council.

ELECTION OF OFFICERS

At the first meeting of the ATAC, the members shall elect from among their voting members, a Chair and Vice-Chair and such other officers as deemed appropriate by the ATAC.

Except for the First Term of ATAC, the Chair shall have served at least 1 year on the ATAC before being elected Chair.

REMUNERATION
ATAC members shall serve without remuneration.

BUDGET
The Advisory Committee shall submit their annual budget request to the City as directed by the Director of Corporate Services.

CONDUCT OF BUSINESS
The ATAC and its members are governed by all applicable City By-laws and Policies for the conduct of meetings and activities, including but not limited to:

1. Council Code of Conduct
2. Purchasing Policy for procuring goods and services
3. Procedural By-law for meetings
4. Municipal Act
5. Municipal Conflict of Interest Act

All persons appointed to Boards and Committees shall complete mandatory training required by the City from time to time, including but not limited to accessibility, respect in the work place and, health and safety.

ROLE OF ATAC MEMBERS

Chair

- is the official spokesperson for the ATAC and speaks on behalf of the ATAC to the media, as necessary;
- understands the objectives of the meeting;
- ensures that the agenda is prepared and circulated prior to the meeting;
- is knowledgeable about parliamentary procedures;
- starts the meeting on time;
- introduces and welcomes all newcomers and guests;
- makes a clear statement of the issues to be discussed;
- assigns the floor to whomever wishes to speak in an appropriate manner;
- ensures that each side of an issue is fully and fairly stated;
- sees that no one dominates the discussion;
- interrupts a Committee member who is speaking out of order or inappropriately;
- makes frequent verbal summaries of the conclusions reached;
- restates all motions, amendments and the outcome of the voting;
- names the movers and seconders of motions;
- conducts the meeting in accordance with Procedural By-law 140-2007.

Vice-Chair

- in the absence of the Chair, assumes the role of the Chair;
- at the request of the Chair, provides assistance in the conduct of the meeting;

ATAC Members

- arrive on time;

- are prepared by reading the agenda and supporting documents beforehand and bringing them to the meeting;
- read the minutes of the previous meeting to ensure that they reflect the general discussion and the motions made;
- listen to all ideas;
- address all remarks through the Chair;
- ask questions if a statement is unclear;
- participate fully in discussions but not to dominate the discussion or allow others to dominate;
- look for the positive aspect of another's ideas;
- avoid personal comments and comments that are not related to the business of the committee;
- refrain from criticizing decisions of the ATAC
- maintain and enhance the image of Council and not act so as to adversely reflect on Council through their respective Board or Committee;
- remain impartial in deliberating decisions, and accept the responsibility associated with each decision as adopted;
- abide by the provisions contained in Terms of Reference in the performance and discharge of official functions and duties, and arrange their private affairs in a manner that promotes public confidence and will bear close public scrutiny;
- avoid the improper use of the influence of their appointed office and declare conflicts of interest, both apparent and real;
- seek to serve the public interest by upholding both the letter and the spirit of the laws and policies established by the Federal Parliament, Ontario Legislature and Council.
- advise the Chair in advance of the meeting if bringing up a new or controversial topic;
- inform the Chair in advance if leaving the meeting early;
- inform the Recording Secretary in advance if unable to attend the committee meeting;

<u>Resource Staff</u>

- attend ATAC meetings as necessary;
- respond to specific questions at meetings;
- participate in the discussion at the ATAC meeting, but not the voting;
- are not entitled to vote on motions or recommendations made at the meeting;
- where the preparation of a report or the undertaking of research will require a considerable amount of time, the approval of the CAO or the Director of the appropriate department is required before the work proceeds;
- updates the CAO and Director of the appropriate department on issues before the ATAC, as deemed appropriate.

<u>Recording Secretary</u>

- consults with the Chair in the preparation of the Agenda for the next meeting;
- sends out the Agenda, previous Minutes and background material prior to the meeting, unless time does not permit;
- summarizes the discussion at the meeting for inclusion in the Minutes;
- records the motions made at the meeting and whether or not the motion was carried or defeated for inclusion in the Minutes;
- forwards the approved Minutes to the City Clerk for distribution to Council and for posting to the City's web site;
- consults with Resource Staff to follow up on action required following the ATAC meeting.

REPORTING EXPECTATIONS

The ATAC will provide at minimum, an annual report to the Public Works Sub-Committee, listing recommended on- and off-road bikeway, walkway and trails network implementation priorities for the subsequent year.

TRAILS AND ACTIVE TRANSPORTATION COMMITTEE

TERMS OF REFERENCE

1. PURPOSE

The Trails and Active Transportation Committee is to act as an Advisory Committee of Council on all matters relating to the future planning and implementation of the Trails Master Plan recommendations and to provide guidance in all aspects of Active Transportation modes associated with self propelled, non motorized traffic, both recreational and utilitarian (commuter).

2. MEMBERSHIP

The Committee shall be comprised of nine (9) members, including

- Three (3) members of the public,
- One (1) citizen member from the Parks and Recreation Advisory Committee,
- One (1) citizen member from the Environmental Advisory Committee,
- One (1) member from the Planning and Development Department,
- Two (2) members from the Parks and Recreation Department,
- One (1) member from the Infrastructure and Environmental Services Department.

3. TERM

The Committee shall be appointed to serve for the balance of the 2010-2014 term of Council.

4. REMUNERATION

None

5. DUTIES AND FUNCTIONS

- Foster and advocate for Active transportation modes within the community by assisting in the planning and implementation of an off-road recreation /utilitarian trails network connecting residential areas to institutional, recreational, and commercial and employment lands in accordance with the Trails Master Plan.

- Review existing cycling routes and make recommendations associated with improving on and off road connectivity to trails and establishing new active transportation (cycling) routes and guidelines including safe cycling policies, standard signage and development of active transportation maps.

- To provide a point of contact between citizens, Town staff and Council in soliciting and assessing community feedback with respect to self propelled transportation modes, trails, costs, priorities, issues and concerns pertaining to the delivery of an expanded municipal trail system.

- To provide public education and assist in the promotion of trails and self propelled transportation modes.

- To provide on going analysis and commentary on policy initiatives related to the Trails Master Plan, trail map review/updates and develop a trails implementation capital work plan in accordance with the Trail Master Plan. Provide input on the Town's Capital and operational budget forecasts for all aspects of trails and active transportation initiatives including, land acquisition, new trail construction and existing trail improvement initiatives.

- Recommend the acquisition of key lands including green and urban linkages and corridors considered vital to ensure the maximum possible protection and connectivity of these resources and the highest possible quality of trail user experience.

- Assist Council and staff in identifying any potential financial resources and funding opportunities with a prime focus on available funding for the procurement of land and development of the trails network in accordance with the policies and procedures identified in the Trails Master Plan, in an effort to maximise opportunities for advancement of trail related initiatives within the Town.

- Communicate and coordinate Aurora trail planning initiatives with other organizations and agencies including the Oak Ridges Trails Association, the Nokiidaa Trails Association, the Oak Ridges Moraine Land Trust, Conservation Authorities, the Region of York and other stakeholders to ensure a coordinated approach with the various stakeholders trails related initiatives and the Town of Aurora trails network initiatives.

- Review and comment on Draft Plan and Secondary Plans of Development including applicable Site Plans for the purposes of providing advice to Council associated with the planning and implementation of the Trails Master Plan.

- Undertake other assignments as may be requested by Council from time to time.

6. REPORTING

The Committee shall report directly to Council through the Director of Parks and Recreation.

7. MEETING TIMES AND LOCATIONS

As determined by the Committee Chair.

8. STAFF SUPPORT

The Parks and Recreation Department will provide technical support to the Committee for the purposes of providing background information associated with policy and process, including formulating the meeting minutes and preparation of the Committee reports to Council.

Staff support members shall not be voting members.

Schedule "A" to By-law No. 6422/106/16

Active Transportation Advisory Committee Terms of Reference

1. The Active Transportation Advisory Committee is a Committee of Council. Active Transportation is defined as any mode of self-propelled transportation (e.g. walking, cycling, in-line skating, wheeling) that relies on the use of human energy to get from one place to another. The modes may utilize on-road and off-road facilities such as sidewalks, bike lanes, and multi-use, inter-connecting trails. Active transportation provides for positive economic, environmental and health impact which benefit individuals and the community as a whole.

2. The mandate of the Active Transportation Advisory Committee isto provide advice and input to Council on matters relating to the promotion and development of an active transportation network within the City of Port Colborne, as follows:

   (a) Identifying issues that impact trail and cycling development in the city.

   (b) Supporting the development of streets and trails that provide for safe, convenient, efficient and accessible use by all users – including pedestrians of all ages and abilities, people with disabilities, and cyclists.

   (c) Promoting active transportation as a routine component of commuting to work and school, tourism and recreation.

   (d) Promoting the environmental, social, economic and health benefits of active transportation.

   (e) Advocating for the development of a built environment that supports an active transportation network.

   (f) Acting as a sounding board and determining appropriate actions in response to issues and initiatives.

3. The principal responsibilities of the Active Transportation Advisory Committee are:

   (a) Advising on strategic priorities relating to active transportation directions, and policies;

   (b) Providing input on various active transportation issues and initiatives, including inter-municipal and other agency's links;

   (c) Increasing public awareness and understanding of active transportation;

   (d) Assisting in the measurement, monitoring, and celebration of successes with respect to active transportation initiatives, including active transportation facility infrastructure enhancements, and support programs on an ongoing basis(i.e.encouragement, education and enforcement);

   (e) Providing input on the active transportation component of pertinent policies as they are developed, implemented and updated; and

   (f) Exploring and reporting best practices for a safe, accessible active transportation network and assist in encouraging a culture of safe active transportation (i.e. cycling, walking, running) use in the City of Port Colborne.

4. The Active Transportation Advisory Committee shall consist of the following voting and non-voting members:

   (a) Seven (7) voting members, including:
      i. One representative from City Council, and
      ii. Six (6) voting members from the Port Colborne community to be appointed by resolution of Council;

(b) Non-voting members of staff shall be designated by the Chief Administrative Officer and shall act as resource persons, and shall provide minute taking and administrative support to the Committee;

5. The Active Transportation Advisory Committee will liaise with the City's Accessibility Advisory Committee and other committees, as deemed appropriate.

6. All meetings of the Active Transportation Advisory Committee shall be open and no person shall be excluded from such meetings, except for improper conduct or for the consideration of matters that qualify for closed session consideration as outlined under the *Municipal Act, 2001*, S.O. 2001, c.25.

7. All members of the Committee shall serve without remuneration excepting that the remuneration of the non-voting staff member shall be governed by the Administrative Policies of the City of Port Colborne and/or the collective agreement, whichever is applicable.

8. The Chair, or in his/her absence the Vice-Chair, shall call a meeting of the Active Transportation Advisory Committee on a quarterly basis. Additional meetings may be called by the Chair, when required. The Chair shall call a special meeting whenever requested by Council or by written petition of a majority of the Committee Members.

9. A quorum of the Active Transportation Advisory Committee shall consist of a majority of sitting, voting members; vacant seats shall count as seats for the purpose of calculating a quorum.

10. Subject to such limitations and restrictions as Council may herein or hereafter either by resolution or by-law impose, the Active Transportation Advisory Committee shall:

    (a) Appoint from the voting members a Chair and a Vice-Chair;

    (b) Provide reports to Council as may be required.

11. The Committee may hold public meetings when, in their opinion, the issues being discussed require community input. Notice of a public meeting shall be given in the local newspaper(s) and on the City's website no less than five days in advance of the meeting.

12. The minutes of all Active Transportation Advisory Committee meetings shall be recorded and distributed to Committee Members and to the City Clerk for safekeeping and inclusion on the next regular Council Agenda. The minutes shall be posted on the City's website.

Date of Last Council Approval: March 4, 2015

The following terms of reference for the Active Transportation Advisory Committee is proposed to Regional Council within Section 75 (1) of the Procedural By-law 00-031, as amended. *"Subject to the provision of any general or special Act, the Council, in establishing any Advisory Committee, will set forth Terms of Reference of the Committee and such other provisions as the Council deems proper."*

Terms of Reference

Active Transportation Advisory Committee (ATAC)

1. Purpose, Mandate and Scope

A. The Active Transportation Advisory Committee, upon request of the Regional Municipality of Waterloo or the Commissioner of Transportation and Environmental Services, will:

a) Assist the Region in developing new active transportation policies, strategies and programs.

b) Advise Regional Council and staff on measures and policies required to implement the Region's commitment to active transportation in the Transportation Master Plan, Context-Sensitive Regional Transportation Corridor Design Guidelines, Active Transportation Master Plan and the Regional Official Plan.

c) Advise Regional Council and staff on cycling and pedestrian (active transportation) issues in accordance with the Regional Transportation Master Plan, Context-Sensitive Regional Transportation Corridor Design Guidelines, the Region of Waterloo Pedestrian Charter, Active Transportation Master Plan and the Regional Official Plan.

d) Advise Regional Council and staff in addressing active transportation issues received from other governments and agencies (i.e., studies, policies, programs, legislation, etc.).

e) Assist in monitoring the extent and effectiveness of active transportation facility construction and support programming (encouragement, education and enforcement) on an ongoing basis.

B. The Active Transportation Advisory Committee will serve as a forum for the public and/or agencies to raise their viewpoints on particular cycling and pedestrian issues and/or findings.

C. The Active Transportation Advisory Committee will endeavour to increase public awareness and understanding of issues taken up by the Committee.

2. Reporting

The Active Transportation Advisory Committee reports to Regional Council through the Commissioner of Transportation and Environmental Services to the Planning and Works Committee.

3. Memberships

A. The Regional Municipality of Waterloo will appoint fifteen members to the committee. The fifteen members will be composed of 2 Regional Councillors and thirteen members at large appointed on a four year staggered cycle. If possible, one (1) representative from the Grand River Accessibility Advisory Committee (GRAAC) with experience and expertise in active transportation, three (3) representatives from each of the three (3) urban Area Municipalities and three (3) representatives from the four (4) rural Area Municipalities should be chosen to provide a balanced regional perspective on cycling and pedestrian issues.

B. Committee members may serve up to eight years (two consecutive four year terms) in accordance with Regional Council Policy.

C. Membership should be drawn from residents with skills and demonstrated expertise in cycling and pedestrian areas of concern and not as representatives of particular agencies, organizations or interest groups, with the exception of the GRAAC member.

D. Members will be appointed on the basis of experience, interest and availability to attend meetings and serve on the occasional sub-committee.

E. The Transportation and Environmental Services or his/her designate shall be in attendance at all meetings.

4. Selection of Members

A. Individuals will become members of the committee through citizen appointment by advertisement.

B. The representative Regional Councillors will be appointed by Regional Council.

5. Terms of Office

A. Appointments of thirteen (13) persons appointed by Regional Council, in addition to the Regional Councillors, for up to four (4) years, in such a way that at least three (3) members will be reappointed or replaced every year; terms are as follows:

a) One (1) year term, maximum of eight (8) years;

b) Two (2) year term, maximum of eight (8) years;

c) Three (3) year term, maximum of nine (9) years;

d) Four (4) year term, maximum of eight (8) years; and

e) Two (2) members of Regional Council, appointed for the term of each Council.

6. Meetings

A. The Committee will elect annually a Chair and Vice-Chair from among its members at the first meeting of each calendar year. The Chair should be able to devote some time between meetings to work with Regional staff or attend the occasional meeting of the Regional Planning and Works Committee or Council when circumstances warrant.

B. It is expected that there will be approximately one (1) meeting per month. These meetings will be open to the public. Closed Sessions will only be held in strict compliance with the Regional Procedural By-law.

C. Members will from time to time be expected to serve on sub-committees reviewing particular issues.

D. The Committee will from time to time invite other persons or groups, such as Area Municipality Trails Advisory Committees and other cycling or pedestrian organizations, to participate in Committee deliberations in order to benefit from additional expertise pertaining to subjects being discussed or to be briefed on the policies and activities of government bodies or other organizations dealing with matters relating to these subjects.

E. Direct staff support to the committee will be provided by the Transportation Planning Division of the Planning, Housing & Community Services Department. An annual budget for the Committee's operation will be, as required, included in the budget of the Transportation Planning Division.

7. Committee Procedures

A. The quorum for a meeting shall be eight (8) members. A reduced quorum may be considered when a member has formally resigned from the Committee or when fewer than fifteen (15) members have been appointed by Regional Council.

B. Committee decisions will be made by majority vote.

8. Agenda Preparation for the Meeting

Meeting agenda will be provided by the Transportation Planning Division of the Planning, Housing & Community Services Department in consultation with Committee members.

9. Minutes of the Meeting

Staff support to the Active Transportation Advisory Committee will be provided by the Clerks Department.

10. Remuneration

Members will be reimbursed if a submission is made for mileage and incidentals (parking, long distance telephone, bus tokens, meals and snacks) as required.

11. Conflict of Interest

Date of Last Council Approval: March 4, 2015

All members shall adhere to the Conflict of Interest Policy for Advisory Committees, approved by Council on May 28, 2003. All members shall annually review and complete the agreement and signature form attached to the policy. Signature forms are to be returned to the Committee Clerk for safe keeping.

Members are expected to undertake their responsibilities on an impartial and objective basis. Any member whose financial interests could be in conflict with the interests of the Region is obliged to disclose same at the meeting. Members will not participate in any decision or recommendation in which they or their immediate family has any financial interest except in common with residents of the municipality.

If a conflict of pecuniary interest arises the member is required to declare the conflict including the reason for declaration.

APPENDIX D

Costing of Recommended Cycling Facilities

Detailed Cost Estimates

Facility	Description	Location	Length/Units	HIDE		Unit Cost (per km or item)	Estimated Cost	
				Length in Kilometres			Short-Term (0-5yrs)	Long Term (5yrs+)
East-West Corridors								
Harbour Trail/East Circle Route	Widen or separate cyclists and pedestrians on Harbourview Trail portion	Harbourview Trail	1600 m	1.6	E11	$500,000		$800,000
	Pave (with asphalt) loose top sections		900 m	0.9	E11	$500,000		$450,000
	Improve signs and pavement markings at trail crossings		7 crossrides		E24	$5,400	$37,800	
Third Street/Ontario Street	Install bike lane signs and pavement markings	Ontario Street	1400 m	1.4	E5	$6,000	$8,400	
	Install share-the-road signs and pavement markings (sharrows) on Third Street as an **interim** measure	Third Street	1500 m	1.5	E17	$4,000	$6,000	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution	Third Street	1500 m	1.5	E4	$8,200		$12,300
Sixth Street (Simcoe County Road 32 part)/Hume Street	Pave any loose top sections	Grey Road 9 to Tenth Line	1300 m	1.3	E13	$105,000		$136,500
	Install multi-use trail on north side of road	Tenth Line to Grey Road 19	2700 m	2.7	E12	$281,000		$758,700
	Install bike lane signs and pavement markings	High Street to Hurontario Street	1300 m	1.3	E5	$6,000	$7,800	
Cameron Street/Collins Street	Install share-the-road signs and pavement markings (sharrows) as an interim measure	Park Road to Peel Street	2000 m	2	E17	$4,000	$8,000	
Campbell Street/Lockhart Road	Designate and redesign for Bicycle Priority Street	High Street to Collins Street	2600 m	2.6	E20	$93,000		$241,800
	Provide sharrows, share the road and wayfinding signs				E17	$4,000	$10,400	
Findlay Drive/Clark Street (north-south)	Designate and redesign for Bicycle Priority Street	Poplar Sideroad to Hurontario Street	1600 m	1.6	E21	$93,000		$148,800
	Install share-the-road (sharrows) signs and pavement markings as an **interim** measure				E17	$4,000	$6,400	
Poplar Sideroad	Complete trail on north side of road	200 m east of Clark Street to Saunders Street	200 m	0.2	E13	$105,000		$21,000
	Pave any loose top sections	High Street to 200 m east of Clark Street	630 m	0.63	E13	$105,000		$66,150
		Stephens Street to Trail Trail	2000 m	2	E13	$105,000		$210,000

Detailed Cost Estimates

Facility	Description	Location	Length/Units	HIDE		Unit Cost (per km or item)	Estimated Cost	
				Length in Kilometres			Short-Term (0-5yrs)	Long Term (5yrs+)
North-South Corridors								
Balsam Street/High Street	Complete missing sections of route with a multi-use trail (shared between pedestrians and cyclists)	First Street to Poplar Sideroad	1620 m	1.62	E14	$292,000	$473,040	
Walnut Street/Cedar Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	Walnut Street from Tenth Street to Third Street, Cedar Street from Third Street to Harbour Trail	1570 m	1.57	E5	$6,000	$9,420	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution				E6	$763,000		$1,197,910
Maple Street/Pine Street	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	Maple Street from Hamilton Drain Trail to Third Street, Pine Street from Third Street to Side Launch Way	2400 m	2.4	E5	$6,000	$14,400	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution				E6	$763,000		$1,831,200
Sainte Marie Street	Install share-the-road signs and pavement markings (sharrows) as an interim measure	Hume Street to Ontario Street	800 m	0.8	E17	$4,000	$3,200	
	Install bike jug handle	South side of Hume Street at Ste. Marie Street	1 jug handle	-		$10,000	$10,000	
	Consider installing buffered bike lanes in the future	Hume Street to Ontario Street	800 m	0.8	E7	$16,000		$12,800
Train Trail	Widen and pave loose top sections	First Street to Poplar Sideroad	2800 m	2.8	E13	$105,000		$294,000
	Review roadway/trail crossings and install proper signing and pavement markings		3 locations	-	E24	$5,400	$16,200	
Peel Street/Lynden Street (east-west)	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	Train Trail to Ontario Street	1900 m	1.9	E17	$4,000	$7,600	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution				E4	$8,200		$15,580
Raglan Street	Pave shoulder on west side of roadway	Ron Emo Road to Poplar Sideroad	770 m	0.77	E20	$60,000		$46,200
	Install wayfinding signs	Hume Street to Poplar Sideroad	1800 m	1.8	E19	$2,100	$3,780	
	Install bike lane signs and pavement markings				E5	$6,000		$10,800

Detailed Cost Estimates

Facility	Description	Location	Length/Units	HIDE		Unit Cost (per km or item)	Estimated Cost	
				Length in Kilometres			Short-Term (0-5yrs)	Long Term (5yrs+)
Gaps and Discontinuity Improvements								
Sixth Street and Hume Street Connection	Install share-the-road signs and pavement markings (sharrows) as an **interim** measure	Hurontario Street to Paterson Street	400 m	0.4	E17	$4,000	$1,600	
	Undertake capital road improvements to add bike lanes as the **ultimate** solution				E4	$8,200		$3,280
	Widen and pave trail through Central Park	Hamilton Street to Trail Trail	260 m	0.26	E13	$105,000	$27,300	
	Construct crossing treatment	Hamilton Street/Central Park parking lot and Paterson Street	1 crossride	-	E24	$5,400	$5,400	
Train Trail and Harbourview Trail Connection	Install signs along the route for wayfinding and to indicate shared facility on Heritage Drive and advise pedestrians and cyclists which sidewalk to use on Side Launch Way	Trail trail to Side Launch Way and Side Launch Way to Maple Street	4 signs	-	E25	$270	$1,080	
	Provide crossing treatments and signs	Side Launch Way at N. Pine Street	1 crossing		E24	$5,400	$5,400	
East Connection to Wasaga Beach	Install wayfinding signs	Hume Street and Highway 26	2 signs	-	E25	$270	$540	
	Improve wayfinding signs	Marineview Drive, Barrington Trail, Georgian Manor Drive, Lakeview Avenue	8 signs	-	E25	$270	$2,160	
	Install signs and pavement markings (compliant with OTM Book 18)	Beachwood Road - Highway 26 to Town's eastern boarder	3300 m	3.3	E5	$6,000	$19,800	
	Construct a multi-use sidewalk along the north side of the roadway	Highway 26 - Marine View Drive to Beachwood Road	670 m	0.67	E15	$475,000		$318,250
Northwest Connection to Blue Mountains	Provide an on or off road connection (assumed 3m Multi-Use Trail)	Highway 26 east end of Vacation Inn Trail to Cranberry Trail	740 m	0.74	E14	$292,000		$216,080
	Provide a crossing at Lighthouse Lane	Lighhouse Lane and Highway 26	1 crossing	-	E24	$5,400		$5,400
	Install share-the-road signs and pavement markings (sharrows)	Cranberry Trail from Highway 26 to Highway 26	2400 m	2.4	E17	$4,000		$9,600
West Connection to Blue Mountain Village	Construct paved multi-use (urban) trail	South Side of High Street to Black Ash Creek Trail	450 m	0.45	E14	$292,000		$131,400
	Widen the bridge over Black Ash Creek (longer term solution)	Black Ash Creek Bridge	1 bridge		E27	$2,500,000		$2,500,000
TOTAL				**43.91**			**$685,720**	**$9,426,950**