Municipality of Trent Hills

Active Transportation and Trails Plan

March 2024

Conceptual visualization of the Ranney Gorge Suspension Bridge

Table of Contents

1. The Context 1
1.1 Understanding the Scope 2
1.2 Project Process & Objectives 6
1.3 Why Active Transportation & Trails Now? 9
1.3.1 Existing Routes & Facilities 9
1.3.2 Policy Review 12
1.3.3 Program Review 15
1.3.4 Strengths, Weaknesses, Opportunities and Threats 18
1.4 Content Overview & Application 20
2. The Vision 11
2.1 AT & Trails Needs 23
2.2 ATTP Vision & Objectives 28
2.3 Plan Commitments & Foundations 30
3. The Plan 34
3.1 Recommendation Development 35
3.2 Ambitious Goal #1 – Touring Cycling 39
3.2.1 Project Recommendations 40
3.2.2 Plan Recommendations 45
3.3 Ambitious Goal #2 – Multi-modal Connections 46
3.3.1 Project Recommendations 47
3.3.2 Plan Recommendations 50
3.4 Ambitious Goal #3 – Walkability 51
3.4.1 Project Recommendations 52
3.4.2 Plan Recommendations 58
3.5 Ambitious Goal #4 – Major Barriers 59
3.5.1 Project Recommendations 59
3.5.2 Plan Recommendations 66
3.6 Ambitious Goal #5 – Planning & Growth 67
3.6.1 Project Recommendations 68
3.6.2 Plan Recommendations 69
3.7 Ambitious Goal #6 – Local Cycling 70
3.7.1 Project Recommendations 71
3.7.2 Plan Recommendations 78

3.8 Ambitious Goal #7 – Recreational Trail Links 79
3.8.1 Project Recommendations 80
3.8.2 Plan Recommendations 84
3.9 Ambitious Goal #8 –Trans Canada Trail 85
3.9.1 Project Recommendations 86
3.9.2 Plan Recommendations 91
3.10 Ambitious Goal #9 – Vulnerable Groups 92
3.10.1 Plan Recommendations 98
3.11 Ambitious Goal #10 – AT Integration 99
3.11.1 Plan Recommendations 100
4. The Action 103
4.1 Implementation Strategy 104
4.1.1 Process 104
4.1.2 Coordination & Consultation 110
4.1.3 Policy & Approvals 119
4.1.4 Implementation Tools 124
4.2 Programming Strategy 136
4.2.1 Plan Recommendation Initiatives 137
4.2.2 Other Tactics 139
4.2.3 Communication 141
4.3 Maintenance & Management Strategy 144
4.3.1 Maintenance Practices 145
4.3.2 Management Practices 149
4.5 Funding Strategy 151
4.5.1 Capital Costs 151
4.5.2 Operating Costs 151
4.5.3 Cost Off-Setting 153
4.6 Closing 156

List of Tables

Table 1 // Summary of Built & Planned AT Routes and Facility Considerations....10
Table 2 // Programming Assessment Alternatives....15
Table 3 // Summary of Existing AT Supportive Programs in Trent Hills....17
Table 4 // Summary of SWOT Assessment Outcomes....19
Table 5 // High level Summary of Input Received from Engagement Activities & Application....27
Table 6 // Summary of Ambitious Goal #1 Project Lengths, Phasing & Costing....43
Table 7 // Ambitious Goal #1 Future Considerations....44
Table 8 // Summary of Ambitious Goal #1 Plan Recommendations....45
Table 9 // Summary of Ambitious Goal #2 Project Phasing & Costing....48
Table 10 // Ambitious Goal #2 Implementation Considerations....49
Table 11 // Summary of Ambitious Goal #2 Plan Recommendations....50
Table 12 // Summary of Ambitious Goal #3 Phasing & Costing....56
Table 13 // Summary of Ambitious Goal #3 Project Recommendation Considerations....57
Table 14 // Summary of Ambitious Goal #3 Plan Considerations....58
Table 15 // Summary of Ambitious Goal #4 Phasing & Costing....64
Table 16 // Summary of Ambitious Goal #4 Project Recommendation Considerations....65
Table 17 // Summary of Ambitious Goal # 4 Plan Recommendations....66
Table 18 // Summary of Ambitious Goal #5 Plan Recommendations....69
Table 19 // Summary of Ambitious Goal #6 Phasing & Costing....76
Table 20 // Summary of Ambitious Goal #6 Project Recommendation Considerations....77
Table 21 // Summary of Ambitious Goal #6 Plan Recommendations....78
Table 22 // Summary of Ambitious Goal #7 Phasing and Costs....82
Table 23 // Summary of Ambitious Goal #7 Project Recommendation Considerations....83
Table 24 // Summary of Ambitious Goal #7 Plan Recommendations....84
Table 25 // Summary of Ambitious Goal #8 Phasing & Costing....89
Table 26 // Ambitious Goal #8 Project Recommendation Considerations....90
Table 27 // Summary of Ambitious Goal #8 Plan Recommendations....91
Table 28 // Summary of Ambitious Goal #9 Phasing & Costing....96
Table 29 // Summary of Ambitious Goal #9 Project Recommendation Considerations....97
Table 30 // Summary of Ambitious Goal #9 Plan Recommendations....98
Table 31 // Summary of Ambitious Goal #10 Plan Recommendations....101
Table 32 // Overview of Implementation Next Steps for Proposed Project Recommendations....105
Table 33 // Overview of Implementation Next Steps for New Trail Opportunities identified following the ATTP....107
Table 34 // Overview of Implementation Next Steps for Potential Programming Strategies....109
Table 35 // Overview of ATTP Roles & Responsibilities to support Implementation....113
Table 36 // Summary of Trent Hills Partner Opportunities and Expectations....116
Table 37 // Suggested Policy & Plan Enhancements for Trent Hills....120
Table 38 // Suggested Amenity Identification & Allocation Tool....129
Table 39 // Summary of Relevant Minimum Maintenance Standards Guidance....145
Table 40 // Potential Trail Maintenance Guidance....146

Table 41 // Potential on-road AT Facility Winter Maintenance Practices 147
Table 42 // Potential off-road Trial Facility Winter Maintenance Practices 148
Table 43 // Suggested Cost Adaptations Considerations for Master Plan Costing 152

List of Figures

Figure 1 // Overview of Trent Hills ATTP Approach and Considerations 4
Figure 2 // Overview of Typical Active Transportation Users in Trent Hills 5
Figure 3 // Trent Hills ATTP Project Schedule & Process Overview 7
Figure 4 // Mixed Traffic Operation with Cyclists Positioned in Centre of Lane (OTM Book 18, 2021) .41
Figure 5 // Roadway with Paved Shoulders (OTM Book 18, 2021) 42
Figure 6 // The coloured areas demonstrate (from left to right) the Frontage Zone, Pedestrian Through Zone, and Furnishing Zone (NACTO Urban Street Design Guide, 2013) 53
Figure 7 // Operating envelopes for pedestrians of various ages and abilities (TAC Geometric Design Guide, 2017) 54
Figure 8 // Hierarchy of Controlled Crossing Systems and Current Policies and Guidelines (OTM Book 15, 2016) 61
Figure 9 // Cross-section of in-boulevard multi-use path (OTM Book 18, 2021) 72
Figure 10 // In-boulevard multi-use path, Peterborough. 72
Figure 11 // Cross-section of one-way and two-way physically separated bicycle lanes (OTM Book 18, 2021) 73
Figure 12 // Cycle track, Montreal 73
Figure 13 // Shared use markings on two-lane chicaned roadway (OTM Book 18, 2021) 75
Figure 14 // Excerpt from OTM Book 18 Figure 6.77 - Uncontrolled Crossing (With Raised Crossing) 87
Figure 15 // Uncontrolled crossing with raised crossing (OTM Book 18, 2021) 87
Figure 16 // Existing conditions, Hastings at Water Street / Cedar Drive 88
Figure 17: Trailhead amenities in Sydenham along the Cataraqui Trail, including bike parking, bicycle repair station, and wayfinding signage. 88

Appendix A: Project Maps

Map 1. Municipality Wide ATTP Project Recommendations
Map 2. Campbellford ATTP Project Recommendations
Map 3. Hastings ATTP Project Recommendations
Map 4. Warkworth ATTP Project Recommendations
Map 5. Municipality-wide ATTP Phasing Recommendations
Map 6. Campbellford ATTP Phasing Recommendations
Map 7. Hastings ATTP Phasing Recommendations
Map 8. Warkworth ATTP Phasing Recommendations

Land Acknowledgement

We recognize the traditional keepers of this land and, specifically our neighbours of the Alderville First Nation, with a formal acknowledgement. Welcome to the Gunshot Treaty Lands of 1788. It is on these lands and on the shores of the big lake, the Mississauga Anishinabeg (A-NISH-IN-NAW-BEK) met with the Crown to facilitate the opening of these lands for settlement. Let us be reminded of the responsibility we all have in making sure that we respect these lands and waters that give us life and sustain our livelihoods.

Team Acknowledgement

We want to thank the considerable efforts of the staff of the Municipality of Trent Hills, municipal partners and stakeholders, and members of the consultant team who guided the development of the Trent Hills Active Transportation and Trails Plan

Municipality of Trent Hills Staff

Kira Mees

Peter Burnett

Cristal Laanstra

Preston Parkinson

Jim Peters

CIMA+ Consulting Team

Claire Basinski

Brandon Quigley

Joy Tigchelaar

We would also like to acknowledge the considerable efforts and meaningful input provided by numerous other stakeholders and residents of the Municipality of Trent Hills.

1. The Context

The Municipality of Trent Hills boasts some of Ontario's most appealing natural and cultural features and is emerging as an attractive place for residents, visitors, and businesses. This unique area has long been committed to the principles and practices of healthy and sustainable community design and development, providing people of all ages with a place they can live, work, and play.

While Trent Hills has provided places and spaces for people to move (i.e., roads, trails, etc.), until now there have not been coordinated and strategic efforts put into identifying where, how, and when routes and facilities that encourage active transportation and recreation should be implemented. To date, there are currently limited policies to support active transportation and trail integration into municipal planning, engineering, and community services.

In 2023, the Municipality of Trent Hills sought funding to support the development of a Municipality-wide active transportation and trails master plan. This document is a summary of the project process and its findings which are intended to be used as a long-range tool for decision-making and to encourage a shift in how people move within and around Trent Hills.

1.1 Understanding the Scope

Through the master plan, the Municipality of Trent Hills seeks to provide staff and stakeholders with…

A long-term strategy to help achieve the goal of creating an environment and community that enhances, encourages, and excites those who live, work, and play about active transportation and trails.

What is unique about this opportunity and this plan is the dual consideration of both active transportation and trails. This broad reaching scope covers a range of users, uses and applications within the context of the Municipality. This scope is important to define and understand prior to presenting and implementing the master plan. An overview of key definitions, assumptions, and applications in the context of the Municipality of Trent Hills is provided below.

Trails

Trails are a specific type of facility that are typically found off-road, connecting people to natural areas for recreational purposes. Trail planning takes into consideration the unique features and experiences of those using facilities to identify routes that balance environmental impact with access and connectivity. Trails can be used for both active and non-active forms of transportation.

Active transportation

Active transportation (AT) refers specifically to the types of users and uses such as walking, cycling, or other self-propelled methods of travel. Active transportation planning looks to provide interventions and routing solutions that accommodate the behaviours and needs of these more vulnerable groups.

Although active transportation plans speak to trails, they mostly address on-road or in-boulevard facilities, such as sidewalks or dedicated cycling infrastructure (e.g., bike lanes). Active transportation plans also supplement infrastructure plans with recommended policies and programs to encourage several types of active trips, including for utilitarian and recreational purposes.

Through discussions with Municipal staff, key stakeholders, and members of the public, it became evident that to fully address the opportunities and challenges related to active transportation and trails within the Municipality, the approach and focus needed to position the plan within larger municipal priorities.

The 2023 – 2027 municipal strategic plan supports the municipal values of…

- Community-focused
- Inclusive
- Innovative
- Integrity
- Sustainability
- Transparency

Where possible, the Active Transportation and Trails Plan (ATTP) has been positioned to support and achieve these municipal values, while providing guidance on how the municipality can address the priorities of…

Sustainable infrastructure

Recreation and well-being

As such, the plan was positioned to focus on providing the Municipality of Trent Hills with…

A robust plan that identifies, designs, and provides next steps on how to improve overall connectivity between communities, major destinations, and surrounding areas. The plan will be based on finding potential projects, strategies, tools, and tactics to enhance recreational and utilitarian active transportation for people of all ages and abilities.

To achieve this, priority was given to active transportation i.e., the means of moving that is people-powered and non-motorized, which often primarily consists of walking and cycling, but also includes other active ways of getting around, such as using rollerblades, skateboards, scooters, skiing, skating, or snowshoeing. The plan also highlights opportunities to enhance, encourage and educate active transportation users around the unique existing and future opportunities within the Municipality of Trent Hills.

Recreational Trips

Refers to the use of the active modes highlighted above for fun, or fitness, often following a route that highlights experiencing natural features or other elements along the way, usually without a key destination in mind.

Utilitarian Trips

Regular trips done for a specific purpose, such as commuting to work or school, or to go shopping, access services, or other key destinations that serve day-to-day needs. Utilitarian trips usually involve a continuous trip or route that allow people to easily access their destination, ideally with minimal interruptions, gaps, facility transitions, or major barriers (physical and nonphysical) along the way.

Most people engage in AT for a mix of recreational and utilitarian purposes, so routes and facilities, whether they be on or off-road, can often be used for both purposes.

Taking an approach that recognizes the relationship between different trip purposes provides the Municipality with an adaptable and flexible approach to facility, route and policy planning which aims to harness the unique needs and opportunities found within the Municipality – as outlined in Section 1.2.

Figure 1 provides an overview of the relationship of the two categories of AT trip purposes relative to how they can be accommodated and addressed through different on and off-road active transportation facilities.

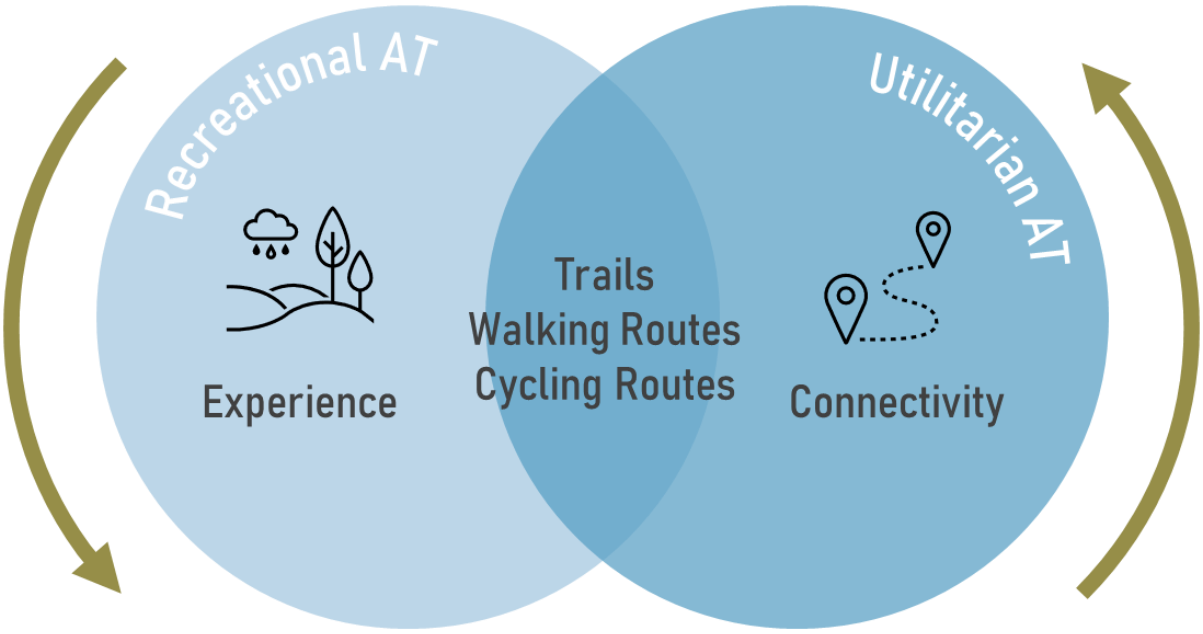


Figure 1 // Overview of Trent Hills ATTP Approach and Considerations

The information provided above addresses the "what" of the scope of work - the elements that were addressed and considered throughout the project process. A master plan of this scope and scale, however, should focus on the intended users. Users are the people who engage in active transportation and consist of people of a wide variety of ages, abilities, confidence, endurance, skills, and expectations. In the context of the Trent Hills ATTP, the goal is to provide opportunities specifically for those who use active forms of transportation (as defined above), and to encourage people in Trent Hills to engage in active trips more often.

The ATTP focuses on finding opportunities that are considered safe and comfortable for several types of AT users. Most people do not only use one mode or form of transportation in their daily travels, but will walk, bike, drive, or travel as a passenger depending on their needs and the nature of the trip. The ATTP network and plan accommodates the preferences and priorities of a range of users based on season, destination, travel companion, and type of experience. Various user groups were factored into the network process as well as the identification of programs and strategies to support behaviour change.

An overview of the different types of active transportation users that were considered during the ATTP process are presented in Figure 2 below.

01. Pedestrians

- Includes people walking, hiking, jogging/running, in wheelchairs/mobility devices, pushing strollers and walking dogs.
- Most vulnerable with greatest need for additional interventions and enhancements
- Greatest demand in built-up/urbanized areas

02. Cyclists

- Range of categories that are determined by comfort and safety.
- Low stress tolerance and varied experiences and needs
- Route need depends on destination and ease of access.

04. Seasonal Users

- AT may be either a primary (i.e., cross- country skiing) or secondary (i.e., walking from a boat) option.
- Driven by AT as the destination (primary mode) or as the link (secondary mode)
- Dependent on weather and location

03. High Endurance Users

- Typically, high degree of experience and dedication, including hikers, touring cyclists, mountain bikers, etc.
- Longer trips and higher threshold for stress.
- Route depends on experience and destination.

Figure 2 // Overview of Typical Active Transportation Users in Trent Hills

1.2 Project Process & Objectives

A scope of work was developed and implemented based on the requirements provided by the Municipality and the experience and expertise of the consultant team.

The purpose of the plan is to…

Identify a series of recommendations and strategies aimed at improving transportation and recreational mobility for people of all ages and abilities by developing an integrated active transportation and trails master plan that includes recommendations for infrastructure, policy & strategy, and implementation.

To do so, five (5) key outcomes were identified by the project team and used as a guide for the project's process and the development of deliverables and components:

- Network of on-road and off-road active transportation and recreation projects
- Design guidelines and standards
- Recommendations to guide implementation
- Policies for consideration and adoption
- Maintenance, management, evaluation, programming, and education practices

The ATTP project was awarded in January 2023 and completed in the Spring of 2024. The project was completed using an iterative process focused on integrating the input received through consultation and engagement activities into the outcomes of the overall project process.

Figure 3 illustrates the project process, including the technical steps and stages of the work plan, and provides a summary of the engagement milestones and objectives. A more detailed summary of the input received over the course of the project is provided in Section 2.0 of the report.

Phase 1. Background

01

- Background data collection & review
- Policy & programming review
- Analysis of existing conditions

Pre-Consultation & Outreach

Phase 2. Development

02

- Identify candidate routes & network
- Undertake feasibility review
- Identify network prioritization & phasing
- Prepare strategies & policies

Round 1 Engagement

Phase 3. Finalize

03

- Prepare a draft and final version of the plan & supporting documents
- Present to Municipal Council for approval

Round 2 Engagement

01. Informing

Tactics that support the development of project tasks where input directly and influenced the plan considerations and context.

- Online engagement
- Committee Meetings
- Events
- One-on-one conversations

02. Validating

Tactics that help validate how input is used and reviewed / adapted.

- Open House
- Committee Meetings
- Virtual meetings
- Staff Meetings
- Committee Workshops

03. Confirming

Tactics used to confirm the outcomes of a process at the point of deliverable finalization or support prior to next steps.

- Staff decision-making sessions
- Presentations to Council

Figure 3 // Trent Hills ATTP Project Schedule & Process Overview

Through the project process, several frequent questions emerged and are addressed below for those reading the plan.

01. How is walking addressed in the ATTP?

Walking improvements or walkability refers to the improvement of a space or place to encourage and support those who wish to walk. Walkability improvements have overarching benefits for community accessibility and connectivity. Walkability will be primarily emphasized within the urbanized/built-up areas of the municipality.

02. What types of facilities were considered?

Both on and off-road facility considerations were made during the development of the plan. Off-road linkages include trails within parks, open spaces, and linear corridors. On-road linkages include bike lanes, sidewalks, signed bicycle routes, in-boulevard multi-use pathways, etc., and were explored on all municipal roadways to identify a strategic network of improvements. Opportunities to leverage new developments were also considered.

03. How was safety and comfort considered?

Through this project we used an approach that prioritized safety and comfort for users of all ages and abilities for on-road facilities, in addition to applying recent design guidelines and standards. For off-road facilities, safety and comfort was included as a design criterion, while also considering the various needs of distinct trail users.

1.3 Why Active Transportation & Trails Now?

The Municipality of Trent Hills is well positioned to develop and implement a Municipality-wide active transportation and trails master plan. The plan builds upon work undertaken by the Municipality, Northumberland County, and other local agencies and stakeholders, while reflecting the unique conditions and context related to active transportation and recreation throughout the Municipality.

Within Phase 1 of the work plan, the project team undertook a detailed review of current conditions, including three core components:

- A review of existing and previously planned routes and facilities
- A review of existing policies and programs that support active transportation work and participation
- A review of the strengths, weaknesses, opportunities and / or threats to active transportation in Trent Hills today

The following sections provide a summary of these findings, which were used as the basis for developing a comprehensive and aspirational vision statement and objectives for the ATTP.

1.3.1 Existing Routes & Facilities

The Municipality of Trent Hills currently has numerous active transportation facilities and routes, including an extensive sidewalk network in urbanized areas, County cycling routes, and various off-road trails, including over 30 kilometres of the Trans Canada Trail spanning Trent Hills from Hastings to the Municipality's eastern border. Existing facilities represent those that have been built on both Municipal or County roadways and are found within the boundary of the Municipality of Tent Hills. Existing facilities also represent routes / facilities identified and approved through other municipal or agency policies / plans / initiatives.

The existing routes and facilities establish the foundation from which future active transportation improvements and linkages are identified. In some cases, facilities in the existing network may also benefit from upgrades to meet current standards, enhance conditions and/or attract new users.

At the onset of the master plan process, maps were prepared to illustrate the existing and previously proposed active transportation and trial linkages found within the Municipality of Trent Hills. The mapping included as Appendix A of this report represents the recommended future projects and project phasing identified by this plan. Table 1 summarizes some of the key considerations regarding the existing and planned facilities / routes in the Municipality of Trent Hills. The table is organized by the various geographic areas of interest within the Municipality.

Area	Built Considerations	Planned Considerations
Municipality-wide	+ Trans-Canada Trail + Oak Ridges Trail – short section in southwest, primarily on-road + Linkages to the south + Existing Northumberland County cycling route ("Trent River Truckin'") + Footpaths / informal trails	+ Proposed future County cycling routes
Campbellford	+ Sidewalks along most streets + Trans-Canada Trail + Ferris Provincial Park Trails + County cycling route + Trent River + Centralized population & services + Significant recreational destinations i.e., suspension bridge	+ Future development areas + County cycling routes + Major projects and EAs
Hastings	+ Sidewalks along major streets + Trans-Canada Trail + Local trail linkages + Park space access	+ Future development areas + Proposed County cycling routes
Warkworth	+ Sidewalks along major streets + Oak Ridges Moraine trail route & Millennium trail + County cycling route	+ Future development areas

Table 1 // Summary of Built & Planned AT Routes and Facility Considerations

There are various areas of jurisdiction within the Municipality that need to be considered in the development of the ATTP. Jurisdiction is based on the agency or entity that owns the roadway or land. There are several different stakeholders within the Municipality of Trent Hills that have established existing routes and facilities or will have a role in the future implementation of recommended routes/facilities and strategies. They include:

+ Northumberland County – responsible for major arterial roadways throughout the Municipality and surrounding area. These roads provide inter-municipal and regional connections, and thus often have fairly high speeds and traffic volumes. Northumberland County has implemented a series of on-road cycling routes along a mix of County and local roads, including the local "Trent River Truckin'" Route. Strategic infrastructure improvements have been identified by the County as part of the previously adopted Transportation Master Plan (details provided in Section 1.3.2) and as part of individual Environmental Assessment projects, including but not limited to the new bridge crossing over the Trent River in Campbellford which is proposed to include cycling infrastructure.
+ Conservation Authorities – three Conservation areas operate in Trent Hills – Lower Trent, Crowe Valley, and Otonabee. These authorities own and operate three conservation areas within the Municipality that provide various trail linkages and other recreational and natural heritage opportunities in the area. Conservation authorities also play a role in protecting and managing impacts on natural resources in the area.
+ Ontario Parks / Parks Canada – similar to Conservation Areas, Provincial Parks provide opportunities for active travel and recreation. Ferris Provincial Park is centrally located within Campbellford and has a significant trail system, including the Ranney Gorge Suspension Bridge which provides a critical crossing of the Trent River in the area, and is also a significant tourism attraction. Parks Canada is also an important stakeholder in Trent Hills, as they manage the Trent-Severn Waterway, including numerous locks that provide waterway access and amenities in the area.
+ Trans Canada Trail – this cross-country trail bisects the Municipality, providing connections to both the northwest and east. The majority of the Trent Hills portion of the Trail is owned and operated by the Eastern Ontario Trails Alliance, to which the Municipality financially contributes to address necessary maintenance and improvements. However, some segments of the TCT within Trent Hills' communities are under the municipality's ownership.
+ Oak Ridges Trail Association – within the southwestern portion of the municipality is the Oak Ridges Moraine Trail that is predominantly used for hiking and provides access to the Oak Ridges Moraine's naturally significant areas. The Trail can be used year-round and is volunteer run and coordinated.
+ Ministry of Transportation Ontario – the MTO has jurisdiction over all provincial highways, regional connections via high-volume and high-speed roadways, which do not always permit use by cyclists or pedestrians. In 1995 Highway 45 was downloaded from MTO to Northumberland County. Thus, the MTO has limited involvement in Trent Hills today, but remains a key stakeholder within long-term planning considerations.

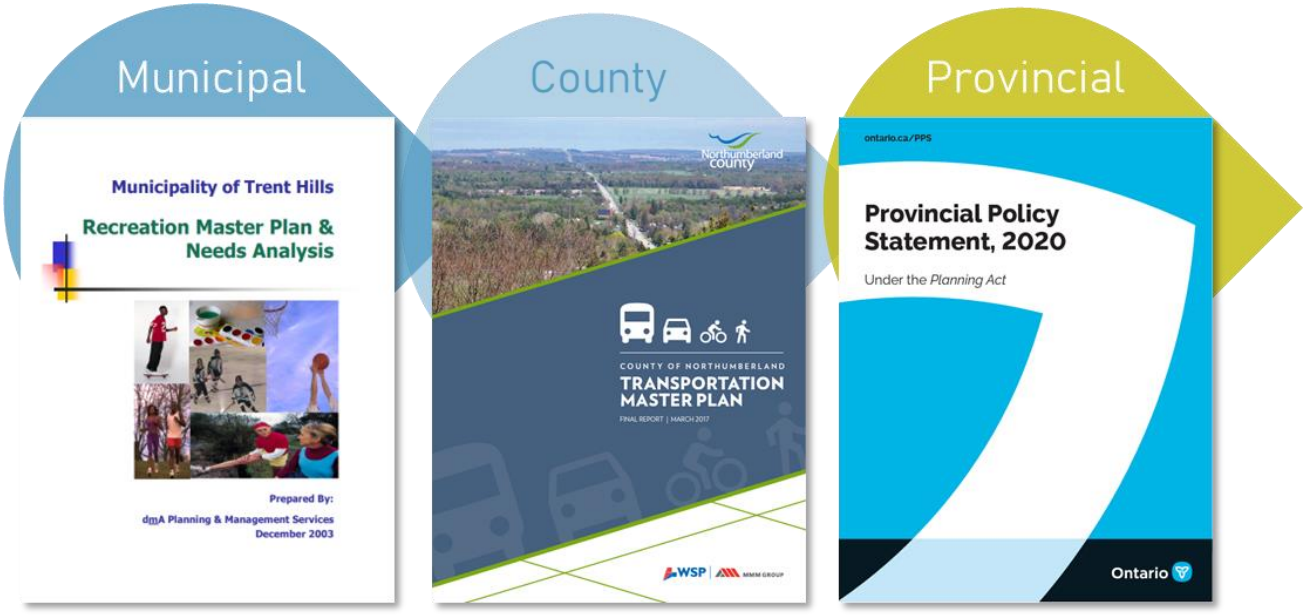
1.3.2 Policy Review

Policies provide the framework within which planning decisions are made in a community. Understanding the existing policy context provides a necessary understanding of the opportunities and limitations related to planning and decision-making at the municipal level.

The policy review conducted for the ATTP identifies the current degree of support for the planning of trail and active transportation routes, the high-level principles of the community, relative to complementary planning principles (e.g., healthy community design), and identifies where policies could be enhanced or improved.

The policy framework extends from the federal and provincial level down to the county and municipal level. A comprehensive review of relevant policies and plans at all levels was undertaken, highlighting the areas of support, as well as gaps with the potential for improvement and enhancement at the municipal level. Appendix A provides a detailed summary of the review's findings.

This ATTP is a functional master plan which means that it functions as more of an implementation strategy rather than a policy document. As such, its recommendations require a degree of support at other policy levels to be broadly effective in the long-term.



Of the policies reviewed, the following key terms that were highlighted demonstrate a relatively high degree of support for active transportation and trail-related planning:

- Non-motorized travel
- Pedestrian-friendly facilities
- Year-round trail users
- Multi-season
- All ages and skill levels
- Community design
- Interconnected
- Safety
- Heritage and culture
- Tourism
- Public destinations

Federal & Province of Ontario

Applicable policies	Policy references	Role and Relevance
8 Framework for Recreation in Canada (2015) Oak Ridges Moraine Conservation Plan (2017) Provincial Policy Statement (2020) #CycleON Cycling Strategy (2014) & Action Plan 2.0 (2018) Ontario Trails Strategy (2005) Minimum Maintenance Standards (2018) Ontario Parks Association – Parks Best Practices Manual (2018)	+ All urban transportation systems are to include provisions that reduce reliance on travel by automobile, including by active transportation. + All municipal roadway facilities are to be built and maintained according to provincially prescribed Minimum Maintenance Standards and be compliant with applicable sections of the Accessibility for Ontarians with Disabilities Act (AODA). + All on-road cycling facilities and pedestrian crossings are to follow the guidelines of the applicable sections of the Ontario Traffic Manual (Books 15, 18, etc.).	Establish the general direction and list of imperatives that municipalities must adhere to within transportation planning. These requirements are meant to be adapted as appropriate to local needs and conditions.

Northumberland County

Applicable policies	Policy references	Role and Relevance
5 Northumberland County Transportation Master Plan (2017) Northumberland County Cycling Master Plan (2014) Northumberland County Official Plan (2016) Municipal Comprehensive Review – Long-term Growth Forecast and Urban Land Analysis (2021) Northumberland County Natural Heritage System Plan (2020)	+ Adopt Complete Streets principles in the design of roads to ensure a comfortable environment for all road users, including pedestrians and cyclists. + Promote walking and cycling as an energy efficient, affordable, and accessible form of transportation. + Connectivity between communities through an integrated AT network + Offer premier touring cycling routes throughout the region.	Coordinates the transportation planning of its local municipalities under a series of strategic objectives and decision-making frameworks. This includes modal split targets as well as step-by-step infrastructure implementation processes.

Trent Hills

Applicable policies

10

Strategic Plan (2023 & 2019)
Official Plan (2000)
Recreation Master Plan (2003)
Community Improvement Plan (2008)
Road Needs Study (2022)
Municipal Cultural Plan (2011)
Connecting Downtown Campbellford Revitalization Plan (2017)
Best practices Recommendation Report-Planning and Developmental Services Review Report (2022)
Budget information - capital and operating (2023)
Development Charges Background Study (2019)

Policy references

+ Provide connectivity between communities through an integrated AT network
+ Promote AT use throughout all seasons, particularly downtown centres.
+ Achieve a balanced transportation system which supports all mode users and encourages more active and sustainable mobility choices

Role and Relevance

Coordinates the transportation planning of its comprising local municipalities under a series of strategic objectives and decision-making frameworks. This often includes modal split targets as well as step-by-step infrastructure implementation processes.

1.3.3 Program Review

Beyond the policy framework, active transportation and trails require the support of educational and encouragement programs to support and generate interest in participation. Because of the recreational and sometimes informal nature of trail and active transportation use – especially within Trent Hills – it is important to have programs that incentivize use and encourage a shift in behaviours to supplement and ensure the use of infrastructure improvements.

A comprehensive review of existing programs undertaken by the Municipality and its partners was completed, providing the project team with a foundation upon which new or enhanced programming and outreach tactics and / or strategies could be developed. The results of this review demonstrate a collaborative and coordinated environment within which municipal staff and stakeholders work together to encourage and educate people in various ways about active transportation.

Programs are most effective when they target specific groups through different types of interventions. With this in mind, each program identified was assessed based on two categories: the group of individuals that it aims to attract or influence and the intervention type. An overview of the assessment alternatives is provided in Table 2 and was used as the basis for identifying and assessing the potential new programs for consideration by the Municipality – as detailed in Section 4.2.

Group Options	Intervention Types
+ Everyone	+ Tourism
+ New Cyclists	+ Promotion
+ Seasoned Cyclists	+ Incentive
+ Touring Cyclists	+ Urban Design
+ Hikers	+ Funding
+ Pedestrians	+ Accessibility
+ Businesses	+ Communication
+ Vulnerable Populations	+ Partnership
+ Others	+ Education

Table 2 // Programming Assessment Alternatives

Table 3 provides a summary of the existing programs within the Municipality of Trent Hills. The information contained within this section is intended to be used not only as the basis for the strategies recommended in Section 4.2 of the plan, but also as a means of monitoring and promoting ongoing work / initiatives of the Municipality and its partners.

Name	Organization	Audience	Intervention	Summary	Relevance
Road Readiness Kit	Bike Action Trent Hills, Trent Hills Public Library	Everyone	Education Incentive	With funding from the Campbellford Seymour Community Foundation, Do-It-Yourself Bike Maintenance Kits are provided for free to anyone to borrow with a library card. Each kit includes a work stand, a pump, a patch kit, and a basic set of tools. People can use the kit at the library or take it home to work on their bike throughout the one-week loan period.	Helps overcome a major barrier to cycling by helping to facilitate bicycle repair and maintenance.
Community Events	Bike Action Trent Hills, Campbellford Rotary Club	Everyone	Promotion Events Education	Ongoing events, including bike maintenance workshops, cycling safety sessions, and group rides.	Addresses barriers to cycling through education on key cycling skills and encourages cycling through a social and supportive atmosphere.
County Cycling Routes and Guide	Northumberland County	Touring Cyclists	Promotion Tourism	The County has established and signed a series of cycling routes, 30-74 km in length, which are promoted via the Northumberland Tourism website, and via online and printed maps which detail the routes and highlight key sights along them. The "Trent River Truckin'" route passes through Trent Hills via a loop from Warkworth, through Campbellford, Healey Falls, and back.	Helps promote on-road touring cycling to visitors and residents with a route that highlights key attractions, and through wayfinding signage.
Cycling Club Rides	Bike Action Trent Hills, Northumberland County Cycling Club	New & Seasoned Cyclists	Events	Rides are offered regularly from May to September, including group rides, mountain biking, and day trips. Rides are rated by terrain and pace to allow opportunities for riders of every level of ability and fitness.	Offers a way for people to explore Northumberland County by bike, including through Trent Hills

Name	Organization	Audience	Intervention	Summary	Relevance
Heritage Tours	Municipality of Trent Hills	Pedestrians, Tourists	Tourism Education	The Trent Hills Heritage Advisory Committee has created four self-guided tours, three of which are walking tours that highlight significant heritage properties and architecture in Hastings, Warkworth, and Campbellford. These are available and promoted on the Trent Hills tourism webpage.	While primarily meant to focus on heritage, the tours also encourage people to walk and explore the community centres in Trent Hills on foot.
Ferris Provincial Park Guided Walks	Friends of Ferris	Hikers, Tourists, Everyone	Tourism, Education	Friends of Ferris organizes weekly guided walks from May to December, along with occasional guided nature walks highlighting natural features in the park.	Helps encourage walking and exploration for recreation and to appreciate the area's natural features.
CIP Program	Municipality of Trent Hills	Businesses, Property owners	Urban Design Funding	Through the CIP program, the Municipality provides grants and rebates for businesses and property owners to improve building facades, signage, accessibility features, and other enhancements. The program's goals include creating attractive public spaces and streetscapes, preserving heritage, and improving energy efficiency and accessibility.	Promotes investment in streetscaping, signage and accessibility features that support active transportation.
Volunteer Transportation	Community Care Northumberland	Seniors, Vulnerable populations Rural Residents	Accessibility Partnership	Offers affordable and accessible transportation services to the community, including accessible transportation for people with mobility challenges or special needs, as well as bus-like rural transportation routes that allow youth, families, adults, or seniors to travel from rural areas.	These transportation services offer people multi-modal options to get around without a car. Routes and destinations serviced should be considered in the ATTP.

Table 3 // Summary of Existing AT Supportive Programs in Trent Hills

1.3.4 Strengths, Weaknesses, Opportunities and Threats

An analysis was undertaken to identify and assess different mobility and land use considerations based on their strengths (S), weaknesses (W), opportunities (O) and threats (T) in relation to the ATTP. The SWOT provided a foundation of key considerations that were used to identify larger planning goals and ambitions as well as specific recommendations and projects. The analysis was completed based on a comprehensive review of background information by the project team that was further informed by discussions with staff members and input from the first round of public engagement.

It is important to note that elements of the SWOT are not always mutually exclusive. A weakness can often be positioned as an opportunity. As such, instead of individual strengths or weaknesses, high level topics have been identified with an assessment for each. The outcomes are presented in Table 4 below.

	Strengths	Weaknesses	Opportunities	Threats
Trails	+ Trans Canada Trail	+ Lack of off-road/trail connection to Warkworth + Trail conditions not ideal for broad cycling use + Many trail crossings are uncontrolled, may not meet current standards. + Lack of trailhead amenities	+ Explore off-road/trail connection to Warkworth. + Improve trail conditions. + Improve safety of crossings + Provide trailhead amenities	+ Costs, distance + Will require ongoing maintenance. + Conflicts with road users
Cycling Routes	+ County cycling routes, including “Trent River Truckin” through Trent Hills	+ Not designed for a wide group of cyclists – mostly for those already comfortable with on-road touring rides	+ Explore additional routes that are accessible to diverse users. + Leverage local cycling groups to expand group rides and encourage use of routes and facilities. + Enhance wayfinding	+ Balancing road cycling along shared roads with rural motorized traffic
Geography	+ Population centres are compact, highly walkable/bikeable in size	+ Outside of population centres, distances are generally too long for most AT trips	+ Focus improvements in centres to support a broad range of trail purposes, with strategic improvements through rural areas.	+ Sometimes challenging terrain can deter involvement

Involvement	+ Community involvement and active groups, i.e., Bike Action Trent Hills, Northumberland Cycling Club		+ Build/strengthen partnerships with local groups to work towards shared goals. + Complement community group activities with municipally led programming/funding	+ Long term sustainability may be challenged as membership changes over time
Demographics	+ Retirement age population has more leisure time, and desire for low-impact recreational activities, and may require non-automotive travel options	+ Many sidewalks, crossings, and other features are not fully AODA compliant	+ Ensure AT facilities are selected and designed to be safe and accessible for all ages and abilities	+ Older population is vulnerable to traffic injuries
Walkability	+ Local main streets have compact, centralized destinations with good walkability.	+ Numerous gaps in sidewalk network along roads in communities	+ Address priority sidewalk gaps and pedestrian crossing opportunities. + Build on existing strengths along main streets to increase walkability and overall attractiveness.	
Tourism	+ Many amenities to attract visitors, i.e., Ferris Provincial Park, Trent Severn waterway, community events, etc. + Extensive tourism promotional efforts, i.e., visittrenthills.ca, Northumberland Tourism	+ Not a widely known destination compared to surrounding areas	+ Ensure amenities are accessible by active modes, and supplement with new trails and facilities to attract more visitors and economic activity. + Explore opportunities to link tourism to AT & trails, i.e., events, interpretive & wayfinding signage, etc.	+ Competition from adjacent municipalities and areas, some of which are more easily accessible or are better known.
Revitalization	+ Community Improvement Plan offers support to businesses to help enhance design features that foster AT		+ Leverage the Community Improvement Plan and future projects to increase appeal of Trent Hills to tourists, customers, and new businesses.	

Table 4 // Summary of SWOT Assessment Outcomes

1.4 Content Overview & Application

The intent of the Trent Hills ATTP is to provide municipal staff with a resource and reference that can be used as an ongoing tool and a framework for decision-making at regular intervals. The information contained within the ATTP report has been designed around the interests and needs expressed by municipal staff, decision-makers, and stakeholders to ensure that the plan can be used as a flexible and adaptable resource for those of varying levels of expertise, understanding, and capacity. The following is an overview of the various components of the plan and how they are intended to be used.

Chapter 1.0 – The Context

Content

An overview of the project process and rationale for the development of the ATTP.

Application

- Communication tools for future public and stakeholder outreach
- Resource for municipal support and rationale as part of annual budgeting

Chapter 2.0 – The Vision

Content

An overview of input received throughout the project process and a presentation of the ATTP vision, objectives, and ambitious goals.

Application

- Communication tools for future public and stakeholder outreach
- A record of consultation and engagement to fulfill future EA requirements

Chapter 3.0 – The Plan

Content

Consolidation of all the proposed recommendations that support the ten (10) ambitious goals that form the foundation of the plan.

Application

- Action plan to support annual project planning and budgeting
- Design guidance on specific facility types and project interventions
- Guidance on next steps to support future actions of municipal staff
- Key considerations required to facilitate the coordination of different recommendations

Chapter 4.0 – The Action

Content

A guide to the implementation of the ATTP, including considerations for programming, maintenance, funding and future collaboration and coordination.

Application

- Internal guide to roles and responsibilities that clarifies who does what
- An internal coordination tool to support project and policy implementation
- A series of potential programs which staff and stakeholders can put in place
- Maintenance and management practices and protocols
- Policy guidance for updates and amendments
- Costing and funding sources for projects

2. The Vision

A strategic functional master plan, like this active transportation and trails master plan, is a means of and developed around achieving larger scale, long-range municipal ambitions, and goals. The Trent Hills Active Transportation and Trails Master Plan has been developed as a 20-to-30-year strategy that provides realistic and innovative solutions to today's challenges and tomorrow's anticipated issues.

Establishing a long-range vision for a specific topic or municipal priority requires considerable input and buy-in. The Trent Hills ATTP vision and objectives are the foundation of the plan and were developed based on public, stakeholder, decision-maker, and staff input. It is important to understand these commitments before presenting the plan recommendations to ensure that there is a collective understanding of what the municipality is ultimately trying to achieve.

2.1 AT & Trails Needs

Determining the active transportation needs in Trent Hills and improving its trails and active transportation network began with a background review that was completed as part of the first phase of the ATTP development (described in Section 1.0) and was enhanced through a multi-faceted engagement program.

A wide variety of staff, decision-makers, residents, and other stakeholders were engaged to determine what they wanted and felt the municipality needed to improve in relation to trails and active transportation in Trent Hills. Engagement activities included:

- Regular project meetings with Municipal staff
- Online consultation at placespeak.com/TrentHillsATTP included sharing project materials, an online survey, interactive mapping tool, and public noticeboard.
- Presentations and workshops with the Trent Hills Community Development Advisory Committee
- Two Public Open Houses (held in July and November 2023)
- Additional stakeholder meetings and input, including data sharing and collaboration with Bike Action Trent Hills

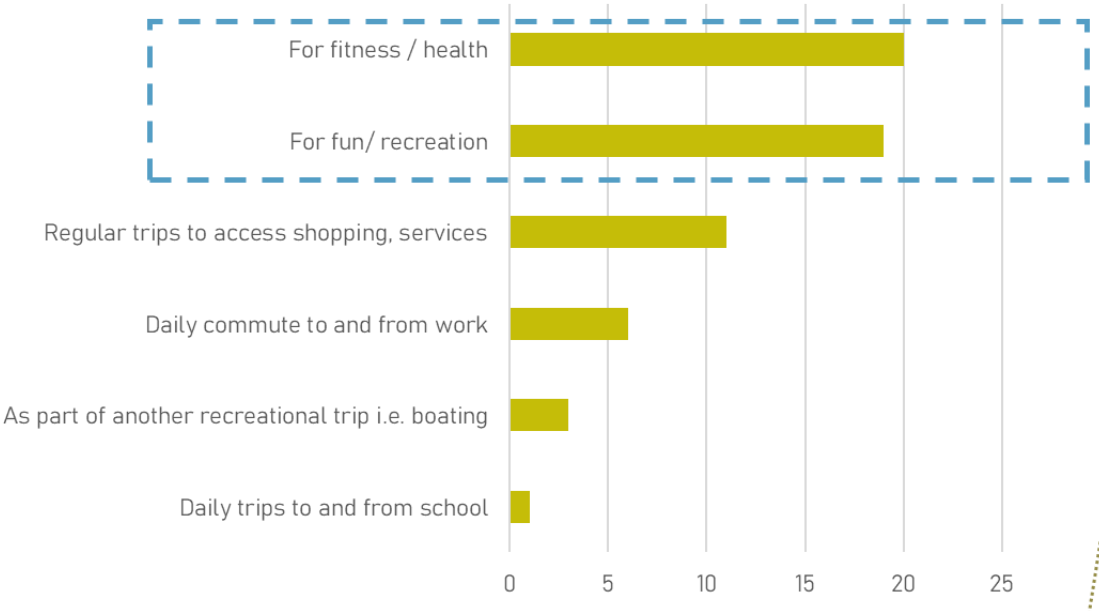
During the online survey conducted during the early stages of consultation, the project team gained important insights on current active transportation behaviour, including trip types, purposes, and frequency. Most active trips from respondents were made for the purposes of fitness, fun, or recreation, but there were also a considerable number of people taking active trips to access shopping centres, services, or work.

As expected, walking was the most common type of active transportation that survey respondents reported using. However, a considerable number of people also engaged in cycling, hiking, and winter trail use.

Respondents also shared their experiences engaging in active transportation, including their sense of comfort and safety along active transportation routes and systems, what they liked best about walking, cycling, and trail use in Trent Hills, and the challenges they faced when travelling by active modes. While people generally felt that Trent Hills' trails were safe and comfortable, mixed feelings were expressed concerning safety and comfort while cycling.

The challenges and strengths of active transportation in Trent Hills that were expressed by consultation participants are summarized on the following pages.

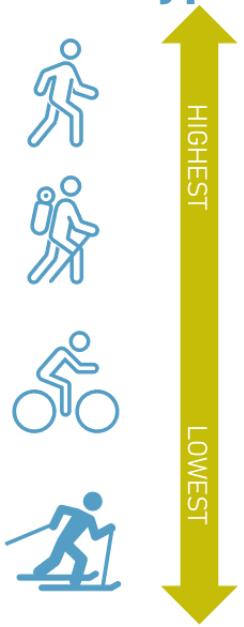
Trip purpose



Preferred Locations

1. Around Campbellford
2. Along rural roads
3. Along signed County cycling routes

User Types



AT Now...

What are the main challenges to walking, cycling, and using trails in Trent Hills

Poor maintenance

Lack of connections

Car focussed

Conflict of users

Lack of education on the part of motorists

Challenging landscape i.e. hills

Lack of amenities

Lack of safety for cyclists

Need for better signage on trails

AT in the future...

What do you like about AT in Trent Hills that you would like to maintain?

Exercise

Nature at the doorstep

Helps building community

Quiet roads

Near water

Flora and fauna

Beautiful scenery

Accessibility to trails

The public information sessions and committee meetings held during the plan's development also proved to be valuable to provide more in-depth insights into active transportation and trails in Trent Hills. Table 5 provides a high-level summary of the core engagement activities that were undertaken over the course of the project process, the input received, and how it was used. It is important to note that this summary does not reflect all the dialogue and virtual engagement that was undertaken over the course of the project. A more detailed summary of consultation input has been provided to the Municipality.

Session	Purpose	Input Received	Application
Committee Meeting #1	+ Provide committee members with an overview of the intent, purpose, and considerations of the ATTP. + Work with the committee – including additional stakeholders from specific community groups/ agencies – to guide the development of the ATTP.	+ Committee members expressed their interest in the ATTP and commitment to their involvement in the process as the plan is developed.	+ Established an understanding of the project purpose and key milestones. + Build initial understanding of stakeholders and relationships.
Committee Workshop #1	+ Learn more about the plan. + Discuss plan considerations. + Share input and ideas. + Confirm the ATTP vision and objectives.	Key topics discussed: + Connecting people + Connecting places + Overcoming barriers	+ Confirmed the vision statement of the ATTP and prioritized plan objectives.
PIC #1	+ To establish an understanding of the current context, conditions, and considerations that will be the basis for the ATTP	Key themes to emerge: + Importance of signage on roads + Multi-modal conflicts + Cycling touring and tourism promotion + Better maintenance practices for trails + Explore sponsorship and partnership opportunities. + Upgrade the Trans Canada Trail + Explore trail connection south of Ferris Park along Trent River	+ Confirmed understanding of project vision, approach, and outcomes. + Gathered input on AT preferences and priorities.

Session	Purpose	Input Received	Application
Committee Workshop #2	+ Learn about what the project team has accomplished since the last committee meeting. + Discuss the ambitious goals, and recommendations and future considerations. + Share input and comments of the draft ATTP recommendations	Key themes to emerge include: + Clarification to ensure that the plan considers potential shifts in Campbellford when the proposed bridge is built. + Clarification regarding considerations to pedestrianize the downtown once the traffic will be diverted from the bridgeworks.	+ Updated and confirmed the vision and objectives. + Establish a series of ambitious goals as the basis of the ATTP. + Identify recommended ATTP projects. + Identify ATTP plan recommendations i.e., policies, program, etc.
PIC #2	+ To establish an understanding of the ATTP vision, objectives, ambitious goals and associated candidate routes, feasibility, prioritization and phasing and strategies and polices.	+ The ambitious goals with the highest support include: (1) safe and comfortable local cycling opportunities, (2) encourage movement for all and (3) leveraging planning growth and development. + A branded municipality-wide signage and wayfinding strategy was highlighted as the top priority, particularly the for the Campbellford trail head. + Use best practices to improve bike accessibility along the paved shoulder of rural roads (i.e. County Road 30). + Follow provincial maintenance standards and enhanced winter maintenance practices, particularly within settlement areas. + Prioritize the design of walkability features when proceeding with infrastructure projects along municipal roads, particularly within the downtowns. + Update the Official Plan and zoning by-law to incorporate ATTP recommendations and policies to support AT and trails. + Use trail classifications for project recommendations. + Prioritize partnership agreements between the municipality and the Eastern Ontario Alliance to ensure TCT management and maintenance is serving local active users. + Where possible, external funding sources should be pursued to supplement municipal funding of ATTP projects.	+ Confirmed the proposed network and design solutions. + Gathered input on recommendation and priorities and confirmed partnerships. + Confirmed commitment to next steps

Table 5 // High level Summary of Input Received from Engagement Activities & Application

2.2 ATTP Vision & Objectives

The ATTP is meant to be the mechanism by which the Municipality's desired future for active transportation and trails is achieved. It is important to articulate what that the future is based on the aspirations of the Municipality and the people that live, work, and play in Trent Hills.

A master plan's goal is articulated through its vision statement. The vision statement should identify the aspirations of a community while also providing guidance through which the plan's aspirations are achieved. A vision statement, when adopted by the municipality, its residents, decision makers, interest groups and stakeholders can be a powerful tool to create buy-in which helps to achieve long-term commitment to implementation.

The vision statement developed for this ATTP was based on public and stakeholder input and further confirmed based on staff review and commentary. The vision demonstrates the municipality's commitment to innovatively re-examine the role and opportunity of active transportation and trails in Trent Hills, including future opportunities for Municipal coordination and collaboration.

This vision statement is supported by a series of eight (8) actionable objectives that clarify how the ATTP vision will be achieved.

The following objectives were defined and refined by the project team, and in consultation with municipal partners and the public. The master plan objectives should be used as indicators of success moving forward.

Vision:

Connectivity for All

The Municipality of Trent Hills prioritizes the health, wellness, and accessibility of people of all ages and abilities by providing safe, comfortable, and equitable transportation options and supportive programming geared towards increased mobility and connectivity no matter the trip type, trip purpose, destination, or individual needs and interests.

01. Connecting… people and places

Safe, comfortable, and seamless connections will be provided to destinations within and between urban and rural areas that address the existing and future needs and desires of community members at all life-stages and foster social interaction.

02. Connecting… with nature

The trail and active transportation network and associated programs will aim to connect people to the natural assets of Trent Hills, including its waterways, forests, protected areas, and other natural features.

03. Connecting… to vibrant downtowns

Active transportation will strengthen the unique identities, cultural and heritage features, and economic activity of the urban centres and associated downtowns of communities in Trent Hills to foster safe, vibrant, walkable, and attractive areas.

04. Connecting… for growth

Active transportation and trails will be integrated into future community infrastructure and services reflecting the future growth areas and opportunities throughout the Municipality, including changes in population size and preferences.

05. Connecting… for sustainability

Actions will be prioritized that minimize the impact of the transportation system on the environment and aim to ensure prosperity and equality for various groups of people today, and with consideration of future generations.

06. Connecting… throughout all seasons

The Municipality will provide opportunities for travel and trail use during all seasons through facilities, design, maintenance, and supportive programs that consider walking, cycling, as well as winter activities such as cross-country skiing and snowshoeing.

07. Connecting… recreation & tourism

Trent Hills will provide visitors and residents with a wide variety of active recreation opportunities that encourage tourism and economic development. This includes providing access to destinations of utilitarian and recreational significance.

08. Connecting… by removing barriers

The plan will develop solutions that aim to remove both physical and non-physical barriers to active transportation through infrastructure and supportive community programming that address the unique experiences of those who live, work, and play within the municipality.

2.3 Plan Commitments & Foundations

The Trent Hills ATTP is a plan that has been developed based on strong planning and policy practice combined with sound engineering and design considerations. It aims to provide options and alternatives for a wide range of users and uses throughout all areas of the municipality, and with consideration of links to surrounding areas. The focus of the ATTP is to provide specific projects and strategies that address the major barriers found within the community.

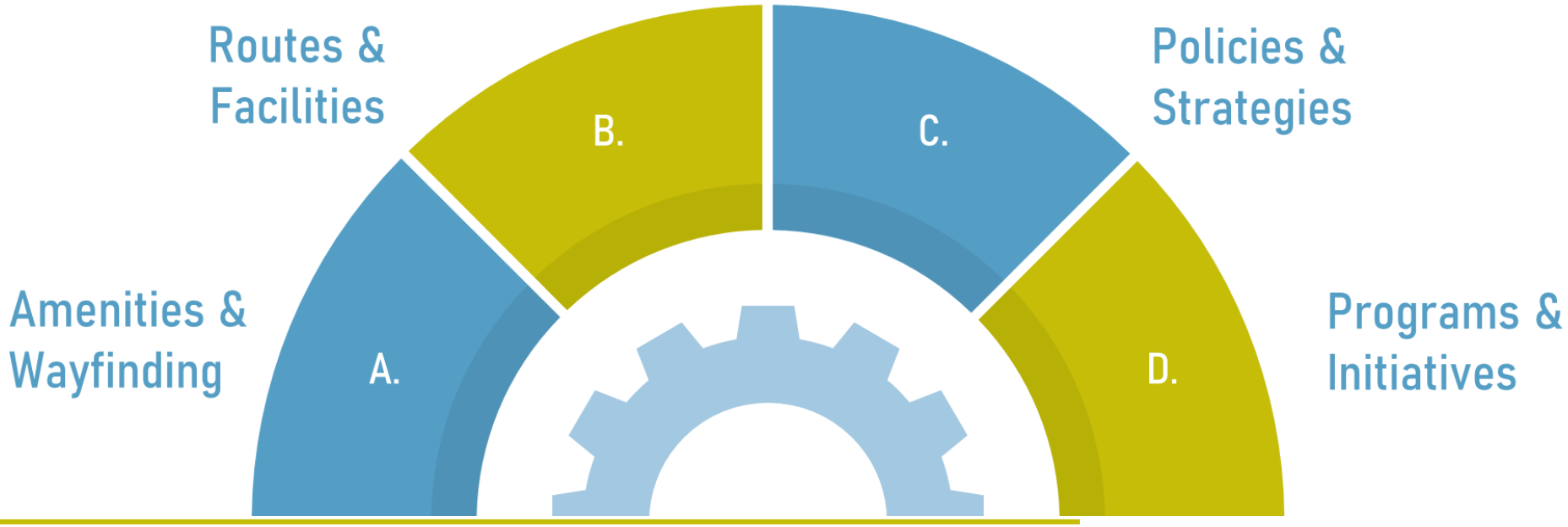
There are two (2) types of barriers – visible and invisible - that are typically found in relation to active transportation. The identification of interventions that address those barriers was one of the major goals of this project and formed the basis for the ATTP recommendations found within the master plan report.

Visible Barriers to Connectivity

The physical gaps and missing links in the system that prevent overall connectivity and access

Invisible Barriers to Connectivity

The non-physical elements that deter people from engaging in trail use or active travel



To effectively address the visible and invisible barriers within Trent Hills, the project team determined that it would be appropriate to approach and organize the plan's recommendations through a series of ambitious goals. This approach helped ensure that the recommendations align with the plan's overarching priorities and commitments, as well as with broader municipal priorities and strategic objectives.

There are a total of ten (10) ambitious goals which have been identified for the Trent Hills ATTP. The ambitious goals were developed based on recommendations from previous municipal plans and policies, and from the outcomes from the initial stakeholder and public consultation.

The ambitious active transportation and trail goals for the Municipality of Trent Hills are as follows.

Ambitious Goal #1. Touring Cycling

Ambitious Goal #1 commits to making Trent Hills a premier destination touring cycling within Ontario.

Ambitious Goal #2. Multi-modal Connections

Ambitious Goal #2 commits to providing connections that make Trent Hills uniquely multi-modal.

Ambitious Goal #3. Walkability

Ambitious Goal #3 commits to making walkability the cornerstone of community connectivity.

Ambitious Goal #4. Major Barriers

Ambitious Goal #4 commits to addressing major barriers within the community to encourage movement for all.

Ambitious Goal #5. Planning & Growth

Ambitious Goal #5 commits to leveraging planning, growth, and development to integrate AT and recreation.

Ambitious Goal #6. Local Cycling

Ambitious Goal #6 commits to providing safe and comfortable local cycling opportunities

Ambitious Goal #7. Recreational Trail Links

Ambitious Goal #7 commits to maximizing opportunities for active and passive recreation on publicly owned lands.

Ambitious Goal #8. Trans Canada Trail

Ambitious Goal #8 commits to creating an active transportation spine via the local section of the Trans Canada Trail.

Ambitious Goal #9. Vulnerable Groups

Ambitious Goal #9 commits protecting and prioritizing the most vulnerable groups including youth and seniors.

Ambitious Goal #10. AT Integration

Ambitious Goal #10 commits to integrating active transportation and recreation into day-to-day decision-making and partnerships.

Section 3.0 of the ATTP provides a detailed overview of the recommended projects and strategies that aim to move Trent Hills towards achieving this plans' ambitious goals over the next 20 – 30 years and beyond.

3. The Plan

The Trent Hills Active Transportation and Trails Master Plan has been developed as a long-range strategic planning document which provides recommendations and direction on both infrastructure as well as planning and policy guidance. Taking into consideration municipal priorities, practices and needs as well as best and comparable practices from other jurisdictions, the project team worked together to identify two (2) types of recommendations which address physical and non-physical barriers in order to achieve the ten (10) long-range ambitious goals of this plan.

A detailed overview of the approach as well as the recommendations that form the basis of the AT and trails plan for Trent Hills are provided in this section. These recommendations are tied to larger municipal priorities which can either be strategically implemented by the Ambitious Goal type, recommendation type or across multiple categories, as appropriate. The goal is to have a set of recommendations that provide flexibility and variation to ensure long-term success for the Municipality.

3.1 Recommendation Development

Before detailing the plan's specific recommendations, it is important to highlight the different types of recommendations and how they were developed. As previously mentioned, there are two (2) types of recommendations that have been identified to support the ten (10) ambitious goals for active transportation and trails in Trent Hills.

10

Ambitious Goals

Project Recommendations

Infrastructure improvements that address physical gaps and missing links in the system to improve overall connectivity and access.

Examples include:

- Proposed routes, facilities, and design solutions
- Proposed amenities and design features

The project recommendations were developed using a four (4) step process:

1. Identify and assess current conditions
2. Identify and assess previously planned routes
3. Identify and assess gaps and missing links
4. Confirm new routes and facilities

Key considerations include:

- Route linkages, including jurisdiction of the roadway
- Land use and land compatibility
- Improvements that may be advisable to meet current standards
- System connectivity and continuity
- Access to key destinations
- High-level feasibility including space, ownership, and condition.
- Leveraging planned capital projects and short-term opportunities

Plan Recommendations

Master planning recommendations that support future actions and activities, primarily related to plan implementation.

Examples include:

- Policy enhancements or programs
- Processes and practices

The plan recommendations were developed using a four (4) step process:

1. Identify previous policies, plans, programs, etc.
2. Engage with existing gaps and opportunities
3. Identify comparable practices
4. Confirm and prioritize based on capacity

Key considerations include:

- Gaps and opportunities from previous plans and policies
- Ensuring policy consistency
- Existing local programs
- Internal capacity and needs to support implementation.
- Current processes, practices, and roles and responsibilities
- Leveraging partnerships and potential coordination opportunities
- Internal and external funding streams and opportunities

When identifying the proposed recommendations, the following commitments were made:

Prioritizing access to and between major and minor destinations and routes

Realistic based on current conditions and future opportunities

Prioritizing the needs of those most vulnerable and addressing barriers

Focusing on opportunities to integrate AT into day-to-day practice

For each ambitious goal, the proposed project and plan recommendations have been presented. A detailed overview of this plan's recommendations and how they were created is provided on the following pages.

For project recommendations

For each project recommendation, key considerations and details are provided about the project's location, design solutions (based on applicable guidelines) and proposed implementation timeline.

Based on each project recommendation's overall complexity, intervention type, municipal priorities and capital projects, and project costing, a phasing implementation strategy has been identified. Three (3) phases of implementation have been identified for ATTP project recommendations:

- Short-term – starting in 2024 for a total of 10 years (to 2034).
- Medium-term – between 11 and 20 years (2035-2044)
- Long-term – 20 years (2044) and beyond

Phasing horizons have been identified for all project recommendations, including those that are under the Municipality's jurisdiction, as well as those in the jurisdiction of Northumberland County and other partner agencies. The phasing information for projects that are not municipally owned is intended to be used as a guide for future discussions and coordination with relevant organizations. Adaptation to such project recommendations can be made, where appropriate, to align with relevant strategic priorities and timelines.

The horizon for implementation has been identified as part of the plan, but the specific year of implementation has not been specified. This has been done intentionally to provide the Municipality with flexibility around the timing of projects, and to ensure that project implementation aligns with larger municipal projects and development objectives, while leveraging internal and external funding opportunities.

For all recommended ATTP projects, estimated costing has been prepared at the master plan level based on the best available information and assumptions at the time of the plan's development. The costing reflects construction costs and aims to provide a preliminary assessment of the anticipated capital costs of projects to facilitate construction. The costing and other specifics for such projects will need to be determined at the time of implementation. Capital costing was prepared for all project recommendations, except for those that were identified more broadly for improvement, or are under the jurisdiction of Northumberland County or another agency.

The route alignment and proposed phasing for the project recommendations is illustrated on Maps 1 through 8.

The following costing assumptions were made:

- Costing was developed using unit prices identified based on best and comparable practice.
- These costs should be the foundation for annual budgetary discussions and decisions made by Municipal staff and be revised as needed.
- The costs are not meant to be prescriptive, but to provide a preliminary estimate of potential capital cost.
- All costing included within the ATTP report is intended to be reviewed and refined at the time the Municipality proceeds with the associated project.

For plan recommendations

For each plan recommendation, key considerations and details are provided in the ATTP for any element required to support next steps. This includes future coordination efforts and partnerships, or any needed change/adaptation in existing municipal processes and practices to accommodate the recommendation's implementation.

Each recommendation has been reviewed and categorized to ensure an appropriate level of support. Categories of Plan recommendations include:

- Guidelines – changes or updates to current design protocols and practices.
- Programming – an encouragement or educational opportunity that helps to influence or adapt behaviours.
- Implementation / Process – changes to process or practice related to the day-to-day coordination on matters related to trails and active transportation.
- Policy – an opportunity to change, amend or create policies that aim to influence or adapt the way in which planning is done to support AT and trails.
- Program – initiatives that aim to influence the behaviours of individuals to generate a greater interest in and use of active transportation and trails.

While each project recommendation has a suggested phase for implementation, plan recommendations are prioritized based on their ease for implementation. There are three (3) potential categories into which each plan recommendation is prioritized, including:

- Immediate – a recommendation can be implemented without or with little additional work, and for which the Municipality currently has sufficient resources.
- Alternate Timing – a recommendation that is dependent on the actions or decisions of an agency or entity other than the Municipality which may impact the timeline.
- Requires Investigation – a recommendation that requires additional work to be completed before the recommendation can be fully implemented.

Unlike the project recommendations, plan recommendations do not have specific costs associated with them. Instead, each recommendation includes an assessment of the resources that will be needed to facilitate implementation, including consideration for the staffing requirements as well as internal and external funding.

For both the project and planning recommendations, a more detailed overview of the implementation tools, tactics and considerations is provided in Section 4.0 of this report and should be used as a resource to inform annual planning and budgeting to achieve the ATTP vision and objectives.

3.2 Ambitious Goal #1 – Touring Cycling

Making Trent Hills a premier destination for touring cycling within Ontario.

Touring Cycling involves long-distance recreational bicycle trips, ranging from single-day trips to extended travels that span multiple days. Routes for touring cycling are tailored towards more experienced and confident cyclists, who are looking for longer-distance and higher-endurance cycling experiences. Such cycling experiences are most often desired along roads that travel through rural and natural areas which provide attractive scenery and link to key destinations with cultural attractions and local services.

While touring cycling routes are generally geared towards road cyclists who prefer paved surfaces for smooth and fast riding, Trent Hills has several gravel roads with very low traffic volumes, which often provide access to key destinations and pass through some particularly scenic areas. Trent Hills has an active gravel riding community and culture, including the annual "Reggie Ramble" in Warkworth and the surrounding area. This is part of a wider trend in which gravel and "adventure" cycling is becoming a more popular activity and area of the cycling market, driven in part by recent advances in bicycle technology.

To leverage these trends and varying user needs, a series of gravel cycling routes were identified to supplement a set of primary cycling routes along paved roads. Despite the increasing popularity of gravel riding, very few municipalities to date have implemented, signed, and promoted gravel-specific cycling routes. This presents an opportunity for Trent Hills to both serve the significant market for touring cycling, while also leading the way to accommodate gravel cycling, joining municipalities such as nearby Hastings County, as well as Oxford County and Stratford who have established specific gravel routes.

This ambitious goal aims to establish Trent Hills as one of the major destinations for touring cycling within all of Ontario by providing unique experiences and opportunities for cycling and encouraging cycling behaviours amongst area residents and potential visitors from far and wide.

Ambitious Goal #1 addresses the following users and uses…

Cyclists

High endurance AT users

3.2.1 Project Recommendations

Project Overview

The touring cycling project recommendations consist of a series of recreational bicycle routes that span the rural areas of the Municipality. Strategic improvements are highlighted to enhance connectivity with the major communities of Campbellford, Hastings and Warkworth.

The recommended projects establish a continuous and connected network made up of loops and excursions of varying lengths and difficulty, ranging from shorter local trips, to longer trips that link to adjacent municipalities. These routes were identified to supplement the existing "Trent River Truckin'" Northumberland County cycling route, while also leveraging planned County routes and future road improvements.

In addition, the rural cycling network includes a series of gravel cycling routes on particularly low traffic volume roads which offer almost trail-like conditions. These routes and could also offer hiking linkages to supplement existing and proposed trails in rural Trent Hills (as per Ambitious Goal #7).

148 kilometres

Recommended rural touring cycling projects

43 kilometres

Recommended gravel route cycling projects

27 kilometres

Recommended intermunicipal touring cycling projects

Project Design

The proposed facility types for the touring and gravel cycling route projects have been identified in accordance with the guidance provided by Ontario Traffic Manual (OTM) – Book 18, the Province of Ontario's primary reference for municipal decision-making relative to on-road cycling facilities.

As part of this process the consultant team applied the OTM Book 18 cycling facility selection tool for rural areas, while considering road characteristics such as traffic volume, posted and operating speeds, road function, and vehicle mix. Design guidance is provided on the following pages.

193 kilometres

Recommended signed bicycle routes

25 kilometres

Recommended new paved shoulders (all County roads, supplementary to existing paved shoulders)

For all routes, consideration should be given to establishing a branded approach to municipal cycling routes – as identified in Plan Recommendation 1b in Section 3.2.2. Signage should be implemented to clarify safe, comfortable, and continuous use of the routes – whether they are municipal, County or otherwise. Signage should be placed strategically and in keeping with standards. Care should be taken to ensure that road signage does not create confusion for users (either through excessive, limited or poorly placed signage).

Signed Bicycle Route

Description

Description	Signed bicycle routes are roads where cyclists operate in mixed traffic operation with travel lanes shared between motorists and cyclists. These are commonly implemented along lower volume rural roads, where cyclists that use these routes tend to be travelling longer distances and have a higher level of skill and experience.
Speed	Low – Moderate (60 km/h or less) in rural conditions
Volume	Low (Less than 3,000 vehicles per day)
Other Considerations	+ No provisions are needed other than bicycle route signage. + When part of a promoted and recognized route, routes should be signed with a Bicycle Route sign; this sign can either be the provincial standard sign (M511 OTM) or locally developed signage (to be considered as part of Planning Recommendation 1b, detailed below). + Bicycle route signs should be placed 20 to 30 m in advance of and following intersections and decision points. A minimum frequency of one sign every 2 km on rural roadways is recommended. + Avoid wide shared lane configurations that allow motorists and cyclists to travel alongside one another, as these may degrade the quality of the cycling environment by encouraging faster motor vehicle speeds and truck traffic. The preferred configuration is to encourage cyclists to ride in the centre of the lane to minimize unsafe passing by motorists. + Under the Ontario Highway Traffic Act motorists must provide, as nearly as may be practical, at least 1.0 m of space when passing a cyclist.

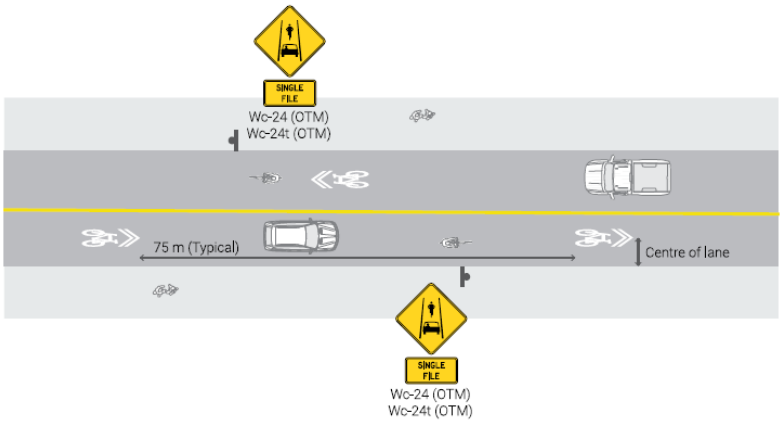


Figure 4 // Mixed Traffic Operation with Cyclists Positioned in Centre of Lane (OTM Book 18, 2021)

Optional signage and pavement markings:

+ Bicycle Route Marker sign (M511 OTM) or similar
+ Share the Road / Shared Use Lane signs (Wc-19 and Wc-24 OTM)
+ Motor Vehicle Passing Prohibited sign (Rb-66 and Rb-66t OTM)
+ Shared Use Lane Symbols (Sharrows)

Paved Shoulder

Description

Description	A paved portion of the roadway outside of the area travelled by motor vehicles that can accommodate people riding bicycles, as well as pedestrians and stopped and emergency vehicles.
Speed	Moderate – High (50-80 km/h)
Volume	Moderate (2,000 – 5,000 vehicles per day)
Width	1.2 – 2.0 m operating space
Other Considerations	+ To be considered "bicycle accessible," paved shoulders should provide sufficient operating space, be delineated by pavement markings, and have a smooth surface clear of snow or debris. + Shoulders may be supplemented by a marked buffer between 0.5 – 1.0 m in width. Buffered paved shoulders are recommended along roads with higher speeds, volumes, and/or significant transport truck traffic. + Signage should be provided along paved shoulders when part of a promoted route, with the same specifications regarding signed bicycle routes on shared roadways.

Optional signage and pavement markings:

+ Bicycle Route Marker sign (M511 OTM) or local signage
+ Solid white edge line
+ Painted buffer strip (optional)

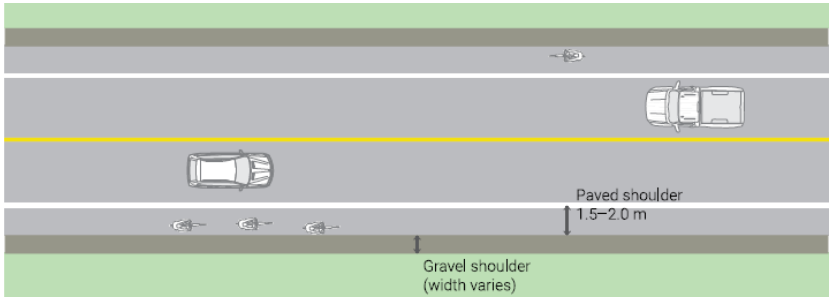


Figure 5 // Roadway with Paved Shoulders (OTM Book 18, 2021)

Project Phasing & Costing

The project phasing for the touring cycling routes – especially those that require the implementation of paved shoulders – will require ongoing coordination and integration with planned municipal capital projects as well as Northumberland County capital planning. Signed routes are lower complexity projects that should only require the purchase and installation of signage along the designated roadways.

When determining the feasibility of the proposed projects, consideration was given to the existing platform and shoulder width of each roadway to determine if there was capacity to implement design solutions without considerable cost implications. Where possible, routes have been identified where minimal changes to the existing roadway need to be made and where the intervention is considered relatively easy to implement.

A summary of the phasing and costing for the recommended projects is provided in Table 6 along with the phasing for County projects.

Horizon	Trent Hills		County	Total
	Kms	Cost	Kms	Kms
Short term	55.9	$55,900	13.3	69.2
Medium Term	88.3	$88,300	34.35	122.7
Long Term	12.9	$16,400	13.8	26.7
Total	151.7	$160,600	61.45	218.6

Table 6 // Summary of Ambitious Goal #1 Project Lengths, Phasing & Costing

Project Considerations

This section outlines the project considerations specific to the touring and gravel cycling routes. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #1.

Consideration	Application
Future Considerations	+ Generally, all projects listed under Ambitious Goal #1 are considered pre-approved under new MCEA requirements, although there may need to be a formal Environmental Assessment completed if the AT project is combined with more extensive road improvements. + Most routes identified along Northumberland County roads where new paved shoulders are recommended will require collaboration with the County on implementation. + While most routes under Municipal jurisdiction have been identified for only signage improvements, traffic volumes and speeds should be monitored, and some routes may warrant paved shoulders if conditions change over time. + Coordinate signage installation and other improvements with Municipal and County Road resurfacing and reconstruction projects.
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Develop a signage and wayfinding strategy (as per Planning Recommendation 1b) and finalize signage to be used for touring routes. + Refine design and costing, and conduct stakeholder and public consultation as appropriate – consistent with Environmental Assessment requirements (if needed) or to solicit public feedback. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Undertake a survey or other consultation with residents and tourists to understand the evolving demand for gravel touring routes within the municipality, and their continued use / enhancement following their implementation. + Refine costing and ensure costs are included in municipal budgets and capital plans. + Advocate for inclusion of routes identified along Northumberland County roads in future County plans and projects.

Table 7 // Ambitious Goal #1 Future Considerations

3.2.2 Plan Recommendations

Ambitious Goal #1 seeks to create a rural environment that is safe, comfortable, easy to navigate, and appealing to a diverse range of cyclists and recreational cycling trip purposes. Beyond the proposed projects, which establish a continuous and connected system of rural cycling routes, the plan recommendations establish a means of providing supportive programming for cyclists living in or visiting Trent Hills. Supportive programming is intended to encourage participation and awareness of the municipality's active transportation and trail networks. The design and coordination of signage and wayfinding tools also helps to create an easy to navigate environment that highlights access to major destinations and linkages throughout Tent Hills and surrounding areas.

	Recommendation	Type	Timeline	Lead	*Partner*	*Resource*
1a	Touring cycling routes are to be marked following Provincial cycling guidelines, with the necessary regulatory and directional signage at decision points at least every 2 km, using cycling route signage concepts included in the ATTP and refined through a municipal signage and wayfinding strategy.	Guideline Implementation	Immediate	Internal Coordination	None	Moderate
1b	A branded municipality-wide signage and wayfinding strategy is to be developed providing information at key decision points regarding municipal routing and connectivity opportunities.	Program	Alternative Timing	External	Northumberland County Conservation Authorities	High
1c	Local municipal routes will be coordinated with Northumberland County, leveraging the additional connectivity of County roads where applicable, and integrated with the County's Trent River Truckin' bicycle route.	Implementation	Immediate	External	Northumberland County Surrounding Municipalities	Low
1d	The Municipality will support a Bicycle Friendly Business program, in partnership with interested local businesses and *Ontario By Bike*.	Program	Alternate Timing	External	Ontario by Bike	Low

Table 8 // Summary of Ambitious Goal #1 Plan Recommendations

3.3 Ambitious Goal #2 – Multi-modal Connections

Providing connections that make Trent Hills uniquely multi-modal.

Making Trent Hills uniquely multi-modal is a broad but vital goal which strives to ensure that people who live, work, and play within Trent Hills have options to get where they want to go, no matter how they choose to travel. While the focus of the ATTP is non-motorized modes of travel, it needs to be recognized that many AT facilities are along roads or shared trails where people on foot and bike must, at times, interact with large, heavy, fast moving motorized vehicles, including cars and trucks along roadways, or ATVs and snowmobiles along some trails. In the context of Trent Hills, multi-modal travel is unique in that it can seasonally include significant boating trips via the Trent Severn waterway.

The lines between motorized and non-motorized modes are also increasingly being blurred, as technology such as e-bikes, e-scooters, or various other forms of micromobility increase in variety and popularity.

The key to a successful AT network is the safe and seamless integration of modes. In the context of the overall municipal transportation network, this can involve recognizing and balancing various trade-offs and priorities between different modes, including through planning and design and facilities, as well as associated policies and regulations.

Given the importance of addressing climate change, protecting the environment, and addressing broader municipal goals, it is important for the ATTP to also consider other sustainable transportation modes and explore how the municipality can support the increased adoption.

This ambitious goal aims to leverage the uniqueness of Trent Hills to provide transportation and mobility alternatives that respond to the modal experiences of those who live, work, and play there.

Ambitious Goal #2 addresses the following users and uses…

Cyclists

Pedestrians

High endurance AT users

3.3.1 Project Recommendations

Project Overview

The project recommendations related to Ambitious Goal #2 are focused on creating a greater degree of access to the Trent Hills waterway system through establishing new active transportation routes to improve connectivity.

The focus on waterways is a strategic choice given the significant demand for waterway access and recreation in the area. The proposed projects aim to strategically enhance connectivity and access to some of the municipal waterway access points, including marinas, boat launches, docking areas, and the Trent-Severn locks (which are usually accompanied by moorings and other waterway amenities).

The scope and scale of the multi-modal projects is highly focused as it is expected to build upon the linkages that were identified for the rural/touring cycling network (Ambitious Goal #1) within the rural area and leverage unique multi-modal transportation opportunities by connecting AT uses (i.e. cycling or walking) to the municipality's waterway system (i.e. by boat).

In urban areas, waterway connections build upon the urban cycling and walking networks (Ambitious Goals #3 & #6). As the Municipality develops a signage and wayfinding strategy (Ambitious Goal #1, Recommendation 1a & 1b), these waterway connections should be part of the future considerations for developing a branded wayfinding and signage application.

10.75 kilometres

Recommended waterway access routes

Project Design

Generally, waterway connections are recommended along roadways where the end point does not connect to another roadway. Therefore, these linkages are typically identified along roadways that have lower volumes and lower speeds. As per the facility selection guidance in OTM Book 18, a roadway with these conditions is appropriate for shared or mixed use among motorized and non-motorized users. As such, they should only need signage to establish them as routes, including bike route and other regulatory and directional signage depending on specific conditions (see details in 3.2.1)

At waterway access locations, it may be preferable for the user to stop and experience nature or the surroundings at the trip end point. In these cases, there may be opportunities for the Municipality to consider the implementation of trailheads or staging areas, including rest areas, bike parking, and other AT-supportive amenities. Specific locations and design solutions for waterway access staging areas have not been identified in this section; however, the Municipality is encouraged to use the staging area design tool identified in section 4.1.5 of the ATTP to guide future decision-making regarding design and implementation of amenities at these waterway access locations.

Project Phasing & Costing

Phasing for the project recommendations identified for Ambitious Goal #2 requires ongoing coordination and integration with planned municipal capital projects. As with the touring cycling routes, these signed routes are considered projects with relatively low complexity, which would (typically) only require the purchase and installation of signage along the designated roadways.

Where possible, routes have been identified where minimal changes to the existing roadway need to be made and where the intervention is considered relatively easy to implement.

A summary of the phasing and costing for the recommended projects is provided in Table 9.

	Municipality of Trent Hills	
Horizon	Kms	Cost
Short term	5.05	$6,800
Medium Term	5.7	$5,700
Long Term	0	$0
Total	10.75	$12,500

Table 9 // Summary of Ambitious Goal #2 Project Phasing & Costing

Project Considerations

Project considerations specific to the waterway access routes are as follows. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #2.

Consideration	Application
Future Considerations	+ Ensure that the projects are coordinated with each other, and with Ambitious Goal #1 routes to ensure that the linkages connect to other AT routes and do not result in a disconnected network. + Coordinate signage installation and other improvements with Municipal Road resurfacing and reconstruction projects. + Ensure that water access points and associated routes are promoted as part of broader tourism and recreation initiatives. + Consider exploring additional routes to provide off-road trail links, or experiences that include a mix of land and water routes in the long-term. + Review and determine whether the routes overlap with other County routes and ensure that there isn't overuse of signs and clarity around wayfinding is maintained.
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon. + Develop a signage and wayfinding strategy (as per Planning Recommendation 1b) and finalize signage to be used for waterway access routes. + Refine the project design and costing, and conduct stakeholder and public consultation as appropriate. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in future municipal budgets and capital plans.

Table 10 // Ambitious Goal #2 Implementation Considerations

3.3.2 Plan Recommendations

Ambitious Goal #2 seeks to ensure that people have access to local destinations regardless of their income, access to a car, or how they choose to travel. The following plan recommendations seek to ensure the Municipality reviews and keeps track of emerging micromobility technologies and solutions while also taking steps to ensure that AT supportive policy is embedded into Municipal planning and maintenance / management efforts.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
2a	Policies and by-laws will be reviewed and amended as needed to clarify the role of micromobility and electric-assisted vehicles such as e-bikes and e-scooters along its streets and trails, building on Provincial laws and guidance within the ATTP.	Policy Process	Requires Investigation	Internal Coordination	Trail organizations & interest groups	Low
2b	Land acquisition, encroachment, and/or easement requirements to establish new trail or active transportation improvements are to be reviewed as projects proceed to implementation with the preferred approach determined based on available funds and ATTP resources.	Implementation Process	Alternative Timing	External	Affected agencies and private landowners as appropriate	Moderate - High
2c	Consideration should be given to the strategic expansion of alternate mode options, including but not limited to localized transit, carpool lots, charging stations, etc. which could be integrated into the development of a Transportation Master Plan or related strategic study.	Policy	Requires Investigation	External	Internal staff, council, Northumberland County	High
2d	The Minimum Maintenance Standards are to be used as the primary reference when determining the appropriate maintenance of on-road active transportation infrastructure, and standards will be reviewed and updated (if needed) as new infrastructure is implemented.	Guidelines Implementation	Requires Investigation	Internal single lead	N/A	Low
2e	For off-road / trail infrastructure, exploration of enhanced maintenance practices, based on the guidance found within the ATTP, are to be reviewed and undertaken where appropriate.	Guidelines Implementation	Requires Investigation	Internal Coordination	Dependent on trail ownership – may involve Eastern Ontario Trails Alliance	Moderate - High
2f	A program is to be explored to provide bicycle sharing/rental services, starting in Campbellford, and the feasibility of the future expansion to Hastings and Warkworth is to be explored by Municipal staff.	Program	Requires Investigation	Internal Coordination	May require vendor / service provider	Moderate - High

Table 11 // Summary of Ambitious Goal #2 Plan Recommendations

3.4 Ambitious Goal #3 – Walkability

Making walkability the cornerstone of community connectivity.

Prioritizing walkability means recognizing the essential role that walking plays in our overall mobility. Everyone is a pedestrian at some point in their journey, whether they are walking for the entirety of their trip, or just walking from where they parked their bicycle or car.

Walking is also the most inclusive form of travel, as it doesn't require buying a vehicle, or having any special skills or experience to participate. Highly walkable places are also accessible to people of all ages and abilities, including people who use wheelchairs or other mobility devices.

To become more culturally and economically vibrant, communities in Trent Hills need to be much more than places people drive through, but instead destinations where people want to get out of their cars, explore main streets, and local natural and cultural attractions up close and in person.

Walkable streets that are safe and comfortable for people of all ages and abilities to walk are stronger communities where people want to shop, gather, and socialize. This Ambitious Goal has perhaps the greatest value to broader Municipal goals that go well beyond the mobility and transportation role of walking, and can help Trent Hills work towards a more sustainable, healthy, and socially supported future for its local communities.

This ambitious goal aims to find opportunities where recreation and utilitarian mobility can be accessed by all through the most basic and equitable form of transportation – walking. It focuses on enhancing community experience through providing greater connectivity and accessibility, along with supportive amenities and design elements. It is not intended to be merely a prescriptive set of sidewalk replacement recommendations as found in other plans, but a series of tools to inform decision-making and make meaningful community design impacts.

Ambitious Goal #3 addresses the following users and uses...

Pedestrians

3.4.1 Project Recommendations

Project Overview

To ensure Trent Hills considers walkability as the cornerstone of community connectivity and ensure people on foot are prioritized – particularly in urbanized communities – two types of project recommendations were developed: sidewalk improvement locations and improved walkability corridors.

To identify sidewalk improvement locations, streets were identified where sidewalks are missing on either one or both sides of the street, as well as areas where existing sidewalks do not meet standards and require improvements. These locations were then refined based on key destinations and connectivity, and street classification and purpose, with specific sidewalk gaps documented and added to the network database as appropriate.

Improved walkability corridors were also identified along streets that provide significant access within communities, and which would most benefit from additional enhancements that make walking more comfortable and inviting, such as rest areas, street furniture, curb cuts / extensions, plantings, or other amenities. These types of improvements not only encourage people to walk, but also help make places more inviting to people, such as potential customers and tourists, and can support the vibrancy of local businesses.

7.7 kilometres

Recommended walkability improvements

14.4 kilometres

Opportunities for new sidewalks / improvements

Project Design

Creating safe, accessible, and welcoming places that invite people to walk starts – but does not end – with the provision of sidewalks that are fully separated from motor vehicles. Not all sidewalks are created equal – sidewalks that are too narrow, in disrepair, or too close to busy roadways are not ideal for attracting more people to walk and are especially difficult to navigate for people with disabilities. In Ontario, the Accessibility for Ontarians with Disabilities Act (AODA) sets out requirements to ensure that pedestrian paths and other provided amenities recognize the needs of people of all ages and abilities, while other standards and guidelines provide more details in this regard.

In addition to sidewalks, creating places that are enjoyable for walking involves considering the entire pedestrian environment. Along a given road or corridor, this approach involves considering three distinct areas, or “zones” within the area/boulevard beside the travelled portion of a road. These include:

Pedestrian Through zones include the primary sidewalk or pathway that runs parallel to the street and is intended to be clear and navigable for pedestrian travel.

Frontage zones are located adjacent to property lines and are offset from adjacent lands, including a “clearance from building fronts, doors, utilities and architectural features” (TAC, 2017). The width of the frontage zone can vary highly and is influenced by the local conditions.

Furnishing zones are located between the roadside curb and the sidewalk (or pedestrian through zone) and provides a buffer between motor vehicle traffic and pedestrians, as well as space for elements such as lights, utility poles, landscaping, and street furniture. As with frontage zones, the width of the furnishing zone can vary, but in the areas recommended as Improved Walkability Corridors in the ATTP, approximately 3 m is a reasonable width to allow for a wide range of pedestrian amenities and furnishings. In locations where street parking is present, the furnishing zone can be extended for brief distances by extending the curb where parking is not permitted to define parking areas.

In addition to these aspects of the pedestrian environment, it is also important to consider intersections and other locations where pedestrians may wish to cross the road and there may be interactions with motor vehicles. While these locations are also important, they are addressed in the ATTP through Ambitious Goal #4 (Section 3.5).

Figure 6 // The coloured areas demonstrate (from left to right) the Frontage Zone, Pedestrian Through Zone, and Furnishing Zone (NACTO Urban Street Design Guide, 2013)

Sidewalk Improvements

	Description
Description	Roadway locations with current sidewalk gaps that should be addressed through the provision of a concrete path on one or both sides of the road.
Width	1.8 – 3.0 m recommended, no less than 1.5 m at any point.
Considerations	+ New sidewalks should be built in accordance with relevant standards, e.g., Accessibilities for Ontarians with Disabilities (AODA) Design of Public Spaces Standard, Transportation Association of Canada (TAC). + Sidewalks should have firm, stable, and slip resistant surfaces. + Ensure sufficient horizontal and vertical operating space, considering both able-bodied pedestrians of varying ages, as well as people with various disabilities. + Sidewalks should consist of a pedestrian through zone, or clear width, of no less than 1.5 m, with no obstructions at any point. Sidewalks should be wider where feasible, especially where higher numbers of pedestrians are anticipated. + The Municipality should aim to provide sidewalks on both sides of all roads in urbanized areas, with higher volume roads prioritized.

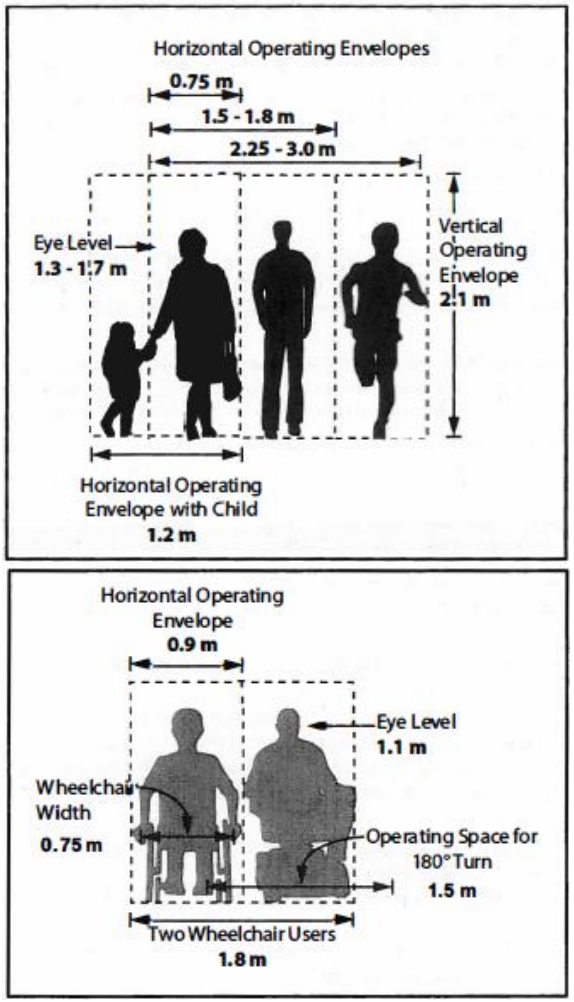


Figure 7 // Operating envelopes for pedestrians of various ages and abilities (TAC Geometric Design Guide, 2017)

Walkability Corrdiors

Walkability corridors are major streets that have been earmarket to include enhanced design treatments to better accommodate the safe and comfortable movement of pedestrians. These corridors typically prioritize the pedestrian and accessibility and could include a range of different features – depending on the space that is available and the length of the corridor. Examples of the types of treatments that could be considered as part of a walkability corridor project include the following. Specific design guidance can be acquired from best and comparble practices and should consider the unique context and conditions along each individual corridor.

Amenities	Examples
Street furniture	+ Benches + Waste bins + Bike racks + Planters + Signage & wayfinding + Public art
Landscaping	+ Trees + Grass + Other plantings
Traffic calming	+ Speed humps / cushions / tables + Raised crossings / intersections + Narrower traffic lanes + Curb extensions + Traffic islands
Accessibility features	+ Tactile surfaces + Audible pedestrian signals + Curb cuts/ramps + Signal timing adjustments

Project Phasing & Costing

Sidewalks and walkability improvements will require ongoing coordination and integration with planned municipal capital projects as well as Northumberland County capital planning – depending on the corridors along which they are being recommended. Sidewalk improvements are likely to be implemented primarily as part of broader road improvements or other capital projects. Some walkability improvement corridors provide options for implementation. For projects where small-scale improvements have been identified, short-term projects have been selected with opportunities for internal and external stand-alone project funding. However, more extensive changes are possible when coordinated with major road reconstruction projects.

When determining the feasibility of project recommendations, consideration was given to the existing conditions to determine if there was space available in the road right-of-way for new sidewalks or other pedestrian infrastructure or amenities. Where possible, routes have been identified where minimal changes to the existing roadway need to be made.

Due to the complexity and cost of adding sidewalks along existing roadways, sidewalk improvements were not phased and costed as there was not sufficient scope in the ATTP to confirm condition and priority. Implementation horizons and cost estimates were only provided for Walkability Improvement Corridors.

The costing estimates for Walkability Improvement Corridors include two scenarios, each defined by amenities and features for each linear kilometer of roadway:

Walkability Improvements

- Curb extensions
- 2 benches
- 4 street trees
- 4 waste bins
- 4 bike racks
- 2 street banners

Traffic Calming

- Curb extensions or edge lines (to narrow roadway).
- 4-6 speed humps
- 4 signs

A summary of the phasing and costing for the recommended projects is provided in Table 11 along with the phasing for County projects.

	Trent Hills		County	Total
Horizon	Kms	Cost	Kms	Kms
Short term	3.45	$721,800	0	3.45
Medium Term	0.55	$118,800	0	0.55
Long Term	0	$0	3.7	3.7
Total	4	$840,600	3.7	7.7

Table 12 // Summary of Ambitious Goal #3 Phasing & Costing

Project Considerations

There are distinct considerations for the implementation of sidewalk improvement projects and walkability corridor improvement projects. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #3.

Consideration	Application
Future Considerations	+ Given the comprehensive and multi-modal nature of the Walkability Corridor Improvements, these projects may benefit from more comprehensive studies and consultation before proceeding toward detailed design and implementation, and possibly a formal Environmental Assessment, especially if more extensive road improvements are planned or desired by the Municipality along the corridor or in the area. + Projects identified along Northumberland County roads will require collaboration with the County on implementation including timing, funding, and other project requirements. + Coordinate improvements with Municipal and County Road resurfacing and reconstruction projects where possible + The walkability audit tool (Planning Recommendation 3a) should be used to inform walkability improvement projects identifying the need and justification for improvement types based on the unique conditions and context of the corridor
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon. + Refine the project design and costing, and conduct stakeholder and public consultation, as appropriate. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in future municipal budgets and capital plans.

Table 13 // Summary of Ambitious Goal #3 Project Recommendation Considerations

3.4.2 Plan Recommendations

Ambitious Goal #3 seeks to recognize the essential role that walking plays in our overall mobility by establishing walkability as the cornerstone of connectivity in Trent Hills. The following plan recommendations seek to ensure the Municipality regularly tracks conditions for walking and pedestrian safety, proactively works to address barriers to walking and pedestrian conditions, strengthens its planning framework to ensure that built-form in future developments is supportive of walkability, and ensures that future projects appropriately recognize the importance of pedestrian-friendly design and features.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
3a	The walkability audit tool identified within the ATTP is to be reviewed, confirmed, and used in targeted areas within the built-up areas of the municipality to regularly identify and update walkability needs.	Implementation Process	Immediate	Internal Coordination	N/A	Low
3b	Updates to municipal software and online reporting tools are to incorporate consideration for and documentation of sidewalk issues or other physical barriers to walking.	Program Process	Alternate Timing	Internal Coordination	N/A	Moderate
3c	To accommodate future growth potential, municipal Zoning by-laws are to be adapted to promote more mixed-use development and/or permit small convenience retail in residential neighbourhoods to achieve walkable distances between residences and essential amenities	Guidelines Policy	Alternate Timing	Internal – led by Planning	Requires buy-in from council, public, other stakeholders	Low
3d	When proceeding with detailed design projects for municipal corridors, prioritization should be given to walkability and the design of pedestrian features based on community input.	Implementation Process	Immediate	Internal – led by Public Works	N/A	Low

Table 14 // Summary of Ambitious Goal #3 Plan Considerations

3.5 Ambitious Goal #4 – Major Barriers

Addressing major barriers within the community to encourage movement for all

Barriers that people face when engaging in active transportation can be physical – such as major waterways or roadways – or non-physical, such as practical considerations, social conventions, or lack of skills or comfort that prevent people from engaging in active trips.

In Trent Hills, the Trent-Severn Waterway is of course an important route for travel and recreation that offers many benefits, but getting across it can be a challenge. There are key existing river crossings in Campbellford and Hastings currently, but outside of these locations, waterway crossings in Trent Hills are few and far between.

Busy roads and major or even minor intersections can also present barriers to people on foot, bike, and other active modes. At these locations consideration must be given to how different users can safely and comfortably interact and share space, and that trails and AT routes and facilities are not interrupted.

There are many non-physical, unseen barriers that may not first come to mind when considering removing barriers to AT, but these are often the most important factors that prevent increased trail use or active trips in a community. These include policies and regulations related to land uses or road design that prioritize automotive travel, or a general lack of support and prioritization for active transportation through planning processes and practices.

The intent of Ambitious Goal #4 is to think beyond the routes and facilities and consider the wholistic experience of the AT user. More specifically, the intent is to provide direction on how AT and trail facilities traverse other physical features and the non-physical conditions and surroundings of the system.

Ambitious Goal #4 addresses the following users and uses…

Cyclists

Pedestrians

High endurance AT users

3.5.1 Project Recommendations

Project Overview

There are three types of project recommendations identified to address Ambitious Goal #4 including:

Intersection Improvements

Improvements at major intersections, usually with existing signalized or stop controls, where there are proposed active transportation linkages or facilities.

Waterway Crossing Improvements

Waterway crossings are a key connectivity challenge for AT in Trent Hills. Specific treatments across these areas include a mix of short-term minor improvements to existing facilities, as well as medium to long-range capital projects that should be explored to facilitate connectivity in the future.

Trail Crossing Improvements

Specific start and end points of trail connections, or those that require the crossing of a roadway and warrant enhanced treatments to support safe crossing from one side to another.

Note that the Trail Crossing Improvements in this section only relate to existing and proposed local trails. Proposed projects associated with the Trans Canada Trail are addressed as part of the project recommendations under Ambitious Goal #8.

Project Design

Waterway Crossing Improvements are highly context sensitive, and mostly include either short-term signage or traffic calming enhancements at existing bridges or other links. A few more extensive long-term capital projects are recognized, including the already underway second road crossing in Campbellford which should include AT facilities, and the need for a new or improved crossing in Hastings. Any new bridge project should consider relevant standards (e.g., CSA S6:19 Canadian Highway Bridge Design Code).

Intersection and Trail Crossing improvements - At intersections or where trails meet the roadway and require a crossing, treatments or enhancements have been identified to facilitate the safe and comfortable movement of AT users. Facilities should be designed in accordance with relevant standards, e.g., OTM Book 5 (Stop or Yield Controlled Intersections), Book 12 (Traffic Signals), and Book 15 (Pedestrian Crossing Treatments).

At existing controlled intersections, suggested improvements include enhancing crosswalk markings with “ladder” type or other more visible crosswalk treatments, and/or rebuilding portions of curbs to provide curb extensions or tighter curb radii to shorten crossing distances. These options are detailed on the following pages.

At intersections identified in the ATTP where there is no current traffic control or pedestrian crossing, a traffic study should be done to determine the appropriate controlled crossing, based on the guidance in the Ontario Traffic Manual (OTM). The selection process should involve the following steps:

- Determine whether a traffic signal is warranted based on OTM Book 12
- If a traffic signal is not warranted, determine if a pedestrian crossing (PXO) is warranted, and if so which type, based on the assessment criteria in OTM Book 15. This assessment considers traffic and pedestrian volumes, as well as the "requirement of system connectivity" or "pedestrian desire lines" at the location.
- In locations where a controlled crossing such as signalization or PXO is not feasible or advisable, follow OTM Book 15 design guidance for uncontrolled pedestrian crossings. Additional guidance for uncontrolled crossings where high numbers of cyclists is expected can also be found in OTM Book 18. Depending on the context, a supervised school crossing location may also be considered.

Design guidance details and considerations for pedestrian crossovers (PXO) and intersection improvements that prioritize active transportation can be found on the following pages.

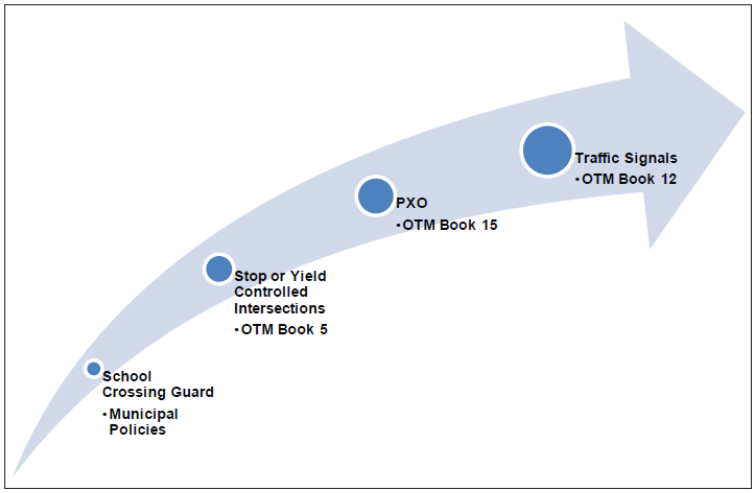


Figure 8 // Hierarchy of Controlled Crossing Systems and Current Policies and Guidelines (OTM Book 15, 2016)

Pedestrian Crossovers

	Description
Description	A pedestrian crossover (or PXO) provides pedestrians with a controlled crossing opportunity, requiring motorists to yield to pedestrians within the marked crosswalk. There are four types of PXO – A, B, C & D – each meant for specific road contexts.
Roadway Speed	Low to moderate (60 km/h or less)
Volume	Varies
Width	2.5 – 4.0 m
Design features	+ All PXO types: include regulatory and warning signs and crosswalk pavement markings. + Type A: Uses flashing amber beacons and internally illuminated overhead warning signs. + Type B: Uses rapid rectangular flashing beacons (RRFB), and both-side mounted and overhead regulatory signs. + Type C: Uses RFFB and only side mounted regulatory signs. + Type D: Uses only sign mounted regulatory signs (no RFFB).

Regulatory signage varies depending on PXO type, and may include:

+ "Pedestrian X" (Ra-4) and "Stop For Pedestrians" (Ta-4t) signs
+ "No Passing Here to Crossing" (Ra-10) signs
+ "Advanced Pedestrian Crossover Ahead" (Wb-X) signs upstream of crosswalk

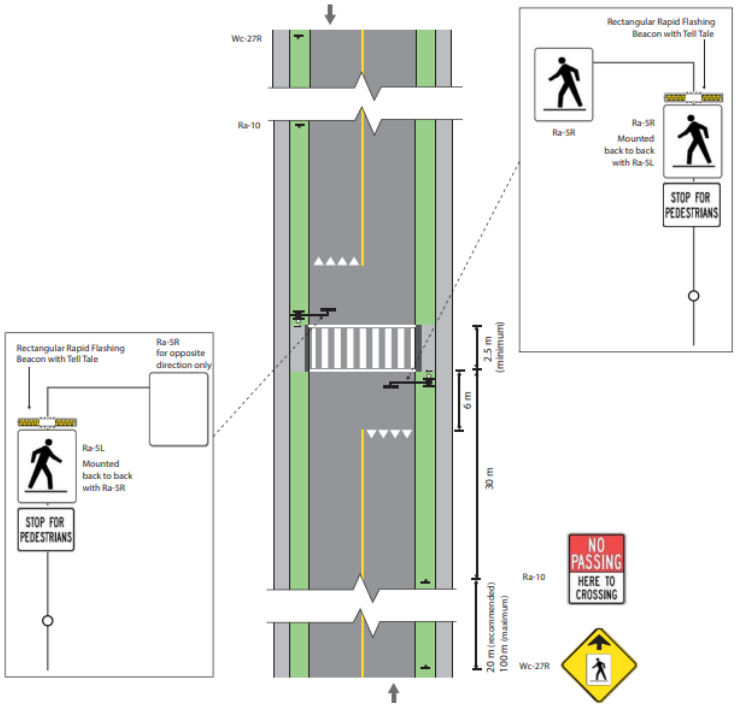


Figure 9 // Drawing showing Pedestrian Crossover Level 2, Type B, one of four types detailed in OTM Book 15 (2016). Other designs vary in terms of signage details and presence of flashing lights.

Intersection Improvements

Amenities	Examples
General improvements	+ Improved crosswalk markings + Curb extensions + Tighter curb radii + Signage
Accessibility features	+ Tactile surfaces + Audible pedestrian signals + Curb cuts/ramps + Signal timing adjustments
Trail crossing amenities	+ Trailheads + Interpretive or directional signage + Rest area / benches + Bike parking

Project Phasing & Costing

Phasing for the project recommendations identified for Ambitious Goal #4 requires ongoing coordination and integration with planned municipal capital projects. While some of the recommended improvements are relatively minor and could be implemented as stand-alone projects, others that are more extensive will benefit most from broader capital project coordination.

It should be noted that most project costs for Ambitious Goal #4 are related to one proposed project – a new or improved all-season multi-purpose bridge across the Trent River in Hastings. Currently, Hastings has a road connection along Bridge Street with narrow sidewalks, and a swing bridge that aligns with the Trans Canada Trail, but which is only traversable in winter and is primarily used by snowmobilers. An improvement or replacement of this swing bridge would be a major capital project that would likely require a funding partnership or significant long-term planning by the Municipality. As such, this project has been phased for long-term implementation, and the timing, costing, and feasibility of this project is highly variable.

Intersection improvements are highly variable depending on context; although some are as simple as adding improved crosswalk markings or other minor enhancements, others require establishing new controlled pedestrian crossovers or moving curb locations. Many intersection improvements are in locations under the jurisdiction of Northumberland County, so the Municipality of Trent Hills will need to advocate and partner with the County to see that these improvements are implemented.

Many of the trail crossing improvements identified in the plan are of fairly low complexity, often involving simply providing enhanced signage or pavement markings. Some trail crossing improvements are meant to be implemented in coordination future trail projects that are detailed as part of Ambitious Goal #7 – as much as possible, the phasing for these projects should be aligned.

A summary of the phasing and costing for the recommended projects is provided below.

	Trent Hills		County	Total
Horizon	#	Cost	#	#
Short term	9	$685,000	0	9
Medium Term	1	$1,000	8	9
Long Term	4	$3,503,000	2	6
Total	14	$4,189,000	10	24

Table 15 // Summary of Ambitious Goal #4 Phasing & Costing

Project Considerations

The following are project considerations specific to the recommended crossing improvements. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #4.

Consideration	Application
Future Considerations	+ Major projects, such as new bridge connections, will likely need to be studied further, including the completion of one or more formal Environmental Assessments before proceeding to detailed design and construction. + Projects identified at intersections and crossings under the jurisdiction of Northumberland County will require collaboration with the County on implementation. + For projects at roadway crossing locations, traffic studies should be conducted by Municipal staff to ensure that the suggested projects meet required warrants, and whether additional traffic improvements may be advisable at the given location. In some cases, this may result in a different solution for the project location, such another form of traffic control. + As much as possible, projects should be coordinated with Municipal and County Road resurfacing and reconstruction projects. + Adjacent municipalities may need to be consulted for some projects (i.e., Township of Asphodel-Norwood)
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Refine design and costing, and conduct stakeholder and public consultation as appropriate – consistent with Environmental Assessment requirements (if needed) or to solicit public feedback. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in municipal budgets and capital plans. + Advocate for inclusion of projects identified in locations under the jurisdiction of Northumberland County in future County plans and projects.

Table 16 // Summary of Ambitious Goal #4 Project Recommendation Considerations

3.5.2 Plan Recommendations

Ambitious Goal #4 seeks to support a future in Trent Hills where physical and non-physical barriers are removed or addressed to encourage movement for all. The following plan recommendations seek to ensure that municipal policies ensure that barriers are avoided and addressed via policies that guide land use and infrastructure planning, and that barriers are addressed through appropriate guidelines and standards.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
4a	Municipal policies are to be reviewed and amended based on the principles and considerations outlined within the ATTP to ensure policies do not unintentionally create or worsen physical and non-physical barriers through land use and infrastructure planning.	Policy	Immediate	Internal - led by Planning	N/A	Low
4b	Applicable national, provincial, and local guidelines and standards (as outlined within the ATTP) should be used when implementing routes where there is a crossing of a major barrier to determine the most appropriate and safe design treatment for all corridor users.	Guideline	Immediate	Internal Coordination	N/A	Low

Table 17 // Summary of Ambitious Goal # 4 Plan Recommendations

3.6 Ambitious Goal #5 – Planning & Growth

Leveraging planning, growth, and development to integrate AT and recreation.

New developments and their associated planning and review process present opportunities whereby the Municipality can ensure that future local neighbourhoods support active trips and active living. This should include the provision of AT facilities, including on-road linkages and off-road trail connections as part of new communities, sites, and buildings.

If appropriate municipal planning policies, by-laws, and standards are not in place, these opportunities can be missed; this can sometimes result in more car-dependent, sprawling development that prioritizes motor vehicle trips at the expense of active modes. Such resulting development can be expensive to service and perpetuate societal climate and health challenges.

Trent Hills has already taken important steps in how it manages new development, including initiating an update to the Municipal Official Plan. To support Ambitious Goal #5, a set of planning recommendations were developed to ensure AT facilities and amenities are considered and appropriately prioritized as part of development approval processes, major municipal projects, and through the upcoming Official Plan and associated policies and Zoning By-law updates.

It should be noted that several planning recommendations associated with other Ambitious Goals also aim to support AT and trails as part of the land use planning and development process, including those associated with Ambitious Goals #3 & 9.

The project recommendations are different for Ambitious Goal #5 than those associated with other goals, as they combine the identification and monitoring of development locations and provide guidance on how Municipal policy could help to shape future improvements. Connectivity with these future development areas were considered in the development of the walking, cycling, and trail networks associated with Ambitious Goals #3, 6 & 7.

Ambitious Goal #5 addresses the following users and uses…

Cyclists

Pedestrians

3.6.1 Project Recommendations

As noted above, project recommendations associated with this goal are unique in that there are no specific routes or facilities that have been identified at this time. This has been done intentionally to acknowledge and appropriately incorporate the required planning process that is to be facilitated by municipal staff as per the Planning Act. The following section provides overview of how AT and trail facilities should be incorporated into the design of new development areas, which should be considered in tandem with the detailed policy recommendations provided to Municipal staff. The ATTP facility design guidance provided elsewhere in the ATTP for walking, cycling, and trail facilities should also be considered in this process.

Development proponents are expected to work through an iterative process with municipal staff, beginning early in the planning stages to create an appropriate AT and trail system (internal and connecting to the surrounding linkages) for each development area. This should reflect the intent of the ATTP and other municipal policies and functional planning documents.

Many land developers recognize the value of integrating AT and trails into their projects, and often use these as selling features. Providing the development industry with information about the existing AT and trail system as well as future project recommendations, desired connections and design expectations will help to improve communication among all parties involved. It is expected that applications for new developments will contain trails and AT improvements that reflect the local context within Trent Hills.

Proposed new developments should provide infrastructure and networks that address physical barriers, make appropriate connections to important destinations, and enhance connectivity with the existing and planned system surrounding the development area. Design solutions should be sensitive to, and take advantage of, natural and cultural landscape features.

A careful examination of a variety of factors, including topography and drainage, slopes, soil conditions, flora and fauna, microclimate and human comfort, historic/cultural resources, public education opportunities, significant views and vistas should be part of the process to integrate trails and AT in new developments.

At the time that site plan design or secondary planning is being undertaken, relevant resources within the ATTP including trail classifications or other design guidelines should be encouraged for use, along with provincial and national standards (e.g., OTM, TAC, AODA).

Ideally in new development areas, trails or AT facilities should be constructed concurrently with the construction of other infrastructure and homes. When construction is deferred until homes are built, there can be conflict when residents adjacent to planned facilities claim that they were not aware of plans for construction, even if this intention has been clearly indicated in provincial and municipal planning policy. Developers and builders are encouraged to be proactive about notifying prospective buyers where AT links and trails are to be located at the time, they are selling lots.

3.6.2 Plan Recommendations

Ambitious Goal #5 seeks to ensure that healthy community design is incorporated into mobility planning decisions and planning, growth, and development processes and policies. The following plan recommendations seek to ensure that trails and active transportation facilities and amenities are included within new developments and future municipal infrastructure projects. It also seeks to encourage the incorporation of ATTP recommendations into the upcoming Official Plan update and associated framework that governs land use planning in the Municipality.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
5a	Site plans submitted as part of new developments should include context appropriate active transportation and trails facilities and amenities, and link to the existing and planned active transportation and trails identified within the ATTP.	Process	Immediate	Internal Coordination	N/A	Low
5b	Upcoming updates to the Trent Hills Official Plan, and associated zoning by-law, will incorporate ATTP recommendations and include policies to support active transportation and trails through consideration of infrastructure, programming, and supportive built form.	Policy	Immediate	Internal – led by Planning	Support from Public Health for policy enhancements	Low
5c	Where possible, consideration should be given to incorporating features of or related to active transportation / mobility when undertaking municipal planning and design projects	Implementation Process	Immediate	Internal – led by Public Works	N/A	Low - Moderate

Table 18 // Summary of Ambitious Goal #5 Plan Recommendations

3.7 Ambitious Goal #6 – Local Cycling

Providing safe and comfortable local cycling opportunities for people of all ages and abilities

Most people enjoy cycling, but they are often hesitant to use a bike for day-to-day trips if they do not have safe and comfortable places to ride. In the past, cycling has rarely been prioritized as part of overall transportation networks, especially in North America, where automotive travel has been the primary mode to get around for decades. But that is starting to change.

A 2023 Ontario-wide survey[1] found that 68% of people across the province cycle occasionally – at least once a month - while 2.3 million Ontarians (22%) are frequent cyclists. Many people discovered cycling as a new or more frequent activity during the 2020 Covid-19 pandemic, with new technology and trends in cycling (i.e., e-bicycles, cargo bikes, and fat bikes) also growing in popularity.

The geographic size of communities in Trent Hills are well-suited for local trips to be made by bike, as one can ride across any of Campbellford, Hastings, or Warkworth in just a few minutes.

Given that Trent Hills does not currently have regular transit service, cycling can help bridge the gap in the local transportation network by providing an option for trips that are too long to walk, but reasonable to bike. Trent Hills also has an active cycling culture that can be built upon, with the group Bike Action Trent Hills active in the community through cycling advocacy, programming, events, and group rides.

To allow safe and comfortable opportunities to cycle for people of all ages and abilities in local communities in Trent Hills, a network of on-road cycling routes and facilities were developed throughout Campbellford, Hastings, and Warkworth. These routes represent a spine system of improvements that aim to ensure that there is physical separation between cyclists and road users where possible, or to use quiet local streets where space is shared. The network is supplemented by a series of policies to ensure facilities are of high quality and attract a range of users, while also providing supplementary programs and amenities, such as bicycle parking.

Ambitious Goal #6 addresses the following users and uses…

Cyclists

[1] https://www.sharetheroad.ca/news-media-p157824

3.7.1 Project Recommendations

Project Overview

To support the provision of safe and comfortable opportunities to cycle for people of all ages and abilities, a network of all ages and abilities (AAA) cycling routes and facilities was identified and recommended within the built-up areas and major communities of Trent Hills.

While the rural touring routes detailed in Ambitious Goal #1 are targeted at experienced cyclists looking for longer-distance, recreational cycling opportunities, the AAA facility recommendations within Campbellford, Warkworth and Hastings are focused on attracting more people to ride bikes for short local trips, including for trips to work and school as well as shopping and to access local services.

Studies have shown that, while there are some people who will cycle in most current North American road conditions, and others who are unlikely to ride a bike regularly regardless of the conditions, the majority of people are "interested but concerned" about cycling; this group of people include those of a wide variety of age, gender, and ability, whose cycling frequency depends heavily on having a network of low-street facilities.

The intent for the community AAA network is to avoid having people on bikes mix with traffic as much as is feasible, and to either provide dedicated or separated cycling infrastructure, or direct people to shared routes along low volume and low speed local streets.

The recommended AAA community cycling network includes a mix of different facility types, including:

3 kilometres

In-boulevard multi-use paths
In addition to off-road trails detailed in Ambitious Goals #7 & #8

4 kilometres

Separated bike lanes / cycle tracks

1 kilometre

Bike lanes

3 kilometres

Neighbourhood bikeways

Project Design

The proposed facility types for the AAA community cycling network projects have been identified in accordance with the guidance provided by Ontario Traffic Manual (OTM) – Book 18, the Province of Ontario's primary reference for municipal decision-making relative to on-road cycling planning, design, and maintenance.

As part of this process the consultant team applied the OTM Book 18 cycling facility selection tool for urban areas, while also considering road characteristics such as traffic volume, posted and operating speeds, road function, and vehicle mix. Design guidance is provided on the following pages.

Multi-use Paths

	Description
Description	In-boulevard multi-use paths are facilities that are physically separated from motor vehicle traffic within the road right-of-way and provide space for two-way travel shared between people riding bikes and pedestrians.
Speed	Moderate - High (50 km/h+)
Volume	Moderate - High (6,000 vehicles per day or more)
Width	Facility: 3.0 – 4.0 m Buffer from curb: 0.6 m (minimum)
Signage and pavement markings	+ Shared Pathway sign (Rb-71) + Pathway Organization sign (Rb-72A or Rb-72B) + Yield to Pedestrians sign (R1-16) + Pedestrian and Bicycle Crossing Ahead sign (Wc-14) + In-boulevard Multi-Use Path pavement markings
Other Considerations	+ Good option in locations where there are not existing sidewalks, and there is generous boulevard space in the right-of-way. + Most appropriate in locations without high numbers of pedestrians, and thus should be avoided along busy main streets where user conflict may occur. + Buffer between facility and roadway may be hard-surfaced or consist of a strip of grass or plantings. Buffer space can provide space for snow storage, sloped approach ramps or driveway aprons, or signs and poles.

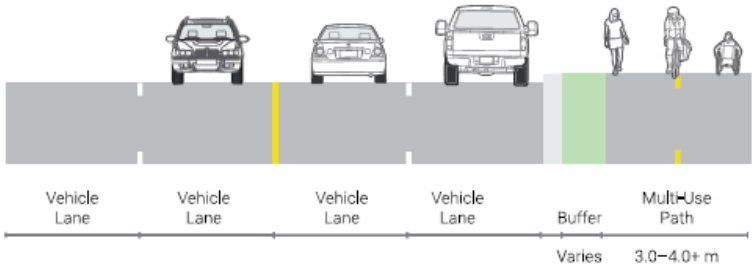


Figure 9 // Cross-section of in-boulevard multi-use path (OTM Book 18, 2021)

Figure 10 // In-boulevard multi-use path, Peterborough.

Physically Separated Bicycle Lanes / Cycle Tracks

	Description
Description	Separated Bicycle Lanes or Cycle Tracks both provide dedicated cycling space for users, distinct from pedestrians, and physically separated from motor vehicles. Physically separated bicycle lanes are parts of the roadway separated from motor vehicle lanes by a horizontal buffer plus vertical elements such as bollards or a barrier curb; cycle tracks are fully outside of roadway in the adjacent boulevard, separated from motor vehicle traffic by a curb plus a horizontal buffer.
Speed	Moderate - High (50 km/h+)
Volume	Moderate - High (6,000 vehicles per day or more)
Width	One-way: 1.5 – 2.5 m facility, plus 0.3 – 2.5 m buffer Two-way: 2.7 – 4.0 m, plus 0.6 – 2.5 m buffer
Signage and pavement markings	+ Reserved Bicycle Lane sign (Rb-84 or Rb-84 OTM) + Reserved Bicycle Lane Ahead sign (WB-10 TAC) + Turning Vehicles Yield to Bicycle sign (Ra-18 OTM) + Object Marker sign (Wa-33 OTM) + Bicycle Lane Pavement Marking, with optional directional arrow. + Yellow Centreline (for two-way facilities) + Painted Buffer Strip (as needed)
Other Considerations	+ Separates pedestrians and cyclists, so is appropriate for areas with high numbers of pedestrians. + Where cycle tracks are adjacent to walkways, carefully consider accessibility and AODA requirements in design. + Where on-street parking is present, sufficient clear sight distance should be provided at intersections and driveways

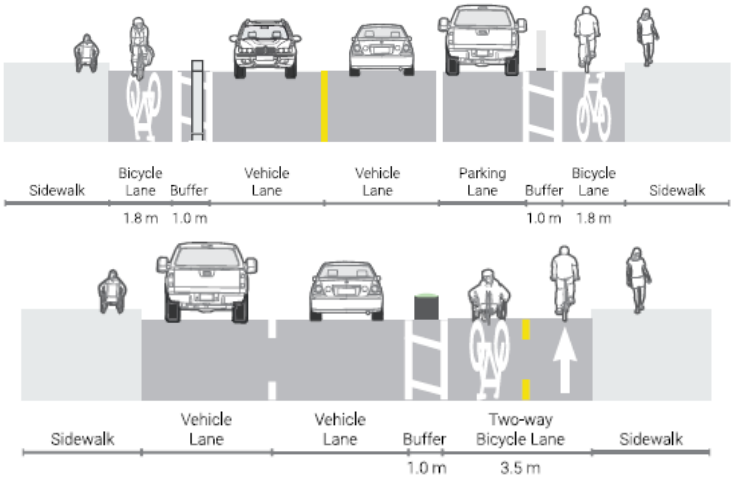


Figure 11 // Cross-section of one-way and two-way physically separated bicycle lanes (OTM Book 18, 2021)

Figure 12 // Cycle track, Montreal

Bicycle Lanes

	Description
Description	Conventional bicycle lanes consist of a portion of roadway that has been designated for exclusive use of people riding bicycles using pavement markings and signage.
Speed	Moderate (40 - 50 km/h)
Volume	Low - moderate (Less than 6,000 vehicles per day)
Width	1.5 – 2.0 m Optional buffer: 0.3 – 1.5 m
Signage and pavement markings	+ Reserved Bicycle Lane sign (Rb-84 or Rb-84 OTM) + Reserved Bicycle Lane Ahead sign (WB-10 TAC) + Turning Vehicles Yield to Bicycle sign (Ra-18 OTM) + Bicycle lane pavement marking, with optional directional arrow. + Solid while Edge line + Painted Buffer Strip (optional)
Other Considerations	+ Aim to provide a generous bicycle lane width to increase the distance between cyclists and motor vehicles and provide a buffer where feasible. + Where on-street parking is present, a buffer is recommended between the parking lane and bicycle lane to guide cyclists away from opening car doors.

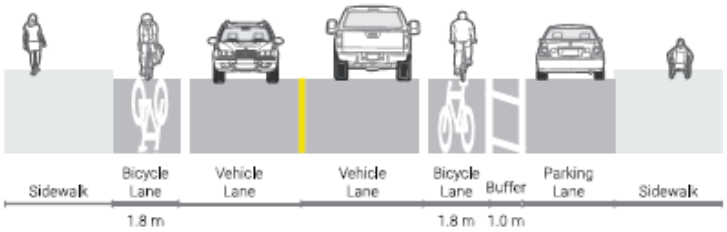


Figure 14 // Cross-section of conventional bike lanes (OTM Book 18, 2021)

Neighbourhood Bikeways

	Description
Description	Neighbourhood bikeways are cycling network facilities that provide shared road space between bicycles and motor vehicles. These facilities are meant to be established only along local streets with low traffic speeds and volumes. If these conditions are not currently present, they can be established by incorporating measures to lower traffic speeds and better prioritize bicycle travel.
Speed	Low (40 km/h or less)
Volume	Low (Less than 3,000 vehicles per day)
Width	N/A
Signage and pavement markings	+ Share the Road (Wc-19 OTM) or Shared Use Lane sign (Wc-24 OTM) + Bicycle Route sign (M511 OTM) or other bike route signage + Shared use lane (sharrow) markings + Motor Vehicle Passing Prohibited sign (Rb-66 OTM)
Other Considerations	+ Design elements that can be incorporated into neighbourhood bikeways include: - Speed management /traffic calming - Traffic reduction measures (e.g., diverters, median islands) - Intersection treatments (e.g., bike boxes, refuge islands) - Cyclist priority measures - Signs and pavement markings + Encouraging cyclists to ride in the centre of narrow lanes is preferred for shared cycling routes, as wide shared lanes (4.3 m or more) are associated with higher motor vehicle travel speeds.

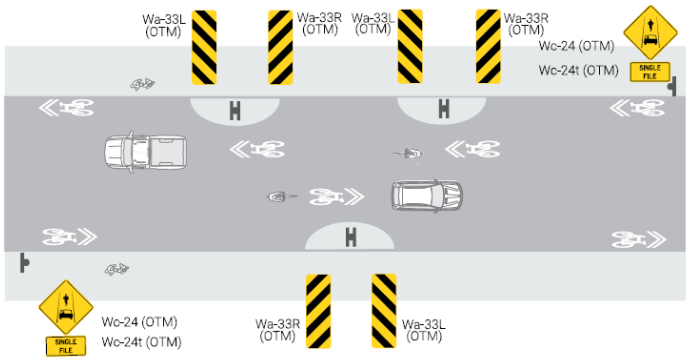


Figure 13 // Shared use markings on two-lane chicaned roadway (OTM Book 18, 2021)

Project Phasing & Costing

The project phasing for the recommended projects will require ongoing coordination and integration with planned municipal capital projects as well as Northumberland County capital planning.

For some projects, such as bike lanes where space exists, or for neighbourhood bikeways, the design interventions are relatively minor. In these cases, consideration should be given by the Municipality to pursue these as stand-alone capital projects as they do not require significant changes to the roadway and may – in some cases – only require the use of paint and signage.

When determining the feasibility of the recommended projects, consideration was given to the existing conditions of each roadway and associated right-of-way. Where possible, facilities have been identified where minimal changes to the existing roadway need to be made and where the intervention is as easy to implement as possible.

A summary of the phasing and costing for the recommended projects is provided in Table 12, along with the phasing for recommended projects along County roads.

	Trent Hills		County	Total
Horizon	Kms	Cost	Kms	Kms
Short term	5.5	$543,500	0	5.5
Medium Term	0.5	$199,750	0.8	1.3
Long Term	1.4	$451,050	3	4.4
Total	7.4	$1,591,520	3.8	11.2

Table 19 // Summary of Ambitious Goal #6 Phasing & Costing

Project Considerations

This section outlines the project considerations specific to the community cycling network projects. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #6.

Consideration	Application
Future Considerations	+ Generally, all projects listed under Ambitious Goal #6 are considered pre-approved under new MCEA requirements, although there may need to be a formal Environmental Assessment completed if the AT project is combined with more extensive road improvements. + Most projects identified along Northumberland County roads involve protected cycling facilities and may involve more extensive changes to the road layout, and thus will require collaboration with the County on implementation. + At the time of implementation, traffic volumes, speeds and other roadway conditions should be re-assessed, which may result in the design and implementation of different facility types. + Facility design should be coordinated with Municipal and County road resurfacing and reconstruction projects. + Celebrate the construction of new facilities with events and promotional communication to the public
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Develop a signage and wayfinding strategy (as per Ambitious Goal #1, Planning Recommendation 1b) and finalize signage to be used for Neighbourhood Bikeways. + Refine design and costing, and conduct stakeholder and public consultation as appropriate, consistent with Environmental Assessment requirements (if needed) or to solicit public feedback. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in municipal budgets and capital plans. + Advocate for the inclusion of facilities identified along Northumberland County roads in future County plans and projects.

Table 20 // Summary of Ambitious Goal #6 Project Recommendation Considerations

3.7.2 Plan Recommendations

Ambitious Goal #6 seeks to ensure that the Trent Hills provides safe and comfortable opportunities for cyclists of all ages and abilities in urbanized areas of the municipality. The following plan recommendations aim to ensure that new cycling facilities are built according to the most recent standards and guidelines, are accompanied by amenities such as bicycle parking facilities, and that the use of trails and cycling facilities is supported through new technology and initiatives.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
6a	The design guidance provided in the ATTP, along with other applicable provincial and national guidelines and standards are to be utilized when proceeding with the review and confirmation of facility design prior to implementation.	Guideline	Immediate	Internal – led by Public Works	N/A	Low
6b	Bicycle parking facilities are to be provided at major public community destinations (e.g., libraries, schools, community centres, parks, etc.), along public rights-of-way in downtown commercial centres, and as part of new development areas, based on the guidance provided within the ATTP for the selection of preferred bicycle parking alternatives.	Guideline, Program	Immediate	Internal – led by Community Services & Recreation	Input from public & stakeholders	Moderate
6c	The Municipality will explore opportunities to leverage technology to encourage and support active transportation and trail use (e.g. trail apps, trail sensors, etc.) based on guidance found within the ATTP as facilities are improved or built.	Program, Implementation	Alternate Timing	Internal – led by Community Services & Recreation	N/A	Moderate

Table 21 // Summary of Ambitious Goal #6 Plan Recommendations

3.8 Ambitious Goal #7 – Recreational Trail Links

Maximizing opportunities for active and passive recreation on publicly owned lands

Quality off-road trails that provide connections through parkland, open space, and other public lands enhance recreational opportunities for residents and visitors in a municipality. Planned off-road trails in Trent Hills should serve a wide variety of users, including people who wish to get active by walking, hiking, cycling (including utilitarian cycling, touring, mountain biking, cyclocross, etc.), winter uses such as cross-country skiing and snowshoeing, or other self-propelled ways of getting active.

When designing and implementing trails, it is important to recognize that people are looking for various types of experiences, from passive recreation such as leisurely local walks, to more strenuous active recreational experiences that require greater skill and stamina, such as mountain biking or long-distance hiking. It is important to recognize that a single type of trail cannot effectively serve all these different users and various experiences, so a variety of trail types should be provided as part of an extensive network.

To support this, trail classifications and associated guidelines have been developed and were considered in the creation of the project recommendations. Project recommendations are further refined based on the context in which they are being recommended. Planning recommendations have also been developed as part of the ATTP to support trail infrastructure classification and design, including supportive amenities (trailheads, signage, etc.), as well as events and activities to enliven trail spaces and encourage their use.

While active and non-motorized trips are the focus of this plan, there is significant demand in Trent Hills for motorized recreational uses, so existing and future trails should be managed to allow or restrict ATV, ORVs, and snowmobiles as appropriate through a mix of bylaws, communication, education, and enforcement.

It should be noted that Ambitious Goal #7 focuses on locally owned trails, and the associated recommendations are separate but complimentary to other Ambitious Goals, especially #8 which focuses on the Trans Canada Trail specifically, and Goal #4, which addresses trail crossing improvements.

Ambitious Goal #7 addresses the following users and uses…

Cyclists

Pedestrians

High endurance AT users

Seasonal AT Users

3.8.1 Project Recommendations

Project Overview

Two primary project improvements - developing trails in park space and trails in unopened road allowances - are recommended as part of Ambitious Goal # 7. Trails in park spaces are generally located in urban areas and refer to trail connections that have been identified through municipally owned parkland or other open spaces that provide local connections to the overall trail and AT system and to key destinations. Trails along unopened road allowances are generally located in rural areas, with some urban links, and are along municipally owned corridors that could provide recreation trail linkages, and/or alternatives to on-road AT links.

11.77 kilometres

Proposed trails in park spaces

29.75 kilometres

Proposed trails in unopened road allowances

Project Design

Off-road trails are significantly different than on-road facilities, as they are not subject to road engineering standards and guidelines. Design of trails can be highly variable, depending on the expected trail function, expected users, user experience, and other factors. Trails in urban areas are generally expected to serve a wide variety of user groups and be fully accessible - including in accordance with the Accessibility for Ontarians with Disabilities Act (AODA) legislation and regulations. Other trails in natural or rural areas may be targeted for a specialized set of users, and thus may be narrower and follow various terrain, and are not always fully accessible for all users. In some cases, trails may permit use by motorized trail vehicles, which thus require greater width and design interventions may be needed to control potential conflicts.

A high-quality trail environment has a mix of different types of off-road trails, with the various trail experiences, skill level, and intended uses clearly communicated at key points.

To support the Municipality of Trent Hills in the design of future trail upgrades and new connections, a set of trail classifications and associated guidelines were developed based on best practices and relevant guidance, including the Ontario Parks Association Best Practices Manual (2018), National Guidelines for Classifying Multi-use Trails in Canada (2021), and guidelines and standards from other municipalities across Canada. A summary of the Trent Hills trail classifications is included on the following page, with the full set of design considerations provided to the Municipality.

Trail Classifications

	Primary Trail Type 1	Secondary Trail Type 2	Tertiary Trail Type 3
General function	Non-motorized active use for recreation, leisure, and commuting purposes Spine trail providing access to key destinations in urbanized communities	Non-motorized active use for primarily recreation and leisure purposes Provides access to parks, open spaces, and natural areas in proximity to communities	Non-motorized uses, with some exceptions Provides opportunities to experience nature and rural landscapes, and connect to rural destinations, e.g. Conservation Areas
Expected users	Pedestrians, cyclists, joggers, other active uses Accommodates users of all ages, abilities, skills, and experience Motorized use restricted	Pedestrians, hikers, cyclists, other active uses Some experience / stamina may be required Motorized use restricted	Pedestrians, hikers, mountain bikers, equestrians, winter activities, mixed use. Some user experience / stamina may be required Motorized use permitted in some locations
Typical distance	Short 0 – 2.5 km	Short / moderate 1 – 5 km	Moderate / long 5 - 25 km
Ease of use	Easy	Easy to Moderate	Varies based on condition
Accessibility	Meets or exceeds accessibility requirements	Meets accessibility requirements where feasible	May not be accessible
Width	4.0 m typical 3.0 m minimum	1.5 – 2.5 m typical. Minimum 0.5 m in constrained locations	1.0 – 2.0 m typical. May be narrower in constrained locations
Surface	Hard surface – e.g., asphalt or concrete	Granular surface – e.g., screenings, stone, gravel	Natural surface – e.g., dirt, grass, woodchips. May be uneven.
Example			

Project Phasing and Costing

Below is a summary of the phasing and costing details for projects associated with Ambitious Goal #7. Note that these are high level estimates and recommendations for phasing and costing which should be subject to further study before proceeding to implementation.

Unlike AT facilities found along municipal or County roads, trails are identified for implementation outside of the road right-of-way, which means that there are fewer opportunities for coordination with larger capital projects such as new roads or major road rehabilitation. As such, the design and implementation of recommended trails would require a proactive approach to planning and implementation from municipal Parks and Recreation staff and their internal and external partners.

Trails that are identified along unopened road allowances will require coordination with Engineering and Public Works staff to determine the use, intent, and purpose of the road allowance and to explore future use as a trail.

A summary of the phasing and costing for the recommended projects is provided below.

Horizon	Kms	Costs
Short-term	10.3	$1,668,250
Medium-term	12.1	$1,110,000
Long-term	19.15	$1,347,500
Total	41.52	$4,125,750

Table 22 // Summary of Ambitious Goal #7 Phasing and Costs

Project Considerations

This section outlines the project considerations specific to maximizing active transportation linkages in Trent Hills through recreational trail infrastructure. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #7.

Consideration	Application
Future Considerations	+ Many trail projects will likely need to be studied further, and in some cases the completion of a formal Environmental Assessment may be required or advisable before proceeding to detailed design and construction. + National and provincial guidelines for recreational trails and the ATTP trail classification guidelines should be applied to the design of all trail projects. + As much as possible, ATTP projects should be coordinated with broader Municipal and County infrastructure projects. + Where local trails intersect with or are adjacent with the Trans Canada Trail, it may be appropriate to consult with the Eastern Ontario Trails Alliance or other stakeholders to ensure a seamless and connected trail network throughout the area.
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Refine design and costing, and conduct stakeholder and public consultation as appropriate – consistent with Environmental Assessment requirements (if needed) or to solicit general public feedback and support. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in municipal budgets and capital plans.

Table 23 // Summary of Ambitious Goal #7 Project Recommendation Considerations

3.8.2 Plan Recommendations

Ambitious Goal #7 seeks to maximize active transportation and passive recreation to trail linkages in Trent Hills. The following plan recommendations seek to ensure the Municipality regularly tracks its progress through the strengthening of its planning framework.

	Recommendation	*Type*	*Timeline*	*Lead*	*Partner*	*Resource*
7a	Work with partners to support the implementation of events and activities which activate trail spaces, leveraging partnerships with local organizations, businesses, and other local events. Appropriate programming is to be determined based on the information and tools contained within the ATTP	Program Implementation	Immediate	External	Local businesses & organizations, leverage potential volunteer support and other community events	Low to Moderate
7b	The design guidance included within the ATTP is to be used to design and implement trailheads throughout the municipality at strategic locations to denote trail start and end points and to communicate necessary information regarding trail experience and intent	Guidelines Implementation Process	Immediate	Internal Coordination	N/A	Moderate
7c	The Trail Classifications identified within the ATTP are to be used when designing new trail linkages, trails within future development areas and the improvement of existing trail linkages and adopted as part of municipal guidelines and standards where appropriate.	Guidelines Implementation	Immediate	Internal-led by Community Services and Recreation	N/A	Low
7d	When considering the implementation of new trail linkages or the enhancement of existing trail linkages, the processes and practices regarding approvals, design and implementation is to be used as a guide for next steps and as a tool for communicating with internal and external partners	Process	Immediate	Internal-led by Community Services and Recreation	N/A	Low

Table 24 // Summary of Ambitious Goal #7 Plan Recommendations

3.9 Ambitious Goal #8 –Trans Canada Trail

Creating an active transportation spine using the Trans Canada Trail

The Trans Canada Trail is a key connecting link for active transportation across Trent Hills today and has potential to be an even more important spine in the future. The Trans Canada Trail (TCT) is a system of multi-use urban and rural trails that – as the name suggests – provides connections across the country, spanning over 28,000 kilometres on land and water. The trail is coordinated and supported by a national not-for-profit organization, with sections of the trail owned, operated, and maintained by local organizations. In the case of Trent Hills, the rural sections of the TCT are managed by the Eastern Ontario Trail Alliance (EOTA), with urban sections owned and maintained by the Municipality.

While the TCT is already an important trail spine for a variety of uses, both active and motorized, it was noted through both engagement and field review that there are locations where use is challenging, and improvements are needed. Many people expressed a desire to use the TCT in Trent Hills more frequently for cycling but expressed dissatisfaction with the current condition of the trails. Some felt that the current high levels of ATV use diminished the trail experience for other AT users. Amenities, signage and wayfinding, and road and other barrier crossings were also identified as potential areas for enhancement.

The Trent Hills ATTP seeks to address these issues through a mix of project recommendations related to the TCT itself, as well as improvements at key crossing and trailhead locations, along with planning recommendations to strengthen and clarify the partnership between the EOTA and the Municipality of Trent Hills.

Ambitious Goal #8 addresses the following users and uses…

Cyclists

Pedestrians

High endurance AT users

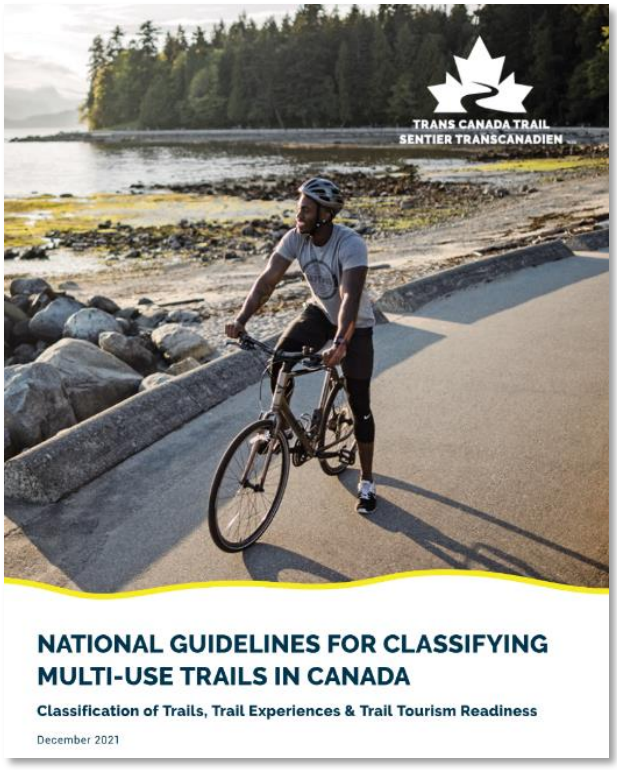
Seasonal AT Users

3.9.1 Project Recommendations

Project Overview

Project recommendations identify specific sections of the TCT for improvement, including a total of 19 km of linear trail improvements, with the section between Warkworth and Campbellford considered the highest priority. The recommendations also identify locations for crossing improvements and trailheads that would benefit from enhanced amenities.

It is important to note that project recommendations were identified along the section of the trail under the ownership of the EOTA, while supplementary municipal trail improvements and new trail linkages were identified as part of ambitious goal #7.



Project Design

For trail improvements, the Municipality and its partners should apply the trail classification guidelines detailed in Ambitious Goal #7, along with Trans Canada Trail guidelines (e.g., National Guidelines for Classifying Multi-Use Trails in Canada), and other relevant national and provincial guidance regarding recreational facilities. The TCT can generally be considered a secondary trail as per the ATTP trail classifications, but this may vary depending on conditions and context. The goal should be to create a consistent experience throughout the municipality that reflects the natural context and conditions through which the TCT passes through.

Note that while a total of 19 km of linear sections of trail have been identified for improvement, the main maintenance issue that was identified was the condition of bridges along these routes, and these should be the focus of future TCT upgrades and maintenance.

The following pages detail the design guidance for improvements for trail crossings and at trailheads / staging areas.

Trans Canada Trail Crossing Improvements

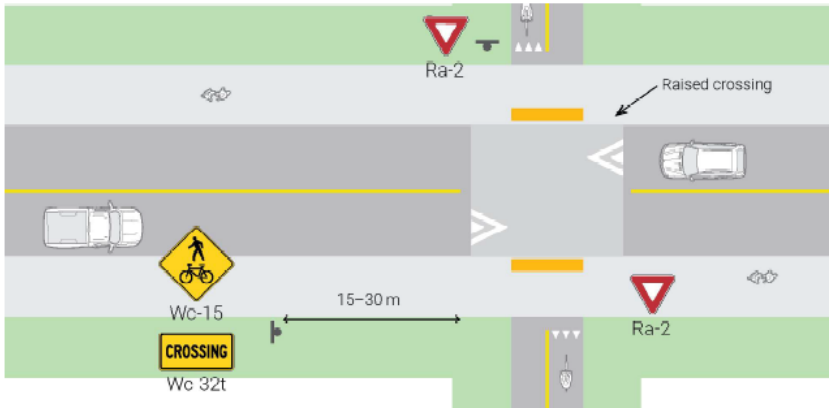


Figure 14 // Excerpt from OTM Book 18 Figure 6.77 - Uncontrolled Crossing (With Raised Crossing)

Description

Description

For trail crossing improvements, OTM Book 15, and other relevant road engineering and design guidance should be applied. This guidance is detailed in part under Ambitious Goal #4. It should be noted that the majority of TCT crossing improvements recommend uncontrolled crossing environments.

Considerations

Required:

- Trail Crossing (Wc-32 and Tc-32T) or Pedestrian and
- Bicycle Crossing (Wc-15 & Wc-32T) Advanced Warning Signs along roadway approaching trail for drivers.
- Pedestrian Yield to Traffic (Wc-28) warning signs for pedestrians
- Signs and/or Yield sign (Ra-2) for trail users
- No Parking (Rb-51) sign within 30 m of crossings

Optional:

- Refuge island and centre median, with associated pavement markings and signage
- Raised crosswalk
- Curb extensions
- Curb depressions
- Supplementary crossing ahead warning sign (Wc-15) with distance tab (Wa-23-t)

Trailheads

Trailheads are developed sites at major points of entry and exit along trail. Trailheads provides access to the trail, help users identify and confirm that they have arrived at the TCT, and communicate expectations about the trail experience ahead.

	Description
Description	Three key locations have been identified for trailhead improvements in the ATTP: + Hastings at Water Street / Cedar Drive + Campbellford at Alma Street / Simpson Street + Campbellford at Burnbrae Road
Trailhead amenities	Potential amenities at these locations could include: + Rest areas, including seating, tables, waste bins, water fountains / refill stations, etc. + Wayfinding and interpretive signage + Signage explaining rules and regulations of the trail, warnings, or potential hazards, etc. + Maps or informational pamphlets in a waterproof container + Landscaping + Vehicle parking areas + Bicycle parking facilities + Toilets + Public art

Figure 16 // Existing conditions, Hastings at Water Street / Cedar Drive

Figure 17: Trailhead amenities in Sydenham along the Cataraqui Trail, including bike parking, bicycle repair station, and wayfinding signage.

Project Phasing and Costing

As implementation proceeds for the project recommendations identified for Ambitious Goal #8, there should be ongoing coordination and integration with the EOTA and the Trans Canada Trails Association. Linear trail improvements are mostly along locations that are the responsibility of the EOTA, and thus it will be essential to work closely as partner to move the projects forward. While high level cost estimates have been developed for these projects, these are more so for consideration as opposed to application as these linkages are not technically municipally owned. Crossing and trailhead locations are mostly under municipal jurisdiction, but EOTA should still be consulted closely to ensure awareness, support, and input.

Phasing has been identified for all projects to provide some guidance on how these overarching TCT improvements could coordinate with some of the other complementary project recommendations from the ATTP and to demonstrate the importance that is being placed on the TCT as the spine of the system.

That said, the information contained with the ATTP is meant to be used as a communication and collaboration tool as opposed to a prescriptive recommendation of timeline for the EOTA and other partners.

A summary of the phasing and costing for the recommended projects is provided below.

	Trent Hills			*Total*		
	Kms	#	Cost	Kms	#	Cost
Short-term	0.9	17	$543,500	12.2	20	$1,130,000
Medium-term	0	0	$0	6.9	1	$690,000
Long-term	0	0	$0	0	1	$165,000
Total	0.9	17	$543,500	18.2	22	$1,820,000

Table 25 // Summary of Ambitious Goal #8 Phasing & Costing

Project Considerations

This section outlines the project considerations specific to improving the Trans Canada Trail across Trent Hills. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #8.

Consideration	Application
Future Considerations	+ For projects at road crossing locations, traffic studies should be conducted by Municipal staff to determine whether additional traffic improvements may be advisable at the given location. In some cases, this may result in a different solution for the project location. + Projects identified at crossings of roadways under the jurisdiction of Northumberland County will require collaboration with the County on implementation. + Projects along or adjacent to portions of the Trans Canada Trail under the management of the EOTA should be implemented by or in close collaboration with the EOTA, as appropriate. + As much as possible, projects should be coordinated with Municipal and County Road and other infrastructure projects.
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Refine design and costing, and conduct stakeholder and public consultation as appropriate – consistent with Environmental Assessment requirements (if needed) or to solicit public feedback. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in municipal budgets and capital plans. + Advocate for inclusion of projects identified in locations under the jurisdiction of Northumberland County in future County plans and projects. + Advocate for inclusion of projects identified in locations management by the EOTA in future EOTA plans and projects.

Table 26 // Ambitious Goal #8 Project Recommendation Considerations

3.9.2 Plan Recommendations

Ambitious Goal #8 seeks to create an active transportation spine in in Trent Hills using the Trans Canada Trail. The following plan recommendations seek to guide the Municipality in its partnership with the EOTA on trail improvements, including ensuring agreements are in place, regular meetings occur, and maintenance and upgrades are completed to meet the goals of the municipality.

	Recommendation	*Type*	*Timeline*	*Lead*	*Partner*	*Resource*
8a	A partnership agreement is to be developed / amended between the municipality and the Eastern Ontario Trails Alliance (EOTA) to ensure trail management and maintenance is serving the needs of the Municipality and all trail users of the TCT. The agreement is to be reviewed annually to determine necessary updates and/or to assess the need for potential financial impacts.	Implementation, Process	Requires Investigation	External	Eastern Ontario Trails Alliance Trans Canada Trails Association	Low
8b	The Municipality will work with the EOTA to ensure that there is sufficient ongoing maintenance and upgrades made to the TCT within Trent Hills.	Implementation	Immediate	External	Eastern Ontario Trails Alliance	Moderate
8c	An annual meeting is to be held with the EOTA to identify necessary projects or initiatives that are to be undertaken to ensure that the maintenance and management of the trial is being undertaken in alignment with the ATTP and Municipal priorities.	Implementation Process	Alternate Timing	External	Eastern Ontario trails Alliance	Low

Table 27 // Summary of Ambitious Goal #8 Plan Recommendations

3.10 Ambitious Goal #9 – Vulnerable Groups

Protecting and prioritizing vulnerable groups including youth and seniors

Prioritizing youth, seniors, and other vulnerable groups is a unique challenge for municipal public spaces, but also one of the reasons why an extensive and thoughtfully designed active transportation and trail network is so important. Protecting and accommodating seniors is especially important in Trent Hills where over 30% of the population is aged 65 and over.

To make progress towards the goal of protecting and prioritizing youth and seniors, a series of recommendations were developed, including location-specific project recommendations, as well as policies to facilitate these projects, and ensure safety for vulnerable road users and populations is considered and embedded in Municipal policy.

To ensure a focused and effective approach to recommendations, community destinations where youth and seniors are most likely to be present were identified, including schools, parks and recreational facilities, seniors' homes, and health services. Around each of these destinations, a 250 and 500 m buffer was identified, creating zones where a commitment to improvement and prioritization through design interventions was made.

These areas were considered when developing other ambitious goals, particularly #4 (walkability) and #6 (community cycling facilities). They were then reviewed for supplementary traffic calming and other safety improvement opportunities that are included among the project recommendations in this section. Project recommendations for this goal also endeavored to establish AT hubs at community destinations to provide enhanced AT-supportive amenities such as rest areas.

The goal of protecting and prioritizing youth and seniors is reinforced through planning recommendations that aim to ensure that the Municipality develops a comprehensive set of by-laws, guidelines, and standards that follow recent best practices regarding school zone safety, speed limits, road design, pedestrian crossings, universal design, and site plan approval for new developments.

Ambitious Goal #9 addresses the following users and uses…

Cyclists

Pedestrians

Project Overview

Project recommendations to protect and prioritize youth and seniors include the identification of six (6) sections of roadway in urbanized areas of Trent Hills and ten (10) recreational community destinations that are to be established as AT hubs. These projects are summarized below.

6 locations / 2.4 kilometres

Measures to improve safety and reduce traffic speed in strategic locations
In addition to projects identified as part of Ambitious Goals #4 & #6

- Market Street, Front St to Oliver Rd
- Booth Street, Market St to Bridge St
- Kent Street, Richard St to Church St
- Elmore Street, Bridge St to First St
- Margaret Street, Market St to Bridge St
- Albert Street East, Bridge St to Wellington St

10 locations

Community destinations identified for AT-supportive amenities, such as rest areas, bicycle parking, and bike repair stations.

- Campbellford Visitor Centre
- Campbellford Lawn Bowling Club / tennis courts
- Recreation and Wellness Centre - Campbellford
- Kennedy Park – Campbellford
- Campbellford-Seymour Arena & area
- Campbellford Public Library
- Hastings Public Library
- Hastings Field House
- Warkworth Public Library
- Percy Township Arena

Project Design

The proposed projects to support vulnerable populations have been identified in accordance with relevant road design standards and guidelines, as well as best practices in features and amenities that support active transportation adoption.

While these recommended projects do include some specific routes and facilities, unlike some of the other ambitious goals, the aim with these improvements is take a broader and more wholistic view in these locations, and to reconsider how these corridors and spaces are designed. As time, capacity, and budget becomes available, municipal staff are encouraged to explore supplementary measures and interventions that can achieve the desired outcome of better protection of youth and seniors as time, capacity, and budget is available. This should be done in consultation with the community, including through the application of the walking audit tool (Plan Recommendation 3a) with targeted stakeholders, such as senior or school groups.

On the following pages design guidance has been provided for the Municipality's consideration. The guidance should be reviewed on a case-by-case basis as the Municipality determines the most appropriate design solutions for the various locations.

Road Safety Measures

Senior and youth-focused road safety measures mostly consist of traffic calming, which are covered to some extent as part of the project recommendations for Ambitious Goal #3 – Walkability. For the purposes of project costing, two scenarios were developed (A & B), with different levels of intervention, depending on context. Each traffic calming approach involves narrowing the roadway, adding speed humps, and reducing the speed limit from 50 km/h to 40 km/h. These scenarios are detailed below.

It should be noted that these are meant to be only a starting point for design elements of locations identified for traffic calming. The measures indicated above may be modified or supplemented with measures such as intersection treatments (raised crossings, curb radius reductions, traffic circles / mini-roundabouts), or features such as raised centre medians, vertical centreline treatments (e.g. flexible bollards), texture surfaces, or other treatments.

	Traffic Calming A	Traffic Calming B
Narrowing roadway	With curb extensions (Concrete with tactile plates added at crossing locations)	With pavement markings (edge lines)
Speed Limit	Lowered to 40 km/h, communicated via signage	
Speed humps	Every 150 m	Every 200-250 m

Community AT Hubs

Community AT hubs have been identified to prioritize the installation of AT-supportive features, including:

Bicycle Parking

Parking for bicycles is an essential component of a multi-modal transportation, allowing people to securely lock their bicycles while contributing to more orderly public spaces. In providing bike parking, both short-term parking for visitors should be considered as well as more secure longer-term storage for residents and employees of a given location.

Bike rack designs should support a bicycle upright by its frame and allow each bicycle to be locked in at least two places, such as through “Post and ring” or “inverted-U” style rack designs. Bicycle parking should be in convenient and highly visible locations close to nearby entrances. Bike racks should be installed on hard surfaces, and allow sufficient clearance between other bike racks, street furniture, walls, or pedestrian clear ways, and consider the footprint of a parked bicycle, which can vary in length from 1.8 to 2.4 m. When feasible, consider protecting bicycle parking from the weather by locating in covered areas or combining with a shelter.

Bicycle Repair Stations

Bicycle repair stations include tools and usually an air pump and a place to hang a bicycle to make minor bike repairs and conducting basic maintenance. These are a low cost and useful tool for cycling, especially along popular cycling tourist routes.

Rest Areas

Rest areas provide a stopping point for travellers where a variety of amenities are grouped together, such as benches, tables, water fountains, waste bins, or other features. Rest areas are especially useful for seniors, families, and other users who need to sit and rest more frequently.

Project Phasing & Costing

The phasing for the road safety improvements will require ongoing coordination and integration with planned municipal capital projects. For the establishment of AT hubs, these are relatively low complexity projects, as they are all located on Municipal-owned land and can be implemented fairly easily by purchasing and installing the recommended amenities.

There are a few different models by which these projects could be implemented which impact the overall phasing and costing of the recommendations. The Municipality may wish to proceed on a project-by-project basis focusing on specific corridors or locations where improvements are being made. Alternately, an approach could be used whereby amenities are purchased in bulk and placed at some or all the locations recommended.

The expectation is not that the Municipality will select one approach but has the flexibility to alternate between approaches depending on the capacity of Municipal staff, available budgets, and priorities of Council.

A summary of the phasing and costing for the recommended projects is provided in Table 6 along with the phasing for County projects.

	Trent Hills		
Horizon	Kms	#	Cost
Short term	1.9	10	$190,178
Medium term	0.5		$13,100
Total	2.4	10	$203,278

Table 28 // Summary of Ambitious Goal #9 Phasing & Costing

Project Considerations

This section outlines the project considerations specific to the improvements to enhance safety for youth and seniors and establish AT hubs. This is not intended to be an exhaustive list of considerations but a starting point from which Municipal staff can move forward with and monitor the next steps for Ambitious Goal #9.

Consideration	Application
Future Considerations	+ Generally, none of the projects listed under Ambitious Goal #9 should require a formal Environmental Assessment, although for road projects a study may be required or preferred if the recommended project is combined with more extensive road improvements. + On roads where projects have been identified, traffic volumes and speeds should be monitored, with specific design solutions adapted based on the most recent analysis of road conditions.
Next Steps	+ Prioritize and refine specific timing of the short-term projects within the 10-year horizon consistent with other capital planning as appropriate. + Refine design and costing, and conduct stakeholder and public consultation as appropriate – consistent with Environmental Assessment requirements (if needed) and to ensure buy-in from the public, especially residents and business-owners in the immediate vicinity of given projects. + Pursue external funding based on the funding opportunities noted in Section 4.0 of the ATTP. + Refine costing and ensure costs are included in municipal budgets and capital plans.

Table 29 // Summary of Ambitious Goal #9 Project Recommendation Considerations

3.10.1 Plan Recommendations

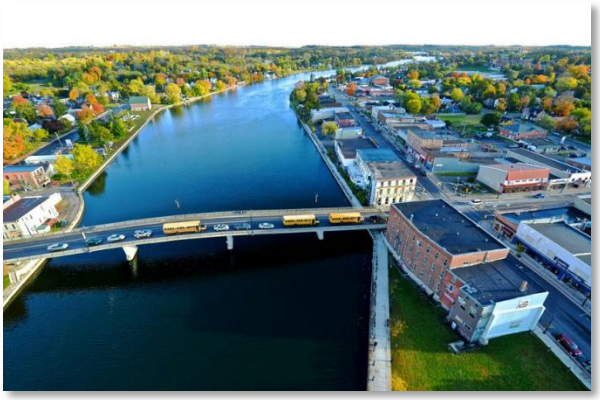
Ambitious Goal #9 seeks to prioritize children, seniors, and other vulnerable populations within community areas and hubs. The following plan recommendations aim to ensure that future municipal policies and bylaws related to new developments and traffic operations work towards the goal of improving conditions for vulnerable populations, and that programs are developed at schools to encourage safe and increased active travel habits among school-age youth.

	Recommendation	Type	Timeline	Lead	*Partners*	*Resources*
9a.	At the time that the Municipality reviews bylaws and policies, there will be an exploration of future opportunities create or improve policies, programs and interventions that could help to create safe and comfortable spaces with a focus around areas with vulnerable populations.	Policy, Process	Immediate	Internal coordination	N/A	Low
9b.	The Municipality will explore the development and implementation of an active and safe routes to school program in partnership with local schools, school board and Public Health representatives.	Program, Process	Immediate	External	School Boards, local schools, HKPR District Health Unit	Moderate
9c.	The Municipality will review the phasing and other aspects of pedestrian crossings at signalized intersections in urban areas in partnership with Northumberland County to advocate for crossing times, pedestrian priority measures as appropriate, and sufficient accessibility for people of all ages and abilities.	Guideline, Process	Requires Investigation	Internal coordination	N/A	Moderate
9d.	The Municipality will continue to apply healthy built environment and universal design standards to inform review and commentary on development applications (e.g., site plan approval) prioritizing approaches that ensure safety and comfort specifically in those areas where there is an expectation of youth and senior populations.	Guideline, Process	Immediate	Internal Coordination	N/A	Low to Moderate

Table 30 // Summary of Ambitious Goal #9 Plan Recommendations

3.11 Ambitious Goal #10 – AT Integration

Integrating active transportation and recreation into day-to-day decision-making and partnerships



Proactive partnerships are critical for integrating active transportation into day-to-day decision-making in Trent Hills. By ensuring that Trent Hills is a proactive partner, the Municipality will be able to fully implement the recommendations set out as part of the other Ambitious Goals and embrace and appropriately prioritize active transportation in its future work.

While the previous goals and associated recommendations are all important aspects of the ATTP, the real value of the plan is what it builds and bring to life within the municipality. To ensure that the ATTP moves from plan to action, the planning recommendations associated with Ambitious Goal #10 seek to ensure that roles and responsibilities for implementation among internal staff and external partners are clearly defined, appropriate resources are pursued and employed, and there is ongoing accountability, monitoring, and assessment of the plan and its associated recommendations going forward.

It is important to note that for Ambitious Goal #10 there are no project recommendations that have been identified. as the purpose of this Ambitious goal is based on improving processes and practices.

Ambitious Goal #10 addresses the following users and uses…

Cyclists

Pedestrians

High endurance AT users

Seasonal AT Users

3.11.1 Plan Recommendations

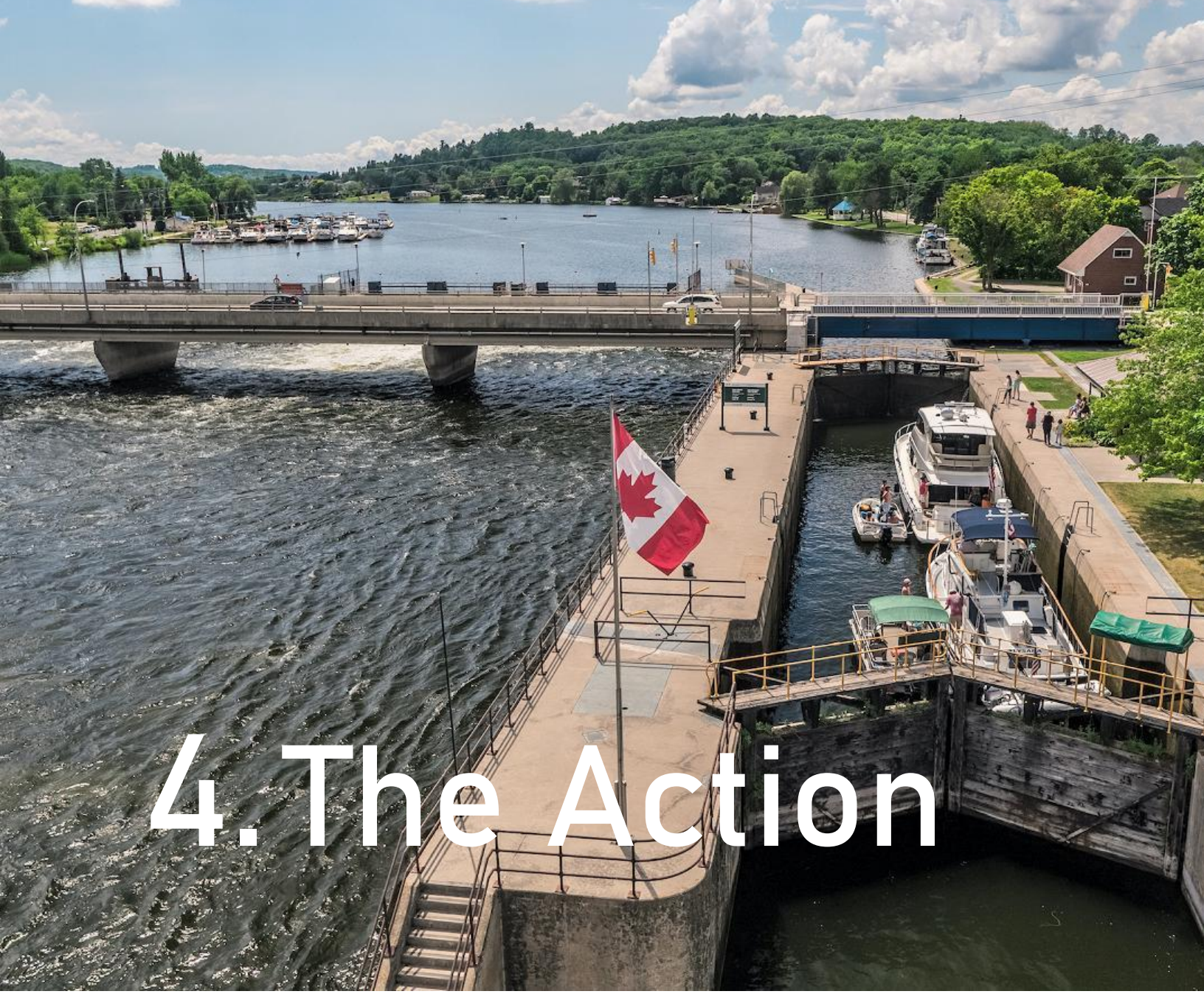
Ambitious Goal #10 seeks to integrate active transportation and recreation into day-to-day decision-making and partnerships in Trent Hills. The following plan recommendations seek to ensure the Municipality regularly tracks its progress towards an integrated active transportation network through the strengthening of its planning framework.

	Recommendation	*Type*	*Timeline*	*Lead*	*Partner*	*Resource*
10a	Staff from various Municipal departments will coordinate the implementation of ATTP recommendations based on the roles and responsibilities outlined within the ATTP.	Implementation, Process	Immediate	Internal Coordination	N/A	Low
10b	Municipal staff will co-create an annual report to Council on progress made in the implementation of the ATTP and to present the intended projects and recommendations that will be the focus for the following year.	Implementation, Process	Immediate	Internal Coordination	N/A	Low
10c	The proposed phasing identified within the ATTP is to be used to inform annual budget allocation and decision-making regarding the project and plan recommendations that are to be pursued	Implementation	Immediate	Internal Coordination	N/A	Low to Moderate
10d	The municipality is to adopt an annual budget of $25,000 to support the implementation of the ATTP, with an increase of $10,000 each year. This budget allocation should be reviewed after 5 years. These funds are in addition to AT projects that would be implemented as part of wider municipal capital projects.	Implementation	Immediate	Internal Coordination	N/A	Moderate
10e	Where possible external funding sources should be explored annually to determine if there are opportunities to supplement municipal funding for the ATTP	Implementation	Immediate	External	Depending on funding streams	Low

	Recommendation	Type	Timeline	Lead	Partner	Resource
10f	The Municipality is to review the mandate and terms of reference for both the Community Development Advisory Committee and Accessibility Advisory Committee to ensure ongoing discussion regarding and support for the implementation of the ATTP.	Implementation, Process	Requires Investigation	External	CDAC & AAC	Moderate
10g	The management tools provided within the ATTP are intended to be used as a means of coordinating the management of implementation, including updating relevant information and communicating across municipal departments.	Program, Implementation, Process	Immediate	Internal Coordination	N/A	Moderate
10h	Municipal staff will coordinate counts of active transportation users and at key locations and analyze data to determine the use of facilities, ongoing trends, and need for future facility and crossing improvements.	Program	Alternate Timing	Internal led by Bylaw Enforcement	Internal coordination – draw upon efforts of volunteers as appropriate	Moderate to High

Table 31 // Summary of Ambitious Goal #10 Plan Recommendations

FOGORIG
BREWING
@FOGORIGBREW



4. The Action

The Trent Hills ATTP provides staff, stakeholders and decision-makers with tangible tools and tactics to support day-to-day decision-making and future planning and design processes. The plan aims to be realistic, adaptable, and appropriate for Trent Hills, while also reflecting the current municipal processes and protocols and supporting future changes to achieve long-term priorities and the ambitious goals of this plan. Chapter 4.0 provides a series of strategies that are intended to be used to support municipal decision-making and the implementation of the recommendations outlined in Chapter 3.0 of this plan.

Chapter 4.0 focuses on implementation, programming, maintenance / management, and funding which were all raised as major challenges throughout the project process. The intent of this chapter is to establish an action plan and a source of information to facilitate next steps. The information contained within this chapter is not intended to be prescriptive but provide a series of resources and references from which Municipal staff can draw upon.

4.1 Implementation Strategy

An implementation strategy takes into consideration the current capacity and practices of the Municipality and strategically provides recommended adaptations, enhancements, or improvements to ensure that the Municipality is positioned to support ongoing implementation of the ATTP.

The adoption of the ATTP is a first step in the Municipality's implementation journey; however, there must be long-term changes to the Municipality's processes and practices to fully achieve the plan's objectives. The information contained within the following sections has been developed to help support the adoption of these changes to internal policy and practice.

4.1.1 Process

Process refers to the typical next steps that each project recommendation will need to proceed towards design and construction. Not all projects are the same, but there is a core approach to next steps which can generally be used once the Municipality determines if a project should proceed. The process is consistent with the guidance provided within OTM Book 18 for Cycling Facilities, but can also be used for all forms of active transportation projects, including trail linkages.

Once the Municipality determines that a recommended project will proceed towards implementation, this process should be reviewed to determine which steps are considered applicable. For example, many of the recommended projects identified for Ambitious Goal #1 only include the implementation of regulatory or branded signage and wayfinding. For these projects, the Municipality may proceed with additional public and stakeholder consultation – especially Northumberland County who is a key partner – and field review to determine the appropriate placement of the signage, but detailed study, preliminary design, tender and construction would not be required.

Table 32 on the following page illustrates the eight-step process that has been identified as the basis for the necessary next steps as the Municipality proceeds with the ambitious goal project recommendations. The process is intended to be used as a guide for internal and external communication and coordination.

Step	Overview
Step 1. Planning	+ Review the ATTP project based on Municipal capital planning + Prepare a report to Council for information and / or endorsement, as appropriate
Step 2. Site Review	+ Undertake an additional review of the current site conditions + Collect specific site-specific condition information to inform project design
Step 3. Preliminary Design	+ Prepare a preliminary design concept based on the ATTP design recommendations found within chapter 3.0, and considering provincially and nationally accepted guidelines and standards
Step 4. Consultation	+ Present preliminary design concepts to resident and other stakeholders and solicit input + Engagement should be undertaken with residents within 1 km of the project location, as well as with any relevant committees or public agencies, e.g., public health + Public meetings are not necessary, but focus should be on effective communication and information gathering
Step 5. Detailed Design	+ Refine and prepare a detailed design concept of the preferred design solution, reflecting appropriate input received from the engagement activities undertaken as part of step 4
Step 6. Schedule	+ Identify the preferred project schedule + Identify funding sources and allocate budget + Undertake consultation to inform residents within 1 km radius and relevant stakeholders re: construction schedule
Step 7. Tender	+ Prepare and release public tender + Assess submissions and award to the successful candidate
Step 8. Construction	+ Construction administration and site inspection through to the completion of the project

Table 32 // Overview of Implementation Next Steps for Proposed Project Recommendations

The process and model outlined above is an applicable guideline for the projects identified within each ambitious goal of the ATTP.

While the Municipality is confident that a diverse and impactful list of projects has been identified, there is a desire for flexibility and adaptability through the planning and implementation process following the adoption of the plan. An implementation process must take into consideration the potential for additional opportunities that are identified following the completion of the ATTP.

This is most common for off-road trail projects, where there may be linkages on public or privately-owned lands and new trail linkages are identified based on new desire lines, demand, or land that was previously privately-owned, but has come under public ownership. Another relevant scenario is in the case of Ambitious Goal #5, which is focused on leveraging future growth and development opportunities.

For these locations, an additional series of steps – consistent with the level of detail used to review the ATTP plan recommendations – should be completed followed by implementation step 3 and onward in Table 32 above. Table 33 provides an overview of these initial steps and stages and a description of the work that is to be completed.

In addition, there are numerous new development areas which are slated for future residential and community growth, and specific projects in these areas may only come to light once proposals are in advanced stage of approval. As part of these future communities there should be consideration for and exploration of the inclusion of active and sustainable infrastructure linkages as part of the parkland dedication process or the design of the transportation system. In addition to the guidance provided through this plan on planning related policies, the process highlighted below (Table 33) should be used to identify the most appropriate application and inclusion of active transportation and trail infrastructure in these locations. The process used for these types of opportunities should be consistent with the Planning Act and typical land use planning frameworks.

Should a developer secure the necessary approvals to proceed with the Draft Plan of Subdivision or Condominium followed by site plan approval and then ultimately the building permit, the following should be considered. As part of the Draft Plan of Subdivision the developer (or supporting entities) would prepare a series of legal documents, including the location and width of streets, the identification of pedestrian and cycling facilities within the road right-of-way, and public facilities that could include but are not limited to trails within park space. The Site plan – as guided by the Provincial Site Plan Control Guide (as per Section 41 of the Planning Act) – provides additional levels of detail related to AT and trail elements within a development area, including access for pedestrians and other vehicles e.g. cyclists, walkways, landscaping, etc. The Site Plan is provided to the Municipality for review and approval by Council – unless that authority is otherwise provided to staff. The process and decision are facilitated by municipal staff and planning legislation and should be followed as such.

Step	Overview
Step 1. Background	+ Review relevant information regarding the location of the identified connection including information on land ownership, environmental impacts, or other contextual considerations that would impact feasibility.
Step 2. Site Visit	+ Undertake field review including one or two visits to document area conditions
Step 3. Identify Potential Improvement	+ Identify a preliminary route alignment (if a new trail or on-road AT linkage has been identified) + Identify if other improvements to the AT conditions would be appropriate e.g. staging areas, rest areas, etc.
Step 4. Confirm Project Details	+ Determine the appropriate type of facility or improvement. For trails refer to the trail classifications identified for Ambitious Goal #7 and for Cycling Infrastructure refer to Ontario Traffic Manual Book 18.
Step 5. Mark Improvement	+ Revisit the site to determine where and what may be needed in terms of the specific improvements
Step 6. Secure Land Needed	+ For those improvements where some of the lands are not currently owned by the Municipality, further exploration be made into the appropriate planning tools be used to secure the land as per the tools outlined in Section 4.1.5 of the ATTP + Confirm preferred approach
Step 7. Develop Work Plan	+ Prepare a work plan for the design of the program including municipal staff capacity, external partner capacity, materials / collateral, media and communication and other equipment. + Identify the preferred schedule + Identify funding sources and allocate budget

Table 33 // Overview of Implementation Next Steps for New Trail Opportunities identified following the ATTP

Unlike project recommendations, the plan recommendations speak to internal and external processes, practices and actions that are recommended to proceed with the implementation of the ATTP. Unlike project recommendations, plan recommendations are subject to internal processes and protocols that are determined by Municipal staff and other internal stakeholders. For the day-to-day Municipal process and implementation of this plan's recommendations, the Municipality is encouraged to utilize the existing processes and protocols that currently exist related to operational and strategic planning and annual budgeting.

Each recommendation is to be reviewed annually by the suggested Committee with leadership from Municipal staff. When the Municipality determines that it will proceed with a recommendation, an anticipated budget is to be included within the Municipal annual capital or operational budget process, with work proceeding in the next fiscal year. Municipal staff are encouraged to use reports to Council as a means of justifying future budget allocation and work undertaken to implement the ATTP goals and recommendations.

As per Section 4.2 of the plan, there are a series of education and outreach related strategies and tactics that are recommended for consideration by the Municipality. Education, outreach, and awareness are critical components of the ATTP's success and realization of the Municipality's ambitious goals. As opposed to providing specific recommendations, it was determined that the most appropriate approach would be to provide Municipal staff with alternatives and suggested processes based on best and comparable practices.

The Municipality is encouraged to take a community-based social marketing approach (outlined in Table 34 below) to tailor its education and outreach tactics to specific audiences and locations, and ultimately encourage and influence behaviour change. This approach aligns with Ambitious Goals #6 and #9 that make the commitment to prioritize vulnerable road users and support a greater degree of comfort and safety for active transportation and trail users.

Like the recommended and future potential project recommendations, a step-by-step process has been identified for the purposes of supporting the next steps associated with the education and outreach plan recommendations. As Municipal staff and their partners determine if and when to proceed with an educational or outreach initiative, this process is intended to be used to determine the appropriate audiences, the potential impacts and objectives, the preferred tactics, and the means of facilitating implementation.

Step	Overview
Step 1. Behaviour	+ Identify the behaviour that is intended to be influenced + Identify the desired outcome of the program
Step 2. Audiences	+ Identify the preferred audience(s) to be targeted, including assessment and consideration of socio-demographic groups and specific active transportation and/or trail users. + Confirm audiences based on the information contained within the ATTP and the engagement that was undertaken as part of the ATTP process
Step 3. Barriers	+ Identify potential limitations or barriers people face in adopting the desired behaviour, and position solutions or tactics relative to the program's goals and objectives.
Step 4. Placement	+ Determine a potential pilot location / approach for implementation and catchment for the initial release of materials / information or coordination of activity
Step 5. Work Plan	+ Prepare a work plan for the design of the program, including municipal staff allocation/capacity, external partnerships, communications materials, required equipment and evaluation tactics. + Identify the preferred program schedule / timeline + Identify the funding sources and allocate budget
Step 6. Implementation	+ Implement and coordinate the program over an initial 6 month to 1 year timeline
Step 7. Evaluation	+ Review and analyze metrics the determine success and lessons learned + Undertake engagement to gather input + Modify the implementation approach or pivot to alternate tactic implementation base on this information

Table 34 // Overview of Implementation Next Steps for Potential Programming Strategies

4.1.2 Coordination & Consultation

The development of the Trent Hills ATTP included coordination and collaboration between municipal staff, stakeholders, and decision-makers. As this is a master plan, consultation was undertaken community-wide, meaning that site specific consultation and engagement was not undertaken regarding specific recommended projects.

As per the implementation process outlined in Section 4.1.1, there is an expectation that as projects proceed and move forward to implementation that efforts be made to engage with community members, decision-makers, key stakeholders, and other interested parties to solicit their input, and refine and confirm next steps.

The ATTP's success will be achieved through future collaboration and coordination between municipal staff and decision-makers as well as with external partners and residents. The Municipality of Trent Hills values and prioritizes coordination and collaboration, and commits to using this approach as part of the ATTP's implementation. The Municipality also commits to ongoing communication regarding the status of ATTP implementation, progress on its recommendations, successes achieved, and challenges experienced.

The following are recommended roles, responsibilities and opportunities for consultation and coordination by group.

Municipal Staff

Municipal staff will be the leaders and champions responsible for the day-to-day implementation, and ongoing monitoring and management of the ATTP.

The roles and responsibilities of Municipal staff have been defined based on the experiences and expectations set out through the project process. The success of these roles hinges on the Municipality dedicating staff resources and capacity to the role of plan coordination, as per Recommendation 10c. This role could start with inter-departmental coordination and leadership by an existing staff member, and then expanded to a dedicated role once the Municipality has undertaken the first few years of implementation. There are numerous examples of Municipalities who have invested in a dedicated staff person that is responsible for the coordination and oversight of implementation. This role could have multiple components, including but not limited to:

+ Initiating meetings with internal staff from relevant departments to determine annual projects and budgets
+ Work with external agencies to facilitate partnerships and coordination
+ Seek external opportunities for funding and support
+ Establish meetings with key stakeholders and groups
+ Initiate policy changes or programming development
+ Prepare annual reporting and information gathering.

An overview of the proposed departmental roles and responsibilities is provided in Table 35. The information provided in the table is not meant to be prescriptive but is intended to guide the delegation of responsibilities and how various departments can work together. Once the ATTP has been adopted, the expectations regarding the roles and responsibilities that are outlined within the table should be continually communicated to all municipal departments, and confirmed based on assumed scope and capacity.

For continuity and efficiency, it is recommended that the Municipality continue to identify the role of the Community Development Manager as the lead for all ATTP related initiatives, in addition to the support of a part- or full-time dedicated staff person – as outlined above. The Community Development Manager would be responsible for all elements and aspects related to the overall coordination of roles and responsibilities both internally and externally.

Legislative Services	+ Primarily focused on corporate, administrative, and legislative functions + Could support in the coordination of council and committee presentations and the inclusion of ATTP updates on council agendas, with reports included as part of agenda packages

Planning & Development	Planning & Development
	+ Oversees planning initiatives to support growth and development.
	+ Could be responsible for:
	  + Updates to existing municipal policies and plans as per the directions provided in the ATTP report
	  + Review and coordination of development applications consistent with the design guidance and direction provided
	Building
	+ Ensures existing building, properties and new construction adhere to municipal, regional, and provincial standards and legislation.
	+ Could be responsible for:
	  + The update of municipal standards and guidelines based on the direction of the ATTP.
	  + Enforcing by-laws – both existing as well as future new – pertaining to trail and recreational facility use

Community Services	+ Responsible for the wellbeing of individuals and communities through the provision of services and infrastructure including open spaces and facilities, including but not limited to trails.
	+ Shall be responsible for:
	  + Leading the trails recommendations and directions from the ATTP
	  + Contribution to a combined annual report documenting recent work completed and next stages of work
	  + Identification of proposed projects as part of the annual budget process
	  + Identification of internal and external funding options and alternatives
	  + Coordination of the community grants program to provide additional funding for community projects
	  + Lead coordinator of stakeholder and agency input to advance strategic trail projects
	  + Undertaking special projects related to ATTP implementation
	  + Identification and coordination of AT and trail related programs as per the ATTP recommendations
	  + Ongoing collaboration with external agencies to implement the proposed ATTP projects and to monitor additional opportunities.
	  + Providing comments on projects led by Planning & Development and Roads & Urban Services to advance ATTP recommendations

Roads & Urban Services	+ Administration of construction, operation and maintenance of the physical infrastructure of the Municipality
	+ Shall be responsible for:
	  + Leading the on-road AT recommendations and directions from the ATTP
	  + Contribution to a combined annual report documenting the work completed to date and next stages of work
	  + Identification of proposed projects as part of the annual budget process
	  + Identification of internal and external funding options and alternatives
	  + Facilitate engagement on future engineering and public works projects
	  + Identify opportunities for EA projects and integration of AT issues
	  + Coordination with Northumberland County on capital project implementation
	  + Providing comments on Planning & Development projects to reflect the recommendations and content found within the ATTP

Fire Department	+ With an emergency response role, the Fire Department may serve as a champion for safe practices and where needed enforcement within the recreational areas including AT links and trail connections within parks and open space

Finance	+ Manages the finances of the Town including the creation of the annual capital and operating budget.
	+ Could be responsible for:
	  + Approving budget requests associated with the ATTP put forward on an annual basis, including both capital and operating funding
	  + Exploring and securing additional external funding as appropriate
	  + Integrating AT and trail related infrastructure (and supporting tools) into existing asset management practices and processes

Table 35 // Overview of ATTP Roles & Responsibilities to support Implementation

Decision Makers

The primary decision-makers within the Municipality of Trent Hills are the Mayor and members of Municipal Council, followed by staff in senior leadership roles, including but not limited to the CAO. Municipal decision-makers and senior leadership determine whether projects identified within the ATTP move forward to implementation. As per Recommendation 10c, Municipal staff are to provide updates and reports to Council on implementation progress, with Council being responsible for approving the requested budget to support capital and operational costs.

In addition to this formal approval role, there may be future opportunities for consultation and education in the form of Council or senior leadership workshops if it is deemed to be appropriate or would benefit the progress of approvals related to the ATTP. These supplemental engagement opportunities would be coordinated by the ATTP implementation lead for the Municipality.

Committee Members

The Municipality of Trent Hills has several committees and advisory bodies, each with its own purpose and mandate, which dictates their involvement in municipal-related matters. There are a total of three committees to Council which formally provide guidance on matters related to municipal interest. They are the Heritage Advisory Committee, the Accessibility Advisory Committee, and the Community Development Advisory Committee.

For the purposes of the Trent Hills ATTP, staff and the consultant team worked with the Community Development Advisory Committee, which provided invaluable input to the project process and outcomes. Staff should continue to work with the Community Development Advisory Committee as a source of input and guidance on the implementation of the ATTP. Recommendation 10c notes that a dedicated group be the venue for future decision-making regarding the implementation of the ATTP be identified. It is recommended that the Development Advisory Committee fill this role. Additionally, the following guidance is provided for the Municipality's consideration:

+ Topics related to the ATTP should be included as ongoing items on the committee agenda, including updates on work completed, upcoming projects, and ideas for new initiatives.
+ A minimum of two (2) meetings annually should include additional external stakeholders e.g. Ontario by Bike, Northumberland County, etc.
+ A report should be created and provided to Council by the committee (through staff) on a regular basis, providing an update on the status of the ATTP and plans for next steps
+ Facilitate opportunities for public outreach and education with community members and interested parties regarding matters related to AT and trails
+ Consider the establishment of a sub-committee focusing specifically on trails and active transportation that would provide focused direction in this area.

Agency Partners

Another important stakeholder group in the implementation of the ATTP are partner agencies. These agencies have authority and jurisdiction over some of the lands and facilities associated with improvements identified in the ATTP, so it is important to continually monitor, maintain and strengthen these relationships with these groups.

As part of the ATTP implementation process, a number of these stakeholders and agencies have been contacted and communicated with. There is an awareness of the recommendations among these groups; however, further conversations are required to ensure that there is ongoing coordination, collaboration and communication between the various agency representatives and Municipal staff.

A summary of potential agency partners and their expected roles in relation to ATTP implementation is included in Table 36.

Eastern Ontario Trails Alliance	+ Coordination regarding the implementation of project recommendations under ambitious goal #8 + Ongoing conversations about maintenance efforts and funding in support of future TCT work + Outreach to be undertaken at least once per year through the existing model of Council participation, with additional strategic outreach directly with the EOTA executive director as appropriate.
Northumberland County	+ Coordination re: the implementation of strategic on-road linkages as per the County TMP and Municipal ATMP, as well as county land-use and infrastructure projects + Coordination of communication initiatives based on wider tourism and economic development priorities and opportunities + Suggestion to have outreach/meetings at least once per year
Local School Boards	+ Coordination/support for trail supportive programs and initiatives specifically targeted at youth + Permissions for new trail connections as landowner dependent on project location + Outreach as appropriate, depending on the initiative and its proximity to schools or in relation to youth/students
Conservation Authorities	+ Strategic partnerships for trail related projects that are on or adjacent to CA lands + Approvals may be required depending on potential impact of project + Coordination of communication information regarding recreation and trail opportunities + Outreach suggested through the associated committee at least once or twice a year
HKPR District Health Unit	+ Partner as it relates to education and outreach programming initiatives. + May provide additional support related to justification for future trial project for Council and other decision-makers + Outreach at once or twice per year, potentially through the committee
Ontario Provincial Police	+ Strategic enforcement beyond municipal enforcement practices =for trail safety as well as roadway safety concerns + Safety related education and outreach partner + Outreach should be done at least once per year
Ministry of Transportation Ontario	+ Addressing issues where trails or active transportation routes meet roads/highways under provincial jurisdiction + Providing support for road safety and cycling + Outreach as appropriate, depending on the recommended project
Surrounding Municipalities	+ Coordination of trail linkages and AT connections that cross-boundaries, as appropriate to determine phasing and potential alignment of work (mostly related to projects associated with ambitious goal #1, inter-municipal connecting links) + Outreach should be undertaken at least once per year

Table 36 // Summary of Trent Hills Partner Opportunities and Expectations

Local Interest Groups

Local interest groups are organized entities that have a vested interest in the outcomes and the progress of active transportation and trail-related initiatives within the Municipality of Trent Hills and sometimes beyond – depending on their jurisdiction. As part of the development of the ATTP, the following interest groups were identified and engaged, where possible.

- Hike Canada & Ontario
- Ontario Cycling Association
- Ontario by Bike
- Snowshoe Canada
- Trail Running Canada
- Share the Road Cycling Coalition
- Ontario Trails Council
- Bike Action Trent Hills

The Municipality is encouraged to continue to monitor the involvement – both existing and potential – of these interest groups to determine where it would be appropriate and helpful to collaborate and coordinate with them on ATTP related initiatives.

First Nations & Indigenous Communities

As part of the master planning process, Indigenous and First Nations were contacted regarding the opportunity to provide input to the planning process. No input was received nor was follow-up provided.

Indigenous and First Nations engagement is not required for an active transportation and trails master plan; however, considering the geography of the Municipality of Trent Hills and the role of trails and public space relative to traditional land and rights holders, it would be the recommendation of this plan to ensure the Indigenous and First Nations be part of the ongoing conversations and next steps associated with the ATTP implementation.

The Municipality should continue to explore opportunities to work with local First Nations, including Alderville, Hiawatha and Curve Lake, and leverage the Municipality's trail and active transportation portfolio as an opportunity for building relationships, trust, and reconciliation. This can be done in a number of ways:

- The utilization of trails as a space of traditional education and history sharing.
- The inclusion of signage and wayfinding honouring Indigenous peoples in Ontario, and specifically within the area in and around Trent Hills.
- The dedication of specific trails to local First Nations or Indigenous groups.
- The planting of traditional Indigenous plants, similar to the Indigenous Plant Medicines Trail found within the Royal Botanical Gardens in Burlington, ON.
- The design of trails using traditional practices, with the preservation and encouragement of restoration within trail construction and maintenance practices.

- Employing / working with First Nations and Indigenous groups to support in the design and construction of trails and future educational offerings.

While these suggestions are specific to the ATTP, the Municipality is also encouraged to find opportunities whereby the voices and experiences of First Nations and Indigenous peoples are expressed. As a commitment to ongoing truth and reconciliation, these perspectives can be integrated into municipal projects and practices beyond the statutory and regulatory requirements.

Members of the Public

Members of the public are encouraged to participate in municipal active transportation and trails initiatives. As these projects proceed through to implementation, there will be opportunities for more localized outreach and engagement through ongoing and project-specific consultation efforts undertaken by the Municipality.

Engagement tools and tactics should be identified based on the priorities, objectives, and any statutory requirements of the project. They could include design charettes, public input sessions, open houses, or presentations (among others). In addition, less formal outreach should continue to be undertaken to generate awareness and interest, and to seek increased volunteer support for active transportation and trails.

Bike Action Trent Hills has also undertaken several community and public facing engagement and outreach activities which have generated interest and involvement by community members. The group continues to seek external funding opportunities to enhance these efforts, and the Municipality should continue to support them in this work

The Municipality should find every opportunity, whether through their own leadership or as a partner, to advance the series of recommended educational initiatives as outlined in Section 4.2 of the master plan.

4.1.3 Policy & Approvals

The Trent Hills ATTP is unique in how the Municipality is planning to embark on a series of efforts to change the way in which planning is done around active transportation and trail provision across Trent Hills.

As documented earlier in the report, a comprehensive review of existing policies and plans was undertaken to determine the degree of support for trails and active transportation within the current policy context. While there was some degree of support – primarily at the County and Provincial Level – there were some clear improvements and enhancements that could be made to municipal policy to provide staff with the tools to be able to facilitate change.

Similarly, as the Municipality proceeds with the implementation of the ATTP, there will be specific planning and process approvals which will be required for projects to move forward. These approvals are part of legislated documents and are required for certain types of projects – depending on project cost, location and context or the jurisdiction under which the project is found.

As part the development of the implementation strategy, a series of suggested policy changes were identified and provided to Municipal staff for consideration. These policy changes are recommended to be used to inform policy and plan updates, as well as the development of new plans and policies. In addition, approval requirements have been identified for a greater degree of transparency as to what will be required when a project moves from planning through to implementation stages. The details are provided on the following pages.

Policy

As part of the ATTP, a series of ambitious goals have been established as the foundation for master plan recommendations and suggested Municipal actions. Policies are one of the core elements of the "plan recommendations." There are a series of plan recommendations which speak specifically to the development and adoption of supporting policies with the intent of achieving the wider goals, objectives, and priorities of the Municipality.

A comprehensive memo outlining the suggested policy changes has been prepared and shared with Municipal staff to support the implementation of the ATTP. More specifically, the Ambitious Goal recommendations that are addressed through the document include:

- #2a. Policies and by-laws will be reviewed and amended, as needed, to clarify the role of micromobility
- #2c. Consideration should be given to the strategic expansion of alternate mode options
- #3c. To accommodate future growth potential, municipal Zoning by-laws are to be adapted.
- #4a. Municipal policies are to be reviewed and amended
- #5b. Upcoming updates to the Trent Hills Official Plan, and associated Zoning by-law, will incorporate ATTP recommendations
- #9a. At the time that the Municipality reviews bylaws and policies, there will be an exploration of future opportunities to create or improve policies, programs.

The following is a summary of some of the highlights from the memo that was prepared and submitted to Municipal staff as part of the ATTP process.

Agency	Role
Provincial Policy	+ Continued monitoring of the evolution of Provincial Policy within Ontario + Appropriate consideration and inclusion of policy directions within the Trent Hills context within the Official Plan and other appropriate municipal policies.
Municipal Policy & Planning	+ Update and / or amend the Campbellford / Seymour / Percy / Hastings (Trent Hills) Official Plan (2000) as part of a comprehensive Municipal review + The Official Plan should reflect – where appropriate – the recommendations of the ATTP, including relevant reference to proposed projects and policies that encourage active forms of transportation
2003 Recreational Master Plan	+ Considering the date of adoption and timeline, the Municipality is encouraged to undertake a comprehensive review of the plan including additional consideration for recreational trails which would incorporate / advance the recommendations (where appropriate) from the ATTP
Zoning By-law (No.2010-105)	+ Inclusion of the suggested by-law provisions / amendments as part of an update to the Zoning By-law based on best and comparable practices from other municipalities within Ontario
New Plan Development	+ Where possible, consideration should be given to developing new policies, plans, guidelines, and standards that provide the Municipality with sufficient direction on transportation-related matters, including but not limited to active transportation + Potential plans include a Municipality-wide Transportation Master Plan and Road Infrastructure Guidelines / Standards
Policy Considerations	+ Where there are potential policies and strategies that the Municipality wishes to include but are not able to do so at this time, some high-level policy considerations and directions have been provided. These policy considerations include e-bikes and micromobility, liability, new development areas, and traffic safety. + All policy considerations have an impact on existing municipal policies, guidelines and standards but could be incorporated into some of the new plan development suggestions

Table 37 // Suggested Policy & Plan Enhancements for Trent Hills

Approvals

For Ambitious Goal #7 there are a series of off-road linkages that are recommended for implementation. These project recommendations were identified based on information that was provided by the Municipality regarding publicly available or owned lands. As such, there is a relatively high degree of confidence that there would not be additional land acquisition or approvals by other agencies or entities with jurisdiction over the land.

That said, the plan aims to be as flexible and adaptable as possible, and there may be future trails identified which are located on lands that are not considered the responsibility of the Municipality of Trent Hills. As such, depending on the specific location of the proposed project recommendation, there may be certain land uses, land contexts, land ownership and conditions that require additional approvals or permits to be prepared and submitted prior to the construction of a trail.

Based on typical conditions and considerations within the Municipality of Trent Hills, there are three (3) potential reports and approvals that would need to be sought once a project proceeds through to implementation. The intent is for the Municipality to refer to this information and review / confirm the necessary approvals at such a time that the trail project proceeds beyond the planning stage.

Localized & Provincial Environmental Impact Study or Environmental Impact Report

If there is a proposed project within or adjacent to a significant natural area or natural feature within the Municipality which could have a potential adverse affect on natural areas, an environmental impact study (EIS) may need to be completed. Should it be determined that an EIS is required for a specific project, information should be provided in the study, including but not limited to: methodology, policy framework, field inventory, existing conditions, significance and sensitivity of natural features, impact analysis, and summary of recommendations, or defer to an alternate template / approach as identified by the Town.

Similarly, depending on the location and anticipated impact, a similar EIS may be required to be submitted to the Ministry of the Environment, Conservation and Parks. The content of this study would be developed based on the requirements set out by the Ministry and would be subject to approval by Ministry staff.

An environmental monitoring plan may also be required in support of the EIS. The monitoring plan would require an analysis of the future use of area by wildlife, a long-term management plan for invasive species, and an adaptive management plan to determine if mitigation can be effective in maintaining biodiversity. The need for the monitoring plan would be determined based on the scope and scale of the project.

Municipal Class Environmental Assessment Study

Under the Environmental Assessment Act, there are specific projects which require an Environmental Assessment to be undertaken. The Act applies to municipalities and typically pertains to large scale infrastructure projects. The rationale as to whether an EA would be required is typically determined based on cost thresholds. The Municipality is encouraged to use the master plan level costing included within the ATTP to determine which projects may be appropriate for an EA project, assuming that they would be completed as a stand-alone capital project and not a part of a larger Municipal infrastructure project.

Based on the description of projects noted within the MCEA requirements, some of the projects related to Ambitious Goal #6 (AAA cycling facilities) as well as Ambitious Goal #7 (recreational connections) may fall within the "construction or removal of sidewalk or multi-use pathway within existing or protected rights-of-way" which are considered pre-approved. However, for some of the more significant recommended projects that are found outside of the road right-of-way, the EA may not be required as it would be subject to the EIS noted above.

Environmental assessment studies may also be required for some of the more significant trail transition features, e.g., those consistent with item "#28. Construction of underpasses or overpasses for pedestrian, cycling, recreational or agricultural use."

Other Agencies

There are several other agencies that have jurisdiction over various components of the Municipality of Trent Hills. In the context of ATTP recommendations, approval may be required for recommendations that impact either Northumberland County or the local Conservation Authorities.

Due to the nature of many of the plan and project recommendations, it is likely that there will need to be ongoing coordination and collaboration with Northumberland County. More specifically, there are some recommended projects which are identified along County roadways – with most of the linkages identified along routes where the County has already implemented or is planning to implement AT routes / facilities. For these and any other projects identified under the County's jurisdiction, it is the recommendation of the ATTP that there be annual opportunities for coordination of capital projects and operational efforts i.e. programming and communication with County staff participating in meetings to determine opportunities to coordinate implementation efforts.

Work being done by the Municipality of Trent Hills within and around Conservation Authority lands must be in alignment with policies outlined within the Conservation Authority Act and the processes and protocols outlined in Ontario regulation 163/06, with additional oversight and input provided by Conservation Authority staff for development applications within or adjacent to natural areas. This primarily pertains to future residential-related development areas but could include trail or active transportation infrastructure depending on the context.

There are several instances where a permit may need to be submitted to the relevant local Conservation Authority. There are three (3) categories of services that a Conservation Authority can charge fees for, all of which are determined if the recommended work is being completed on Conservation Authority lands or if input / review is required based on the Planning Act.

Category 2 addresses municipal programs and services which would pertain to the new development areas identified as part of Ambitious Goal #4. Category 3 includes other programs and services including recreational activities and amenity maintenance as well as education and awareness. Project recommendations as per Ambitious Goal #7 recreational offerings as well as Plan recommendations related to programming and awareness may require some of these additional fees and services from the Conservation Authority.

As part of the permit process, the following steps are typically undertaken which the Municipality of Trent Hills would need to adhere too:

1. Pre-consultation – to clarify the expectations regarding the application as well as the timeline required for review.
2. Permit review process – a review and assessment of the application to determine if the work will affect the control of flooding, erosion, dynamic beaches, pollution, or the conservation of lands. Ultimately, the goal is to determine if the application meets the requirements of Ontario Regulation 163-06.
3. Complete permit application – which includes the completion of the application along with the applicable fees. It is up to Conservation Authority staff to determine if the application is deemed to be completed based on the degree of impact i.e. either a major or minor application. The timeline for review is determined based on the various categories of applications.
4. Hearing and appeals – should an application not meet the policy recommendations; it will be provided to the Conservation Authority's Board of Directors who will determine whether to approve or deny the application.

This work is not in addition to or separate to existing Municipal practice. It is being outlined in the ATTP for a greater degree of understanding regarding the necessary work that will need to be completed for select plan and project recommendations based on the lands upon which they are being implemented. This work would primarily be facilitated by the Municipality's existing Planning and Development services, with the potential for some involvement by Community Services / Parks and Recreation.

With more recent provincial directions, the role of Conservation Authorities continues to evolve. The information contained within the ATTP should be reviewed in the context of new or adapted policies that are released by the Province to determine the most appropriate direction or impact to future projects.

4.1.4 Implementation Tools

The implementation process includes the steps and stages that are intended to be undertaken once Municipal staff determine which plan and project recommendations will be pursued each year. A master plan of this nature is wide reaching and can be complex to coordinate. As part of the development of the ATTP, a precedent of coordination and collaboration between Municipal staff and stakeholders has been established. Not all staff or stakeholders will have the same roles and responsibilities, and it will be the responsibility of staff to proceed with coordination, information sharing, planning, design maintenance, management, evaluation, and educational effort as projects are implemented.

In addition to the implementation strategy, a detailed program, maintenance, and funding strategy have been prepared for the Municipality of Trent Hills. In addition to these strategies, implementation will be supported by a consistent and clear set of tools to inform future decision-making and communication. The following is an overview of these tools, which are intended to be adopted and utilized by Municipal staff across different departments – with the primary lead being the Municipality's Community Services department through the Community Developer Officer. Some of the following sections provide full details to support their application, while others provide a summary of the documents / materials that have been shared with the municipality.

Tool 01. GIS Database

All information pertaining to project recommendations for the Trent Hills ATTP including project location / alignment, proposed design solutions / facilities, proposed phasing and priority project identification have been included as part of a Geographic Information System (GIS) database. The database was developed based on the information provided by the Municipality of Trent Hills and acquired from other publicly available sources.

The GIS database has been provided to Municipal staff and is intended to be used as a tool to:

+ Monitor and manage the plan's implementation by updating relevant information within the database to reflect changes in conditions or status of recommended projects.
+ Establish programming and outreach materials, including Municipality-specific tourism based mapping and online resources.
+ An internal asset management tool which can be used to communicate municipal priorities and integrated with wider municipal services.
+ A communication tool with external partners, including but not limited to Northumberland County.

Tool 02. Management Spreadsheet

While GIS can be an effective asset management tool, not all practitioners who will be involved in the implementation of the ATTP will have access to or experience with this technology.

The information contained within this database is meant to be a resource to support project recommendation implementation. As such, a Microsoft Excel document has been developed that contains the same information as the GIS database, but in a format that can be accessed by a wider range of Municipal staff members and partners.

The management spreadsheet tool is intended to be used to:

- Facilitate a greater degree of coordination between a wide range of municipal staff members.
- Be easily adaptable to track and monitor the implementation of recommended projects.

Tool 03. Field Notes

Field investigation and documentation has been undertaken as part of the development of the ATTP, specifically as it relates to the Trans Canada Trail and other off-road project recommendations identified under Ambitious Goal #5 and #7.

Information collected during the field investigations, including photos, associated locations, and context-specific considerations were documented. In addition, a comprehensive desktop review of context specific considerations was prepared early in the ATTP process and incorporated into the GIS database and management spreadsheet. The information gathered through these reviews depict the current conditions that were considered at the time the ATTP was developed.

While it is acknowledged that the conditions will change over time, the condition summary / field notes can be used to:

- Better understand and communicate with internal and external partners how and why a decision was made.
- Inform future decision-making regarding the implementation of project recommendations as staff proceed with project implementation.
- Be used as a resource when developing communication tools, including graphics, for future engagement and outreach.

Tool 04. Trail Classification

Ambitious Goal #5 and #7 pertain to the design and implementation of new and improved recreational trail linkages within the Municipality of Trent Hills. The focus of these ambitious goals is to leverage the unique geographic, environmental, and natural features of Trent Hills along with the demand for safe and comfortable recreational opportunities. For each of the identified project recommendations under Ambitious Goal #5 and #7, there is an expectation that an appropriate trail design will be identified and implemented.

Trails are not intended to be a one-size-fits-all application. They are meant to be a series of experiences that can be used for different trip types, purposes, and experiences. However, it is helpful for municipalities to have a consistent set of design applications to guide decision-making regarding the type of trail that is expected as they proceed with the implementation of the recommended projects.

A proposed set of trail classifications was developed for the Municipality of Trent Hills, taking into consideration the surrounding context, the function of the trail, existing and / or anticipated users, and how the trail interacts with existing off and on-road linkages. There are a total of three (3) trail classification types, outlined both here and in Section 3.8.1.

A detailed description of each trail classification has been provided to the Municipality as a tool to inform the design of recommended trail projects or other future trail connections. The tool is not meant to be prescriptive, but used as the basis for decision-making and consistency in design, application, maintenance, and management.

Primary Trail (Type 1)

Trail Form
Single or Double Track

Width
4.0m width (typical), 3.0m minimum

Typical Distance
0-2.5km

Surface
- Hard surface
- May include concrete, coloured and patterned concrete to suit urban design.

Purpose
Showcase trail or spine trail providing for and attracting a variety of activities. Typically provides access to key destinations such as community centres, parks, key commercial areas, schools etc.

Function
Recreation, leisure, and active transportation commuting functions.

Experience
Suitable for Individuals of all Ages and Abilities with no trail experience needed.

User
Non-motorized active transportation use

Accessibility
Meets or exceeds minimum accessibility requirements.

Degree of Difficulty
Easy

Secondary Trail (Type 2)

Trail Form
Typically, Single Track

Width
1.0-1.5m typical width. Minimum of 0.25m for single track trails or in constrained locations

Typical Distance
0-5km

Surface
- Granular surface (i.e. limestone screenings, granite screenings)
- Granular A, clear stone, wood boardwalk in context specific locations

Purpose
Opportunities to experience parks, open spaces, and natural areas within proximity to major communities. Could provide access to on-road active transportation routes / facilities where appropriate or other niche AT opportunities such as waterways.

Function
Recreation and leisure with access to commuter-based functions

Experience
Suitable for Individuals of all Ages and Abilities with no trail experience needed.

User
Non-motorized specific/preferred uses

Accessibility
Meets accessibility requirements where feasible. Maintaining natural heritage values takes precedence.

Degree of Difficulty
Easy to Moderate

Tertiary Trail (Type 3)

Trail Form
Typically, Single Track

Width
1.0-2.0m (may be narrower in constrained locations such as limited property/parcel width, topographic and natural heritage, and natural hazard constraints)

Typical Distance
0-25km

Surface
- Natural surface (earthen, grass), woodchips
- Surface to be determined based on surrounding conditions

Purpose
Opportunities to experience nature and the rural areas within Municipal limits and to connect to key partner trail linkages e.g. Conservation Areas.

Function
Recreation and leisure typically for specific niche physical activities

Experience
Suitable for Individuals of all Ages and Abilities with no trail experience needed.

User
Non-motorized uses with some motorized use in select locations

Accessibility
May not meet accessibility requirements. Maintaining municipal control for public access and facilitating long-term trail network development are priorities.

Degree of Difficulty
Varies based on condition and trail type

Tool 05. Amenity Allocation & Trailhead Identification

The overall connectivity, continuity, comfort and safety of the active transportation and trails network in Trent Hills is a major priority and commitment. While the implementation of specific projects can provide significant value and impact on AT and trail users, their experience of the system and of the facilities will be enhanced through the implementation of AT and trail amenities. AT and trail amenities typically include the following:

- Vehicle parking
- Parking for bicycles and other active uses
- Benches and/or rest areas
- Waste bins
- Washrooms
- Gates/barriers
- Water fountains/taps
- Loading zones
- Shelter
- Drop off areas.
- Plantings
- Supplementary signage
- Lighting

The implementation of amenities can be a key factor to attract and enhance the experience of trail users. The design, placement, frequency, and accessibility of amenities heavily influence the comfort levels and perceived safety of the facility by individual users. When amenities are strategically combined, they are typically referred to as trailheads or staging areas.

The difference in these two design treatments is the scale. Trailheads are a developed site that provides access to one or more trails (normally smaller than staging areas) or other active transportation facilities, and typically includes space allocation for parking. Trailheads typically contain identification for the AT or trail system with directional signage and waste bins and basic toilets. Specialized features are not common.

The applicability of amenities is determined based on the intended users and the degree to which the staging area or trailhead is expected to be used. For example, if there is expected to be a high degree of use at the trailhead and a wide range of users, the location will likely require a more robust design treatment with a wider range of amenity types and more frequent maintenance.

Within Trent Hills, there are some trailheads and staging areas that have been implemented; primarily at select start and end points of the Trans Canada Trail or within the urban and built-up areas that represent segments of the municipality's trail system. For Ambitious Goal #5 and #7, enhancements are expected for trail crossings, signage, and prominently located trailheads.

In addition, Ambitious Goal #9 speaks to the prioritization of vulnerable road users, including youth and seniors. Considering the unique demographic nature of these groups and some of their physical and non-physical needs, the implementation of amenities can be one of the key contributing interventions which influences the way in which they experience or are encouraged to experience space through active forms of transportation.

To support future decision-making by the Municipality, four (4) types of trailheads have been identified for consideration and application. These are summarized in the following table (Table 38) with recommended amenities for each trailhead type, as well as high-level budgetary assumptions. Each trailhead type considers the recommended classifications of associated trails, as well as adjacent cycling and pedestrian infrastructure.

Amenity Type	Level 1		Level 2		Level 3		Level 4	
	Yes	No	Yes	No	Yes	No	Yes	No
Parking	X		X		X		X	
Rest Area	X		X		X		X	
Lighting	X		X		X		X	
Signage	X			X	X		X	
Drop-off Area		X		X		X	X	
Garbage		X	X		X		X	
Washrooms		X		X	X		X	
Gates / Barriers		X		X	X		X	
Loading Zones		X		X		X	TBD	
Shelter		X		X		X	TBD	
Potable Water		X		X		X	X	
Cost	$		$		$$		$$$	

Table 38 // Suggested Amenity Identification & Allocation Tool

Tool 06. Walkability Audit

As per Ambitious Goal #3 Plan Recommendation 3a, the Municipality is encouraged to use a walkability audit tool in targeted areas "within the built-up areas of the municipality on a regular to regularly identify and update walkability needs."

The proposed walkability audit tool is intended to enable the Municipality of Trent Hills to identify a various repairs, modifications, and enhancements that can improve the walkability of a particular street, public space, or community area. This includes ensuring that pedestrian infrastructure is well-maintained and up to date, which is critical to the long-term success of implementing the ATTP.

The tool is a way for the Municipality to take a proactive approach to monitoring, evaluating, and improving pedestrian facilities, rather than reactively responding to specific requests as they arise. It can be worthwhile to conduct audits in the same location at various times of day and at different seasons during the year. The frequency at which the audits are undertaken are to be determined by the Municipality, but could benefit from being completed at least one or two times per year depending on capacity of staff and community stakeholders / committee members.

This audit is designed to be flexible and can be used by a wide range of people of various ages, abilities, and levels of knowledge, including municipal staff members, members of stakeholder groups, local volunteers, and other members of the public. In addition to providing input to the municipality on walkability conditions and potential improvements, the audits can also be a way to engage specific stakeholders and demographics who may have unique perspectives on walkability, such as seniors, children and youth, or people with disabilities.

A detailed memo outlining the approach and the tool has been prepared and provided to Municipal staff. The tool documents observations, key locations for suggested improvements, and recommended strategies or interventions to address the identified issues. Details included in the tool are as follows:

Sidewalk Conditions

- Are there continuous sidewalks present?
- Are there any problems with the sidewalk conditions?
- Is there a buffer between the sidewalk and the roadway?

Crosswalks and intersections

- Is there a need for additional safe pedestrian crossings?
- Are existing crossings adequate?

Facilities and Comfort

- Would the route benefit from additional amenities?
- Are there any sources of excessive noise or poor air quality along the route?
- Is there traffic or driver behaviour along the route that makes walking feel unsafe or unpleasant?

Tool 07. Trail Inspection Tool

Effective maintenance and management are critical to the long-term success and use of the active transportation and trails within the Municipality of Trent Hills. A more detailed overview of the maintenance practices for trail and active transportation infrastructure can be found in the maintenance strategy provided in Section 4.3 of this plan.

In addition to the maintenance practices themselves, it is also necessary to ensure that there is sufficient documentation of the maintenance that is done to record the work completed and ensure that maintenance issues are highlighted, and a course of action is created to address those issues. This is part of a wider and more robust risk management approach for the Municipality as new infrastructure and new municipal maintenance practices are introduced.

It is the expectation that Municipal staff will be responsible for the maintenance of the infrastructure associated with the trail and active transportation system, including existing infrastructure and routing found under the Municipality's jurisdiction and those that are identified as future project recommendations through the ATTP.

To support these efforts, a trail inspection template has been provided for consideration and application. The inspection form is an adaptation of the template used by the Bruce Trail Conservancy. A more local example that can be drawn upon is the Ganaraska Hiking Trail Maintenance and Status Form. For more information, please refer to the following resource: https://ganaraska-hiking-trail.org/wp-content/uploads/2022/05/Trail-Maintenance-Status-Report.pdf.

The intent is to use this template (and adapt it as needed) to undertake the evaluation of off-road trail linkages such as the Trans Canada Trail or the Hastings Hub Trail at least 1-2 times per year, reflecting changes in the seasonal patterns. More specific details on the frequency, timing, and approach to those under review and the subsequent maintenance practices are provided in Section 4.3.

In addition, this tool could easily be adapted for on-road active transportation facilities, including but not limited to the Rural Touring Routes (Ambitious Goal #1) and the AAA Facilities (Ambitious Goal #6). Most of the considerations still apply, but a note on the type of facility would be appropriate in the initial section of the form.

Municipality of Trent Hills Trail Status Report Form

Staff Member Name	Tel / email	Signature	Date Submitted	Trail Covered, Total km & Date Inspected
Town Director	Tel / email	Signature	Date Received	Trail Section

	Details	Km marking	Work Done	Help Needed	Additional Effort
1	Garbage, vandalism				
2	Corridor needs upgrade to new trail classification (see s. 2.3.1)				
3	Needs mowing (M), brush cutting (b), manual weed whacker (w)				
4	Tree / brush obstruction and hazard (fallen trees, dead limbs, leaning trees, etc.)				
5	Other natural hazards (large holes, roots, steep slopes)				
6	Unsafe structures such as bridges, boardwalks, fences / wires				
7	Wet areas causing detours / inconvenience				
8	Blazes overgrown, need repaint, old signage / markings not removed, Unused trail not blocked				
9	Environmental – erosion, etc.				
10	Signs (missing, misleading, or needed)				
11	Major changes by property owner (dependent on owner and access)				

Bridge / Stair / Boardwalk Inspection. If there are any such structures on or along this segment of trail, please inspect for safety e.g. damage or missing deck boards, railings, support beams; signs of rot in structure; issues with signage or wayfinding, damaged amenities, insecure foundations e.g. resulting in wobble or tilting; erosion of surroundings likely to lead to loss of stability; flood damage; etc. Please review the options and check the box that applies.

☐ There is no structure of this nature

☐ Problems noted using template below

☐ Structures inspected and found to be sound

Issues noted:	
Location of issues:	
Photo of issue provided?	

Are there any other observations that should be documented? Are there necessary changes that need to be made to the routing, are there any unauthorized users, any issues with trail user conflict, suggested improvements (general). Please expand using the text box below.

Tool 08. Implementation Assessment

The phasing and prioritization of project recommendations was influenced and impacted by the degree of feasibility of each project. This implementation assessment considers the ease at which the project could be implemented considering the context, the impact, the cost relative to the design treatment and the overall community needs and impact along with planned or anticipated capital projects and areas of growth.

The assessment, combined with a review of the project jurisdiction (ownership), provided an overall recommendation for implementation. In the context of project recommendations, a proposed phase (short, medium, or long-term) was identified for each project, whereas for plan recommendations there are three categories of prioritization which indicate the general timeline of when the recommendation could be implemented (immediate, alternate timing or requires investigation).

Should a project opportunity arise that was not previously identified as part of the ATTP, every effort should be made to determine either the proposed phase for the proposed project alignment or the timing for initiation. A matrix of considerations was developed which is to be used to complete assessments to determine high-level recommendations for implementation coordination.

Control	Work Needed		
	High complexity	Moderate complexity	Low Complexity
The degree of influence the municipality has over the recommendation	There are a considerable number of issues or items that need to be addressed through future studies	Some additional work may need to be completed prior to implementation	There are minimal to no issues that need to be addressed prior to design and construction
Municipality Sole responsibility of Trent Hills including roles or ownership			
Municipal Partner Responsibility of a partner of Trent Hills (public agency)			
Other Responsibility of a private entity that isn't a frequent partner			

Project recommendations	Long term 20+ years	Medium-term 11-20 years	Short-term 0-10 years
Plan recommendations	Requires Investigation	Alternate Timing	Immediate

Tool 09. Acquisition Options

While most of the project recommendations are found on lands that are publicly owned, there could potentially be some future linkages located on privately owned lands or future changes in ownership which impact coordination and implementation. Should there be off-road recreational linkages i.e. trails (consistent with the approach taken for Ambitious Goal #7) identified in the future on privately owned lands, there are a series of options for how the Municipality can address appropriately integrating those linkages into the wider system. The following is a summary of some of the alternatives that are available to the Municipality of Trent Hills.

The information below was developed based on several resources and references, including the land acquisition strategies identified in the Town of Aurora Trails Master Plan (2011), Rails to Trails Conservancy Acquisition Strategy, Capital Region District Regional Parks Land Acquisition Strategy, among others. The information contained within this table should be reviewed and adapted, as needed, to ensure that the resources and references remain relevant as the Municipality proceeds with the implementation of the ATTP.

Purchase $$$

Purchase by non-profit or public entity at fair market value.

+ Cost recovery through levies or charges to the benefitting owners
+ Municipal Act

Buy $$$

Legal document noting the intent to purchase.

+ Document outlines required price, applicable period, with a feed (~10% of land value)
+ Good option if funds need to be raised to cover the cost

Easement $

Permission of use to public entity with private owner retaining ownership and control of lands

+ Differing rights and responsibilities for the private landowner and public entity
+ Preference for a long-term agreement to avoid discontinuity.
+ Transfer of liability with formal agreement which would require a separate document to be created

Conservation Easement $

Agreement that restricts uses for conservation purposes.

+ Registration on title binds both current and future landowners
+ Requires ongoing monitoring and consideration of public access

Donation $

Rented from the owner for a set amount of time to allow for trail use.

+ Text credits may be available for land donated for conservation purposes.
+ Lands must meet federal tax rules for donation to quality

Land Exchange. $$

The trading of lands to facilitate trail connectivity.

+ Net differences in value settled at time of agreement / exchange.
+ Guided through the Municipal Act

Parkland Dedication. $

Lands provided to the municipality from developers.

+ Undertaken as part of development applications and approvals.
+ Typically pertaining to recreation lands but may also be natural areas.
+ Planning Act limitations to be reviewed

Land Trust $

Not for profit organizations focused on conservation.

+ Linkage incorporated into other trail systems which may have use restrictions that are not consistent with those of the Municipality.
+ Would be applicable to local organizations or affiliated agencies

Lease. $

Provides exclusive rights to use the land for a specific term and cost.

+ Licenses allow for permission to use a property for a purpose but does not bind the owner.
+ Agreement must be in place and renewed

Incentives. $

Tax of management incentives to encourage trails use along lands.

+ Agreement to be established with landowner based on expected use.
+ Difficult to monitor compliance of trail

Private Stewardship. $

Private landowner takes care of linkage and protection.

+ Voluntary and can build trust with residents.
+ Not permanent and control / outcome is dictated by the private landowner.
+ Would require ongoing monitoring

4.2 Programming Strategy

To ensure that people know about and take advantage of the trails and AT infrastructure that is built, programs that encourage and educate about safe and appropriate use of these facilities is an often forgotten but important and cost-effective way to increase active travel for recreational and utilitarian purposes. Many of our current societal norms in North America often assume that motorized travel is the best way to get around, resulting in people ignoring or forgetting that active trips can be much more enjoyable, affordable, efficient, and practical ways to get around.

Early in the process of developing the ATTP, a review of existing programs in Trent Hills was conducted, the results of which are presented in Section 1.2. As shown through this review, Trent Hills is fortunate to benefit from a range of programs led by the Municipality itself, Northumberland County, as well as various community partners.

Bike Action Trent Hills is a local group who has considerably advanced active transportation in the Municipality, organizing a variety of local events, working with community partners, and successfully securing funding to support programming; these local leaders should be leveraged and supported by the Municipality to continue to advance active transportation programming.

The Municipality of Trent Hills seeks to build upon these successes through the development and implementation of an adaptable but multi-faceted programming strategy. The programming strategy focuses on identifying and providing guidance around tactics and initiatives that aim to change people's habits by tapping into people's everyday experiences, needs, and desires. It also aims to address non-physical barriers, such as lack of skills or knowledge, difficulty carrying items, access to bike repair and maintenance services, or false perceptions about the difficulty of trips on foot or on bike, to name a few.

Research has shown that the most effective behaviour change programming goes beyond typical marketing or communications tactics, but instead takes a more in-depth community-based social marketing (CBSM) approach that emphasizes personal contact among community members, engages people directly in the desired behaviours, and focuses on identifying and removing barriers people face.

The plan recommendation programming process outlined in Section 4.1 above mirrors this type of approach, and provides guidance as to how the Municipality could undertake this type of work. The following sections provide an overview of potential tactics which are intended to be considered by Municipal staff for implementation in consultation with external stakeholders, partners, and committee members.

4.2.1 Plan Recommendation Initiatives

Throughout the various ambitious goals that were identified as part of the ATTP, a series of plan recommendations were identified which focus on specific programming options and alternatives. As the Municipality proceeds with their implementation, information to guide next steps for each recommendation is provided below. Each initiative is referenced by [(Ambitious Goal #) + (Recommendation Letter)].

Initiative 1. Bicycle-Friendly Business Recommendation 1d

The Bicycle Friendly Business program is a province-wide initiative coordinated by the Ontario By Bike Network which promotes and offers information on cycling in Ontario to people looking for cycling tourism experiences through its website, printed guide, and other outreach and marketing materials and activities. The program helps businesses reach the cycling tourism market, and offers training workshops, a participant toolkit, and other supportive resources. Businesses can participate in the program for free by registering their business and meeting a few basic certification criteria. Trent Hills already has approximately 20 local businesses that are part of the program. The Municipality is encouraged to follow the lead of other jurisdictions by helping to promote the program, facilitating the application process for businesses, offering incentives to businesses who join, and to help promote local bicycle friendly businesses through municipal tourism and economic development initiatives.

Initiative 2. Bicycle Share / Rental Recommendation 2f

Services to offer bicycles for rent are a common service in cities and towns across North America. Hourly or daily rentals have been commonly used in areas with significant bike tourism for many years. Some of these have been for-profit programs, while others have been led by public entities such as libraries or other community organizations.

More recently, bike sharing systems have become more common, as technology has made it possible to create an entirely self-service, turnkey system consisting of bicycles spread out over a large area – either at docks or entirely dockless –offering very short-term rentals calculated by the minute. While these bike share systems have most commonly been implemented in large, dense urban centres, new technology has made it more feasible to establish small-scale bike share services, as has been done in smaller Ontario communities such as Fenelon Falls, Bobcaygeon, and Haliburton.

As the Trent Hills Chamber of Commerce has already taken steps to establish a canoe and kayak rental program in Campbellford based out of the Visitor Centre, it makes sense in the short term to leverage this and expand it to include a fleet of bicycles to rent. Depending on the uptake and success of such a service, it can be expanded to other communities via a similar or modified model, either led by the Municipality, or through partnerships with other organizations such as the local public library (that is already involved in lending out bicycle repair kits), local businesses, or other organizations.

Initiative 03. Active and Safe Routes to School Program
Recommendation 09b

The benefits of kids walking and biking to school are well-documented, including improved physical and mental health outcomes, better academic performance, safer streets, and reduced pollution and traffic. But in the last few decades across the county, more children are being driven to school, and fewer are getting the benefits of being physically active on their trips to and from school.

Active School Travel programs can help change these trends by building lifelong habits of safe walking and cycling among children and youth, and influencing parents as the decision-makers for family trips. The Municipality can support school active travel by leveraging relationships with relevant stakeholders such as local schools and boards, as well as provincial and national resources and programming, such as Ontario Active School Travel and EcoSchools Canada. The Municipality can also offer incentives to local schools that participate, by providing trail maps, active transportation information, and other incentives.

Programs such as an active school travel initiative would be ideal to support the achievement or fulfillment of Ambitious Goal #9 which focuses on youth and seniors and the protection and prioritization of our most vulnerable populations.

4.2.2 Other Tactics

Other tactics identified include potential initiatives which could be considered for implementation should the Municipality and its partners determine that there is sufficient interest, budget, and demand. The opportunities were identified based on input generated from the engagement sessions and activities undertaken as part of the ATTP's development, and have been detailed for the Municipality's consideration.

Promotional Information & Incentives

A big part of how successful the Municipality will be at attracting people to bike and walk will be how encouraged they feel and how much incentive there is to participate in the activities. The municipality is encouraged to purchase and distribute items that are both useful and reinforce messaging, such as bike bells, bike lights, or water bottles. These incentive items can include Municipal branding and web links or QR codes to relevant online information for cross-promotional opportunities with suggested communication tactics (see section 4.2.3 for more details).

Expand Existing Programs & Partnerships

As noted in the programming review detailed in Section 1.3.3, for a municipality of its size, Trent Hills has a solid foundation of programming in place that supports active transportation in a variety of ways. Expanded municipal support can help enhance these programs, provide stability to ensure they are continued regularly in future years, allow them to reach more people, and ensure they even more strongly support municipal goals.

As part of Section 4.1 there is a comprehensive overview of the suggested partners that the Municipal is encouraged to continue to coordinate and collaborate with. This approach to partnership and coordination will be valuable for expanded, enhanced or new opportunities for programming and outreach and ultimately behaviour change. The following is an overview of some of the suggested collaborations which the Municipality is encouraged to explore as part of future programming and outreach tactics.

+ Bike Action Trent Hills has recently accelerated the adoption of cycling locally by coordinating group rides, various skills workshops, along with other events and initiatives. The Municipality can help strengthen the efforts of Bike Action Trent Hills by potentially providing funding, incentives, or in-kind support.

+ The Trent Hills Public Library has already partnered with Bike Action Trent Hills to make bike maintenance kits available to the public for loan. Such a service could be expanded to loan other AT equipment, such as snowshoes, cross-country skis, or even bicycles, as has been done through other municipal libraries. Libraries are great places to hold local educational events on AT topics, and library branches can also support active transportation by incorporating relevant themes into their ongoing programs or book displays and can also support safe routes to school programs.

+ Ferris Provincial Park is uniquely situated near Campbellford, and already provides a significant trail system to support active recreation, and a Discovery program coordinated by park staff. The group Friends of Ferris supports the park, including through providing regular guided walks. In future years, the Municipality is encouraged to work with the park and Friends of Ferris to expand programs and activities, such as providing new trails for cycling, more winter activities such as groomed ski trails, and possibly also equipment rentals.

4.2.3 Communication

Beyond the tactics and initiatives that are pursued, the Municipality is encouraged to improve and enhance their overall approach to public and stakeholder communication as it relates to active transportation and trail offerings. Having reviewed best and comparable practices, the following are some potential communication efforts that the Municipality could pursue in tandem with education and outreach initiatives, or in the initial stages of ATTP implementation before external funding is secured. These alternatives are also intended to be reviewed by Municipal staff, committee members and partner stakeholders on an annual basis to determine potential work as well as document successes and lessons learned.

Online Resources & Tools

Currently, the information that exists regarding trails or active transportation routes are found on the Trent Hills Municipal page as part of Parks, Recreation and Community sub-page, the Trent Hills Tourism page and on the Northumberland County page. The Municipality has an interactive mapping tool, but it does not currently include information regarding trail or active transportation routing. In addition, the newly launched Parks and Facilities Search Tool includes some of the municipal trails when the term “trail” is used in the search but does not yield any results when the term “cycling” is used.

There is potential to improve these online interfaces and provide more comprehensive and up-to-date information and resources, including an illustration of the existing on and off-road trails and AT linkages based on the ATTP GIS database.

While there is more up-to-date information on the County’s page, the Municipality – for risk management and liability purposes – should consider accurate and timely updates to online information to ensure that there is appropriate awareness and documentation of what is available, maintained, and safe to use.

In addition, the overall Municipal trail page should be expanded, or an additional page created to address the active transportation linkages found on-road as well as the off-road trail routes. Any municipal page regarding trails and active transportation should strive to include information about key destinations and safe use of trails / AT, types of facilities that are anticipated, safe use and etiquette, user expectations and maintenance commitments.

This will be especially important as the Municipality proceeds with the implementation of the ATTP. To be useful, the page should be updated on a regular basis to ensure that all content is relevant, and to promote new projects and initiatives as they are implemented. Website content should be accompanied by complementary content and promotion through the Municipality’s social media channels and other avenues. The Town’s online content should also be coordinated with printed materials, to ensure that all information is consistent.

Printed Materials

While most people look online for information regarding active transportation and trail routes and opportunities, there is still a role for printed materials. Many people prefer print materials, and not everyone can equitably and reliably access the internet. Print materials can also be a useful way to get information directly into people's hands and in front of their eyes at in-person events or other outreach activities. These materials can also summarize and direct people to more detailed information available online.

Providing printed maps that illustrate the current trail and active transportation linkages found within the Municipality – including municipal, County, and other agency routes - is a good starting point for printed information. These hard copy maps should be updated every other year, at minimum, to reflect new projects shortly after they are built. These maps can include or be supplemented with separate flyers or brochures with information on topics such as safe trail practices, trail landmarks, local flora and fauna, ongoing programs, and upcoming events.

Trail Specific Municipal Branding

The ATTP included the development of a project-specific logo, which has been widely used for the promotion of the project and for active transportation and trail related initiatives. It is recommended that the Municipality build upon this concept to develop unique branding for Municipal AT and trail routes in tandem with regulatory signage. This will help make all associated features and marketing materials easily recognizable by the public.

This branding could also be supplemented by naming of routes to recognize important cultural, natural, or historical local features or people, to create recognizable destinations. This may be of interest in areas that have a particular connection with First Nations or Indigenous communities as well as locations where municipal trails and AT linkages connect with wider County routes or Provincial routes. For example, the County's Trent River Truckin' runs throughout Trent Hills and is a destination for cyclists within the County and beyond. The intent is for the Municipal branding to build upon existing signage to denote the complementary locations where the Municipal routes link with County Routes. A similar example is the Trans Canada Trail and municipally owned trails within the major communities that connect to the TCT.

The intent is not to create signage pollution but to create a clear and consistent visual identity for the Municipality that complements existing routes and creates clarity around which routes are to be used, when they can be used, by whom, and what they connect too.

Tailored Messages

As with any communications and outreach initiative, to successfully promote trails and active transportation facilities and encourage their use, it is important to have a strategy to target audiences, and to tailor messages that will resonate and be effective.

Messages should be developed for different demographic groups that are prevalent in Trent Hills, such as young adults, parents & families, or seniors. Furthermore, consideration may be given to the unique socio-demographic features of each of the major communities for a more tailored approach to generating interest and awareness to the areas AT and trail opportunities.

While it can be important and useful to include messages about safety, key messages should focus on the benefits of using trails and active forms of transportation as part of a healthy lifestyle, and how they provide a fun, environmentally friendly, affordable, flexible way to independently get around and explore the Municipality.

Messages should not only be tailored to the audiences that they are intended to reach, but should also be adapted based on the platform that they are released on. Depending on the social media platform or media outlet, different formats and message requirements should be considered. As part of the ATTP's engagement strategy, a series of messages were prepared and provided to municipal staff which can form the basis for future messages and associated communication materials.

New Development Welcome Packages

New residents to Trent Hills are a key audience for active transportation promotion as they are most likely to benefit from and act on information about trails and active transportation opportunities in the area.

Once mapping and other printed materials are developed, these can be included in welcome packages for new residents. Such a package can be incorporated into transportation demand management measures that the Municipality can ask of developers through the development approval process. The information can be included along with information regarding other publicly available municipal services and can be combined with other incentives or promotion initiatives.

4.3 Maintenance & Management Strategy

The monitoring, evaluation and maintenance of existing and future active transportation and trail infrastructure in Trent Hills is critical for ensuring facilities are usable and welcoming throughout all seasons, and well into the future. An effective management and maintenance strategy that ensures facility upkeep is done in a proactive and timely manner supports a more predictable infrastructure management and risk management approach while also helping extend the service life of facilities.

The ATTP maintenance and management strategy provides suggested maintenance practices and management tactics that are to be used by Trent Hills to maintain its existing active transportation and trail systems throughout the year, as well as future practices that could be considered by the Municipality to adopt as they proceed with the implementation of new types of trails and AT infrastructure. This includes but is not limited to emerging winter maintenance practices to accommodate a year-round multi-modal system (as per Ambitious Goal #2).

The maintenance strategy also provides a suggested approach to public and stakeholder communication regarding maintenance practices and protocols being undertaken by the Municipality. The ATTP maintenance strategy was informed by a series of Provincial, Regional, and Local policies and regulations including O. Reg. 239/02: Minimum Maintenance Standards for Municipal Highways, OTM Book 18 (2021), Ontario Parks Association Parks Best Practices Manual (2020), Northumberland County's Asset Management Plan (2022), Trent Hills Asset Management Plan (2018), and Trent Hills Winter Control Quality Standards policy (2022).

These existing policies and practices are the basis of the maintenance strategy and the default or minimum for the type of maintenance that should occur. The intent is to provide a strategy which allows the Municipality to evolve over time to consider and ultimately adopt maintenance practices that reflect new infrastructure maintenance needs as well as the interests of community members who are seeking more year-round opportunities for recreation and activity.

4.3.1 Maintenance Practices

On-road Facilities

There are several best practices that should be considered to ensure effective active transportation maintenance throughout all seasons. In the context of the Trent Hills project recommendations, active transportation facilities range from separated cycling infrastructure as part of Ambitious Goal #6, to shared facilities identified as part of Ambitious Goal #1. Except for shared cycling facilities and paved shoulders, there are no other types of AT facilities found within Trent Hills currently. The current practice for these types of facilities is to adhere to the Minimum Maintenance Standards (MMS) for Municipal Highways (O. Reg. 239/02).

The Municipality is encouraged to continue the use of the MMS for purposes of facility maintenance; however, as new facilities are implemented every effort should be made to ensure that there is appropriate maintenance of those facilities to both meet the guidance from MMS as well as adopt additional guidance from Ontario Traffic Manual, Book 18 (2021) for cycling facilities. The following is a summary of the relevant standards that should be applied to both existing as well as planned future on-road active transportation facilities.

Type	Service Level Criteria
Patrol and Inspection Conditions	+ 3 times every 7 days to one every 30 days (O. Reg 239/02 s.3)
Sweeping (10.2.1)	+ Scheduled sweeping weekly to monthly; deploy resources outside of scheduled sweeping as soon as practicable after becoming aware of debris (O. Reg 239/02 s.9)
Surface Discontinuities (10.2.1)	+ Greater than 5 cm height within 2 to 21 days after acquiring knowledge of the discontinuity (O. Reg 239/02 s.16)
Cracking (10.2.2.2)	+ Greater than 5 cm wide and 5 cm deep (O. Reg 239/02 s.8)
Potholes (10.2.2.3)	+ 600 cm2 by 8 cm deep within 4 days of acquiring knowledge of the pothole (O. reg 239/02 s.6)
Surface Drop-off at Shoulders (10.2.2.4)	+ Deeper than 8 cm (O.reg 239/02 s.7)
Vegetation Management (10.2.3)	+ Routine mowing including daylight triangles at intersections, annual trimming of trees near pathway
Signage (10.2.5) and Pavement Markings (10.2.6)	+ Refreshed as needed

Table 39 // Summary of Relevant Minimum Maintenance Standards Guidance

Off-road Facilities

Although off-road trails are not regulated by the Ontario Minimum Maintenance Standards (MMS), these types of trail facilities should be monitored and maintained to minimize any encroachments or deteriorating conditions. Maintenance should be done in coordination with broader parkland maintenance practices. If trails are not considered usable and safe for intended uses in all seasons, Trent Hills should provide the appropriate communication and signage as appropriate.

The following is a summary of recommended trail maintenance activities from the Ontario Parks Association Parks Best Practices Manual (2020) which are currently being used for the existing municipal trails within the Municipality. The Municipality is encouraged to continue the application of these standards, and as needed, adapt them relative to the new trail classifications outlined within the ATTP and the maintenance considerations for each.

Type	Service Level Criteria
Patrolling and Inspection	+ Develop a regular inspection schedule, record all inspections + Ensure that staff do visual inspections when working in an area + Look for irregular surfaces, trip hazards, washouts, obstructions, broken glass, and refuse, especially after major storms + Regularly inspect trail amenities (e.g., hardware, bollards, gates, lighting, railings, signs, stairs). + Respond in a priority sequence to inspection findings and public complaints based on their severity and their impact to the safety of the public
Maintenance Schedule	+ Develop a maintenance schedule, record all maintenance, and maintain all types of surfaces regularly.
Vegetation Management	+ Clear vegetation at least 1 metre on both sides of trails to prevent vegetation encroachment and improve safety. + Trim trees and shrubs to provide a 3.3 m vertical and 2.5 m horizontal clearance for trails users + In locations with significant natural features (e.g., woodlots or wetlands) conduct education and awareness to limit impact of trail use on these environments, and fence off impacted areas as needed + Remove dangerous low-hanging, dangling or dead tree limbs + Remove weeds and grass from cracks and expansion joints. + Trim around signs and light poles + When removing vegetation, follow an Integrated Plan Health Care (IPHC) plant management strategy using a variety of controls
Trail Surface	+ As required, sweep all surfaces, repair cracks, and seal asphalt + Conduct annual grading on granular/aggregate paths + Complete all work when weather conditions permit, and implement erosion and sedimentation control practices before beginning work
Signage and Notification	+ Post signs advising the public where there is no winter maintenance + Notify the public of closures due to maintenance activities or emergencies (flooding, ice, etc.)

Table 40 // Potential Trail Maintenance Guidance

Winter Maintenance

Although the use of active transportation and trail systems in Trent Hills tends to decline in the winter months, there are many who use these pathways year-round for both utilitarian and recreational forms of travel. While snow coverage may be preferred for some recreational trail users (i.e., fat bikers, snow shoers or cross-country skiers), many facilities – especially sidewalks, cycling facilities, and primarily trails in urbanized areas - should be maintained to an adequate level snow removal, ice prevention, and ice treatment. The maintenance of on-road active transportation facilities should meet or exceed the minimum standards outlined by the MMS for winter maintenance activities, and best practices should be followed for off-road facilities through parkland and open space.

On-road Facilities

In accordance with the Trent Hills Winter Control Quality Standards Policy (POL-PWK-01), the Municipality's Public Works staff monitor weather conditions, both current and forecast to occur, three times per day from October 1st to April 30th. Staff also conduct daily winter road patrols from November 15th to April 15th along traffic corridors "that are representative of the Municipality's roads." The Municipality's policy for snow clearing is to deploy resources as soon as practicable to clear accumulations based on depths that vary based on various road characteristics. Similar efforts are made to prevent and treat icy roadways, which also vary based on road class. The municipality has also set out a network of Priority Winter Control Routes along which operations will be conducted overnight during extreme winter storm conditions and/or overnight.

The following is a summary of the recommended standards for on-road AT facilities outlined by the Provincial Minimum Maintenance Standards (MMS) that should be followed by Trent Hills.

Type	Bicycle Lane	Sidewalk and Multi-use Pathway
Snow Clearing	When snow accumulation on bicycle lanes is greater than 2.5 to 10 cm, "deploy resources as soon as practicable to address the snow accumulation" and within 8 to 24 hours (O. Reg 366/18 s4.2)	Maintain to 8 cm within 48 hours, minimum width of 1 metre (O. Reg 366/18 s16.3)
Ice Prevention	Up to 24 hours preceding the likelihood of ice formation (O. Reg 366/18 s5)	"Treat… if practicable to prevent ice formation or improve traction within 48 hours if the municipality determines that there is a substantial probability of ice forming" (O. Reg 366/18 s15)
Ice Treatment	Treat ice within 3 to 16 hours after becoming aware of icy conditions (O. Reg 366/18 s5)	Under routine weather events, within 48 hours after becoming aware of icy conditions (O Reg 366/18 s15)

Table 41 // Potential on-road AT Facility Winter Maintenance Practices

Off-road Trails

Winter maintenance practices are important for allowing users to safely recreate and travel through park and recreational amenities. Regular daily inspections and daily, weekly, and monthly maintenance schedules and records can help maintain trail accessibility, safety, and year-round recreation, with inspection findings or public complaints responded to promptly.

The Municipality may decide that not all trails are subject to year-round winter maintenance, but those that do not should be clearly signed at key locations to inform users and ensure safety. The ATTP Trail Classifications should be considered, with winter maintenance being provided according to the following guidance:

Type	Trail Type
Primary	Winter maintenance generally provided at the same standards as on-road facilities
Secondary	Winter maintenance depends on use of trail and context
Tertiary	No winter maintenance, with this clearly communicated at trailhead locations

Table 42 // Potential off-road Trial Facility Winter Maintenance Practices

To ensure trail accessibility and safety, the following winter maintenance activities should be conducted as required:

- Plough or shovel pathways, steps, and ramps
- Anti-icing, salting, and sanding as required
- For trails meant for winter activities, groom snow conditions accordingly.

4.3.2 Management Practices

The Trent Hills ATTP has embraced and reflected an approach that provides Municipal staff and partners with sound guidance, along with opportunities for adaptation and flexibility. Once adopted, the contents of the plan are intended to be used as a guide for day-to-day discussions, annual planning and budgeting, coordination and collaboration with key stakeholders and partners, and for ongoing promotion and outreach. The hope is that this plan retains its relevance and provides Municipal staff and stakeholders with the information needed to address questions, issues, and opportunities when they arise throughout the implementation process.

To ensure that the ATTP is considered applicable beyond the first or second year of implementation, there should be monitoring, management, and, where needed, adaptation. The following are some of the suggested management practices that are recommended to ensure that there is information gathering, and communication regarding the ATTP implementation status in future years. Ambitious Goal #10, Recommendation 10b speaks to annual reviews of the plan's implementation status, highlighting successes, lessons learned and plans for the year to come to demonstrate progress.

It will be important for the Municipality to manage and better understanding the change in usage of existing and planned routes and facility experiences to determine how best to adapt or enhance the municipal offerings. To do so, the Municipality is encouraged to explore opportunities where information can be gathered to better understand the current state and changes that occur. Four (4) potential options have been identified and outlined below for the Municipality's consideration.

Stakeholder Outreach

The stakeholders engaged as part of the ATTP and those identified in Section 4.1 should continue to be involved in the review and assessment of trails and active transportation routes and facilities. Stakeholders should be invited to a meeting at least once a year as part of the Community Development Committee, and potentially via a dedicated trail and AT committee. Staff will prepare agendas and minutes focusing on using the input gathered from these meetings to understand how the routes and facilities are functioning, issues and concerns, communication needs, potential programs, and partnerships, etc. These meetings is recommended to occur prior to budget decisions.

Data Collection

Municipal staff should strive to either manually complete or purchase technology to support in the gathering of data and other information regarding trail and active transportation use. These counts will help to establish a better understanding of existing use and users, allowing for more detailed information regarding user perceptions from tactics like intercept surveys.

Information gathering could occur concurrently with the maintenance reviews, working with committee members and other stakeholders for the manual collection. For technology-based options, the following alternatives have been identified:

+ Individual Smartphone Technology a self-documented approach using a survey is provided via QR code at the beginning of a trail and trail users can log trips, provide commentary, identify

seasonal operational issues, quality of trail experience, etc. This is a low-cost option whereby the Town would need to prepare a survey and provide it for public access. The downside is that the information is subjective and not consistent.

+ Eco-counters or tube counters are automated devices which provide point in place counts of facility use. The counters can be placed at strategic locations to understand the frequency and type of use by all trail users – active or motorized. The information is provided directly to the municipality through user friendly software. Counters range from short-term tube or infrared counters, to more permanent inductive loop counters that can distinguish between bicycles and pedestrians. The cost for these counters ranges from between $1,500 to $5,000 per counter, depending on the type and associated features of the device. Visual displays can be purchased along with the counting device, and these can serve as an additional promotional tactic to show the popularity of key trail locations.
+ Cameras can be placed along trails or other facilities, mounted on lighting or utility poles 15 to 25 feet above the ground. Although typically used to monitor on-road traffic, these can also be used for AT infrastructure, and can delineate between various users through the video technology and supporting algorithms. There can be issues associated with privacy, but the degree of detail typically addresses these concerns. Costing is dependent on the number of installations and the terms of data collection. Costs are estimated at approximately $2,000 for each device, with some subscription fees depending on the provider's technology.

Community Engagement

Municipal staff are encouraged to offer a survey every alternate year – following the summer and after the winter – to gather information on the experiences and perceptions regarding municipal trails and active transportation routes and facilities. This will help supplement the ongoing documentation of trail maintenance issues and will focus on evaluating successes and opportunities for improvement.

The survey could be a coordinated effort between the Municipality and Trent Hills Tourism, Northumberland County or with Bike Action Trent Hills. The benefit of gathering information would extend to all who are working together to encourage and support active transportation and trails in and around the Municipality.

Any survey created should be centrally housed and promoted through a wide range of social and traditional media outlets.

4.5 Funding Strategy

For the purposes of providing the Municipality with a master plan that is based on opportunity and flexibility, costing has been prepared at the master plan level and shared with Municipal staff to inform the development of budget assumptions and growth-related planning. As presented in Chapter 3.0, a preliminary potential capital cost has been identified for each of the ambitious goal recommended projects and organized by phase. The information has also been provided to Municipal staff through the detailed network management spreadsheet.

These preliminary costs are intended to be reviewed and refined at the time the town decides to proceed with a proposed project or education/outreach initiative. Costing information has been organized into two categories – capital costs and operating costs.

4.5.1 Capital Costs

Capital costing has been prepared for the project recommendations except for projects that are not under the jurisdiction of the Municipality, such as recommended projects that are the responsibility or under the jurisdiction of a partner agency / organization such as the TCT / Eastern Ontario Trails Alliance or Northumberland County. Capital costs are fixed, one-time expenses incurred to build assets such as infrastructure, or to purchase land, amenities, or equipment.

The following are some of the assumptions that were used to develop the information contained within the Master Plan report:

- Costing was developed using unit prices, identified based on best and comparable practice, and confirmed based on municipal input and experience.
- These costs should be the foundation for annual budgetary discussions and decisions made by Municipal staff and be revised as needed to reflect up-to-date information.
- The costs are not meant to be prescriptive but provide a preliminary estimate of the potential implementation costs.
- The capital costs do not reflect costs associated with the programming and outreach strategy which has been assumed to be addressed through external funding options (see Section 4.5.1).

4.5.2 Operating Costs

Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. For the purposes of the ATTP, it has been assumed that operating costs include maintenance, evaluation and enforcement associated with the existing and recommended projects.

The following are some of the considerations for operating costs that should be reflected by the Municipality:

- Maintenance will be dependent on the type of infrastructure and the expected seasonal use. At a minimum, the following maintenance practices have been assumed for trails and active transportation facilities to be undertaken on a regular basis to reflect the changes in season:

  - Removing encroaching vegetation
  - Mowing
  - Map/signage updates
  - Trash removal/litter clean-up
  - Flood or rain damage repair: silt clean up, culvert clean out, etc.
  - Patching, minor re-grading, or concrete panel replacement
  - Planting, pruning, and general landscaping.
  - Amenity repair or replacement
- Costs associated with the maintenance of physical infrastructure will vary depending on staff availability as well as weather conditions. Costing does not provide recommendations on the types of maintenance vehicles or tools that would be needed to facilitate seasonal maintenance.
- Maintenance activities may or may not be required if there are environmental compliance requirements, but should be reviewed by staff to determine if maintenance would have an impact on resource protection.
- For winter maintenance, preliminary costs should only pertain to operational/staffing efforts and not the acquisition of necessary equipment. Should the municipality consider the purchase of a vehicle to support adapted maintenance practices, this cost could be upwards of $250,000 which includes the purchase of vehicle, insurance, fuel, and storage.
- Enforcement is undertaken by staff as part of the Municipality's By-law Enforcement under the Planning and Building department. The level of effort may increase because of the recommendations related to data collection and evaluation, as well as the increased use of trails and active transportation corridors. Additional staffing or budgetary allocations may be required to accommodate these changes.

While costs have been provided within the ATTP, there are several unknowns regarding the cost implications related to the master plan. What is included within the ATTP will fluctuate and change as time elapses. As projects move towards implementation, additional costs and contingencies should be considered. It is recommended that the following additional costs be considered and incorporated into budget assumptions as part of the implementation process.

Type of Impact	Amount
Inflation	3-4%
Approvals	5%
Studies	$50k
Design	20%

Table 43 // Suggested Cost Adaptations Considerations for Master Plan Costing

4.5.3 Cost Off-Setting

Historically, the Municipality of Trent Hills has dedicated funding to trails through its Community Services and Recreation department, and through partnerships with local organizations and agencies, but has not actively pursued active transportation related projects due to a lack of strategic planning guidance – as now provided in the master plan.

In many cases, the investment in trail and active transportation initiatives has been determined on a case-by-case basis or as monies become available from external sources. The ATTP reflects a new municipal approach to tackling the future of trails and active transportation infrastructure and programming. Though costing has been provided, it is expected that most of the costing for projects will come from capital and growth-related sources as well as external funding sources.

As opposed to focusing on the lump sum costing for the project and plan recommendations, the focus is placed on finding a series of "funding models" that could be used to support implementation and "off-set costs." There are two (2) overarching sources of funds that could support future implementation and are detailed below.

Internal Funding Opportunities

Internal funding includes monies that are committed by Municipal council and leadership. The funding is determined annually as part of the budget process. Plan recommendation 10d clearly identifies a financial commitment in support of the implementation of the ATTP. Starting in 2024 / 2025 the municipality is to adopt an annual budget of $25,000 to support the implementation of the ATTP, with an increase of $10,000 each year to an upset limit to be determined by Council. This budget allocation should be reviewed after 5 years, and these funds are in addition to AT projects that would be implemented as part of wider municipal capital projects.

For the purposes of the Trent Hills ATTP, the funding model takes an integrated and collaborative approach – one that is borne by all Municipal departments due to the nature of the recommendations. For example, trails will be "funded" by Community Services through Parks and Recreation, while active transportation i.e. on-road projects will be funded by Engineering / Public Works. As noted above; Planning and Building has a key role in the funding model as they will oversee development approvals which have the potential to contribute to funding through development charges and/or costs borne by the developer due to growth. Costs associated with communication, evaluation, management, etc. will be integrated into day-to-day operational costs and work plans of municipal departments including but not limited to the following costs for:

- Staff leadership and coordination of the committee
- Coordination and management of GIS data as part of a wider asset management tool
- Coordination of internal ATTP implementation through different departments
- Development and release of promotional materials
- Updates and information shared through social media
- Development of annual reporting
- Coordination with external partners to pursue programing.
- Identification of external funding sources

External Funding Opportunities

Even with dedicated internal funding, the anticipated costs to support the implementation of the ATTP will need an ongoing commitment to exploring opportunities for external funding sources. External funding opportunities should be explored regularly and pursued, whenever feasible, to offset ATTP implementation costs. As part of the Municipality's annual reporting, an assessment of available budgets relative to the costing needs should be included. If needed, additional requests for funds should be identified as the trail system grows and demand increases.

The following are a series of funding opportunities which could be considered for additional funding support. The requirements and criteria for these funding opportunities will likely change from time to time and new opportunities will arise. It is important to undertake a review of opportunities on an annual basis.

Agency Driven

Agency driven opportunities are funding sources that come from agencies which are either formally established or are affiliated with a government entity. The information contained within the ATTP or established as part of the development of the plan will be a key source for the completion of funding applications.

Government of Canada

- Investing in Canada Program
- Healthy Communities Canada Funding Initiative
- Green Municipal Fund
- Federal Gas Tax
- Federal Active Transportation Fund

Province of Ontario

- Province-wide Cycling Network Funding
- Provincial Gas Tax
- Ontario Trillium Foundation Community Building Fund
- Ontario Rural Economic Development Fund
- Tourism Development Fund
- Ontario Community Infrastructure Fund

Development Driven

Development opportunities include funding that could be secured because of leveraging development charges. Development charges are monies that are paid by local developers as they work through the development process. Depending on the eligibility of projects, some of the trails or other active transportation facilities (within proximity to development) could have monies allocated from those development charges to cover all or a partial amount of the project cost. Some municipalities may establish a development charges fund which reallocates monies to municipal projects.

Municipal funds should be acquired from development charges and if needed updates to the Development Charges By-Law 21-15 are to be made to facilitate the use of development funds for trails and active transportation facilities.

Other

Throughout the Municipality of Trent Hills and Northumberland County there is a powerful sense of community pride and investment. In addition to the formalized and structural funding opportunities, there are local options which should be explored on an ongoing basis. For localized investment, it is important to note that these opportunities are not limited to financial contributions. Of considerable value is the "in-kind" support that can be provided, including but not limited to volunteer trail stewards, maintenance, data collection, promotion, and event outreach, etc. The following are some of the alternatives for the Town to explore.

Organizational Support

Organizational support refers to investments made by local clubs and interest groups who are organized but are not formally affiliated with any government organization or private entity. They could include local agency support (in-kind) or funding from groups that align with trails and active transportation priorities.

Public-Private Partnerships

There may be local business or industry who have an alignment with the AT and trail focus of the Municipality who may wish to provide corporate funding in support of implementation. The Municipality should explore opportunities for corporate environmental funds with local businesses to leverage and encourage local investment in community services.

Private Citizen Donation

Donations can be accepted at any time; however, the Municipality may wish to target a dedicated fund-raising month whereby opportunities are provided to "name a trail," "name a route" or "design a trailhead" which are used to specifically generate monies for trial implementation and supports.

Events & Tourism

The Municipality of Trent Hills is part of a significant tourism area within Northumberland County, with many local attractions and visitor assets. Trails and active routes are emerging as part of the wider recreational conversation, linking traditional boating tourism with new opportunities to explore areas of natural and cultural significance. The Municipality of Trent Hills should explore opportunities to leverage existing tourism events to generate monies in support of trails. In addition, there may be other opportunities that highlight opportunities to use trail and active transportation routes which could be explored, including coordinated trail rides or hikes where monies are raised for access opportunities.

For events, there are different models that can be explored whereby a route could either be part of the overall event or it is the event. Exploring opportunities to activate the space (i.e., art installations, historic tours, etc.) is encouraged for stand-alone events.

Pass & Permits

Like the approach used for the trails found within the Lower Trent Conservation Areas, there may be opportunities to raise additional monies for the use of specific trail linkages that require additional management and maintenance. These efforts could be solely led by the Municipality, or could be explored through a formal partnership with a local Conservation Authority or other agencies such as the Eastern Ontario Trails Alliance.

If the Municipality were to explore individual municipal trails for permit or pass purposes, it may be appropriate to identify user destination trails that are part of a wider branded initiative and provide access to major Municipal destinations for this type of fund raising. Considering the municipal service nature of the trail system, these passes should likely not be considered mandatory and would be more of an annual donation received in exchange for a branded identifier.

4.6 Closing

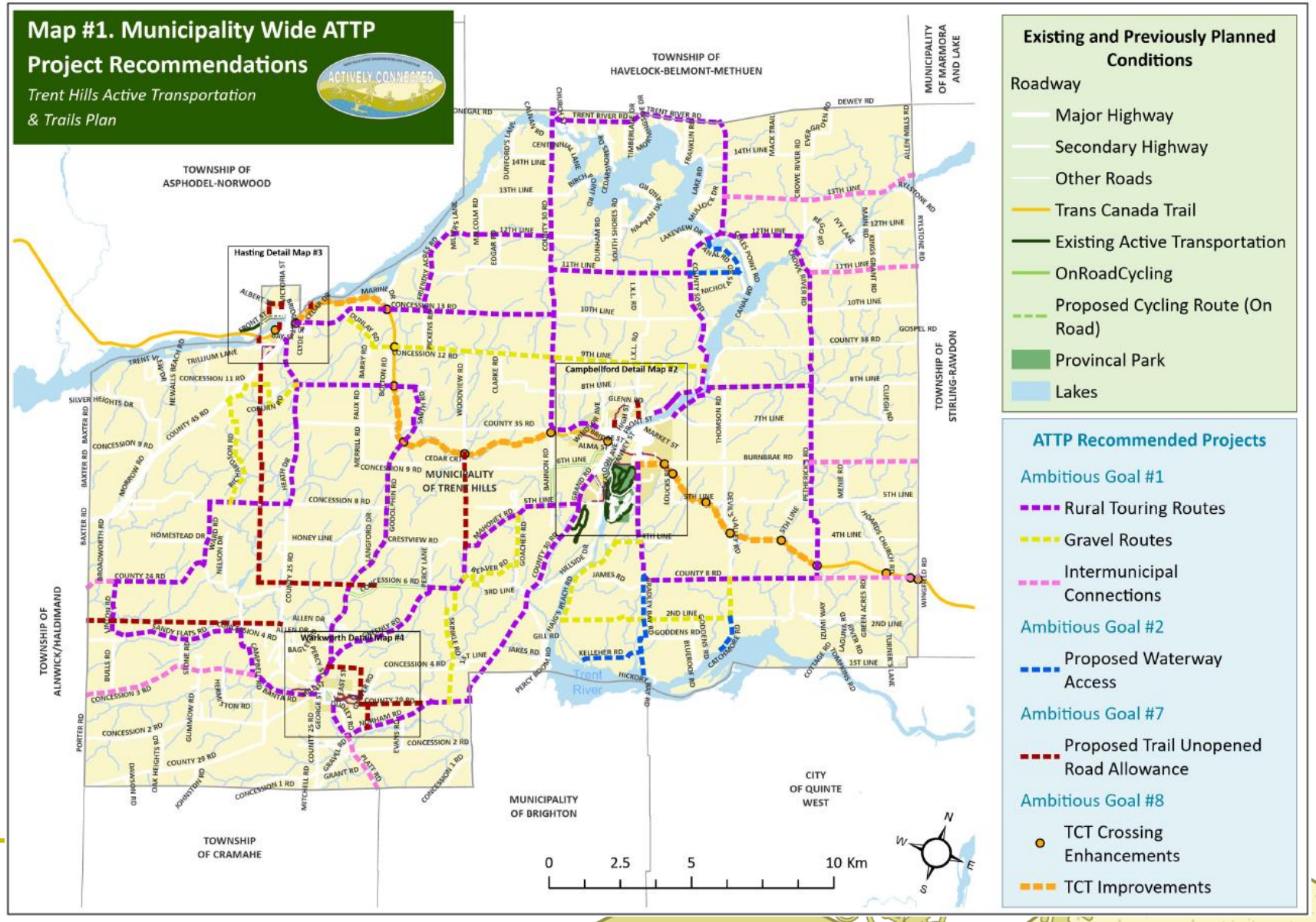
The Municipality of Trent Hills has established a comprehensive and ambitious strategic plan which focuses on shifting the way in which people move, live, and play. The project and plan recommendations included within the ATTP, along with the supporting information and implementation strategy, are intended to provide staff, stakeholders, and decision-makers with the flexibility to integrate trails and active transportation into day-to-day and annual decision-making. While the information and recommendations contained within the plan are not considered to be prescriptive, they can act as a means of informing the work that all Municipal departments do – each with a unique role and set of responsibilities for components of the plan's implementation.

Furthermore, this is not meant to be a stand-alone document; it is meant to be woven into wider planning decision-making and engineering design, and complement other Municipal and County policies and plans that are in place or will be developed in the future. To be successful, implementation of the Plan will require coordination and collaboration within and outside of the Municipality, leveraging the combined efforts of various partners working together towards more sustainable, healthy, and resilient communities with mobility and accessibility at the core.

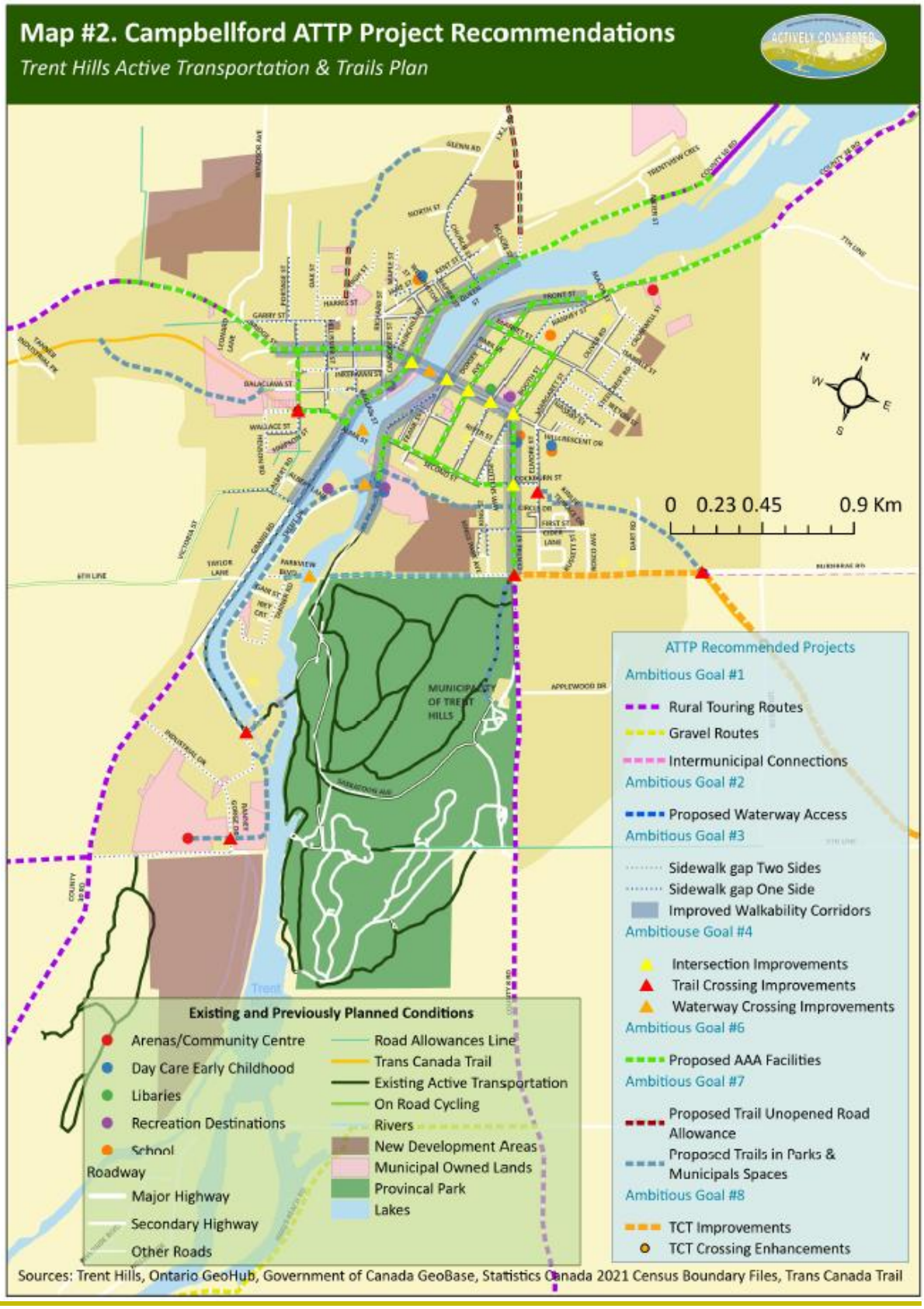
We are excited to continue the conversation as we put this plan into action, and build a future for trails and active transportation in Trent Hills that is ambitious, bold, and connected!

Appendix A: List of Maps

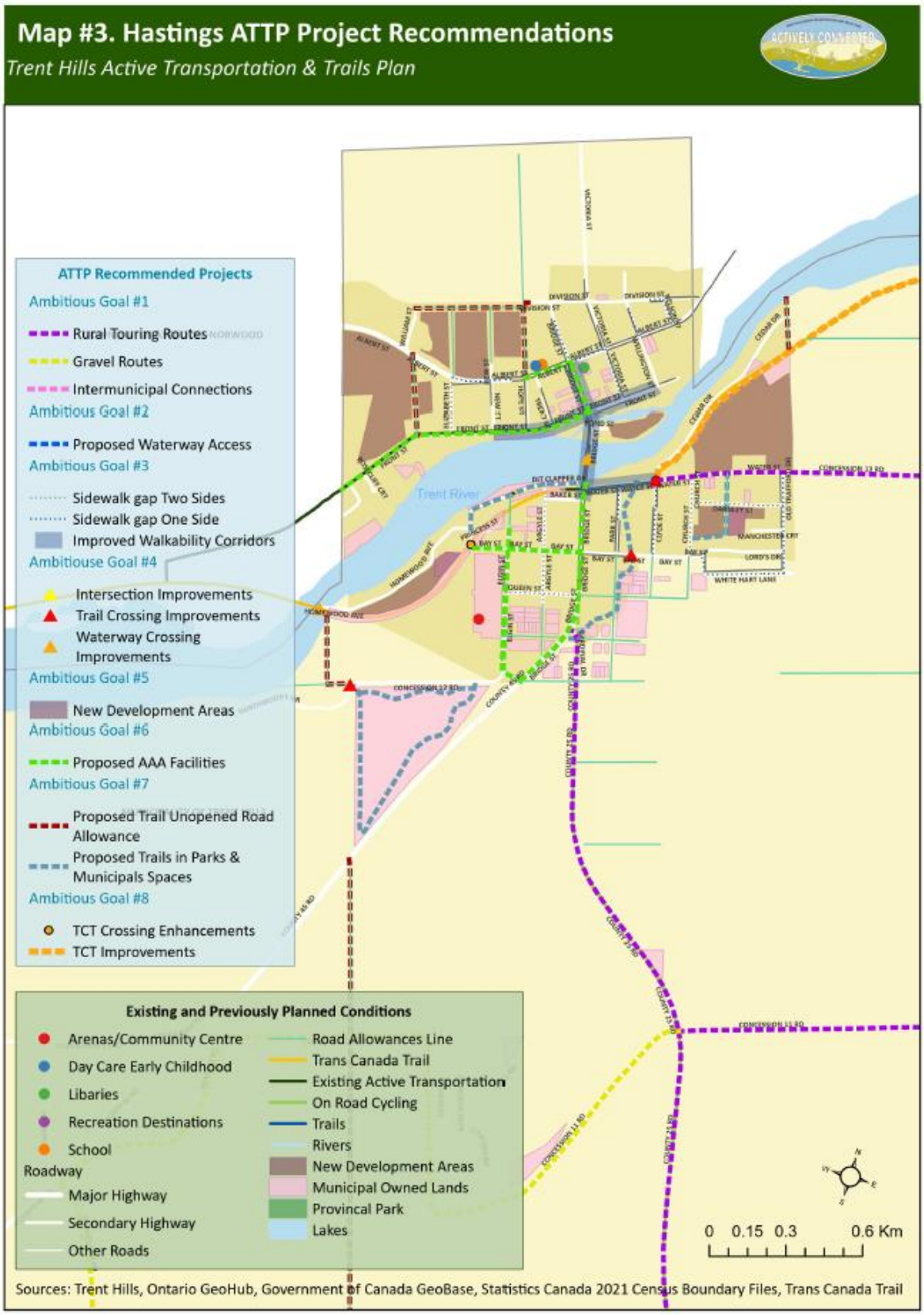
Municipality-wide Project Recommendations



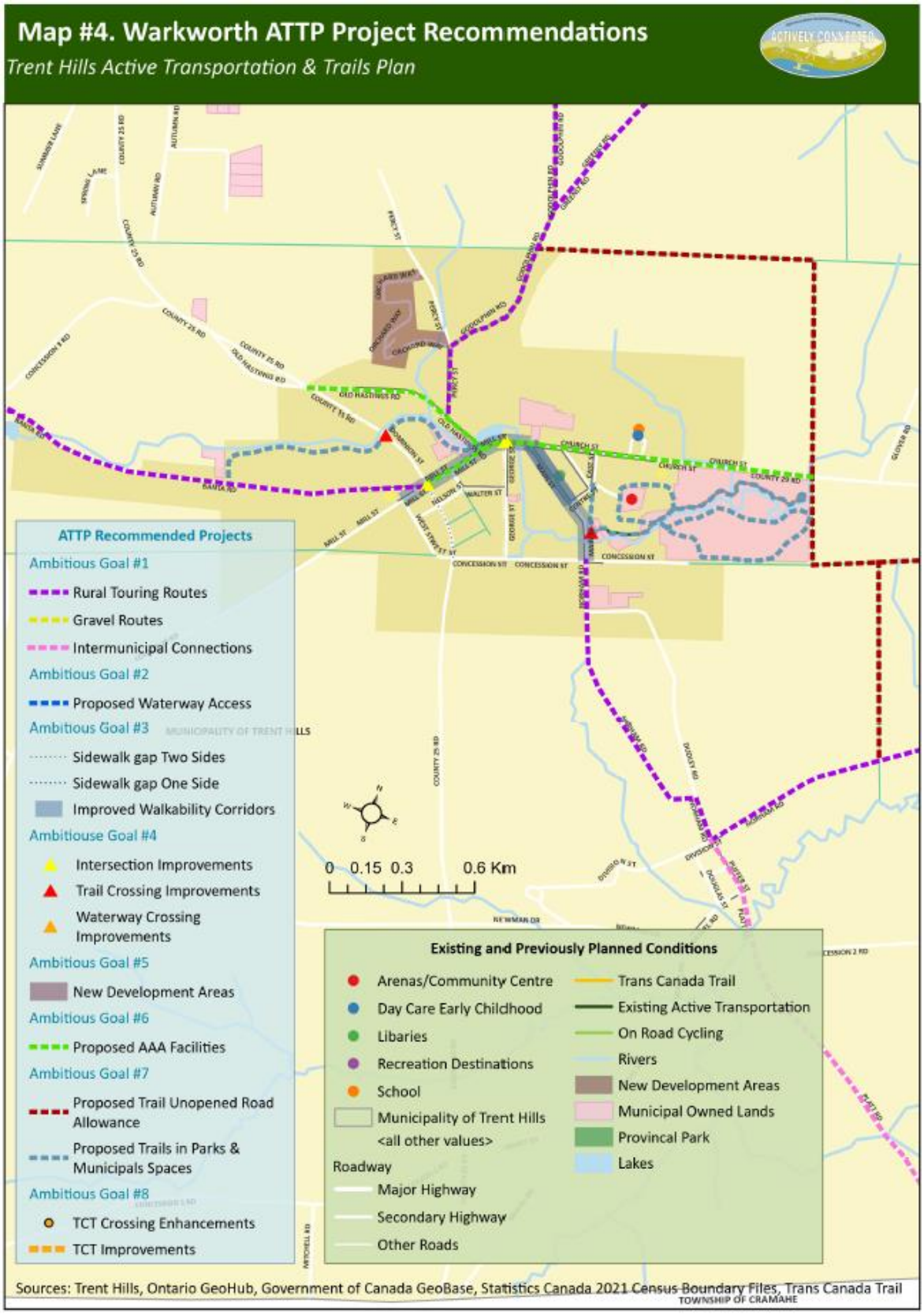
Campbellford Project Recommendations



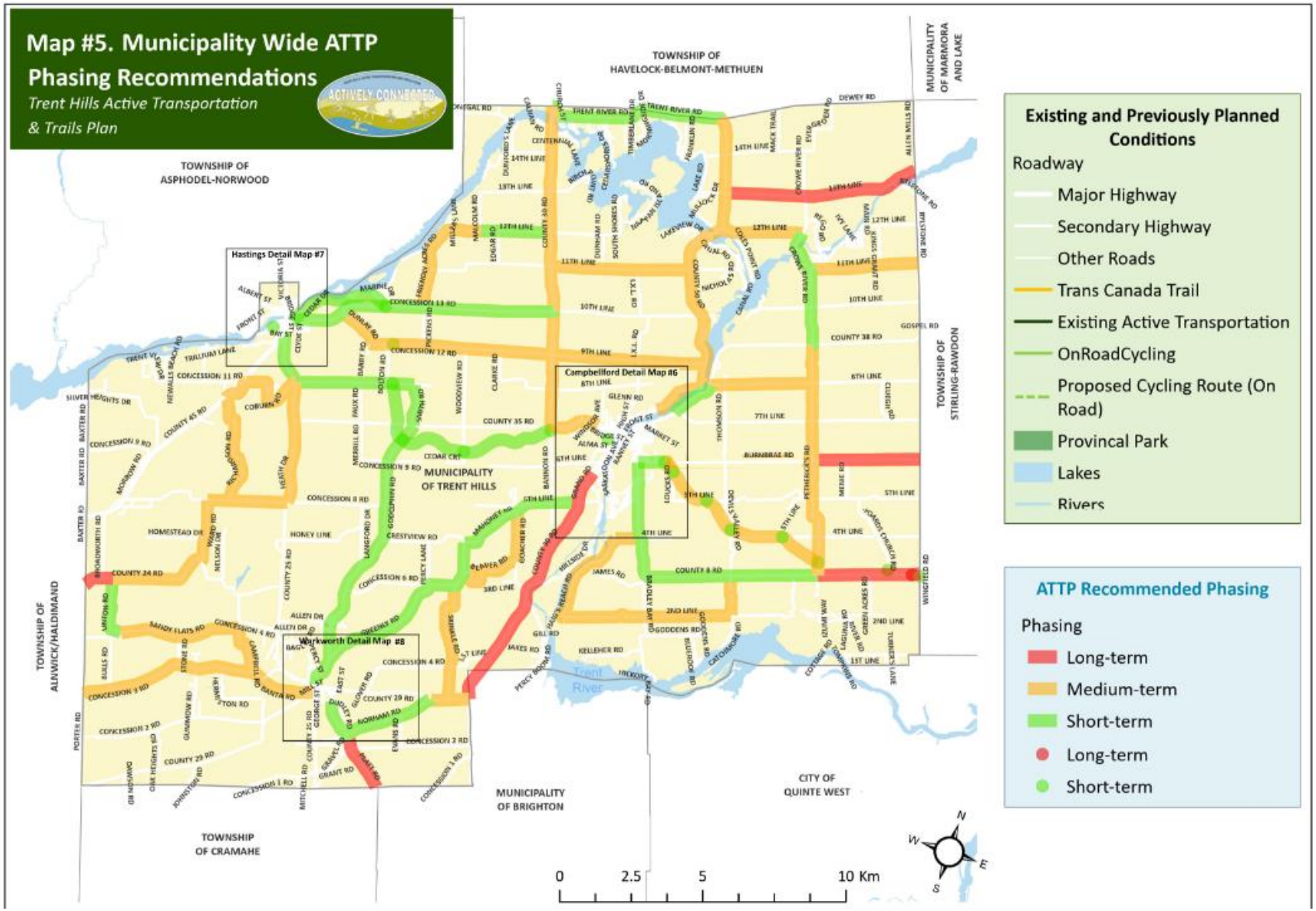
Hastings Project Recommendations



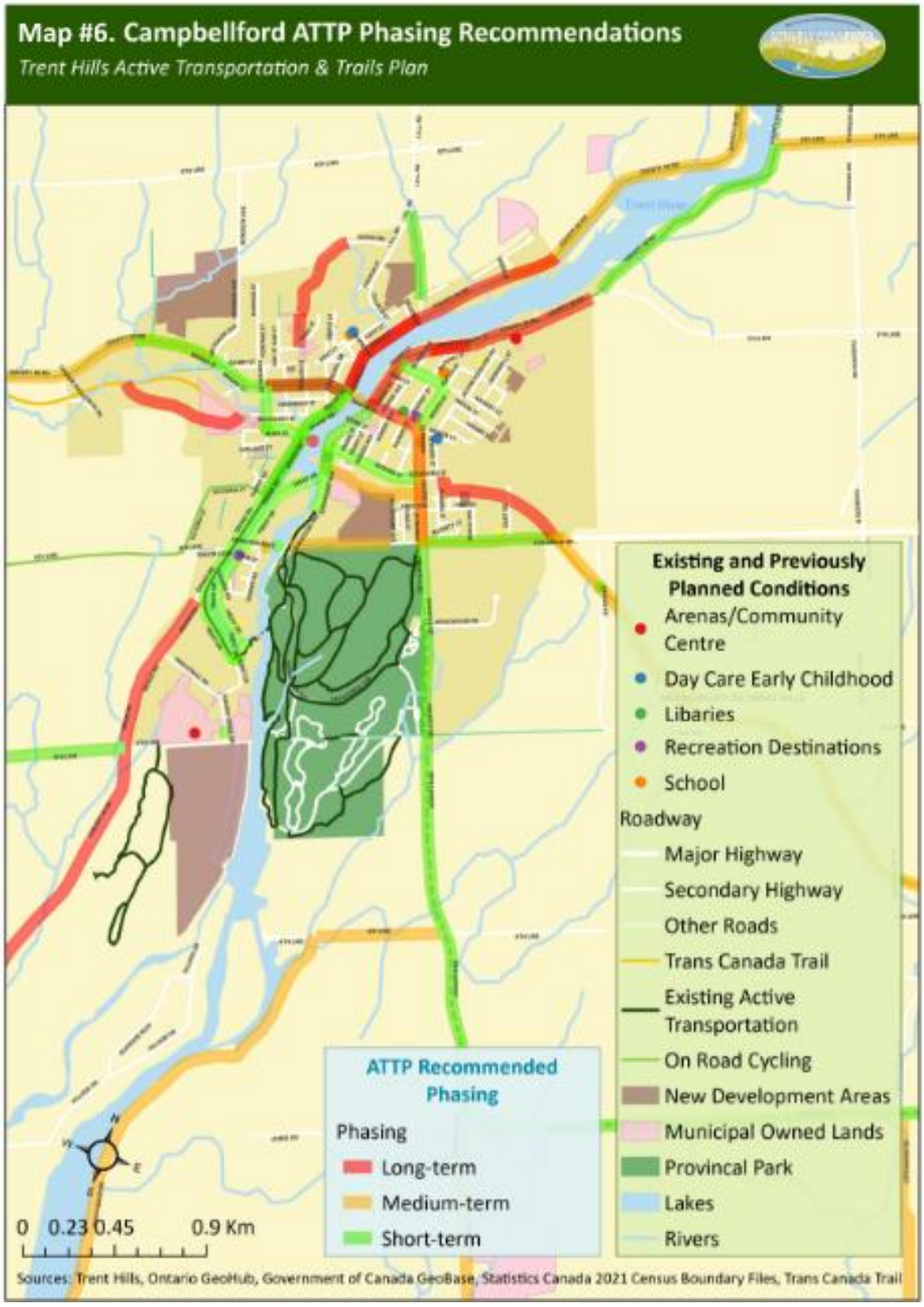
Warkworth Project Recommendations



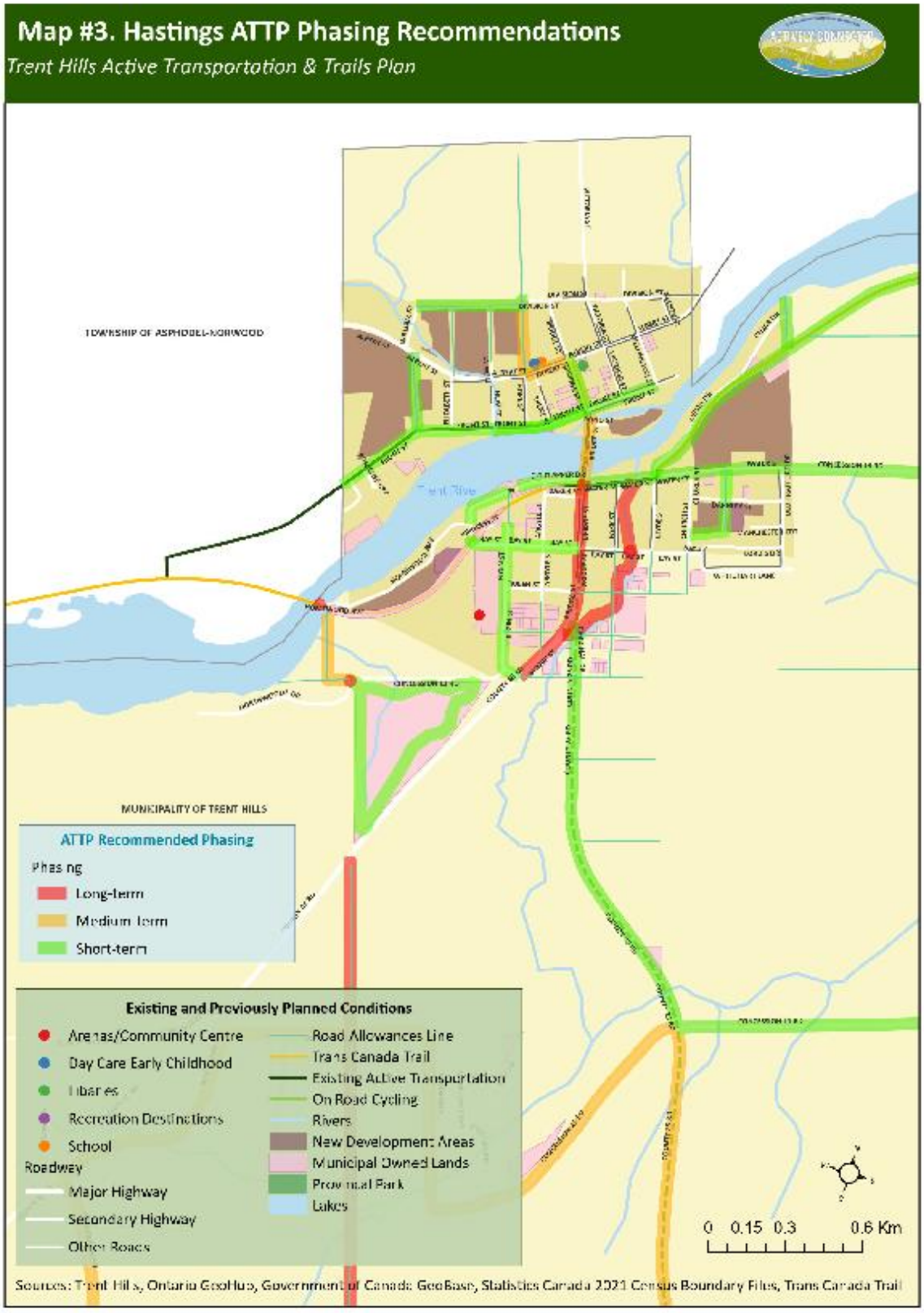
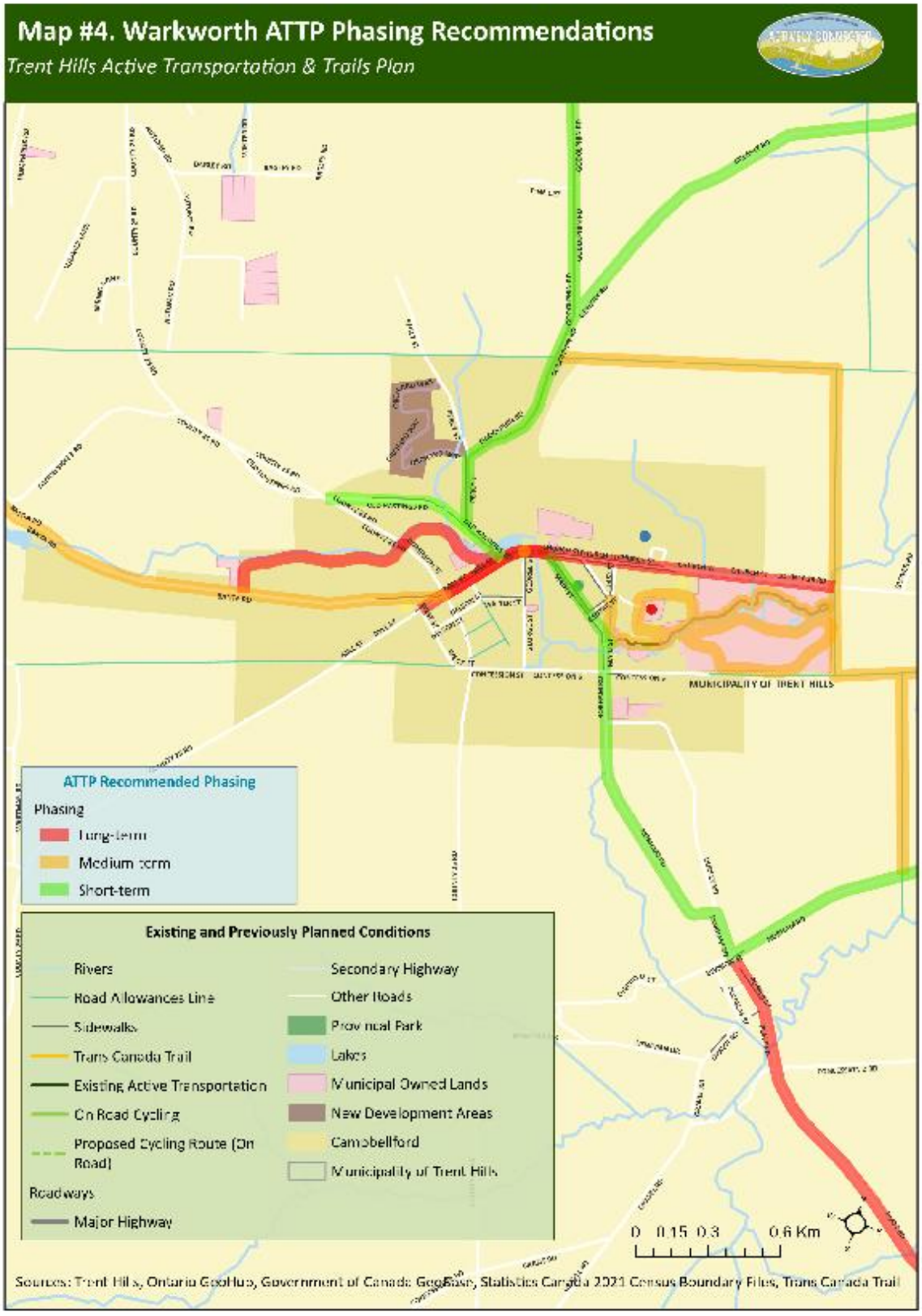
Municipality-wide Project Phasing



Campbellford Project Phasing



Hastings Project Phasing



Warkworth Project Phasing