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Additional Resources

There are a number of documents that have been prepared along with the development of the RTMP. Many of these documents provide additional documentation of process and outcomes and have been provided to municipal staff as part of the project record. The document can be acquired (if needed) through a formal request to ssweeney@grimsby.ca

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ACKNOWLEDGEMENT

Niagara Region/Grimsby is situated on treaty land. This land is steeped in the rich history of the First Nations such as the Hatiwendaronk (Hat-i-wen-DA-ronk), the Haudenosaunee (Hoe-den-no-SHOW-nee), and the Anishinaabe (Ah-nish-ih-NAH-bey), including the Mississaugas of the Credit First Nation. There are many First Nations, Métis, and Inuit people from across Turtle Island that live and work in Niagara today. The Regional Municipality of Niagara/Grimsby stands with all Indigenous peoples, past and present, in promoting the wise stewardship of the lands on which we live.

We would like to thank all of those who helped to make the Recreational Trails Master Plan a reality. The members of municipal staff who shared their time, knowledge, and experience to build a plan that is intended to be used as a guide for future discussion and decision making and the stakeholders and members of the public who shared their passions, priorities, and ideas of what they would like the future of trails in Grimsby to look, feel, and function like. We acknowledge and thank you for your efforts, time spent, and all that you shared.

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CONTEXT



1.1 Understanding Trail Planning & Design

The Town of Grimsby is a growing urban centre in Niagara Region, bounded by Lake Ontario to the north and the Niagara Escarpment to the south. Home to many natural sights, as well as a vibrant community culture, Grimsby is flourishing as a destination for residents (both existing and new) and visitors alike. This is the first trails master plan and was one of the recommendations of the Parks, Recreation and Culture (PCR) master plan. A critical part of this new growth includes strategically planning so that those who live, work, and play within and around the Town are provided with opportunities that allow for a greater experience with recreation specifically in the form of trails.

As a municipality that balances natural destinations with community destinations at every turn, expanding the ways that residents and visitors can explore their surroundings and their community is a top-of-mind priority. In 2021, the Town of Grimsby embarked on the process of developing a strategic master plan to guide future planning, design, and decision making regarding recreational trails within the Town of Grimsby.

1.1.1.1 WHAT IS A MASTER PLAN?

A master plan is a municipally developed and adopted document that is part of the municipal planning framework. It typically provides high-level guidance on a specific topic. In the context of this project, focus is placed on the future of trails in Grimsby, including where they are located now, where they could be in the future, how they are designed, supportive programs, policies and amenities, the timeline for their implementation, and the process and next steps.

An effective master plan is meant to be a flexible guide. Infrastructure master plans such as this one is typically based around a comprehensive series of connections that have been determined to be feasible and achievable. A master plan establishes and puts forward recommendations which are intended to adapt with changes in trail conditions, political support, municipal priorities, partner priorities, and stakeholder input.

A master plan is not intended to be a commitment to construction. Recommendations are realistic but not definite and will still require additional consultation, design, and coordination. The plan has been developed based on input from members of the public and stakeholders and is considered a community-informed document; however, the implementation of such a master plan will include future work undertaken by the Town in partnership with stakeholders, community members, and decision makers to confirm preferred solutions, priorities, and next steps.

The document is intended to feed into an existing framework of municipal policies and plans while also responding to the ever-changing conditions of a municipality that is experiencing considerable growth.

The Town of Grimsby continues its commitment to identifying, exploring, and monitoring opportunities to expand and enhance the connection between activity and nature throughout the Town through the development of this Recreational Trails Master Plan (RTMP).

The RTMP is aptly named...Active by Nature.

The RTMP outlines the strategic outlook for recreational opportunities in the form of on and off-road trails over the next 20 years. It has been designed to support and grow the active transportation possibilities through strategic trail connections that bridge the natural environment and the community of Grimsby for all who choose this town to walk, cycle, skate, ride, or roll.

The Recreational Trails Master Plan was developed with the purpose of...



Providing Town staff, partners, and stakeholders with the tools and resources necessary to affect change and increase overall interest, participation, and awareness of trails as a form and opportunity for enhanced recreational mobility.

The objectives of the RTMP were to...

- 1. Identify a network of trail routes and facilities that looks to address the unique needs of trail users for recreational purposes and where appropriate points of connection and alignment with utilitarian connections.
- Prepare a consistent set of design guidelines and standards which address not only the trail route but other complementary elements such as trail amenities, signage and wayfinding, crossings, and barriers.
- 3. Integrate trail planning and design best practices and lessons learned from local, provincial, national, and international examples.
- 4. Provide a strong planning foundation through policy considerations and updates that align with the priorities and practices of the master plan.
- **5.** Explore unique and innovative design options and solutions for context specific sections of the network such as the escarpment, major regional roadways, waterways, and other natural and physical features.
- 6. Align with wider strategic priorities of the Town including climate change, environmental sustainability, and public health.
- 7. Develop a long-range strategy that supports day-to-day decision making in the short, medium, and long-term horizon that is adaptable and flexible to changing practices.
- 8. Identify education and encouragement programming to support and enhance the proposed infrastructure and policies with the goal of influencing recreational behaviours.
- 9. Provide staff with a clear structure and tools to support the design and implementation of trail infrastructure consistently within the Town boundary.
- 10. Provide opportunities for collaboration and coordination with local partners to support the build-out of a continuous and connected trails network and to support funding.
- 11. Leverage the involvement and interest of the community and key stakeholders through a robust engagement program to build capacity and support for Town staff.

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1.1.2 Defining Recreational Mobility

Throughout the RTMP, concrete recommendations are made to help guide the Town in achieving its recreational trails goals. To best frame the recommendations of this plan, we must first outline the scope, considerations, and assumptions that went into their development. This plan focuses on recreational trails, which may be seen as or used as destinations in and of themselves or may help to connect other amenities in the Town, such as parks, beaches, natural areas, as well as other community destinations.

Recreational trails are best defined as...

"A thoroughfare or track across land or snow, used for recreational purposes such as pedestrian activities including wheelchair use, skating or skateboarding, equestrian activities, non-motorized snow trail activities, bicycling or use of other human powered vehicles, aquatic or water activities and motorized vehicular activities including all-terrain vehicle riding, motorcycling, snowmobiling, use of off-road light truck or use of other off-road motorized vehicles."

(Source: americantrails.org)

In the context of the Town of Grimsby, recreational trails have been identified as the primary means by which enhanced recreational mobility can be achieved.

Recreational mobility is the concept that...

we choose and require support to be able to engage in both active and passive activities that allow us to enhance our educational values, improve physical fitness, increase our cultural or social experiences and exposures, and socialize with community and family members.

Recreational mobility is unique...

Because "it is primarily based on choice and preference and is spatially dispersed across an area and non-routine in nature."

(Source: Leisure Mobility and Individuals' Relationship to the Living Environment)

Unlike other day-to-day trips where a place of work, school, or function is the destination, the recreation or leisure activity is the "final destination". In many cases, these activities require a choice being made to pursue the activity and the necessary support to allow individuals to participate equally. What is considered leisurely or recreational for one individual is by no means the same for another. The amount of time that is spent in one's day on leisure and recreation is very much influenced by the population profile. This means that more than other transportation "trips", recreation may require additional levels of support and encouragement.

Recreational mobility is the focus of this master plan and the ways to address recreational mobility are nuanced and varied depending on a range of different factors. When considering how best to address and enhance recreational mobility within the Town of Grimsby, consideration should be given to, and questions posed around six (6) core factors. These considerations are identified in Figure 1 and are embedded into the master planning, design, and policy/program development process.



Figure 1 // Recreational Mobility Concepts and Considerations

Town of Grimsby Recreational Trails Master Plan Final Report // 2024

1.1.2.1 RTMP ROLE

When developing and ultimately using the RTMP it is important to understand the role that it is intended to play in the context of municipal, regional, and provincial policies, plans, and guidelines. As noted in Section 1.3.2, the RTMP has not been developed nor will it be implemented in isolation.

Once adopted, the RTMP will form part of the Town's policy and planning hierarchy. A municipal planning hierarchy establishes the framework from which land use and infrastructure planning decisions are made. It responds to the higher-level frameworks at the provincial and regional government and provides more localized direction as to how the municipality is intended to grow. At the highest level, the Town's Official Plan sets out policies that determine what, where and how development is intended to occur, and infrastructure is intended to be built. While the Official Plan is adopted and used as the primary regulatory reference, other strategic plans are typically developed and adopted to provide more specific direction on different aspects of community infrastructure.

In the context of the Town of Grimsby, the Town's Official Plan is supported by a number of strategic plans and development related directives. The Recreational Trails Master Plan once adopted will be a supporting document and resource / reference which is intended to guide decisions related to trails / recreational mobility. Most applicable to the Recreational Trails Master Plan are the Parks and Recreation Master Plan and, in the future, a municipal-wide Transportation Master Plan.

These policies / plans are not intended to be used in isolation. Once adopted the RTMP is intended to be used as the primary reference in decisions made related to trails while also considering / referencing the other municipal plans and policies. Figure 2 provides an overview of the intended coordination (illustrated by the "C") that is to occur once the RTMP is adopted and proceeds with implementation.

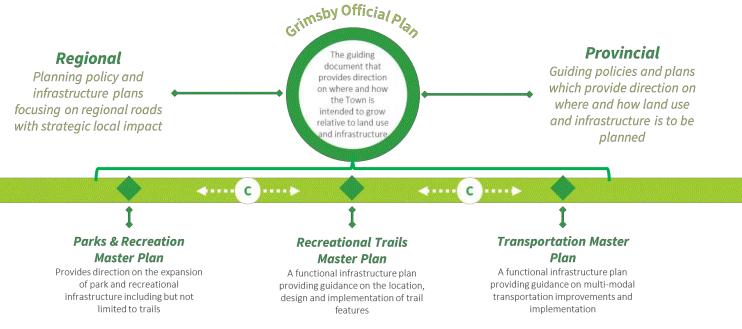


Figure 2 // Role of the RTMP in Municipal Planning

1.1.2.2 PLAN ASSUMPTIONS & CONSIDERATIONS

When developing a municipality-wide master plan of this scope and scale, there are a number of assumptions and considerations that help to frame and shape the work being done. The assumptions and considerations were established when undertaking the RTMP for the Town of Grimsby. It is important to document these assumptions and considerations so that there is a common understanding of this framework when reviewing the content and recommendations of the report.

#1. The Recreational Trails Master Plan is a Guiding Document.

The Recreational Trails Master Plan provides high-level guidance and recommendations regarding planning and designing recreational trails throughout Grimsby. This includes the identification of potential alignments (i.e. locations) of new trails, as well as design classifications for trails, implementation strategies, high-level costing and phasing, standardized maintenance practices, and education and promotion tactics.

The "teeth" of this masterplan lies in the 43 recommendations that are presented in Section 1.5. The recommendations were developed in collaboration with municipal staff and set out actionable items that can be undertaken by the Town to achieve the overall master plan goals and objectives over the next 20+ years. Each of the recommendations identifies a proposed timing, indicating whether they are immediately achievable, require further analysis, or are dependent on additional stakeholder engagement/coordination. They include tools, processes, practices, roles and responsibilities, programs, etc. all of which are intended to enhance and complement the proposed trail projects and guide day-to-day decision making.

#2. The proposed routing will include further analysis.

The proposed routing of all new trails has undergone a preliminary feasibility review at the master plan level. This assumes that while some field review has been undertaken, any new trails will be subject to further detailed review including supplementary studies (i.e. environmental impacts) and preliminary and detailed design projects which all include aspects of focused outreach and public engagement prior to construction.

The costing and phasing proposed within this plan is meant to help guide the Town and plan for investment on an annual basis, based on internal decision-making processes. Any on-road improvements that have been identified within this plan are subject to coordination with Town of Grimsby Public Works or the Region of Niagara and where needed, trails found within or in proximity of the Bruce Trail and Niagara Conservation lands will also require coordination with affected agencies.

#3. Change is expected.

As a long-range planning document, the RTMP is meant to respond to shifting conditions, context, and opportunities. Since the initiation of the project in 2021 and its adoption, conditions, project priorities, and political directives have shifted, and outcomes were adapted in response. This approach will remain the same as the Town proceeds with implementation. What is possible now may not be the same as what is possible in 5, 10, 15 or 20+ years. This master plan has incorporated reflective and flexible recommendations which will allow the Town to respond to shifting conditions and still adhere to the best practices recommended within this plan.

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1.2 Plan Development

This plan was first initiated in Summer of 2021. Over the following two years, the Town worked with various stakeholders and the public to envision what trails could look like in Grimsby over the next 20 years. This included two rounds of public engagement and multiple stakeholder sessions throughout the planning process. A timeline of the RTMP planning process is included in Figure 3.

1.2.1 Plan Engagement & Outreach

In Fall of 2021 and Spring of 2022, the Town engaged the public and stakeholders on the development of the plan. The first round of engagement focused on identifying the strengths, weaknesses, and opportunities of Grimsby's existing trail network and gathering input from what the community would like to see encompassed within the RTMP.

The second round of engagement introduced draft trail classifications and a draft proposed trail network for comment. After this round of engagement, the trail network and design guidance were finalized based on feedback from the public and final drafts were presented online in Spring 2023. Figure 4 summarizes the key engagement feedback. A more detailed summary is provided in Technical Memo #1.

A note regarding the rail with trail...

As part of our engagement with the community, we heard significant support for a potential 'rail with trail' along the CN rail line crossing Grimsby east to west. We listened to this feedback and the Town engaged in a preliminary feasibility review with CN (and other impacted stakeholders) to explore the possibility of a trail that would abut the rail line.

This linkage, as well as others proposed in the RTMP (that are considered under the jurisdiction of the Town), will be subject to future engagement and outreach as part of the next steps associated with implementation. More information on this process and its outcome is summarized in Section 2.1.



Figure 3 // Recreational Trails Master Plan Project Timeline & Process

Town of Grimsby Recreational Trails Master Plan Final Report // 2024

ROUND 1 ENGAGEMENT FEEDBACK



What are words the come to mind when you think of trails in Grimsby now?

Beautiful	Limited	Peaceful
-----------	---------	----------

Relaxing Maintenance Improve Access

Hard to find Healthy Disconnected

Fun Lack of parking Picturesque



What are words that come to mind when you think of trails in Grimsby in 10 years?

Sujety For all users waterfrom	Safety	For all users	Waterfront
--------------------------------	--------	---------------	------------

Connected Active Easy to find

Accessible Safe Multi-use

Well maintained Naturalized Clean & comfortable

ROUND 2 ENGAGEMENT FEEDBACK

Most supported trail links...







Escarpment Stairs at Centennial Park

West-end Waterfront Trail

Forty Mile Creek Trail extension

Core themes heard...



Prioritize connections to the escarpment



Prioritize additional parking and amenities at trailheads



Prioritize connections between Downtown and Grimsbyon-the-Lake

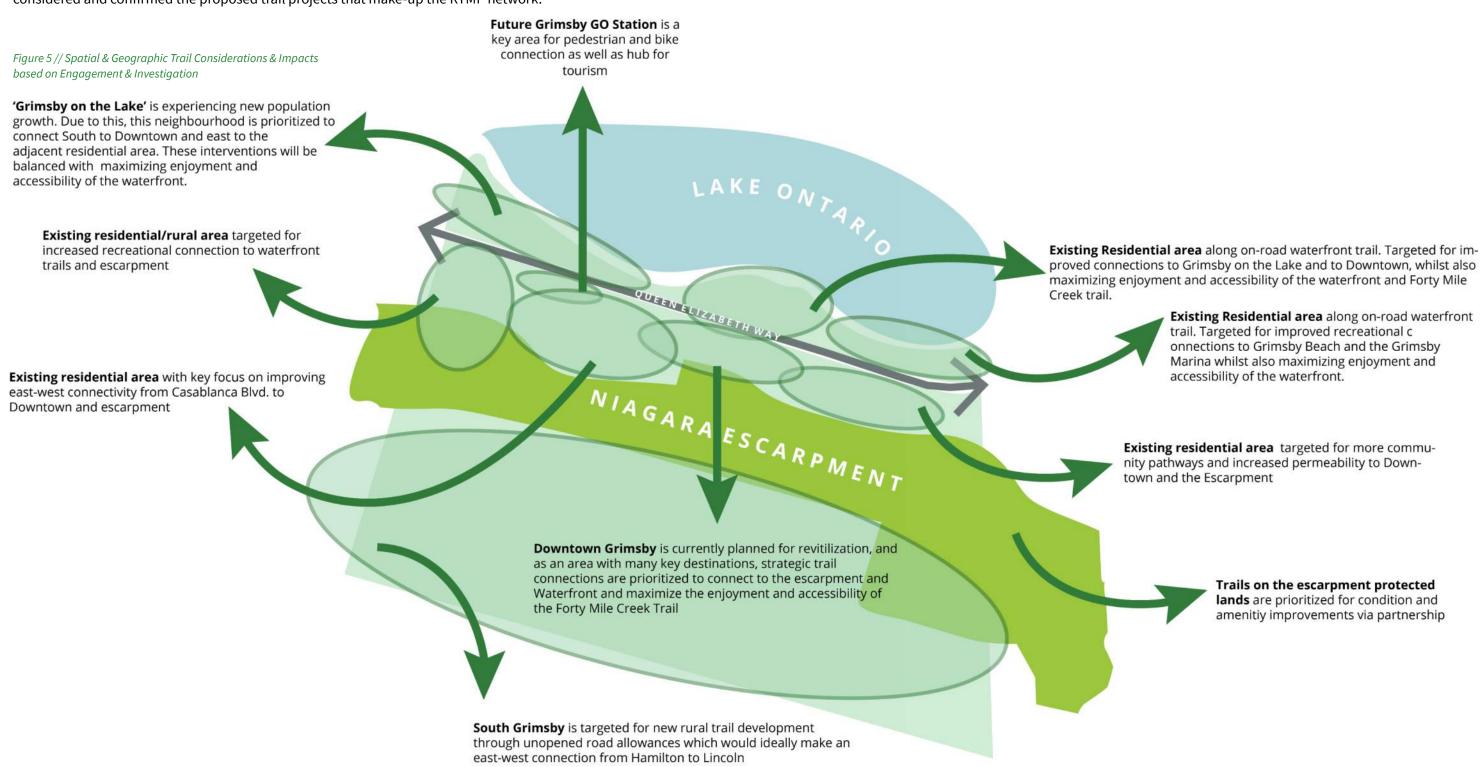


Support for East-West Rail with Trail

Figure 4 // Infographic Summary of Engagement Input Gathered and Feedback Received

1.2.2 Unique Features of Grimsby

In addition to the infographic summary provided above, Figure 5 presents some of the unique geographic and spatial features that influenced and impacted the development of the RTMP, specifically as the project team considered and confirmed the proposed trail projects that make-up the RTMP network.



Town of Grimsby Recreational Trails Master Plan Final Report // 2024

NATURAL

RECREATIONAL TRAILS PLAN.

1.3 Grimsby Trail Context & Conditions

This is the first ever trails master plan developed for the Town of Grimsby. However, the previous work completed, the conditions and context, the policy framework, and societal shifts that have been done/occurred, has all been part of the foundation upon which this plan is being developed. The following section introduces the baseline of context of trails planning within Grimsby and the rationale as to why this is the perfect time for the Town to develop and adopt a strategy of this nature.

1.3.1 Demographics & Geography

Grimsby reflects a growing urban centre and major community hub and destination in Niagara Region.

Since 2016, Grimsby underwent 5.7% population growth. In addition, the Town of Grimsby also protects many sensitive natural and rural areas, including the Lake Ontario Shoreline, Niagara Escarpment, Niagara Peninsula Conservation Areas, Greenbelt, Carolinian Forest, and Prime Agricultural Area.

That said, the vast amount of nature and natural areas in Grimsby offer both an opportunity and a potential barrier to connectivity. Trails are meant for recreational enjoyment but also must remain environmental stewards and respect the natural landscapes they tread upon. Figure 6 provides an infographic summary of relevant features that contribute to the uniqueness of the Town of Grimsby relative to trail need, access, and development.

The Town of Grimsby is nestled on the boundary of Niagara Region and the City of Hamilton in addition to several unique natural and culturally significant features. Given its proximity to the City of Hamilton, adjacent Niagara Region municipalities, and the Canada-USA border, Grimsby is a hotspot for connectivity. It's the "Niagara Gateway", a restaurant and tourism hub averaging 2.7 million visitors annually. Moreover, the historic Grimsby Beach neighbourhood is a popular tourist destination known for its rich history and distinctive painted cottages.

Beyond visiting, Grimsby is also a place to both grow up and grow old. Based on the 2021 census, 22% of the population is under the age of 19 and 21% of the population is over the age of 65. As a predominantly residential community, local connections between neighbourhoods are of utmost priority. Particularly, connecting Downtown Grimsby, a key area with many shops, employment opportunities, and gathering spaces for both residents and visitors alike.

Grimsby is experiencing a significant amount of growth due to its access to major cities and towns within the GTHA and Niagara Region. It has planned transit expansions, with a proposed Grimsby GO station at Casablanca Blvd, and new residential density in the Grimsby-on-the-Lake neighbourhood. These new developments are contributing to the considerable growth and the shift in demographics within the Town, with the population density in 2021 reaching 420 people per square kilometer. This new density drives an increased need and demand for more greater connectivity and access in the Grimsby-on-the-Lake neighbourhood to the established residential neighbourhoods to the east.

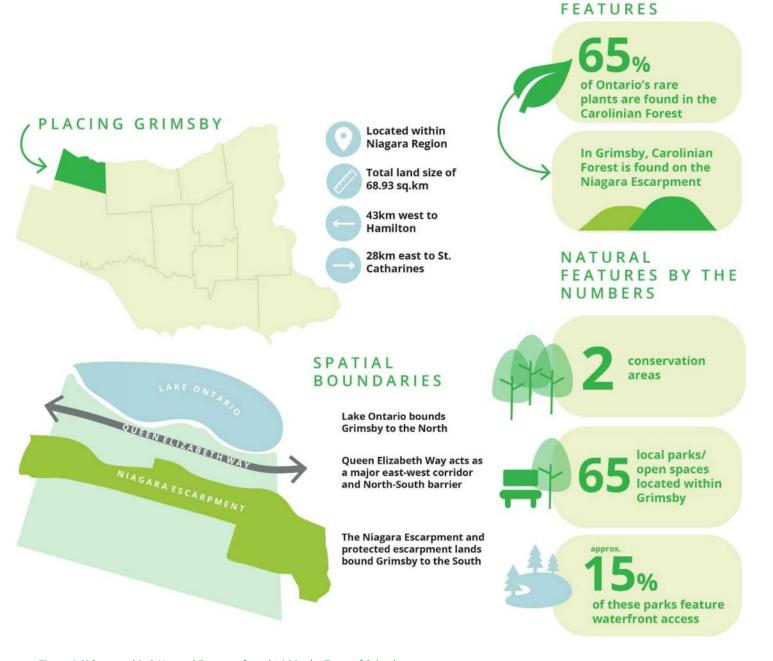


Figure 6 // Geographic & Natural Features found within the Town of Grimsby

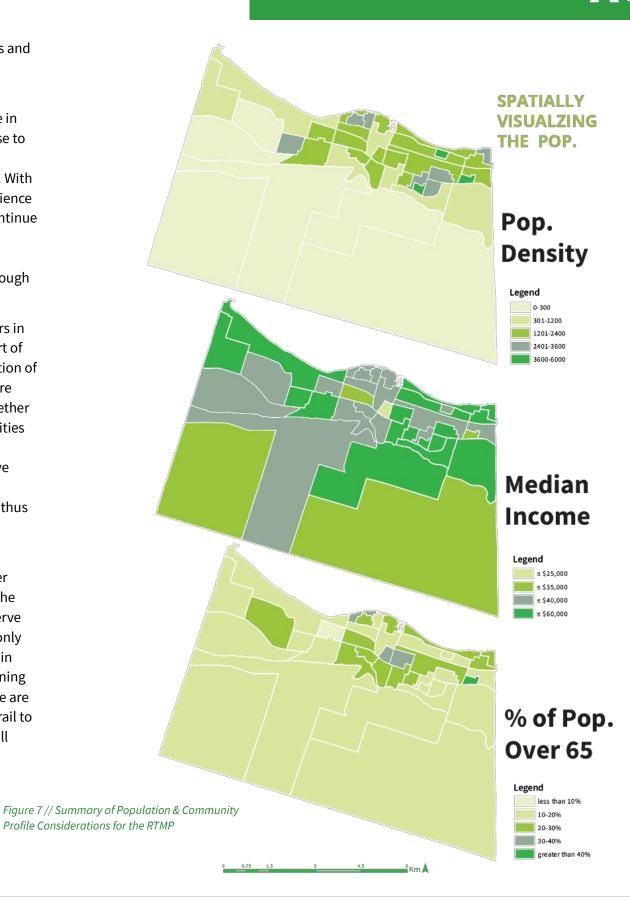
An effective master plan should leverage the opportunities but also address the barriers. Grimsby remains an auto-dependent municipality with 95% of commuters driving. This raises key issues of safety at crossings where trail users may need to interact with motorists. Moreover, two transportation corridors, being the CN railway and the Queen Elizabeth Motorway, are east-west barriers to north-south connectivity. Recreational trails are an opportunity to enhance these areas of natural beauty while also addressing the concerns related to individual and community mobility and movement.

An infographic summary of demographic and development conditions and considerations is provided in Figure 7, along with commentary on the impact on recreational trail currently and in the future.

There are clear opportunities for advancing trail development and use in the Town of Grimsby. As a Town that is growing in population, but close to many natural destinations, there is an opportunity to leverage trail development that connects more people to their scenic surroundings. With the impact of COVID-19 on the way in which we can and want to experience nature and the mental and physical health impacts of doing so, we continue to see a significant demand for and around these areas of natural and cultural significance. As opposed to leading people to these locations without guidance, there is an opportunity to activate these spaces through trail connectivity.

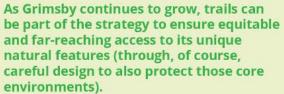
Furthermore, amplifying connections to the main commercial corridors in both Downtown and Grimsby-on-the-Lake will ensure trails can be part of more than just the recreational mobility network, but also offer an option of travel for destination-bound trips. Individuals seek destinations and are typically willing and able to spend money at the end of their trip – whether it be recreational or transportation in nature. The economic opportunities are not isolated to those who live within the Town, but those who are visiting and seeking new experiences. Giving people the option to leave their cars and explore the Town on foot or on bike using interesting, comfortable, and safe facilities will help to encourage greater use and thus investment in the Town through shops, cafes, restaurants, and other complementary destinations.

Finally, the demographic needs of Grimsby (i.e., women, families, older adults, and low-income population) will be prioritized to ensure that the proposed trail network and complementary trail recommendations serve those who would want to (or need to) use the trail network. This not only refers to the location and destinations of the trail system, but the way in which they are designed and the amenities that support use. By designing with the most vulnerable and those with the highest needs in mind, we are designing and addressing everyone's needs. While we can't design a trail to accommodate everyone, Grimsby seeks to provide opportunities for all where possible and accommodate unique needs as necessary.



Community Profile Key takeaways...

More people. Great nature.



Connecting Downtown.

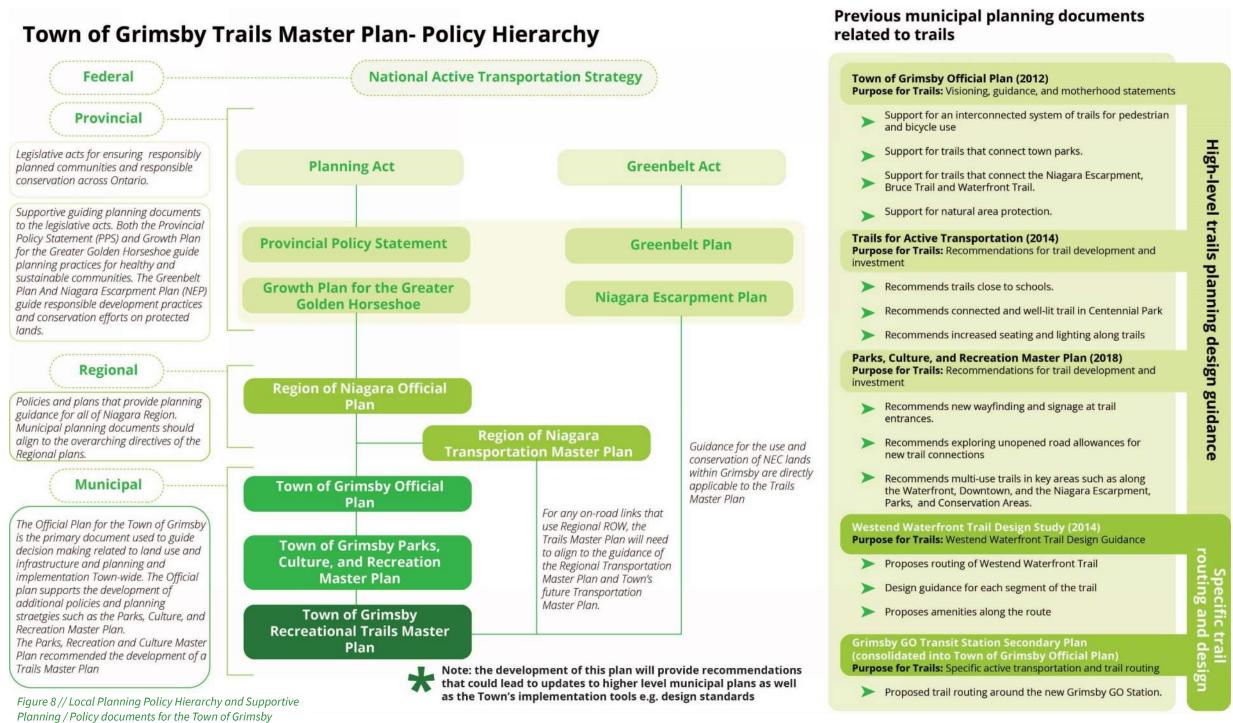
24% of people commute within Grimsby, but only 5% use active travel modes. The main purpose of trails are recreational, however there is opportunity to form safe connected off-road routes to key destinations, such as employment areas Downtown.

Trails for all.

According to the mapping of demographic data, populations over 65+ are clustered near the downtown. Trails should be accessible to all ages and abilities, and ensuring short travel distances to and from trailheads can ensure everyone who wants to walk, bike, or roll Grimsby's trails feel able.

1.3.2 Planning & Policy

Planning is framed by a policy hierarchy that stems from high level provincial policies down to area specific municipal plans. Within the Town of Grimsby, trails are supported by a range of policies at all levels. Trails fit into the policy hierarchy, providing layers of support for future consideration and enhancement (see Figure 8 for an overview of relevant planning policy at all levels). More specifically, the Town of Grimsby has adopted plans that support trail development and investment. The majority are contained within municipal policy, including the Town's Official Plan and the Parks, Culture and Recreation Master Plan (see the summary of plan impacts to the right). These plans provide the basis of the previously proposed trail routes that were considered in this plan and will be discussed in more detail in Section 2.2.1. As part of Phase 1 of the RTMP, a comprehensive review of applicable policies and plans was completed. The outcomes are summarized in Technical Memo #1 and are the basis for suggested policy enhancements and revisions outlined in Section 3.4.



1.3.3 Existing Routing & Infrastructure

Prior to the identification of new trail improvements and linkages, it is critical to establish an understanding of what is currently "on the ground" (i.e., existing conditions and what has been previously adopted or proposed, planned conditions). The review of existing and planned conditions was conducted based on available geographic data and information systems (GIS), previous plans, and open-data sources, as well as select previously proposed or adopted routes from municipally, regionally, or provincially accepted or adopted initiatives. This information was reviewed in tandem with a more robust set of land-use and service information, which provides the additional context for trail routes and experiences including but not limited to parks, open space, destinations, land parcels, conservation areas, urban boundaries, secondary planned areas, etc. Once consolidated, mapping was prepared illustrating the locations of the existing and previously planned routes within the Town of Grimsby relative to other transportation and land use considerations. The route alignment and location of existing trails are presented in Map 1, and previously proposed trails, Map 2.The following is an overview of the types of trails that exist within the Town of Grimsby at the time the RTMP was developed.

Existing Town of Grimsby Trails...

Trails that are found on Town-owned lands such as parks and open spaces or along Town owned streets/corridors.

Existing Regional hiking trails...

Trails that are found in the Town but extend beyond the borders to surrounding areas or are the responsibility of other partner agencies.

Notable of the existing conditions are the West-end Waterfront Trail in the Grimsby-on-the-Lake neighbourhood and the Forty Mile Creek Trail. Additionally, there are kilometers of trail along the Niagara Escarpment, with the Bruce Trail and Niagara Peninsula Conservation Authority Trails. Further, Grimsby is connected to a series of trails in both the Greater Toronto Hamilton Area and Niagara Region. To the east, the Waterfront Trail continues to the Burlington Waterfront Trail and Hamilton Waterfront Trail, and the Dofasco 2000 trail in Hamilton borders the Grimsby municipal boundary in the South. To the west, the Waterfront trail connects to St. Catharines, Port Dalhousie, and Niagara-on-the-Lake. The trails found within the Town of Grimsby are an amalgam of unique opportunities that represent a great deal of coordination and effort by Town staff and its partners.

Existing on-road linkages...

Connecting linkages that are either designated as trails but found on-road or are identified as part of the region's wider cycling network.

Previously proposed routes...

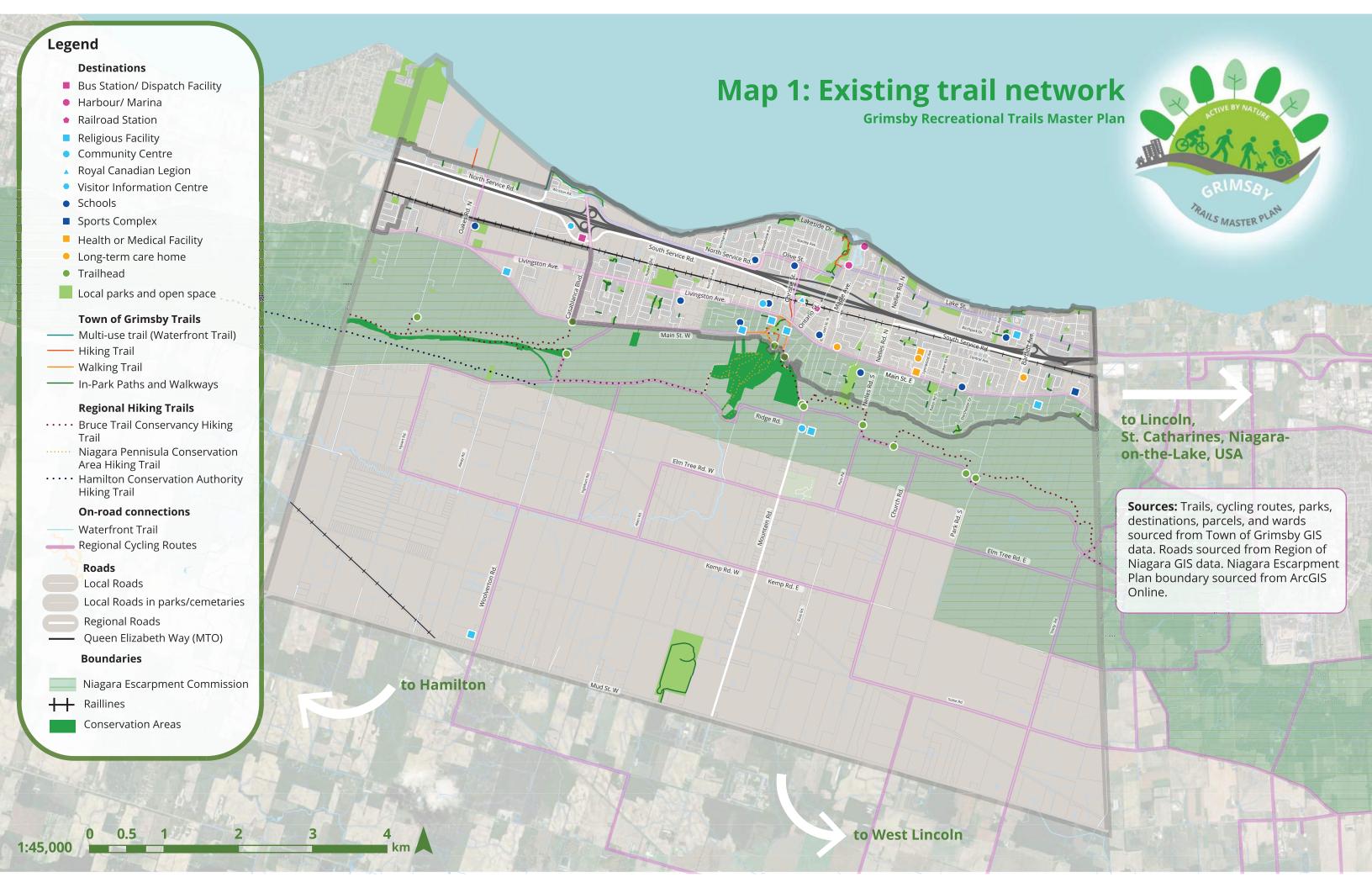
On and off-road linkages that were previously identified and recommended through municipal, regional, or municipal partner plans or processes that are anticipated to be implemented.

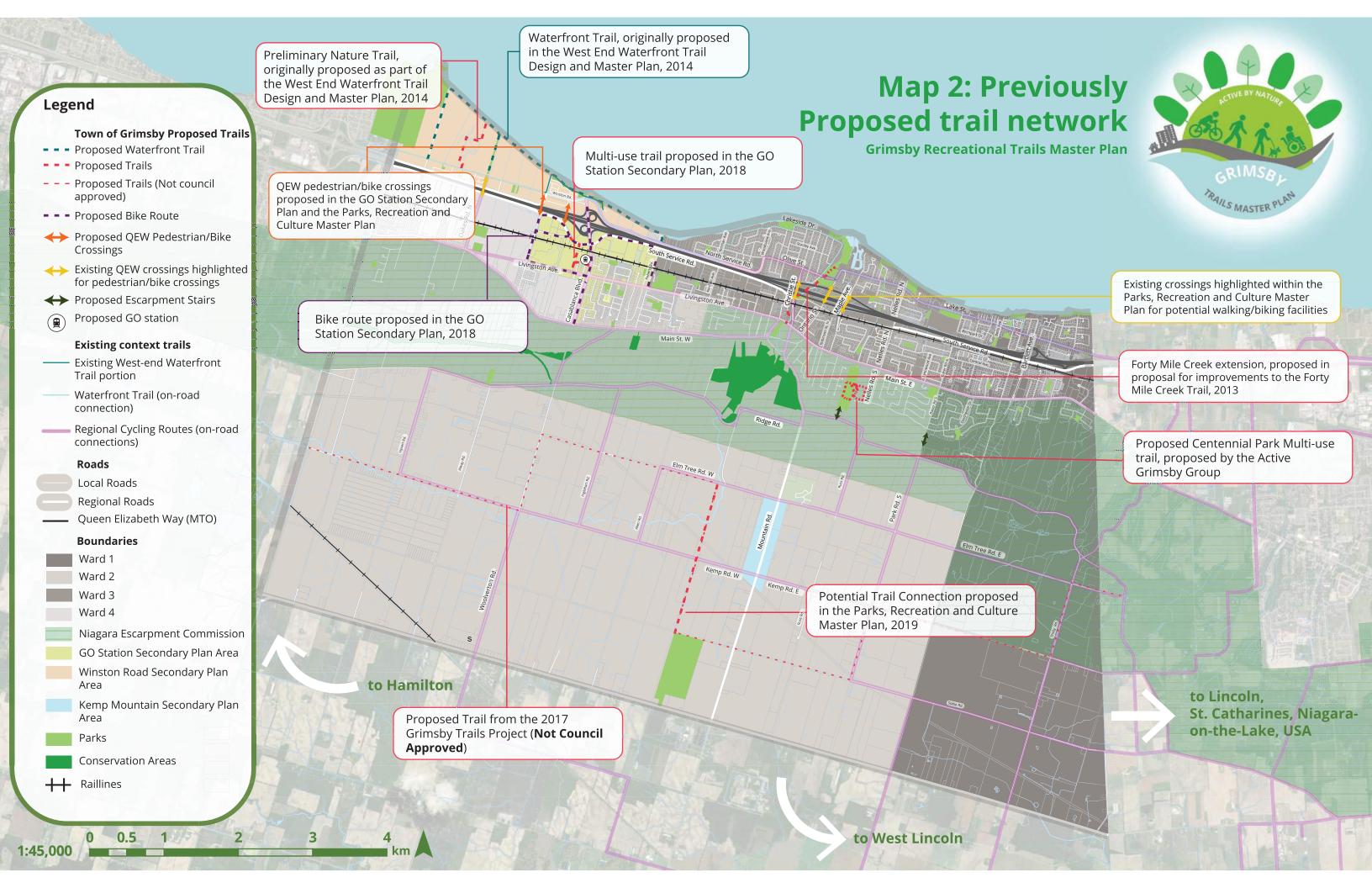
Trail	Trail Type	Kms
Waterfront Trail	Town Trail	12.2
Westend Waterfront Trail (Multi-use)	Town Trail	0.4
Hiking Trails	Town Trail	2.4
Walking Trail	Town Trail	5.0
In-park Paths & Walkways	Town Trail	5.2
Bruce Trail	Regional Hiking Trail	19.9
Hamilton Conservancy Agency Trails	Regional Hiking Trail	9.5
Niagara Peninsula Conservation Authority Trail	Regional Hiking Trail	4.8
Waterfront Trail	Existing On-road Links	11.8
Regional Cycling Routes	Existing On-road Links	154
	Total Existing Trails	225.2
Proposed Waterfront Trail		5.3
Proposed Trails		5.3
Proposed Bike Routes		6.6
Т	otal Previously Proposed Routes	17.2

Table 1 // Summary of Existing Trails found within the Town of Grimsby (2023)

It is important to keep in mind that not all trails are owned and operated by the Town, nor are they considered part of the scope of this project. For example, we note the location of and connection to on-road cycling linkages (both municipal and regional). However, the focus of the RTMP does not include a comprehensive review of the condition and potential improvement of on-road linkages. Due to the nature of trail linkages, we also acknowledge that it can be difficult (if not impossible) to achieve a fully connected trails system.

Therefore, considering the on-road links and other connections helps to achieve some of these overarching goals and objectives but will not be reviewed or revised as part of the scope of this project. While the alignment of the existing and previously proposed trails is being accepted, this master plan recommends improvements and enhancements to ensure that the design of these trails is consistent with accepted and adopted best practices as well as guidelines and standards.





1.4 Why Trails Now & The Vision

SO, WHY IS NOW THE TIME FOR THE RTMP?

Community impact...

Given the population growth, surrounding natural areas, and supportive policy context, Grimsby is well-poised to embark on a trails master planning process. Although trails have been supported and planned for in previous efforts, there has yet to be a cohesive master plan focused on the planning, promotion, and implementation of trails across Grimsby. This leads to lack of public knowledge on existing trails and a lack of connectivity between current trail systems. Forming a cohesive vision for trails within in Grimsby is important as trails offer many benefits to both those who live in and visit the Town.

Overall health...

Trails have been well documented to offer substantive physical and mental health benefits. In terms of physical health, trails promote physical activity for a range of different age groups, from children to seniors. Active walking, running, cycling, or strolling can decrease risks of chronic disease as well as offer a low-impact activity for those with pre-existing health conditions. With access to nature and quiet areas, trails also support community mental health, which is a growing area of importance. The past three years of navigating a global pandemic have underscored the importance of having safe and accessible public spaces. Trails offer a form of recreational activity which increases the resiliency of the public realm.

Sustainability...

Beyond population health, trails also provide environmental benefits which help make Grimsby more livable for humans, wildlife, and nature alike. Many existing trail systems in Grimsby are naturalized and traverse environmentally significant lands, such as the Bruce Trail and the Forty Mile Creek. These trails help to protect these areas and steward low-impact access for residents and visitors to appreciate natural areas and their environmental value. Beyond just infrastructure, programming and educational resources are part of trails planning and can ensure that the importance of natural areas is recognized, valued, and protected.

Economic return...

Trails are part of a sustainable future but also contribute to the sustainability of our economy. A significant driver of tourism within Niagara Region and its area municipalities (including the Town of Grimsby) active transportation contributes to municipal and regional agri-tourism. The Twenty Valley is an emerging tourism destination, serving as the economic entry point to the rest of Niagara Region. At the foot of the Bruce Trail, and part of the Waterfront Trail linkage, the Town of Grimsby stands to see significant increases in tourism and economic growth if further investment is made to provide a connected, continuous, safe, and enjoyable active experience through trails and other active linkages.

If we implement the RTMP we aim to achieve our community vision and our principles of commitment...

VISION

The Town of Grimsby is a significant recreational destination in Ontario, providing residents and visitors with accessible active and passive trail opportunities.

PRINCIPLES

Integrated

Trails are part of a connected and continuous transportation system.

Equitable

Direct access to trails is provided to all, and high needs are prioritized for investment.

Achievable

Feasible and actionable strategies are established and endorsed along with supportive tools.

User-focused

The comfort and safety of all users is prioritized through design.

Maintainable

Provides solutions that can be maintained and enhanced over time.



1.5 RTMP Action Plan

The RTMP encompasses all the essentials needed by the Town to advance trails throughout Grimsby. Beyond just routing, this plan also provides recommendations and guidance that support the detailed-design, programming, ongoing maintenance, phasing, funding, and implementation of trails.

1.5.1 RTMP Content

The RTMP has been developed with the goal of providing municipal staff and stakeholders with a dynamic and useable resource that addresses the aspects of trail planning, design, and implementation that arise on a day-to-day basis. It is meant to be a plan for trail action. The following is a summary of the key components of the RTMP, their location within the RTMP document, and their intended use.

Recommendations and Strategy for Action (Section 1.5.2)

The recommendations are the core of the RTMP, providing actionable items that can move trail initiatives forward over the horizon of the plan.

The Proposed Trail Network (Section 2.0)

The network of proposed trails shows the envisioned trails and supporting on-road connections throughout the town. This network is organized based on the trail purpose, with four major spine trails, a series of connecting secondary trails, and strategic on-road connecting links. Together, these form a cohesive network of trails that respond to community priorities for trail development.

Trail Classifications (Section 2.3)

Not all trails are made equal, and different environmental and community contexts warrant different trail surfaces, widths, and amenities. In addition to the network, this plan provides design guidance for a series of different trail types: from natural trails to destination trails.

Implementation tactics (Section 3.1)

Each trail is contingent on a variety of factors to support implementation. This includes the costing, phasing, and supportive policies which position the proposed projects for successful implementation.

Programming/enforcement/education tactics (Section 3.4)

Welcoming and functional trails are also more than just physical infrastructure; how they operate and are maintained is also a result of the supports put in place, such as programming and education efforts and enforcement recommendations.

Monitoring and Evaluation tools (Section 3.5)

A series of tactics and supports which will help to guide the monitoring and evaluation of individual trail performance as well as the plan's success.

1.5.2 RTMP Recommendation

To realize the vision and principles as well as guide implementation, the Recreational Trails Master Plan is bolstered by a Strategy for Action.

The RTMP Action Plan is developed around 43 recommendations that will help the Town to realize trail projects, prepare for future change, and synthesize future transportation initiatives. The recommendations are actionable items that the Town can implement to push forward trail development.

The RTMP recommendations have been strategically identified within five categories pertaining to designing, building, implementing, encouraging, and adapting.

An assessment of anticipated time and effort has been identified for each proposed recommendation. The categorization of recommendations has been undertaken based on best and comparable practices, current municipal function, and capacity, as well as work previously completed. The level of effort categorization helps to set an expectation of effort and timeline estimates which are intended to help with future project and capital/operational planning undertaken by municipal staff. The following is a summary of the three categories/phases of implementation identified for the RTMP recommendations.

Recommendations that are phased as "ready to proceed" reflect recommendations that are implementable as soon as the plan is adopted. Recommendations phased as "coordination required" reflect interventions which may require further collaboration and/or discussion between the Town and internal and external stakeholders. Recommendations phased as "further investigation required" may need to be supported by on-going research and/or investigation to complete the recommendation. This could refer to additional studies, review, or evaluation prior to implementing the recommendation.

Although not intrinsically or definitively linked to timing, generally ready to proceed recommendations should be implemented within 5 years of the plan passing, and recommendations wherein coordination or further investigation is required are more long-term.

A detailed overview of the proposed recommendations is provided on the following pages. The content of the RTMP has been developed to support the implementation/ action of each recommendation. Where recommendation specific supports are provided the following icon will be presented throughout the RTMP document.

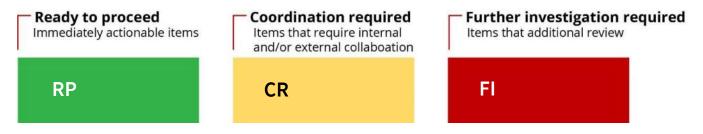


Figure 9 // Overview of Recommendation Implementation Status

1.5.2.2 RECOMMENDATION TYPE #1. DESIGN

Recommendations which identify preferred treatments and guidance associated with the aspects of trail design including the trail itself and supporting amenities. Within this plan, the design recommendations are tied to the proposed trail network as well as future design solutions that complement the trails network.

Item	Recommendation	Status
R1.1	The trail and supporting design guidelines are to be used by the Town of Grimsby as the primary resource when informing the design of trail linkages and trail supportive amenities.	RP
R1.2	Trail amenities and trail activation solutions are to be implemented in a consistent manner throughout the Town through the application of the amenity selection and implementation tool identified in the plan.	CR
R1.3	The signage and wayfinding guidelines as identified in the recreational trails master plan are to be reviewed and a comprehensive wayfinding strategy is to be developed and implemented integrating the route intent and major destinations.	CR
R1.4	Where applicable, provincially accepted design guidelines and standards should take precedence over those included as part of the recreational trails master plan, including but not limited to Accessibility for Ontarians with Disabilities Act Built Environment Standards.	RP
R1.5	The Town should refer to Ontario Traffic Manual Book 18: Cycling Facility Design as the guide for the design of on-road and in-boulevard linkages identified as part of the recreational trails network in partnership with the Town's Public Works departments.	RP

Table 2 // Summary of RTMP Design Recommendations

1.5.2.3 RECOMMENDATION TYPE #2.BUILD

Recommendations related to the location of and next steps in the process of constructing the process of achieving the proposed trail network. Section 2, and particularly Section 2.2 provides the RTMP content to support the proposed recommendations.

Item	Recommendation	Status
R2.1	The proposed recreational trails network as identified in the 2023 Recreational Trails Master Plan will be adopted and used to guide trail planning, design, and implementation with focus placed on the proposed groupings of priority projects to facilitate recreational trail connectivity throughout the Town.	RP
R2.2	The Town should continue to work with Niagara Region to facilitate the next steps in the design and construction of on-road linkages found under the Region's jurisdiction.	RP
R2.3	The Town should prioritize the work with applicable landowners (i.e. Hydro one, CN Rail, School Boards, etc.) to facilitate the next steps in the design and construction of key segments of the east-west trail corridor depending on the location of the segments of the spine trail.	CR
R2.4	The Town should continue to work with all affected municipal partners (i.e. Grimsby Power, Hydro One, Metrolinx, GO Transit, Niagara Conservation and School Boards) to facilitate the design and construction of recreational trail linkages that are found on their lands and proceed with supporting the necessary next steps.	CR
R2.5	The Town should prioritize the enhancement of major trailheads at the entrance of the Bruce Trail and Conservation Areas (i.e. major trail locations) to include sufficient parking, as well as at the entry and exit points of the proposed spine trail connections with the implementation of minor trailheads at strategic locations along the trail where conditions are appropriate.	CR
R2.6	The Town should prioritize the implementation of a set of escarpment stairs at the base of Centennial Park and proceed with the necessary approvals and design.	RP

Table 3 // Summary of RTMP Build Recommendations

1.5.2.4 RECOMMENDATION TYPE #3. IMPLEMENT

Recommendations addressing the processes, policies, and practices to support the day-to-day coordination, management, maintenance, and funding of trails. Within the RTMP, implementation guidance and information are provided in Section 3.

Item	Recommendation	Status
R5.1	The proposed recreational trail network as identified in the 2023 Recreational Trails Master Plan is to be adopted as a schedule as part of the Town's Official Plan to ensure that the recommendations are further supported at a higher policy level.	CR
R5.2	The proposed on-road or in-boulevard linkages as identified in the Recreational Trails Network should be reviewed and validated in future municipal functional master plans including but not limited to a Town-wide Transportation Master Plan or Active Transportation Master Plan.	FI
R5.3	The Town's Recreational Trails Master Plan should be used as the primary reference for all trail related projects and initiatives replacing select prior plans (e.g. Parks, Recreation & Culture Master Plan) where appropriate.	RP
R5.4	The recreational trail classifications as identified in the 2023 Recreational Trails Master Plan are to be adopted as the primary guidance for all off-road trail design, as well as within municipal standards to be used for the future design and construction of new trails or improvements to existing trail linkages.	RP
R5.5	The Town should update their existing road design standards to incorporate inboulevard and on-road active transportation facilities where appropriate.	RP
R5.6	The Town should utilize the information contained within the 2023 Recreational Trails Master Plan to communicate with developers as part of site plan approvals and development applications to ensure the location and design of trail linkages is consistent.	RP
R5.7	Annual funding of the Recreational Trails Master Plan should be allocated by the Community Services Department based on the proposed phasing strategy with additional external funding sources explore to support municipal budgets where needed.	RP
R5.8	The Town should explore the identification of special projects as part of annual municipal budgets to support promotion and education of trails as per the recommendations found within the Recreational Trails Master Plan.	RP

Item	Recommendation	Status
R5.9	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.	RP
R5.10	Land acquisition, encroachment, and/or easement requirements to accommodate the implementation of new trails are to be reviewed and studied as a project proceeds with implementation.	CR
R5.11	The Town should review the terms of reference for, and make-up of a trails related committee to Council (name to be determined) and consider establishing a trail specific sub-committee to review and monitor the implementation of the 2023 Recreational Trails Master Plan.	RP
R5.12	A formal recreational trails partnership strategy should be adopted based on the roles and responsibilities identified in the Recreational Trails Master Plan which is to be reviewed and adapted annually.	CR
R5.13	The recreational trail phasing plan is to be used as the blueprint for annual decision making related to budgeting and scheduling trail projects and initiatives.	RP
R5.14	The Community Services Department will prepare an annual report to Council documenting the progress made on the Recreational Trails Master Plan and anticipated next steps.	RP
R5.15	When Town staff in other departments proceed with Functional Master Plan (i.e. Transportation Master Plan), recommendations and trail routing should be reviewed, confirmed, and incorporated where appropriate.	RP
R5.16	The implementation processes and decision-making tools will be adopted as referenced as the primary guide for next steps as a trail linkage proceeds to design and construction.	RP
R5.17	Safe and appropriate trail use is to be enforced by Municipal By-law as per the by-law guidance and trail classification identified through the Recreational Trails Master Plan.	CR

Table 4 // Summary of RTMP Implementation Recommendations

Town of Grimsby Recreational Trails Master Plan

Final Report // 2024

1.5.2.6 RECOMMENDATION TYPE #4. ENCOURAGE

Recommendations pertaining to potential programs and initiatives that educate and encourage people to participate in trail activities and trail use.

Item	Recommendation	Status
R4.1	The Town should coordinate the development of an online platform for trail information sharing and promotion in partnership with other trail management agencies such as the Waterfront Trail, Bruce Trail Conservancy, or Conservation Niagara.	RP
R4.2	Recommended education and outreach strategies should be reviewed and prioritized by the Committee to Council in partnership with the Community Services Department with a minimum of one educational initiative to be undertaken annually.	RP
R4.3	The Town should coordinate the development of a hard copy map communicating trail related information and update/produce the map to reflect new trails constructed and/or changes to the trails network bi-annually.	RP
R4.4	Public perception of implementation successes and needs for improvement will be gathered through community surveys which are to be undertaken on a biannual basis.	FI
R4.5	Minimum Maintenance Standards will be used as per the Council direction with additional consideration for enhanced maintenance standards as part of Town by-laws, based on direction from the Recreational Trails Master Plan.	RP
R4.6	Select trails will be maintained during the winter where appropriate with maintenance being undertaken by the Community Services Department.	CR

Table 5 // Summary of RTMP Encourage Recommendations

1.5.2.7 RECOMMENDATION TYPE #5. ADAPT

Recommendations which provide the tools to support ongoing master plan adaptation and resiliency to respond to changing priorities and practices of the Town relative to recreational trails.

Item	Recommendation	Status
R5.1	The Town of Grimsby Recreational Trails Master Plan is to be revisited and updated every 10 years or at a time that is considered appropriate relative to municipal priorities and resources.	RP
R5.2	The proposed recreational trails network will be reviewed on an annual basis to determine if there are any updates needed including additional connections for consideration or opportunities that are no longer feasible	RP
R5.3	The tools and frameworks identified as part of the recreational trails master plan should be reviewed and revised (if needed) on a bi-annual basis to ensure that their application and consistency is up to date.	RP
R5.4	A bi-annual evaluation is to be undertaken of the status and condition of the trails as per the template identified in the Recreational Trails Master Plan. Evaluations are to be completed in the summer.	CR
R5.5	An annual review of external funding opportunities should be undertaken to explore potential sources of public funding based on the recommended sources as identified in the Recreational Trails Master Plan or additional sources that emerge following adoption.	RP
R5.6	Operational costs are to be reviewed and refined on an annual basis to ensure that trail maintenance (seasonal and winter included) is appropriately supported to meet the expectations of the Recreational Trails Master Plan.	CR
R5.7	Considerations for land acquisition and additional studies related to Recreational Trail Master Plan projects should be incorporated into capital project planning based on the guidance provided by the RTMP and other municipal sources.	CR
R5.8	The GIS database and implementation tools will be adopted by staff to manage the implementation of the network and to inform annual reporting.	RP
R5.9	Dedicated staff time should be allocated to the implementation of the Recreational Trails Master Plan by the Community Services Department with future review of capacity to determine if a dedicated or partially dedicated role is necessary.	RP

Table 6 // Summary of RTMP Adapt Recommendations

NETWORK



2.1 Process & Considerations

The second chapter of the Town of Grimsby is a comprehensive overview and summary of the approach used to identify and confirm the proposed recreational trail connections that make-up the Town's recreational trails network/system. There are numerous considerations and components that go into the identification of a municipal network. When developing the Grimsby Recreational Trails network, three key components were considered and used to inform the identification of the network.

#1. Planning process & assumptions

#2. User needs & interests.

#3. Land use compatibility

The details of these three components are documented in Chapter 2.0, explaining the process and considerations that were foundational to the development of the RTMP network. The chapter contains the information needed to understand the proposed recreational trails network for the Town of Grimsby. While the fulsome review and evaluation process is not documented within the RTMP, the details have been shared with municipal staff and can be made available if needed.

When reviewing the information in Chapter 2.0 keep in mind that...

When developing the recreational trails network for the Town of Grimsby, there were numerous and ever evolving conditions and considerations that needed to be reflected. It is not possible for the master plan to capture all ongoing planning efforts. However, the plan outlines the assumptions where possible. To achieve the desired connectivity (as endorsed by the public and stakeholders), the recreational trails network not only identifies off-road connections. The network relies on a series of existing, previously planned (municipal and Regional), and potential on-road connections with a focus on strategic connectivity.

On each of the maps prepared, notes have been provided documenting these assumptions. Not all proposed trail linkages are intended to be implemented immediately. In fact, this network is intended to be an ongoing effort of monitoring proposed and potential opportunities using the contents of the RTMP as a guide for annual and day-to-day decision making. The plan should be ready in its entirety to understand the unique contexts, conditions, design solutions, and timeline for the projects identified.

01.

ACTIVE BY NATURE.

2.1.1 #1. PLANNING PROCESS & ASSUMPTIONS

As noted in Chapter 1.0, a master plan of this nature is typically focused on a series of proposed projects or improvements which are central to achieving the vision and goals. Due to the nature of trails, it is not always realistic to have a fully continuous and connected off-road trail system. However, the iterative approach to identifying, evaluating, selecting, and designing trail routes is like that of other transportation systems (e.g., walking, cycling, etc.). The recreational trails network was developing using an iterative, network-based planning approach. Planning refers to the process by which a system of trail routes and facilities are identified, reviewed, confirmed, designed, and prioritized. Best and comparable planning practices encourages an iterative process that focuses on integrating and building upon existing and previously planned routes and facilities. The intent of the process is to ensure that feasible trail improvements and new trail solutions are identified in the context of municipal planning, design, construction, and maintenance.

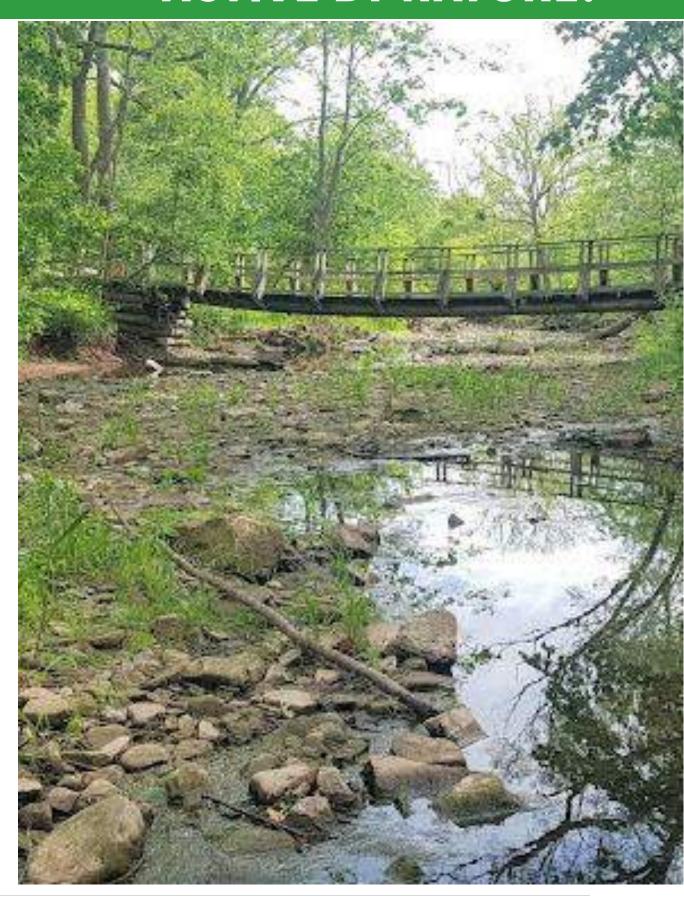
For the purposes of this project, the iterative network approach relied on five (5) steps. The approach focused on continual evaluation of trails needs, barriers, and priorities leveraging the input received from engagement and outreach, the information gathered from master plan level field investigation and review, as well as best and comparable practices. This process was meant to continually evaluate for trail opportunities available in the Town and to utilize input, field investigation, and other context specific considerations to refine and adapt the recommendations to determine the preferred proposed routes and potential design solutions.

To inform the planning process and establish a greater understanding of the existing conditions, a multi-pronged approach was taken to reviewing and documenting context specific considerations. A desk-top review as well as in-field investigation were undertaken over the course of the planning process. The findings from these reviews included the following information and has been provided to the Town as part of the project record.

- Trail start point.
- Trail end point
- Relative demand of users
- User types and variation
- Presence of parking (on or off-road)
- Connectivity (to additional trails or alternate AT routes)
- Environmental Features and description of those features
- Ownership
- Crossings

The information is intended to be used at the time that the project moves forward with implementation. It provides a snapshot of the context that was considered at the time the plan was developed and recommendations were made, as well as a template for future information gathering and documentation. A compilation of key features was developed and used throughout the process to determine the most appropriate trail alignment (i.e., location, future design solutions, and impacts).

A summary of findings and an overview of graphics is provided on the following pages. The process was further underpinned by a series of local, regional, and inter-regional assumptions which are considered "givens". These assumptions were developed based on discussion with Town staff and an understanding of the principles and aspirations of the plan. An overview and description of each of the process steps and the assumptions that have been identified and integrated are presented in Figure 10.





Unopened Road Allownace Kemp Rd W. @ Hysert Rd. looking west



Unopened Road Allownace Kemp Rd W. @ Alway Rd.



Unopened Road Allownace Kemp Rd W. @ Inglehart Rd.



Unopened Road Allownace Kemp Rd W. @ Allen Rd.



Unopened Road Allownace @ Mountain Rd.



Unopened Road Allowance @ Kemp Rd. W



Elm Tree Rd. W @ Allen Rd.



Unopened Road Allowance Elm Tree Rd. E @ Russ Rd.



Bal Harbour Park



area @ Morrison Cres.



Signage and natural area @ Margaret Ave.



Culvert of Forty Mile Creek passing under the Queen Elizabeth Way



Creek @ Lake St., along the Waterfront Trail



West-end Waterfront Trail looking west



Unopened Road Allowance @ Livingston Ave. (Grimsby Woodlot)



Railway lands looking east @ Oakes Rd.



Unopened road allowance @ Oakes Rd. N looking east towards the woodlot



Oakes Rd. S



Unopened road allowance @ Cline Mountain Rd. looking



Unopened road allowance @ Kelson Ave. looking east



Oakes Rd. dog park to Lake Ontario



Aerial view of Grimsby Wetlands, west of Grimsby on the Lake



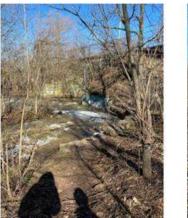
View of the Forty Mile Creek Trail, looking South



Unmitigated intersection of the trail and the rail line, evidence of desire line



Trampled fencing at the intersection of the trail and rail line



Forty Mile Creek tunnel beneath the rail line



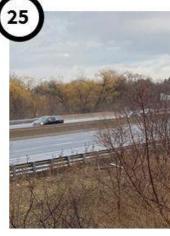
View of the Forty Mile Creek Trail, looking North



Informal trail coming from Christie St @ South Service Road



Forty Mile Creek tunnel @ South Service Road. Evidence of use for walking.



Forty Mile Creek crossing point under the QEW



Heavy vegetation in abutting lands going down to the tunnel



Sidewalk connection beneath QEW (photo provided by Parks Staff



Existing Bridge crossing Forty Mile Creek south of Pumphouse



Existing signage marking the bridge as closed

steps



Existing & Previously Proposed

The identification of trails that currently exist and are promoted within the Town of Grimsby as well as trails and on-road connections identified and adopted through past planning processes and approvals.

2

Potential Trails & Trail Barriers

The identification of locations within the Town of Grimsby that create or generate recreational trips and the access and design considerations for those locations.

3

Draft Trail Network

The identifiation of land uses and locations througout the Town of Grimsby that could be considered for future trail development, design and implementation and the barriers that require solutions.



Preferred Trail Network & Design

The confirmation of prefered and feasible trail routes and the identification of design solutions including trail types, amenities, signage and wayfinding, etc. for the proposed network.



Phasing & Priorities

The strategic consideration of priorities to inform the development of a three phase strategy with horizons in the short-term, medium-term and long-term to guide implementation.

network assumptions



Local assumptions...

- The network will focus on recreational connections with strategic connectivity to the Downtown
- Previously identified routes will be investigated prior to confirmation
- Planned QEW crossings will be reviewed relative to the trails system and preferred crossings confirmed
- Sidewalks may form part of the trails network, but sidewalk gaps will not be a priority for review.
- For on-road connections, emphasis will be placed on design continuity.
- Carolinian forests will be highlighted through trail network enhancements.
- Off-road links in publicly owned lands will be prioritized.



Regional assumptions...

- The Region's cycling network will be "adopted" from an alignment perspective but reviewed (on local roads) for design enhancements
- No other routes on regional roads will be explored as part of the master plan
- Route access and linkages within the Niagara Penninsula Conservation Authority Lands will be accepted
- Enhancements at points of transition and trailheads will be identified



Inter-regional assumptions...

- The Bruce Trail and the Waterfront Trail alignments will be accepted
- On-road segments found on Town roads will be reviewed to identify design enhancements
- Secondary connections will be explored to the Bruce Trail
- The province-wide cycling network will be explored alignment, facilities, and phasing will be accepted as identified in the strategy
- Provincial guidelines and standards will be applied for on-road linkages (i.e. Ontario Traffic Manual Book 18)

Figure 10 // Grimsby Recreational Trails Network Approach & Assumptions

02

ACTIVE BY NATURE.

2.1.2 #2. USER NEEDS & INTERESTS

Beyond the unique context and conditions within which trails could be developed and the planning assumptions set by the Town and its partners, it is critical to consider who the intended users are. Trail location and design are very much tied to who and how the trail is intended to be used and is not a one-size-fits-all approach. In fact, it can be a challenge to design a trail that is considered accessible to all meets the physical and experience needs for everyone. In developing the Recreational Trails Master Plan for the Town of Grimsby, a user first or user focused approach was tied into the overall process.

USER FIRST OR USER FOCUSED APPROACH

A recreational trail is a specific corridor, area, or destination that provides a range of different users with an opportunity to experience nature as part of their day-to-day trips or recreational pursuits. When developing the RTMP, consideration was given to some key impacts when it comes to trail users and uses.

2.1.2.1 FOR EXAMPLE...

- Not all trail users can be accommodated in one location if conflict and risk mitigation are a priority.
- In some locations, the environmental context and impact may have an influence on what can be designed and where.
- Due to limited space and opportunity for trails, there may be some more common uses that require prioritization over others.
- The intended use and prioritization of trail users should reflect both the existing activities in the community as well as desired activities that are known or identified through engagement.

To do this, trail users, their design impacts and considerations, and typical preferences related to trail experiences were defined. An overview of the proposed trail users and their definitions is provided on the following page, which served as the basis for identifying trail linkages as well as trial design solutions.

While the definitions are helpful and provide clarity around design, it is important to acknowledge that one individual likely does not exclusively have one type of "use". The intent is to provide opportunities for a range of experiences while reducing the potential for conflict and risk where possible.

Important to note that...

We are aware that there are several other potential trail users that could use the system now and, in the future, including equestrians or off-road vehicles. Considering the more urban nature of the Town, as well as restricted use on existing trails such as the Bruce Trail, the likelihood of these users is low and are not considered as the "design base" when reviewing the existing and identifying future trail routes and facilities.

2.1.2.2 PRIMARY USERS

Are the most frequent trail users having the most standard design impacts and considerations or are influenced by population fluctuations.

Trails in Grimsby are designed specifically for:



Pedestrians

- Walking, hiking, jogging, running, bird watching, dog walking, and strollers.
- Fewer design requirements
- Prefer softer surfaces.
- Vertical clearance 8 ft.
- Amenities: benches, drinking fountains, shaded rest areas, rest rooms, signage



Sc

Bicyclists

- Range of categories that align with comfort and safety.
- Strong interest but concern with low stress tolerance and varied experiences and needs.
- Operating space of 1.2 1.5 m
- Preference for neighbourhood routes and separation





Accessibility or Mobility Device

- Firm and stable surfaces
- No openings smaller than 20mm
- Long narrow openings placed at right angles to the direction of travel.
- Minimum clear width of 1500mm
- Minimum head room of 2100mm
- Edge protection and raised barriers next to steep slopes.



2.1.2.3 SECONDARY USERS

Are more "niche" uses which have generational applications or impacts or are emerging due to shifts in population trends and mobility needs.

Users that trails in Grimsby will be designed to consider in selection locations.



In-line Skating / Skateboard

- Paved multi-use trails are likely to attract inline skaters and skateboarders.
- Require hard surfaces.
- Trail width like bicyclists at 1.5 m or more with vertical clearance of pedestrians at 8 ft.
- Amenities such as benches are appreciated.





E-bike & Motorized Users

- Appropriate in more rural areas
- 8 10 ft. wide for one-way traffic and 12 to 14 ft. wide for two-way traffic
- Obstacles should be removed.
- Minimum sight distance of 400 ft.
- Branches cleared at least 2 ft and 10 ft vertical clearance.
- Direction is provided by the provincial government and municipal by-laws.





Winter Uses / Mountain Bikes

- Similar alignment to pedestrian and cyclist trails
- Maintenance considerations are more seasonally and weather dependent.
- Tend to seek out more challenging and experience specific courses with steeper grades and uneven surfaces.
- More appropriate for dedicated single use



2.1.3 #3. LAND USE COMPATIBILITY

With the identified users in mind, the next key element of the trail network development process was determining where new trails should be located and prioritized. Trails are important mobility corridors for recreational activities, but as they are off-road, new trail development is contingent on available lands.

In Grimsby, new trail projects were proposed using a land-use compatibility approach. In this, specific types of land were prioritized due to their inherent compatibility with and support for potential trail connections, namely parks, Town-owned lands, unopened road allowances, and when appropriate, easements.

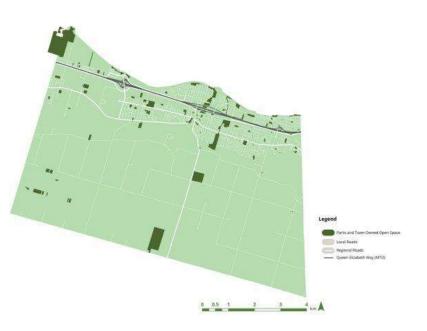
UNOPENED ROAD ALLOWANCES

Unopened road allowances are lands that are under the municipality's ownership that are identified for potential future roadway extensions or the building of new roadways. There are over 87 kms of unopened road allowances in Grimsby, in a variety of conditions. Some unopened road allowances are cleared and are currently used for off-road vehicles (i.e. farming vehicles or ATVs), some are overgrown with vegetation, and others are currently being encroached upon by adjacent land-uses. Within this plan, all unopened road allowances were considered as potential new trail corridors, with priority given to those that are cleared.

PARKS AND TOWN-OWNED LANDS

The Town of Grimsby has over 60 local parks and many parcels of Town-owned land. Parks are designated green space that are held by the municipality primarily for recreational use. Park land can be acquired through future development in collaboration with a developer, someone undertaking a development application, or the protection of lands by the municipality. Whenever feasible, these lands were prioritized for new trail connections as they are already utilized for recreational purposes and have complementary uses for trail activity.

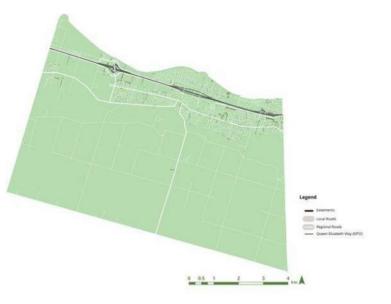




EASEMENTS

Town of Grimsby, being: storm/sanitary/watermain, berm and noise wall, ROW widening, Drainage, Bell Canada, Turning circle, and Utility-transformer. Easements are lands that have been acquired by the municipality to provide and maintain municipal servicing and infrastructure. They are typically adjacent to privately owned lands. Given the current uses of easements only strategic connections were explored in easements. Any trails in easements are also subject to further validation.

There are seven (7) main types of easements in the



ROAD RIGHTS-OF-WAY

Of particular interest to many members of the public and stakeholders is the connectivity of trail linkages throughout the Town of Grimsby. As stated previously, trails are not inherently continuous and connected. They leverage unique land uses and spaces to provide an experience for different types of users primarily for recreational purposes. The only way that trails can be connected is through the use of on-road linkages on publicly owned lands in the road right-of-way. As documented in Section 1.3.1, there are municipal and regional on-road linkages that are currently found within the Town of Grimsby. There are also previously proposed/planned routes identified by the Region that provide additional on-road connectivity including but not limited to recommendations found within the Region's Transportation Master Plan, Cycling Strategy, and the recently completed Complete Streets Design Guidelines.

The Town of Grimsby has not yet developed and/or adopted a Transportation Master Plan or strategy that provides direction on how to incorporate active transportation and recreational uses into municipal road rights-of-way. As such, the RTMP process identified a series of on-road connections that provide direct access to existing, previously proposed, and newly proposed recreational trail linkages. The intent was not to provide a comprehensive review of all possible on-road connections but to find opportunities to achieve connectivity within the recreational trails network. The focus of the Recreational Trails Master Plan is recreational mobility. Connectivity is a significant part of recreational mobility in addition to providing access to a wide range of communities with varying needs.

The identification of these on-road linkages is to serve as the foundation for a future Active Transportation Master Plan or Transportation Master Plan undertaken by the Town of Grimsby, at which point the linkages would be reviewed in more detail with the necessary information to undertake all the steps and stages of Ontario Traffic Manual Book 18 and other municipal guidance documents. The phasing and implementation will need to be developed and confirmed based on detailed information from the Town's Public Works Department in tandem with municipal capital planning.

PARTNER LANDS

In the past, the Town of Grimsby has partnered with or been a partner to a number of public agencies and organizations who have jurisdiction over and responsibility for lands within the Town which could potentially be used for trail development. In the context of the Town of Grimsby RTMP, there are the following public entities that were explored for potential trail development collaboration and coordination:

- CN Rail
- Hydro One/Grimsby Hydro
- District School Board of Niagara
- Niagara Catholic District School Board

Of these prospects, opportunities were explored in more detail on CN rail, Hydro One, and Grimsby Power lands with select trail linkages identified for future consideration and exploration.

RAILWAY CORRIDORS

As part of this master plan, railway lands were also explored as potential trail corridors. Particularly, the CN Rail corridor which runs east-west through the center of Grimsby. When accommodating trails along rail corridors, there are two options: rail-to-trails or rail-with-trails. Rail-to-trails are trails which repurpose unused rail corridors as linear trail connections.

Rail-with-trails, in contrast are trails which run parallel to an active rail corridor. Rail-with-trails have significantly more safety and user-management considerations than rail-to-trails, as they require the operations of the rail corridor to be balanced with the users of the trail system. These interests are managed through considering the speed and quantity of trains that traverse the corridor daily, the available separation distance between the tracks and the trail corridor, the opportunity for physical separation through fences or berms, and the impact to maintenance and emergency operations of the rail corridor. In many municipalities, rails-with-trails are being explored and implemented to offer off-road active transportation corridors.







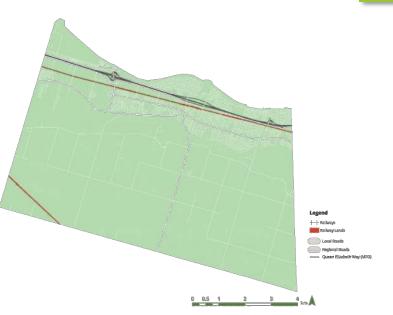
In Grimsby, both available rail lines are active. Therefore, the only opportunity to explore railway lines as potential trail corridors is through the rail-with-trail approach.

Benefits of rails-with-trails...

Rails-with-trails can often provide unobstructed linear trails that have high degrees of separation, and low frequency of crossings with vehicular traffic. As they follow along rail corridors, rails-with-trails can also be an opportunity to implement a major active transportation corridor with minimal land acquisition.

Constraints of rails-with-trails...

However, as rail-with-trails needs to balance conflicting interests and safety requirements of both the trail users and rail operations, there are many constraints to these trails. First, there must be adequate space available adjacent to the rail



corridor to accommodate a trail, without significantly impacting rail maintenance and emergency operations. This distance is dependant upon the speed and quantity of trains that traverse the corridor daily. Moreover, dependent on the speed and quantity of the trains, additional space for a barrier between the trail and tracks may be necessitated. Due to these reasons, railway tracks that have a high frequency of fast-moving trains are not often recommended for rails with trails, unless there is adequate separation distance and no other potential lands for the trail to be located.

The rail-with-trail opportunity in Grimsby...

In Grimsby, the CN Rail corridor which runs east-west through the Town was explored as a potential rail-with-trail. The CN Rail corridor is a Class 1 Railway, with approximately 6 trains daily and an average operating speed of 60 km/h. The demand on this rail corridor is expected to increase with the addition of the planned Grimsby GO Station at Casablanca Boulevard.

The railway lands in Grimsby vary in width, with certain lengths of the corridor being too constrained to accommodate a trail, and others being a conflict between a potential trail and required emergency and maintenance practices of CN Rail. As part of this project, Town staff met with CN Rail to identify and discuss the potential of strategic portions of CN land where there could be adequate space to safely locate a trail along the corridor. However, at this time, CN Rail was not supportive of a rail-with-trail within Grimsby along their rail corridor, . Town staff will continue to monitor this opportunity, recognizing the high trails potential and that it is a preferred route for future consideration.

02.

ACTIVE BY NATURE.

HYDRO CORRIDORS

Hydro corridors are the lands of electrical transmission systems. These corridors are often long, unobstructed paths that make excellent candidates for trail systems. Across Ontario, many hydro corridors are being adapted to be multi-use pathways and trailways, including the Finch Hydro Corridor Trail, Greenline, and the Gatineau Hydro Corridor Trail, to name a few.

Benefits of trails in hydro corridors...

Trails in hydro corridors are popular for their linear connectivity and access to natural features and landscapes. As these trails are located along electrical transmission system lines, they often do not have frequent interactions or crossings with vehicular traffic, and offer safe, continuous active transportation infrastructure.

Constraints of trails in hydro corridors...

Given that these trails often follow active electrical transmission systems, trails need to manage potential risks and shared safety concerns between the hydro company and the trail users.

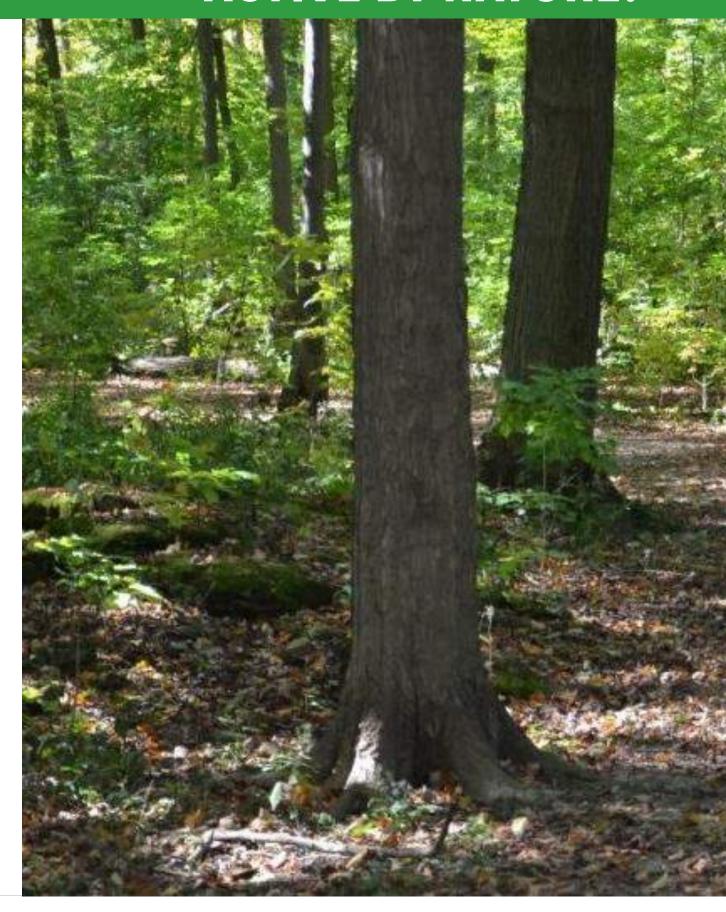
Hydro corridor trail opportunities in Grimsby...

The Grimsby Hydro Corridor is composed of easements along privately owned land, CN Rail land, and Ministry of Transportation (MTO) land. Although there are some lengths of the corridor that are clear and provide an opportunity for a trail, much of the hydro corridor in Grimsby is fenced and shares use with industry. Where possible, the project team has identified areas of the hydro corridor where trails should be explored. Any proposed trail routes along the hydro corridor are subject to further collaboration with the appropriate hydro company and landowner.

PRIVATELY OWNED LANDS

Privately owned lands are lands that are owned by residents or owned by an individual, developer, or private entity. It was not a priority for the RTMP to seek out privately owned lands for trail development. There are limited locations where connections are identified on privately owned lands. These locations have been specifically identified as a final alternative facilitating a larger connection. It would be the responsibility of the Town to explore opportunities for land acquisition or agreement with the private landowners if that location was deemed to be the most feasible.

Where possible, the Town of Grimsby is committed to working with local developers to identify opportunities for park land dedication in the form of park space or trails. In addition, where possible, every effort should be made to identify opportunities for active transportation accommodation and connectivity in new development areas. As noted in Chapter 1.0, the Town of Grimsby is experiencing significant growth and there is considerable potential to have new trail linkages achieved through partnerships with local developers. The alignment of these trails is still unknown. However, based on publicly available information about potential developments the Town may be able to target future locations using the RTMP implementation process.



2.2 Trail Network

The recreational trails network identified throughout the Town of Grimsby has been developed and designed to leverage compatible land uses while also responding to community input and interests and leveraging partner priorities and planned projects. The network was developed and designed based on the process and considerations noted in Section 2.1, with consistent response to input received and context specific features and conditions.

The proposed recreational trails network is intended to be used as a guide by municipal staff and stakeholders as they move forward with annual capital and operational planning. It is intended to be a resource and reference for communication and coordination with municipal partners and allied agencies to advocate for future trail improvements. It is not meant to be an exhaustive list of potential trail opportunities. The network represents potential trail linkages that are considered feasible at the time the Recreational Trails Master Plan was developed while also trying to plan for future community planning and growth.

The intent of the recreational trails network is to...

Highlight a series of potential trail projects and complementary amenities/features that together create a continuous and connected system of recreational opportunities for people of all ages and abilities, targeting high needs areas, areas of future growth, and areas of natural and cultural significance.

When reviewing the proposed recreational trails network, it is important to note that:

- 1. There may be other trail opportunities that emerge as the Town moves forward with the implementation of the RTMP. Municipal staff are encouraged to explore these opportunities and find ways to integrate work on these initiatives in tandem with RTMP projects.
- 2. Assessment of the proposed trail linkages was done at a master plan level, which means environmental impacts and other structural assessments were not fully reviewed. It is possible that as a proposed trail linkage proceeds further assessment may determine that the linkage is not feasible or requires an alternate alignment.
- 3. Consultation has been undertaken with affected agencies including but not limited to CN Rail, School Boards, Niagara Region, Conservation Halton, Hydro One, Grimsby Power, and others. While the majority of the stakeholders are supportive, there are others that have concerns with specific linkages identified. The Town is encouraged to continue to engage with these stakeholders and monitor/discuss the opportunities further.

- **4.** Only those projects that are under the Town's jurisdiction or ownership and specifically those projects that would be the responsibility of the Community Services Department have been fully vetted. Other projects, including those found on municipal road rights-of-way (the responsibility of public works), on regional roadways (the responsibility of Niagara Region), in or adjacent to conservation areas (the responsibility of Niagara Conservation), etc. are to be designed, phased, and costed outside of the RTMP (additional details provided within the implementation section of the report).
- **5.** The "success" of many of the trails identified relies on the implementation of other linkages. For example, a trail in isolation if not a destination itself will require the implementation of alternate features to achieve its full potential. Projects are not meant to be viewed in isolation, but in the overall build-out of the network.
- **6.** It is the preference of the Town for the proposed routing to be designed to achieve a continuous and common experience consistent with the recreational nature of the plan. As such, where appropriate, a greater degree of separation for on-road connections is desired.

Not all trails are made the same. In fact, the trail recommendations have been organized into four different types of trail intents. A trail intent sets the expectation for how the trail linkage or feature is intended to be used and the role that it holds as part of the overall network. The trail intents are the basis for the RTMP system defining the trail form, function, and purpose. Two (2) of the trail intents make-up the build-out of the recreational trails network while the two (2) remaining pertain to network enhancements as well as on-road linkages that provide the network connectivity and facilitate the seamless use and transition of trails by trail users.

A detailed description of each of the trail intents is provided on the following page. Map 3 illustrates the proposed trail intents that represent the planned recreational trails network for the Town of Grimsby.

There are a total of 77.56 km of recreational trails and 42 trail

features / amenities proposed throughout the Town of

Grimsby as part of the recreational trails network.

The proposed recreational trails network, as identified in the 2023 Recreational Trails Master Plan, will be adopted, and used to guide trail planning, design, and implementation with focus placed on the proposed groupings of priority projects to facilitate recreational trail connectivity throughout the Town.

02.

ACTIVE BY NATURE.

2.2.1 SPINE TRAIL

DESCRIPTION

- Significant trail linkages that provide direct access to major destinations within the Town or surrounding areas
- Trail is considered a destination to those living in or visiting the Town.
- Where possible, spine trails are identified in off-road areas, but connectivity is considered the primary driver.
- It is assumed that higher order trails are desired for these locations, but that surface type may vary based on context and impact.
- A high degree of amenities is desired along these corridors to accommodate higher use by a range of user groups.

CONSIDERATIONS

- Selected based on previously identified connections as per ongoing planning projects undertaken by the Town and partners.
- Originally sourced from previous work completed by municipal staff to explore enhancements to the trail network in areas where there is highest need and interest.
- Identified based on input from the public and validated at a master plan level to determine most feasible alignment, balancing comfort, and safety with regulatory requirements.
- Connections include north-south and east-west linkages within the Town and to surrounding areas.

OVERVIEW OF PROPOSED LINKS

Name	Description	Length
East-west Spine Trail	Major link connecting Grimsby from the east to the west, through Downtown, major commercial corridors along Livingston Ave, and residential neighbourhoods north of Main St. W. This trail link is composed of both off-road trails and physically separated on-road and in-boulevard active transportation infrastructure. The purpose of this trail is to support safe, separated, east-west active travel with core connections to Downtown shopping, schools, and residential areas.	12.64km
Westend Waterfront Trail	Scenic trail along the Waterfront of Grimsby which provides new active transportation infrastructure for the Grimsby-on-the-Lake Neighbourhood.	3.65 km
Grimsby South Spine Trail	Trail system with vistas of natural areas within the South of Grimsby and core connectivity to the Hamilton Dofasco 2000 Trail and Southward Park.	16.69km
Forty Mile Creek Trail	Major natural trail system connecting the existing Forty Mile Creek Trail across Downtown providing naturalized vistas and separated active transportation connectivity below the QEW.	1.43km

Table 7 // Summary of Proposed Spine Trails



2.2.2 SECONDARY ROUTE

DESCRIPTION

- Off-road trail linkages that provide localized opportunities for people to undertake recreational activities.
- Primarily found within parks and open spaces within local neighbourhoods
- Design solutions include a range of trail classifications (other than the highest order trail) which are to be adapted based on context and environmental conditions.
- Amenities are identified on a trail-by-trail basis and determined based on the surrounding use and context.

CONSIDERATIONS

- Identified based on the land-use approach, utilized to inform the development of the plan whereby complementary land uses were explored as potential trail connections (e.g., unopened road allowances, easements, parks, and open space, etc.)
- The intent is not to provide a trail in every park but to strategically identify improvements in neighbourhoods where wider connectivity can be achieved and additional connections are desired.
- Informed by input from Town staff and members of the public/stakeholders.

OVERVIEW OF PROPOSED LINKS

Name	То	From	Length (km)
Lakewood Gardens Park	In-park path	In-park path	0.09
Morocco Park	In-park path	In-park path	0.1
Whittaker Park	In-park path	In-park path	0.3
Forty Mile Creek Trail	In-park path	In-park path	0.6
Lakeview Terrace Park to Robinson St. N Trail	Robinson St. N	Lakeview Terrace Park	0.5
Sumner Crescent Green Space Trail	Easement at Sumner Crescent	100 Sumner Crescent	0.28
Connecting Trail to Steve McDonnell Leash Free Dog Park	100 Sumner Crescent	Steve McDonnell Leash Free Dog Park	0.13
Steve McDonnell Leash Free Dog Park Trail	In-park path	In-park path	0.09

Name	То	From	Length (km)
Unopened Road Allowance South of Bartlett	End of Road- Bartlett Ave	Park Rd. S	0.21
Bell Park	In-park path	In-park path	0.07
Victoria Terrace connecting trail	In-park path	In-park path	0.04
Nelles Beach Park Trail	In-park path	In-park path	0.15
Morrison Cres. Greenspace Trail	Morrison Cres.	Jeanette Ave.	0.56
Admiral Circle Pathway	Admiral Circle	Morrison Cres. Beach Access	0.08
Arrowhead Lane Park Path	In-park path	In-park path	0.15
Sherwood Park Trail	In-park path	In-park path	0.25
Centennial Park Trail	In-park path	In-park path	0.8
Nelles School Trail	In-park path	In-park path	0.4
Merritt Cres Park	In-park path	In-park path	0.08
Grimsby GO Station Multi-use path	Livingston Ave	South Service Rd	0.59
Off-leash dog park trail	Winston Rd.	Westend Waterfront Trail	0.6
Preliminary Nature Trail	Westend Waterfront Trail	North Service Rd	0.85
Unopened Road Allowance east of Cline Mountain Rd.	Cline Mountain Rd.	Bruce Trail	0.74
Bruce Trail Nature Pathway	Main St W	Bruce Trail	0.81
Allen Rd Natural Trail	Allen Rd	Bruce Trail (Ridge Rd.)	1.03
Elm Tree Rd. Natural Trail	Elm Tree Rd E	Russ Rd.	0.61
Grimsby Mountain Cemetery Trail	In-park path	In-park path	0.68

Table 8 // Summary of Proposed Secondary Routes

2.2.3 TRAIL TRANSITION

DESCRIPTION

- Significant changes to the physical environment which require the design and implementation of a trail related feature to facilitate the transition of users.
- Conditions could include water crossings, major roadways, changes to topography such as the escarpment, intersections, etc.
- Design is based on best and comparable practices as well as context specific design solutions.

CONSIDERATIONS

- Identified based on public and stakeholder input, field investigation, and previously planned routes.
- Escarpment stairs were specifically identified as an area of consideration for the RTMP. Preferred locations were explored in consultation with the Conservation Authority
- The design of select features are consistent with best and comparable practices and design guidance but will require additional review and confirmation prior to design and implementation.
- Transitions also include trailheads and staging areas noting the start and end points of trail linkages.

OVERVIEW OF PROPOSED FEATURES

Name	То	From
Forty Mile Creek Trail Bridge	Forty Mile Creek Trail	Grimsby Marina
Bruce Trail Stairs at Centennial Park	Centennial Park Trail	Bruce Trail
Forty Mile Creek Underpass	Forty Mile Creek at Niagara On- Ramp	Forty Mile Creek Park Soccer Field
Forty Mile Creek- QEW Underpass boardwalk	Forty Mile Creek at Niagara On- Ramp	Forty Mile Creek at Niagara On- Ramp
Forty Mile Creek- QEW Underpass boardwalk	QEW	QEW
Forty Mile Creek- QEW Underpass boardwalk	Forty Mile Creek at Niagara On- Ramp	Forty Mile Creek at Niagara On- Ramp
Forty Mile Creek CN underpass boardwalk	CN tracks south	CN tracks north
Nelles Rd QEW Pedestrian Bridge	Nelles Rd N south of QEW	Nelles Rd N north of QEW
CN grade-separated crossing	Grimsby GO station	Grimsby GO station
Bruce Trail Stairs	Unopened Road Allowance east of Cline Mountain Rd.	Bruce Trail
Kemp Rd. Natural Trail Boardwalk	Kemp Rd. Natural Trail	Kemp Rd. Natural Trail
Southward Park Natural Trail Boardwalk	Southward Park Natural Trail	Southward Park Natural Trail
Kemp Rd W Rural Trail Loop Boardwalk 1	Kemp Rd W Rural Trail Loop	Kemp Rd W Rural Trail Loop

Name	То	From
Kemp Rd W Rural Trail Loop Boardwalk 2	Kemp Rd W Rural Trail Loop	Kemp Rd W Rural Trail Loop
Oakes Rd. Major Trailhead	Oakes Rd. N	Oakes. Rd N
Escarpment Vista Park Minor Trailhead	Escarpment Vista Park	Escarpment Vista Park
Unopened Road Allowance east of Cline Mountain Rd. Signage-Only Trailhead	Unopened Road Allowance east of Cline Mountain Rd.	Unopened Road Allowance east of Cline Mountain Rd.
Westend Waterfront Trail west Major Trailhead	Westend Waterfront Trail	Westend Waterfront Trail
Off-leash dog park minor trailhead- shore side	Off-leash dog park trail	Off-leash dog park trail
Off leash dog-park signage-only trailhead - road side	Off-leash dog park trail	Off-leash dog park trail
Westend Waterfront east minor trailhead	Westend Waterfront Trail	Westend Waterfront Trail
Lakewood Gardens Park Signage- Only Trailhead	Lakewood Gardens Park	Lakewood Gardens Park
Forty Mile Creek Pumphouse Major Trailhead	Forty Mile Creek Trail at the pumphouse	Forty Mile Creek Trail at the pumphouse
Forty Mile Creek Trail Existing Signage-Only Trailhead	Forty Mile Creek Trail at Lake St	Forty Mile Creek Trail at Lake St
Forty Mile Creek Minor Trailhead at Forty Mile Creek Soccer Filed	Forty Mile Creek Trail at Forty Mile Creek Soccer Field	Forty Mile Creek Trail at Forty Mile Creek Soccer Field
Forty Mile Creek Minor Trailhead at Christie St	Forty Mile Creek Trail at Christie ST	Forty Mile Creek Trail at Christie St
East West Spine Minor Trailhead at Ontario St and Town Owned Parking lot	Ontario St and town owned parking lot	Ontario St and town owned parking lot
Coronation Park Minor Trailhead	Coronation Park at Elm St	Coronation Park at Elm St
Bruce Trail Nature Pathway Minor Trailhead	Bruce Trail Nature Pathway at Main St W	Bruce Trail Nature Pathway at Main St W
Morrison Cres. Greenspace Trail - Morrison Cres Signage Only Trailhead	Morrison Cres. Greenspace Trail - Morrison Cres	Morrison Cres. Greenspace Trail - Morrison Cres
Morrison Cres. Greenspace Trail - Jeanette Ave Signage Only Trailhead	Morrison Cres. Greenspace Trail - Jeanette Ave	Morrison Cres. Greenspace Trail - Jeanette Ave
Lake St. at Water Treatment Plant Signage Only Trailhead	Lake St. at Water Treatment Plant	Lake St. at Water Treatment Plant

Name	То	From
Jeanette Ave at Water Treatment Greenspace Signage Only trailhead	Jeanette Ave at Water Treatment Greenspace	Jeanette Ave at Water Treatment Greenspace
Lakeview Terrace Park Signage-Only Trailhead	Lakeview Terrace Park	Lakeview Terrace Park
Minor Trailhead Natural Trail at Kemp Rd W and Bowslaugh Rd	Kemp Rd W and Bowslaugh Rd	Kemp Rd W and Bowslaugh Rd
Signage Only Trailhead at Natural Trail at Allen Rd and Elm Tree Rd W	Natural Trail at Allen Rd and Elm Tree Rd W	Natural Trail at Allen Rd and Elm Tree Rd W
Signage Only Trailhead at Natural Trail at Ridge Rd and Allen Rd Unopened Road Allowance	Natural Trail at Ridge Rd and Allen Rd Unopened Road Allowance	Natural Trail at Ridge Rd and Allen Rd Unopened Road Allowance
Signage Only Trailhead at Natural Trail at Kemp Rd W north of Southward Park	Kemp Rd W	Kemp Rd W
Signage Only Trailhead at Natural Trail at Elm Tree RD W N of Southward Park	Natural Trail at Elm Tree RD W	Natural Trail at Elm Tree RD W
Signage Only Trailhead at Natural Trail at Elm Tree RD W and Russ RD	Natural Trail at Elm Tree RD W and Russ RD	Natural Trail at Elm Tree RD W and Russ RD
Signage Only Trailhead at Natural Trail at Russ RD north of Kemp Rd E	Natural Trail at Russ RD north of Kemp Rd E	Natural Trail at Russ RD north of Kemp Rd E
Minor Trailhead at Southward Park	Southward Park	Southward Park
Signage Only Trailhead at Church Rd and Sobie Rd	Church Rd and Sobie Rd	Church Rd and Sobie Rd
Thirty Rd Major Trailhead	Thirty Rd and Bruce Trail	Thirty Rd and Bruce Trail
Woolverton Conservation Area Major Trailhead	Woolverton Rd at Woolverton Conservation Area	Woolverton Rd at Woolverton Conservation Area

Name	То	From
Signage Only Trailhead at Sherwood Park	Sherwood Park	Sherwood Park
Signage Only Trailhead at Arrowhead Park	Arrowhead Park	Arrowhead Park
Signage Only Trailhead at Maplewood Park	Maplewood Park	Maplewood Park
Minor Trailhead at Nelles Rd Ped. Bridge and Hydro corridor trail	Nelles Rd N and South Service Rd	Nelles Rd N and South Service Rd
Signage Only Trailhead at Nelles Beach Park	Nelles Beach Park	Nelles Beach Park
DSBN Secondary School Major Trailhead	DSBN SS	DSBN SS
Bartlett Ave and South Service Rd intersection improvements	Bartlett Ave	South Service Rd
Midblock crossing of Main St E at Centennial Park	Main St E at Centennial Park	Main St E at Centennial Park
Midblock crossing of Kemp Rd W at Southward Park	Kemp Rd West north of Southward Park	Kemp Rd West north of Southward Park
Midblock crossing of Mountain Rd.	Mountain Rd at Southward Park	Mountain Rd at Southward Park
Ivan Ave/ Maple Ave Mid-block crossing	Ivan Avenue	Maple Ave

Table 9 // Summary of Proposed Trail Transition Features

2.2.4 CONNECTING LINKS

DESCRIPTION

- On-road linkages that achieve wider connectivity between the various off-road trail improvements providing access to trail from all areas of the Town and surrounding areas
- Links were identified and design solutions recommended based on best and comparable practices and provincial guidelines such as Ontario Traffic Manual Book 18
- Amenities are not considered along connecting linked beyond signage and wayfinding.

CONSIDERATIONS

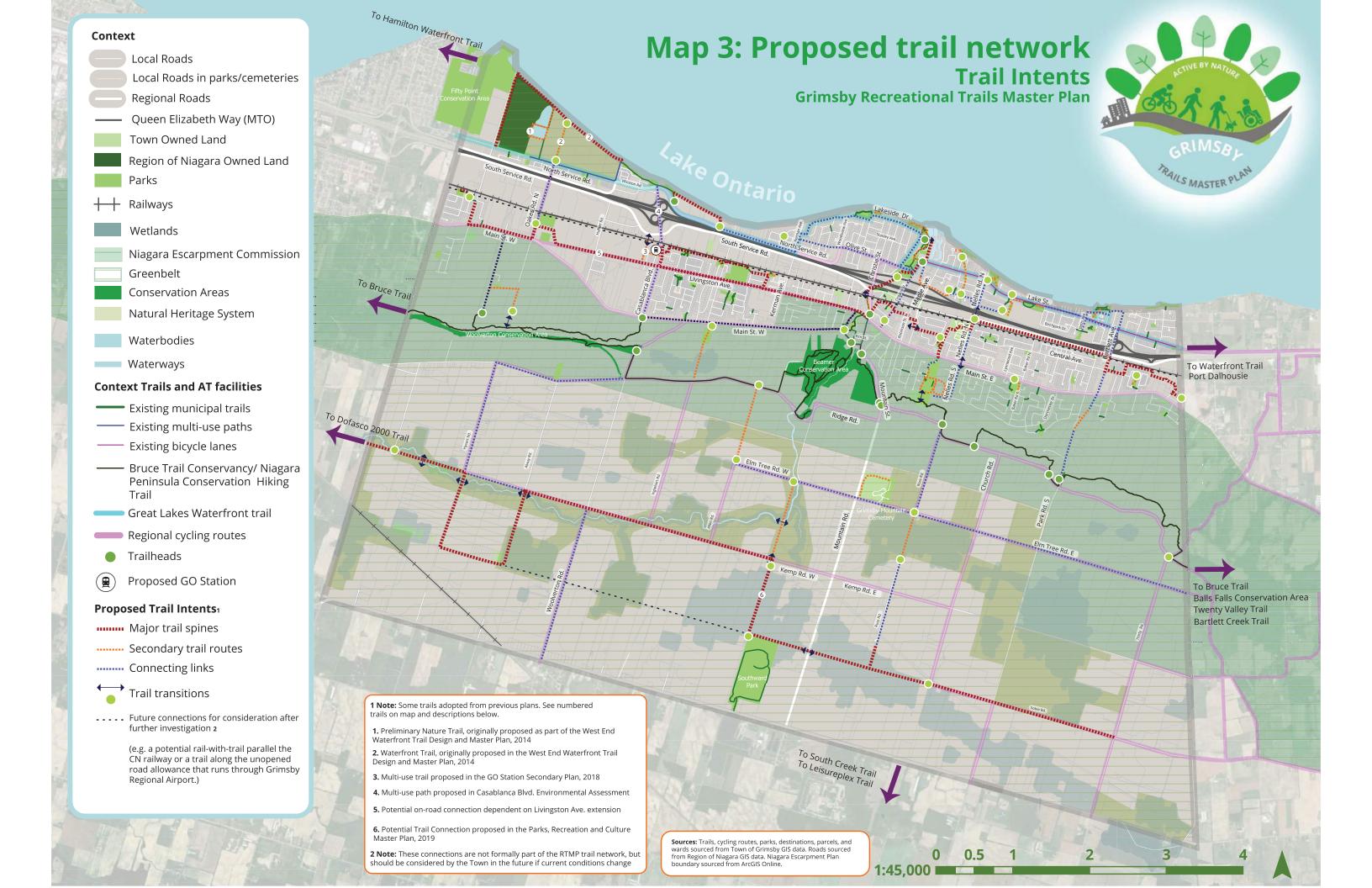
- The connections are identified acknowledging that the scope of the project is meant to be an off-road focused strategy implemented by the Town's Community Services Department
- Linkages are sourced from significant public input as well as other complementary planning initiatives.
- Connecting links will need to be further considered and reviewed by the Public Works Department in the context of their integration with future planning projects such as a Transportation Master Plan or Active Transportation Strategy
- Routes have been costed and phased but are the discretion of the Public Works Department to proceed with implementation.

OVERVIEW OF PROPOSED LINKS

Name	То	From	Length (km)
North Service Rd. (Regional Rd 39)	North Service Rd at Water Treatment Facility	North Service Rd at Kerman Ave.	1.06
Kerman Ave.	North Service Rd.	Karen Cres.	0.25
Karen Cres.	Kerman Ave.	Lakeside Dr.	0.08
Lakeside Dr.	Karen Cres.	Elizabeth St.	1.72
Elizabeth St.	Lakeside Dr.	Olive St.	0.5
Olive St.	Kerman Ave.	Elizabeth St.	1.35
Olive St.	Elizabeth St.	Ontario St.	0.2
Ontario St.	Olive St.	Carnegie Lane	0.55
Ontario St.	Carnegie Lane	Main St. E	0.33
Robinson St. N	Lake St.	QEW	0.27
Jeanette Ave.	Lakeview Terrace Park	Easement at Sumner Crescent	0.77
Lake St.	Baker Rd. N	Bartlett Ave	1
Betts Ave.	Grand Ave Public School	Temple Lane	0.25
Temple Lane/ Tupper Blvd	Betts Ave.	Bartlett Ave	0.5
Bartlett Ave.	Tupper Blvd.	Lake St.	0.23
Bartlett Ave.	Lake St.	End of Road- Bartlett Ave	1.11

Name	То	From	Length (km)
Nelles Rd. N	Pinewood Ave	Main St. E	0.25
Nelles Rd. S	Main St East	Dorchester Ave.	0.72
Dorchester Dr.	Nelles Rd	Centennial Park	0.28
Casablanca Blvd.	CN tracks	Winston Rd.	0.72
Casablanca Blvd.	Livingston Ave.	Main St. W	0.7
Main St. W	Livingston Ave.	Casablanca Blvd.	2.62
Oakes Rd	Main St W	Smith Public School	0.2
Oakes Rd	Smith Public School	CN tracks	0.15
Oakes Rd.	CN tracks	South Service Rd	0.42
Oakes Rd.	South Service Rd	Winston Ave.	0.25
Main St W	Oakes Rd.	Kelson Ave.	1.15
Elm Tree Rd	Allen Rd	Thirty Rd	6.08
Russ Rd.	Russ. Rd at Russ Rd. Natural Trail	Russ Rd at Elm Tree Rd. Natural Trail	1.06
Woolverton Rd.	Kemp Rd. W	Municipal Boundary	2
Hysert Rd.	Kemp Rd. W	Ridge Rd.	1.48
Cline Mountain Rd.	Main St. W	Bruce Trail at Cline Mountain Rd.	1.08
Park Rd. S	Bartlett Ave Unopened Road Allowance	Bruce Trail	0.85
Ridge Rd.	Hysert Rd.	Bruce Trail	1.68

Table 10 // Summary of Proposed Connecting Links



02.

ACTIVE BY NATURE.

The details regarding the specific network priorities, potential phasing, and future implementation processes are all documented in Section 3.0 of the RTMP. However, based on the review of the proposed recreational trails network there are some assumed opportunities for coordination and collaboration that will facilitate the building of the network. The following recommendations have been developed/adopted to help guide future effort. Municipal staff and its partners are encouraged to review the proposed route intents map to guide future coordination efforts.

The Town should continue to work with Niagara Region to facilitate the next steps in the design and construction of on-road linkages found under the Region's jurisdiction.

The Town should prioritize the work with applicable landowners (i.e., Hydro One, CN Rail, School Boards, etc.) to facilitate the next steps in the design and construction of key segments of the east-west trail corridor depending on the location of the segments of the spine trail.

The Town should continue to work with all affected municipal partners (i.e., Grimsby Power, Hydro One, Metrolinx, GO Transit, Niagara Conservation and School Boards, etc.) to facilitate the design and construction of recreational trail linkages that are found on their lands and proceed with supporting the necessary next steps.

The Town should prioritize the enhancement of major trailheads at the entrance of the Bruce Trail and Conservation Areas (i.e., major trail locations) to include sufficient parking as well as at the entry and exit points of the proposed spine trail connections with the implementation of minor trailheads at strategic locations along the trail where conditions are appropriate.

The Town should prioritize the implementation of a set of escarpment stairs at the base of Centennial Park and proceed with the necessary approvals and design.



2.3 Network Design

Network design is the application of features and components that influence the way in which the facility is experienced. There are many different types of design elements that need to be considered and incorporated into the design of a trail linkage. Influencing the way trails are designed comes in the form of trail classifications, guidelines, and standards. Of critical importance is providing a municipality with a consistent set of design guidelines and standards that are applied municipality-wide and lead to a more continuous, accessible (where appropriate), and intuitive use of trail routes.

The content in the following sections provides a detailed overview of the proposed design solutions identified for each of the projects recommended as part of the RTMP. It is also intended to be used as a resource and reference by municipal staff when projects proceed to implementation, or alternative or additional opportunities arise.

The trail and supporting design guidelines are to be used by the Town of Grimsby as the primary resource when informing the design of trail linkages and trail supportive amenities.

2.3.1 Trail Design Classifications

When it comes to identifying design solutions to a trails network, it is important to consider several key factors including but not limited to user type, land use, experience, accessibility, surface, width, and overall application/maintenance. In the context of a trails master plan, it is typically the design and development of a set of trail classifications that provides the guidance on how different trail linkages are intended to be designed and used. Once the route alignment and intent had been defined and confirmed, the consultant team worked with Town staff to identify a series of trail classifications that reflect the intended use, experience, and users within the Town of Grimsby. 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.

The trail classifications for the Town of Grimsby Recreational Trails Master Plan have been developed taking into consideration the various trail intents, the surrounding land use context, the function of the trail relative to the overall trail system, and how the trail interacts with existing off and on-road linkages. There are a total of four (4) trail classification types identified for the Town of Grimsby. The Town of Grimsby's trail classifications are unique, due to some of the parameters and details provided below.

Degree of difficulty is identified for each, setting appropriate expectations for the degree of effort or experience that would be required to utilize the trail linkages. This combined with degree of accessibility helps to determine the most appropriate users and user experience relative to other trail opportunities within the Town.

The intent is to utilize this assessment, along with some of the core messages, risk identification, uses/ user groups and information, signage, and wayfinding to establish the necessary content and graphics that would be used when designing and implementing staging areas/trailhead features (see more details in the following section on this type of application).

The following is a summary of the various trail classifications. A more detailed description of each has been provided to the Town as one of the key resources and decision-making tools regarding trail design.

For each of the proposed spine trail and secondary routes, a recommended trail design solution has been identified. The proposed design solutions are illustrated on Map 4 which is reflective of the trail classifications identified. A detailed overview of the proposed design solutions by link is provided in the detailed trail network database which has been provided to the Town as part of the project record and as a supporting tool for future implementation.

The recreational trail classifications, as identified in the 2023 Recreational Trails Master Plan, are to be adopted as the primary guidance for all off-road trail design as well as within municipal standards to be used for the future design and construction of new trails or improvements to existing trail linkages.

2.3.1.1 URBAN DESTINATION TRAIL (TYPE 1)

Distance

0-5 km







Width

4m typical 3m min.

Slope



5% max.

Function

The urban Destination trails is for non-motorized trail use.

Purpose

It can be used for the purpose of recreation, leisure, sight-seeing, and active transportation commuting.

Application

Town showcase trail or main spine trail, providing for and attracting a variety of public activities including tourism, events, and festivals.

User

It can accommodate all user groups, all ages and abilities, families, and tourists. Some typical users can be pedestrian, dog walker, recreational and commuter cyclist, mixed uses, vehicular for servicing. No trail experience is required.

Typical Land Use

Park land, Designated Waterfront Trail.

Accessibility

Meets or exceeds minimum accessibility requirements.

Degree of Difficulty

There is very few or no obstacles. The degree of difficulty is easy.

Example

Waterfront Trail, Southward Community Park

2.3.1.2 COMMUNITY / NEIGHBOURHOOD TRAILS (TYPE 2)

Slope

Distance





3m typical





0-5 km

Community/Neighborhood Trails is for non-motorized multi-use.

Purpose

Function

Primarily used for recreation and leisure with potential for active transportation commuting connections.

Application

Neighbourhood footpaths and community park and playground trails, which may connect to primary trails and community destinations (e.g. community centres, commercial areas, schools, and parks) or to public transit and AT routes.

User

It can accommodate all user groups, all ages and abilities, families, and tourists. Some typical users can be pedestrian, dog walker, recreational and commuter cyclist, mixed uses, vehicular for servicing. No trail experience is required.

Typical Land Use

Park land, Community Centres.

Accessibility

Meets or exceeds minimum accessibility requirements where feasible.

Degree of Difficulty

Easy to Moderate

Example

Hickory Crescent-to-Willow Lane Trail, Forty Mile Creek Side Trail/Coronation Park Trail

2.3.1.3 NATURAL SURFACE / NATURE TRAILS (TYPE 3)

Slope

Distance



0-15 km





1 to 1.5m typical

topography

Function

Non-motorized specific/preferred uses.

Purpose

Recreation and leisure typically for specific physical activities such as hiking, birding, mountain biking, horse-back riding, crosscountry skiing, and snowshoeing. May include single or double track trails.

Application

Opportunities to experience nature within the Town limits and connect to key partner trails. Usually a natural dirt surface with some boardwalks and technical trail features such as logs and rocks.

User

Pedestrian, hiker, dog walker, and may include special use trails (e.g. catering to foot traffic only, designed for mountain biking, fitness, etc.)

Typical Land Use

Open Spaces/Environmental Protection Areas (EPA)

Accessibility

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

Degree of Difficulty

Moderate to Difficult

Example

Forty Mile Creek Trail

2.3.1.4 RURAL TRAILS (TYPE 4)

Distance







topography

Function

0-10 km

Non-motorized multi-use with specific motorized use

Purpose

Recreation and leisure uses. Hiking, mountain biking, horse-back riding, light cross-skiing, and snowshoeing. Motorized farm and ATV vehicles may be encountered.

Application

Allows opportunities to experience the countryside within the Town limits, and to temporarily or permanently contribute to a trail network that enables public access generates connections between trails, destinations, and active transportation facilities.

User

Pedestrian, hiker, dog walker, mountain biker, equestrian users, light winter activity users, and some motorized vehicles such as farm machinery and ATV users. Caution required. This type would require some experience/stamina.

Typical Land Use

Unopened Road Allowances (URA)

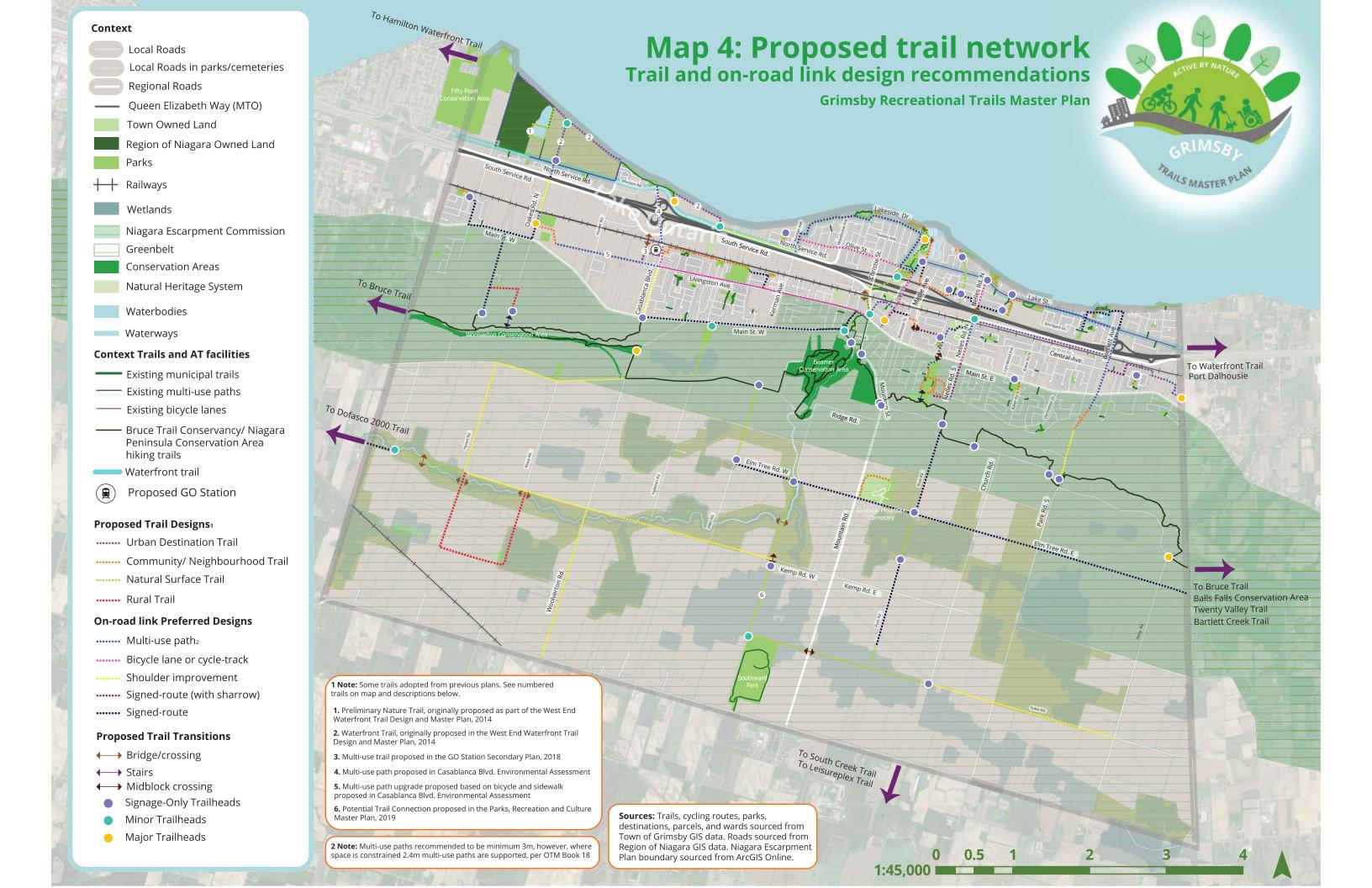
Accessibility

May not meet accessibility requirements. Maintaining municipal control for public access and facilitating longterm trail network development are priorities.

Degree of Difficulty

Moderate

Example



2.3.2 Trail Transitional Features

As part of the proposed recreational trails network, there are trail transitional features that have been identified along and at major points of exit and entry of the recreational trail system. There are many different types of locations where trail transition features are needed. The design of these features is unique to the specific context and are implemented to facilitate a greater degree of experience, comfort, and safety as well as an overall understanding of the intended use of the trail linkage, rights-of-way, and overall system.

Figure 11 is an illustration of some of the different locations along a potential trail which would typically warrant the implementation of a trail transition feature.

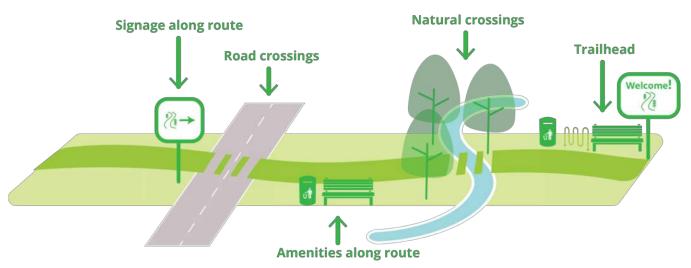


Figure 11 // Trail Transition Needs & Placement Alternatives

When considering the type of design alternatives at these locations, there are a number of different options and alternatives. Critical points of transition have been identified in the context of the Town of Grimsby RTMP network. The proposed trail transitional features are identified on Map 4.

When identifying design guidance for these features, it is typically a case-by-case design approach that responds to and is reflective of the unique trail condition and context. That said, there are a series of design guidelines and recommended design practices that have been provided and are intended to be used as a reference at the time that the project moves forward for implementation or if alternate or new opportunities arise which would benefit from utilizing the information contained within the RTMP.

2.3.2.1 TRAILHEADS

The continuity, connectivity, and use of a trail system/network are further enhanced through the implementation of trail amenities. Trail amenities include but are not limited to 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 trail amenities can be a determining factor for trail users. Their design, placement, frequency of placement, and accessibility heavily influence the comfort levels and perceived safety of the trail by individual trail users. When trail 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) with a few parking spots. Trailheads typically contain identification for a trail system with directional signage and waste bins and basic toilets. Specialized features are not common. Trailheads are different than the trail facility or the trail itself due to the fact that they attract the use as opposed to accommodate it.

The degree of applicability of trail amenities is determined based on the intended users and the degree to which the staging area 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 trailhead will likely require a more robust design treatment with a wider range of amenity types and more frequent maintenance.

In the context of the Grimsby Recreational Trails Master Plan, existing trailheads are primarily found along the existing spine system of the Bruce Trail at major access points. There are some existing park trails where moderate identification has been implemented. However, the application is not consistent. The Grimsby RTMP recommends the use of trailhead classes which have been identified. It is recommended to link the type of amenity, placement, and design with the type of trail that it is being recommended. Where appropriate, the RTMP identifies the trailhead classifications relative to the destination priority as well as the trail classification. There are two types of trailhead classifications that have been identified. They are outlined in further detail below with an overview of a decision-making tool following.

^{*}Note: lighting is recommended on a case-by-case basis and should be assessed using CPTED guidance prior to implementation.

Major Trailhead



Figure 12 // Major Trailhead Design Concept

- Full range of amenities
- Meant to act as a focal point and draw more activity to the trail.
- Strategic placement to major trails that currently are or are projected to be major spines of the network.

Type of Trail Applicability: Urban Destination Trail (highest frequency of application) with select application along Community/Neighbourhood Trails and Pathways

Example

Westend Waterfront Trail Major Trailhead



Minor and Signage-Only Trailheads



Figure 13 // Minor Trailhead Design Concept



Figure 14 // Signage-Only Trailhead Design Concept

The following description applies to both the Minor and Signage-Only trailhead categories:

- Some essential amenities
- Minor trailheads are targeted for minor trails that currently or are projected to have medium-high use, or any
 park pathways that connect into trail links.
- Alternatively, Minor trailheads are also targeted for any trailheads along major trails where space is limited.
- Signage-Only trailheads are targeted for secondary entrances to trails that are near another major trailhead, or for local park pathways.

Type of Trail Applicability:

Community/Neighbourhood Trails and Pathways are recommended to have the highest-degree of Minor trailheads, with strategic Signage-only trailheads along secondary entrances or in-park paths. Natural Surface/Nature Trails should aim to support Minor trailheads wherever feasible with Signage-Only Trailhead application in areas where space is constrained.

Example

Forty Mile Creek Trail Minor Trailhead at Christie Street



At the designated trailhead locations there is typically signage that provides an overview of the expected conditions and experience for consideration prior to initiating a trail trip. On page 49 of the RTMP, a "family of signs" has been identified and recommended for implementation by the Town of Grimsby. As part of the family of signs, trailhead specific signage has been identified. At the time that the Town proceeds with the implementation of a trailhead and the amenities and designs are being determined / confirmed, the trailhead classes as well as the trailhead design alternatives are to be reviewed and referenced.

Table 11 provides a summary of the proposed trailhead classes recommended for application throughout the Town of Grimsby. This information, along with the trailhead class details, are intended to support the implementation of design recommendation #2 as the Town proceeds with the implementation of supportive amenities as identified in the proposed trail features presented in Section 2.3.2 of the RTMP.

Trail amenities and trail activation solutions are to be implemented in a consistent manner throughout the Town through the application of the trailhead and staging area classifications and design guidance identified in the plan.

Features	Major	Minor	Signage-Only
Parking (Bikes/Car)	Υ	Υ	N
Rest Area	Υ	Υ	Optional
Lighting	Υ	Υ	Optional
Signage	Υ	Υ	Υ
Drop off Areas	Υ	N	N
Garbage	Υ	N	N
Washrooms	Optional	N	N
Gates / Barriers	Υ	N	N
Loading Zones	Υ	N	N
Shelter	Υ	N	N
Potable Water	Υ	N	N
Programming	Υ	N	N

Table 11 // Trailhead Classes & Amenity Application

2.3.2.2 CROSSINGS

There are a number of locations where the recreational trail network crosses or passes over roads, natural features such as waterways, and other physical barriers. In these cases, a design feature would be needed to guide users from one part of a trail to another. By implementing crossings and structures that reflect the design of the trail and the conditions that are being crossed a greater sense of connectivity can be achieved.

When designing trails it is likely that at some point the trail connection will intersect with a roadway. At each of these locations, there should be a distinct or clearly delineated access point where pedestrian, cyclist, and vehicle traffic will need to be managed. Trail crossings or terminus points should be designed to clearly articulate the way in which users are meant to cross the roadway or how they should transition to the next portion of the trail. The following are some of the basic elements which should be considered when a trail approaches or crosses a major or minor roadway.

- Creating and maintaining an open sight triangle at the crossing point to allow trail users to see approaching vehicles and for trail users to be seen by drivers in approaching vehicles.
- Access barriers on the trail which serve to:
- Prevent unauthorized users from entering the trail, and
- Act as a visual cue to trail users that they are approaching an intersection with the road.
- Caution signs along the roadway in advance of the crossing point to alert motorists to the upcoming crossing
- Caution signs along the trail to alert users of the upcoming roadway crossing
- Aligning the crossing point to achieve as close to possible a perpendicular crossing of the roadway to minimize the time that users are in the traveled portion of the roadway.
- A concrete ramp with tactile warning plates in the boulevard and curb ramps on both sides of the road to allow users to enter and cross the roadway.
- Pavement markings where appropriate:
- Pavement markings, to delineate a crossing should only be considered at crossings where there is some form
 of vehicle control in place (e.g., stop sign, or traffic signal or pedestrian crossover).
- Pavement markings should not be used at uncontrolled trail intersections with roads (i.e., free flowing vehicular traffic that is not controlled by a stop sign or traffic signal). Trail users are required to stop and wait for a gap in traffic at uncontrolled intersections. Pavement markings at uncontrolled crossings may give trail users the false sense that they have the right-of-way over motor vehicles, contrary to the Highway Traffic Act.

In some locations signing on the trail may not be enough to get trail users to stop before crossing the road. Under these circumstances or in situations where the sight lines for motorists are reduced and/or where there is a tendency for motorists to travel faster than desirable, the addition of other elements into the trail crossing may be necessary. Changing the trail alignment may help to get trail users to slow and stop prior to crossing. Changes to the streetscape may also provide a visual cue and traffic calming effect for vehicles.

The following are design guidelines and considerations related to types and conditions of trail crossings. In the context of the Town of Grimsby Recreational Trails Master Plan there are a series of proposed crossings as part of the trail projects noted in Section 2.1.

The information contained in these guidelines are intended to be used to determine the most appropriate crossing once the Town proceeds with design and implementation. The type of crossing treatment selected generally depends on the type of road being crossed (e.g., low volume local street vs. urban arterial); number of lanes being crossed (e.g., 2-lane vs. multi-lane); traffic volume and vehicle operating speeds; sight lines (e.g., horizontal, and vertical road alignment); and the anticipated volume of trail users.

Advance Warning Sign

- 2-lane road cross-section
- Good sight lines (no horizontal or vertical curves in road that obstruct visibility of trail users or oncoming vehicles)
- Low motor vehicle traffic volume
- Low to moderate pedestrian volume (consider existing conditions and potential future demand)
- Residential neighbourhood in urban setting or collector road on the urban fringe
- Low cost to install.

Centre Median Refuge

- 2-lane or multi-lane cross-section
- Generally good sight lines (no horizontal or vertical curves in road that obstruct visibility of trail users or oncoming vehicles), though could be used on 2-lane roads where there are minor sight line limitations.
- Low motor vehicle traffic volume
- Low to moderate pedestrian volume (consider existing conditions and potential future demand)
- Rural, urban fringe or urban setting (e.g., collector or minor arterial road in urban setting)
- Low to moderate cost to install.

Pedestrian Crossover

- 2-lane or multi-lane cross-section
- Type 'A', 'B' 'C' or 'D' as per Ontario Traffic Manual Book 15
- Good or slightly obstructed sight lines
- Moderate motor vehicle traffic volume
- Low to moderate pedestrian volume (consider existing conditions and potential future demand)
- Urban or urban fringe setting (e.g., collector or minor arterial road in urban setting)
- Moderate cost to install.

Mid-block Pedestrian Signal (With or Without Centre Median)

- Multi-lane cross-section
- Applied in conditions with good sight lines or compromised sight lines (other factors have greater influence on decision than sight lines)
- Moderate to high motor vehicle traffic volume
- Moderate to high pedestrian volume (consider existing conditions and potential future demand)
- Urban or urban fringe setting (e.g., arterial road in urban setting)
- No signal-controlled nearby (e.g., within 200 m of trail crossing point)
- Moderate to high cost to install.

Intersection Pedestrian Signal

- Multi-lane cross-section
- Applied in conditions with good sight lines or compromised sight lines (other factors have greater influence on decision than sight lines)
- Moderate to high motor vehicle traffic volume
- Moderate to high pedestrian volume (consider existing conditions and potential future demand)
- Urban setting (e.g., arterial road)
- Trail crossing cannot be routed to a nearby stop-controlled intersection (e.g., within 200 m of trail crossing point)
- Note that signal control can also assist motor vehicles entering the arterial from the side street.
- Moderate to high cost to install.

Cross Ride

- 2-lane or multi-lane cross-section
- Applied in conditions with good sight lines or compromised sight lines (other factors have greater influence on decision than sight lines)
- Moderate to high motor vehicle traffic volume
- Moderate to high pedestrian and cyclist volume (consider existing conditions and future demand)
- Urban or urban fringe setting (e.g., arterial road in urban setting)
- Designed as per Ontario Traffic Manual Book 18
- Bicycle crossing signal head (additional to pedestrian crossing signal head) which permits cyclists to ride through the pedestrian crossover area without contravening the Highway Traffic Act
- Moderate cost to install when retrofitting an existing signalized crossing, moderate to high cost to install for locations where no signals exist.

Grade Separated Crossing

- Controlled access highway, multi-lane road cross-section
- Can be applied in conditions with good or compromised sight lines (other factors have greater influence on decision than sight lines)
- High to very high motor vehicle traffic volume

- High pedestrian volume (consider existing conditions and potential future demand)
- Urban, urban fringe or rural setting (e.g., arterial road or controlled access highway in the urban setting)
- Trail crossing cannot be routed to a nearby signal-controlled intersection, underpass, or overpass.
- Surrounding grades facilitate the design of a seamless crossing for trail users and the use of stairs or steep ramps can be avoided. Stairs or steep ramps on approach may discourage use of the grade separation.
- High to very high cost to install.

Waterways

Bridges are required for crossings of creeks and rivers. Prefabricated self-weathering steel truss bridges are typically the most cost-effective form of bridge crossing. Though costly elements to design and implement their long service life makes them a worthwhile investment where a bridge is needed.

- Bridge decking must be oriented perpendicular to the path of travel and be slip resistant.
- Slopes on bridges should not exceed 5%.
- Bridge railings should be designed to a minimum height of 1.37m. This minimum height is important where
 cyclists are using the bridge as the 1.37m height provides the necessary protection due to a cyclist's higher
 center of gravity on their bicycle.

Boardwalks

Where trails pass through sensitive environments such as marshes, swamps, or woodlands with many exposed roots, an elevated trail bed or boardwalk is usually required to minimize impacts on the natural feature. If these areas are left untreated, trail users tend to walk around obstacles such as wet spots, gradually creating a wider or multiple meandering footpaths through the surrounding vegetation, resulting in vegetation trampling and damage. On tertiary and some secondary trails a low-profile boardwalk may be appropriate and requires modest engineering to develop an appropriate design. For primary and most secondary trails a more sophisticated design and installation is necessary. This is likely to include engineered footings, abutments, structural elements, and railings. Helical piles are an alternative foundation methodology that is cost effective, and a low impact installation compared to concrete footings. Piles are drilled into the ground with a small skid steer or mini excavator then left in place to serve as the foundation. Helical piles allow for a narrower disturbance area and reduced numbers of trips to haul in concrete and haul out fill generated by pier excavations. Where finished boardwalk surfaces are less than 60cm above the surrounding grade a curb along the edge of the boardwalk will prevent users from rolling off the edge. Where the difference in grade exceeds 60cm, a railing should be provided.

Railways

Where the trail network crosses active railway lines crossing designs / design upgrades must follow Transport Canada Grade Crossing Standards (2014).

https://www.tc.gc.ca/media/documents/railsafety/grade-crossing-standards.pdf

2.3.2.3 STAIRWAYS & SLOPE FEATURES

Stairways or other transitional slope features are intended to accommodate considerable changes in slope along a trail linkage. Within the context of the Town of Grimsby stairs have been a desired and necessary improvement at locations where an individual aims to get access to a higher point along the Niagara Escarpment or other feature that has a considerable shift in elevation.

When considering the implementation of a staircase or other transitional feature the following should be considered. These guidelines have been adapted from the City of Toronto Multi-use Trail Design Guidelines and are to be reviewed and revisited by the Town of Grimsby in the identification and implementation of these features as part of the recreational trails master plan:

- Providing universal accesses that can be navigated by users with a wide range of abilities is very important, and all new or upgraded trail accesses should seek to satisfy at least the most current legislated accessibility requirements; care should be taken that the trail being accessed is also accessible.
- Ramps should be designed to meet and exceed Ontario Building Code and the Integrated Accessibility Standards Regulation Guidelines where possible. These include all of the dimensional requirements for stairs and ramps as well as requirements for surfaces, guards, handrails, and most other components.
- Where a switchback is desired, it should be designed to conform with the requirements for ramps that are noted above. Avoid design features that encourage or facilitate fast cycling (long, straight runs, greater widths) because the turning radii used for switchbacks are not suitable for such a use.
- Both stairs and ramps can be installed as in-ground or elevated structures. Elevated structures, though more
 costly are preferable (especially for stairs) due to a somewhat reduced construction impact in natural areas,
 longer service life, and the ability to maintain existing drainage patterns.
- Generally, a clear width of two metres between handrails is appropriate as it permits two users to pass in opposite directions and does not trigger a code requirement for a center handrail.
- Because these facilities are not considered part of the linear trail, they are not usually widened to
 accommodate heavier use (although this can be considered); instead, extra space should be provided at
 landings to allow users to rest, to enjoy the view or to wait for the way ahead to become clear; this also
 requires clear sight lines from one landing to the next, or preferably from the top to the bottom of the entire
 stair or ramp.
- At the top and bottom of stairs and ramps, there should be space for trail users to set up or orient themselves; this should be a minimum of three or preferably five metres from the edge of the trail; coordinating amenities such as seating or water bottle fillers at these locations is recommended.
- Wayfinding sign placement should include, at minimum, clear decision, or direction signs at the top and bottom of all stairs (for trail users entering or exiting at these locations); provision of map and information signs and accessibility information is recommended on the side of the facility that constitutes an entrance to the trail system.
- It is recommended that stairs be provided with channels for bicycles and other wheeled devices such as strollers. These should be constructed from visually contrasting materials and should not obstruct pedestrian use of the hand grab on either side. These should be on both sides, if feasible, and should be approximately 0.2 metres wide. A raised lip (approximately 0.05m) can help to keep wheels on the channel and make it more visible. Channels should connect smoothly with any landings.
- Stair and ramp combinations may also be considered to provide choices for trail users and a combination of access and convenience.

Constructing switch backs properly – compared to stairs or ramps - takes careful planning. It is particularly important to steepen the trail grade immediately before and after the turn so that the turn itself has a reduced grade. Proper drainage at the top is also essential. It is best practice to avoid – where possible – or minimize the use of switchbacks in trial construction. An alternate route maybe more appropriate and where possible the preference would be to seek the implementation of stairs or ladders. All confirmed locations and design details for both switchbacks as well as stairs should be confirmed within the field based on additional field investigation and detailed reviews of context and conditions within the surrounding areas.

What is critical to remember is that in any case, these features are necessary for transition but require considerable planning and design effort to appropriately understand and design for the conditions in which they are being built. Accessible options may be possible but may not be feasible in all locations. The following are some examples of the types of trail stair features that could be considered for implementation.







2.3.2.4 SIGNAGE & WAYFINDING

The use of trails requires clear information on how to use the trail infrastructure, where to go and how to interact with other users. When designing a trail system, every effort should be made to provide users with sufficient information to feel both safe and comfortable. Within the Grimsby Recreational Trails Master Plan the implementation of strategic signage and wayfinding is considered critical to the success of the recreational trails network. When implementing signage and wayfinding, the most affective application should:

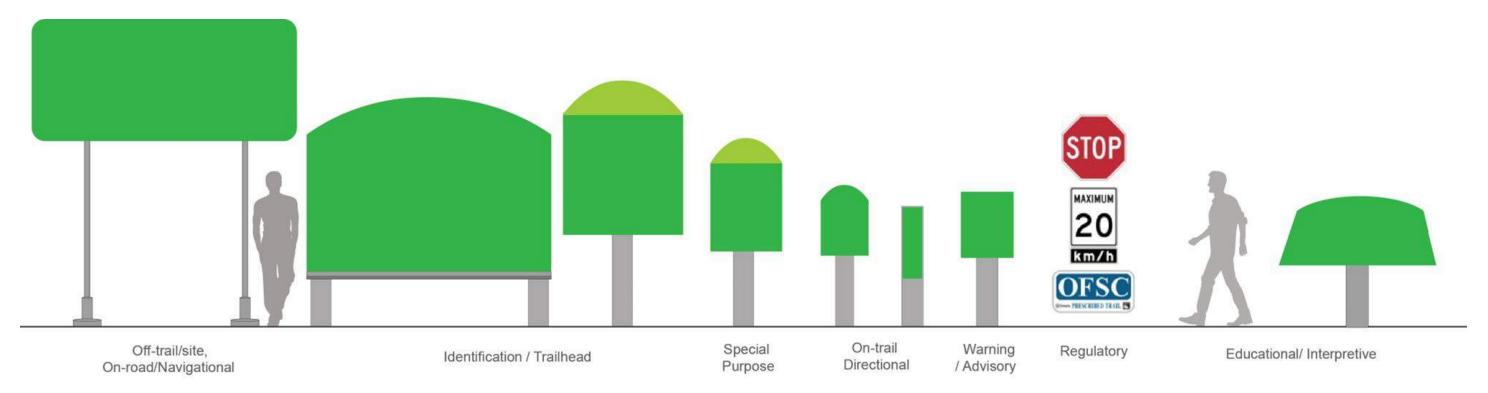
- Articulate user/visitor experience, managing expectations and needed skills.
- Communicate details for safety and accessibility (AODA standards may apply)
- Create an integrated wayfinding system: on-road facilities, trails, parks, and tourism for motorized and non-motorized users.
- Be consistent with higher level design guidance where necessary.
- Can bring coherence and consistency to Parks and Recreation and Tourism signage.

The information contained within the RTMP is intended to be the basis for a more comprehensive wayfinding and signage strategy which could be completed by the Town or the basis for day-to-day decision making regarding the implementation of signage and wayfinding as part of the implementation of the proposed trail projects. A best practice when considering signage and wayfinding is the identification of a "family" of signs each with a different purpose and message. This family contains unifying design and graphic elements and materials. The unified system becomes immediately recognizable by the user and can become a branding element. A family of signs when effectively implemented helps to attract, inform, navigate, and manage the users of the trail system.

Figure 15 provides an overview of the types of signage that makes up a "family of signs". A more detailed description of each is provided on the following pages.

The signage and wayfinding guidelines as identified in the recreational trails master plan are to be reviewed and a comprehensive wayfinding strategy is to be developed and implemented integrating the route intent and major destinations.

Figure 15 // Overview of Trail Signage Classifications



Off-trail/Site Navigational Signs

Purpose: The signs are intended to facilitate awareness and access to trails.

Location: The intent of these signs is to help users/visitors navigate to trails at major decision points on-road near the trail link. Major destinations including built up areas a re a recommended location for these signs or within a 5 km radius of the trailhead/trail staging area.

Content:

- Trail branding with logo
- Trail or trail network name
- Directional arrows
- Distance and time to trail.

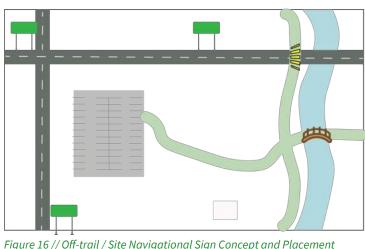


Figure 16 // Off-trail / Site Navigational Sign Concept and Placement Recommendations



ACTIVE BY NATURE.

Trailhead Sign - Primary

Purpose: The signs are intended to facilitate awareness and access to trails.

Location: The intent of these signs is to help users/visitors navigate to trails specifically at the entry point of the trail linkage where there is a designated start or end to the facility.

Content:

- Trail or trail network name
- A map of the trail system indicating accessibility and assigned level of difficulties.
- Orientation information indicating the user/visitor's current location.
- Rules, and regulations of the trail
- Permitted and restricted uses
- Amenity information
- Key points of interest
- Any warnings and potential hazards
- Grimsby Parks and Recreation contact information and hours of operation
- Any sponsorship or partnership information and logos
- Any trail-related event information.

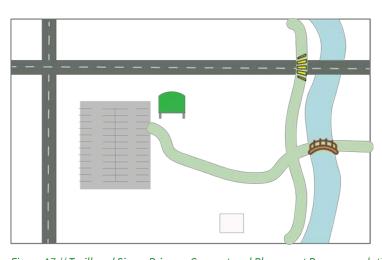
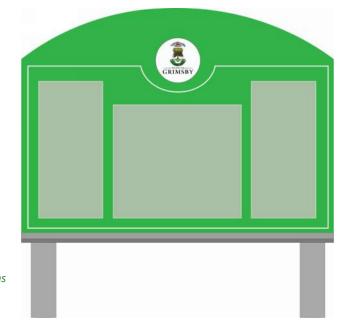


Figure 17 // Trailhead Sign – Primary Concept and Placement Recommendations



Trailhead Sign - Secondary

Purpose: The signs are intended to communicate the expectations and experiences found along the trail

Location: The signage is intended to help users identify and confirm that they have arrived at and are on a Grimsby trail.

Content:

- Trail branding with logo
- Trail or trail network name
- A map of the trail within the trail system indicating accessibility and assigned level of difficulties.
- Orientation information indicating the user/visitor's current location.
- Rules, and regulations
- Permitted and restricted uses
- Amenity information
- Points of interest
- Distances and typical durations for pedestrians and cyclists
- Warnings and potential hazards.

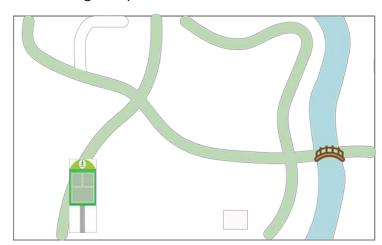
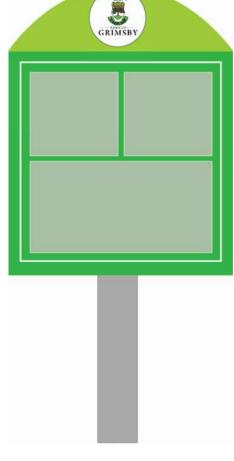


Figure 19 // Trailhead Sign – Secondary Concept and Placement Recommendations



Special Purpose Signs

Purpose: The signs are intended to identify information that is unique to the specific trail that it is being implemented. The sign typically provides direction on operational needs or expectations.

Location: The signage is typically placed at the entry point of the trail along with the trailhead features. It should specifically refer to unique features that require operational adaptation along the trail for reference by the trail user.

Content:

- Trail branding with logo
- Trail or trail network name
- Destination signs
- Entry fees
- Partnership recognition

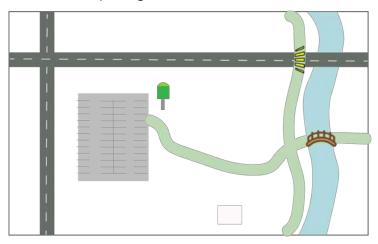
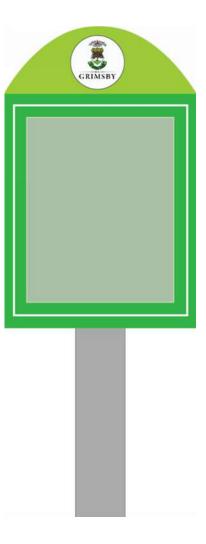


Figure 18 // Special Purpose Sign Concept and Placement Recommendations



02.

ACTIVE BY NATURE.

On-trail Directional Signs

Purpose: The signs are intended to provide essential navigational information to the visitor/user and direct users to nearby trails and loops, amenities, and points of interest

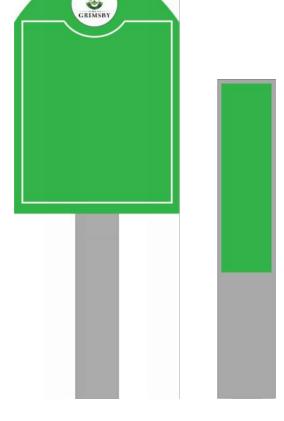
Location: Signage is intended to be placed at trail junctions along a trail and within along a trail linkage or within a trail related land use / space. The signage should be implemented 500m apart with a frequency that addresses where decisions need to be made or new trail users may require information.

Content:

- Trail name
- a map of the trail within the trail network (and any specific colours/symbology associated with the network, trailhead, and pamphlets)
- orientation information indicating the user/visitor's current location.
- directional arrows
- distances and typical durations for pedestrians and cyclists
- points of interest, and
- warnings and potential hazards



Figure 21 // On-trail Directional Sign Concept and Recommended Placement

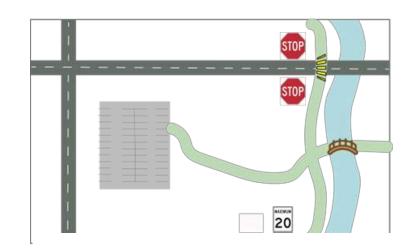


Regulatory Signs

Purpose: Signs communicate necessary behaviours-based on requirements under the Highway Traffic Act. They could communicate information related to safety, permission or prohibition, parking control, boundary markers, protective signs for health and environment and mandatory signs for obligatory action.

Location: In clear view, without obstructions and at specific locations to establish and reinforce expectations of all users including on-road motorists, especially in spots with known concerns.

Content: Determined by the Highway Traffic Act and other supportive design guidelines and standards including Ontario Traffic Manual Book 12.











Warning/Advisory Signs

Purpose: Communicate essential safety information to the user/visitor based on human behaviour or environmental conditions.

Location: Placement determined by the presence of features which would be identified at the time of design confirmation prior to construction. Signs could be placed at any point along the trail and should be at the start and end point prior to trip initiation.

Content:

- Trail branding with logo
- Highly visible caution notification
- Identification of specific features to be aware of
- Infographics
- QR code for more information / emergency information
- Direction on preferred action

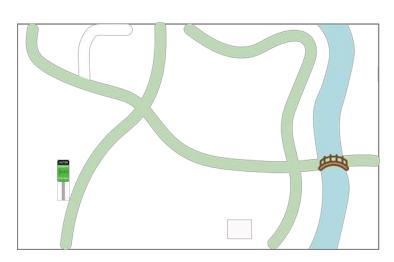


Figure 23 // Warning / Advisory Sign Concept and Recommended Placement



Educational and Interpretive Signs

Purpose: Educational signs may provide ecological, Indigenous, and natural heritage information, and may be part of an educationally themed trail or trails that are used specifically for educational purposes in partnerships with schools and organizations.

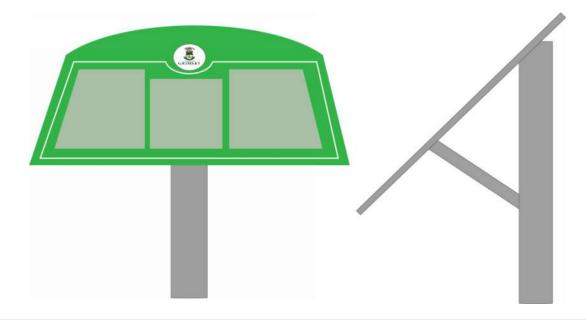
Location: Signage should be implemented at a specific point of interest or special environmental/ historical feature and viewing or rest/stop areas

Content:

- Trail branding with logo
- Feature name
- Identify, explain, and pose questions, and be oriented for a variety of users across a range of ages and abilities



Figure 22 // Educational and Interpretive Sign Concept and Recommended placement



2.3.3 Other Influential Standards & Guidelines

The intent is not for the Grimsby Recreational Trails Master Plan to reinvent the wheel for every and all aspects of design. The following is a summary of some of the most applicable and relevant guideline documents and resources that are recommended for consideration as the Town proceeds with the implementation of the recreational trails master plan.

Where applicable, provincially accepted design guidelines and standards should take precedence over those included as part of the recreational trails master plan including but not limited to Accessibility for Ontarians with Disabilities Act Built Environment Standards.

2.3.3.1 ACCESSIBILITY FOR ONTARIANS WITH DISABILITIES ACT (AODA); BUILT ENVIRONMENT STANDARDS

The Accessibility for Ontarians with Disabilities Act, (AODA, 2005) states that "The people of Ontario support the right of persons of all ages with disabilities to enjoy equal opportunity and to participate fully in the life of the province." Ontario Regulation 413/12 (O.Reg 413/12) is the built environment standard which is considered the most applicable series of accessible guidelines and criteria which apply to new construction and extensive renovation of trails and exterior paths of travel. O.Reg 413/12 groups outdoor pedestrian routes into one of three categories as follows:

- Paths of Exterior Travel: which includes sidewalks and exterior walkways that connect directly to buildings
 and facilities. Examples include walkways that connect parking lots to buildings, main walkways in parks that
 connect to park pavilions, playgrounds, and washroom buildings etc.
- Beach Access Routes: which are defined as the main connecting walkway(s) and beaches intended for public use.
- Recreational Trails: which encompass a range of facility types ranging from hard surface multi-use trails in major urban parks to natural surface walking trails in more remote areas.

Sections 80.8 and 80.10 in O.Reg. 413/12 provides the technical requirements for Recreational Trails. Some of the key requirements include:

- A minimum 1.0m wide tread free from obstructions and a minimum of 2.1m clear head room above trail
- Trail surfaces that are firm and stable
- Where trails are constructed adjacent to water or a drop-off the trail must have edge protection that prevents
 users from slipping over the edge. The top of the edge protection must be at least 50mm above the trail
 surface and it must be designed to not impede the drainage of the trail surface. Edge protection adjacent to
 water or a drop-off is not required where there is a protective barrier / railing that runs along the edge of the
 trail.
- Where there are gates / barriers at trail entrances they must have an opening of between 850 mm and 1000mm
- Trailhead signage must be provided that indicates the length of the trail; type of surface; average and minimum trail width; average maximum running/longitudinal and cross slope; and the location of amenities (where provided). Signage must have text that has a high tonal contrast with background colours to facilitate visual recognition, and text must use a sans serif font.

- Brochures and media used to describe the trail must convey the same information in the same manner as required for trailhead signs.
- Information on trailhead signs and brochures (e.g., slope, width etc.), as opposed to subjective information (e.g., level of difficulty rating) about the trail's characteristics allows the user to make an informed decision whether to use the trail before they set out, based on their personal level of ability.

This section of O.Reg. 413/12 also recognizes exceptions where accessibility requirements can be waived. These include one or more of the following:

- The requirements, or some of them, would likely affect the cultural heritage value or interest of a property identified, designated, or otherwise protected under the Ontario Heritage Act, places designated as National Historic Sites, or historic places marked or commemorated under the Historic Sites and Monuments Act.
- The requirements, or some of them, might damage, directly or indirectly, the cultural heritage or natural heritage resources on a property included in the list of United Nations Educational, Scientific and Cultural Organization's (UNESCO) World Heritage sites.
- There is a significant risk that the requirements, or some of them, would adversely affect water, fish, wildlife, plants, invertebrates, species at risk, ecological integrity, or natural heritage values, whether the adverse effects are direct or indirect.
- It is not practicable to comply with the requirements, or some of them, because existing physical or site constraints prohibit modification or addition of elements, spaces or features that would be required to meet accessibility requirements.

2.3.3.2 CRIME PREVENTION THROUGH ENVIRONMENTAL DESIGN (CPTED) DESIGN PRINCIPLES

Trails should be designed to allow users to feel comfortable, safe, and secure where and when possible. Personal safety can be an issue for many individuals. They typically arise more frequently with; women, the elderly, and children, who are considered to be among the most vulnerable groups.

Principles of Crime Prevention Through Environmental Design (CPTED) provide guidance on how to consider and appropriately design with comfort and safety in mind. CPTED should be considered and appropriately applied to help address security issues concerning the use of municipal trails, particularly in locations where trails are infrequently used, isolated or in areas where security problems have occurred in the past. There are four core CTPED principles which include natural access control, natural surveillance, territorial reinforcement, and maintenance.

Understanding how these principles translate to municipal planning and design is important to help inform future next steps. Some specific design considerations that have been employed by municipalities include:

- Providing good visibility by others by having routes pass through well-used public spaces.
- Provide the ability to find and obtain help: Signage that tells users where they are along the trail system.
- Provide "escape" routes from isolated areas at regular intervals.
- Maintain sight lines and sight distances that are appropriately open to allow good visibility by users.
- Provide trailhead parking in highly visible areas.

- Minimize routing close to features that create hiding places such as breaks in building facades, stairwells, dense shrubs, and fences.
- Design underpasses and bridges so that users can see the end of the feature as well as the area beyond.
- Signs near entrances to isolated areas can be used to inform users that the area is isolated and suggest alternative routes.

2.3.3.3 ONTARIO TRAFFIC MANUAL (OTM) BOOKS

As noted in the network development approach and as identified in the trail intents, there are strategic on-road linkages that make up part of the recreational trails network as a means of achieving connectivity. Through this plan it is acknowledged that more work will need to be done to review and determine the feasibility of the preferred design solutions for these connection as part of a wider active transportation review. Until such a time that the Town proceeds with a Transportation Master Plan or Active Transportation Master Plan, where appropriate the Town should seek to work with three Ontario Traffic Manual Guideline documents to support recommendations identified within the RTMP as well as other active transportation related work throughout the Town – specifically relating to on-road cycling infrastructure.

OTM Book 18

The leading set of guidelines within Ontario pertaining to the planning, design, implementation, and maintenance of on-road cycling infrastructure. The information contained within this document has been used to provide preliminary recommendations regarding the on-road connections and are encouraged to continue to be used as these linkages are reviewed, confirmed, and implemented.

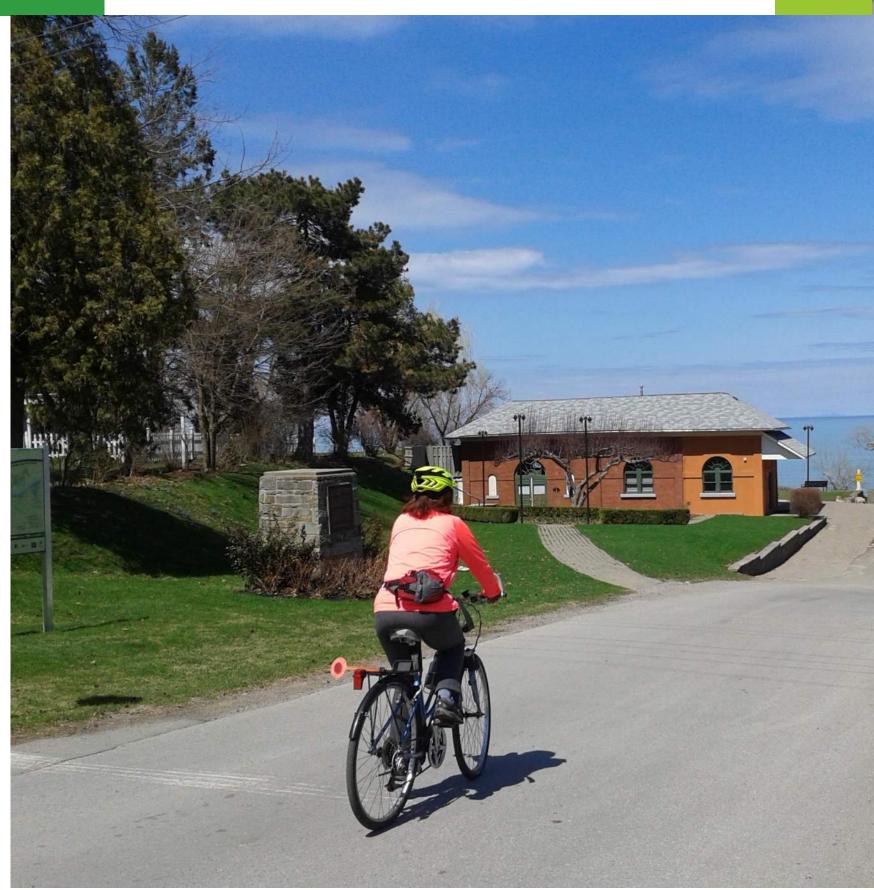
OTM Book 12

This document provides guidance on Traffic signals which may be helpful or necessary at the points of crossing where a trail transitions across a street or through an intersection.

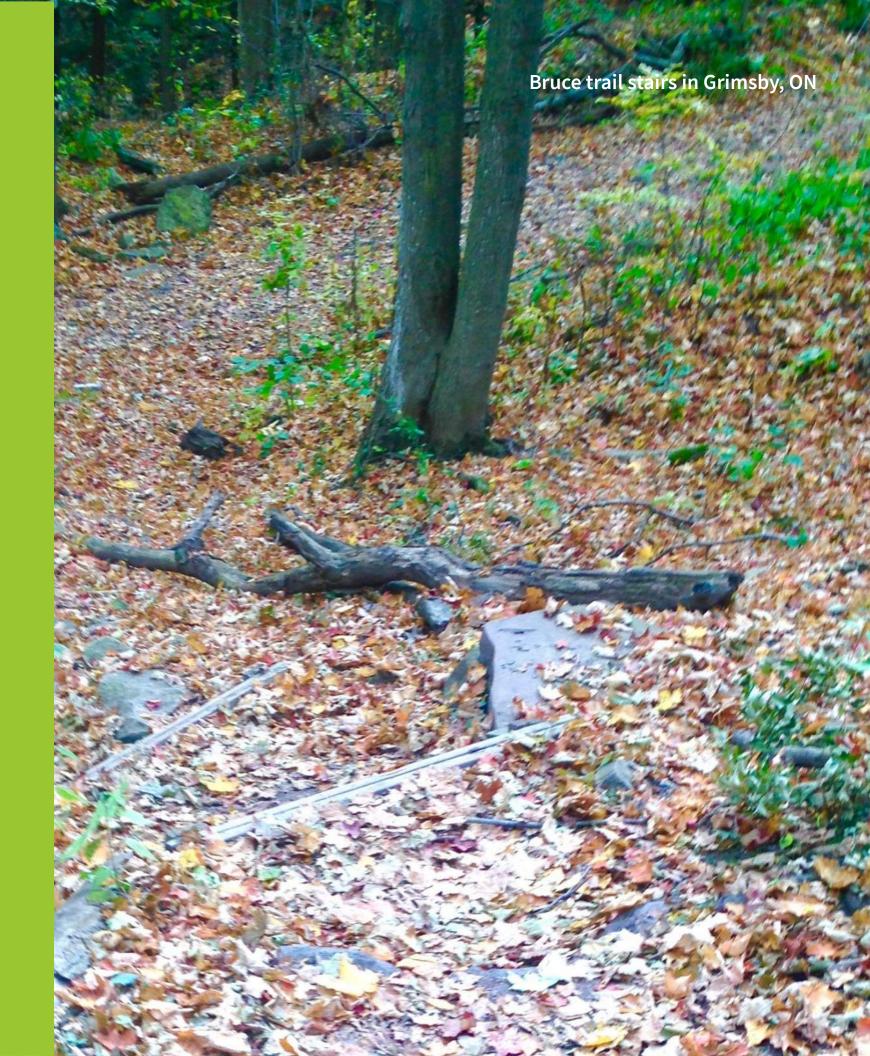
OTM Book 15

This document provides design guidance on pedestrian crossing facilities. Like OTM Book 12, these guidelines would be used as major transition points between trails or across physical barriers.

The Town should refer to Ontario Traffic Manual Book 18: Cycling Facility Design as the guide for the design of on-road and in-boulevard linkages identified as part of the recreational trails network in partnership with the Town's Public Works departments.



3.00 IMPLEMENT



The intent of the Recreational Trails Master Plan for the Town of Grimsby is to provide municipal staff, stakeholders and partners with a resource and guide to help with day-to-day decision making, collaboration, coordination, and communication over the course of the next 20+ years. A typical master plan is intended to be updated every 5 years to reflect changes in planning policy, practice, and process; however, the RTMP for the Town of Grimsby aims to provide a responsive and adaptive approach which allows for this plan to respond to these changes – and others – on an ongoing basis.

While the RTMP has been developed and designed to be adaptable and responsive it is important to provide guidance to inform future discussions and decision making. Section 3.0 provides guidance and resources to support future efforts around the implementation of the recreational trails master plan. It recommends a framework in the form of recommended project phases as well as strategic network priorities. With the adoption of the RTMP, any and all trail related decisions are to be reviewed in the context of the content and information contained within the RTMP specifically the resources and references included throughout the remainder of the document.

The Town's Recreational Trails Master Plan should be used as the primary reference for all trail related projects and initiatives replacing select prior plans e.g., Parks, Recreation & Culture Master Plan where appropriate.

3.1 Implementation Considerations

A typical master plan identifies a proposed phase / timeline for each project that is being recommended. For the Grimsby RTMP, instead of having a disjointed and separate timeline for each linkage focus was placed on establishing a series of priority projects that aimed to achieve the continuous, user focused, accessible, actionable, and maintainable recreational trails network that was desired for the Town. Where logical, individual trail projects have been "combined" to form one continuous and connected 'priority trail linkage'.

The intent is for the Town to focus on the strategic implementation of these project combinations to achieve some of the most impactful trail linkages within the Town of Grimsby. The priority trail links were identified based on a series of considerations which started with an assessment of implementability. The assessment of implementability was similar to the approach that was used for the proposed RTMP recommendations. The details have been provided to the Town and the outcomes are illustrated on Map 5.

In addition to the implementability review, priority projects were also determined based on input received from Town staff, strategic priorities of residents and stakeholders as well as overall trail experience and function. There are four (4) types of priority projects that are identified for the Town's implementation – high priority projects, medium priority projects, quick wins, and partner priorities.

For each priority project a preliminary proposed phase or timeline of implementation has been identified. This phasing provides the Town with a blueprint for project implementation. The recommended phasing has been identified based on project complexity, the degree of control over the project that the Town has as well as overall interest and need as expressed by members of the public and / or stakeholders and partners.

The timeline for implementation was developed based on a preferred 20-year horizon as identified by Municipal staff. It is typical for master plans of this nature to be organized into three horizons – mirroring a similar timeline as other municipal infrastructure and land use planning. For the purposes of the RTMP, we have assumed the following phasing horizons:

- Short-term (0-5 years)
- Medium-term (6-15 years)
- Long-term (16-20+ years)

The results of this assessment and phasing identification are presented on Map 7.

It is important to note that due to the importance of implementability and feasibility in the context of the RTMP, when it comes to identifying priority project phasing...

- High priority projects are typically phased within the short to medium term.
- Medium priority projects are typically phased within the medium to long term.

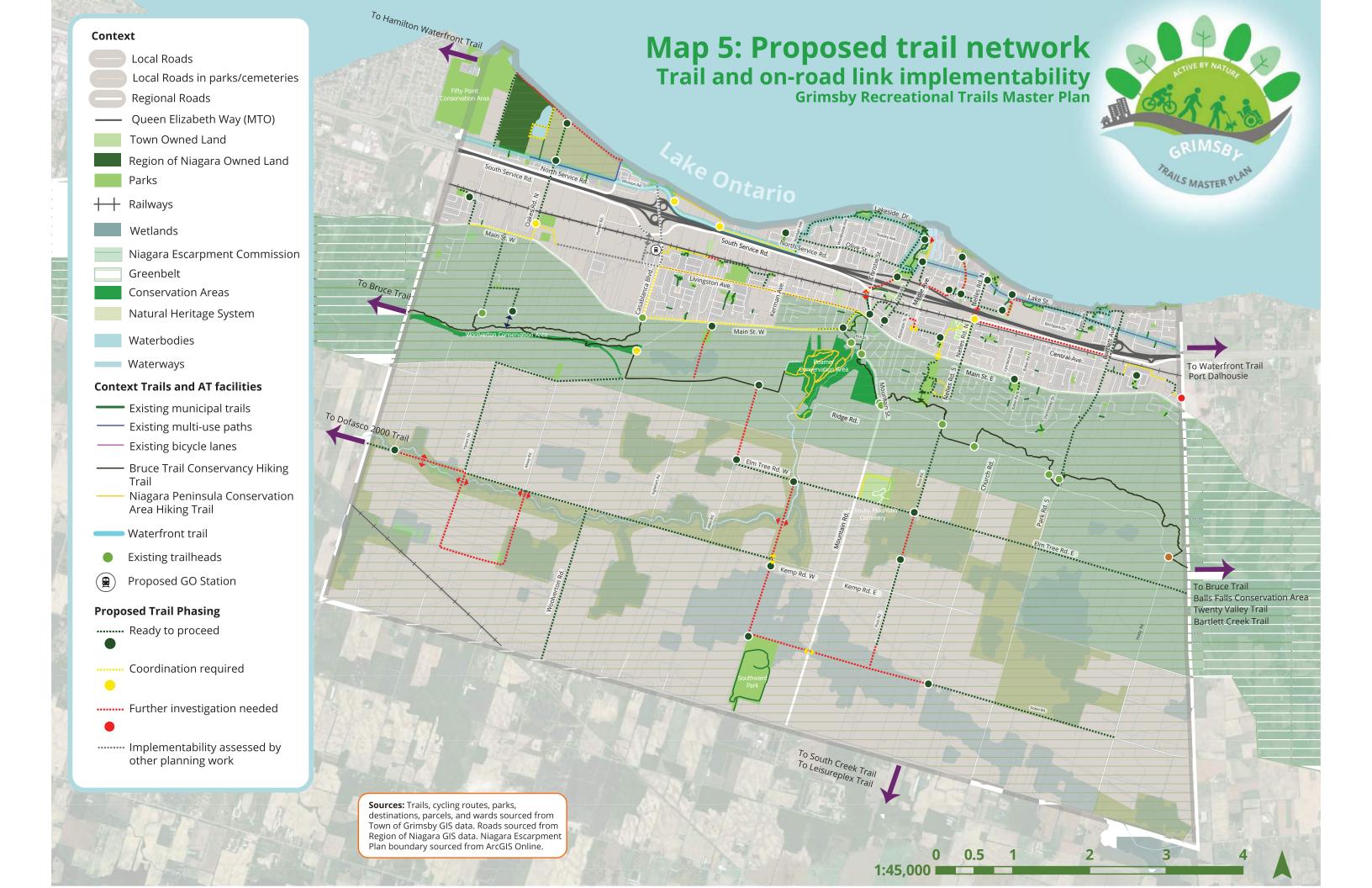
While the Town is encouraged to focus on the implementation of the high and medium priority projects; if funding becomes available (though external or other sources) that there be a series of projects which they could draw upon that could proceed to design and implementation without significant effort. These projects are identified as "quick wins" and are also not considered "phased" within the three horizons. Similarly, projects that are not under the jurisdiction or control of the Town, a proposed phase has not been identified. They have been identified as "phased outside of the RTMP".

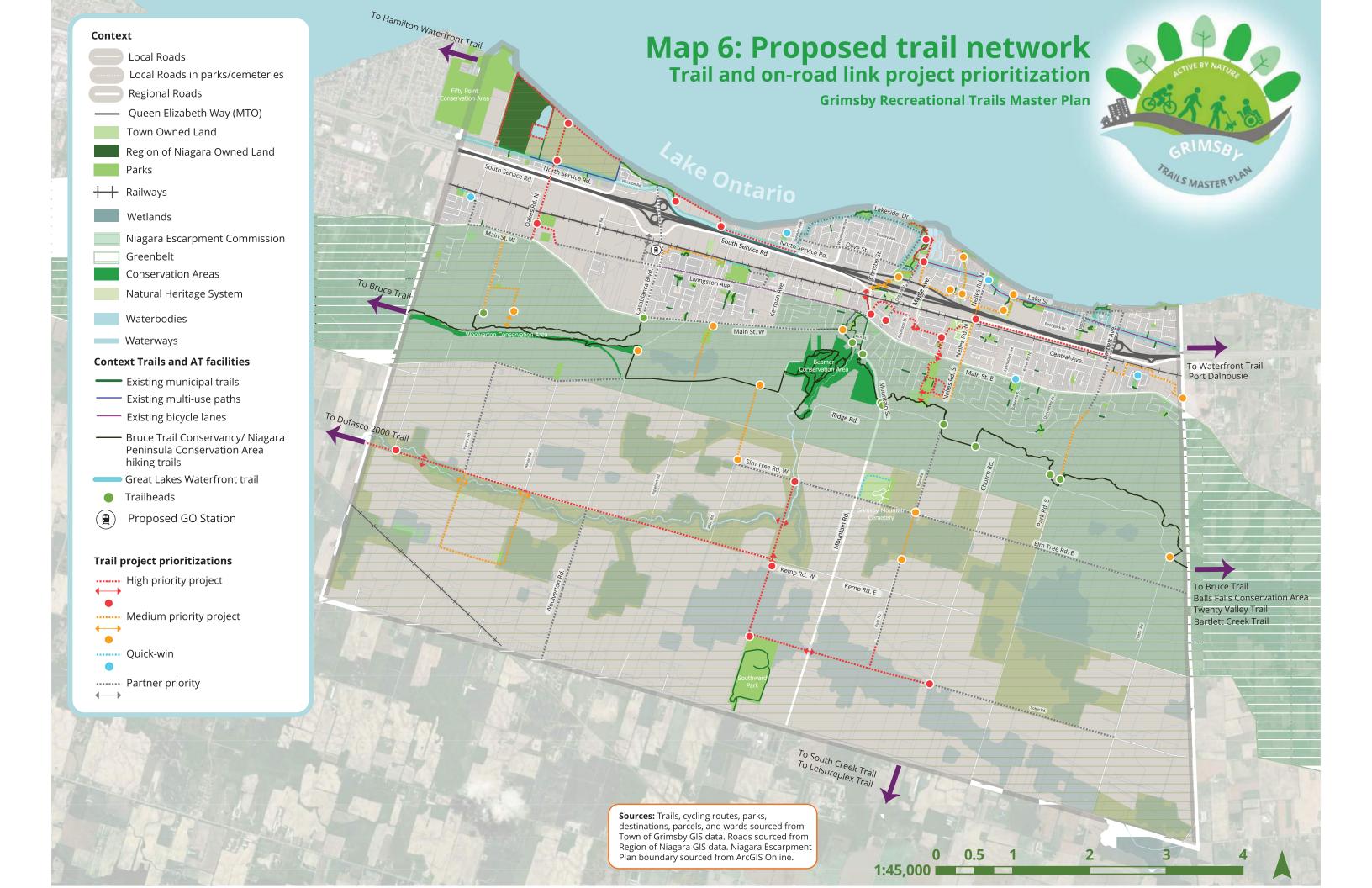
The expectation is that the Town of Grimsby initiate the implementation of the RTMP starting within the 2024 calendar year; however, the assessment of phasing is more so meant to help guide the level of effort that would be needed to proceed with the proposed project as opposed to a prescriptive timeline for implementation. It is also important to note that these timelines are subject to other municipal projects and priorities and could be shifted and / or adapted to ensure that the Town remains responsive to changes in municipal priorities and practices.

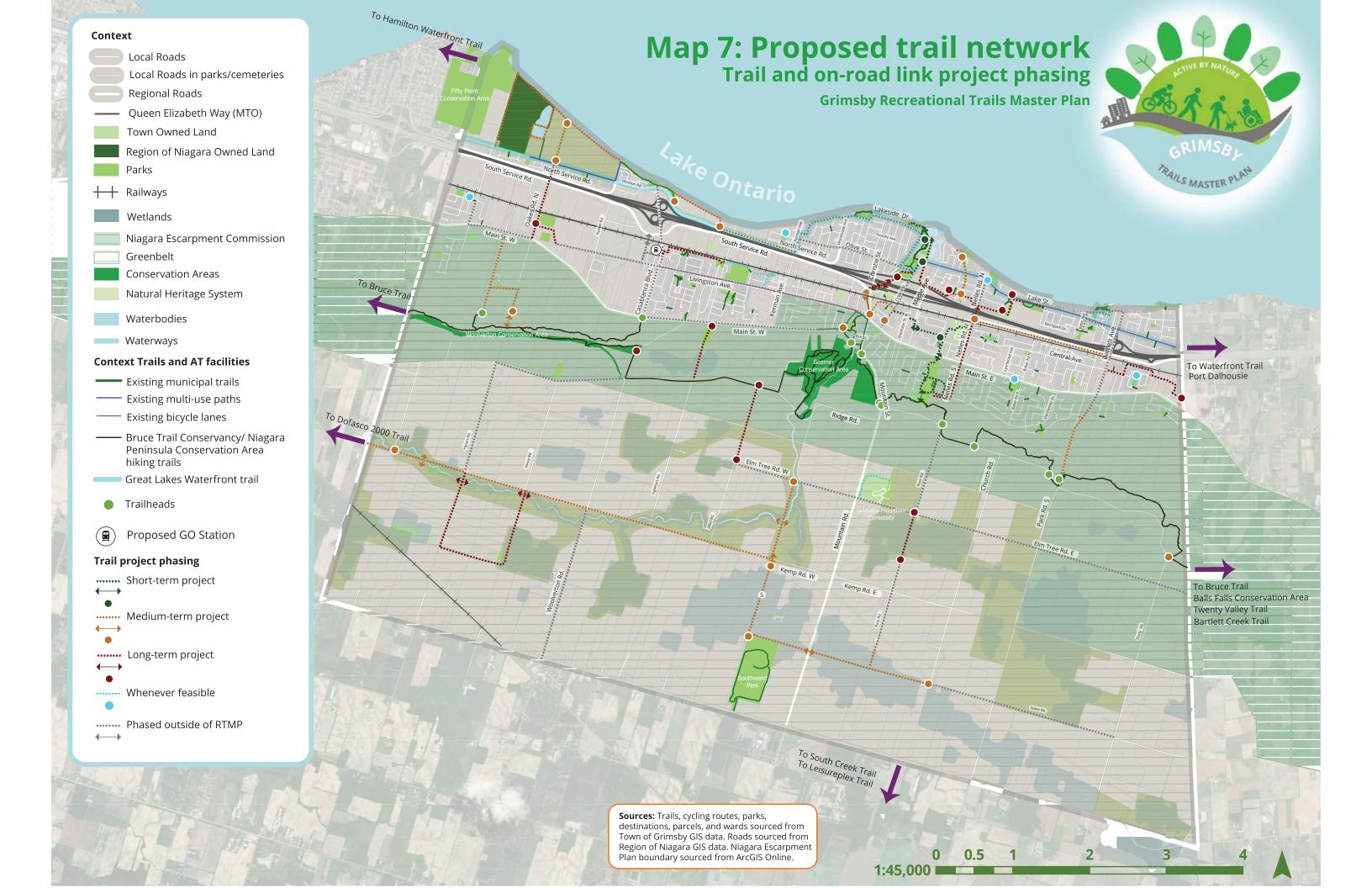
Lastly, the recommended timeline does not reflect the year or horizon in which the project is intended to be completed. It reflects when the project is to be initiated and acknowledges that there may be projects that take many years to complete the necessary approvals, design, and construction details – see Section 3.2 for more details.

The recreational trail phasing plan is to be used as the blueprint for annual decision making related to budgeting and scheduling trail projects and initiatives.

The following is a description of each of the priority projects. Within the priority project descriptions, the proposed phasing has been identified. All proposed priority projects are presented on Map 6.







3.2 Priority Projects

3.2.1 High Priority Projects

High priority projects are comprised of core trail links and features which work together to achieve critical connectivity, safety, and comfort objectives for the trail system. These projects were often supported by stakeholders and the public during the engagement process, or achieve a key objective heard during the engagement process. Given that connectivity is a core feature of high priority projects, many are segments of one of the four spine trails.

Being "high priority" does not mean these projects are necessarily simple or low-cost to achieve, and further research and/or coordination may be required to achieve but does mean that the town should prioritize their implementation for the benefit of the trail system. As these projects are high priority, the majority are phased for the short to medium term and their respective phase was determined by the complexity of the project, the coordination required to achieve the project, and the anticipated cost.

Project Name	Total km	Phase	Description
Forty Mile Creek Downtown Connection	0.98	Medium- term	This trail connection provides natural access into the Forty Mile Creek area, extending the existing Forty Mile Creek Trail to the South Service Rd. The project would offer an alternative walking/hiking trail access into Downtown via Elizabeth St and Carnegie Lane, with recommendations to enhance active transportation infrastructure on both streets. This project is part of the East-West Spine Trail and Forty Mile Creek Spine Trail.
Downtown to Centennial Park Connection	0.85	Short-term	Trail connection that bridges Downtown to Centennial Park, through on-road and off-road connections. Includes a new in-park path of Maplewood Park. This project is part of the East-West Spine Trail.
Centennial Park and Escarpment Stairs	2.21	Short-term	New in-park paths of Centennial Park and an escarpment access staircase at the base of the park, connecting into the Bruce Trail.
Hydro Corridor Urban Destination Trail	2	Medium- term	This trail connection provides off-road linear connection from Nelles Road to Bartlett Ave along the Grimsby hydro corridor. This project is part of the East-West Spine Trail.

Project Name	Total km	Phase	Description
Forty Mile Creek Lakeshore Connection	1.39	Short-term	This trail connection improves and extends the existing segment of the Forty Mile Creek trail which connects into the Pumphouse. The trail extension is supported by a strategic on-road connection along Ontario St. This project is part of the Forty Mile Creek Spine Trail.
Westend Waterfront Trail	6.16	Medium- term	The Westend Waterfront Trail provides a separated destination trail along the Lake Ontario Shoreline with connectivity into the Grimsby-on-the-Lake neighbourhood. This project is a proposed spine trail.
Grimsby South Spine Trail	10.5	Medium- term	This trail connects the Hamilton Dofasco 2000 Trail to Church Rd, via both off-road trails and strategic on-road links with improved active transportation infrastructure. The trail also connects into Southward Park and the in-park trail system. This project is part of the Grimsby South Spine Trail.
Oakes Rd. to Waterfront Trail Connection	1.34	Long-term	This connection would provide safe and continuous active transportation access between Grimsby on the Lake and Livingston Ave along Oakes Rd. Given that this project is dependant upon partner priorities that are currently being finalized, it is not phased until the long-term, but should remain a priority for implementation once partner priorities are confirmed. This project in part of the East-West Spine Trail.

Table 12 // Summary of High Priority RTMP Projects

3.2.1.1 PRIORITY PROJECT #1.

Forty Mile Creek Trail Downtown Connection

Phase Medium term

Project control Town and partner

CORE FEATURES

- Improvements to existing Forty Mile Creek Trail and trailhead from Christie St. to the CN tracks.
- New naturalized trail south of the CN tracks to South Service Rd.
- Formalized below-grade crossing of CN tracks along existing crossing for Forty Mile Creek
- New multi-use paths along Elizabeth St. and Carnegie Lane connecting Forty Mile Creek into Downtown (400m)
- New Minor trailhead at Ontario St. town-owned parking lot, providing downtown adjacent amenities for resting, signage, and bicycle parking.

PROPOSED TRAIL/AT DESIGN



Natural trail



Multi-use path

PROPOSED TRANSITION FEATURES

Minor trailhead, boardwalk

IMPLEMENTABILITY

Some further investigation required

ACTIVE BY NATURE.

3.2.1.2 PRIORITY PROJECT #2.

Downtown to Centennial Park Connection

Phase Short term

Project control Town and partner

CORE FEatures

- New community/neighbourhood trail in lands adjacent Maple Ave.
- Supporting signed route along John St leading to Maple Ave. trail (220m).
- New proposed pathway adjacent Niagara Region Housing project.
- Signed route with sharrow along Ivan Ave (350m), connecting to Maple Ave. trail via a proposed mid-block crossing at Ivan Ave and Maple Ave.
- New in-park path in Maplewood Park
- New Signage-only trailhead at Maplewood Park.

PROPOSED TRAIL/AT DESIGN



Community/ Neighbourhood trail



Signed route.

PROPOSED TRANSITION FEATURES

Signage-Only trailhead, mid-block crossing

IMPLEMENTABILITY

Some coordination required.

3.2.1.3 PRIORITY PROJECT #3.

Centennial Park Trail & Escarpment Stairs

Phase Short term

Project control Town and partner

CORE FEatures

- New trail in Centennial Park which loops into District of Niagara School Board Nelles School land
- New proposed escarpment stairs at the base of Centennial Park connecting to the Bruce Trail
- Supporting multi-use path along the in-park roadway to the new proposed trails (630m)
- New signage along the in-park roadway in Queens Lawn cemetery which identifies its linkage to other trail systems.
- Proposed mid-block crossing at Main St E and Centennial Park.

PROPOSED TRAIL/AT DESIGN



Community/ Neighbourhood trail



Multi-use path

PROPOSED TRAIL TRANSITION FEATURES

Staircase, mid-block crossing

IMPLEMENTABILITY

Some coordination required.

3.2.1.4 PRIORITY PROJECT #4.

Hydro Lands Urban Destination Trail

Phase Medium term

Project control Town and partner

CORE FEatures

- New urban destination trail along hydro corridor from Nelles Rd N. to Bartlett Ave.
- Supporting minor trailhead at Nelles Rd.
- Intersection improvements to Bartlett Rd. and South Service Rd to facilitate safe crossing of trail users.

PROPOSED TRAIL DESIGN



Urban

Destination trail

PROPOSED TRAIL TRANSITION FEATURES

Minor trailhead, intersection improvements

IMPLEMENTABILITY

further investigation required.

3.2.1.5 PRIORITY PROJECT #5.

Forty Mile Creek Trail Lakeshore Connection

Phase Short term

Project control Town and partner

CORE FEatures

- Improvements to existing Forty Mile Creek trail from Grimsby Pumphouse to Olive St.
- New community trail along Grimsby Marina lands with supporting bridge to existing Forty Mile Creek trail.
- In-park path along Whittaker Park connecting into Grimsby Pumphouse
- New Major trailhead at Grimsby Pumphouse
- Improvements to the existing signage-only trailhead at the secondary entrance into Forty Mile Creek at Lake St.
- Supporting signed route along Ontario St. from the trailhead to Olive. St (150m).

PROPOSED TRAIL DESIGN



Community/ Neighbourhood trail

Natural trail

Signed route.

PROPOSED TRAIL TRANSITION FEATURES

Major trailhead, Signage-only trailhead, bridge

IMPLEMENTABILITY

Some coordination required.

3.2.1.6 PRIORITY PROJECT #6.

Westend Waterfront Trail

Phase Medium term

Project control Town and partner

CORE FEatures

- New urban destination trail connecting to the existing Westend Waterfront trail and extending it to Fifty Point Conservation Area to the west and the North Service Rd to the east.
- Upgrades to the existing Major trailhead at Winston Rd. to add additional amenities.
- New Minor trailhead at the Eastern end of the proposed Westend Waterfront Trail (adjacent Fifty Point Conservation Area)
- Formalization of an urban destination trail in existing off-leash dog park connecting Westend Waterfront trail to North Service Rd.
- New Minor trailhead at the north end of the new trail along the Off-leash dog park and Signage-only trailhead at the south end.
- New naturalized path surrounding Biggar Lagoon Wetland and connecting into the Westend Waterfront trail.
- Supporting multi-use path along Kelson Ave North, extending the active transportation infrastructure to the North Service Rd. (1.08km)
- Recommended shoulder improvement to North Service Rd. to connect Westend Waterfront trail to residential neighborhood.

PROPOSED TRAIL/AT DESIGN



Community/ Neighbourhood trail



Multi-use path



Natural

trail

PROPOSED TRAIL TRANSITION FEATURES

Major trailhead, Minor trailhead, Signage-only trailhead

IMPLEMENTABILITY

Some further investigation required.

03.

3.2.1.7 PRIORITY PROJECT #7.

Grimsby South Spine Trail

Phase Medium term

Project control Town

CORE FEatures

- New natural trails connecting Southward Park to Church Rd., Elm Tree Rd. W, and Russ Rd.
- New Minor trailhead at Southward Park and Kemp Rd. W and Bowslaugh Rd.
- New boardwalks at core crossings of streams along natural trails
- Proposed Midblock crossing of Mountain Rd. providing safe crossing of trail users.
- Signage-only trailheads at core intersections of the trail, including Church and Sobie Rd., Elm Tree Rd W and Southward Park, Kemp Rd. W and Southward Park.
- Supporting signed route and shoulder improvement along Kemp Rd. W to connect the trail system to the Dofasco 2000 Trail (4.5km)
- Proposed Midblock crossing of Kemp Rd. W at Southward Park

PROPOSED TRAIL/AT DESIGN



Natural trail



Shoulder improvement

PROPOSED TRAIL TRANSITION FEATURES

Minor trailheads, Signage-Only trailheads, boardwalks

IMPLEMENTABILITY

Some further investigation required.

3.2.1.8 PRIORITY PROJECT #8.

Oakes Road to Waterfront Trail

Phase Long-term

Project control Town and partner

CORE FEatures

- New trail connecting Oakes Rd. to potential Livingston Ave. extension and Smith Public School
- New Major trailhead at Oakes Rd. providing new amenities and marking the access point of the East-West trail spine.
- Supporting active transportation infrastructure along Oakes Rd. connecting Livingston Ave. to the Grimsby on the Lake neighbourhood. This infrastructure includes: a multi-use path (150m), signed route (550m), and shoulder improvement (420m).

PROPOSED TRAIL/AT DESIGN



Community/ Neighbourhood trail



Multi-use path



Shoulder improvement



Signed route.

PROPOSED TRAIL TRANSITION FEATURES

Major trailhead

IMPLEMENTABILITY

Some coordination required.

3.2.2 Medium Priority Projects

Medium priority projects are core elements of the trails system that support high priority projects by extending the connectivity or provide localized neighbourhood connectivity. Medium priority projects can also encompass more complex projects which may require further investigation to be completed. These projects are generally slated to be phased within the medium to long term.

Project Name	Total km	Phase	Description
Secondary School to Bartlett Ave trail and active transportation connection	1.58	Long-term	Trail connection between the new proposed secondary school and Bartlett Ave through off-road trails and strategic on-road connections with improved active transportation infrastructure. This project is part of the East-West Spine Trail.
Forty Mile Creek Trail QEW Underpass	0.61	Long-term	Proposed natural trail connection along the Forty Mile Creek beneath the QEW. Includes a new minor trailhead at the Forty Mile Creek Soccer Field. This project is subject to further review and investigation to confirm feasibility. This project is part of the Forty Mile Creek Spine Trail.
Casablanca Blvd. to Peach King Centre trail	0.88	Long-term	Trail connection along easements connecting a residential neighbourhood to the Peach King Centre through off-road trails. This project is part of the East-West Spine Trail.
Morrison Cres. to Jeanette Ave. natural trail	0.64	Medium- term	Naturalized and community trail connecting a residential community.
Cline Mountain Rd. Escarpment stairs	2	Medium- term	Escarpment stairs and new rural trail providing western access to the Bruce Trail.
Robinson St. N to Jeanette Ave. trail and active transportation connection	0.77	Long-term	Off and on-road active transportation route connecting a residential community.
Sumner Crescent to Steve McDonnell Park trail	1.18	Long-term	Off and on-road active transportation route connecting a residential community.

Project Name	Total km	Phase	Description
Nelles Rd. QEW Crossing and Nelles Rd. AT interventions	1.69	Long-term	Pedestrian and cyclist bridge crossing the QEW at Nelles Rd. providing access to both residential communities and commercial areas. Supported by strategic on-road active transportation improvements along Nelles Rd. connecting to the bridge.
Bruce trail nature pathway	0.81	Long-term	Naturalized trail connecting into the Bruce trail. Supplemented by a new minor-trailhead at the start-point of the trail.
Elm Tree Rd. natural trail and active transportation connections	7.72	Long-term	Naturalized trail system in the south of Grimsby, supported by strategic active transportation connections between trails.
Bartlett Ave Bruce trail connection	1.06	Medium- term	Off-road trail connecting Bartlett Ave. into the Bruce Trail. Supported by a strategic shoulder improvement to adjoining road.
Kemp Rd. W rural trail loop	2.92	Long-term	Naturalized trail system in the south of Grimsby, with strategic boardwalk connections crossing streams. This project is part of the Grimsby South Spine Trail.
Thirty Road trailhead	n/a	Medium- term	Minor trailhead proposed at Thirty Rd.
Woolverton Conservation area trailhead	n/a	Long-term	Major trailhead proposed at Woolverton Conservation Area. This project may be further coordination with the NPCA.
Coronation Park trailhead	n/a	Medium- term	Minor trailhead proposed at Coronation Park to connect into existing in-park pathways and provide an area of rest/staging before the Bruce Trail.

Table 13 // Summary of Medium Priority RTMP Projects

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3.2.3 Quick Wins

A series of proposed trail projects have been identified that are considered stand-alone linkages that serve a very local form and function. The implementation of these projects does not impact the success or implementation of other linkages and the projects themselves are ready to proceed through to design and construction with additional community outreach and consultation where appropriate. They are found on publicly owned lands and can proceed through to implementation with minimal additional work.

There is no specific timing identified for these projects and the Town is encouraged to refer to the following list of projects as funds become available through the exploration and acquisition of external funding or as monies are provided by the Municipality as part of special or capital projects. **Error! Reference source not found.** s ummarizes the proposed projects that have been identified within this category.

Name	Length	Classification
Lakewood Gardens Park in-park path	0.09km	Community/neighbourhood trail
Morocco Park in-park path	0.1km	Community/neighbourhood trail
Steve McDonnell Leash Free Dog Park trail	0.09km	Community/neighbourhood trail
Bell Park in-park path	0.07km	Community/neighbourhood trail
Victoria Terrace connecting trail	0.04km	Community/neighbourhood trail
Nelles Beach Park in-park path	0.15km	Community/neighbourhood trail
Arrowhead Lane in-park path	0.15km	Community/neighbourhood trail
Sherwood Park in-park path	0.25km	Community/neighbourhood trail
Merritt Cres. Park in-park path	0.08km	Community/neighbourhood trail
Grimsby Mountain Cemetery in-park path	0.68km	Community/neighbourhood trail
Peach King Centre walkway	0.32km	Community/neighbourhood trail
Escarpment Vista Park in-park path	0.22km	Community/neighbourhood trail
Escarpment Vista Park Minor trailhead	n/a	n/a

Name	Length	Classification
Signage-Only Trailhead at Arrowhead Park	n/a	n/a
Signage-Only trailhead at Nelles Beach Park	n/a	n/a
Signage-Only trailhead at Lakewood Gardens Park	n/a	n/a
Signage-Only trailhead at Sherwood Park	n/a	n/a

Table 14 // Summary of "Whenever funds are available" RTMP Projects

03.

ACTIVE BY NATURE.

3.2.4 Partner Priorities

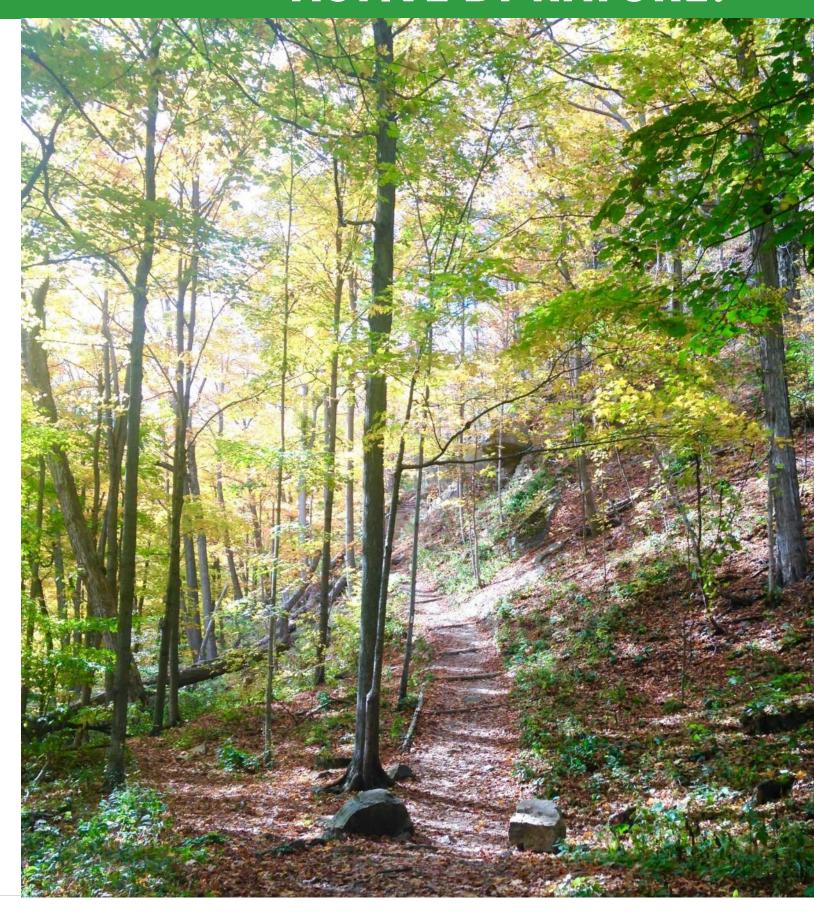
As noted throughout the RTMP document, it is a challenge if not impossible to provide a continuous and connected system of off-road trails; and where possible the Town has built upon the considerable efforts of other partner organization who have previously implemented or are in the process of implementing complementary projects / initiatives.

As such, there are a series of projects that are not the responsibility of the Town of Grimsby including but not limited to:

- Municipal on-road linkages that would be the responsibility of the Town's engineering and public works
 department with the exception of some critical on-road strategic linkages that provide direct access and
 connectivity to a proposed or existing trail which have already been accounted for in the high and medium
 priority projects.
- Regional linkages that were identified as part of the Region's on-road cycling network, ongoing capital
 projects, EAs and other design assignments and planned initiatives as outlined in the Transportation Master
 Plan.
- Projects planned as part of future development applications which are being undertaken by the Town in partnership with local developers.
- Projects that are initiatives initiated other public and private partners including but not limited to CN Rail, Hydro One, Grimsby Power, School Boards, Conservation Niagara, etc.

The RTMP assumes that the timing for the implementation of these projects would be determined by the organization or municipal department that is responsible for its outcome. As such, these projects have not been phased and the Town is to defer to the proposed timeline as assumed by the organization responsible. The RTMP encourages ongoing coordination and collaboration between the Town's community services department and partner organizations.

The proposed on-road or in-boulevard linkages as identified in the Recreational Trails Network should be reviewed and validated in future municipal functional master plans including but not limited to a Town-wide Transportation Master Plan or Active Transportation Master Plan.



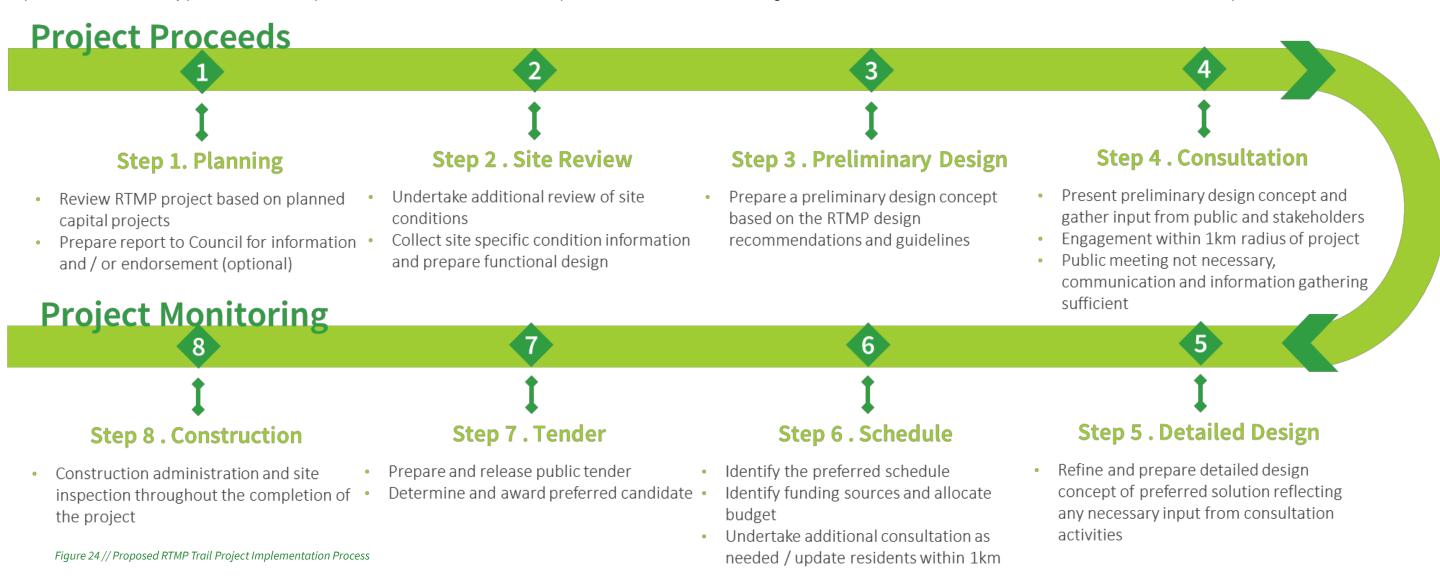
3.3 Processes & Practices

The RTMP is about acting and continually working towards the long-term trail goals and objectives set out by the Town of Grimsby. The Town has made a commitment to finding opportunities wherever possible to work towards the implementation of the Town-wide recreational trails network providing opportunities for people of all ages and abilities to have a greater degree of recreational opportunity and mobility.

While the identification and adoption of the master plan is a first step in the process, there must be long-term changes to the Town's processes and practices that mean that trail planning, design and implementation is integrated into day-to-day considerations and actions. The information contained within the following sections has been developed to help support in the adoption of these changes to internal practice.

3.3.1 Implementation Processes

Implementation process refers to the steps and stages following the completion of the RTMP. It provides a step-by-step approach which takes a proposed trail project from recommendation through to design and implementation. Not all projects are the same; however, there is a core approach to next steps which can generally be used once the Town determines a project should proceed through to implementation. This approach is applicable to all trail intents but may be adapted depending on the degree of implementation (as assessed in Section 3.1) of the RTMP process. Figure 24 illustrates the eight-step process that has been identified as the basis for the necessary next steps as the Town of Grimsby proceeds with the implementation of the RTMP network. The process is intended to be used as a guide for internal and external communication and coordination of next steps.



3.3.2 Implementation Coordination & Consultation

As part of the development of the RTMP a considerable amount of coordination consultation was undertaken at key stages in the project process. Coordination, engagement, and collaboration was undertaken with a wide range of decision makers, stakeholders, agencies, interest groups and members of the public. As this is a master plan, consultation was undertaken at the community-wide level and while every effort was made to reach out to community members, it was not possible for the Town to discuss individual trail opportunities with each surrounding landowner or resident.

The development of the RTMP has been used as an opportunity to enhance and formalize many partnerships which will ultimately be required to support the implementation of the plan. A critical aspect of implementation is the identification of roles and responsibilities to support ongoing coordination and collaboration. Another key component is ongoing communication regarding implementation progress and consultation on projects and initiatives that move forward.

The benefit of a master plan is that it is just the starting point. As noted in the implementation process and above the success of the plan's implementation will hinge on future collaboration and coordination between municipal staff and decision makers as well as with external partners. It will also require a considerable amount of future engagement and outreach where more focused conversations about specific trail linkages will be completed. The intent is to provide ongoing opportunities for collaboration, coordination, communication, and consultation with all affected groups / individuals.

The following is a summary of what some of these engagement and coordination expectations may look like based on the intended audience and the role that they will play in the implementation of the RTMP. This information is to be used as the basis for a partnership strategy to support the day to day and long-term implementation of the RTMP.

3.3.2.1 DECISION MAKERS

Decision makers within the Town of Grimsby take a number of different forms. The two primary decision makers are the Mayor and members of municipal Council followed by department level senior leadership specifically the Office of the CAO and the CAO. These individuals are the only ones who can determine whether a project identified within the RTMP can move forward to implementation. They should be updated at least once per year on the status of the RTMP implementation and will be responsible for approving the requested budget to support capital and operational costs.

This group is more of an approval authority; however, there may be opportunities for internal consultation in the form of a Council workshop if it is deemed to be appropriate or would benefit the progress of approvals related to the RTMP. These opportunities would either be identified by the Town's RTMP implementation lead or at the request of senior leadership / municipal Council.

3.3.2.2 MUNICIPAL STAFF

Municipal staff will be responsible for the day-to-day implementation and execution of the RTMP. With the Town's municipal structure there are defined roles and responsibilities for existing municipal departments. These responsibilities have been reviewed in the context of the RTMP content and recommendations. Table 15 provides a summary of different roles and responsibilities for each municipal department.

Department	Role
Office of the Clerk	 Primarily focused on corporate, administrative, and legislative functions Could support Community Services in the coordination of all council and committee facing presentations and the inclusion of RTMP updates on council agendas with reports included as part of agenda packages
Building Department	 Ensures existing building, properties and new construction adhere to municipal, regional, and provincial standards and legislation. Could be responsible for: Utilizing new standards and guidelines relative to trail planning and design as it relates to new developments – specifically development proposals. Enforcing by-laws – both existing as well as future new – pertaining to trail and recreational facility use
Finance Department	 Manages the finances of the Town including the creation of the annual capital and operating budget. Could be responsible for: Approving any trail related budget requests put forward on an annual basis including both capital and operating. Exploring and securing additional external funding based on applicable funding sources beyond the Town. Integrating trail infrastructure (and supporting tools) into existing asset management practices and processes
Fire Department	 With an emergency respond role, the Fire Department may serve as a champion for safe practices and where needed enforcement within the recreational areas including trail linkages and park spaces
Information Technology & Service Innovation Department	 Some of the departmental role and those that are most applicable including the management of the Town's IT infrastructure as well as support for network infrastructure, communication system and spatial solutions. Could be responsible for: Management of the GIS database and updates to support network infrastructure asset management. Support with municipal communications regarding the RTMP and subsequent work undertaken. Identification of opportunities leveraging technology along trail systems or as part of the activation of trail spaces

Department	Role
Public Works Department	 Administration of construction, operational and maintenance of the physical infrastructure of the town Could be responsible for: Design and construction of the proposed trail infrastructure projects as identified in the RTMP. New development servicing and the integration of trail linkages and infrastructure as part of new development projects Seasonal and winter maintenance of the trail system based on the guidelines and standards included within the RTMP
Planning & Development Department	 Oversees planning initiatives to support effective and responsible growth and development in Grimsby. Could be responsible for: The amendment or updates to existing municipal policies and plans and the development of new policies (if needed) as a result of the RTMP specifically the Town's Official Plan (which as of 2023 in the initial stages of review and update) The review and coordination of development applications relative to the recommendations and content of the RTMP based on input from community services
Community Services Department	 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: Coordinating the implementation of the RTMP as the primary lead for ongoing monitoring and management of the plan Development of annual reports documenting the work completed to date. 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 further the consideration of strategic trail linkages. Undertaking special projects as it relates the RTMP implementation. Coordination of the community services committee with the potential to establish a sub-committee related specifically to trails and the implementation of the RTMP. Identification and coordination of trail related programs as per the RTMP recommendations Ongoing collaboration with external agencies as it pertains to the proposed RTMP project and the monitoring of additional opportunities. Providing comments on planning and public works project to reflect the recommendations and content found within the RTMP

Table 15 // Summary of Municipal Staff Roles & Responsibilities

The information contained within Table 14 is not meant to be prescriptive. It is intended to be used as a guide and a communication tool. Once the RTMP has been adopted the roles and responsibility expectations outlined within the Table should be continually communicated to all municipal departments and confirmed based on assumed scope and capacity. Due to the level of effort that is expected to be required of the Community Services Department it is likely that an additional staff person will be required to support implementation efforts in addition to the roles and responsibilities that currently exist.

The Community Services department will lead the implementation of the RTMP and prepare an annual report to Council documenting the progress made on the recreational trails master plan and anticipated next steps.

Safe and appropriate trail use is to be enforced by Municipal By-law as per the by-law guidance and trail classification identified through the recreational trails master plan.

Dedicated staff time should be allocated to the implementation of the recreational trails master plan by the Community Services Department with future review of capacity to determine if a dedicated or partially dedicated role is necessary.

3.3.2.3 COMMITTEE MEMBERS

The Town of Grimsby has a number of boards and committees which have been established "to provide a forum for public input so recommendations can be made to Councill on issues within their defined areas of responsibility". There are both standing committees and advisory committees to Council. For the purposes of the development of the RTMP, the community services committee was updated / consulting on the proposed network and recommendations. In addition, updates were made to some of the other advisory committees over the course of the project and information gathered where interest was expressed.

Table 16 are some of the assumptions / recommendations regarding the involvement of existing municipal committees to Council.

Committee	Role
Community Services Committee	 Considered to be the lead committee responsible for providing guidance to community services and Council regarding RTMP implementation priorities. Depending on the level of interest there may be the option to create a sub-committee or working group within the community services committee to specifically focus on the implementation and all matters related to the RTMP. Would be the lead group in identifying trail related project and programming priorities to inform the Town's annual planning and budgeting efforts
Joint Accessibility Advisory Committee	 Asked to provide additional input where needed. When pursuing the implementation of a proposed trial linkage or trail project where accessibility is considered possible and a priority the committee should be consulted on the process and the outcome

Committee	Role
Grimsby Green	 Involvement limited but may wish to be updated on matters related to trail
Advisory	sustainability and environmental impacts – where appropriate. Involvement to be
Committee	determined on a case-by-case basis
Age Friendly	 Similar to the accessibility committee this advisory committee would be an excellent
Advisory	resource when determining age friendly related programs as per the behaviour
Committee	change and communication suggestions provided within the RTMP.

Table 16 // Municipal Committee Roles & Responsibilities

The Town should review the terms of reference for, and make-up of the Community Services Committee and consider establishing a trail specific sub-committee to review and monitor the implementation of the recreational trails master plan.

3.3.2.4 AGENCY PARTNERS

Equally important to the internal roles and responsibilities are partnerships with partner agencies, who have supported the development of the RTMP. There is a critical role for each of these groups beyond the development of the RTMP. Considering, the bulk of these agencies have authority and jurisdiction over some of the lands and thus the projects identified within the RTMP, it is important to continually monitor, maintain and strengthen these relationships on an ongoing basis.

Table 17 provides a summary of the suggested roles / responsibilities and degree of involvement / consultation / partnership that is anticipated for each of the groups noted above. It is important to note that this is not a prescriptive recommendation but is intended to be the basis for discussions with each of the partners as to their preferred role as the Town proceeds with implementation of the RTMP. Please note that this table does not make reference to the necessary approvals or permits that would be required to be completed prior to the construction of RTMP projects. Those are noted in Section 3.3.4 of the RTMP.

Committee	Role	Outreach	\$ Partner
Niagara Region	 Coordination regarding the implementation of strategic on-road linkages as well as regional land-use and infrastructure projects Potential funding partnership provided for multi-use pathways implemented along regional roadways as part of existing regional funding program. Coordination of communication initiatives based on wider tourism priorities and opportunities 	Dependent on Initiative with Annual Outreach Regarding RTMP	Υ

Committee	Role	Outreach	\$ Partner
Local School Boards	 Coordination/support for trail supportive programs and initiatives specifically targeted at youth. Permissions for new trail connections as landowner dependent on trial location 	Dependent on trail initiative	No
Niagara Peninsula Conservation Authority & Hamilton Conservation Authority	 Strategic linkage partnerships for trail related projects that are on or adjacent to CA lands. Approvals would be required depending on potential impact. Coordination of communication information regarding recreation and trail opportunities 	Once to Twice / year	N
Bruce Trail Conservancy	 Strategic linkage partnerships for trail related projects that provide access to the Bruce Trail corridor. Coordination of communication information regarding recreation and trail opportunities 	Once to Twice / year	N
Canadian National Rail	 Strategic linkage partnership for trail related projects that are found on lands under the control of the agency 	Dependent on trail initiative Monitoring required	N
Hydro One / Grimsby Power	 Strategic linkage partnership for trail related projects that are found on lands under the control of either agency. Potential co-creation of trail linkage or land acquisition exploration 	Dependent on trail initiative with minimum one touchpoint per year	Υ
Niagara Region Public Health	 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 	Once to Twice / year	Y
Ontario Ministry of Transportation	 Addressing issues where trails meet roads/highways under provincial jurisdiction. When proceeding with potential crossings of provincial infrastructure approvals will be required Providing support for road safety and cycling 	Dependent on trail initiative	N
Niagara Regional Police Service Contingent 8	 Strategic enforcement beyond municipal enforcement practices primarily for trail safety Safety related education and outreach partner 	Annually	N

Committee	Role	Outreach	\$ Partner
Waterfront Regeneration Trust	 Strategic linkage partnership specifically as it relates to improvements made to the Waterfront trail. Opportunities for cross-promotion regarding localized linkages and beyond 	Dependent on trail initiative	N
Ontario Trails Council	 Opportunities for promotion and outreach as well as resources and support related to future trail initiatives and improvements 	Annual	Υ
Surrounding Municipalities	 Coordination of trail linkages that cross- boundary – where appropriate to determine phasing and potential alignment of work 	Minimum annually	N

Table 17 // Agency Partners & Stakeholder Roles & Responsibilities

A formal recreational trails partnership strategy should be adopted based on the roles and responsibilities identified in the recreational trails master plan which is to be reviewed and adapted annually.

3.3.2.5 STAKEHOLDERS & LOCAL INTEREST GROUPS

There are a number of clubs, interest groups, etc. that have also been involved throughout the development of the RTMP. Interest groups have a vested interest in the outcomes and the progress of trail related initiatives within the Town of Grimsby and sometimes beyond – depending on their jurisdiction. As part of the development of the RTMP, the following interest groups were identified and engaged:

- Hike Canada & Ontario
- Ontario Cycling Association
- Ontario by Bike
- Snowshoe Canada
- Trail Running Canada
- Share the Road Cycling Coalition
- Hamilton Naturalists Club
- Grimsby Lions Club
- Grimsby Rotary Club
- Niagara Cycling Clubs Alliance
- Bike Niagara
- Hamilton Trail Blazers
- Mountainview Cycle
- Niagara Bruce Trail Club
- Kinsmen Club of Grimsby
- Probus Club of Grimsby
- Big Brothers / Big Sisters
- Friends of the Escarpment
- Grimsby Benevolent Fund
- Grimsby Garden Club
- Community Support Services Niagara
- Community Living
- Grimsby Senior Citizens Committee
- Grimsby Historical Society
- Niagara West YMCA
- Newcomers & Neighbourhood of Grimsby
- Grimsby Chamber of Commerce
- Grimsby Downtown Improvement Area
- Grimsby Environment Network

For those stakeholders that represent groups found beyond the Town of Grimsby or Niagara Region, it is the recommendation of the RTMP that strategic outreach and engagement only be undertaken if it is deemed to be appropriate or to provide support for initiatives that require additional context, consideration, or endorsement. For those stakeholders that represent local or regional groups, consideration should be given to including them in annual conversations regarding the implementation of the RTMP. It would be wise to seek their input on the prioritization of recommendations or trail projects strategically to inform annual decision making and budgeting.

It may be appropriate to provide an invitation to these groups to recommend an individual who would be able to volunteer time on the Community Services Committee or should a trail related sub-committee be struck.

3.3.2.6 MEMBERS OF THE PUBLIC

Members of the public are encouraged to participate in municipal matters as their time allows. As projects proceed through to implementation there will be opportunities for more localized outreach and engagement through form consultation efforts undertaken by the Town. Engagement 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 with the potential to see more residents provide volunteer support for trails. Where possible, a greater degree of communication and community outreach should be undertaken with the public using the programing and outreach strategy as a basis for potential initiatives.

3.3.2.7 INDIGENOUS & FIRST NATIONS

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 a trails master plan of this nature; however, considering the shifting dynamic and the unique opportunities / interests of trails relative to traditional land 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 RTMP implementation. There could be unique opportunities that arise due to being a more active partner with the Town. For example:

- The utilization of trails as a space of traditional education and history sharing.
- The inclusion of indigenous trail markers honouring indigenous peoples in Ontario and specifically within the Niagara Region area.
- The dedication of specific trails to local first nations or indigenous groups.
- The planting of traditional indigenous plans similar to the indigenous plan medicines trail found within the Royal Botanical Gardens.
- The design of trails in traditional practices with the preservation and encouragement of restoration through the 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 RTMP, the Town is also encouraged to find opportunities whereby the voices and experiences of first nations and indigenous people can be expressed and integrated into municipal projects and practices beyond statutory and regulatory requirements.

3.3.3 Implementation Tools

The process outlined in Section 3.3.1 provides the steps and stages that are intended to be undertaken once the Town determines that a recommended RTMP project is to proceed through to implementation. As Town staff proceed with the implementation of the RTMP, there will be several elements which would benefit from a consistent and guided approach. A series of implementation tools have been developed which are intended to be adopted and utilized by Town staff across different departments – with the primary lead being the Town's Community Services team. Some of the details have been provided to support their application while others are files / materials that have been shared with the municipality.

The implementation processes and decision-making tools will be adopted as referenced as the primary quide for next steps as the Town proceeds with the implementation of the RTMP.

The tools and frameworks identified as part of the recreational trails master plan should be reviewed and revised (if needed) on a bi-annual basis to ensure that their application and consistency is up to date.

The Recreational Trails Master Plan GIS database and implementation tools will be adopted by staff to manage the implementation of the recreational trails network and to inform annual reporting.

3.3.3.1 TOOL #1. GIS DATABASE



Details presented as part of the recommended recreational trails network including project location / alignment, proposed design solutions, implementability, priority project identification and phasing has been incorporated into a comprehensive Geographic Information System (GIS) database. This database was developed based on the information provided by the Town of Grimsby and other partners and updated to reflect the most up to date information presented and recommended within the RTMP. The GIS database has been provided to Town staff and is intended to be used as a tool to:

- Monitor and manage the plan's implementation by updated relevant information within the database to reflect changes in conditions or status of the project.
- Establish communication materials specifically Town-wide mapping and other promotion / outreach tactics as identified in section 3.4 of the RTMP.
- An internal asset management tool which can be used to communicate municipal priorities integrated with wider municipal service and infrastructure provision.

3.3.3.2 TOOL #2. FIELD NOTES



As noted in Section 2.1, a considerable amount of field investigation and documentation has been undertaken as part of the development of the RTMP. All of the information collected during the field investigations completed – including photos, photo locations and – were documented as part of the RTMP supports. In addition, a comprehensive desktop review of context specific considerations was also prepared early in the RTMP process. Both resources depict the current conditions that were considered at the time the RTMP was developed. While it is acknowledged that the conditions will change over time these resources serve as a tool to:

- Better understand and communicate with internal and external partners how decision was made.
- Future decision making regarding the implementation of trail projects e.g., design impacts & outcomes.
- Be used as a resource when developing communication tools including the use of graphics for future engagement and outreach.

3.3.3.3 TOOL #3. MANAGEMENT SPREADSHEET



While GIS can be an effective asset management tool, not all practitioners who will be involved in the implementation of the RTMP will have access to or knowledge of how to use this technology. To support greater use of the GIS database, an excel version has been developed which contains the same information regarding recommended trail projects. This tool is meant to be used in conjunction with or as opposed to the GIS database depending on the degree of comfort and capability that staff have. The database has been provided to Town staff and intended to be used in the same manner and means as tool #1. GIS database.



3.3.3.4 TOOL #4. TRAIL INTENT APPLICATION



For each of the proposed trail alignments, a "trail intent" (as outlined in Section 2.2) has been identified. Trail intents are the foundation of the RTMP defining the form, function, and purpose of the proposed trail which in turn influences the preferred design solution, implementability and phasing. For each of the proposed trial linkages, a trail intent has been defined. The trail intent for the linkages identified within the RTMP are not intended to change; however, if there are new trail opportunities that arise as the Town proceeds with the implementation of the RTMP a trail intent would be the first "definition" to consider.

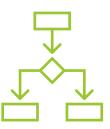
For ease of future application, a decision tree has been developed which is intended to help guide future decision making. Town staff are encouraged to use this resource and share it with other municipal staff and municipal partners to communicate the decision-making process and to support their own decision making where appropriate. Figure 25 presents the decision-making process and the outcomes relative to the recommended trail intents for the Grimsby RTMP.

The decision-making process is not intended to be prescriptive. The intent is to use this tool as a guide and for the basis of consistent decision making for one of the core foundations of the RTMP. It should be informed by detailed field investigation and additional input from municipal staff and stakeholders where appropriate.



Figure 25 // RTMP Trail Intent Decision Making Tool

3.3.3.5 TOOL #5. TRAIL DESIGN DECISION TREE



The proposed trail classifications as presented in the RTMP and used to determine recommended design solutions are a critical resource that have been provided to the Town. The classifications are intended to be used going forward as the basis for determining and confirming the preferred design solution for the recommended trail linkages. Once the trail classifications had been developed and route alignment confirmed; a process / decision tree was developed to determine the most appropriate trail classification based on the surrounding trail conditions and context.

The decision tree is presented in Figure 26 and is to be used as the basis for future decision making as new trail opportunities emerge that were not previously identified as part of the RTMP or significant changes to the trail context at the time the project proceeds to implementation.

The decision tree is a tool and is not a prescriptive set of recommendation regarding preferred design solutions. The intent is to use this tool as the basis for decision making supplemented by additional field investigation and context specific information gathering as well as engagement and outreach with community members and stakeholders.



Figure 26 // RTMP Trail Classification Decision Making Tree

3.3.3.6 TOOL #6. TRAIL IMPLEMENTABILITY TOOL

The prioritization of trail projects and the identification of proposed phasing was influenced and impacted by the degree of feasibility and implementability of a recommended trail project.

Implementability refers to 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.

Similar to the two other tools previously presented, should an opportunity arise that was not previously identified as part of the RTMP, every effort should be made to determine the implementability of the new route prior to confirmation and inclusion as part of the RTMP network.

A matrix of considerations was developed and used to complete the implementability assessment. This matrix is to be used by Town staff should a new or alternative project emerge as the RTMP is being implemented.

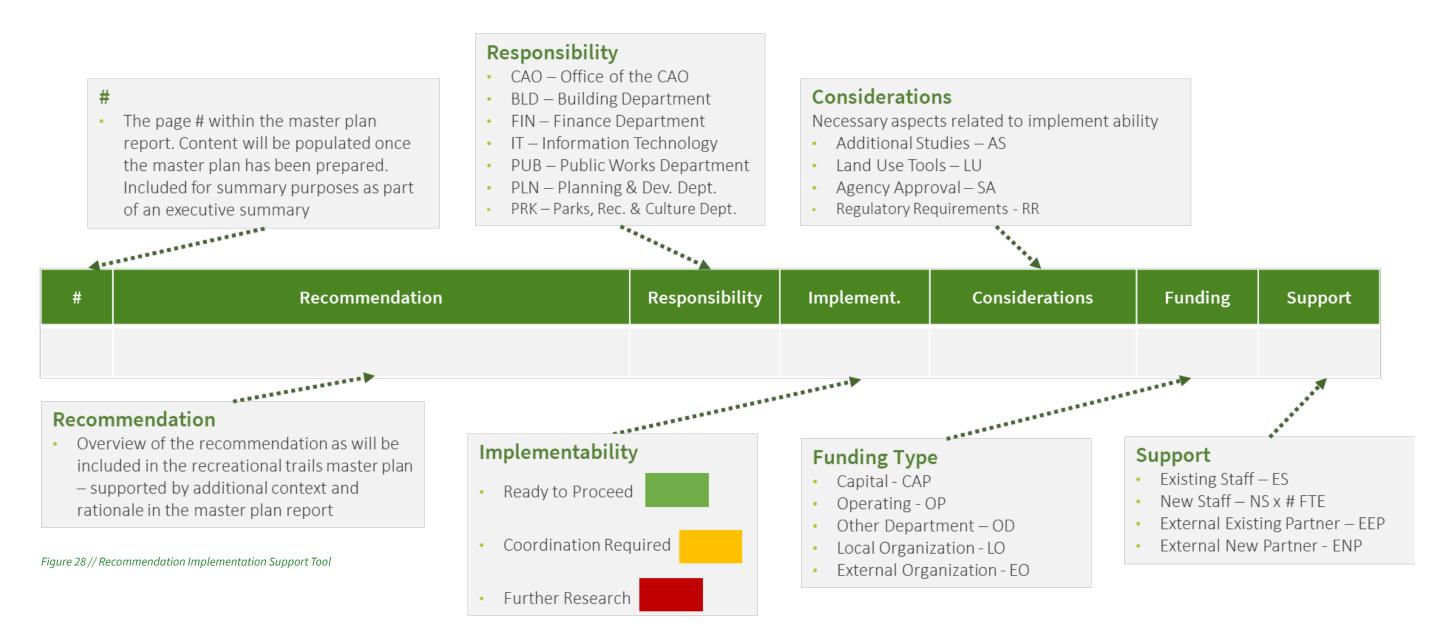
The matrix is presented in Figure 27 and can be used either for potential trail routing or as new recommendations, priorities or projects emerge that pertain to recreational trails within the Town of Grimsby.

	Work Needed			
Control	High Complexity	Moderate Complexity	Low Complexity	
Control speaks to the degree of influence that the Town has over the project scope	There are a considerable number of issues or aspects 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	
Town It is the sole responsibility of the Town either on Town-owned lands or under the Town's jurisdiction				
Town Partner It is the responsibility or jurisdiction of a public agency that is an identified partner of the Town				
Other It is the responsibility or ownership of a private entity or agency that is not considered a frequent partner				
Ready to Proceed Short-term 0-5 years		on Required m 6-15 years	Additional Research Long-term 15+ years	

Figure 27 // Implementability Assessment Matrix

3.3.3.7 TOOL #7. RECOMMENDATION IMPLEMENTATION GUIDE

In addition to the RTMP network, the master plan recommendations are of critical importance to the success of the plan. While the RTMP provides a considerable amount of direct and support as to how to proceed with each of the recommendations it is also important to understand the who, how and when for each. To support this, a detailed overview of each recommendation has been prepared outlining the intent of the recommendation, the internal responsibility indicating municipal leadership, the implementability (consistent with the three assessments referenced in Section 2.2), the next steps and considerations that would be needed to move forward with the implementation of the recommendation, funding source and opportunities and staffing / partnership supports. The details have been provided to municipal staff for review and application throughout the implementation process. It is intended to be used as a resource and a guide and adapted as needed to reflect changes in roles / responsibilities, funding options, context, etc. Figure 28 provides an overview of the format and type of content that has been provided.



3.3.3.8 TOOL #8. TRAIL INSPECTION TOOLKIT

Effective maintenance and management is critical to the long-term success and use of the recreational trails system in the Town of Grimsby. A more detailed overview of maintenance practices for trial features is provided in Section 3.5.2 of the RTMP. In addition to the maintenance practices that are used it is also necessary to ensure that there is sufficient documentation of the maintenance that is done not only to provide a written record of the work completed but to ensure that maintenance issues are highlighted and a course of action to address those issues is created. As part of ongoing maintenance practices it is the expectation that Town staff will be responsible for the maintenance of the recreational trail system, specifically a combination of efforts between Community Services and Public Works.

To support these efforts, a trail inspection template has been provided for consideration and application. The inspection form is an adaptation of the template that the Bruce Trail Conservancy uses which would be most applicable in the context of the Town of Grimsby considering the presence of the Bruce Trail within the Town. The intent is to use this template (and adapt as needed) and undertaken recreational trail evaluation at least 1-2 times per year reflecting changes in the seasonal patterns. More specific details on the frequency, timing and approach to those review and the subsequent maintenance practices are provided in Section 3.5.2.

Grimsby Recreational 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 (depending on materials used); issues with signage or wayfinding, trailhead feature broken, insecure foundations e.g. resulting in wobble or tilting; erosion of surroundings likely to lead to loss of stability; flood damage or movement. Please review the options and check the box that applies.

There is no structur	e of this nature	Structures inspected and found to be sound		
Problems noted usi	ng template below			
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 expanusing the text box below.				

3.3.4 Additional Implementation Considerations

As the Town of Grimsby moves forward with the implementation of the RTMP, the implementation process outlined in Section 3.3.1 be used as a guide to determine and communicate the appropriate next steps. As noted above, the process is a guide which outlines the typical steps that move a project from planning through to design and ultimately construction. However, not all trails are the same and, in some cases, there are additional steps / stages or aspects of the process that are required.

Considering both the recommended trail projects and reflecting on the potential for other opportunities that may emerge one the plan has been adopted, the following additional are a series of additional process considerations and supports that could be used depending on the context of the project. Many of these considerations ensure that the necessary approvals are secured for the Town to proceed with the projects.

3.3.4.1 LAND ACQUISITION

While most of the proposed recreational trail linkages are found on lands that are publicly owned, there are some linkages identified on privately owned lands or partner lands. The intent is to limit the number of trails that are found under private ownership; however, the Town is also focused on overall trail access and connectivity and may seek to explore trails in privately owned lands if it is considered logical from a trail continuity and accessibility perspective. The following is a summary of some of the options / alternatives that are available to the Town of Grimsby should there be critical linkages found on privately owned lands.

The information provided in Table 18 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 Town proceeds with the implementation of the RTMP.

Туре	Description	Applicability	Cost
Purchase	Purchased by nonprofit or public entity at fair market value	 Cost recovery through levies or charges to the benefitting owners Municipal Act 	\$\$\$
Option to 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 	\$

Type	Description	Applicability	Cost
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 the Town. 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 	\$

Table 18 // Land Acquisition Options & Alternatives

Land acquisition, encroachment, and / or easement requirements to accommodate the implementation of new trails are to be reviewed and studied as a project proceeds with implementation.

3.3.4.2 APPROVALS

Depending on the specific location of the proposed trail linkages, there may be certain land uses, land contexts, land ownership and conditions require additional approvals or permits to be prepared and submitted prior to construction of the trail. Based on the jurisdiction and context within the Town of Grimsby, there are three (3) potential reports and approvals that would need to be sought once a project proceeds through to implementation. They are described in further detail below.

The intent is for the Town to refer to this information and review / confirm the necessary approvals at such a time that the trial proceeds beyond the planning stage.

Localized & Provincial Environmental Impact Study or Environmental Impact Report

If there is a proposed trail within or adjacent to a significant natural area or natural feature within the Town which could have a potential adverse affect on those natural areas an environmental impact study (EIS) may be required to be completed. These may be most appropriate if there is an urban destination trail identified within any of those lands designated by the Town of Grimsby. Should it be determined that an EIS is required for a specific trail project information should be contained in such a study including but not limited to methodology, policy framework, field inventory, existing conditions, significant 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 as 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 the inclusion 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 is 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 such as towns, cities and counties 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. There are four types of EA schedules including Schedule A, A+, B or C. Schedule A and A+ projects are considered pre-approved under the MCEA requirements.

Based on the description of projects noted within the MCEA requirements, recreational trails 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 trail linkages 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".

The EA process and requirements would be determined by the anticipated project cost as informed by the content found within the RTMP.

Niagara Escarpment Plan Permissions & Development Permit

Within the Niagara Escarpment Plan area. Under the Niagara Escarpment Planning and Development Act, specifically R.R.O. 1990, REGULATION 828 trails specific to the Bruce Trail and its alignment are considered preapproved and would not require a development permit. However, there is no mention of other municipal trails or pathways. It would be the recommendation of the RTMP that any proposed trails found within the NEP area be reviewed in consultation with representatives from the NEP to determine the most appropriate course of action based on the project assumptions and proposed improvements.

Niagara Peninsula Conservation Authority Permissions & Work Permit

The NPCA have approved a Planning and Permitting Policy document and supporting Procedural Manual which provides an overview of the required approvals and permits to undertake development and work on lands found under the jurisdiction of the CA. The permit requirements typically pertain to projects of a development nature. Passive public recreational uses such as trails and pathways as well as associated structures e.g. staircases, steps and lookouts are considered permitted within the valley land erosion hazard limit or provincially significant wetland. They are to be in accordance with Section 5.2.4, 5.2.5 and 5.2.6.

Private Landowners

Beyond the public entities requirements referenced above, it has been acknowledged that some of the proposed RTMP routing has been identified along or on lands that are privately owned – either by individuals or by private entities / organizations. In addition, there are trail opportunities that have been identified which currently do not have the endorsement of some of these private landowners but they linkage is considered of critical importance to members of the public and community stakeholders. As the RTMP proceeds to implementation, Town staff must continue to work with these private landowners to continue the necessary conversations regarding these potential trail linkages.

In some cases, it may be a conversation regarding the necessary approvals process. For example, the proposed trail linkage to the West of the Town, just north of the railway tracks within the Hydro One easement. Both Hydro One and Grimsby Power have expressed their support for this linkage and their commitment to supporting next steps. Town Staff should continue to work with the project partners from these organizations to determine the necessary approvals that would be required to proceed and any other permits or agreements that would need to be in place.

In other cases, the opportunities have currently reached a "dead end" and at this time the affected agencies / organizations do not support their implementation. While the decision is respected the Town would still like to ensure that these opportunities are monitored if the organization's position or guidelines / standards change which would accommodate the trail in the future.

3.3.5 Maintaining

The current practice for the Town of Grimsby as it relates to trail maintenance is one that is ad hoc whereby maintenance is undertaken as part of a wider public works exercise and as needed which are completed on a case-by-case basis. The approach to maintenance is one that is currently based on informal community input and some staff assessment as opposed to being tied with a specific maintenance standard for trail use and users. Before considerable effort is made to dedicate municipal funds to trail maintenance, the Town should endeavour to align existing maintenance standards with some of the new minimum maintenance practices to allow for more year-round use of active transportation and active recreation infrastructure.

Many municipalities currently use the Provincial Minimum Maintenance Standards (Ontario Regulation 239/02) to inform maintenance practices. At the Provincial level, the Minimum Maintenance Standards (MMS) provides greater guidance around the maintenance of active transportation infrastructure which could in turn be used for select trails where deemed appropriate.

Table 19 provides a summary of some of the potentially relevant minimum recommended service levels for non-winter maintenance activities based on information provided in Ontario Traffic Manual Book 18: Cycling Facilities (2021).

,	
Туре	Service Level
Patrol and inspection	3 times every 7 days to one every 30 days (0. Reg 238/02 s. 3)
Sweeping	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 (10.2.21)	Greater than 5cm height within 2 to 21 days after acquiring knowledge (O. Reg 239/02 s.16)
Cracking (10.2.2.2)	Greater than 5cm wide and 5cm deep (O. Reg 239/02 s.8).
Vegetation management	Routing mowing including daylight triangles at intersections, annual trimming of bike path trees.
Signage (10.2.5) and pavement markings	Refreshed as needed

Table 19 // Overview of Potential Applicable Minimum Maintenance Standards

Minimum Maintenance Standards will be used as per the Council direction with additional consideration for enhanced maintenance standards as part of Town by-laws based on direction from the recreational trails master plan.

While the information in Table 18 provides a general overview of standard maintenance practices, the degree, frequency, and type of maintenance that is expected for trails can be much more dependent on the context, anticipated users, conditions and intended use / connectivity. As the Town proceeds with the implementation of the RTMP, there is an expectation that maintenance will be undertaken on select trails throughout the year allowing for greater seasonal opportunities of trial use.

The information contained within Table 20 is meant to be a guide, a starting point for future discussions by Town staff regarding the type of maintenance and level of service that is provided for each proposed trail classification.

Туре	Maintenance Practices	Level of Service
Urban Destination Trails (Type 1)	 Ploughing in winter sweeping as required in other seasons. regular grass mowing and trimming along trail edges. regular trimming, weeding of plant beds 	Highest level of service in all 4-seasons / highest frequency of maintenance (e.g. weekly)
Community / Neighbourhood Trials and Pathway (Type 2)	 Mowing and trimming as per surrounding park maintenance practices and schedule. Some sections may be candidates for winter maintenance; would need to be determined based on connectivity to other winter maintenance options or destinations that would continue to see interest during the winter months 	High level of service in 3- seasons, and moderate frequency of maintenance (e.g. twice per month during spring, summer, fall; and/or as required for emergencies during 4 seasons).
Natural Surface / Nature Trail (Type 3)	 Moderate to low level of service (e.g., to remediate significant erosion, remove obstacles on trail bed) No winter maintenance. 	Moderate to low frequency of maintenance (e.g. seasonally or as required for emergencies)
Informal Trail (Type 4)	Lowest frequency of maintenanceNo winter maintenance.	Lowest level of service

Table 20 // Maintenance & Level of Service by Trail Classification

Select trails will be maintained during the winter where appropriate with maintenance being undertaken by Community Services staff.

The maintenance practices noted in Table 18 and 19 provide direction on more frequently occurring maintenance that is to occur along trail linkages. Most are trail management related and do not require considerable amounts of effort or budget. Over a longer period, there will need to be more considerable maintenance that occurs as the lifecycle of the infrastructure wares and tears with use. Within a 3–5-year period its recommended that overall cleaning and / or refurbishment of signs, benches and other amenities implemented at start and end points or along the trail are to occur; and every 10 – 20 years the surface would need to be replaced – specifically those with crushed gravel or limestone (typically around the 15-year mark) as well as major renovations or replacement for large scale infrastructure.

The information provided above includes directions on the type and frequency of maintenance that could be undertaken for municipal trails; however, it is the responsibility of the Town to provide a process by which individuals are able to share trail maintenance concerns or information can be gathered and addressed on a regular basis.

Utilizing the trail inspection toolkit and framework provided in Section 3.3.3; the Town is encouraged to undertaken review of existing trail infrastructure to determine the necessary maintenance practices. The evaluation and maintenance should be completed at least twice throughout the year when there are transitions between seasons which could impact the performance and experience of the trail. These evaluations are seasonal in nature and are considered above and beyond the patrol and inspection that is to be completed at more frequent intervals by bylaw enforcement officers or other applicable municipal staff.

In addition, the Town may wish to consider update the Town's "Report and Issue" tool which allows individuals to submit questions, comments, and concerns regarding municipal services via the Town's website. This mechanism is widely used for a range of different municipal services but currently does not include an option for trail related issues. Similar to the other topics, the trail category would include a pro-populated form whereby individuals can submit their questions. Categories included could be:

- 1. Date the issues was observed.
- 2. First name
- 3. Last name
- 4. Email address
- 5. Phone umber
- 6. Street address
- 7. Location where issues occurred / was viewed.
- 8. Photo of issue noted.
- 9. Type of issue noted (maintenance, overgrowth, user conflict, surface issues, damaged signage, amenity damage or replacement, lack of amenities, etc.)
- 10. Description of issue noted.

A bi-annual evaluation is to be undertaken of the status and condition of the trails as per the template identified in the Recreational Trails Master Plan.



Policies & Programs

Trail Supportive Policies 3.4.1

Policies, guidelines, standards, and bylaws are the primary tool used at any municipality to shape where, how, and when infrastructure and servicing is provided. Without a strong foundation of supportive policies and / or policies that encourage continued planning innovation progress can rarely be made. As outlined in Section 1.3.2, the Town of Grimsby has a strong foundation of policies, plans and planning framework documents that influence and impact the way in which trails are integrated into the planning and design landscape.

With the adoption of the RTMP, there are changes / amendments / enhancements that will need to be made to some of these documents to ensure that there is consistent references, alignment, and support. The Town must also focus on removing any intended barriers to trail planning and implementation which may be found within these resources. Table 21 provides a summary of proposed changes that are recommended to be made by the Town of Grimsby to existing municipal policies, plans, guidelines, standards, bylaws, etc.

	Amendments / Considerations	Impa
Official Plan	 Trails are referenced on a number of occasions throughout the Official Plan. Where possible, trails should be explored as its own section within the Official Plan clarifying the interaction between active recreation and active transportation more clearly and as a cornerstone of land use and community planning. Specific sections may require update including but not limited to Section 3.8.11.4 and 5.6. Additional design guidance would be valuable for inclusion as part of this document removing specific languages to facility types and allowing for the RTMP and other supportive plans to provide the necessary guidance. Where possible, the RTMP proposed network should be considered for adoption as a schedule within the Official Plan At the time the RTMP was developed the Town's Official Plan was in the process of being reviewed and updated. The expectation is that through this process, the outcomes / outputs of the RTMP be used to guide the updated sections referenced above with a focus on aligning the two documents and incorporating key guidance into the OP as the primary planning resource for the Town and its partners. 	The do muni refe plani one reg af infra neces: critic

High Official Plan is the first ocument which many nicipal staff and partners er to when determining nning outcomes and the e that has statutory and gulatory requirements affecting land use and rastructure. Alignment is ssary and support will be ical to the success of the RTMP

	Amendments / Considerations	Impact
Parks, Recreation & Culture Master Plan	 In the event that the Town proceeds with the creation of an updated recreation master plan; it would be an ideal opportunity to utilize this process to review and revise content based on the. In the interim, the current version of the master plan should be used alongside the RTMP to ensure coordination and consistency 	Moderate The recreational trails master plan should be used as the primary reference but opportunities for activation of space and connectivity between recreational opportunities should be a priority
Secondary Plan	 Provide the proposed network as identified within the RTMP to encourage developers to ensure future developments and secondary plan areas provide greater recreational mobility through trail improvements, localized amenity improvements, and land uses/destinations which encourage more active trips. Utilize the trail classifications identified within the RTMP to provide to developers as part of the secondary planning process to ensure that trail routes as part of parkland dedication or municipal connections are designed in a consistent manner. 	High Leveraging future development will be critical to the build-out of the RTMP network and providing opportunities for recreational services within community to those who come to live within the Town
Bylaws	 The Development Charges Bylaw is to be reviewed to determine if there are any necessary amendments that need to be made to ensure that trails are considered eligible for funding 	High An important opportunity to find cost off-setting for trails which would help to support the implementation of strategic linkages
Site Plan Requirements	 Requiring local developers to not only consider but ensure the implementation of recreational facilities such as off-road trails through park spaces, active recreation and transportation facilities along roadways and other amenities should be pursued. Updating the site plan requirements to identify specific recreational services should be undertaken to support future development application reviews 	Moderate to High Similar to the secondary plan and development applications the site plan requirements would remove the choice and integrate trails into minimum or mandatory requirements

Table 21 // Suggested Policy Revisions / Amendments / Changes

It is acknowledged that through this review the Town has yet to undertake the development and adoption of other supportive functional master plans such as a Transportation Master Plan or Active Transportation Master Plan. It would be a significant benefit to the Town if these plans were to be developed and adopted to further complement the recommendations found within the RTMP. Other existing plans such as the Downtown Master Plan, West End Waterfront Trails Design Study and Master Plan provide sufficient support for trails that there is no need to revisit the plan content; however, the Town is encouraged to use the RTMP along with these plans as implementation proceeds.

The proposed recreational trail network as identified in the 2023 Recreational Trails Master Plan is to be adopted as a schedule as part of the Town's Official Plan to ensure that the recommendations are further supported at a higher policy level.

The Town should update their existing road design standards to incorporate in-boulevard and on-road active transportation facilities where appropriate.

When reviewing the applicable planning tools, there were some typical municipal resources and references that have yet to be developed and adopted by the Town. The Town will continue to work within existing planning frameworks and when possible, will develop and adopt functional and strategic plans and provide additional guidance and context on how to plan for land use and provide for municipal infrastructure and services. At such a time as those projects are undertaken reference should be made to the Recreational Trails Master Plan as the primary reference related to off-road trail planning, design, and development.

There is one exception to this recommendation. As part of the RTMP, a series of on-road connecting links have been identified with the purposes of providing a continuous and connected system of recreational opportunities. At the time the RTMP was developed, there was not sufficient information available – nor was it part of the scope – to undertake a detailed review of these on-road opportunities. As such, the Town is encouraged to use these recommendations as the basis for a future functional master plan in the form of a Transportation Master Plan or Active Transportation Master Plan.

When Town staff in other departments proceed with Functional Master Plan (i.e., Transportation Master Plan), recommendations and trail routing should be reviewed, confirmed, and incorporated where appropriate.

RECREATIONAL MOBILITY IN POLICY

The suggested policy improvements are being recommended to ensure that municipal policies and plans are now in alignment and do not contradict the RTMP. One of the primary goals of the RTMP is to provide a greater degree of recreational mobility for those who live, work, and play within the Town. To achieve this, there will need to be consideration for and adoption of policies that address some critical emerging trends and mobility practices. Table 22 is a summary of some of these potential policy considerations which will need to be reviewed and considered by the Town as strategic plans and high-level policies are developed and / or updated.

Topic	Considerations	Impact
E-bikes & micromobility	E-bikes can blur the lines between traditional bicycles and motorized bikes. Some provincial rules are in place to differentiate between different types but deciding where they are appropriate and enforcing rules can be a challenge.	 Monitor evolving best practices. Consider modifications to municipal policies and by-laws to clarify permissions and restrictions of different types of e-bikes / micromobility in different locations. Consider how e-bikes / micromobility can be accommodated in the design of trail infrastructure. Engage in targeted education campaigns to explain e-bike and micromobility rules and etiquette
Liability	If multi-use trail facilities are improperly designed, constructed, or maintained, the Town may be exposed to some level of liability. Many aspects of the RTMP are meant to mitigate liability, including design and maintenance recommendations – highlighting the importance of plan implementation.	 Ensure provincial/national design guidelines and applicable laws and regulations are followed for trail designs, especially as they evolve in the future. Monitor trails through regular patrols and document conditions. Increase public awareness of user rights and obligations. Maintain proper insurance coverage.
New Development	When a new development is proposed, designs should include aspects that support trails and recreational mobility, including projects in the RTMP, and which are consistent with the RTMP's design guidance.	 Review the Site Plan approvals process as needed to reflect the importance of implementing trail projects and ensuring appropriate design of trail links and amenities. Leverage the development approval process to direct investments towards the trail network, (i.e., via development charges, parkland cash-in-lieu).

Table 22 // Emerging Policy Trend Opportunities

The Town should utilize the information contained within the recreational trails master plan to communicate with developers as part of site plan approvals and development applications to ensure the location and design of trail linkages is consistent.

3.4.2 Trail Supportive Programs

Trail supportive programming pertains to strategies, tactics, or other initiatives that are designed and implemented with the main purpose of encouraging, educating and promoting the use of trails within the Town of Grimsby. The Town is seeking to implement the RTMP in part to influence the behaviours of those who live, work, and play in Grimsby to harness the growing interest and demand for active forms of recreation and encourage the use of local trails – both today and into the future, as the trail network grows.

There is growing interest in trail usage across Grimsby, including among long-term residents, new residents, and various age groups – such as youth who are looking for autonomy and active and safe experiences, families who are looking for activities to do together, or people who are looking to be active while aging in place. Without an investment in Town-wide trail promotional and educational programs, there will be a significant missed opportunity for greater awareness of the trail offerings throughout the Town, and the new trail infrastructure that is built may not be used to its full potential.

Trail supportive programs that have been identified as part of the RTMP are focused around two priority areas:

#1 • Effective Communication

#2 • Behaviour Change Tactics

There are numerous types of trail programs that could be explored which address these two priority areas. The Town is encouraged to continue to work with its committee members and partners to review, confirm and identify tactics that will have the greatest degree of influence and impact on community interest and behaviour. To inform these discussions, the RTMP identifies a series of potential programs which are intended to be reviewed and considered at such a time as the committee and Town staff proceeds with the implementation of the RTMP. The Town must consider programming along with the implementation of trail infrastructure. They are intended to be implemented in tandem to maximize impact, influence, and trail use.

3.4.2.1 EFFECTIVE COMMUNICATION

Online Resources & Tools

Currently, some information on trails is available on the Town website, including trails and cycling routes managed by other organizations. There is potential to improve this page and provide more comprehensive information and resources including interactive mapping of trails and routes, information about key destinations and safe use of trails, and to promote ongoing programming and events as they occur. This will be especially important at the trail network expands as envisioned by this plan. In order to be useful, the page should be updated on a regular basis to ensure all content is relevant, and to promote new trail projects and programming as they are implemented. Website content should be accompanied by complementary content and promoting the website through the Town's social media channels. Online content should also be coordinated with printed materials, to ensure all information distributed by the town through various channels is consistent.

Printed Materials

While increasingly people mostly look online for information about trails and destinations, 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 and can help promote more detailed information available online. Providing printed trail maps are a good starting point for printed information. These hard copy maps should be updated every other year, at minimum, in order to reflect new trail 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 Recreational Trails Plan included the development of a project-specific logo, along with conceptual trail signage designs. It is recommended that the Town continue to build on these ideas to develop unique branding for its trail system that is complementary but separate from the overall municipality. This will help make trails and their associated amenities, as well as trail marketing materials, easily recognizable and distinguishable from other municipal services. This branding could also be supplemented by naming of trails to recognize important cultural, natural, or historical local features or people, to create recognizable destinations.

Tailored Messages

As with any communications and outreach initiative, in order to successfully promote trails and encourage their use, it is important to have a strategy to target particular audiences, and to tailor messages that will resonate and be effective. Messages should be developed for different demographic groups that are prevalent in Grimsby, such as young adults, parents & families, and seniors. While it can be important and useful to include messages about safety, it is also important not to forget to tell people about the benefits of using trails, and how trails provide a fun, environmentally friendly, affordable, flexible way to independently get around and explore the Town.

New Development Welcome Packages

A key audience who are among the most likely to benefit from and take action on information about trails are people moving into new residential developments in Grimsby. Once trail maps and other printed materials are developed, these can be included in welcome packages for new residents to Grimsby. Such a package can be incorporated into transportation demand management measures that the Town can ask of developers through the development approval process. This trail information can be included along with information on transit and other municipal services to welcome people to the community and can be combined with other incentives or trail promotion initiatives.

The Town should coordinate the development of an online platform for trail information sharing and promotion in partnership with other trail management agencies such as the Waterfront Trail, Bruce Trail Conservancy or Conservation Niagara.

The Town should coordinate the development of a hard copy map communicating trail related information and update / produce the map to reflect new trail constructed / changes to the trails network every other year.

3.4.2.2 BEHAVIOUR CHANGE TACTICS

Youth Stewardship Program

Getting young people and schools involved in trail stewardship, and interested in the natural areas around them, can have multiple benefits for the community. Such a program can help educate youth about the benefits of trails, parks, and nature, and create life-long trail users. Students can also be a useful volunteer group to help ensure the trails remain attractive and accessible for all – especially high school students, who often are required to commit volunteer hours to community projects. Many schools already do clean-up events and environmental improvement projects at their own schools, so expanding this practice to nearby trail locations can be a simple extension to enrich such activities, especially for schools located near existing or future trails. Schools could be invited to "adopt" sections of trails to get a greater sense of ownership over these sections and be encouraged to experience them throughout different seasons to see how the trails change throughout the year.

Curriculum Integration

Trails, and the natural areas that often surround them, are local assets that can be leveraged to enrich learning opportunities. The Town, in partnership with other agencies, can develop lessons and activities that link to the education curriculum at various levels, and in various subjects. Integrated educational programs related to trails can also support school programs such as the national EcoSchools certification program, Active School Travel plans and programs, or many public health initiatives.

Trail Buddies

Effective behaviour change approaches need to do much more than simply tell people about the benefits of a desired behaviour, such as trail use, but should actively engage people in the desired activity. A mentorship program that connects people to engage in trail outings in a social atmosphere can be highly effective at not only increasing active recreation, but also building community and civic engagement. Commonly, such programs match an experienced and knowledgeable local trail user with one or more people who are interested but have limited experience with local trails. A Trail Buddies program could target people who are new to Grimsby (or even Canada) or be focused on certain demographics such as youth or seniors. Such programs are often effective when partnering with a local non-profit organization, such as one focused on health, the environment, seniors, youth, or a settlement or social service organization, who already have an established population they serve.

Promotional Incentives

Effective outreach and promotion of trails involves more than just providing information, but also incentivising trail use. While handing out a map or pamphlet has some utility, people are generally more excited to receive a useful item that helps them enjoy trails. Such incentives could include any number of items, such as bicycle bells, tools, or lights, reflective straps, stickers, badges, buttons, water bottles, sunglasses, toques, t-shirts, etc. These items can be offered as prizes for events, help attract people to booths or kiosks, while also being useful items that help remind people to use trails more often and in a safe manner. Items should be branded with the Town's trail specific branding that is developed and include a web address and/or QR code that links to the Town's main trail page.

03.

ACTIVE BY NATURE.

Activation of Space

Part of the aim of the Recreational Trails Plan is to create attractive trail spaces where people want to be. But even the best spaces in cities and towns need to come alive through events, kiosks, pop-up booths, or other activities. This could involve leveraging other community events and expanding them to ensure they include trail spaces. It could also be as simple as pop-up booths at busy trail locations with staff from the Town or other agencies providing trail information, incentives, and even services such as a water refill stations or simple bike tune-ups or safety checks. Local businesses such as food trucks or artisans can also be invited to trail locations to set up to provide items for sale, or community groups can be invited to promote other services. All of these can help activate areas along trails, attract more people, and enrich trail experiences.

Story Telling

Many municipalities have partnered with libraries or other literacy organizations to set up story walks in parks or trails, in which the pages of a picture book are adapted into large format signs that are arranged in such a way as to create a self-guided walk. Ideally, stories can be selected that relate to the surrounding area or can link to themes that the Town wants to promote. While these story walks are generally temporary, interpretive trail signage can also be set up in a similar and more permanent way to tell a continuing story along a loop or defined trail section. This increasingly popular tool helps encourage people – especially children and families – to use trails and outdoor public spaces while promoting literacy, well-being, healthy living, and physical activity.

Community Challenges

A trail or hiking challenge can be a useful way to encourage trail use and can be organized in a variety of ways. Usually, the challenge sets up a goal to complete – either in terms of kilometers travelled, or number of trails or trail loops completed – and has people log and report their trips over a specific period of time to be eligible for prizes. By having people report on their trips, this also allows the Town to report on the total number of trips or km travelled during the challenge, helping to demonstrate how popular trails are in the community. Some municipalities have combined such community challenges with fundraising efforts for charitable causes, or to help support trail maintenance or educational programming. Challenges can also be combined with photo competitions, in which people are asked to photograph landmarks, plants, or wildlife along local trails. Community challenges can be especially effective when linked to the opening or new trail connections, new behaviour change programs, or other community events.

Community Trail Rides / Hikes

Organizing regular events that centre around a bike ride, walk, or hike can be a simple and effective way to encourage people to make use of trails. Such experiences provide a social environment to help enrich the experience for regular trail users, while also being a great way to attract new or infrequent trail users. These events can include guided trips that highlight sections of trail and engage participants in related interests such as plant or wildlife identification, or appreciation of cultural and historical features of Grimsby. Organized bike rides have the added benefit of helping people build cycling skills. These trail experiences can be varied and targeted to trail users of various skill levels and stamina, should build on existing events and activities, and can also be done in coordination with local groups.

Recommended education and outreach strategies should be reviewed and prioritized by the Committee to Council in partnership with Community Services with a minimum of one educational initiative to be undertaken annually.

3.5 Costing & Funding

A master plan is a high-level document that sets out a series of recommendations that aim to achieve long-range ambitions and goals. These recommendations will change over time and in some cases due to the level of detail available in a master plan there may be conditions or contextual considerations that shift the outcomes. Despite this, it can be helpful to provide high-level costing along with the recommendations to provide staff and decision makers with a better sense of the overall commitment and potential impact on municipal budgeting.

3.5.1 Costing Overview

For the purposes of the 2023 RTMP, costing has been prepared at the master plan level which are based on a series of assumptions determined at the time of development which reflect primarily construction costs. The master plan level costing aims to provide a preliminary assessment of the anticipated capital or operating costs of projects to facilitate implementation and management and the sources of monies that will be used to fund those costs. 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.

3.5.1.1 CAPITAL COSTING

Capital costing has been prepared for the recommended trail network (and all associated projects) except for trails identified as "costed outside of the RTMP" which include the proposed on-road linkages as well as any projects that are the responsibility or under the jurisdiction of a partner agency / organization. Capital costs are fixed, one-time expenses incurred on the purchase of land, buildings, construction, and equipment used in the production of goods or in the rendering of services.

The following are the costing assumptions that informed the development of the Town of Grimsby capital trail costs:

- 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 Town 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.

Based on these assumptions, the capital cost for the implementation of proposed trail projects within the Town of Grimsby recreational trails master plan is...

\$19,635,661 to be implemented over the course of 20 years.

This means that the cost annually could be around \$981,783.

It is not the recommendation of the RTMP to allocate the approximately \$700,000 dollars to trail projects annually. It is, however, the recommendation of the RTMP to review the trail priorities, phasing and costing on an annual basis to determine how much budget should be allocated to the implementation of RTMP projects by the Community Services Department and other municipal departments as needed.

Two tables that have been provided which outline some of the cost options and alternatives for consideration by the Town. The detailed trail linkage costing, and associated unit costing has been provided to the Town as a tool for future reference and application as the RTMP proceeds through to implementation.

Priority Project Costing

Priority Project	Cost
Forty Mile Creek Trail Downtown Connection	\$298,500
Downtown to Centennial Park Connection	\$241,893
Centennial Park Trail and Escarpment Stairs	\$1,451,420
Hydro Lands Urban Destination Trail	\$1,095,000
Forty Mile Creek Lakeshore Connection	\$947,210
Westend Waterfront Trail	\$2,566,000
Grimsby South Spine Trail	\$2,539,700
Oakes Rd. to Waterfront Trail	\$371,630

Table 23 // Costing for Priority Projects

Costing by Phase

Project Phases	Cost
Quick Win Projects Total	\$583,000
Short-term Projects Total	\$2,640,523
Medium-term Projects Total	\$8,287,962
Long-term Projects Total	\$8,124,176

Table 24 // Costing for Project Phasing

The preliminary costing provided in the plan are meant to not only support the plan's actions, but also to support the adaptable and flexible approach that is provided to municipal staff. 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.

Inflation	Approvals	Studies	Design
3-4%	5%	\$50k	20%

Table 25 // RTMP Project Costing Adaptation

Considerations for land acquisition and additional studies related to recreational trail master plan projects be incorporated into capital project planning based on the guidance provided by the recreational trails master plan and other municipal sources.

In addition to the capital costs for the recommended trails network, high-level costing estimates have been provided for the proposed programs and initiatives noted in Section 3.4.2. The costs for these activities are quite challenging to assess as they will be heavily dependent on the geographic impact and reach, stakeholders and partners involved as well as the opportunities to leverage past work or work done by partner agencies.

Communication Tactics

Priority Project	Cost
Online Resources & Tools	\$5 - \$10,000
Hard Copy Materials	\$2,500
Trail Specific Municipal Branding	\$7,500
Tailored Trail Messages	\$1,500
New Development Welcome Packages	\$20,000

Table 26 // Potential Costs for Proposed Communication Programs

Behaviour Change Tactics

Priority Project	Cost
Youth Stewardship Program	\$750
Trail Buddies	N/A or Trail Passes
Curriculum Integration	\$500
Incentive Programs	\$1000
Activation of Space	\$10 - \$20,000

Priority Project	Cost
Story Telling	N/A Event Coordination
Community Challenges	\$1,000
Community Trail Rides / Hikes	\$1,500

Table 27 // Potential Costs for Proposed Behaviour Change Programs

3.5.1.2 OPERATING COSTS

The Town of Grimsby is also responsible for the operating costs associated with trails. Operating costs are associated with the maintenance and administration of a business on a day-to-day basis. For the purposes of the RTMP, it has been assumed that operating costs include trail maintenance, evaluation and enforcement based on the recommended approaches noted in Section 3.6. The following are the costing assumptions that informed the development of the proposed operating costs:

- Trail maintenance will be dependent on the type of trail as per the trail classifications and intended seasonal uses. At a minimum, the following maintenance practices have been assumed for the recreational trails within the Town of Grimsby to be undertaken on a routine basis quarterly to reflect changes in season or bi-annually:
 - 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 regrading, 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 resource and environmental compliance staff to determine if maintenance would have an impact on resource protection.
- For winter maintenance, preliminary costs have been provided. These costs only pertain to operational/staffing efforts and do not reflect the acquisition of necessary equipment. Based on research, 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 Town's building department. The level of effort to complete bi-annual trail reviews and documentation (using the tool provided) may require one additional (1) FTE for information gathering and documentation. It may also require an additional budget of \$25,000 for enforcement related costs which would be undertaken by the Town or partner agency.

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Operations Costing by Classification

Priority Project	Annual 3 Season Maintenance Cost/500m	Winter Maintenance Cost/500m	Total Cost / 500m
Urban Destination Trail (Type 1)	\$1,366.86	\$287.76	\$1,654.62
Community / Neighbourhood Trail and Pathways (Type 2)	\$743.38	\$0.00	\$743.38
Natural Surface / Nature Trail (Type 3)	\$323.73	\$0.00	\$323.73
Informal Trail (Type 4)	\$0.00	\$0.00	\$0.00

Table 28 // Operational Costs for Recreational Trail Types in Grimsby, ON

Operational costs are to be reviewed and refined on an annual basis to ensure that trail maintenance (seasonal and winter included) is appropriately supported to meet the expectations of the recreational trails master plan.

3.5.2 Cost Off-setting Alternatives.

The Town of Grimsby has utilized a relatively informal and unstructured approach to funding of trail infrastructure and trail projects in the past. In many cases, the investment in trail initiatives has been determined on a case-by-case basis or as monies become available from external sources. The recreational trails master plan is an ambitious series of desired trail opportunities identified throughout the Town of Grimsby. While costing has been provided it is not expected that all projects will be implemented or that this list of projects reflects all potential opportunities that exist within the Town. It is an informed identification of feasible and aspirational projects which will require a significant amount funding and monetary commitment.

When referring to "cost off-setting alternatives" we are referring to the various funding models that could be secured to support the implementation of the recreational trails master plan. The master plan assumes that this is the monetary commitments that are being made to facilitate implementation. There are two overarching sources of funds that could support future implementation. Internal monies that are committed by municipal council and leadership and external monies which are sought through grant applications and / or donations and distributed by a third-party group. The following is an overview of the potential sources of funding within these two categories.

3.5.2.1 INTERNAL

Internal funding is determined annually as part of the budget process. As noted above, the intent is for the Town's Community Services Department to lead the funding and implementation of the majority of the recreational trails master plan. However, due to the unique municipal roles and responsibilities of various departments there will be financial support required from some of the other municipal departments. Table 29 provides an overview of some potential funding sources that could be explored by department.

Department	Role
Office of the Clerk	Operational enforcement software and programming (O)
Community Services Department	 Completion of a recreation trails master plan (update) which would require the inclusion of the recommendations found within the RTMP (O) Various projects identified through the Town's capital budget align with the recommended trail projects and the proposed timing. Leveraging the park renewal projects, new park projects and other individual enhancements planned throughout the Town would be of benefit. Accessibility improvements – annual budget as determined by AODA compliant trail projects
Information Technology & Service Innovation Department	Communications related improvements to the website (O)

Department	Role
Public Works Department	 Undertaking additional master plan studies to confirm on-road infrastructure identified within the RTMP (O) Maintenance of bridges, culverts and road structures which could pertain to some of the trail transition features (O) Design standards update which could include the inclusion of trail infrastructure as part the recommended trail classifications (O) Development charges study update – inclusion of considerations for trails as eligible projects if not already confirmed (O) Coordination with planned capital projects based on the on-road connections identified within the RTMP. Leveraging the sidewalk rehabilitation annual program, traffic safety program, road rehabilitation 2023, etc. as annua on-going projects which could include recreational trail components where appropriate
Planning & Development Department	Official Plan review which could include the integration of the RTMP (O).

Table 29 // Town of Grimsby Department Funding Sources

Annual funding of the recreational trails master plan should be allocated by the Community Services Department based on the proposed phasing strategy with additional external funding sources explore to support municipal budgets where needed.

The Town should explore the identification of special projects as part of annual municipal budgets to support promotion and education of trails as per the recommendations found within the recreational trails master plan.

3.5.2.2 EXTERNAL

Even with dedicated internal funding secured by the Town, the anticipated cost to support the implementation of the recreational trails master plan will likely require additional sources. External funding opportunities should be explored regularly and pursued, whenever feasible, to offset the costs. As part of the Town's annual reporting, an assessment of available budgets relative to cost needs should be included and if needed, additional requests for funds should be identified as the trails 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 which come from agencies which are either formally established or are affiliated with a political entity. The information contained within the recreational trails master plan 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

- Ontario Municipal Commuter Cycling Fund
- 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 refers to the monies that could be secured because of leveraging development charges. Development charges are monies that are paid back by local developers as they work through the development process. Depending on the eligibility of projects, some of the trail linkages (within proximity to development) could have monies allocated from those development charges to cover all of 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.

Other

Throughout Niagara Region there is a strong sense of community pride and investment. In addition to the formalized and structure funding opportunities there are local options which should be explored on an ongoing basis. For localized investment, it is important to note that it is not limited to monies. 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 service Club or Local Trail Club Funding

Public-Private Partnership

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

Private Citizen Donation

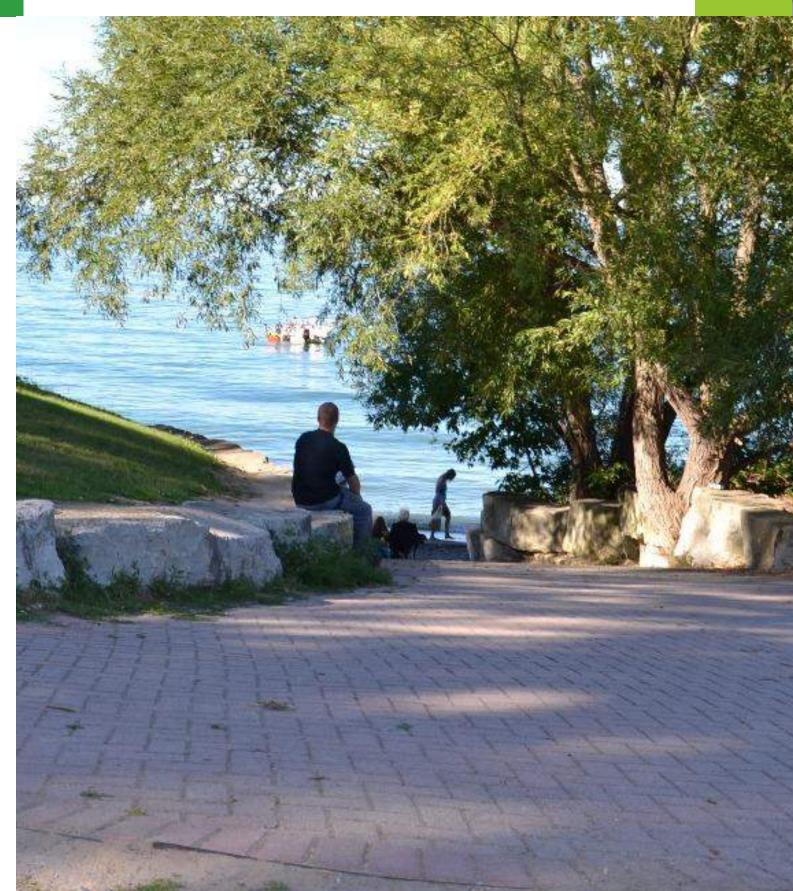
Donations can be accepted at any time; however, the Town may wish to target a dedicated fund-raising month whereby opportunities are provided to "name a trail" or "design a trailhead" which are used to specifically generate monies for trial implementation and supports.

Events & Tourism

The Town of Grimsby is part of a considerable tourism area within Niagara Region and has found opportunities for more unique and local interests and draws. Trails are part of the wider active recreation conversation within the Region which provide access to and between tourism destinations. The Town of Grimsby should explore opportunities to leverage existing tourism events to generate monies in support of trails. In addition, there may be other opportunities that highlight the trail system which could be explored including coordinated trail rider or hikes where monies are raised for access opportunities. For events, there are different scales that can be explored where-by the trail could either be part of the overall event or the trail is the event. Exploring opportunities to activate the space (i.e., art installations, historic tours, etc.) would be encouraged for stand-alone events.

Pass & Permits

Like the approach used for the Bruce Trail Conservancy, 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 individual to the Town or could be explored through a formal partnership with the BTC for trails that provide linkages to the Bruce Trail. If the Town were to explore individual municipal trails for permit or pass purposes, it may be most appropriate to identify user destination trails that are part of a wider branded initiative and provide access to major Town destinations may be appropriate for this type of fund raising. Considering the municipal service nature of the trail system these passes would not be considered mandatory and would be more of an annual donation received in exchange for a branded identifier.



3.6 Management & Adaptation

The Town of Grimsby Recreational Trails Master Plan has been developed and designed to be an adaptable and flexible resource for Town staff and its partners. 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 an opportunity for ongoing promotion and outreach. The hope is that this plan retains its relevance in application and provides Town staff and stakeholders with the information needed to address questions, issues, and opportunities if and when they arise throughout the implementation process.

To ensure that the RTMP is considered applicable beyond the first or second year of implementation, it is the intent for there to be a considerable amount of monitoring, management and adaptation that occurs. The following section has been developed to help guide these future discussions and decision making.

Given the flexible and adaptive nature of this plan, as context and conditions change there may be trail linkages and opportunities that were not considered as part of the RTMP process that become available for the municipality to explore. Particularly, areas that have been considered a high priority to members of the public, stakeholders, and municipal staff through the process of this RTMP should be continually monitored to determine if they could – in the future –be explored as trail linkages. These opportunities could include, but are not limited to the rail corridors, for the opportunity of rails-with-trails, unopened road allowances which are currently encroached upon or unusable, and future development opportunities that may change the context of land-use.

The proposed recreational trails network will be reviewed on an annual basis to determine if there are any updates needed including additional connections for consideration or opportunities that are no longer feasible.

Progress represents the demonstration of improvement that occurs as a result of the implementation of the Recreational Trails Master Plan and other municipal initiatives. It will be important for the Town to identify means of better understanding the change in usage of existing and planned trails, overall experiences with trail as a community service and opportunities for future improvement / enhancement. There are four (4) types of information collection that have been identified for consideration by the Town to support ongoing monitoring of progress.

3.6.1.1 CONVERSATIONS WITH STAKEHOLDERS

The stakeholders engaged as part of the RTMP process and those identified in the partnership section should continue to be involved in the review and assessment of trails. Stakeholders will be invited to a meeting at least once a year with Community Services staff with the agenda focusing on using their input to understand how the trails are functioning, issues and concerns, communication needs, potential programs, and partnerships, etc. The meeting is recommended to occur prior to budget decisions.

3.6.1.2 MANUAL DOCUMENTATION

Town staff will either manually complete or purchase technology to support in the gathering of data/information regarding trail use. The counters will help to generate data regarding trail use and users and the manual documentation would allow for more detailed information regarding user perceptions. This can occur concurrently with the maintenance reviews. Manual documentation is also encouraged to include intercept surveys of users where possible. The various types of technology that could be deployed include:

- Individual Smartphone Technology which is a self-drive/self-documented approach using a survey is provided via QR code at the beginning of a trail and trail users are able to 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 the survey and provide it for public access. The downside is that the information is not consistent and subjective.
- Eco-counters which are point in place documentations of trail use which 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. A cost for an eco-counter is around \$1,500 per counter. It provides a visual que which can serve as an additional promotional tactic and can also include branding consistent with other municipal concepts (i.e., trail signage).
- Tube counter module and technologies are placed along a trail underneath the surface and provide a more permanent solution to gathering data on a day-to-day basis. MetroCount is one such example which also includes a counter box in proximity. They capture all trail use and typically cost around \$5,500 and may need to be replaced about every 5 years.
- Cameras can be placed along the trail, mounted on lighting or utility poles 15 to 25 feet above the ground. Typically used for traffic on-road these can also be used for trails and 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 term of data collection. This could be around \$2,000.

3.6.1.3 COMMUNITY ENGAGEMENT

Town 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. This will help supplement the ongoing documentation of trail maintenance issues and will focus on evaluating successes and opportunities for improvement. The survey will be developed and distributed through the Let's Talk page or through other municipality-wide collection services.

Public perception of implementation successes and needs for improvement will be gathered through community surveys which are to be undertaken on a bi-annual basis.

Adaptation refers to how things change over time. The Town of Grimsby worked diligently, collaboratively, and creatively on the development of the Recreational Trails Master Plan. The adoption of this plan marks a shift in how the Town prioritizes community services, active recreation and transportation and values the health and prosperity of their residents.

This is an ambitious plan that sets out recommendations and improvements that reflect the priorities of community members, stakeholders, and agency partners. It pushes the envelope as to what could be imagined envisioning a continuous and connected system that respects, reflects, and preserves the areas of natural and cultural significance within the Town. With time, things will change and shift, priorities, political positions staff, stakeholders, and partners.

This plan needs to continue to be the guiding document and the roadmap for recreational trails and more importantly a greater degree of recreational mobility, accessibility, and connectivity throughout the Town over the course of the next 20 years. The tools, tactics, approaches, frameworks have been designed with long-term implementation in mind and are intended to be resilient enough and clear enough to be used by municipal staff and stakeholders over time despite changes to roles, responsibilities, and context.

Ongoing communication, coordination and collaboration will be the key to success. Acknowledging lessons learned, tackling challenges and issues that arise and leveraging opportunities where possible. The partnerships that have been established through this process – both internal and external – will be the key to the Town's success as a leading recreation and trail destination within Niagara Region, southwestern Ontario, and Ontario as a whole.

The Town of Grimsby Recreational Trails Master Plan is to be revisited and updated every 10 years or at a time that is considered appropriate relative to municipal priorities and resources.