Staff Report



To Committee of the Whole

Service Area Public Services

Date Monday, June 7, 2021

Subject Guelph Trail Master Plan

Recommendation

1. That the Guelph Trail Master Plan dated May 2021, included as Attachment-1 to this report, be approved.

2. That the funding requirements for the Guelph Trail Master Plan be considered in future operating and capital budgets in order to implement the recommendations of the master plan.

Executive Summary

Purpose of Report

To provide Council the Guelph Trail Master Plan (GTMP) and seek approval to implement the plan's recommendations. The GTMP is a strategic document that guides how the trail network is planned, designed, funded, built, and maintained.

Key Findings

The GTMP updates an older version approved in 2005. An update is needed to set new priorities in line with the Strategic Plan and to take advantage of new approaches, legislation, and guidelines in trail planning.

The GTMP creates a renewed vision for Guelph's future trail network and recognizes that trails are essential to everyday life for recreation, health, and mobility. The master plan seeks to develop an inclusive, connected, sustainable trail network that offers diverse experiences, fosters an active and healthy lifestyle, and showcases Guelph's natural and cultural assets for all. Thirteen goals help support the vision by identifying opportunities, an approach to achieving the goal, and a desired outcome.

The GTMP is built on community engagement, comparator research, trend analysis, and technical analysis. Guelph residents and stakeholders contributed feedback through three rounds of consultation throughout the planning process, with 1,700 people engaged and another 2,000 informed on the plan. Consultation took the form of workshops, pop-up information booths, surveys, online presentations, and advisory committee meetings, totaling 30 different opportunities to share feedback.

An updated trail network map and strong implementation plan set out the trail network for the next ten years. The GTMP includes actions for how to achieve the vision for the future – through policies, infrastructure renewal, trail operation, and new trail construction. Strong decision making criteria helps guide future capital investment.

Financial Implications

Over the next ten years, the capital investment to build new trails is \$28.2 million, to improve existing trails is \$3.05 million, and to improve operational efficiency through new policies, procedures and studies is \$975,000. This capital investment means as population grows, the current level of service will be maintained and trails in existing areas are improved. Grant funding will be pursued to help offset the City's capital investment.

Over the next ten years, operating costs are projected to rise by 25 per cent to proportionately manage the larger trail network. The current operation of trails costs \$945,000 per year for both seasonal and winter maintenance. The base maintenance costs are estimated to rise by \$22,750 per year for the next 10 years.

Thirty-eight more kilometers of primary and active transportation trails are recommended to be added to the winter maintenance program. This represents an additional increase of \$9,500 per year. To maintain a larger network and expanded winter maintenance program, it is estimated the total annual increase to the operating budget will be \$32,250.

Approval of specific annual capital investment and associated operating impacts will be considered in future budget requests.

Land acquisition estimated in the range of \$15 million to \$25 million is currently unfunded in the City's budget. As part of a Trail Acquisition Study or through other financial studies (Community Benefits Charge), staff will review potential funding strategies, land acquisition tools, and future policies to support acquiring land for trails.

Report

Introduction

The Guelph Trail Master Plan (GTMP) is a strategic document that guides how the City plans, designs, funds, builds, and maintains Guelph's trail network. It is an update to replace our 2005 GTMP as an update is needed to set new priorities in line with the Strategic Plan and to take advantage of new approaches, legislation and guidelines in trail planning.

Guelph is growing at one of the fastest rates in Canada, with the population forecasted to increase from 136,600 people to 203,000 by 2051. With strong growth comes increased demand on existing infrastructure and changes to the way people use trails. Active transportation or using your own power to get from one place to another, is becoming more popular as a primary mode of transportation. As neighbourhoods become denser and community concerns about environmental impacts of transportation rise, trails will help support more users who choose active transportation. A well-planned approach is needed to steer the City in the right direction and set priorities for the next ten years.

Guelph has a robust trail system with over 130 kilometres of trails and multi-use paths. The Citizen Satisfaction Survey (2019) shows 95 per cent of people are satisfied with parks and 90 per cent of people are satisfied with recreation programs and facilities. The survey also shows that these services are very important to residents and that our focus should be on maintaining the current level of service. As the City and community adapts to new challenges related to COVID-

19, trails have been highlighted as essential for community health, social connection, recreation, and transportation.

Guelph Trail Master Plan Focus

The focus of the GTMP is trails located outside of road rights-of-way. Trails are off-street pathways that provide two-way travel for people to move using human-powered transportation (walk, roll, cycle) in a shared space, typically in a park, greenway, or infrastructure corridor. There are many forms of human-powered transportation – wheeling, pushing a stroller, mobility aids, in-line skating, walking, hiking, or cycling. Connections to road rights-of-way, secondary plan areas, University of Guelph, and Grand River Conservation Area properties were studied, but detailed planning of these areas is not included.

The Transportation Master Plan, Active Transportation Network (ATN) study, Cycling Master Plan and Sidewalk Needs Assessment all focus on pedestrian and cycling infrastructure in the road right-of-way. Draft findings of the Transportation Master Plan were incorporated into the plan, including the Cycling Spine Network for consideration at the Special Council Meeting May 26, 2021. These documents are intended to help deliver a comprehensive active transportation network that will allow individuals to choose how they navigate through the city. This framework will allow staff flexibility and multiple tools to ensure that active transportation routes are available to all citizens. Active transportation routes that are located outside of road rights-of-way, which provide access to nature and recreation, are a critical component of that overall objective.

Vision, Values, and Goals

The master plan is built around a vision statement, values, and goals organized into five themes that support the Strategic Plan. The vision of the GTMP is:

Trails are essential to everyday life for recreation, health, and mobility. We will support and develop an inclusive, connected, sustainable trail network that offers diverse experiences, fosters an active and healthy lifestyle, and showcases Guelph's natural and cultural assets for all.

There are thirteen goals organized into five themes to help support the overall vision for trails in Guelph. These goals were informed by engagement with the community members, City of Guelph Accessibility Advisory Committee (AAC), City of Guelph Natural Heritage Advisory Committee (NHAC), trail user groups, agency partners, and City staff. The themes are as follows:

- Complete well-connected community
- **Inform** easy to use and navigate
- **Protect** what is valuable
- **Celebrate** our unique community
- Manage an effective, fiscally responsible, and trusted local government

The goals of the master plan are included in Table 1 and are organized based on pillars of the Strategic Plan instead of GTMP themes.

Table 1. Goals of the Guelph Trail Master Plan

Strategic Plan	Goals
Sustaining our future	Goal 6: Protect our natural heritage system and cultural heritage assets
Navigating our future	Goal 1: Create a complete network of trails Goal 3: Develop trails to support active transportation Goal 5: Improve navigation of our trail network Goal 7: Enhance sense of security and manage risk Goal 8: Improve comfort for trail users
Working together for our future	Goal 4: Provide easily accessible information about trails Goal 9: Work together with our community Goal 13: Enhance management of and use of data in decision-making
Building our future	Goal 2: Provide equitable access and use of our trail network Goal 10: Accommodate placemaking along trails Goal 11: Improve branding of trails and trail materials Goal 12: Maintain existing infrastructure and improve operational efficiency

Trail Network

The GTMP reviewed opportunities for where new trail implementation could be achieved as part of the overall network growth. The process involved significant work between City staff and the consultant team, along with feedback from the public and stakeholders.

Proposed trails are classified as planned trails and desired connections in Attachment-2: Proposed trail map. Key maps or figures have been pulled from the GTMP and included as attachments to make them easier to find. In order to implement the shared vision for the trail network, the GTMP includes design guidelines for route planning, trail construction, and crossing improvements for various types of trails.

Implementation and Recommendations (2022 - 2031)

The implementation of the GTMP is action oriented. The master plan includes actions for how to achieve the vision for the future – through policies, infrastructure renewal, trail operation, and new trail construction over the next ten years. A full list of the plan's 25 actions are found in Chapter 6 of the master plan. Below are specific actions organized by type of work:

Policies and Practices Supporting Trails

One of first steps in implementing the master plan will be to build the tools, policies, and practices to support future work. Policies will help provide City staff, developers, community groups, and residents with clarity on how trails in established neighbourhoods or new developments will be planned, operated, and maintained. Specific actions include:

- Develop and implement a signage and wayfinding strategy
- Develop a Trails Technical Manual and Trails Acquisition Policy
- Provide easily accessible information about trails online
- Investigate new technologies to support trail users and wayfinding
- Develop programming to activate the trail system
- Establish a trail committee
- Work with community partners on community-led, City-supported projects

Through the GTMP, existing relationships with trail user groups were enhanced. Staff have initiated regular meetings with stakeholder group representatives with the intention of determining the mandate, function, roles, and responsibilities of a future trail committee.

Existing Trails, Infrastructural Renewal, and Trail Operation

An area of focus of the GTMP is to improve existing trails and renew aging infrastructure – this aligns to the Strategic Plan's priority of "Managing existing infrastructure."

As an action of the master plan, the trail system will be examined for opportunities for continuous improvement. Safety, functionality, inclusiveness, and user experience will be reviewed on an ongoing basis through regular inspections and work planning. Specific actions for existing trail operation and maintenance include:

- Examine the trail system for opportunities for continuous improvement
- Review and expand the winter maintenance program for existing trails
- Identify a pilot project for trail lighting on a section of the ATN
- Develop a network approach to managing trails and active transportation routes
- Develop an Asset Management Plan for trails
- Complete natural area management plans to plan for trails

Building New Trails and Infrastructure

The GTMP identifies new trail construction by how they are funded through the City's budget: Growth or City Building. Growth related trail network expansion occurs as part of the development review process and is prioritized by the City's Development Priorities Plan. City Building trails require that the City address connection gaps and trail access equity concerns in built up areas which can be much more detailed, costly, and time consuming.

There are three actions that relate to new trail construction:

- Construct or advance planning of priority City Building projects
- Improve crossing of major barriers at key locations
- Continue to build new trails in areas of growth as development occurs

A strong decision making criteria helps guide capital investment over the next years. Fourteen City Building projects were selected as the priority projects. This does not mean that other trails are not important; it means that when ranked against the decision making, they rank lower. The top fourteen projects were identified as priority as they are most likely to be planned or constructed with forecasted funding and resources. Priority City Building projects were identified by the public, stakeholders, and the project team.

The Implementation Map in Attachment-3 breaks down the proposed trails into Growth and City Building trails. A list of the City Building priority projects is

included in Attachment-4. Details about how each project meets decision making criteria and when it might be planned or constructed is also included.

Monitoring Success

Collecting and managing data about trails will help monitor the plan's success. A goal of the plan is "Enhance management of and use of data to support decision-making." The GTMP recommends that a system to measure the success of the plan be developed as part of a data management program. The system should include key performance indicators to measure and report on the plan's success.

The success of the GTMP will be reported regularly as the plan is monitored and evaluated. A review and update of the master plan is planned for 2026 at the five year mark. A five year review may include revisiting goals and priorities, and aligning work plans with a future strategic plan or new opportunities. A full master plan update is recommended in 2031.

Trans Canada Trail Gap Update

As part of the GTMP update, a route investigation was completed to identify route options to fill a three kilometre gap in the Trans Canada Trail (TCT) between Guelph and Guelph-Eramosa Township. The trail extension would link Guelph to a network of trails across Ontario by connecting an existing multi-use path along Woodlawn Road to the Kissing Bridge Trail in Guelph-Eramosa, which currently ends at Wellington Road 39 (Silvercreek Parkway). Attachment-5 includes an update about the Trans Canada Trail project.

Financial Implications

Implementation of the GTMP will require continued investment through both operating and capital budgets. Approval of specific annual capital investment and associated operating impacts will be considered in future budget requests. A summary of forecasted average costs is included in Tables 2 – 4. These costs are annual estimates and will be refined based on detailed trail design as part of the budget process.

Capital Investment

Over the next ten years, the capital investment to build new trails is estimated to be \$28.2 million – including new trails that were identified in the ATN study. The capital investment to improve existing trails is estimated at \$3.05 million – including improvements identified through the ATN Study. The capital investments to improve operational efficiency through new policies, procedures, and studies is estimated at \$975,000. This capital investment means as population grows, the current level of service will be maintained in new growth areas and improved in existing built areas.

Capital funding for trail growth is expected to be mainly collected through Development Charges (DCs). For the Community Building trails, a combination of grant, tax and DC funding will be used based on the specifics of each trail. The forecasted grant and tax funding required for the plan is in line with current forecasted funding for trails.

Tables 2 and 3 show average annual capital budget forecasts over the next ten years to implement the master plan. The budget forecast for new trails is expected

to be fairly consistent over the next ten years, but the budget forecast for infrastructural renewal is expected to increase in 2026.

In order to help support the development of trails, the GTMP recommends the City continue to pursue grants or alternative revenue streams to ease the City's capital investment in trails. The City intends on getting projects 'shovel-ready' in order to make pursuing grants easier.

Table 2. Capital Investment for New Trails (2022 - 2032)

New trails	2022 – 2032 Average annual budget forecast	Total over ten years
Growth	\$1,000,000	\$10,000,000
City Building	\$1,300,000	\$13,000,000
City Building (ATN)	\$500,000	\$5,200,000
Total	\$2,800,000	\$28,200,000

Table 3. Capital Investment for Infrastructure Renewal (2022 – 2032)

Infrastructure Renewal	2022 – 2025 Average annual budget forecast	2026 – 2032 Average annual budget forecast	Total over ten years
Improvements to existing trails	\$100,000	\$350,000	\$2,400,000
Improvements to existing trails (ATN)	\$30,000	\$75,000	\$645,000
Total	\$130,000	\$425,000	\$3,045,000

Operating Budgets

The 2020 operating budget for trail maintenance is approximately \$945,000 which includes labor, equipment, and materials needs.

Operating costs for trails are based on a number of factors including type of amenities, level of use, ease of access, length, location in the city, equipment needs, and seasonality of services. Over the next ten years, the trail network is planned to expand by 25 per cent, and a proportional increase in operating budget will be needed to manage the larger network. This is estimated at \$22,750 annually.

To understand future budget forecasts, the GTMP estimated per linear metre operating and maintenance costs, and applied these proportionally to the expanded trail network. For each linear metre of trail, it costs approximately \$6.75 for the City to maintain. For trails that are winter maintained, it costs the City an additional \$2.50 per linear metre. These costs represent a baseline that is likely to change as trail maintenance practices are refined based on an updated trail classification, future trails operation manual, and new asset management practices.

Operating funding for growth related maintenance costs is funded through annual assessment growth, and will have minimal impact on the annual tax rate. Winter maintenance is a service enhancement, and therefore will be included as a budget increase as it is expanded. Table 4 summarizes the annual budget increases to manage a larger network and expand the winter maintenance program.

Winter Maintenance

Currently, 27 kilometres of trail are winter maintained. Based on the recommendations in the GTMP and the Strategic Plan priority to invest in active transportation, winter maintenance of trails should be expanded. The GTMP recommends winter maintenance be expanded to all primary (which include ATN routes) and neighbourhood connector trails, which means an additional 38 kilometres of trail be added to the winter maintenance program. This will be implemented incrementally over the next ten years, and represents a yearly increase to the winter maintenance operating budget by approximately \$9,500.

Staffing and Support

The maintenance costs identified in Table 4 include a total of four new positions required to successfully implement the plan. It is estimated that three new full time equivalent (FTE) positions will be needed to manage trail operations as the network expands. A trail technologist will also be needed to help maximize operational efficiency and allow for better asset and data management. FTE positions will be taken to Council through the annual budget cycles as part of the City's operating budget for Parks. New FTE positions will be partially offset in existing labour budgets as seasonal staff positions are converted to full time staff positions.

Summary of Operating Budgets Increases

The forecasted annual increase needed to manage the larger network and expand the winter maintenance program is included in Table 4. For the GTMP, the winter maintenance costs were isolated to better understand the operational impact of maintaining more trails in winter. To maintain a larger network and expanded winter maintenance program, it is estimated the total annual increase to the operating budget will be \$32,250.

Table 4. Forecasted Operating Budget (2020 - 2031)

	2020 trail	Annual	Increase over	Forecasted
	operating	average	ten years	2032 trail
	budget	budget		operating
		increase		budget
Average base	\$870,000	\$22,750	\$227,500	\$1,097,500
maintenance				
Winter	\$75,000	\$9,500	\$95,000	\$170,000
maintenance				
New full time	-	-	4	-
positions				

Land Acquisition

There may be times when the City will need to acquire land or an easement for trails – for example, trails along Guelph Junction Railway or on other agency land.

The forecasted value of land for trails over the next ten years is in the range of \$15 million to \$25 million. This is based on the estimated length of trails, potential size of trail corridors and current land values.

Land acquisition is currently unfunded in the City's budget. As part of a Trail Acquisition Study or through other financial studies (Community Benefits Charge), staff will review potential funding strategies, land acquisition tools, and future policies to support acquiring land for trails.

Consultations

The GTMP was developed in collaboration with key staff across many departments. Key involvement from staff in Parks, Environmental Planning, Accessibility, and Transportation Planning ensured a collaborative approach to trails.

External Engagement

The GTMP conducted engagement of the community, stakeholders, and agency partners in three phases: project launch, trail network mapping, and setting priorities. Overall, we heard from over 1,700 people at over 30 public events, stakeholder meetings, intercept polling, online engagement, direct email correspondence, and three different advisory committees of Council. The second phase of engagement was combined with the engagement for the Parks and Recreation Master Plan. A summary of the engagement is found in Appendix A of Attachment-1. Common themes include:

- Difference between transportation focused trails versus recreation focused trails
- Funding trail improvements and accessibility
- Completing the gaps in the network
- Trail safety and trail crossings at roads or other barriers
- Winter maintenance
- Where to find relevant information and mapping
- Communicating trail conditions to help users understand level of difficulty
- Signs and wayfinding
- Protecting the environment while also providing accessible trails

Wherever possible, community engagement data was reviewed and we incorporated community engagement data from related projects such as the Strategic Plan, Community Plan, 2017 and 2019 Citizen Satisfaction Surveys, Natural Heritage Action Plan, Urban Forest Management Plan, Wellington-Dufferin-Guelph Public Health Healthy Communities Baseline Study, Parks and Recreation Master Plan and the Guelph and Wellington County Vital Signs data.

The draft GTMP was posted on the City's website on May 27, 2021 and shared through advertising and correspondence to residents on the mailing list. The master plan is a representation of a community informed plan. Council's decision about the master plan will be shared in the same way.

Strategic Plan Alignment

The GTMP supports four of the five pillars in the Strategic Plan. Table 1 shows how goals of the master plan align to pillars of the Strategic Plan.

It most closely aligns to the 'Navigating our Future' pillar, as trails support investment and promotion of active transportation. The GTMP supports the whole

transportation system by providing alternative modes of transportation. Trails can help support these priorities:

- Providing attractive, affordable, and reasonable transportation options for everyone
- Improving connections to workplaces in Guelph
- Improving the safety, efficiency, and connectivity of the whole transportation system

The master plan supports the 'Sustaining our Future' pillar by protecting the green infrastructure provided by woodlands, wetlands, watercourses, and other elements of Guelph's natural heritage system, and by increasing Guelph's tree canopy. Promoting and investing in active transportation can also help to reduce carbon emissions.

'Working together for our future' is supported by delivering better information to the community about trails and working with community partners. The goals of the master plan support these priorities:

- Improving services through greater use of technology and data
- Improving front-line customer service and communications
- Developing strategic partnerships with stakeholders to improve service delivery
- Exploring new funding options, service-delivery models, and partnerships to ease taxes for residents and businesses

By managing our existing community assets and securing new ones the priorities of 'Building our Future' are supported. Trails will help build strong, vibrant, safe, and healthy communities that foster resilience in the people who live here by:

- Working to enhance community well-being and safety through direct service and program delivery
- Helping to prevent and mitigate the challenges associated with mental health and addictions by working to address root causes

Attachments

Attachment-1 Guelph Trail Master Plan, dated May 2021

Attachment-2 Proposed Trail Map

Attachment-3 Implementation Map

Attachment-4 City Building New Trail Priority Evaluation

Attachment-5 Trans Canada Trail Gap Update

Attachment-6 Council Presentation

Departmental Approval

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