TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

Final June 2021

The Township of UXBRIDGE
Trail Capital of Canada

UXBRIDGE ATP PREPARED BY:

WSP + SHARE THE ROAD CYCLING COALITION

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Chapter 1 Introduction

The Township of Uxbridge is known as the Trail Capital of Canada[1]. With over 300 kilometres of existing off-road trails including a number of provincially and regional significant trail systems such as the Oak Ridges Trail, the Greenbelt Cycling Route, the Trans Canada Trail and the MTO Province-wide cycling network[2], there are many opportunities for people to get out, and get active in Uxbridge. These routes are major cycling and hiking destinations that attract thousands of visitors each year, and also serve as connections to local facilities and services for Township residents. It is estimated that the Township generated over $8 million in visitor spending from tourism activity in 2019[3].

Active living and recreation are not new concepts for the Township. There is a long history of community support to enhance opportunities for active transportation and recreation within Uxbridge. This master plan is intended to provide strategic direction for an active transportation network that is equitable and accessible for people of all ages and abilities, and that can facilitate active living within the Township and its hamlets. The plan is also intended to provide direction and guidance on emerging trends that can shift the future of transportation within the Township such as vision zero, micro-mobility, complete streets and age-friendly design.

This is the Township's Active Transportation Plan (ATP) – a long term guiding document that provides the Township and its partners with the tools and strategies to enhance infrastructure, policy and programming for active transportation in Uxbridge.

[1] Federal designation received from Innovation, Science and Economic Development Canada in 2009.
[2] Includes 43 kilometres of off-road trails located on lands owned / managed by the Township, and 27 kilometres of routes located on Township roads.
[3] 2020-2022 Uxbridge Community Tourism Plan (Central Counties Tourism).

1.1 About the ATP

Uxbridge's ATP is informed by past initiatives and policies established by all levels of government, which provide direction on future growth and infrastructure priorities. At its core, policy and specifically planning policy, has the ability to establish significant change if clear and strong guidance is provided. In the past decade, there has been an increase in support for active transportation and recreation from all levels of government. Provincial, regional and municipal governments are working together and establishing policies, research, strategies and initiatives that provide support for investments and improvements in active transportation.

One of the first steps in this process was developing an understanding of the plans and policies that have helped set the foundation for the ATP, including those that have a direct influence on active transportation planning, design and implementation within Uxbridge, and the areas where they need to be enhanced and / or improved to address the objectives of the strategy. The following is an overview of all plans and policies that were reviewed to inform the Active Transportation Plan.

Provincial Policies

Provincial statutes provide legislated documentation which must be enacted without interpretation through provincial policies. Provincial policies are statutory documents which outline actionable policies to achieve the statutes. Policies can be interpreted based on the condition and context of the municipality.

Policies Reviewed:

- Accessibility for Ontarians with Disabilities Act (2005)
- Ministry of Transportation Ontario Bikeways Design Manual (2014)
- Ontario Traffic Manual Book 15: Pedestrian Crossings (2016)
- #CycleON Action Plan 2.0 (2018)
- Minimum Maintenance Standards for Municipal Highways O.Reg.239/02 (2018)
- Places to Grow Act (2019)
- Provincial Policy Statement (2020)
- Ontario Traffic Manual Book 18: Cycling Facilities (2020 update)

Policy Considerations:

- Promote the use of active transportation and transit in and between residential, employment (including commercial and industrial) and institutional uses and other areas (s.1.8.1.b – Provincial Policy Statement).
- Transit and active transportation will be practical elements of our urban transportation systems (Places to Grow Act – Vision Statement).
- The transportation system within the Greater Golden Horseshoe (GGH) will be planned and managed to: offer a balance of transportation choices that reduces reliance upon the automobile and promotes transit and active transportation (Places to Grow Act - s.3.2.2.b).

- Municipalities will ensure that active transportation networks are comprehensive and integrated into transportation planning to provide:
    - Safe comfortable travel for pedestrians, bicyclists and other users of active transportation; and
    - Continuous linkages between strategic growth areas, adjacent neighbourhoods, major trip generators, and transit stations, including dedicated lane space for bicyclists on the major street network, or other safe and convenient alternatives (Places to Grow Act - s.3.2.3.4).
- Technical and legislative requirements are outlined in the Accessibility for Ontarians with Disabilities Act built environment guidelines and O.Reg.239/02.
- Minimum Maintenance Standards for Municipal Highways sets out the requirements that the Township is required to adhere to when designing AODA-compliant facilities and maintaining all highway facilities. Additional design guidance is provided in Ontario Traffic Manual Book 15 and 18, which provide direction on pedestrian crossing treatments and cycling facilities, respectively.

Regional Policies

Regional policies directly shape the planning, design, implementation and operation of active transportation facilities along regional roads. Durham Region has a number of existing policies that provide specific guidance on active transportation / cycling projects including the Regional Cycling Plan, 2021 (Draft) at the Durham Transportation Master Plan (2017).

Policies Reviewed:

- Region of Durham Official Plan (2020)
- Durham Transportation Master Plan (2017 TMP)
- Durham Regional Cycling Plan, 2021 (Draft) (2012 RCP and 2021 RCP)
- Durham Vision Zero Strategic Road Safety Action Plan (2020)
- Region of Durham Community Climate Adaptation Plan (2016)

Policy Considerations:

- Active transportation and transit routes will connect to urban growth centres, regional centres, and waterfronts (Regional Official Plan).
- Support for people-oriented and active transportation supportive urban areas (Regional Official Plan).
- Support to integrate land use and transportation planning (Durham TMP).
- Improve walking and cycling as a more practical and realistic travel mode by promoting sustainable travel choices (Durham TMP).
- Actions to reduce collisions and severity of cyclist collisions (Durham Vision Zero).
- Contemplates a program to develop a connected and balanced mobility system for all modes of transportation, with a priority on active transportation (Climate Change Local Action Plan).

Township Policies

The ATP will be influenced by policies at the municipal level such as the Township's Official Plan, Parks Master Plan, Strategic Plan and other planning documents. The Township's Official Plan provides the most guidance on future development, as it is a statutory document required under the Planning Act and the Provincial Policy Statement.

Policies Reviewed:

- Township of Uxbridge Development Charges Background Study (2014)
- Township of Uxbridge Official Plan (2014)
- Township of Uxbridge Parks Master Plan (2018)
- Township of Uxbridge Community Tourism Plan (2020)
- Township of Uxbridge Multi-Year Accessibility Plan (2020)

Policy Considerations:

- Provision shall be made for sidewalks on both sides of all arterial and collector roads, and on one side of all local roads, at a minimum (Uxbridge Official Plan).
- Bicycle movement shall generally be accommodated in the road right-of-way. Consideration shall be given to the inclusion of bicycle facilities in road rights-of-ways for new arterial and collector roads, and the addition of facilities for bicycles on existing arterial and collector roads when such roads are reconstructed or where it is financially feasible to do so. (Uxbridge Official Plan).
- The Township as the "Trail Capital of Canada" has developed an extensive, existing system of pedestrian/bicycle trails. The Township shall continue to work to expand this system over time, in particular, enhancing connections to the Downtown (Uxbridge Official Plan).
- The Township's Development Charges Background Study outlines the provision of all services that are eligible to receive funding from development charges including but not limited to parks, trails, sidewalks and transportation.
- The Parks Master Plan contains five recommendations related to trail development, and 5 five recommendations related to trail operations and maintenance. The recommendations are organized into three horizons: short term (1 to 5 years), medium term (6 to 10 years) and long term (11+ years).
- The Community Tourism Plan outlines the importance of cycle and trail tourism within Uxbridge and contains several objectives, actions and items to support the development and expansion of trail infrastructure and supportive features.
- The Multi-Year Accessibility Plan identifies a number of projects that are intended to enhance and create a *barrier-free environment for all persons, regardless of needs, to participate as fully as possible in all aspects of community life*. The Plan outlines notable accessibility initiatives completed since 2015 as well as proposed future initiatives to enhance accessibility throughout the Township.

1.1.1 Project Assumptions

It is critical to identify the expectations for this plan at the onset and clearly indicate what a master plan is intended to achieve, as well as what it is not. Master plans are long-range planning documents that provide a broad framework to help establish the needs and rationale for specific projects in the future for a municipality.

A master plan is not a commitment to projects, nor does it commit a municipality to future investments. The document is intended to recommend potential infrastructure improvements that address future growth and development for the area in study.

To clearly set the expectations for the ATP, the following assumptions should be reviewed and taken into consideration:

What the plan is:

- A long-range blueprint;
- A tool to facilitate implementation;
- A communications tool; and
- A guide for future policies.

What the plan is not:

- A schedule of capital projects;
- A feasibility study for specific projects;
- A prescriptive policy document; and
- A commitment to costs and funding.

This plan is meant to be a flexible and adaptable resource for Township staff and its partners. It is intended to be a guide for future decision making for the planning, design and development of active transportation infrastructure and supportive programs and policies. As such, any future changes to the Township's ATP should be reviewed and documented by staff in consultation with residents and stakeholders on an on-going, as needed basis.

1.1.2 Study Process

The ATP has been developed in two phases between June 2020 and March 2021. Each phase was informed by feedback collected from Township staff, Advisory Committees including the Township's AT Committee, Accessibility Advisory Committee and Trails Committee, as well as residents and decision makers to ensure the recommendations contained in this plan reflect the desired outcomes for active transportation in Uxbridge. An overview of each project phase is presented below.

Phase 1: Future Directions Strategies and Actions

Purpose	Tasks
Establish an understanding of the active transportation context within Uxbridge including opportunities, challenges, and trends.	– Assess Uxbridge's active transportation strengths, weaknesses, opportunities and threats. – Assess the demand and potential for active transportation in Uxbridge.

Phase 2: Future Directions Strategies and Actions

Purpose	Tasks
Establish recommendations that will be used beyond the lifespan of the master plan to help guide and inform future decision making including: a proposed network of active transportation routes / facilities; programing, outreach and education options; and an implementation strategy.	– Review existing conditions and identify missing links. – Identify an active transportation network including preferred facility types. – Develop an implementation strategy including phasing, priorities and costing estimates. – Establish educational, promotional and programming recommendations. – Draft and finalize the plan.

To complete the ATP, Phases 1 and 2 of the Municipal Class Environmental Assessment (MCEA) Process were completed. The MCEA Process is a guide for planners and engineers when undertaking major infrastructure and master planning projects. This process consists of five phases which are designed to engage the public, consider and assess alternative solutions, and costs and apply sound engineering judgment to develop the most appropriate solutions.

In addition, at least one point of contact with the public must be undertaken to complete Phases 1 and 2 of the MCEA Process. Development of the ATP included multiple opportunities for public and stakeholder engagement. An overview of the key consultation milestones and the input received over the course of the study are provided in the following section.

1.1.3 Consultation and Engagement

A key component of developing the ATP was to understand public interest and the future aspirations for what this plan could be, and how it could help shape the future of active transportation in Uxbridge. To harness public support and feedback, a number of engagement activities were undertaken to provide meaningful opportunities for stakeholders, residents and staff to engage during the study process.

Consultation activities were undertaken throughout the study to represent the Township's commitment to those currently involved in the planning process and those who could have a role in future stages of the process. This was meant to ensure that their input and interests would be reflected in a strategy to improve active transportation infrastructure, policies and initiatives throughout Uxbridge. An overview of the consultation events and activities that were undertaken is provided below.

Stakeholder Interviews

Date: July 2020
Purpose: One-on-one interviews with key stakeholders were undertaken to better understand existing conditions and to develop a foundation for the recommendations for programs and policies relating to active transportation.
Participation: 8 interviews with 11 stakeholders
Outcomes: An overview of the active transportation strengths, weaknesses, opportunities and threats – see section 1.2.1 for details.

Online Interactive Survey

Date: July 24 to September 1, 2020
Purpose: To gather input on key issues related to active transportation within the Township and to provide an interactive mapping tool that allowed people to identify important linkages and routes within the Township.
Participation: 140 participants and over 2000 data points / comments
Outcomes: Summarized below

Committee Workshops

Date: August 6, 2020 – Trails Committee Workshop
August 11, 2020 – Active Transportation Committee Workshop
August 17, 2020 – Accessibility Advisory Committee Workshop
Purpose: To develop a better understanding of existing conditions for active transportation in Uxbridge, present the results of the Stakeholder Interviews and outcomes and collect information on potential candidate active transportation routes to be explored as part of the study process.
Participation: 3 separate working meetings with the Township's Advisory Committees: Trails Committee, Active Transportation Committee, and the Accessibility Advisory Committee
Outcomes: Summarized below

Combined Committee Workshop

Date: September 22, 2020
Purpose: To present the draft active transportation network and gather feedback on prioritization of different route improvements as well as potential projects for education, encouragement and outreach related to active transportation in Uxbridge.
Participation: Representatives from the Township's Trails Committee, Active Transportation Committee, and the Accessibility Advisory Committee.
Outcomes: Summary provided below.

External Stakeholder Workshop

Date: November 5, 2020
Purpose: To present the draft active transportation network and gather feedback on potential projects for education, encouragement and outreach related to active transportation in Uxbridge.
Participation: Meeting materials were provided to stakeholders for review and commentary and uploaded on the Township's website (here)

Combined Committee Workshop

Date: March 2, 2021
Purpose: To present the draft Active Transportation Plan and solicit feedback as the plan moves towards public comment and finalization.
Participation: Representatives from the Township's Trails Committee, Active Transportation Committee, and the Accessibility Advisory Committee.
Outcomes: Suggested edits and revisions to the draft plan.

Virtual Public Open House

Date: March 18, 2021
Purpose: To present the draft Active Transportation Plan, solicit feedback as the plan moves towards finalization and demonstrate how the plan has been informed / shaped by input received over the course of the study.
Participation: 24 people attended the virtual meeting including the Township's CAO, 3 councillor and the Mayor.
Outcomes: Suggested edits and revisions to the draft plan.

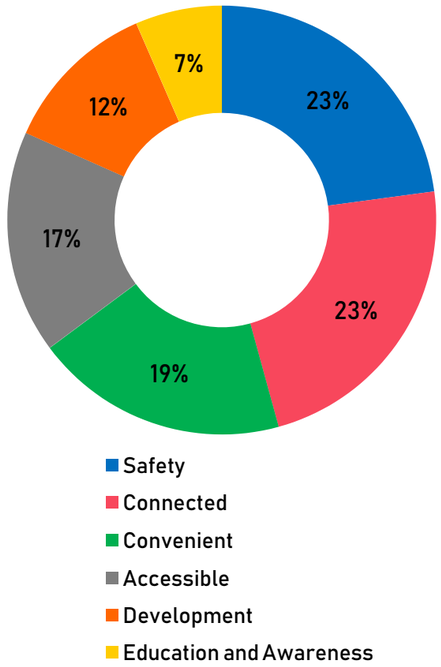
In addition to public and stakeholder consultation, a number of meetings were held with the Township's project team to discuss work completed to date, study findings, upcoming milestones and next steps. The input, feedback and comments received over the course of the study were used to not only inform the study process, but also to ensure that the recommendations contained within this plan are specific to the Township and reflect the community's interests.

The following graphics provide a summary of some of the input that was received through these consultation activities. Appendix A provides additional details on all materials that were presented at each consultation event / activity.

Online Survey Results – Activity #1

People were asked to identify the principles they thought were most important when selecting routes for the ATP.

The results for Activity #1 are summarized below:



What does this tell us?

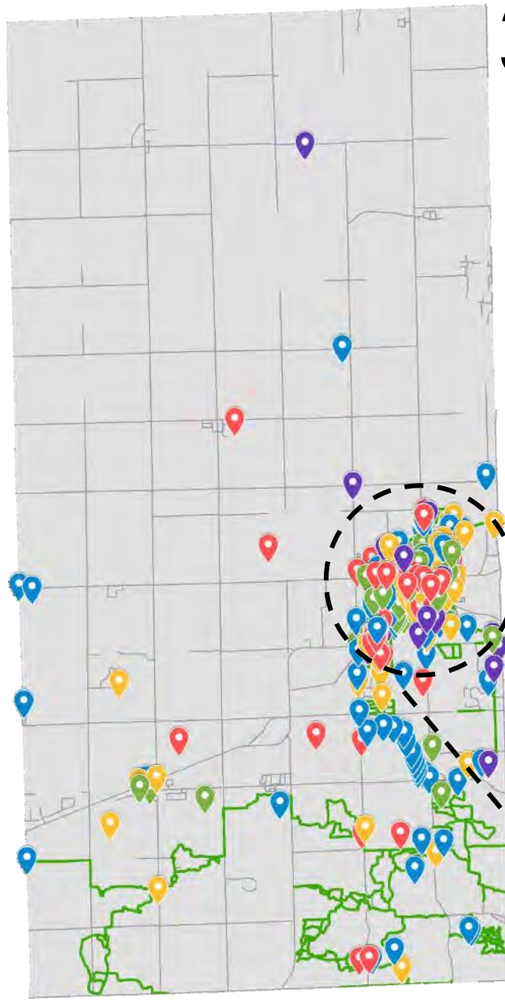
When identifying an active transportation network for Uxbridge, consideration should be given to routes that:

- Improve a user's sense of safety and ultimately makes them feel more comfortable to walk, bike and user other non-motorized forms of travel.
- Connect to where people live and where they want to go,
- Are a convenient and realistic option for people to use for travel or recreation.

Online Survey Results – Activity #2

People were asked to use pins to identify their favourite destinations, walking and cycling barriers and new routes that could be explored as part of the plan to form part of a preferred active transportation network for Uxbridge.

The results for Activity #2 are summarized below:



337 pins were placed a sample of the input:

Destinations:
Swimming pool, Farmers Market, Fields of Uxbridge, downtown area and shops, Second Wedge, Elgin Park, schools

Barriers:
Missing links to / from existing trails, lack of trail crossings, missing sidewalk connections, truck traffic, narrow roads

Bike Routes:
Wagg Road, Maple Bridge Trail, connections to Regional Forests, York-Durham Line, Ashworth Road

Walking Routes:
Elgin Park, to / from schools and shops, trails in Countryside Preserve

Other Comments:
Need walking and cycling improvements beyond the downtown area, need more parking, improve trail conditions, and crossings

Online Survey Results – Activity #3

The last activity consisted of a survey to collect information on user interests, habits and preferences for the ATP.

The results for Activity #3 are summarized below:

Most people identified as the following users:

37%
Pedestrians

22%
Cyclists

Most people engage in active transportation for:

- **22%** recreation and leisure purposes
- **19%** health and fitness reasons

What would encourage more people to be active:

- **22%** a connected Township-wide active transportation network
- **19%** more infrastructure / facilities such as paved shoulders
- **14%** better connections to key destinations within the Township

People identified these 3 priorities for the plan:

1. Provide opportunities for people to walk, bike and be more active (27%)
2. Improve the quality of life and health of residents (20%)
3. Improve biking and walking as a viable transportation option (15%)

Figure 1 - Summary of Input from Online Survey

1

Committee Workshops

Representatives from the Township's Advisory Committees were asked to provide their feedback on active transportation infrastructure including: missing gaps that should be explored through the study and destinations that should be connected to. A sample of the feedback received from the Township's Advisory Committees is provided below.

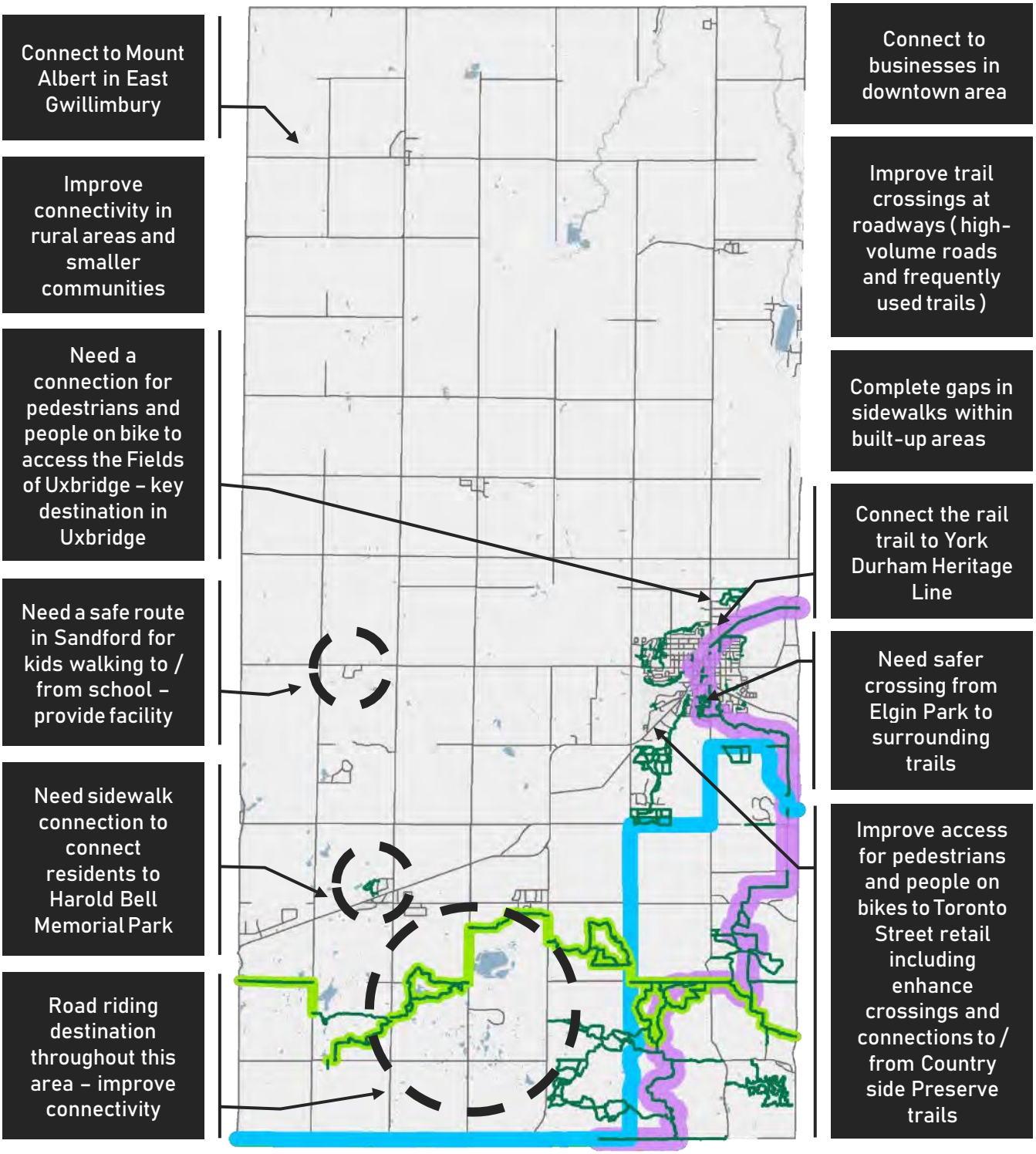


Figure 2 - Summary of Input from Committee Workshops

1.2 Active Transportation Context

It is important to establish the context for active transportation in Uxbridge – the framework from which this plan builds upon, including but not limited to: opportunities; challenges; trends; and infrastructure. The following sections provide an overview of the various components that lay the foundation for this plan – the active transportation context in Uxbridge.

1.2.1 Opportunities and Challenges

Prior to the identification of recommendations or strategies, an assessment of the plan's potential was undertaken. The assessment was a critical initial step in the study process to identify internal and external factors that could directly influence the success (and potential impacts) of implementing the ATP.

The findings from this assessment have been compiled into a SWOT analysis, which takes into account strengths, weaknesses, opportunities and threats. A SWOT analysis for active transportation includes[4]:

Strengths	Weaknesses
– The community's strongest resources in terms of active transportation (e.g. existing infrastructure, compact neighbourhoods, etc.)	– The community's biggest weaknesses and problems in terms of active transportation (e.g. lack of awareness for benefits, sprawling communities, etc.)
Opportunities	**Threats**
– External opportunities that are available to maximize, enhance or support active transportation (e.g. funding, planned development, etc.)	– External threats that could impact the viability of identified opportunities (e.g. government funding cuts, limited staff, etc.)

The SWOT analysis serves as a needs assessment to understand the active transportation context in Uxbridge, and in-turn, develop recommendations that can position the Township for success. As such, the SWOT analysis was undertaken at the beginning of the study process to understand the internal and external factors that have a direct impact on active transportation.

To inform the SWOT analysis, a series of in-depth interviews were undertaken with key stakeholders who play a role in enhancing active transportation in Uxbridge. This included 8 interviews with 11 stakeholders. Questions were posed in the same order for each group of stakeholders and the results were compiled to highlight the strengths, weaknesses, opportunities and threats related to the implementation of active transportation infrastructure and programming.

Following the interviews, the results of the SWOT analysis were presented to the Township's Trails Committee, Active Transportation Committee and Accessibility Advisory Committee for further review, comment and refinement.

[4] https://data.fcm.ca/documents/tools/GMF/Transport_Canada/ActiveTranspoGuide_EN.pdf

Part 1: Stakeholder Interviews

Interviews were conducted using Zoom Teleconferencing Software and recorded to allow for additional accuracy when transcribing each session. Each interview followed the same format, with the following questions being posed to all interviewees, in order:

- What is the biggest strength Uxbridge currently has with relation to active transportation? What is the biggest weakness?
- Thinking of the biggest strength, how can the ATP help the Township to build on that success?
- Thinking of the biggest weakness, what should the ATP include to help to address that?
- What do you think the single most important priority is for the ATP to address? How can the plan best address that issue?
- What stakeholders are currently playing a role in improving active transportation within the Township? What groups are not represented that should be?
- When you think about a community that is successful in implementing new active transportation infrastructure or programs, what community comes to mind? What lessons can Uxbridge learn from that community?
- What has been Uxbridge's most significant success in terms of active transportation in the past 5 years?
- What has been its most significant failure?
- What types of programs already exist to either educate or encourage residents about using active transportation in Uxbridge?
- What types of education programs would you like to see in Uxbridge moving forward?
- What types of encouragement programs would you like to see in Uxbridge moving forward?
- Is there anything else you would like to add?

Part 2: Best Practices Interviews

In addition to the interviews with key stakeholders in Uxbridge, additional stakeholders from other communities were also interviewed regarding best practices and experiences that could be shared with Uxbridge. These interviews were focused on:

- Suggestions for how a smaller community can become more bicycle friendly through policy and programs;
- Programs and policies that have proven to be successful and impactful;
- Challenges encountered when delivering new programs; and
- Partnerships and relationships with external stakeholders and other levels of government that were important for implementation and success.

Best practice interviews with community stakeholders in The Town of Collingwood, The Town of Saugeen Shores and The Town of Ingersoll all served to inform the suggested programs outlined in section 3.

The following is a summary of the input received from the in-depth interviews on the Township's active transportation strengths, weaknesses, opportunities and threats, as priorities that were identified by stakeholders.

Priorities for the plan

When asked about the priorities for the future of active transportation in Uxbridge, Stakeholder comments largely aligned with the sentiments of other stakeholders. Every interviewee expressed the importance of safety and connectivity when it comes to cycling and walking infrastructure in order to enhance active transportation in Uxbridge. Closing gaps in the existing network, prioritizing projects that connect to popular destinations and creating more spaces for people of all ages and abilities to walk were the focus of the priorities expressed, which were confirmed by the workshop attendees in later stages of the engagement strategy.

Stakeholders reiterated the importance of safe cycling infrastructure designed to make all riders – but especially new riders and children – feel safe and welcome riding their bikes. They also communicated a desire to see Uxbridge focus on providing active transportation routes all year round, especially for seniors and people with mobility impairments. In short, stakeholders realized that the most vulnerable populations in Uxbridge – children, seniors, people with disabilities – are the ones that are in the most need of safe, connected active transportation infrastructure, and the safe mobility for those populations emerged as a consensus priority during the engagement process.

Another important theme that emerged throughout the engagement process was the importance of capitalizing on cycling and trails related tourism within Uxbridge. Popular mountain biking trails and hiking trails were repeatedly mentioned by stakeholders as key draws for visitors to come to Uxbridge, but the lack of trail connectivity and safe routes to get into the commercial areas means that many visitors are coming, making use of the trails, and then going home. By providing safer and more convenient ways for people to get from these popular destinations like the trails at Durham Forest, stakeholders felt that the Township could see stronger tourism investment stemming from its extensive trails network.

The overall recognition among stakeholders was that making active transportation better for visitors also makes active transportation better for residents. Visitors and residents alike have a desire to access many of the same places and amenities, so building a community where residents can access the amenities like restaurants, trails and shops means that visitors will have a similar level of access to those amenities when they are staying in, or passing through, the Township.

Strengths

Throughout the interview process, a number of key strengths emerged within the Township. Above all, these strengths reflect the existence of a strong foundation upon which the Township can build an even stronger culture of active transportation.

- Trails and existing physical infrastructure: Recognized by virtually every stakeholder group, the Township's existing trails were seen as a major benefit to the community. Uxbridge's trails provide residents and visitors alike opportunities to experience nature, travel safely between neighbourhoods and connect to broader provincial and national trails networks. Attendees also identified a growing interest, particularly among young families, in getting more active on the trails. Overall, the foundational role that these existing and planned infrastructure investments will play moving forward was well regarded by stakeholders.
- Active and engaged sport cycling and volunteer community: The Uxbridge Cycling Club, the Durham Mountain Bike Association and the existence of three active, engaged advisory committees (Active Transportation, Trails and Accessibility) all highlight the community's strong culture of activity and volunteerism. Trails have been constructed and maintained by volunteer Trail Captains, community organizations have spearheaded community events focused on cycling and trails, and local businesses have stepped up as champions of cycling and walking. The presence of these supports ensures that Uxbridge's Active Transportation Plan can move forward in a manner that doesn't rely solely on support from Township staff, and in a way that garners strong community consensus.
- Relatively compact, walkable geography: particularly within the Township itself, stakeholders highlighted that the community is quite walkable due to its compact layout and good availability of sidewalks and trails to connect the community. Nearly every trip in the Township is under 3km in length, and many popular destinations are under 1km in distance from most residents. With this compact urban form, walking and cycling could be much more common in Uxbridge for daily trips.

Weaknesses

Throughout the interview process, a number of key strengths emerged within the While the interviewees identified many positive aspects, the purpose of the interviews was to intentionally uncover some of the weaknesses and areas of opportunity for improvement. With regards to weaknesses, a few key areas emerged as common themes as the interviews progressed.

- Physical Infrastructure Gaps: Most interviewees highlighted the lack of safe, connected and consistent walking and cycling routes through the community as a barrier to getting more people using active transportation. Stakeholders identified the challenges associated with many of the regional roads in Uxbridge in limiting access to key destinations for people using active modes of transportation, in particular the way that regional roads provide the only route to places like the Fields of Uxbridge and the Commercial area at the southwest edge of the Township. Stakeholders also identified gaps in sidewalks and the absence of crosswalks throughout the community as weaknesses in the Township's active transportation network. Safe infrastructure ends right before you get to your final destination". Addressing these gaps will be key to creating a walking, cycling and wheeling network that feels safe and comfortable to all road users into the future.
- Bike Parking: Stakeholders repeatedly mentioned that finding a safe, secure spot to lock a bike within Uxbridge was a challenge, particularly in the downtown area and the commercial area in the southwest corner of the Township.
- Trail Connectivity: Related to the point above, stakeholders noted that many of the trails don't have the level of utility that they could have in terms of serving as an active transportation corridor because they lack connectivity to key destinations. Part of this stems from the distinction that appears to be made to view Trails almost exclusively as a recreational asset. Multi-use trails, particularly the types of trails that are wide, provide a good surface for walking, wheeling or cycling, and connect to other active transportation infrastructure, can be a key component of an all-ages and abilities active transportation network, and many of Uxbridge's trails have the potential to serve that role if they are connected to on-road cycling and walking routes.
- Education and role modeling: A key weakness identified by several stakeholders was the lack of education about how to ride a bike safely and legally in the community, whether on the roads or on the trails. While the work that was started through the Active School Travel project was beginning to address those concerns, the current lack of cycling education means that many residents still don't have a good understanding of the rights and responsibilities of a bike on the roads.

- Public Awareness Campaigns: Related to the lack of cycling education was a lack of messaging about important aspects of cycling and active transportation. Creating messages about sharing the road with people on bikes, about the role of various trail users and about the rights and responsibilities of various road users that can be shared across various traditional and social media platforms was something that many stakeholders expressed a desire to see in Uxbridge.
- Winter access: Snow clearing is a major challenge for communities wanting to expand the availability and safety of walking and cycling year-round, and creates significant barriers to accessibility as well. Stakeholders noted that the lack of snow clearing in the winter on sidewalks and trails causes variable and icy conditions, and creates specific challenges for people who use mobility devices.
- Trailhead access: Stakeholders noted that many of the trailhead parking lots have not grown to keep pace with the popularity of the trails, and nor have the amenities needed at those places. Washrooms, water fill stations, benches and more could be integrated into planning processes as new parking lots are developed to allow more access to the Township's trails.

Opportunities

The list of potential opportunities presented by the interviewees was long and varied. The project team analyzed the list of suggestions and has grouped those suggestions into three categories as they relate to programming potential: expanding outreach and capacity; enhancing data collection; and strengthening policies. Each of these areas of opportunity have a number of suggested programs or policies associated with them, which will be explored in section 3. Opportunities related to infrastructure development to support walking, cycling and wheeling are captured in section 2 of this plan.

Threats

While the opportunities for improvement are numerous and exciting, there are several threats that could substantially hinder the Township's ability to deliver on the stated goals of this Plan. These threats are outlined below.

- Regional Roads: To create a direct, connected network of active transportation infrastructure, the Township of Uxbridge relies on the cooperation of the Region of Durham. The numerous regional roads that form the key transportation corridors within Uxbridge present major barriers to active mobility, and the development of safe walking, cycling and wheeling infrastructure on these corridors will require additional support from the Region.
- Durham Region Public Health: In many communities, Public Health agencies play a pivotal role in advancing active transportation priorities. From health promotion to injury prevention to policy analysis, many public health units across Ontario provide assistance to communities looking to expand their active transportation networks and programming. In Durham Region, Durham Region Public Health has not been as actively engaged in supporting and promoting active transportation as some of the other health units in the GTHA. Adding to this challenge is the uncertain capacity for public health units all across the province in the wake of the COVID-19 pandemic, so Uxbridge and its neighbours in Durham Region may be unable to rely on their public health unit for support in the future.
- Land ownership challenges: Stakeholders noted that many of the trails in Uxbridge rely on landowner agreements for access. Varying levels of ownership, including the LSRCA, TRCA, Region of Durham, Township and private landowners creates a patchwork of ownership, which can make it challenging to plan for continued access to some of the trails that make up the Township's network.
- Active School Travel Funding: The work that was started by the receipt of the Ontario Active School Travel Funding support in Durham Region ended in mid-2020. The arrival of the COVID-19 pandemic in early 2020 meant that many of the actions that emerged from the initial analysis of conditions around schools in Uxbridge have not yet been implemented.

1.2.2 Community Trends

Travel patterns and user preferences were reviewed to develop a better understanding of the conditions, influences and trends within Uxbridge. Establishing an understanding of community trends ensures that the content in this plan is specific to Uxbridge and reflects where people are going, how people are getting around and potential areas that would benefit most from investment in active transportation

Community trends in Uxbridge were assessed using the following data sources:

1. Census Data

The 2016 Census Data from Statistics Canada asked respondents to provide information on their age, marital status, language, education, labour, mobility, income and housing. The results establish profiles for municipalities and regions across Canada.

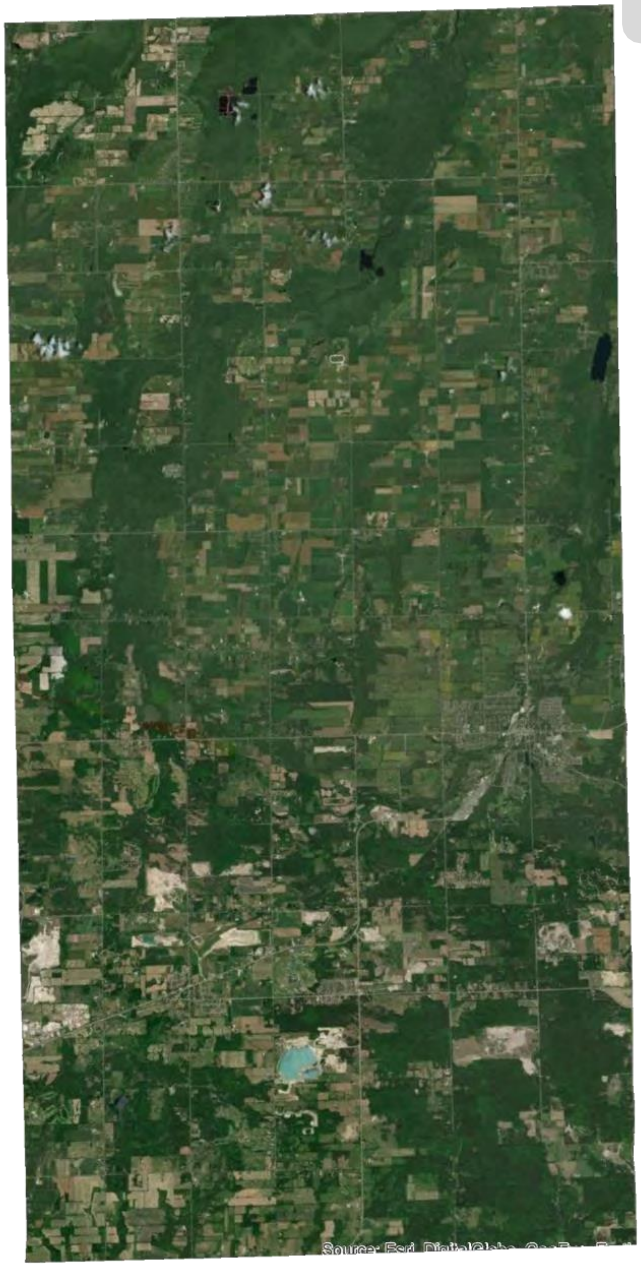
2. Transportation Tomorrow Survey 2016

The Transportation Tomorrow Survey (TTS) survey is conducted every 5 years to collect information on travel trends in southern Ontario. TTS data topics include: trip purpose, mode of travel, median trip length and time period travelled.

3. Strava

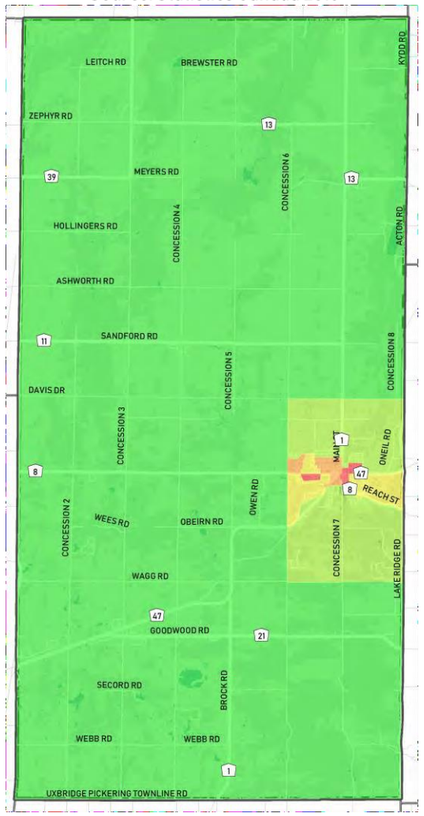
Strava is a website and mobile application, that allows users to track their activity using GPS technologies. Using the data collected, a spatial representation is generated (also referred to as heat mapping) based on volume and frequency of routes travelled. Strava is a voluntary tool that is typically marketed and used by those who are engaging in active forms of travel and recreation for fitness purposes and / or long-distance touring trips. As such, Strava is only meant to be used as a supplementary piece of information with other tools and datasets to understand user habit and preferences for people of all ages, abilities and interests

Key findings that illustrate the Town's community profile and current trends are illustrated on the following two pages.



Population Density

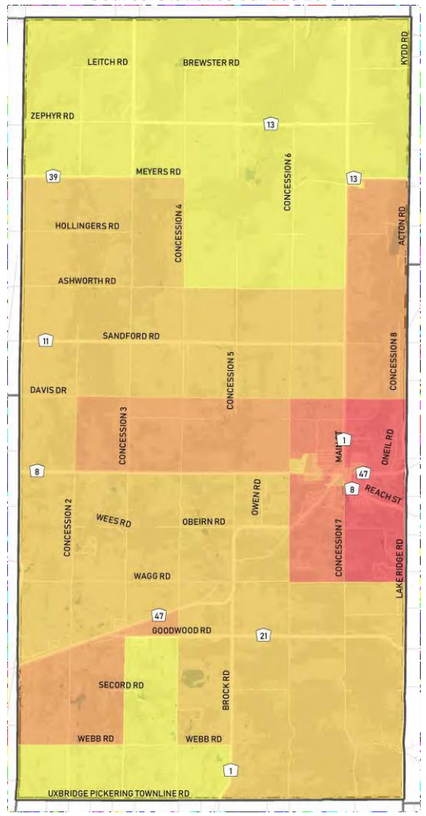
Source: Statistics Canada 2016



Understanding population trends is an important consideration when assessing existing conditions and to better understand where future investments in active transportation could have the biggest benefit to the community and its residents. Most of the Township has a low population density, with the highest concentration of people within and surrounding the built-up area of Uxbridge.

People with a commute time of 15 minutes or less

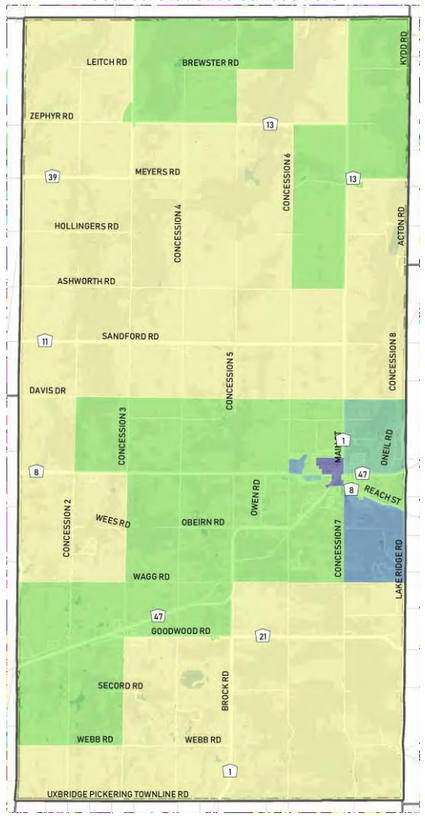
Source: Statistics Canada 2016



Commuting is an important statistic to better understand the potential for improving active transportation usage. The rationale being that a commute under 15 minutes could be a trip that is realistic and possible by bike or foot. The greatest proportion of people with short commute times are within the urban area - this can be attributed to the compact geography of the area making it more conducive to walking / biking for residents.

Active transportation mode share

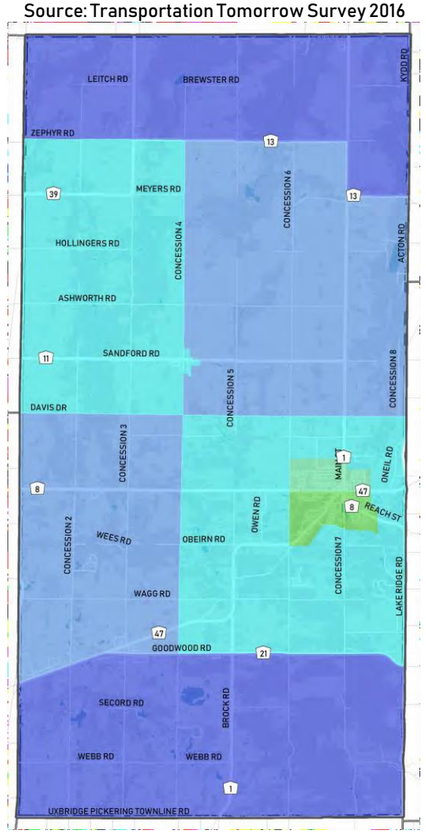
Source: Statistics Canada 2016



Active transportation for the purpose of commuting represents a comparatively small percentage of commuters. Focusing on improving commuter routes within these areas, and areas that have a moderate "active transportation potential" (see figure to the right) may encourage more people to engage in more forms of active transportation as their primary mode of travel, and where possible / convenient, seek opportunities for multi-modal travel.

Trips under 5 kilometres that are not cycled or walked

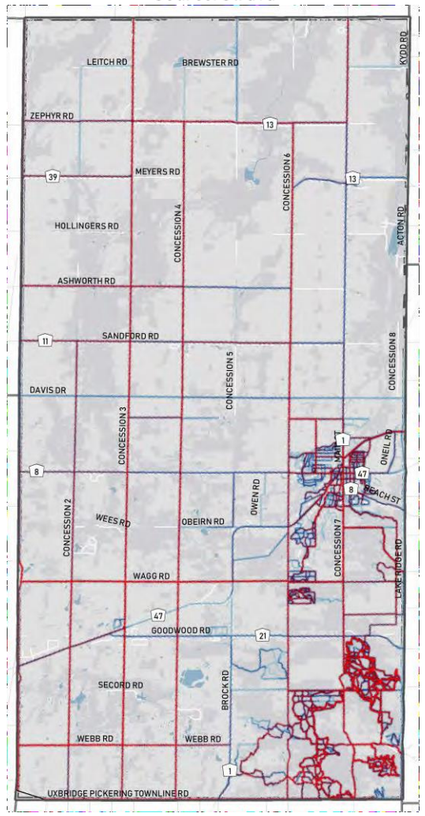
Source: Transportation Tomorrow Survey 2016



Supporting existing users as well as appealing to potential new users is critical to developing an active transportation network. Investing in areas that have a high proportion of short-distance trips that are currently not taken by walking and / or biking, could incite more people to engage in active forms of travel.

Frequently used routes by cyclists and pedestrians

Source: Strava



Strava data was analyzed to identify routes that are popular among active transportation users. Frequently used routes include trails on conservation lands (Glen Major, Walker Woods), Oak Ridge Trails, Trans Canada Trail and connections within the urban area of Uxbridge. It is important to note that Strava is a voluntary tool and typically used by specific users (this does not reflect all people walking, hiking, biking, etc. in the Township.

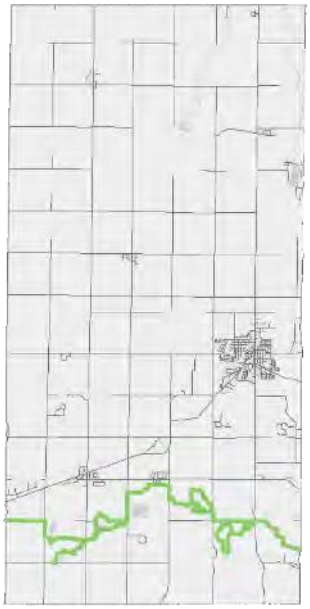
1.2.3 Existing Infrastructure

There are over 300 kilometres of existing trails in Uxbridge, many of which form part of regionally and provincially significant trail / routes systems. The systems provide connectivity throughout the Township but also provide an opportunity for people to connect to communities within Durham Region and beyond. A summary of the existing trail / routes systems found within Uxbridge is provided below. Specific details on existing facility types is provided in section 2.

Oak Ridges Trail

The Oak Ridges trail is approximately 275 kilometres in length and has varying surface types including asphalt, grass / natural, gravel and compacted soil. The trail is located along the Oak Ridges Moraine, a distinct and ridge of hilly terrain that stretches from the Niagara Escarpment in the west to the hills of the headwaters on Trent River in the east.

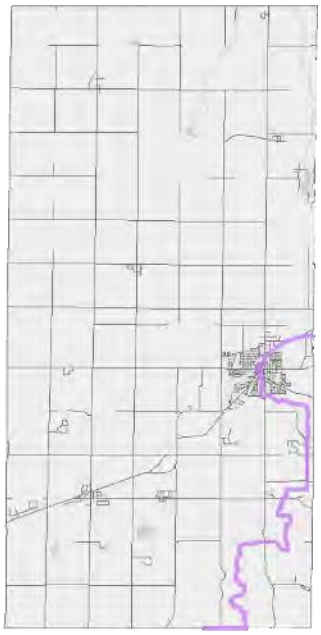
Permitted activities along Oak Ridges Trail include cycling, hiking, horseback riding, mountain biking, snowshoeing, walking / running, hiking and cross-country skiing.



Trans Canada Trail

The Trans Canada Trail is a 24,000-kilometre trail system that stretches across Canada. The trail is approximately 20 kilometres in length in Uxbridge and passes through a number of significant areas including Walker Woods, Glen Major and regional forest tracts.

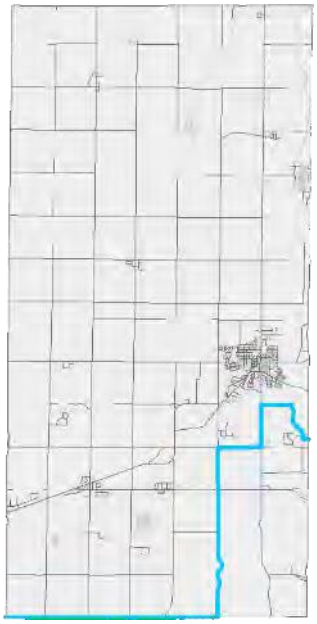
Permitted activities along the Trans Canada Trail in Uxbridge include walking / hiking, road cycling, horseback riding, cross-country skiing, snowmobiling, and mountain biking. Surface type along the trail also varies: natural trail, gravel trail, paved trail, gravel road, paved road.



Greenbelt Cycling Route

The Greenbelt Cycling Route is a 475-kilometre route that connects over 20 municipalities in southern Ontario and is aligned along the Oak Ridges Moraine and the Niagara Escarpment. Within the Township of Uxbridge, the Greenbelt Cycling Route is approximately 25 kilometres in length.

The Greenbelt Cycling Route consists on on-road segments within the Township. Roads that form the Greenbelt Cycling Route include: Uxbridge Pickering Townline Road; Concession 6, Wagg Road, Concession 7 and Brookdale Road .



MTO Province-wide Cycling Network

The Province-wide Cycling Network is the outcome of the #CycleON Ontario's Cycling Strategy: a guide to enhance cycling as a viable mode of transportation over the next 20 years in Ontario. The Province-wide Cycling Network is meant to guide the future of cycling infrastructure decisions with the goal of establishing a connected and consistent network through partnerships with the Provincial staff, municipal partners and external agencies.

Within the Township of Uxbridge, the Province-wide Cycling Network includes part of the Trans Canada Trail, the Greenbelt Cycling Route and the Oak Ridges Trail.

Collectively, these regional trail systems provide a base of routes that already form part an extensive active transportation network in Uxbridge – this plan is not intended to "reinvent the wheel", but rather build upon these existing routes to enhance opportunities for active travel and leverage the Township's existing assets.

1.3 Guiding Principles

This plan is intended to align with the Township's existing policies and specifically the vision, strategic directions, goals and objectives established through the Official Plan. Official Plans are statutory documents (as noted in section 1.1) and developed through rigorous engagement with municipal staff, stakeholders and residents to ensure future planning and development is coordinated, that it meets the needs of a community, that future municipal by-laws reflect local regulations, and ultimately it demonstrates Council's commitment to future growth within the community.

TOWNSHIP OF UXBRIDGE OFFICIAL PLAN VISION STATEMENT

Uxbridge Township - A Rural Ontario Treasure
Uxbridge Township is a vibrant, caring community that will protect and enhance:

i) the beauty and tranquillity of its rural setting through managed growth;
ii) the local natural environment;
iii) the close-knit lifestyle of a small historic town and hamlets;
iv) the local economy, both urban and rural; and,
v) the social, cultural, recreational and health programs.

The following table outlines the future aspirations for the Township including the strategic directions, goals and related objectives as noted in the Official Plan, and how the ATP will help to achieve these. This plan is not intended to establish a new or separate vision – it is intentionally designed to help achieve the Township's vision as noted in the Official Plan (see above).

Table 1 - Official Plan Strategic Directions, Goals and Objectives

Township of Uxbridge Official Plan – Table 1.1 Strategic Direction, Goals and Objectives			How can the ATP help achieve the Official Plan's Strategic Directions, Goals and Objectives
Strategic Direction	Goals	Related Objectives	
1. The Future of Uxbridge's Downtown	1. To establish the Downtown as the social, business and retail centre of the community.	1.1 To maintain existing and attract new retail and commercial activities to the Downtown. 1.2 To create an environment in the Downtown that is attractive to residents and visitors.	– Identify connections to the downtown area that are accessible by foot and bike for residents and visitors. – Establish recommendations that support the Township's efforts to enhance the public realm and in-turn, benefit economic development along this corridor.
2. Uxbridge's Economy Now and in the Future	2. To ensure the health of the Township's local economy by supporting its business and tourism sectors.	2.1 To support the agricultural and aggregate industries and the expansion of farm - related businesses in the Township. 2.2 To encourage self-reliance, entrepreneurship and growth of the small business sector. 2.3 To promote increased tourism, building on the Township's assets and heritage.	– Leverage the Township's existing tourism assets including the Oak Ridges Trail, the Trans Canada Trail and the Greenbelt Cycling Route but enhancing connections to / from, and establishing recommendations that can help to grow cycling tourism within Uxbridge.
3. Managing Growth for Sustainable Development	3. To manage the growth of the community in a sustainable manner that balances environmental protection, the preferred lifestyle of residents, and economic viability.	3.1 To guide and direct the location, type and amount of future residential and commercial development. 3.2 To give consideration to the costs and benefits of the physical infrastructure provided to support growth. 3.3 To encourage an appropriate mix of residential, commercial and industrial development to maintain a viable tax base while protecting the rural and small town character of the community.	– Provide recommendations related to planning policy and development charges, specifically for the provision of active transportation as it relates to eligible services. – Develop cost estimates and a recommended phasing strategy to guide realistic and fiscally responsible implementation.
4. Environmental Protection	4. To protect, enhance and restore natural resources in Uxbridge Township in a manner that contributes to the community's quality of life, identity and economy.	4.1 To protect the quality of surface and ground water in the community. 4.2 To preserve and protect the Oak Ridges Moraine and Natural Heritage System established by the Greenbelt Plan. 4.3 To preserve and promote unique environmental attributes of the community in a manner that contributes to recreational and tourism opportunities.	– Establish recommendations that encourage more people to walk, bike and use non-motorized forms of travel. – Enhance active transportation connections to key trail systems that can improve the recreational and tourism opportunities within Uxbridge.
5. Community Services to Support Quality of Life	5. To maintain and enhance where possible community services to support a high quality of life for Township residents	To work with the Province and other levels of government to maintain and support health and social services to meet the changing needs of residents.	– Identify an active transportation network that is equitable, accessible and can be used by people of all ages and abilities.

1

Chapter 2 Network & Design

Providing a connected and accessible network of active transportation routes and facilities is critical to encourage more people to walk, bike and engages in other forms of active travel and recreation within Uxbridge. A network should be equitable, a visible component of a municipality's transportation system, accessible to people of all ages and abilities, and connected to other municipal destinations and recreational facilities.

With over 300 kilometres of existing trails and being the *Trail Capital of Canada*, a preferred active transportation network for the Township is intended to build upon these existing conditions to further enhance opportunities that make everyday walking and biking easier in Uxbridge. The information provided in the following sections outlines a network of preferred routes and facility types that have been refined through extensive consultation with Township staff, Advisory Committees, stakeholder and residents and reflect current design standards as well as planning and engineering best practices.

The proposed active transportation network identified in this section is not intended to be prescriptive. It is intended to be used by Township staff and its partners to guide future decision making and as new opportunities arise. The proposed active transportation network is meant to be flexible and adapt to new routes and modifications that are identified as Township staff move from the planning and design stages through to construction.

2.1 Developing the Network

The process used to develop the preferred active transportation network consisted of nine steps. The process was iterative and informed by input collected from Township staff, Advisory Committees, stakeholders and members of the public. An overview of the network development process is provided below:

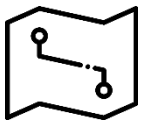
1. Assess and Map Existing Conditions

Using information gathered from the Township and Region, a database of spatial information (geographic information systems – GIS) was developed. The database included information on existing routes and trails as well as land use information, transportation information and other municipal features. The database also includes routes that are proposed as part of the Region's Regional Cycling Plan, 2021 (Draft) and specifically routes identified as part of the Region's Primary Cycling Network that are located in Uxbridge. Section 2.2.1. provide additional information on the Region's Primary Cycling Network, and specifically the routes that are located in Uxbridge.

The data collected as part of this first step was used to map all existing active transportation routes in Uxbridge. The GIS database was updated on an on-going basis to reflect the iterative approach of the network development process.

2. Consultation

Information gathered from the online survey and the three Advisory Committees meetings was used to refine the existing network and inform user needs, preferences and potential new active transportation routes to be explored through the study. Information gathered on potential new routes was used to inform the following step.



3. Identify and Map Candidate Routes

Candidate routes were identified by applying planning principles identified in current design standards and input received from Township staff, results of the online survey and feedback from the Advisory Committees. As part of this step, a preliminary recommendation was established for the suggested facility types of all candidate routes based on an initial scan of anticipated traffic volumes, posted speed, roadway characteristics and the surrounding land-use context.

In addition to the proposed candidate routes, a number of locations were identified for consideration to enhance the crossing of an existing and / or proposed route at a roadway. These proposed crossing enhancements were identified based on feedback received as well as observations gathered from an initial review of existing conditions (completed as part of step 1). In total, there are six locations where a proposed crossing enhancement has been identified. Additional information on the proposed crossing enhancements is provided in section 2.2.2.

All the potential candidate routes and proposed crossing enhancement locations were mapped and provided to Township staff for review and input.

4. Consultation

All candidate routes (and the preliminary recommendations for facility types) were presented at the Combined Advisory Committee meeting. Attendees were asked to provide their input on:

- Additional candidate routes that should be explored;
- The proposed facility types and / or location of routes; and
- Routes / projects that should be prioritized in the short term.

The feedback that was gathered from the Combined Advisory Committee meeting was used to further refine the draft candidate active transportation network.

5. . Network Assessment

High-resolution aerial imagery and GIS data including parcel fabric was used to investigate potential candidate routes and locations where proposed crossings enhancements were identified. Route conditions that were assessed include but were not limited to: existing curb-to-curb width on roadways; roadway platform and road right-of-way; on-street parking; existing utilities and other physical constraints; surrounding land use; connections to key destinations and existing trails; and sightline observations (safety). Due to COVID-19 restrictions, select in-person field checks were undertaken by one staff on the project team to confirm existing conditions at specific locations.

As part of a master planning exercise, a high-level assessment was completed of the proposed active transportation network. This assessment could require more detailed review and confirmation as part of the design and implementation process for individual routes, which in some cases / locations could involve additional detailed investigations, studies and feasibility analysis to confirm routing and detailed design. The information gathered during this step was used to refine and confirm the preferred active transportation network (see step 6).

6. . Recommend and Map the Preferred Facility Types

The selection of routes to form part of the preferred active transportation network was informed by the findings from steps 1 to 4 and sound planning and engineering judgement. Once the routes were confirmed, principles of facility selection from Ontario Traffic Manual (OTM) Book 18: Cycling Facilities, were applied to identify the most appropriate facility type for each route.

Though the active transportation network is not intended to be prescriptive, the OTM Book 18 principles of facility selection provide a consistent and straight-forward framework that can be applied by practitioners to determine the suitability of a facility type and specific roadway as part of future decision-making. Additional information on the OTM Book 18 facility selection principles, is contained in section 2.3.1.

The preferred active transportation network and facility types were mapped and provided to Township staff for review and input.

7

Develop and Map a Draft Phasing Plan

A phasing plan for short term (2021 to 2029) and long term (2030+) projects was developed for staged implementation of the preferred active transportation network. Within the short-term horizon, five priority projects were recommended to draw specific attention to key / important linkages identified throughout the course of the study.

In addition to the recommended phasing plan, proposed cost estimates and funding strategies were developed. Additional information of the proposed phasing plan is contained in section 4.1.

8. . Consultation

The preferred active transportation network by facility types, and the draft phasing plan were presented at the Combined Committee Meeting and the Virtual Open House for review and commentary. Information gathered at both events was used to refine and ultimately confirm the preferred facility types and phasing for the Township's active transportation network.

9. . Finalize the Network, Facility Types and Phasing

Using the feedback gathered at the Combined Committee Meeting and the Virtual Open House, as well as additional feedback provided by Township staff, the recommended active transportation network including facility types, implementation and cost strategy were revised.

2.2 Uxbridge's Active Transportation Network

In total, the preferred active transportation network for the Township of Uxbridge is made up of 218 kilometres including 131 kilometres of existing routes and 87 kilometres of proposed routes. A summary of the preferred active transportation network is provided below.

Table 2 - Summary of the Preferred Active Transportation Network[1]

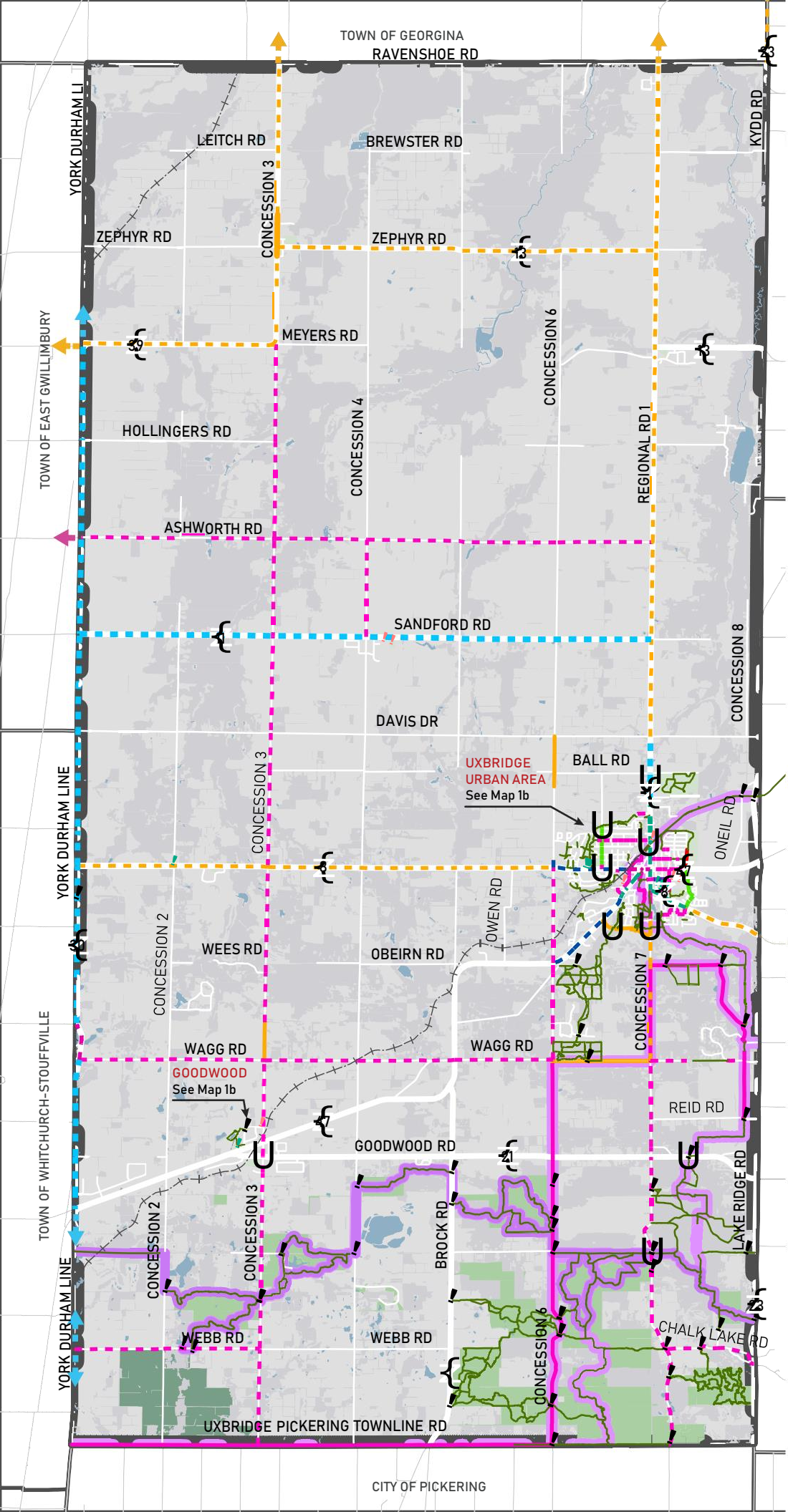
Facility Type	Existing KM	Proposed KM	Total KM
Off-road multi-use trail[2]	42.7	0.5	43.3
In-boulevard multi-use path[3]	0.5	3.8	4.3
Paved shoulder	4.0	3.3	7.3
Bike lane	0.4	0	0.4
Signed route with edge line	0.41	1.7	2.1
Signed route	27.2	72.7	99.9
Sidewalk	55.4	5.3	60.7
Total	130.6	87.4	218

Note:

1. This table does not include routes located on Regional roads within Uxbridge, which have been identified in the Durham Regional Cycling Plan, 2021 (Draft) as part of the Region's Primary Cycling Network. A summary of on-road routes located on Regional roads within Uxbridge is provided in section 2.2.1. This table does however include proposed routes located within the boulevards of Regional roads which have been identified in the Durham Regional Cycling Plan, 2021 (Draft) as part of the Region's Primary Cycling Network.
2. Represents off-road multi-use trails that are located on lands owned / managed by the Township.
3. This table includes the estimated lengths for proposed in-boulevard multi-use paths that are located along Regional roads, and which will also form part of the Region's Primary Cycling Network. These routes include:
    - Brock Street / Regional Road 8: Concession 6 to Railway Street (1.55 km)
    - Toronto Street / Regional Road 47: Concession 6 to Campbell Drive (2.01 km)

Maps 1a and 1b illustrate the preferred active transportation network. The network is intended to be a blueprint for the implementation of active transportation facilities throughout Uxbridge, and is intended to be used as a guide for future decision-making by those responsible for the plan's implementation including Township staff and its partners. The recommended active transportation network is also intended to be flexible so new opportunities that arise in the future can be accommodated in the plan.

The following sections provide an overview of the various components that are illustrated on Maps 1a and 1b including Durham Region's Primary Cycling Network, proposed crossing enhancements and connections at rail corridors.



Map 1a

Proposed Facility Types

UXBRIDGE ACTIVE TRANSPORTATION PLAN

Legend

Existing Routes

- Existing off-road trail
- Existing paved shoulder
- Existing bike lane
- Existing signed route

Proposed Routes

- Proposed off-road trail
- Proposed in-boulevard multi use path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route

Other

- Proposed crossing enhancement
- Community Centre / Facility
- School
- Trail Access Point

Regional and Provincial Trail Systems

- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Rouge National Urban Park
- Wooded Area

Note:
1. Includes routes on Regional roads identified in the Durham Regional Cycling Plan Update (on-going).
2. Regional and Provincial Trail System includes the Great Trail, the MTO Province-wide Cycling Network, the Greenbelt Cycling Route and the Oak Ridges Trail.

The Township of UXBRIDGE
Trail Capital of Canada

Produced in association with the Township of Uxbridge.
This map is intended for information only,
and not for navigation.

 Date Published: June 2021
Projection and Coordinate System:
Universal Transverse Mercator UTM Zone 17N

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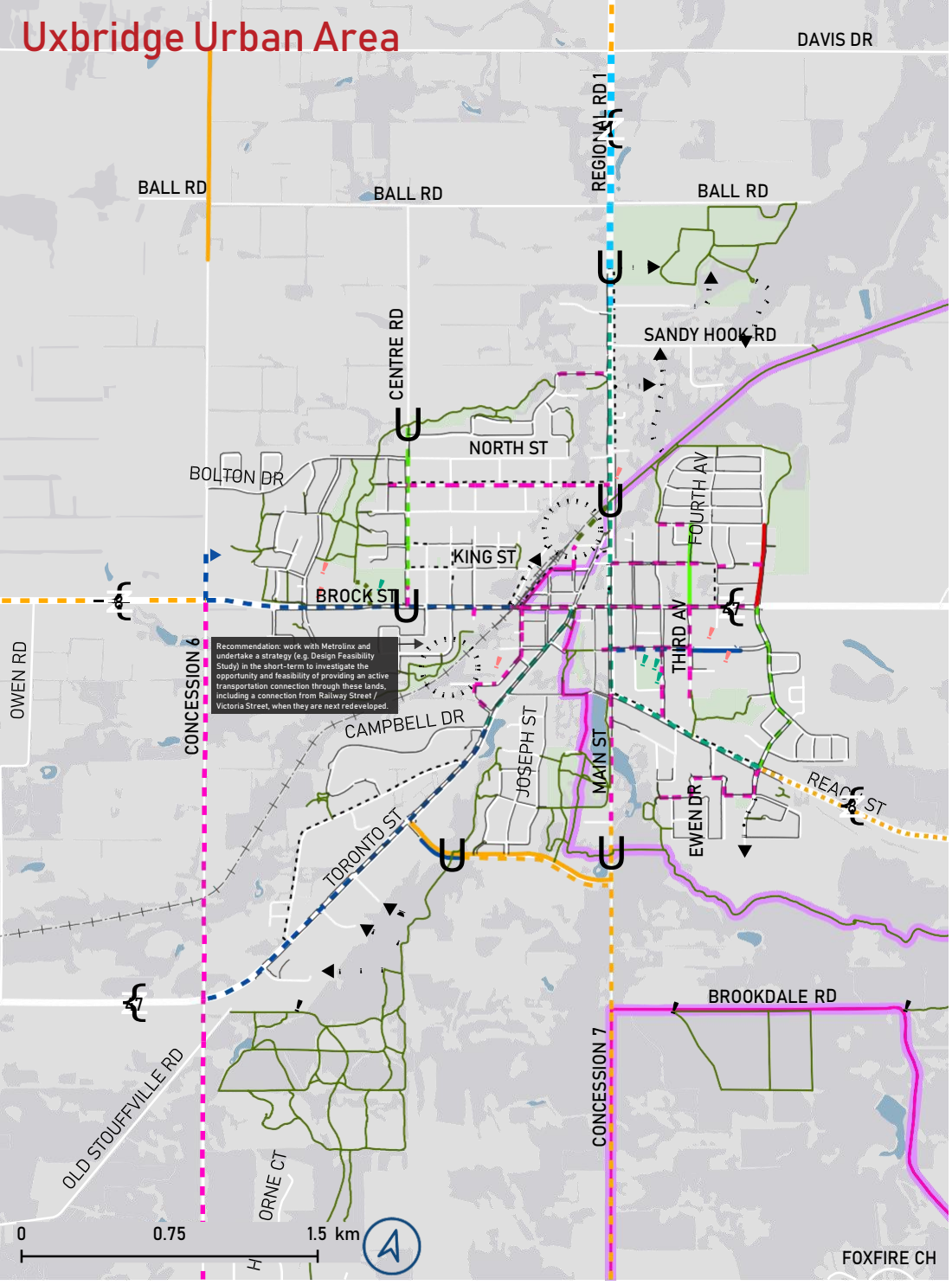
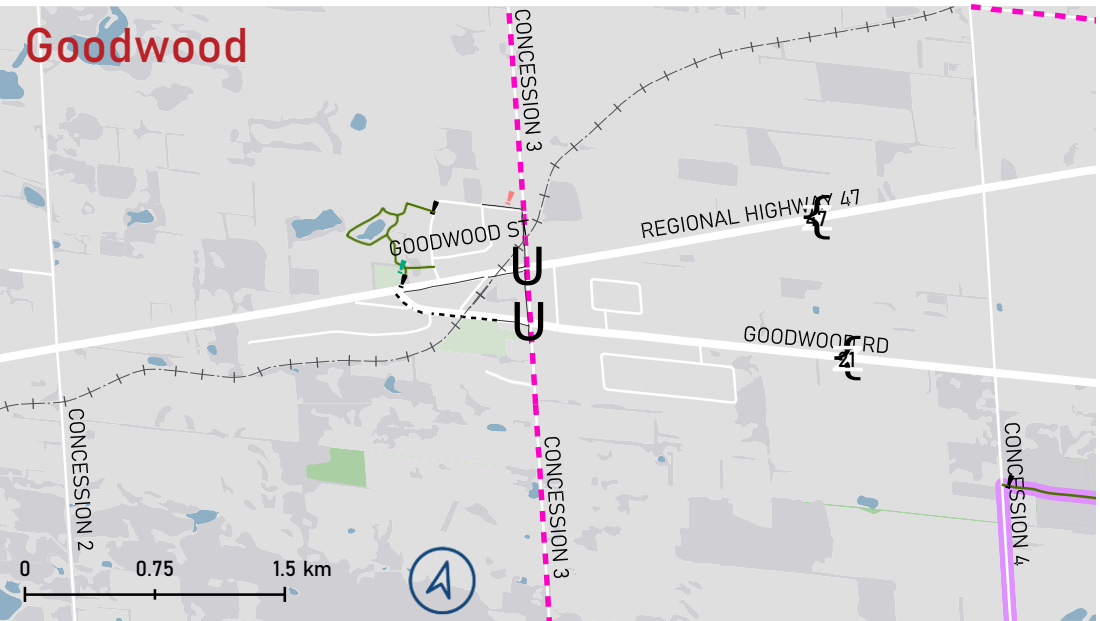




Map 1b

Proposed Facility Types

UXBRIDGE ACTIVE TRANSPORTATION PLAN

Legend

Existing Routes

- Existing off-road trail
- Existing in-boulevard multi use path
- Existing paved shoulder
- Existing bike lane
- Existing urban shoulder
- Existing signed route
- Existing sidewalk

Proposed Routes

- Proposed off-road trail
- Proposed in-boulevard multi use path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route
- Proposed sidewalk
- Desired connection
- U Proposed crossing enhancement

Other

- Community Centre / Facility
- School
- Trail Access Point
- Regional and Provincial Trail System
- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Wooded Area

Note:
1. Includes routes on Regional roads identified in the updated Durham Regional Cycling Plan (2021).
2. Desire connections indicate linkages (or areas) which are proposed to be explored in the future as development occurs throughout the Township.
3. Regional and Provincial Trail System includes the Great Trail, the MTO Province-wide Cycling Network, the Greenbelt Cycling Route and the Oak Ridges Trail.

The Township of UXBRIDGE Trail Capital of Canada

Produced in association with the Township of Uxbridge.
This map is intended for information only, and not for navigation.

 Date Published: June 2021
Projection and Coordinate System:
Universal Transverse Mercator UTM Zone 17N

2.2.1 Durham Regional Cycling Plan

The Durham Regional Cycling Plan (RCP) was developed at the same time Uxbridge's ATP was developed. The RCP builds upon the original network identified in the 2012 Regional Cycling Plan and the most current iteration in the Durham Transportation Master Plan (2017). The Regional Cycling Plan, 2021 is still draft and is expected to go to Council in the Fall of 2021 for endorsement and approval.

As part of the current RCP, Durham's Primary Cycling Network has been reviewed and refined to strengthen connectivity in the northern local area municipalities including Uxbridge. Through this update, there are a number of routes proposed on Regional roads within Uxbridge. Though these routes will connect to the Township's active transportation network, and serve to enhance overall connectivity through Uxbridge, responsibility (inclusive of planning, design, implementation and operations) of on-road routes along Regional roads will be the Region's.

Table 3 outlines all on-road routes proposed on Regional roads within the Township of Uxbridge, and that form part of the Region's Primary Cycling Network. These routes are in addition to the 87.4 kilometres of proposed routes for the Township's active transportation network.

Table 3 - Summary of On-Road Routes Proposed on Regional Roads in Uxbridge, as part of the Region's Primary Cycling Network

Route Description	Length KM	Facility Type
Regional Road 39 York-Durham Line to Ravenshoe Road	9.4	Paved shoulder
Regional Road 13 / Zephyr Road Regional Road 39 to Regional Road 1	8.1	Paved shoulder
Regional Road 1 Davis Drive to Ravenshoe Road	14	Paved shoulder
Regional Road 11 / Sandford Road York-Durham Line to Regional Road 1	12.4	Buffered paved shoulder Signed route
Regional Road 8 York-Durham Line to Concession 6	10.1	Paved shoulder
York Durham Line Regional Road 47 to Regional Road 39	18.4	Buffered paved shoulder
Regional Road 1 / Main Street Colby Road to Davis Drive	1.3	Buffered paved shoulder
Regional Road 1 / Main Street Reach Street to Colby Road	1.9	Buffered bike lane
Regional Road 8 / Reach Street Main Street to Testa Road	0.8	Buffered bike lane
Regional Road 8 / Reach Street Testa Road to Lake Ridge Road	1.6	Paved shoulder

Route Description	Length KM	Facility Type
Regional Road 47 / Brock Street Main Street to First Avenue Fourth Avenue to Herrema Boulevard	0.3	Signed route
Regional Road 47 / Brock Street Victoria Street to Main Street • Short term = signed route with supplementary green-backed sharrows • Long term = separated cycling facility (recommendation to investigate feasibility of a separated cycling facility and design as part of a future study)	0.5	Signed route
Regional Road 47 / Toronto Street Campbell Drive to Brock Street	0.8	Buffered bike lane

In total, there are approximately 79.6 kilometres of proposed routes on Regional roads (identified as part of the Region's Primary Cycling Network) that are proposed in Uxbridge.

In addition to these on-road routes, there are two routes that are proposed in the boulevard of Regional roads (within Uxbridge) and that also form part of the Region's Primary Cycling Network. Though these routes will form part of the Region's Primary Cycling Network, they also form part of the Township's active transportation network. These two routes include:

- Regional Road 8 / Brock Street: Concession 6 to Railway Street (1.55 km)
- Regional Road 47 / Toronto Street: Concession 6 to Campbell Drive (2.01 km)

Figure 3 illustrates the on-road routes proposed on Regional roads in Uxbridge, as well as the two proposed in-boulevard multi-use paths on Regional roads.

Based on the current Regional Cycling Plan Funding Formula, Durham Region commits to the following:

- For in-boulevard multi-use path projects that are part of a Regional road widening or reconstruction project on the Primary Cycling Network the Region covers the consultant design fees, utility relocation, grading, and platform and customized bridge structures as Regional expenses.
- For infill (or "standalone") projects to be constructed that are not part of a road widening or reconstruction project under the Region's capital budget and nine-year forecast, the Region covers the cost of utility relocation, grading, platform and customized bridge structures. The Region will also cover a percentage share of the consultant design fee incurred for infill MUP projects. Appendix A of the draft 2021 RCP details how this percentage share is to be calculated.

As such, the estimated capital costs to construct the two in-boulevard multi-use pathways noted above (Regional Road 8 and Regional Road 47) are included in the cost estimates for Uxbridge's active transportation network – see section 4.2. The cost estimates outlined in section 4.2 do not include the capital costs for on-road routes proposed on Regional roads in Uxbridge; additional information on the costing of these routes is captured in the Durham Regional Cycling Plan, 2021 (Draft).

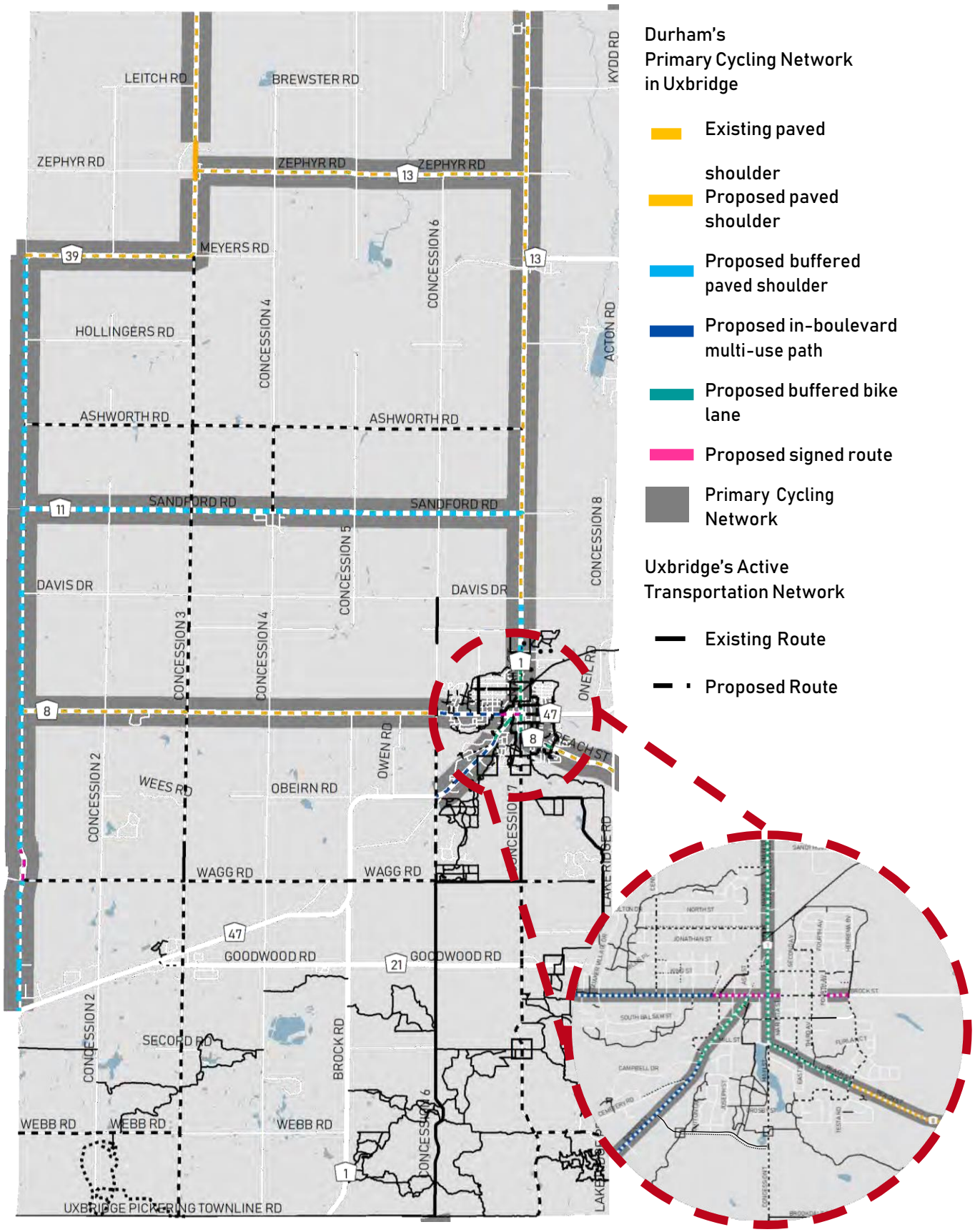


Figure 3 - Durham's Regional Cycling Network in Uxbridge

2.2.2 Proposed Crossing Enhancements

Uxbridge's active transportation network includes ten locations where a crossing enhancement is proposed at locations where a route (inclusive of existing and proposed routes) crosses a roadway. These locations were identified based on feedback received from members of the public, the Township's Advisory Committee, Township staff and well as a review of frequently used routes and popular destinations within Uxbridge. These are not intended to represent an exhaustive or definitive list.

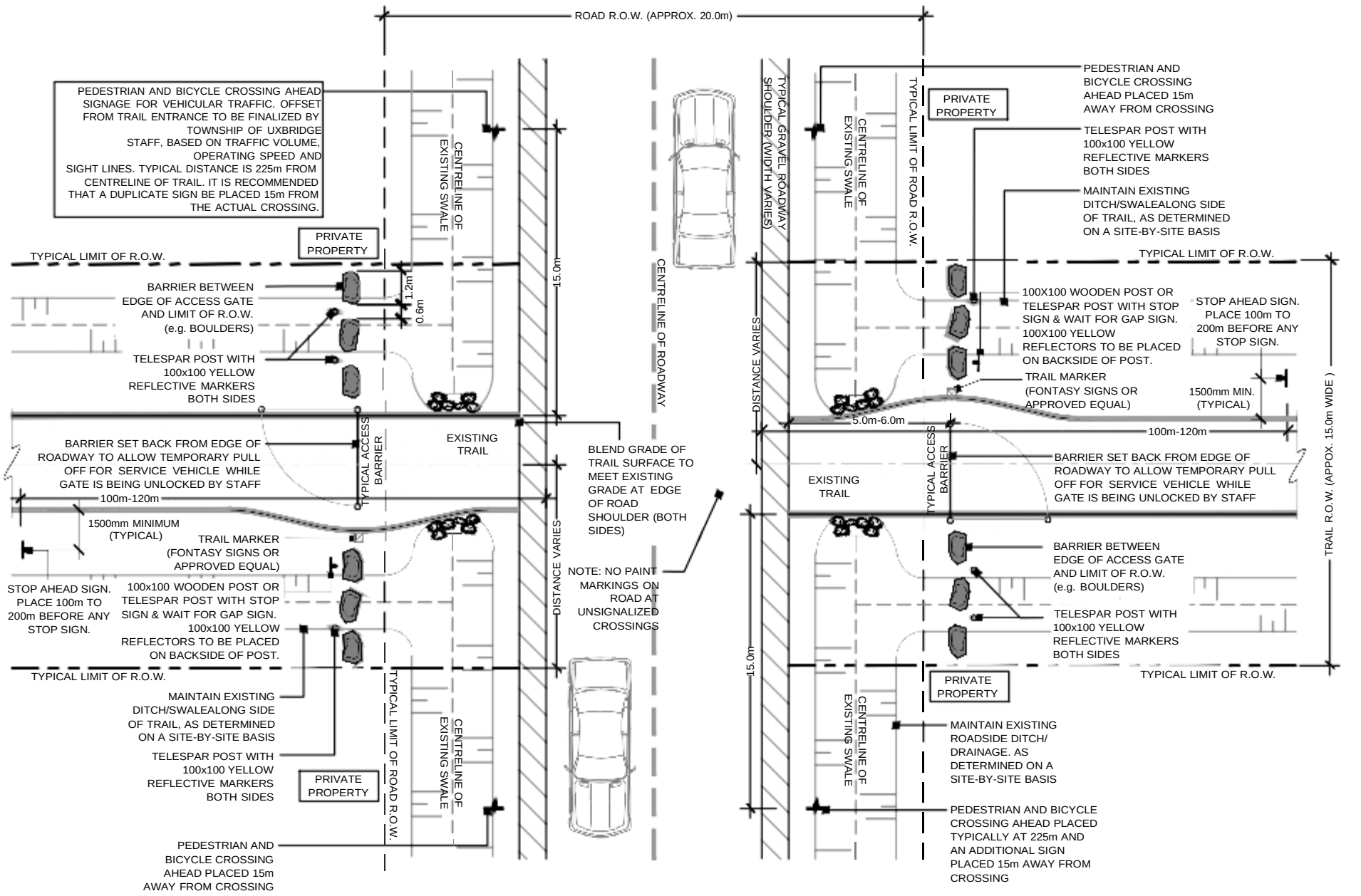
The ten locations where a proposed crossing enhancement has been identified, include the following (in no particular order):

1. Countryside Preserve Trails at Elgin Park Drive
2. The Trans Canada Trail at Concession 7 (south of Crosby Street)
3. The Trans Canada Trail at Main Street / Regional Road 1
4. Connection into Fields of Uxbridge at Main Street
5. The Trans Canada Trail at Goodwood Road
6. Oak Ridges Trail / the Trans Canada Trail at Concession 7 and Brookdale Road
7. Centre Road at Maple Bridge Trail
8. Brock Street West at Centre Road (Uxbridge Arena and Recreation Centre)
9. Regional Highway 47 at Concession 3
10. Goodwood Road 21 at Concession 3

Trail crossings of minor and major roads could include the following:

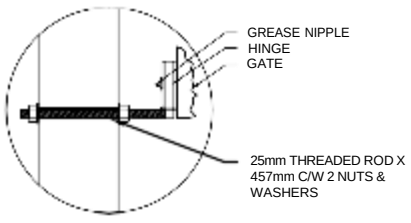
- Creation and maintenance of an open sight triangle at each crossing point;
- Trail access barriers;
- Signage along the road in advance of the trail crossing to alert motorists to the crossing;
- Signage along the trail to alert trail users of the upcoming roadway crossing;
- Alignment of the trail crossing point to achieve as close to possible a perpendicular crossing of the roadway, to minimize the time that trail users are in the traveled portion of the roadway; and
- Curb ramps on both sides of the road to ensure accessibility.

Figure 4 illustrates elements of a typical trail crossing that could be considered to enhance the six trail crossings noted above.

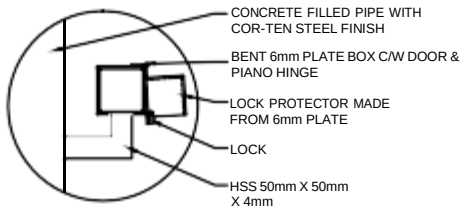


TYPICAL ROAD CROSSING LAYOUT

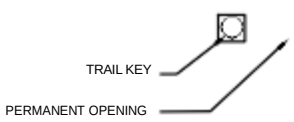
SCALE 1:200

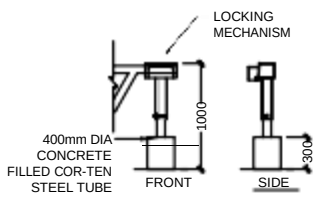


HINGE DETAIL

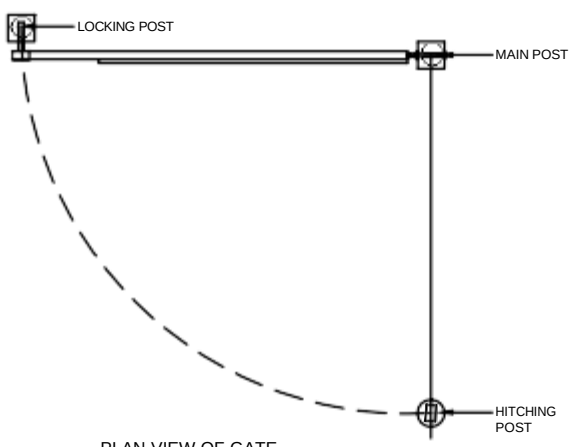


LOCK MECHANISM DETAIL

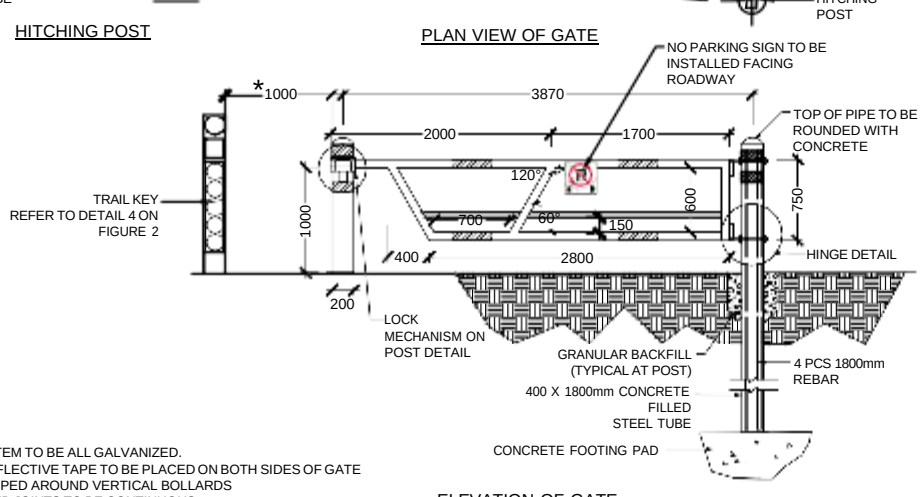




HITCHING POST



PLAN VIEW OF GATE



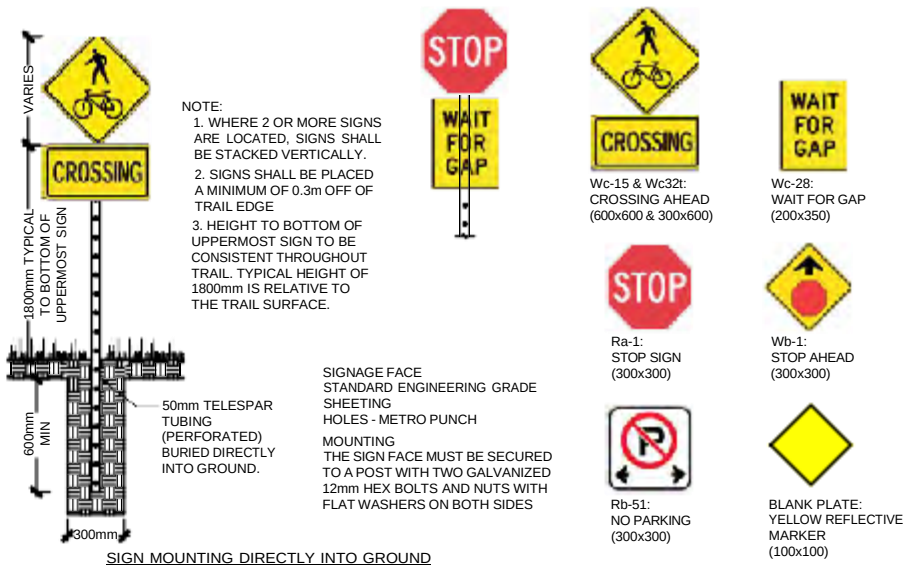
ELEVATION OF GATE

NOTES:
- GATE SYSTEM TO BE ALL GALVANIZED.
- RETRO REFLECTIVE TAPE TO BE PLACED ON BOTH SIDES OF GATE AND WRAPPED AROUND VERTICAL BOLLARDS
- ALL WELDED JOINTS TO BE CONTINUOUS.
- ALL GATES TO BE LOCKED DURING THE CURING STAGE.
- TOP OF NEW CONCRETE FOOTING TO BE LEVEL WITH THE SURFACE OF EXISTING GRADE.
- ALL HARDWARE TO BE GALVANIZED.
- ALL DIMENSIONS IN mm (MILLIMETERS).
- ALL METAL COMPONENTS SHALL CONFIRM TO RELEVANT OPSS.

* PERMANENT OPENING TO BE A MINIMUM OF 1000mm FOR ACCESSIBLE TRAILS TO A MAXIMUM OF 1100mm TO LIMIT MOTORIZED VEHICLES FROM ENTERING TRAIL.

TYPICAL SWING GATE DETAIL

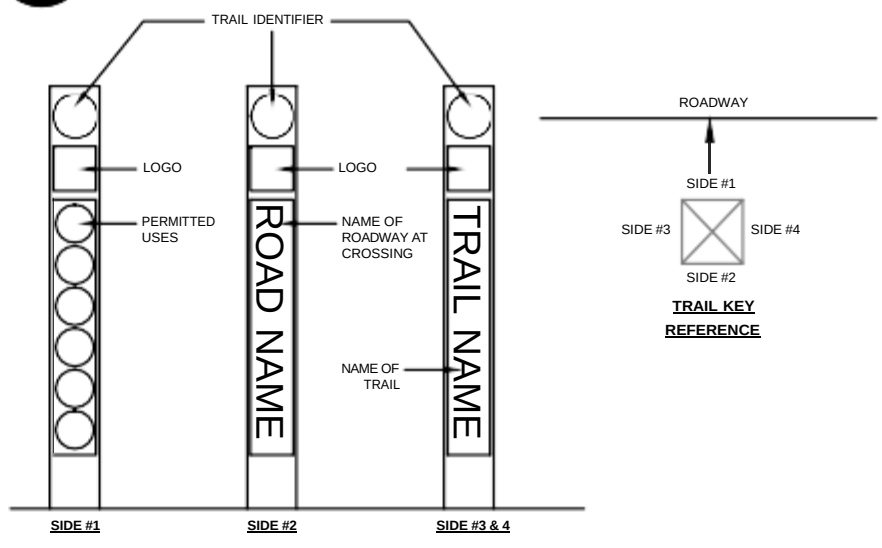
SCALE: NTS



SIGN MOUNTING DIRECTLY INTO GROUND

TYPICAL SIGN INSTALLATION DETAIL

SCALE: NTS



TRAIL KEY REFERENCE

TRAIL KEY LAYOUT

TRAIL KEY DETAIL

SCALE: NTS

Township of Uxbridge	TITLE: Figure 4 Typical Road Crossing Layout	DATE: Draft February 2021	wsp
PROJECT TITLE: Active Transportation Plan			

The typical road crossing details page above shows four typical details:

- Typical road crossing layout indicating the proposed elements to be installed at each crossing.
- Typical swing gate detail indicates the design and installation instructions for the proposed swing gate at each crossing.
- Typical sign installation detail indicates the correct way to install the signposts and the proposed sign plates and dimensions to be used along the trail corridor.
- The trail key detail indicates information that could be included on each side of the key as well as which direction each side should face.

In addition to the typical road crossing layout illustrated in Figure 4, signage should be installed on the approach to trail crossings, and at trail crossings for both motorists and trail users. Recommended signage includes:

Roadway Signage

Wc-15 (OTM)
600mm x 600mm

Wc-32t (OTM)
300mm x 600mm

Pedestrian and Bicycle Crossing Ahead Sign

- Warning sign to inform motorists of a crossing ahead
- Table 4 below provides a summary of the minimum advance distance for installation of Pedestrian and Bicycle Crossing Ahead signs (Wc-15) and accompanying tab Crossing sign (Wc-32t) on roadways with posted speed limits at 50, 60 and 80 km/h.
- Although not a requirement, in addition to installing the Pedestrian and Bicycle Crossing Ahead Sign in advance of a trail crossing, it is recommended that a duplicate of this sign be installed within 15m of the actual trail crossing on both approaches to inform motorists of the actual trail crossing location.

Table 4 - Minimum Distance for Installation of Pedestrian and Bicycle Crossing Ahead Sign on Roads

Road posted at 50 km/h	Road posted at 60 km/h	Road posted at 80 km/h
140 metres in advance + at trail crossing	225 metres in advance + at trail crossing	335 metres in advance + at trail crossing

Trail Signage

Wc-28(OTM)
350mm x 200mm

Wait for Gap Sign

- Wait for Gap sign intended to warn pedestrians and cyclists, intending to cross the trail at a roadway, that they do not have the road right-of-way and must wait for a gap in traffic sufficiently large to ensure a safe crossing.
- Typically implemented along the trail at the crossing of a roadway and installed below the stop sign on the same pole.

Ra-1 (TAC)
300mm x 300mm

Stop Sign

- Stop sign is intended to warn pedestrians and cyclists that they must stop before crossing the trail at the roadway.
- Typically implemented along the trail at the crossing of a roadway.

Wb-1 (OFSC)
300mm x 300mm

Stop Ahead Sign

- Stop Ahead sign is intended to warn pedestrians and cyclists of an approaching Stop sign (Ra-1).
- Typically implemented along the trail 100m to 120m before a Stop sign.

The following photos demonstrate examples of trail crossing features that have been installed along segments of the Trans Canada Trail in Uxbridge, and that can be referenced as a best practice when enhancing other trail crossings within the Township.

Figure 5 - Examples of Trail Signage (Trans Canada Trail) and Access Barriers in Uxbridge

Reference should be made to current best practices including OTM Book 15: Pedestrian Crossing Treatments, including Table 5 which outlines a selection matrix for various pedestrian crossing treatments (PXOs) based on traffic volumes and posted speed along a particular corridor.

Table 5 - Pedestrian Crossover Selection Matrix
Source: OTM Book 15

Two-way Vehicular Volume			Posted Speed Limit (km/h)	Total Number of Lanes for the Road Cross Section[1]			
Time Period	Lower Bound	Upper Bound		1 or 2 Lanes	3 lanes	4 lanes w/raised refuge	4 lanes w/o raised refuge
8 Hour	750	2,250	≤50	Level 2 Type D	Level 2 Type C[3]	Level 2 Type D[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	750	2,250	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	2,250	4,500	≤50	Level 2 Type D	Level 2 Type B	Level 2 Type D[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	2,250	4,500	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	4,500	6,000	≤50	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	4,500	6,000	60	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	6,000	7,500	≤50	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 1 Type A
4 Hour	3,155	3,950					
8 Hour	6,000	7,500	60	Level 2 Type B	Level 2 Type B		
4 Hour	3,155	3,950					
8 Hour	7,500	17,500	≤50	Level 2 Type B	Level 2 Type B		
4 Hour	3,950	9,215					
8 Hour	7,500	17,500	60	Level 2 Type B			
4 Hour	3,950	9,215					

Type A Type B Type C Type D

1. The total number of lanes is representative of crossing distance. The width of these lanes is assumed to be between 3.0 m and 3.75 m according to MTO Geometric Design Standards for Ontario Highways (Chapter D.2). A cross sectional feature (e.g. bike lane or on-street parking) may extend the average crossing distance beyond this range of lane widths.
2. Use of two sets of side mounted signs for each direction (one on the right side and one on the median).
3. Use Level 2 Type B PXO up to 3 lanes total, cross section one-way.

The hatched cells in this table show that a PXO is not recommended for sites with these traffic and geometric conditions. Generally, a traffic signal is warranted for such conditions.

In addition to controlled pedestrian crossing treatments outlined in Table 5, crossings may also occur at locations where traffic control measures are not warranted (due to low vehicular and/or pedestrian traffic volume or physical constraints) and alternative controlled crossings are not feasible. As noted in OTM Book 15, the decision to implement pedestrian treatments at uncontrolled crossing points should consider the need of warning signs and geometric elements that help to:

- Simplify crossings for pedestrians;
- Heighten and maximize the level of road users' awareness of the environment and road hazard; and
- Inform, clarify and reinforce the rules of the road.

Table 6 outlines typical components of pedestrian treatments at uncontrolled crossings.

Table 6 - Components for Pedestrian Treatment at Uncontrolled Crossing
Source: OTM Book 15

Required Components	Desirable Components	Optional Components
– Pedestrian Ahead (Wc-7) or Playground Ahead (Wc-3) or Trail Crossing (Wc-32) Advanced Warning Signs for Drivers (only one the above noted signs is required based on the road environment) – Pedestrians Yield to Traffic (Wc-36) Warning Signs for Pedestrians	– Refuge Islands and Centre Medians with mandatory: ○ Pavement markings on approaches to obstructions ○ Keep Right Sign (Rb-25, Rb-125) ○ Object Marker Sign (Wa- 33L) – Raised Crosswalk – Curb Extensions – Depressed Curbs – Parking and other sight obstructions prohibition within at least 30 m of crossings – Stopping prohibition for a minimum of 15 m on each approach to the crossing, and 10 m following the crossing	– School Crosswalk Markings for supervised crossing according to OTM Book 11 (different requirements for urban and rural locations) – Crossing Guard – School Crossing Sign (Wc-2, Wc-102) – School Crossing Tab Sign (Wc- 2t, Wc-102t) – School Crossing Ahead Sign (Wc-2A, Wc-102A) – Crossing Ahead Tab sign (Wc- 2At, Wc-102At) – School Zone Maximum Speed Sign (Rb-6) – School Zone Maximum Speed When Flashing Sign (Rb-6A)

2.2.3 Future Connections at Rail Corridors

A well-connected and continuous active transportation network typically includes routes that cross over physical barriers such as railways. The implementation of crossings features to help pedestrians, cyclists and other users cross from one side of a route to another side can help achieve overall connectivity within the network.

As part of the Township's active transportation network, two locations have been identified to enhance connectivity surrounding the rail corridor. These locations include:

Connections surrounding the York-Durham Heritage Railway station

Significant interest from the Township's Advisory Committees, residents and stakeholders to improve connectivity in this area and specifically to investigate the opportunity to extend the Trans Canada Trail along the rail corridor (west of Main Street) as the off-road currently terminates at Main Street. Interest was also expressed to improve pedestrian access along Victoria Street and Railway Street, and to construct sidewalks that could connect to key destinations including a brewery , the Farmers Market and the York-Durham Heritage Railway station.

Connection from South Balsam Trail at York-Durham Heritage Railway

Significant interest from the Township's Advisory Committees and residents to provide an active transportation crossing of the rail corridor from South Balsam Trail to the south-east side of the rail corridor. Based on feedback received during the study process and a review of existing user patterns (e.g. heat mapping of frequently used routes in Strava) people are currently crossing the rail corridor from South Balsam Trail to connect to Campbell Drive. In addition, a "desire line" is evident from South Balsam Trail to Campbell Drive when reviewing aerial imagery within the Township.

The York–Durham Heritage Railway corridor is an active rail corridor that is owned by Metrolinx. This section of railway from Stouffville to Uxbridge was purchased by GO Transit (in the early 1990's) and preserved for potential service expansion in the future. The railway is considered a municipal heritage and tourism asset as it operates train excursions between Stouffville and Uxbridge on weekends between June and October.

In general, intact rail corridors provide a significant opportunity for recreational trails and other public infrastructure possibilities. Assembling land for a linear corridor can be challenging, time consuming and costly. Apart from the cost to acquire lands, the time and expense associated with route identification and evaluation as part of an Environmental Assessment would require a lengthy process with no guarantee of a successful outcome. There are examples of former railway corridors that have been acquired and re-purposed into successful recreational trails across the province, with the most relevant example being the Trans Canada Trail within the Township itself.

It is recommended that the Township work with Metrolinx and undertake a strategy (e.g. Design Feasibility Study) in the short-term to investigate the opportunity and feasibility of providing an active transportation crossing at South Balsam Trail and the rail corridor, as well as a connection(s) from Railway Street / Victoria Street, when these lands are next redeveloped and / or part of future rail expansion improvements.

Currently, in order to establish a pathway crossing of an active rail line, proponents must submit their request directly to the railway company. Submissions need to identify the crossing location and its basic design. Designs should be consistent with Draft RTD-10, Road/Railway Grade Crossings: Technical Standards and Inspection, Testing and Maintenance Requirements available from Transport Canada.

Consideration should be given to the design of at-grade crossings of railways. It is recommended that crossings be designed as close to right angles as possible. In many situations this may require widening of a network segment in advance of the crossing, thereby allowing cyclists to reduce their speed and position them for crossing at right angles. Transport Canada's at-grade railway crossing guidelines should be applied.

Rubber track guards are also recommended to improve friction between bike tires and the pavement, and also to narrow the rail gaps. Clearly visible signage should also be displayed to forewarn pedestrians, including those using mobility devices, of an approaching railway crossing, and possible tripping hazards when walking or running over them. Pavement crossing surfaces should also be paved, and inspected regularly during trail inspections for signs of deterioration around the tracks. Pavement deterioration adjacent to railway tracks can be a potential hazard, especially to those in wheelchairs since tires could get caught in the rails. A typical layout for a path crossing a rail corridor is illustrated in Figure 6.

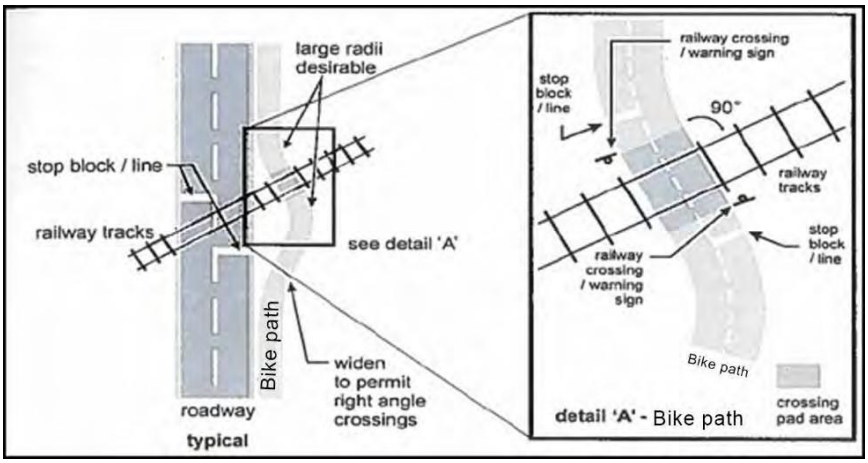


Figure 6 - Bike Path Crossing a Rail Corridor
Source - TAC Geometric Design Guide for Canadian Roads, 2017

2.3 Planning and Design Considerations

There are a number of guidelines and standards that should be used by Township staff and its partners when planning, designing and implementing active transportation infrastructure. It is recommended that Township staff primarily reference the OTM series of guidelines books for facility design, markings and signage. In addition to the OTM guidelines, there are resources available at the international, national and provincial level, which can guide infrastructure design.

A summary of guidelines and standards that were considered during the process to identify the Township's preferred active transportation network include:

International Sources:

- American Association of State Highway and Transportation Officials Guide for the Development of Bicycle Facilities

National Sources:

- National Association of City Transportation Officials (NACTO) Urban Bikeways Design Guide and Urban Street Design Guide
- Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads
- Transportation Association of Canada Bikeway (TAC) Traffic Control Guideline for Canada
- Transport Canada's at-grade railway crossing guidelines.

Provincial Sources:

- Ontario Traffic Manual (OTM) Book 18: Cycling Facilities
- Ontario Traffic Manual (OTM) Book 15: Pedestrian Crossing Treatments
- Ministry of Transportation Ontario (MTO) Bikeways Design Guidelines.
- Accessibility for Ontarians with Disabilities Act (AODA) – Built Environment Standards

The design guidelines are recommended to be used as reference by Township staff and its partners when moving forward with the planning, design and implementation of future active transportation facilities. Building upon these guidelines, the following sections outline planning and design considerations for additional enhancements that could be considered when implementing the Township's preferred active transportation network. These include:

- Facility Selection Principles: section 2.3.1
- Facility Types Overview: section 2.3.2
- Enhancing Signed Bike Routes: 2.3.3
- Trailheads: section 2.3.4

2.3.1 Planning and Design Principles

Planning and design principles are considered when selecting routes and facilities for an active transportation network, and specifically to provide a network that is considered safe, accessible and equitable by those using it. The following principles were applied when identifying the preferred active transportation network for Uxbridge. They are based on guidance provided in current design standards and could be used beyond the lifespan of this plan to inform future decision making.

Motor vehicle speed influences cyclist safety

When designing for an interested but concerned[5] user, practitioners should strive to provide as much physical separation between motor vehicle lanes and the facility as possible. However, it is recognized that it may not be possible or practical to design all facilities to an all ages and abilities standard. As assessment of design criteria of the roadway context should be undertaken to inform the selection of routes and facility types.

All ages and abilities (AAA) design requires low-stress facilities

AAA refers to the planning and design of transportation networks and public realms that are considered safe, comfortable and equitable by the community. Historically, planning design principles have typically favoured very confident riders. An AAA approach considers the needs of traditionally under-represented and under-served populations / groups including: children; seniors; women; people riding bike share; people of colour; low-income bike riders; people with disabilities; and people moving goods or cargo.[6]

Practitioners should strive to select a facility type where people with a range of abilities can feel comfortable participating. Where motor vehicle speeds and volumes are low and can be effectively controlled, shared operating space environments such as signed bike routes are viable options for low-stress routes. As motor vehicle speeds and volumes increase, so does the level of stress, and separated facilities are preferred.

Recent research conducted for NACTO and OTM Book 18 revealed that potential cyclists are more inclined to cycle on physically separated bikeways. This is further evident is newer design standards / guidelines that identify the importance and merits for separated cycling facilities. The updated version of OTM Book 18 lowers the thresholds for when separation should be introduced to better provide for low-stress facilities.

Design criteria need to recognize context

Design standards and guidelines typically include a set of criteria to help select preferred routing options and facility types. It is important to note that these criteria are not prescriptive – they are intended to be flexible to accommodate to site specific characteristics that would be determined on a project-by-project basis.

[5] Refers to a group of people who are open to the idea of cycling but are uncomfortable sharing the road with motor vehicles except on very low-volume, low-speed neighbourhood roads. Facility type is a key factor in determining whether choosing to walk / bike as a viable travel mode. (OTM Book 18, 2020).

[6] https://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new/ages-abilities-user/

Integration of Complete Streets planning and design

Complete Streets are streets for everyone – they are roads that are designed to balance the needs of all road users including pedestrians, cyclists, transit users, and motor vehicle. Active transportation is considered a key element of Complete Streets as walking and cycling infrastructure can offer greater transportation choice, accommodate people at all stages of life and facilitate equal access to goods and services.

It is important to note that a road does not need to be a road for everyone and everything. There are different roadway functions that are intended to serve different purposes e.g. arterial roads are typically high-volume and high-speed roadways that serve traffic flow and land access functions. As such. there is no right or wrong way to apply a Complete Streets approach because all roads are different and serve different purposes. The intent is to plan and design roadways that can accommodate as many users groups as possible.

Providing equitable means of transportation

Research shows that enhancing opportunities for affordable and reliable transportation options is a key determinant to an equitable transportation system. Equity implies that the approach that is being used is considered fair and impartial. Transportation equity makes reference to the ability to provide social and economic opportunities through equitable levels of access to affordable and reliable transportation options based on the needs of the populations being served, particularly populations that are traditionally underserved.

Traditionally underserved groups include individuals in at least one of the following categories: low income, minorities, elderly, immigrant populations, person(s) with disabilities, and/or youth; however, within each community there are unique and geographically specific groups and conditions that need to be considered and addressed. Active transportation is an affordable transportation mode which can help to provide transportation equity and support the diverse needs of all community members.

Supporting economic development and tourism goals

When selecting routes to form part of an active transportation network practitioners should review the goals identified by local and regional tourism offices, business improvement associations and related organizations to identify routes that support these strategies. These routes should consider primary regional destinations such as conservation areas, existing trail systems such as the Trans Canada Trail, Oak Ridges Trail and the Greenbelt Cycling Route, and local destinations such as community centres, universities and historic sites. Scenic corridors have a high potential for cycling tourism.

In urban areas and neighbourhood main streets, it is important to consider how implementation of a route would impact local businesses, and to leverage opportunities to improve the public realm in conjunction with implementation of active transportation infrastructure. These efforts can also support a Complete Street approach when planning and designing roadways and improve conditions for people to access local businesses by foot and bike.

2.3.2 Facility Types

The following table provides a condensed summary of the typical characteristics for facility types identified in this section which are included in Uxbridge's active transportation network. This information is based on best practices and current design resources noted below.

Table 7 - Overview of Facility Types Included in the Active Transportation Network

Facility	Traffic volumes (ADT)	Operating speed	Facility Width	Applicable References
Off-road multi-use trail	N/A	N/A	3.0 – 4.0 metres + minimum horizontal clear zone of 1.5 meres	MTO Bikeways Design Manual, section 5.0 AODA – Built Environment Standards, section 2.2
In-boulevard multi-use path	7,000 or more	>50 km/h	3.0 – 4.0 metres + 1.5 metres offset from back of road curb	OTM Book 18, section 4.3.4 (2021 update)
Paved shoulder	2,500-5,500	40-80 km/h	1.2 – 1.5 metres	OTM Book 18, section 4.5.4 (2021 update)
Bike lane	4,000 – 7,000	40-60 km/h	1.5 – 1.8 metres	OTM Book 18, section 4.4 (2021 update)
Signed route with edge line	<2,500	<40 km/h[1]	3.0 – 4.5 metre travel lane	OTM Book 18, section 4.5.2, 4.5.3 (2021 update)
Signed route	<2,500	<40 km/h[1]	3.0 – 4.5 metre travel lane	OTM Book 18, section 4.5.2, 4.5.3 (2021 update)
Sidewalk	N/A	N/A	1.8 metres	AODA – Built Environment Standards, section 2.1.1

Note:

1. In locations where traffic volumes are very low (e.g. less than 1,000 cars per day) the threshold for speed could be higher. Practitioners are encouraged to reference the OTM Book 18 facility selection process to help identify the desirable level of separation for a facility based on traffic volumes and posted speed. The facility selection process includes three steps and it is important that practitioners complete each step to ensure that the best possible facility type has been identified for the specific context and roadway characteristics.

2.3.3 Enhancing Signed Bike Routes

Signed bike routes are facilities where cyclists and motorists share the same roadway space. These roads may include signage that indicates a particular cycling route, signage that advises motorists to share the road with cyclists, sharrow pavement markings to further reinforce the cycling route, or a combination thereof. Signed bike routes are often implemented along roads with relatively low vehicular volumes and speeds, such as local roads found within residential neighbourhoods.

There are a number of design options that can serve to enhance the overall experience of signed bike routes on the part of cyclists while providing traffic-calming benefits to the street as a whole. Figure 7 - Sample Traffic Calming Techniques below, identifies a number of sample traffic calming techniques that can be applied to local streets, inclusive of horizontal and vertical deflection elements that work to divert or restrict traffic movements. Design interventions such as those identified in Figure 7 can act to slow vehicular traffic and create conditions that are favourable for active transportation, particularly roads where cyclists and motorists share the same roadway space.

The implementation of signed routes should be accompanied by the introduction of traffic calming measures where appropriate. Bicycle route signage and pavement markings alone are not sufficient in calming motor vehicle traffic. Traffic calming design interventions are best determined on a street-by-street basis, informed by the unique road context.

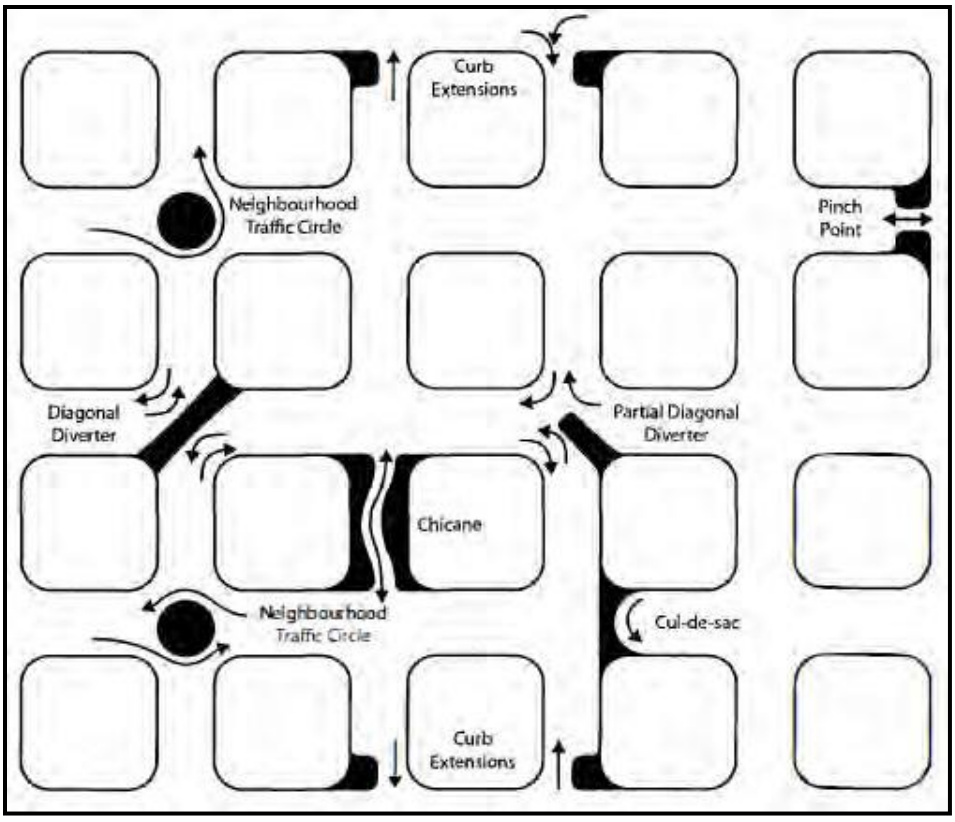


Figure 7 - Sample Traffic Calming Techniques
Source - TAC Geometric Design Guide for Canadian Roads, 2017

The following table provides an overview of a number of traffic calming techniques that should be considered when implementing a signed bike route, including ta description for each, their intended purpose and additional elements to consider.

Table 8 - Overview of Traffic Calming Techniques

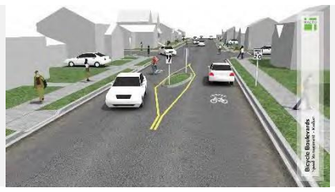
Photo	Traffic Calming Measure	Description / Purpose	Elements to Consider
	Speed Hump / Table	Description: Raised areas spanning the entire width of a roadway, which causes the vertical upward movement of a traversing vehicle. Purpose: speed reduction	– A series of speed humps/tables is more effective than a single installation. – Speed humps/tables with gentle approach and exit gradients, flush leading edges and smooth surfaces pose a less significant hazard to cyclists.
	Speed Cushion	Description: Raised areas on a road, similar to a speed hump, but not spanning the entire width of the road. Purpose: speed reduction	– Allows greater access for transit and emergency services compared to speed humps/cushions. – Could be considered as an alternative to speed humps on emergency routes.
	Curb Extension (bulb-out)	Description: Horizontal intrusion of the curb into the roadway, often at intersections, resulting in a narrow section of roadway. Purpose: speed reduction; crossing distance reduction for pedestrians; increase visibility of pedestrians; and prevent parking close to an intersection	– The effectiveness of a curb extension can be increased when used in combination with other traffic calming measures (speed humps, raised crosswalks, raised intersections, textured crosswalks, curb radius reductions, raised median islands).
	Pinch Points	Description: Two concrete or landscaped islands implemented in the travelled portion of the roadway, placed in a way that only permits one vehicle to travel through the pinch point at a time. Purpose: speed reduction	– The concrete or landscaped islands should be offset from the existing barrier curb to allow for unobstructed passage by cyclists. – Allow for sufficient space to accommodate larger vehicles, such as fire trucks and garbage trucks.
	Median Island	Description: Concrete or landscaped islands in the middle of the roadway that serve to narrow the overall width of the road. Purpose: speed reduction	– May result in increased maintenance costs of the roadway and could lead to the reduction of some on-street parking.
	Traffic Circle / Mini-Roundabout	Description: Island located at the centre of an intersection, which requires vehicles to travel through the intersection in a counter-clockwise direction. Purpose: speed reduction, particularly through intersections	– Identify suitable locations that avoid core emergency vehicle response routes. – Consider at intersections where large vehicles movements are infrequent.

Image Sources: NACTO Urban Bikeway Design Guide

2.3.4 Trailheads

The implementation of trail amenities at the end and beginning of an off-road trail can reinforce the Township's commitment to promoting active transportation and recreation. When addressing trail amenities, the conversation typically focuses on the implementation of trailheads which could include seating / rest areas, parking areas, signage, bicycle parking, loading or unloading areas, garbage receptacles, washroom and amenity buildings and gates / access barriers.

Within the Township, there are **47 trail access points** of which:

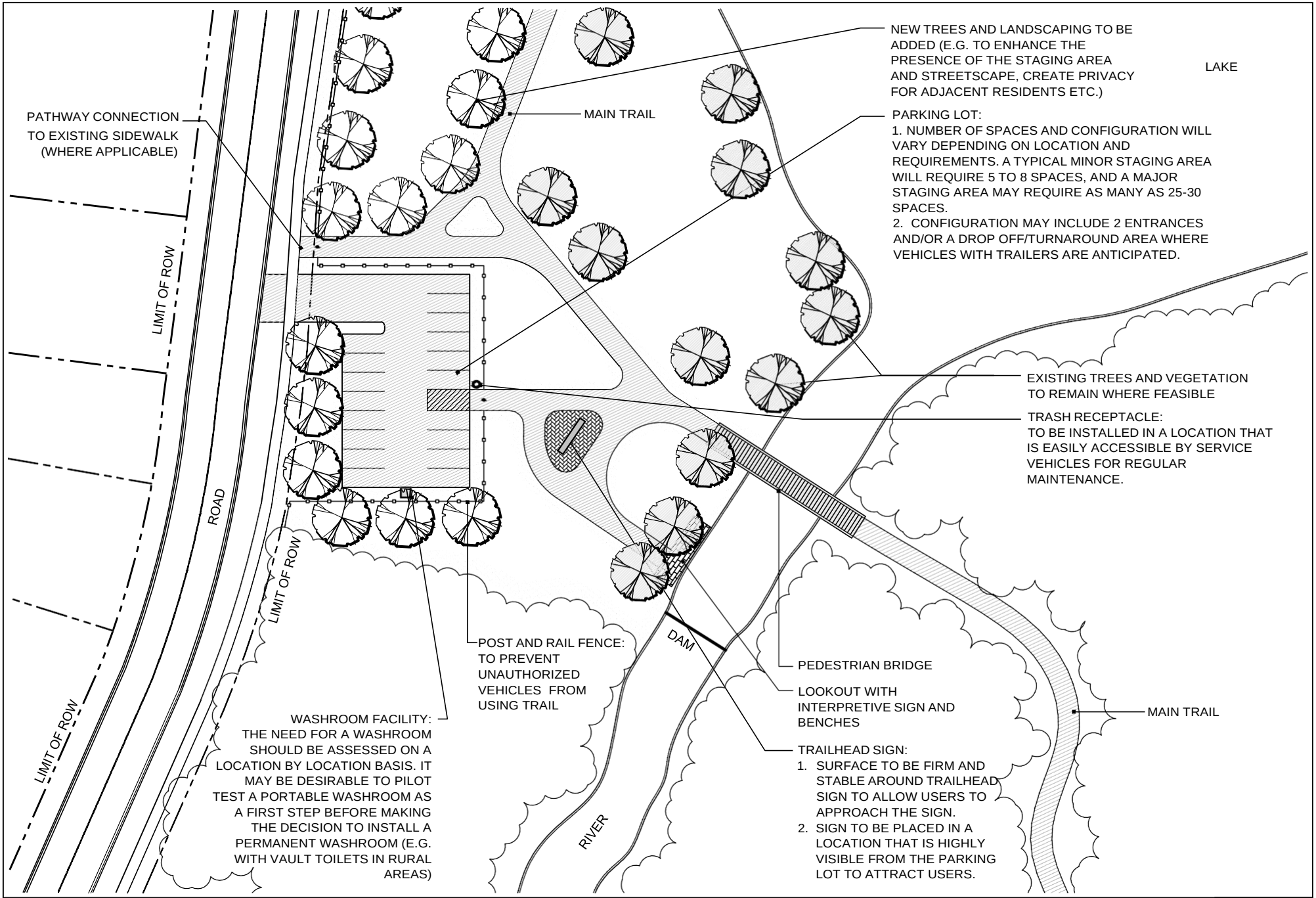
- **29** are walk-in trail access (7 of these have a trailhead)
- **5** have trail access with pull-in parking (5 spots maximum)
- **13** trailheads with a parking lot

Within the urban area of Uxbridge, trail access points are typically integrated into municipal facilities and destinations including parks and community centres. In the rural areas, trail access points can play a key role in the marketing and promotion of trails and tourism for Uxbridge. Where there are major trail access points and / or significant tourism destinations, the Township is encouraged to improve these locations to enhance the overall trail experience and user interest. Figure 8 illustrates the key elements of a typical trailhead area.

To inform future decision making and provide guidance regarding the design of trailheads, Table 9 outlines different amenity recommendations based on a "four-level" hierarchy, whereby Levels 1 and 2 represent minor trails, and Levels 3 and 4 represent major trails.

Table 9 - Trailhead Elements

Trailhead Features	Level 1		Level 2		Level 3		Level 4	
	Yes	No	Yes	No	Yes	No	Yes	No
Parking	•		•		•		•	
Rest area	•		•		•		•	
Lighting	•		•		•		•	
Signage	•		•		•		•	
Drop off area		•		•		•	•	
Garbage		•		•	•		•	
Washrooms		•		•	•		•	
Gates / barriers		•		•	•		•	
Loading zones		•		•		•	•	
Shelter		•		•		•	•	
Potable water		•		•			•	



Township of Uxbridge Active Transportation Plan

SCALE = NTS

FIGURE 8 - TYPICAL TRAILHEAD LAYOUT

As part of the study process, two preliminary locations have been identified for consideration to enhance the existing trail access. These locations consist of the following municipally-owned / maintained trails:

John McCutcheon Way / the Trans Canada Trail at Main Street

Elgin Park Drive

John McCutcheon Way forms part of the Trans Canada Trail – this is a very popular trail that is heavily used by pedestrians, cyclists and other active transportation users within Uxbridge. Currently, those accessing the trail by car can park at the York-Durham Heritage Railway station or at Herrema Fields. The trail terminates at Main Street and continues as an on-road segment.

To supplement the proposed recommendation to enhance the trail crossing at this location (see section 2.2.2), and to investigate the feasibility of providing an AT linkage west of Main Street along the rail corridor (see section 2.2.3), consideration should be given to improve trail access for John McCutheon Way at this location. It is recognized, that there are existing constraints which could limit the viability of trailhead elements outlined in Table 9. However, it is recommended that the Township undertake a detailed assessment / investigation at this location to determine the feasibility of implementing design treatments to enhance trail access to John McCutcheon Way.

There are a number of existing trail systems that can be accessed from Elgin Park Drive including trails within Elgin Park, Wooden Sticks Trail and the Trans Canada Trail. Based on feedback received through the study process and a review of aerial imagery, there appears to be existing demand (and usage) of the grassed area along Elgin Park Drive for trail access and vehicular parking. In addition, these lands are located on municipal parklands.

It is recommended that the Township explore the feasibility of implementing a trailhead at this location which could include a parking lot and other trail amenities identified in Table 9 such as a rest area, signage, washrooms, garbage receptacles, shelter, and potable water. Implementation of a trailhead is this location could enhance connectivity to surrounding trails, and destinations, as well as draw visitors from surrounding areas to support the Township's local economic and tourism development efforts.

These two locations are not intended to be an exhaustive list of recommendations. It is recommended that the Township work with its partners, namely Conservation Authorities, to explore and investigate the potential of establishing new trailhead locations and expand existing trail access points to provide for additional parking.

As trailheads are a key aspect of trail infrastructure and function as a marketing agent for the greater trail system, it is critical that maintenance practices exemplify the standard of quality the Township wishes to deliver. Trailheads are busy hubs of activity and thus are more heavily impacted by wear and tear, waste accumulation, and vandalism. Identifying and managing the level of maintenance required is influenced by the frequency of use, type of user, and size/complexity of trailhead programming. Assumptions can be made to provide baseline expectations for allocation of maintenance resources, however monitoring and collecting data on demands is necessary to inform the increase or decrease of future resource allocation. Tools such as inspection check lists, tracking logs and records of complaints/requests, should be implemented and data reviewed on an annual basis to inform budgeting. In addition to regular monitoring, enabling user reporting can be a successful tool to support trail maintenance. Trailheads should display appropriate contact information and be unquietly identified with an ID number/reference.

When selecting materials and products, balancing lifecycle duration, capital costs and maintenance costs is important. Overall, selections that reduce capital, maintenances and overall labor budgetary costs is best, however there maybe items where maintenance costs are preferred to higher capital investments and can have other benefits. Such an example is often the choice between paved parking areas and granular. Granular surfaces require greater maintenance, however, are lower cost to install and have environmental benefits through infiltration and material composition.

As most damage is caused due to winter related impacts, inspection of all trailheads should occur each spring prior to increase in trail users as the weather turns more favorably. All damaged or hazardous conditions/features should be removed, identified or signed appropriately on site to inform users that rectification is in progress. This action both limits the potential risk factor the failure has incurred and supports the municipality's commitment to the upkeep of the trail system. Table 10 outlines key areas of consideration for trailheads.

Table 10 - Key Areas of Consideration for Trailheads

Feature	Infrastructure/Materials	Benefits	Limitation	Life Cycle	Maintenance
Parking, Drop off Areas & Loading zones	Granular	– Permeable – Low cost install and maintenance	– Ruts and potholes form seasonally – Increase risk for slip, trip and falls. – Less conducive to snow removal. – Harder to delineate parking stalls to maximize use.	5 -10 years	– Annual infill of potholes and ruts. – Regrading and granular top up to 'reset' life cycle.
	Asphalt/Tar and Chip	– Able to delineate stalls and maximize capacity. – Conducive to snow removal	– Impermeable – Need for drainage management/infrastructure	15-25 years	– Minimal to no maintenance.
	Permeable Systems (pour in place, modular paver and/or reinforced grids which support granular surfaces)	– Permeable – Able to delineate stalls and maximize capacity. – Conducive to snow removal	– Higher cost – Susceptible to sediment clogging voids	15 -40 years	– Power washing to clear voids and maintain drainage function (frequency depending on winter maintenance and sediment flow into paved area)
Rest area	Prefabricated Benches & Tables	– Facilitate accessible seating options. – Manufacturer warranty and replacement parts – Defines and encourages site use – Wide range of material options that can increase longevity and/or ease of maintenance and partial replacement.	– Susceptible to vandalism, theft, and degradation by elements, material composition considerations are important. – Need to be kept in good condition or are strong negative reflection on the trail system.	8-15 years	– Minimal annual inspection for defects
	Informal Seat Stones	– Durable and low-cost option – Can facilitate a dual purpose for access barriers	– Does not provide additional accessibility and comfort features	None	– No maintenance
	Lawn Area	– Multi-purpose – picnic, child/dog friendly, area to prepare for trail activity outside of active vehicular areas.	– Requires some maintenance to enable a desirable level of function.	None	– Mowing every 3-4 weeks at a minimum – Over seeding and week management every 2-5 years to maintain/improve quality.
Lighting	LED	– Low energy, low operational cost – LED lower cost savings benefits are reached with longer running lights such as at trailheads.	– Higher procurement cost	10-15 years bulb 35-45 years Poles	– Monitoring for bulb replacement and vandalism

Feature	Infrastructure/Materials	Benefits	Limitation	Life Cycle	Maintenance
	Conventional Power	– Reliable and best suited for facilities highly used in winter evenings – Lower capital costs and operational knowledge	– Higher operational costs	N/A	– N/A
	Solar Power	– Lower operational costs – Positive sustainability optics	– Higher capital cost and operational knowledge needed – Increased maintenance and vandalism volubility	N/A	– Cleaning to remove dust – 2-5-year cycles reflective of seasonal rainfall
Signage	Detailed Maps/Information	– Large scale points of information, including trail mapping, interpretive information, user information – Key amenity to any trailhead that offers route options or multiple destinations, or feature.	– Larger and/or more complex construction – higher maintenance and replacement cost. – Require specialized skills to design.	N/A Depends on materials and design.	– Minimum seasonal inspection for vandalism and/or degradation. – Monitoring for content update needs (approx. 2-5-year cycles).
	Wayfinding/Placemaking	– Minor sign are intended as a simple directional communication or placemaking identifier. – Often single post or simple construction – low maintenance and replacement cost.	– Are limited in the information they can communicate.	5-10+ years	– Minimum seasonal inspection for vandalism and/or degradation.
Waste Management	Standard Waste Bins	– Important tool to reduce littering. – Low cost install and replacement. – Fit well with standard waste collection practices – Can range from barrel bins to more elaborate models with restricted lids.	– Service collection is onerous as locations can be high in number and spread out. Limited winter maintenance can impede seasonal specific servicing. – Minimal capacity and or long durations between serviced lead to overflow and/or odors.	10-15 years	– Functional maintenance per capacity projections - model specific – General inspections with waste pick up for repair or replacement needs.
	Innovative Waste Bins	– Important tool to reduce littering. – Improve feasibility of waste sorting options through collection efficiencies. – Reducing waste collection frequency: – Censored waste/recycling bins that inform the need for emptying through a centralized dashboard. – Large, semi-underground waste collection systems (i.e. Molock, Earthbin) that allow for more waste storage while reducing unwanted smells. – Independent pet waste collection, consider waste to energy conversion systems that showcase green initiatives while encouraging use. – Often more durable than standard bins	– Service collection is onerous as locations can be high in number and spread out. Limited winter maintenance can impede seasonal specific servicing. – Can require changes to standard practices, equipment and/or 3rd party collection. – Can require specialized equipment for monitoring or collection. – Pet collection/energy conversion systems require a process facility within regionally located near collection areas.	10-20 years	– Functional maintenance per capacity projections or censor notifications - model specific – General inspections with waste pick up for repair or replacement needs.
Gates	Metal Gates	– Can be selectively removed/opened for seasonal or maintenance access. – Long lasting, low maintenance.	– Hinge and lock mechanisms are susceptible to damage and degradation.	15-25 years	– Rust protection and hinge maintenance as needed – anticipate minor repair action every 5 year (based on weather degradation and salt.
	Wood or Metal/Wood Combination Gates	– Can be selectively removed/opened for seasonal or maintenance access.	– Hinge and lock mechanisms are susceptible to damage and degradation. – Less durable and long lasting, susceptible to impact damage and weather degradation.	10-15 years	– Post replacement and hinge maintenance as needed – based on weather degradation and salt.

Feature	Infrastructure/Materials	Benefits	Limitation	Life Cycle	Maintenance
Barriers	Bollards – Metal or Concrete	– Removeable options available to facilitate maintenance and other situational access.	– Partial barrier, does not restrict all access – Not suitable for seasonal removal.	15-30 years	– Damage repair as needed.
	Post/Post and Cable Post and Page Wire	– Low cost barrier that restricts most access	– Does not restrict pedestrian access.	15-20 years	– Select post replacement and cable/page wire repair after 5-10-year mark or in response to vandalism/inappropriate use. – Cable tensioning units can be installed to aid with periodic tightening and will increase overall lifespan.
	Natural Stone	– Durable and low-cost option – Good for restricting access by vehicles.	– Partial barrier, does not restrict all access	None	– No maintenance
Shelter	Prefabricated – Metal	– Encourages gathering and provides weather refuges. – Helps to protect information/wayfinding signage. – Pre-engineered, warranted, vandal resistant.	– Contractor or supplier install needed – Can accommodate undesired activity such illegal actions and homeless shelter.	25 - 35 years	– Bi-annual touch up painted over paint damage after warranty period (often 10 years).
	Custom - Wood	– Encourages gathering and provides weather refuges. – Can be installed by volunteers and easily repaired.	– Can accommodate undesired activity such illegal actions and homeless shelter. – Less durable and more susceptible to vandalism and weather degradation.	15-25 years	– Varies largely based on construction materials and design. – Smaller structure should be inspected annually after initial 5 years.
Potable water	Simple Hose Bib/Tab or Bottle Fill Station	– Provide water for users or pets – Desirable amenity at remote or high-volume trailheads. – Best paired with other park and open space amenities to aid feasibility.	– Seasonal, more specialized, maintenance required – Public health risks to water quality, which require monitoring and reporting. – Additional infrastructure required to service. – Susceptible to vandalism	N/A Depends on system.	– Fall decommissioning to empty lines – Spring flush and testing prior to potable use. – Consider non-potable or labeling as such to encourage use for pets and clean up only if there is a risk concern.
Washrooms	Portable	– Rental/3rd party maintained – Can be limited to specific seasons when service is desired. – Ability to scale up or down based on location need.	– Lower standard facility that can be undesirable by users. – Less control over maintenance due to rental contract structure. – Standard models are not accessible, upgrading options recommended.	N/A	– Periodic inspection and relay of issues to service provider.
	Permanent	– Higher quality amenity, higher user satisfaction. – More flexibility for dual purposes and accessibility. – Better addresses higher volumes of use – such as major trailheads.	– Require greater infrastructure and maintenance. – Increased costs to install and maintain. – Increased responsibility for care and maintenance. – Can accommodate undesired activity such illegal actions and homeless shelter.	30-40 years	– Daily to weekly inspections and cleaning, depending on use and vandalism occurrences. – Daily locking/opening if evening use is not desired. – Select replacement of fixtures after 10 years. – Seasonal decommissioning if not heated.

Chapter 3 Outreach

To create a community where active transportation is commonplace, a community cannot focus solely on building new infrastructure – there should be a concerted effort to encourage behaviour change and educate residents about how to use infrastructure in a safe and legal manner. The Township of Uxbridge has had success creating new programs and partnerships to promote active transportation, but there are opportunities to build on these existing successes by enhancing existing programs in the community and adding new complementary programs to help to build a more diverse and inclusive cycling, walking and active community for Uxbridge.

This chapter outlines recommendations for new programs and policies that could be implemented in Uxbridge to help to foster the creation of a strong culture of active transportation in the Township. The new and expanded programs that are presented here are based on best practices from North America where communities have made great strides towards being among the most walkable and bicycle friendly communities in North America.

Chapter 3 is not intended to be prescriptive but rather to outline additional elements of a robust plan to enhance the culture of active transportation in Uxbridge. The information contained in this chapter includes a detailed review of existing and potential partners and potential program options for future consideration and roll-out.

3.1 Partners

To create a culture of cycling and active transportation in Uxbridge, the Township will need to build strong, stable and effective partnerships with stakeholders at the local, regional and provincial level. Table 11 outlines potential partners for the Township and the elements of the Programming Plan that each stakeholder could be responsible for.

Table 11 - Suggested Partners for Programming and Outreach

Partners	Roles
Uxbridge Active Transportation Committee	The Active Transportation Committee can serve as a delivery agent for new programs and projects within the Township. The Committee has shown itself to be capable of planning and delivering events in the past, and there are opportunities to empower the committee to do even more not only to advise the Township on implementation of new infrastructure, but also to organize and deliver events to build a stronger culture of active transportation.
Uxbridge Accessibility Advisory Committee	The Accessibility Advisory Committee can provide input as the Plan moves forward to ensure that Uxbridge's plans build accessibility into every level of decision-making within the Township.
Uxbridge Trails Committee	The Trails Committee has been an effective voice for the development of new trails in the Township, and has helped to establish trail maintenance standards and more effective communications regarding trails with residents of the Township.
Durham Regional Police Service (DRPS)	The DRPS is an important partner in promoting safe road use for all users. Police officers can deliver educational and public awareness messaging, can help with Bike Rodeos and cycling education at schools, and can play a role in sharing information about collisions and citations with Township staff in order to better inform infrastructure decisions.
Uxbridge Cycling Club	The Uxbridge Cycling Club has hundreds of members and has shown an ability to organize and deliver special events within the community. They are an excellent source of manpower, expertise and support for new projects.
Africycle	Africycle has the capacity and expertise to offer residents a meaningful way to learn new skills. They can help to deliver bike maintenance skills, distribute bikes to community members in need and show the transformative power of the bike both within Uxbridge and across the globe.

Partners	Roles
Precious Minds	Working with some of Uxbridge's most vulnerable populations, Precious Minds represents an opportunity to engage with residents who might not otherwise have their voices heard. They engage in programs to boost independence and access for people with exceptionalities, which can be benefited through the provision of active transportation infrastructure and programming.
Uxbridge BIA	Downtown Uxbridge is a key destination within the Township, and the businesses that make up the BIA will be important partners in delivering new programs to encourage people to walk, bike or wheel to the area.
Local Businesses	Businesses that are not represented by the BIA still have an interest in promoting active transportation, especially to their employees.
Region of Durham Active Transportation Committee (DATC)	Formed in 2019, the DATC is an important avenue of communication between the Township and the Region. As the DATC begins to develop more programs and materials, having an established connection with the committee will be important to be able to bring the Uxbridge perspective to the development of those programs and to coordinate their distribution locally.
Durham Region Planning and Works Staff	The upcoming Durham Regional Cycling Plan, 2021 (Draft) is likely to feature additional infrastructure recommendations within the Township of Uxbridge. It will be important for the Township to work with the Region to ensure timely and effective delivery of those infrastructure projects, and to collaborate on the delivery of new programs and projects that may assist Uxbridge as well. Region has existing AT-related programming, including Smart Commute, the Active and Sustainable School Travel Program and Bike Month.
Durham Public Health	While Public Health in Durham has not been actively involved in active transportation projects in the past, there is value in municipalities encouraging the department to play a more active role in promoting, discussing and helping with planning related to active transportation in the future.

3.2 Programming Recommendations

This section will be broken down into three categories with each category representing an additional "tier" of investment that can help the Township to develop a stronger culture of active transportation. The three categories include:

- Phase 1: Foundations
- Phase 2: Basic Programming
- Phase 3: Advanced Programing

While there is no single route to becoming more bicycle friendly, it is strongly recommended that the Township focus on fully implementing the recommendations in each category before rolling out initiatives in the subsequent categories. For example, when determining how to spend programing dollars, the preference should be given to funding the programs in the "Foundations" category before moving on to programs in the "Basic" category, and programs in the "Basic" category should be fully implemented before initiating programs in the "Advanced" category. The delineation between these programs is based on extensive research and experience with Community-Based Social Marketing (CBSM) and is designed to facilitate both cultural and individual shifts in belief, behaviour and attitude towards active transportation in Uxbridge.

3.2.1 Phase 1: Foundations

The programs outlined in this section represent the investments that are most likely to generate significant momentum towards building a stronger culture of active transportation in Uxbridge. These programs are meant to leverage the strengths and opportunities identified in the SWOT (strengths, weaknesses, opportunities and threats) analysis presented in section 1.2.1, and build upon existing capacity within the Township. However, it is important to recognize that without a centralized resource to help build this capacity and develop new partnerships opportunities, the expansion and the development of new programs could be challenging.

For this reason, it is strongly recommended that the Township establish an Active Transportation Coordinator position, even if this position is created as a part-time, seasonal contract position. Hiring a staff person as a Summer Student to help deliver new programs and strengthen existing initiatives, has proven successful in smaller communities. The most notable success in Ontario being the Town of Saugeen Shores; the Town has seen significant improvements in their cycling culture since hiring a Bicycle Community Coordinator in 2018, for each summer. The addition of a 500-hour Active Transportation Coordinator contract from March to October, can contribute significantly to the development of a stronger culture of active transportation in Uxbridge. For reference, the job description for the Town of Saugeen Shores Bicycle Community Coordinator is included in the Appendix B.

The remainder of the suggestions in the "Foundations" section will operate on the assumption that this resource is in place. If the staff person is not hired, these programs are less likely to be as successful, although they could still come to fruition with the support of the Township's numerous advisory committees and volunteer groups.

Action #1: Routine Community Rides and Walks

One of the most common, and easiest to deliver, methods of connecting to individuals and encouraging behaviour change is to host regular community walk and ride events. While community bike rides are much more common than community walks, that is not to say that a walking program is not without a significant level of merit, and for Uxbridge. Community walks and bike rides provide residents with the opportunity to engage in an enjoyable, social activity while also exposing them to the possibilities that exist for getting around Uxbridge actively. Key "ingredients" for a successful community walk or ride program include:

- Regularity: walks or rides should be held on a regular basis, whether that be monthly, biweekly or even weekly. Having the events occur at predictable intervals ensures that residents can engage with the events - even if they miss one, there is another event coming up.
- Visibility: do your best to "brand" the walks or rides as much as possible. Have walk leaders carry a sign encouraging passers-by to join the walk or learn more about it, create a mobile billboard that can be towed on a trailer behind the leader of a community bike ride etc. The best advertising for these events is having people see them "in the wild", or having information spread by word of mouth.
- Accessibility: these are not training events; they are social events. Rides and walks should be done at a pace that is family friendly, and allows for socialization. Ride and walk distances should also be a length that is manageable for first-time riders, inexperienced walkers or young children. Ensure that routes have a shortcut built-in if they are longer so that people can still join up with the larger group if they are not comfortable with completing the entire route.
- Socialization: the idea of community walks and rides is to provide people with an opportunity to meet their neighbours and explore their community – and that means introducing people to businesses and gathering places in their neighbourhoods as well! Ensure that each event ends in a place where attendees can gather and socialize – a local café, a park or even a local brewery!

The Township should consider serving as co-funder for community rides and walks, providing insurance for ride and walk leaders as necessary, promoting events through Municipal communications feeds and helping to print / distribute promotional materials.

Recommended partners:	– Active Transportation Committee – Trails Committee – Recreation Program, Culture and Tourism staff – Uxbridge BIA – Service clubs – Local businesses
Key Outcomes:	– Township hosts a training session for potential ride leaders and organizers – potentially led by the new Active Transportation Coordinator. – Township offers liability insurance to all ride leaders who attend training and agree to abide by rules as set out by the Township. – Advisory Committees, Service Clubs, cycling groups, local businesses and other stakeholders are engaged as ride leaders. – Uxbridge works to develop a consistent brand and identity for the ride series. – Ride leader T-Shirts or other swag are made available as a small token of appreciation. – Incentives for attendees, including discounts or giveaways as local restaurants/cafes or cycling accessories like lights, bells etc. are made available. – Storytelling is embedded in the rides – Township communications staff attends rides to talk with residents who attend the ride to share their stories and create positive press about the events. These stories are shared via social media and traditional media in Durham Region.
Estimated costs:	$2,500 per year for insurance and promotional costs
Inspiration:	Windsor-Tecumseh Slow Ride(here) Every week, dozens of residents gather in Windsor or Tecumseh for a slow, social ride. Rides usually finish at a local park where a food truck is waiting to serve snacks or ice cream to all attendees. These rides have been operating since 2017, and have been growing in popularity every year. The rides are citizen-led, which is a good model for other communities to encourage to reduce the resources necessary from the Township itself.

Action #2: Uxbridge Bike Month

As this plan moves forward, hosting a Bike Month in Uxbridge is a great way to bring cycling to a much larger audience. Expanding the number of events and programs offered during one single month can help to create a conversation about cycling in the community and can provide the push for people to get back on their bikes and give cycling a try, in a way that events interspersed throughout the cycling season cannot. Maximizing the number of events during Bike Month can help to target the "interested but concerned" population of potential riders in Uxbridge, and can build a strong sense of community around cycling. Consider partnering with partners at the Trails Committee, The Township's Active Transportation Committee, local service clubs and local bike shops to offer weekly guided bike tours around Uxbridge during Bike Month, and expand the offerings of events to ensure that June is a month-long celebration of cycling in Uxbridge. Consider hosting two larger events in conjunction to both kick off and wrap up Bike Month – Launch Bike Month with a Bike to Work Day Breakfast in the downtown area and wrap the month up by revitalizing the successful UxCycle (here) event that was hosted until 2018 in the Township. Be sure to work closely with Durham Region to promote and brand your bike month activities with them, and to make use of whatever resources they make available to local municipalities to participate in the promotion.

Bike Month Planning Guide

Bike Month doesn't have to be a huge undertaking - by bringing together different partners, a community can create a great Bike Month without placing the burden of organizing multiple events on any one stakeholder.

Step 1: A Bike Month Committee
The most important aspect of a good Bike Month is to have multiple stakeholders participating. Suggestions for stakeholders to invite to your Bike Month Committee are:

- Local cycling clubs
- Local bike shops
- Local cycling advocacy organizations / advisory committees
- Local Police Service
- Public Health
- Municipal events / Active Transportation staff
- Large employers
- Service clubs (Rotary, Lions, etc.)

It is suggested that you begin hosting Bike Month Committee meetings in March or April to give the group enough time to plan events during late May and June.

Step 2: Build your Calendar
A great Bike Month can be achieved with as few as 4 events over the span of the month – one event each week can help to keep cycling on the agenda and give residents multiple opportunities to engage in cycling in a positive way. Consider "bookending" your Bike Month with more significant events – for example, a complimentary Bike to Work Day Breakfast (here) at Town Hall to start the month and a Family Bike Day or a Glow Ride (a night ride lit up with lights and glow sticks) to end it. Intervening events can be smaller and easier to organize – for example, host a community coffee shop tour, a trail ride, a bike repair workshop or a "dust off your bike" event where bike mechanics volunteer their time to be on-site for basic repair (inflating tires, greasing chains) for bikes that have been in the garage for a little bit too long. For more ideas about events that could be hosted, see these Bike Event "Recipe Cards" (here) for inspiration. Empower interested residents to plan and lead the rides to reduce the planning burden on municipal staff.

Step 3: Promote your Events
Producing a printed calendar of events to distribute around the community can help to reach residents that might not know about the events otherwise. Be sure to make use of existing network of stakeholders, including the Trails Committee and the members of the Bike Month Committee, to spread the word. Publish each event to the Durham Region Bike Month website and work with local partners to produce a regional and local Bike Month Calendar.

Step 4: Evaluate
Be sure to document the results of your Bike Month. Track the number of people that attend the events, gather feedback from them about where they heard about the event and what types of things they would like to see in the future. This type of feedback can be a significant benefit when planning subsequent Bike Months!

Recommended partners:	– Active Transportation Committee – Trails Committee – Service clubs – Durham Region – Local bike shops – Uxbridge BIA
Key Outcomes:	– Begin planning Bike Month in the spring. – Bike Month takes place in June with at least 4 events throughout the month.
Estimated costs:	– $3,000 for promotional materials, event expenses, prizes and more.
Inspiration:	Bike to Work Month – Ottawa (here) The City of Ottawa has hosted arguably the most successful Bike Month in Ontario for the past several years, in part because the community has focused on building effective partnerships to deliver the event. Rather than keep the organization and delivery of the month-long campaign in-house, The City of Ottawa provides funding to EnviroCentre, a local non-profit, to bring Bike to Work Month to life. As a result, the Bike to Work Month offerings in Ottawa have grown rapidly - with new partners coming on board, new initiatives spearheaded by EnviroCentre being made available each year, and new interest in the promotion growing each year. This is an excellent example of a community providing resources to a local non-profit to help to make an event stronger, to build capacity and to develop a stronger culture of cycling in a City.

Action #3: Family Bike Days

Family Bike Days have been successfully deployed in several communities across Ontario, most notably in Ingersoll, where their annual Family Bike Day brings out hundreds of families each year to learn basic cycling skills, trade in bikes that have been outgrown and enjoy the cycling amenities the Township has to offer in a safe, controlled environment. Uxbridge should consider developing a plan for a Family Bike Day that involves elements of cycling education (Bike Rodeos, bike maintenance clinics, etc.), demonstrations and riding clinics, a Bike Swap (similar to a ski swap, where parents can trade in bikes that their children have outgrown) and other elements that will make the day enjoyable for families of all ages. Closing a segment of road can help to ensure that families with young riders feel safe and comfortable letting their kids practice riding, and also creates a unique draw to the event. These events could serve as a high-profile kick-off to Bike Month, and also could help to raise the profile of cycling as students head back to class in September, so consider hosting 2 each year – one in the late spring and one in the late summer.

Recommended partners:	– Township staff – Durham Region Police Services – Schools – Community groups
Key Outcomes:	– Host one Family Bike Day each year, scaling up to two events annually.
Estimated costs:	– $2,000 per event for promotional materials, educator honorariums etc.
Inspiration:	Ingersoll Family Cycling Day (here) In 2015, the Town of Ingersoll hosted their first Bike Month, organizing a few events focused on family and casual cycling including a Family Cycling Day. Family Cycling Day kicks-off Bike Month (June) celebrations each year within the Town – it's a large-scale cycling event with several biking events, a community BBQ, a bike swap, a bike safety and repair clinic, and more. As part of the event, a number of bike rides are hosted including: a 90 kilometre ride designed for advanced road cyclists; a 15-20 kilometre ride designed for recreational cyclists, seniors and youth, and a 1.5-2.0 kilometre rides designed for children and novice riders. Family Cycling Day is organized by the Ingersoll Safe Cycling Committee which includes municipal staff, and Council members who work with businesses and community members (including the Southwestern Public Health Unit and the OPP) to advocate for the growth of cycling and promote the viability of cycling as a form of transportation and recreation.

Action #4: Annual Bike Rodeos

One of the most effective ways to create a stronger culture of cycling is to start with the youth in the community. With a small number of elementary schools, Uxbridge is fortunate to be in the position where every student in the Township could receive cycling education through Bike Rodeos for a relatively small investment. Once an Active Transportation Coordinator is hired, the Township can undertake the practice of hosting Bike Rodeos for every grade 5 student in the community each school year. By ensuring that all students gain access to basic bike handling skills, Uxbridge will create a strong foundation for safe cycling practices later in life, and will help to create a stronger culture of physical activity, especially if these Bike Rodeos are included as part of the broader School Travel Planning project (refer to section 3.2.2. for proposed "Basic" programming options).

Recommended partners:	– Durham Region Police Services – Schools – School boards
Key Outcomes:	– Bike Rodeos at all elementary schools reaching every grade 5 student in Uxbridge each year.
Estimated costs:	– $1,000 annually for insurance and materials. Courses delivered as part of AT Coordinator's duties.
Inspiration:	Cycling into the Future – Waterloo Region (here) Cycling Into The Future is a cycling education program that has been delivered in Waterloo Region for the past several years. Through a funding partnership with the Cities of Kitchener, Cambridge and Waterloo, Cycling Into the Future has resulted in hundreds of Grade 5 students learning how to safely operate a bicycle. The goal is to ensure that each student in Waterloo Region learns basic bike handling skills and the rules of the road, resulting in a population that is more aware of the rights and responsibilities of people on bikes in the future.

Action #5: School Cycling Challenge

An example of a low-cost, but highly successful initiative to get more children riding to school can be found in Saugeen Shores' work in developing a School Cycling Challenge. Each year, the schools in Port Elgin and Southampton challenge one another to see which school can log the highest number of trips taken by bike over the span of a week. Winning schools have seen more than 30% of their student population biking to school through the week – a temporary uptick that leads to sustained increases in the number of children cycling to school. Consider implementing your own School Cycling Challenge in Uxbridge to build a spirit of friendly competition.

Recommended partners:	– Active Transportation Committee – Schools
Key Outcomes:	– School Cycling Challenge takes place annually, with measurements being taken to see how the event impacts ridership at schools over the course of the year.
Estimated costs:	– $500 per year for prizes and promotions.
Inspiration:	Bike to School Challenge – Town of Saugeen Shores (here) Since 2016, the Town of Saugeen Shores has been celebrating Bike Month and undertaking Bike to School Challenges with the Town's four elementary schools. The Bike to School Challenge is held during one week in June and teachers take a daily tally of how their students travelled to school that day. The challenge has proven to be a fun and effective way to encourage more students to engage in active forms of recreation and transportation. In addition, the Town partners with local groups and businesses to offer prizes and incentives for students and their schools – in past years, the winning school has received a bike repair stations and the runner-up received a tree for the school yard.

Action #6: Downtown Bike Corrals

Bike parking in the Downtown area of Uxbridge was identified as a challenge by stakeholders and members of the public. As a means of adding bike parking capacity, consider installing bike parking corrals in the downtown area in spaces that are currently occupied by a vehicular parking space, or which are currently hashed off due to space constraints. One bike corral can fit up to 20 bikes in the space that is normally reserved for one car, so it can significantly expand the number of parking spaces for visitors to the downtown area. Consider installing bike corrals for seasonal use when cycling rates are higher.

Recommended partners:	– Uxbridge BIA
Key Outcomes:	– 2 bike corrals installed on a seasonal basis.
Estimated costs:	– $1,200 per bike corral.
Inspiration:	Downtown Bike Corrals – Town of Oakville (here) In 2016, the Town of Oakville in partnership with its BIAs, installed bike corrals in downtown Oakville, Bronte Village and Kerr Village in an effort to encourage residents to bike to / from these business improvement areas . Bike corrals were installed in advance of Bike Month (June) and were part of a pilot project recommended in the Town's Active Transportation Master Plan.

Action #7: Preliminary Data Collection

One of the challenges being faced by smaller communities like Uxbridge is that there is a lack of available data about who is cycling and walking, how many people are using the trails and how frequently they are riding, walking or wheeling. One of the avenues for addressing this is to invest in trail counter devices which can help to establish a baseline figure of the number of people using the trails every day. In addition to trail counters, consider an annual in-person count program, potentially by partnering with a high school to offer volunteer hours for students who participate in observational counting. The in-person counting can be used to supplement and verify the data collected by the automated trail counters.

Recommended partners:	– Active Transportation Committee – Trails Committee – Schools
Kev Outcomes:	– 2 to 3 trail counters installed. – Annual in-person counting programs performed.
Estimated costs:	– $2,500-12,000 for counting and data collection devices.
Inspiration:	Trail User Counters – City of Owen Sound (here) In May 2020, the City of Owen Sound installed infrared trail user counters at strategic locations throughout the City to support management efforts of municipal recreation trails. The intent of the trail user counters and data collection is to: collect data on the number of people using the trail systems; use the data to inform future maintenance and capital trail investments; and to use the data to inform an update of the City's Recreational Trails Master Plan. The trail counters are portable and planned to be relocated on a frequent basis to collect user counts on the City's trail network on an ongoing basis.

Action #8: Preliminary In-School Data Collection

Schools are a key trip generator in communities like Uxbridge – in many cases it is estimated that 20-30% of the morning rush hour traffic in a community can be attributed to parents driving their children to school. Given their significance in generating trips of all types, having a baseline of information about how students are travelling to school and what reasons are driving parents to make the decisions about their children's travel patterns that they make can help to inform future investments and interventions. While data collection is always an important part of an Active School Travel Planning process (see below in "Basics"), a community can also begin collecting baseline data before the AST Process gets underway. Consider encouraging schools to conduct "Hands-Up" Surveys using the BikeWalkRoll platform to determine travel trends at the start of each school day, and delivering a Parent Travel Survey (Available here) to better understand the motivation behind why parents make the transportation decisions they are making with their kids.

Recommended partners:	– Schools – Public Health
Kev Outcomes:	– Family Travel Survey delivered annually. – Hand-up surveys performed weekly to illustrate travel trends.
Estimated costs:	– None , staff time only.
Inspiration:	BIkeWalkRoll (here) BikeWalkRoll is a browser-based web application developed by Green Action Centre (based out of Winnipeg, Manitoba). This website provides a quick and easy survey tool that is designed to be used by teachers in classroom to collect in-school data. Teachers are encouraged to conduct student travel surveys (using the Hands-Up method described above) to collect information on the number of students whom travelled to school via biking, walking, rolling (e.g. skateboard, scooter), school bus, public transit and driven. Survey information is stored on the participating's school profile page on BikeWalkRoll and can help to create a baseline of data to inform future decision-making regarding investments and priorities amongst municipal staff, stakeholders and Council representatives. There are a number of participating schools within Ontario that are currently using BikeWalkRoll ranging from Thunder Bay, Kitchener, Ottawa and Sarnia.

3.2.2 Phase 2: Basic Programming

The "Foundations" section outlined in section 3.2.1 are intended to establish the beginning stages of a cultural shift in the Township of Uxbridge. These programs are largely intended to build awareness about cycling and to increase its visibility within the community to a point where more residents have been exposed to the idea that you can easily cycle around Uxbridge for your daily needs. The "Basic" section begins to move into programs that are more targeted, and provide an additional level of support and encouragement for specific populations. Programs such as Bike Valet, Active School Travel Programming and workplace encouragement initiative are meant to supplement the broad programs introduced during the Foundations phase (section 3.2.1) to give individuals the extra push to make a behaviour change.

Action #1: Cycling and Walking Wayfinding Signage, and Distance / Time Maps

With Uxbridge's compact geography, most trips made in the urban area are easily doable in under 15 minutes by bike, and many destinations lie within a 30 minute walk of most areas of the Township. One of the challenges with promoting active transportation is that residents often assume that walking or cycling to a destination will take much longer than it actually does[7]. That knowledge gap can be fixed, however, by promoting the large area of town that lies within a 5, 10 and 15 minute bike ride of popular destinations like the Downtown Core, the Fields of Uxbridge or the commercial area. Research has shown that wayfinding, when deployed in a way that highlights safe, attractive routes and the relatively short time that it can take to move between destinations, can significantly improve how residents perceive walking and cycling[8]. An excellent example of these types of visual displays can be found below, from the City of Peterborough. Consider creating similar maps and wayfinding signage and posting them in prominent locations to show residents that riding their bikes or walking to their destinations would be a healthy, quick option to get around the community. Another excellent example of wayfinding that helps direct trail users towards key amenities can be found in Brant County – examples of those signs can be found in the appendices of this report.

As you develop the new wayfinding strategy and the promotional materials, ensure that you also create a promotional campaign that can be delivered through social media and traditional media outlets. These promotional campaigns can help to turn up the volume about walking and cycling, and can create the conditions under which social change can occur in Uxbridge.

Recommended partners:	– Active Transportation Committee – Trails Committee – Uxbridge BIA – Durham Region
Key Outcomes:	– Maps of popular destinations produced and distributed – Wayfinding strategy funded
Estimated costs:	– $20,000 for development of AT wayfinding strategy, purchase and placement of all signage and materials
Inspiration:	Existing Wayfinding in Uxbridge The Township has implemented wayfinding signage (see photo on the left) throughout community over the past few years. The signage provides directional guidance for motor vehicles as well as distance information to key community destinations. It is recommended that the branding and template be built upon to develop a "family" of wayfinding signage specific for active transportation users, so cyclists and pedestrians can be directed to routes that are considered comfortable and safe by foot and bike (e.g. routes identified as part of Uxbridge's active transportation network). Brant County Wayfinding Signage The County has implemented wayfinding and signage along a number of existing trail systems including but not limited to the Grand Valley Trail, the Cambridge to Paris Rail Trail, the S.C. Johnson Rail Trail, the Brantford to Hamilton Rail Trail, and the Lake Erie and Northern Rail Trail. Wayfinding along these trail systems including kilometre markers, kiosks at trail entrances, posts, and interpretive signage. These signs provide directional guidance along the trails, but also notify users to connections (and distances) and key destinations including parking areas, washrooms, restaurants, and cultural / historic areas of significance. An example of the County's wayfinding signage is illustrated in the photo to the right.

[7] https://www.minnpost.com/second-opinion/2018/03/barrier-healthier-active-travel-people-overestimate-how-long-it-takes-walk-or/
[8] https://www.sciencedirect.com/science/article/pii/S221414051830358X

Action #2: Add a "Make it Active" Events Team

Uxbridge plays hosts to dozens of special events every year. Each of the special events that occur in the Township represents an opportunity to connect with residents and visitors alike about active transportation in Uxbridge, and they often present a unique opportunity to speak to people that are "not the usual suspects" when it comes to active transportation. Having a "Make It Active" Events team, whose mandate is to bring an active transportation lens to every event, can help to ensure that the Township continues to build a stronger culture of active transportation in Uxbridge. Consider having every event application be forwarded to the "Make It Active" team for comment, even if event organizers are not required to heed the comments from the team.

The "Just Add Bikes" Events Team could recommend event organizers host Bike Valet at their event (below), could suggest where cycling education could be included in the event, and could suggest avenues to promote walking and cycling through benefits or incentives at the event. Work with event coordinators to establish creative methods of bringing active transportation to a new audience.

Recommended partners:	– Trails Committee – Recreation Program, Culture and Tourism staff – Event coordinators
Key Outcomes:	– All events in Uxbridge are evaluated for active transportation inclusion
Estimated costs:	– None

Action #3: Bike Valet Program

Bike Valet (here) is a highly visible, effective way of showing a Township's commitment to making cycling easier, safer and more convenient. Uxbridge should host Bike Valet at the local Farmers' Market while it is in season, offer the service at regular festivals and events downtown - potentially staffing it with the community's Cycling Staff person. This would provide a benefit to the community – providing people on bikes with a safe place to lock their bike while at community events and providing an opportunity for Municipal representatives to talk with riders about cycling in Uxbridge. The Township could also consider integrating bike valet into the special events permitting process to ensure that all special events in Uxbridge include provisions for Bike Valet. This could be accompanied by a small fee for event organizers to pay for staffing at the bike valet, and could help the community make bike valet a more reliable element of special events in Uxbridge. There may also be an opportunity for the Township to partner with surrounding municipalities like Scugog to share the costs of investing in Bike Valet materials so that the service can be more widely available to all the communities in the area on a more frequent basis.

Recommended partners:	– Active Transportation Committee – Trails Committee – Recreation Program, Culture and Tourism staff (to update special events permitting procedures)
Key Outcomes:	– Bike Valet available at 10 events per year
Estimated costs:	– $5,000 to purchase Bike Valet materials (tents, fencing, bike racks, tags, tables and promotional materials)
Inspiration:	Town of Saugeen Shore – Bike Valet In 2019, the Southampton BIA partnered with the Town to provide Bike Valet services and major community events including Canada Day celebrations and the Marine Heritage Festival. Bike Valet services were made available throughout the duration of the events and located in high-visible areas so people felt more encouraged to bike to these events and use the Bike Valet. Bike Valet services were considered to be successful and used by many people – approximately 150 bikes parked at the Bike Valet during the Marine Heritage Festival.

Action #4: Community Walking and Cycling Promotions

As the broader community promotions begin to take hold in Uxbridge, supplementing the wider community messaging with more targeted interventions will help to get more residents walking and thinking about riding their bikes more often. Consider introducing more focused interventions such as:

- Workplace Lunch and Learns: Take the cycling education programs to where residents and employers already are in Uxbridge. Consider offering different modules, including Bicycle-Friendly Driver training, Basic Bike Maintenance and Cycle Commuting 101 to help employees build up their cycling skills. These programs should aim to take approximately one hour, and should offer a mix of practical, hands-on lessons and classroom-based lessons. Consider offering incentives or additional benefits to employees who take the courses, including gift certificates for local businesses participating in the Walk and Wheel Wednesdays (see below)
- Walk and Wheel Wednesdays: Consider partnering with restaurants and other businesses in the downtown BIA to offer discounts for customers who walk or bike to their businesses during lunch hour every Wednesday. Be sure to promote the program widely!
- Senior Cycling Events: Consider partnering with a local bike shop to offer test rides of E-Bikes for groups of Seniors through senior social groups. Cycling is a great way for older adults to remain active, and an E-Bike makes cycling even easier and more enjoyable. Particularly among seniors, the popularity of E-Bikes is increasing, but seniors are much less likely to consider an E-Bike if they don't know someone who has one or they've never ridden one themselves. By introducing seniors to e-bikes in an enjoyable, social setting, you can help to build a stronger culture of cycling and E-biking among Uxbridge's growing seniors' population.

Recommended partners:	– Township staff – Workplaces – Uxbridge BIA – Local businesses – Active Transportation Committee – Trails Committee – Seniors groups – Local bike shops
Key Outcomes:	– Targeted programs aimed at several demographics in operation each summer
Estimated costs:	– None. Costs of delivering Lunch and Learns should be covered by employers, Walk and Wheel Wednesdays would be based on in-kind support from local businesses and Seniors Cycling Events would need promotional efforts from local bike shops and Seniors Groups.
Inspiration:	Bike Windsor Essex (here) Bike Windsor Essex is a non-profit community cycling advocacy organization educated to the promotion of cycling and active transportation. The organization works with the City of Windsor, Essex County and its local area municipalities, government agencies, stakeholders, businesses and other agencies / organizations to host, support and deliver programs such as community presentations, lunch-and-learns, organized rides, bike rides and cycling classes that are run by CAN-Bike certified instructors. In addition to these programs, Bike Windsor Essex operates a community bike shop that is designed to provide an inclusive space for all people to learn how to maintain and fix bikes and to work on their own bicycles.

Action #5: Active School Travel

Establishing Active School Travel programs for all elementary schools in Uxbridge is an effective way to promote active transportation to the younger generation. It is an effective way of creating lifelong habits of walking and cycling, and should be a focus of the Township as it aims to create a stronger culture of active travel in Uxbridge. Increasing the number of children walking and cycling to school often relies on parents – their understanding of the safety and suitability of routes around the schools, for example – so effective programs must also be targeted at parents as well as students.

Experience from the Ontario Active School Travel Program (here) shows that the most significant factor in determining the success of a School Travel Planning process is the inclusion of a dedicated staffing resource to liaise with schools, deliver programming and provide support to administration to deliver events and promotions. It is suggested that the Township of Uxbridge hire a School Travel Planning Facilitator (see a model Job Description here) to perform School Travel Planning work with schools all throughout the Township. Recognizing that Uxbridge is a relatively small Township, it is suggested that the Township partner with Durham Region and the Township of Scugog to hire an AST Coordinator to work across the municipalities. The Ontario Active School Travel group has prepared an extremely comprehensive guide to launching your own School Travel Planning project, which can be found here.

Many organizations in Uxbridge, including the DRPS and Durham Public Health, have existing relationships within schools, and are in frequent contact with staff and administration at most schools in Uxbridge for a variety of programs and events. Those connections could be expanded to include more emphasis on cycling education in schools to help to ensure that all students know the rules of the road, and how to operate a bicycle safely. Other suggestions for encouraging more active school travel in Uxbridge include:

- Installing Bike Repair stations at the high school in Uxbridge
- Hosting Trips for Kids events taking students on mountain bike trips
- Providing support for after-school bike clubs
- Supporting and leading biking and walking school buses

As School Travel Planning Efforts get underway, be sure to include data collection in your efforts. BikeWalkRoll (here) is a simple tool that uses hands-up surveys to track progress and show how walking or cycling increases in a school over time.

Recommended partners:	– Durham Region – Schools
Key Outcomes:	– All schools in Uxbridge have School Travel Planning programs in place
Estimated costs:	– Approximately $25,000 per year for staffing costs for School Travel Planning Coordinator (If split between Uxbridge and Scugog).
Inspiration:	Town of Ajax – Active and Safe Routes to School (here) In 2019, the Town of Ajax launched their Active and Safe Routes to School program to encourage students to walk, bike and engage in active forms of travel to / from school. As part of the program, the Town developed an Active and Safe Routes to School Manual to be used by teachers, school admin and other volunteers who are interested in setting up. In addition, the Town developed walking maps, biking maps and winter walking maps for all schools in Ajax as a resource for parents to help plan routes for their children. The Town received $60,000 in funding from Green Communities Canada to help support roll-out of this program including prize packs for schools to encourage students to walk and bike to / from school.

3.2.3 Phase 3: Advanced Programming

The programs presented in this section represent programs that would be more reflective of a community with a strong and growing culture of cycling. They frequently require partnerships and community support, but also the investment of a slightly higher amount of resources – either in terms of staff time or financial contributions – to ensure their success. These types of programs should be undertaken once all the items in the "Foundations" and "Basics" are underway, but could be expedited if an opportunity for an injection of resources from external funding sources arose.

Action #1: Advanced Data Collection and Communication

Communities that are successful in building a stronger culture of cycling are also showing signs of success in communicating about both their intentions and the results they are seeing as they further their investments. For the Township of Uxbridge, it is suggested that data collection efforts expand so that the Township has the capacity to tell real, human stories about the benefits of the investments that the community is making. For this to happen, the Township will need to focus on gathering qualitative as well as quantitative information, gathering stories and information about how the investments are changing behaviours and attitudes in the community. It is suggested that Uxbridge engage in:

- Parent Travel Surveys and Interviews: Much of the focus of stakeholders who were interviewed in the development of this plan was on youth. Since parents are the primary decision-makers when it comes to school travel patterns, it is important for the community to have a strong understanding of how parents view transportation to school, and how they could be supported in making more active choices for their kids. These surveys should be used to monitor the efficacy of the various interventions through the AST programs in Uxbridge, and to guide future efforts to improve attitudes and behaviours in the community.
- Transportation Diaries and Focus Groups: Statistics Canada data provides a community with only one metric in terms of transportation behaviours – Journey to Work data. While this data is helpful to see how cycling to work changes every 5 years, it does not capture the majority of trips that residents make. Trips to the grocery store, to places of worship, to local restaurants or businesses – all of those trips go uncounted in the routine census. Sending travel diaries to a select group of residents each year (see an example from the City of Vancouver here) and asking them to capture every trip that they make over the course of a week provides a much better snapshot of how people are moving around the community using different modes of transportation. Once diaries are completed and submitted, consider also hosting focus groups with residents to discover how they feel about their transportation choices in Uxbridge, to identify barriers to making different choices and to uncover stories that can be utilized to humanize the successes that are being realized because of the community's investment in cycling.
- Trail User Surveys and Economic Impact Studies: Especially as Uxbridge begins to see more cycle tourism, it can be valuable to collect information about the economic impact of cycling in the area. Use intercept surveys, trail user surveys and surveys administered through local accommodations and restaurants to gain a better understanding of the impact of cycle tourism on Uxbridge's economy. That type of data can help to identify projects or programs that can boost tourism, and can also be helpful as a rationale for additional investments in cycling projects.

As you build up your data collection efforts, be sure to also ensure that the Township is expanding its ability to hold itself accountable to its Cycling Plan by releasing Biannual Report Cards about the progress being made as cycling investments continue. Report on projects that are being built, the impact those projects are having on ridership, stories that can be shared to inspire others and any information uncovered through the dissemination of surveys or other data collection efforts. These types of reports can both keep the Township on track as it expands its support for cycling and can serve as a motivator for behaviour change among residents – consider the report an additional opportunity to market the community's support for cycling.

Recommended partners:	– Schools – Active Transportation Committee – Trails Committee – Durham Region – Ontario By Bike (for support in developing economic impact studies)
Key Outcomes:	– Qualitative data collection - Travel Surveys, Focus Groups, Parent Surveys – included in data collection efforts – Biannual Report Card produced outlining Uxbridge's momentum on cycling – Strong quantitative data about economic impacts, ridership and safety made available
Estimated costs:	– $5,000 per year for data collection efforts through polling and research firms, most other data collection performed by Municipal Staff
Inspiration:	City of Vancouver – Annual Transportation Survey (here) and Report Card (here) The City of Vancouver undertakes an annual survey to better understand travel behaviour and preference of its residents, and to track progress on achieving the City's transportation mode share targets. A primary component of the survey consists of a travel diary whereby participants record their trips – this trip data is compared to survey conducted from previous years to allow for analysis of transportation trends. The survey findings are intended to inform future decision-making about transportation investments in the city. In addition to the annual Transportation Surveys, the City publishes an annual Report Card which provide an overview on progress and changes occurring every year within the City.

Action #2: Earn-A-Bike Program with Africycle

The presence of Africycle in the Township of Uxbridge presents a unique opportunity to provide youth and other community members with the training and skills necessary to build and maintain a quality, working bike. Consider working with Africycle to offer an Earn-A-Bike program in Uxbridge where people participate in bike repair and bike shop maintenance while also building a custom bike for themselves. This helps to provide Africycle with the volunteer power it needs to refurbish more bikes, puts more bikes into the community and helps to provide residents (primarily youth) with transferable, applicable skills that will help them develop a lifelong love of cycling.

Recommended partners:	– Schools – Active Transportation Committee – Trails Committee – Durham Region
Key Outcomes:	– Earn-A-Bike partnership offered through local high school as volunteer hours opportunity
Estimated costs:	– None, staff time only.
Inspiration:	Earn-a-Bike Program –B!ke Community Bike Shop, City of Peterborough (here) A local bike shop in the City of Peterborough (B!ke) offers a Earn-a-Bike program that is designed to provide access to bicycle for those who cannot afford to buy a bicycle. Volunteers learn how to fix bicycles through volunteering their time to work on community bikes and by learning from the staff at the bike shop. Typically, participants can work on their own bike once they have volunteered 15 to 20 minutes each time which could include working on other bicycles and / or completing other tasks at the shop.

3.3 Implementation Summary

The programs outlined in section 3.2 represent a significant shift in how the Township communicates and works on cycling and active transportation projects. To accomplish these shifts, it is recommended that the Township add between 0.25 and 0.75 Full Time Equivalent staff positions to deliver the programs and initiatives outlined in the previous section. With this additional staffing support, the Township is well positioned to be a leader in active transportation in Ontario, and to experience significant benefits from tourism, quality of life and health improvements among its residents. A summary of the anticipated staffing resources, proposed programs and estimated costs for each category of proposed programs / initiatives, is presented below.

Table 12 - Summary of Programs for Phase 1: Foundations

Phase 1 Programs	Estimated Costs	Cost Frequency
Community Rides	$2,500	Annual
Bike Month	$3,000	Annual
Family Bike Days	$2,000	Annual
Bike Rodeos	$1,000	Annual
School Cycling Challenge	$500	Annual
Downtown Bike Corrals	$2,400	One-time cost
Primary Data Collection	$2,500-$12,000	One-time cost
Preliminary In-School Data Collection	$0	Annual
Total Costs:	$9,000 + $4,900-$14,400	Annual One-time cost

Staffing resources required: 0.1 – 0.25 FTE

Table 13 - Summary of Programs for Phase 2: Basic Programming

Phase 2 Programs	Estimated Costs	Cost Frequency
Wayfinding strategy and signage	$20,000	One-time
“Make It Active” events Team	0	Annual
Bike Valet	$5,000	One-Time
Community Cycling Promotions	0	Annual
Active School Travel	$25,000	Annual
Total Costs:	$25,000 + $25,000	Annual One-time cost

Staffing resources required: 0.35 – 0.75 FTE

Table 14 - Summary of Programs for Phase 3: Advanced Programming

Phase 2 Programs	Estimated Costs	Cost Frequency
Enhanced Data Collection and Communications	$5,000	Annual
Earn-A-Bike Program with Africycle	0	Annual
Total Costs:	$5,000	Annual

Staffing resources required: 0.35 – 0.75 FTE

1

Chapter 4 Implementation

The ATP is intended to serve as a flexible guideline for Township staff to create a culture of active and sustainable travel within Uxbridge through the implementation of supportive infrastructure and programs. The recommendations and information contained within the plan are intended to inform day-to-day decisions and guide short and long-term efforts to improve active transportation in Uxbridge.

Implementation of the plan will require on-going collaboration between the Township and its partners to ensure that the recommendations outlined within this document are brought to fruition. Implementing the ATP will require more than constructing active transportation facilities; meaningful partnerships between different stakeholders and organizations will be required to achieve the desired outcomes of this plan. This includes planning and implementing physical infrastructure, educating users on how to properly use the facilities, and promoting the Township's existing assets to fully realize the economic potential of active transportation in Uxbridge.

The following chapter provides the Township with a realistic implementation strategy to inform future decision making, policy and planning processes. Information is provided on a suggested phasing strategy, cost estimates, partnerships, funding options and additional considerations to help guide next steps.

4.1 Phasing

The proposed phasing for the Township's active transportation network has been organized into two phases over a 10+ year timeline. An implementation phase has been identified for each proposed route in the active transportation network based on the following considerations:

Short Term: 0 to 10 years

- Low investment projects (all signed bike routes) to achieve quick wins.
- Coordination with projects identified in the Township's current Capital Budget.
- Critical sidewalk connections identified by feedback received.
- Future studies to assess the feasibility and design of active transportation routes.

Long Term: 10+ Years

- Projects that will require major investment in rural areas.
- High profile projects that will require future studies to confirm feasibility / design.
- Sidewalk connections where there are significant physical constraints.
- Corridors that have been recently reconstructed and not scheduled for upgrades in the short term.

Maps 2a and 2b illustrate the proposed phasing which is also summarized in Table 15.

Table 15 - Phasing Overview for the Active Transportation Network

Facility Type	Short Term	Long Term	Total KM
Off-road multi-use trail	0.2	0.3	0.5
In-boulevard multi-use path[2]	2.0	1.8	3.8
Paved shoulder	0.7	2.7	3.3
Signed route with edge line	1.7	0	1.7
Signed route	72.7	0	72.7
Sidewalk	1.8	3.5	5.3
Total	79.1	8.3	87.4

Note:

1. This table does not include routes located on Regional roads within Uxbridge, which have been identified in the Durham Regional Cycling Plan, 2021 (Draft) as part of the Region's Primary Cycling Network. Refer to the Durham Regional Cycling Plan, 2021 (Draft) for phasing information.
2. This table does include proposed routes located within the boulevards of Regional roads which have been identified in the Durham Regional Cycling Plan, 2021 (Draft) as part of the Region's Primary Cycling Network. These routes include:
    - Brock Street / Regional Road 8: Concession 6 to Railway Street (1.55 km) – Long term
    - Toronto Street / Regional Road 47: Concession 6 to Campbell Drive (2.01 km) – Short term

Key takeaways for Phasing

Short Term Projects (0 -10 years)

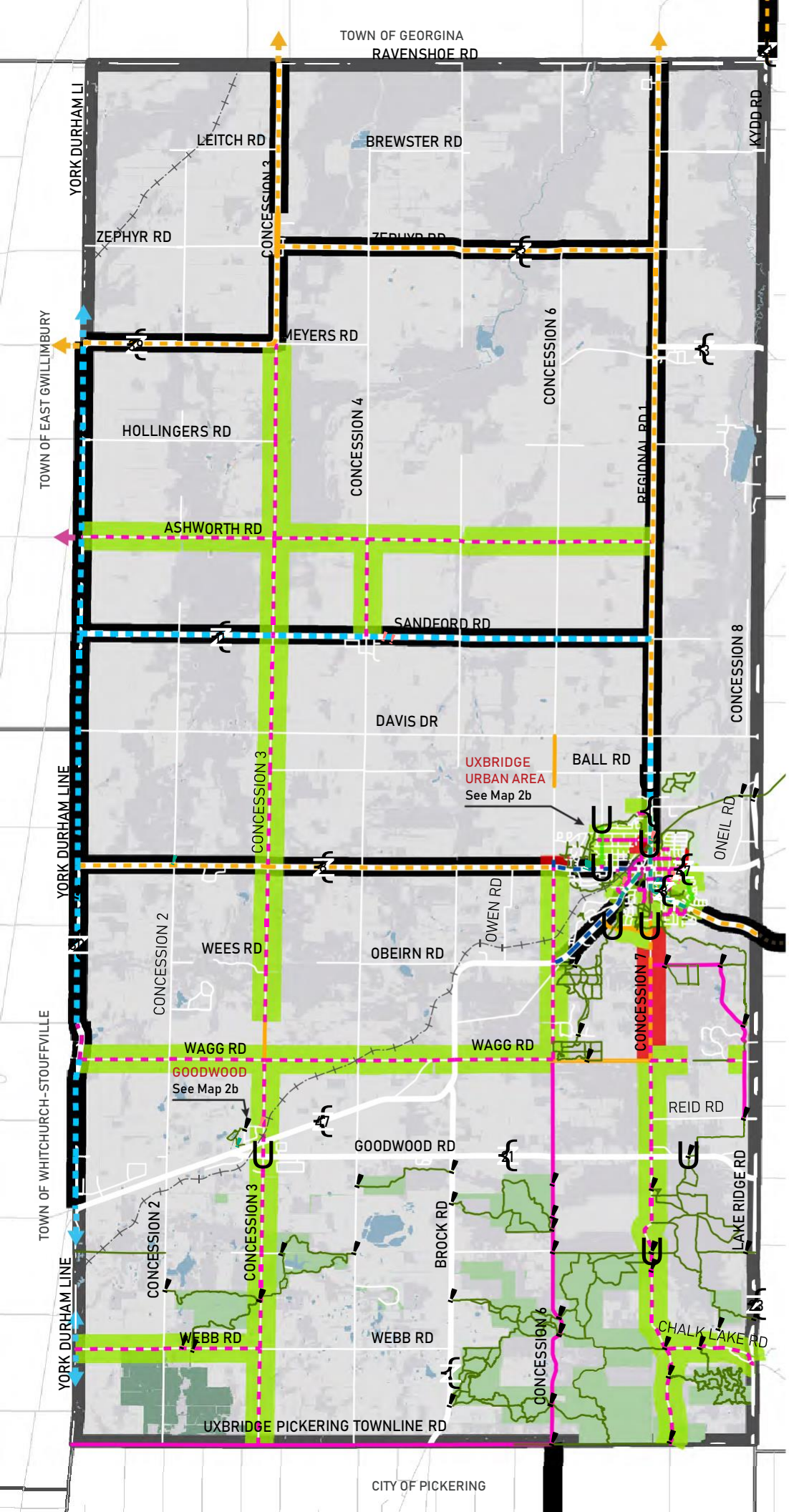
- Approximately 91% of the network is proposed in the short term.
- This equals 33% of the total estimated cost for the entire network (short + long term) which is largely attributed to all signed bike routes phased within the first ten years e.g. projects that are considered low investment but easy quick wins to establish network connectivity on local neighbourhood streets.
- Other short-term projects include sidewalks and in-boulevard multi-use paths that fill gaps to key destinations and where there is known existing demand (such as people currently walking along these corridors without infrastructure in place).
- Appendix C includes a detailed breakdown of all routes that form part of the active transportation network for Uxbridge.
- Municipal planning documents are typically updated every 5-10 years consistent with the Municipal Planning Act. As such, the ATP focus for implementation are short term projects (within the first ten years).

Long Term Projects (10+ years)

- Routes identified in the long-term horizon should be reviewed when the plan is next updated, and at that time, staff should determine the appropriate phasing for routes based on available budgets, resources and opportunities.

Durham Regional Cycling Plan, 2021 (Draft)

- The proposed phasing of routes located on Regional roads within Uxbridge is not included in Table 15, nor captured in the cost estimates provided in section 4.2.
- All information related to phasing and costing for routes on Regional roads is contained in the Durham Regional Cycling Plan, 2021 (Draft).
- The only information pertaining to the Region's Primary Cycling Network that is included in Table 15 and section 4.2, are the two proposed in-boulevard multi-use paths along Regional roads (see footnote #2 in Table 15).
- Through the Region's current Regional Cycling Planning Formula, there is an existing cost sharing formula between the Region and its local area municipalities for in-boulevard multi-use pathways along Regional roads that form part of the Region's Primary Cycling Network. As such costing information for Toronto Street / Regional Road 47 (proposed short-term project) is included in the phasing and cost estimates for Uxbridge's ATP since there is an expected shared responsibility to fund and implement these linkages. Costing information is included in section 4.2.



Map 2a

Proposed Phasing

UXBRIDGE ACTIVE TRANSPORTATION PLAN

Legend

Existing Routes

- Existing off-road trail
- Existing paved shoulder
- Existing bike lane
- Existing signed route

Proposed Routes

- Proposed off-road trail
- Proposed in-boulevard multi use path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route
- U Proposed crossing enhancement

Proposed Phasing

- Short term (0 to 10 years)
- Long term (10+ years)
- Regional Primary Cycling Network

Other

- Community Centre / Facility
- School
- Trail Access Point
- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Rouge National Urban Park
- Wooded Area

The Township of UXBRIDGE
Trail Capital of Canada

Produced in association with the Township of Uxbridge.
This map is intended for information only,
and not for navigation.

 Date Published: June 2021
Projection and Coordinate System:
Universal Transverse Mercator UTM Zone 17N

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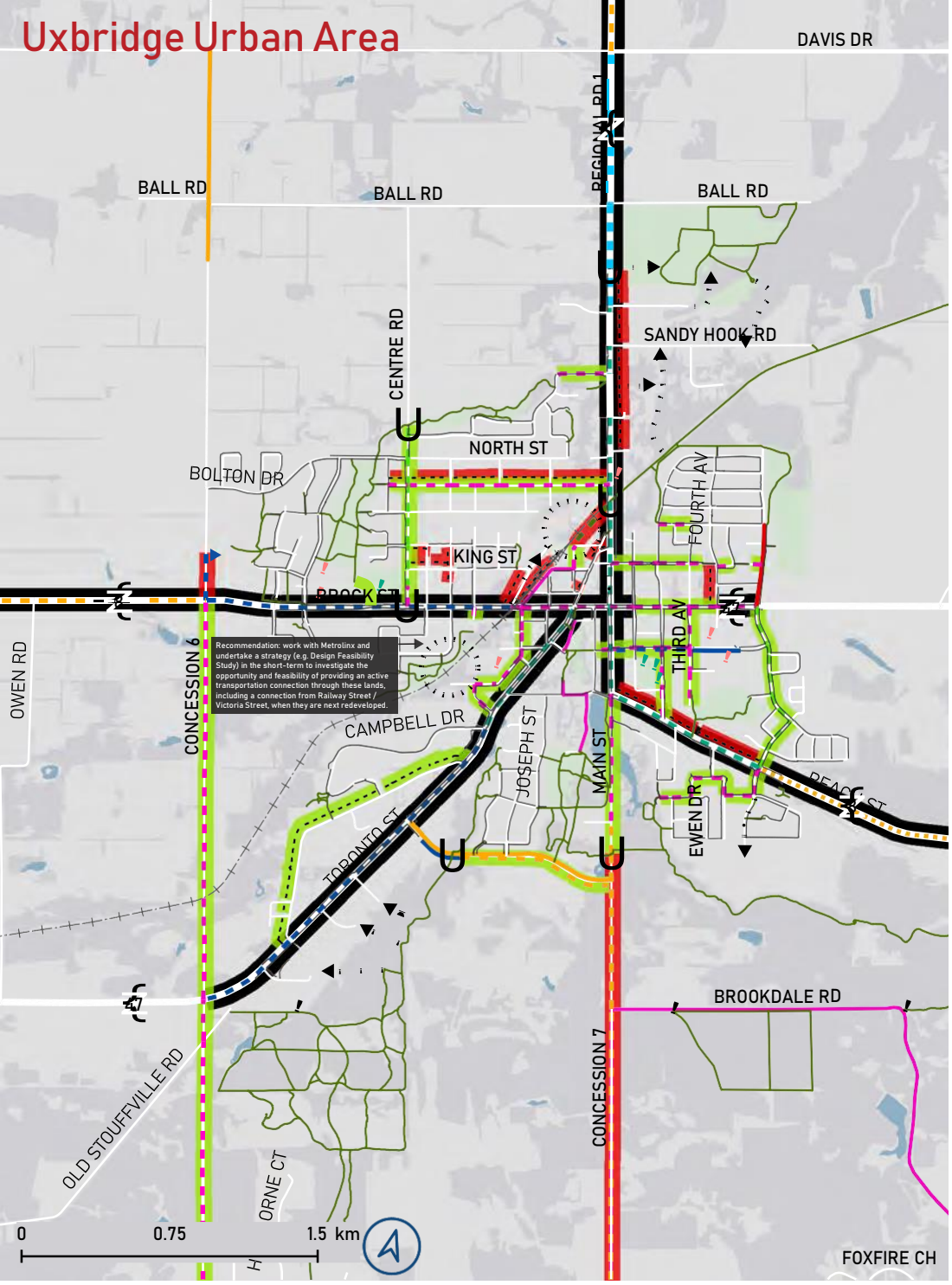

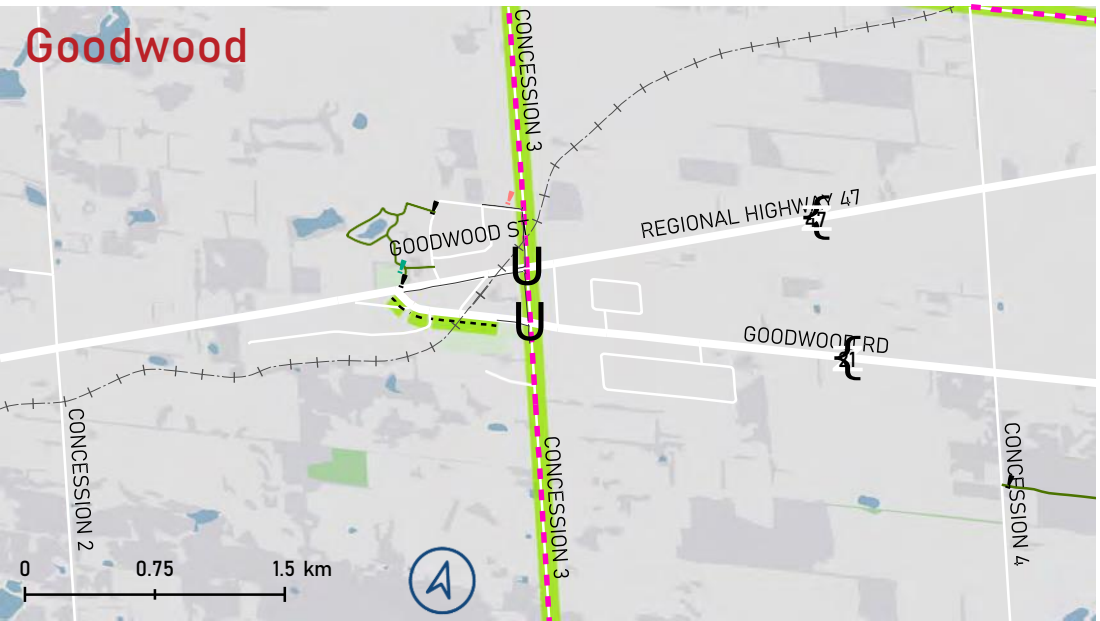

Map 2b

Proposed Phasing

UXBRIDGE ACTIVE TRANSPORTATION PLAN

Legend

Existing Routes

- Existing off-road trail
- Existing in-boulevard multi use path
- Existing paved shoulder
- Existing bike lane
- Existing signed route
- Existing sidewalk

Proposed Routes

- Proposed off-road trail
- Proposed in-boulevard multi use path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route
- Proposed sidewalk
- Desired connection
- U Proposed crossing enhancement

Proposed Phasing

- Short term (0 to 10 years)
- Long term (10+ years)
- Regional Primary Cycling Network

Other

- Community Centre / Facility
- School
- Trail Access Point
- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Wooded Area

The Township of UXBRIDGE Trail Capital of Canada

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 Date Published: June 2021
Projection and Coordinate System:
Universal Transverse Mercator UTM Zone 17N

4.1.1 Priorities

Four priority projects have been identified for implementation in the short term. These represent projects that have been identified by the public, stakeholders, the Township's Advisory Committees and staff as critical linkages and enhancements for active transportation in Uxbridge. Implementation of these projects can demonstrate the Township's concerted efforts to harness public support, achieve Official Plan goals and leverage partnerships. The proposed priority projects are presented in Table 16 below (in no particular order).

Table 16 - Proposed Priority Projects

Priority Project	Description
Proposed crossing enhancements at six locations: – Countryside Preserve Trails at Elgin Park Dr. – Trans Canada Trail at Concession 7 (south of Crosby St.) – The Trans Canada Trail at Main St. / Regional Rd. 1 – Connection into Fields of Uxbridge at Main St. – The Trans Canada Trail at Goodwood Rd. – Oak Ridges Trail / Trans Canada Trail at Concession 7 and Brookdale Rd. – Centre Rd. at Maple Bridge Trail – Brock St. W. at Centre Rd. – Regional Highway 47 at Concession 3 – Goodwood Rd. 21 at Concession 3	Improvements to trail / route crossings was identified as a key concern and top priority at all engagement events / activities. Visible and well-connected crossings provide a smooth transition for people on foot or bike, and can provide a visual cue to motorists so that drivers are more aware of people crossing at a specific location. Over the past year Uxbridge has experienced a significant increase in the number of people using trails as a result of the COVID-19 pandemic. Trails provide a space for people to be outside while still adhering to public health guidelines and protocols. As a result, the Township has seen a rise in the number of people using trails and specifically a surge in people parking at trailheads and trail access points. Based on extensive feedback, 10 locations have been identified as areas to improve for: trail access and parking; trail transitions; and crossings at community destinations. It is suggested that staff review these locations and additional design consideration provided in section 2.2.2 to improve trail conditions at these locations. A number of these trails / routes cross at roads and lands that are managed by other jurisdictions and agencies. It is recommended that the Township work with its partners in the short term to enhance crossings at these locations.
Uxbridge Downtown Revitalization (Brock Street)	Brock Street is the main spine through the downtown area and provides access to a number of local businesses and destinations that are desirable to people walking and biking in Uxbridge. Though there is no formal cycling facility along this section of Brock Street, it is designated as part of the Trans Canada Trail. In addition, there is high demand and usage along this corridor by people walking and biking as expressed from feedback collected during the study process and an assessment of current user trends. Investing in active transportation can improve the public realm by providing more space for pedestrians in the boulevard, space for cyclists on road, and to make Brock Street more of a "complete street". In 2020, the Township of Uxbridge, with support from the Ontario Ministry of Agriculture Food and Rural Affairs (OMAFRA), the Region of Durham and the Uxbridge BIA, initiated a Downtown Revitalization Project (UDR). Over the course of this year, the UDR Project will implement the first 3 stages of the OMAFRA 4-stage process for downtown revitalization: Stage 1 – Preparation ; Stage 2 – Collect Data and Analyze; Stage 3 – Develop Goals & Action Plans; and Stage 4 – Implementation. The key deliverable of the UDR Project will be the creation of a Strategic Plan and Action Plan that could be implemented in Stage 4 by the Township and Region of Durham. As part of Stage 2 (Collect Data and Analyze), it is recommended that Township staff work with the Region to assess the feasibility of implementing separated cycling facilities, enhancements to pedestrian infrastructure and improvement to the overall public realm. Improvements to pedestrian and cycling infrastructure can also help to support the 3 lenses of the Downtown Vision: *Uxbridge features a vibrant and thriving downtown that is rich in history and recognized as an inclusive and accessible community.* – Buildings: shopfronts and active street level uses – Public spaces: promenade, patios and spill out areas – Streets: active transportation and trails / trail connections
Sidewalk connection to Harold Bell Memorial Park in Goodwood	Harold Bell Memorial Park is a popular destination for residents in Goodwood. Though no sidewalk exists from Regional Road 47 to Deer Ridge Road, people are currently walking to the park as evident by an existing worn footpath in the boulevard of the south side of Goodwood Road (Regional Road 21). In addition, there is an existing curb cut with a tactile warning indicator strip at the south-west leg of the Goodwood Road / Regional Road 47 intersection. This intersection provides a crossing and connection into Walter Taylor Park and Goodwood Community Centre. It is recommended that a sidewalk connection be constructed on the south side of Goodwood Road (Regional Road 21) from Regional Road 47 to the current terminus of the existing sidewalk at Deer Ridge Park.
In-boulevard multi-use path along Toronto Street / Regional Road 47	Toronto Street is a Regional Road (Regional Road 47) with access to a number of retail stores and services in Uxbridge. Providing a multi-modal connection along this corridor was identified as a key priority when engaging with residents, stakeholders and the Township's Advisory Committee. Using current design standards and based on traffic volumes and operating speeds along the roadway, the preferred facility for Toronto Street is a separated facility. An in-boulevard multi-use pathway is being recommended to accommodate two-way travel for both pedestrians and cyclists, and access into the retail shops. This segment of Toronto Street is also identified on Durham's Regional Cycling Plan, 2021 (Draft) to form part of the Region's Primary Cycling Network. As such, it is recommended that the Township work with the Region, and leverage the existing Regional Cycling Planning Formula to seek funding for the implementation of an in-boulevard multi-use pathway along this segment of Toronto Street.

4.2 Cost Estimates

Implementing the proposed active transportation network will require funds and resources from the Township and its partners. Annual funding for construction, maintenance, operations and programming should be identified in the Township's annual budgeting process to strategically implement the active transportation network over time. In addition, the Township should seek additional funding sources to maximize budget efficiencies and coordination with other major projects.

High-level costing has been prepared for the proposed active transportation network. This costing is based on a set of unit prices (see Appendix C) that are blended rates and reflect best practices from comparable municipalities in Ontario. It is recognized that the level of effort will vary on a project-by-project basis and some projects could require additional work compared to other projects included in cost estimates.

As noted in section 4.1, the focus for implementation is in the short term. As such, Table 17 presents the estimated cost to implement the active transportation network in the short term.

Table 17 - Summary of Estimated Costs in the Short Term by Facility Type

Facility Type	KM	% of Short-Term Network	Estimated Cost
Off-road multi-use trail	0.2	0.2%	$81,591
In-boulevard multi-use path[1]	2.0	2.5%	$905,561
Paved shoulder	0.7	0.8%	$137,528
Signed route with edge line	1.7	2.2%	$29,563
Signed route	72.7	92.1%	$102,365
Sidewalk	1.8	2.3%	$176,206
Total	79.1		$1,432,814

Note:

1. This table includes the estimated lengths for proposed (short term) in-boulevard multi-use paths that are located along Regional roads, and which will also form part of the Region's Primary Cycling Network. These routes include:
    - Toronto Street / Regional Road 47: Concession 6 to Campbell Drive - $905,561, Short Term

    This project is also costed and included in the Regional Cycling Plan, 2021 (Draft) since the Region's current Regional Cycling Planning Formula provides cost-sharing for all in-boulevard multi-use pathways along Regional roads and that form part of the Region's Primary Cycling Network.

In addition to Table 17, Table 18 outlines the estimated short-term implementation cost by potential funding streams which include:

- 40% funded through the Township's general tax revenue
- 60% funded through grants, tax levy and development charges

These funding proportions were applied to all proposed routes in the Township's active transportation network to demonstrate how routes could potentially be funded.

Table 18 - Summary of Estimated Costs in the Short Term by Funding Stream

Funding Stream		Estimated Short-Term Cost	Cost per year (over 10 years)
40%	General tax revenue	$573,125	$57,313
60%	Grants, tax levy and development charges	$859,688	$85,969

Based on the information presented in the table above, it is expected that $573,125 of the short term costs could be funded through the Township's general tax revenue, and $859,688 of the short term costs could be funded through grants, tax levies and development charges. To support implementation of the ATP, it is recommended that the Township continue to pursue external funding opportunities and partnerships to offset the cost of implementing active transportation infrastructure. Potential partnerships are outlined in section 4.3 and potential funding sources are outlined in section 4.4.

Key takeaways for Cost Estimates

Overall Cost Estimates

- The estimated cost to implement the active transportation network is approximately $1.4 million over the next 10 years.
    - $573,125 of the short term costs could be funded through the Township's general tax revenue, and $859,688 of the short term costs could be funded through grants, tax levies and development charges.
- In addition to the estimated capital costs of $1.4 million in the short term, there are estimated programming costs identified in section 3.3. Estimated costs for programming options include:
    - Phase 1: Foundations - $9.000 (annual costs) + $4,900-$14,000 (one-time costs)
    - Phase 2: Basic Programming - $25.000 (annual costs) + $25,000 (one-time costs)
    - Phase 3: Advanced Programming - $5.000 (annual costs)
- Proposed crossing enhancements are not included / identified in Table 17. The cost to enhance and improve each crossing is largely dependant on the design and treatment applied at each location. As such, the estimated costs for a proposed crossing enhancement should be determine through future study at such time when a design is being considered / reviewed.
- The approach used to generate the cost estimates for Uxbridge's active transportation network is the same approach used to cost the Region's Primary Cycling Network – same unit prices were applied, and costs include a percentage for contingency (24%) and design / engineering (13%).
- Appendix C includes detailed information for cost estimated on a route-by-route basis, including cost estimated for long term projects.

General Considerations

- The total estimated investment can be reasonably lowered if the Township can leverage future capital plans and implement active transportation facilities in conjunction with other infrastructure projects. It is however important to note that aligning the phasing plan with capital works to solely reduce costs is not sufficient to develop a high-quality network. If a critical link is missing, it may need to be budgeted and included in the capital plan for implementation to achieve the desired connectivity and level of service for the network.
- External partnerships could be pursued to spread costs among stakeholders. See section 4.3 for information on partnerships and section 4.4 for information on potential funding sources.

4.3 Partnerships

Implementation of the ATP will require various partnerships from a number of groups. Only when these different groups work together, will the true potential of the ATP be achieved. Successful implementation will rely largely on Township staff working with other levels of government and stakeholders to build, maintain, and market active transportation assets to achieve the broad goals identified earlier in this plan.

Moving forward, it is critical that there be on-going collaboration between the Township and its partners to advance the implementation of infrastructure and accompanying programs, as well as opportunities for cost-sharing and post-implementation promotion. As identified in section 3.1 of this plan, the Township has a number of partners that it can rely on to support implementing the plan. There is a tremendous opportunity in leveraging partnerships with Discover Uxbridge and the Uxbridge BIA to promote the Township's active transportation assets and all that Uxbridge has to offer. A great effort should be made in marketing the active transportation network first and foremost, and then drawing these visitors into Township to contribute to the local economy. Such an approach would serve to capitalize on the Township's brand as the Trail Capital of Canada and offer local businesses with a potential market to expand their goods and services to.

Additional support can be leveraged from Durham Region through Durham Region Transit (DRT) and Metrolinx through GO Transit. Each organization has the opportunity to enhance the overall active transportation network by providing bicycle parking and benches at bus stop locations, serving the needs of pedestrians and cyclists. These partnerships would not only help to implement the ATP, but also support first-mile, last-mile travel.

A comprehensive table of proposed partners and their anticipated role is presented in Table 19. This list is not exhaustive and there could be new partnerships that present themselves in the future. The Township should leverage any future opportunities for additional partners to support implementation of the ATP.

Table 19 - Proposed Partners and Roles

Potential Partners	Anticipated Roles							
	Planning	Design	Policies	Construction	Maintenance	Enforcement	Education	Promotion
Uxbridge Staff (Public Works and Operations, Recreation Program, Culture and Tourism, and Development Services)	●	●	●	●	●			
Uxbridge Active Transportation Committee	●	●			●		●	●
Uxbridge Accessibility Advisory Committee	●	●			●		●	●
Uxbridge Trails Committee	●	●			●		●	●
Uxbridge BIA and Local Businesses								●
Cycling Clubs and Active Transportation Groups							●	●
Local organizations and advocacy groups							●	●
Durham Regional Police Service (DRPS)						●	●	
Durham Region Planning and Transportation Staff	●	●	●				●	●
Durham Public Health			●				●	●
Durham Region Tourism								●
Conservation Authorities	●	●	●	●	●	●	●	●
Trans Canada Trail	●	●	●	●	●		●	●
Durham Region Transit	●	●	●					
Provincial Stakeholders	●	●	●				●	●

4.4 Funding Options

A review of internal and external funding options was undertaken to identify different funding options available. The Township is encouraged to monitor available funding opportunities both within and external to the organization, and to utilize the information contained within this plan to support funding applications and asks.

There are varying levels of government and non-governmental organizations that have a role in implementing active transportation infrastructure and programming within Uxbridge, and that could provide funding support. Examples include Durham Region funding the implementation of cycling facilities on Regional roads within the Township and the provincial government contributing funding to the implementation of network segments that form part of the MTO Province-wide Cycling Network. Additional funding partners can include the Trans Canada Trail and the Federation of Canadian Municipalities (FCM), among others. Other funding opportunities may come in the form of partnerships with the BIA, with the implementation of bicycle parking and other amenities in support of active transportation.

The Township should regularly monitor funding streams, grants and other external funding sources to assist with the implementation of the plan. This includes funding streams made available by the federal and provincial governments as it pertains to the development of active transportation facilities, to reduce the overall financial burden on the Township. A sample of federal and provincial funding sources include:

Federal / Provincial Gas Tax

- For the federal program please refer to: https://www.infrastructure.gc.ca/plan/gtf-fte-eng.html
- For the provincial program refer to: http://www.mto.gov.on.ca/english/service-commitment/gas-tax-program.shtml

Federation of Canadian Municipalities Green Municipal Fund

- For additional details regarding the Green Municipal Fund and potential funding alternatives refer to: https://fcm.ca/home/programs/green-municipal-fund.htm

Federal and Provincial Infrastructure / Stimulus Programs

- For Federal Government infrastructure stimulus fund details refer to: https://www.canada.ca/en/office-infrastructure.html
- For Provincial Government infrastructure stimulus fund details refer to: https://www.ontario.ca/page/ministry-infrastructure

In addition, the Township should explore funding opportunities made available through the Region using their current Regional Cycling Planning Formula for in-boulevard multi-use pathways along Regional roads, as well as other funding programs should they become available in the future. Lastly, the Township is encouraged to explore corporate sponsorship of the trail network. This would be similar to the "adopt-a-road" program found across Ontario but targeted to a specific trail in the Township's network. Corporate sponsorships would allow for local businesses to financially sponsor a specific trail facility, with their logo being prominently displayed along the facility in return. This would be similar to the existing practice of local businesses sponsoring minor recreational sports leagues in Uxbridge today.

4.5 Supporting Implementation

Beyond phasing and costing, there are a number of factors which can shape how active transportation gets rolled out from the planning stages through to implementation and operations. The information in the following sections has been identified for the Township's consideration as it moves forward with implementing the ATP.

4.5.1 Policy Considerations

Policies are the framework to create top-down change in a municipality. The following are a set of policy considerations which can help facilitate change towards supportive active transportation planning and design in Uxbridge.

Paved Shoulders on Rural Roads

The preferred active transportation network for Uxbridge includes a number of proposed signed routes on rural roads where there is existing demand for cycling but the current road platform cannot accommodate the implementation of paved shoulders. Application of signed bike routes on these routes is considered appropriate based on the traffic volumes and speed thresholds outlined in the updated OTM Book 18. It is recommended that when these roads are next scheduled in the Township's Capital Budget for reconstruction / rehabilitation, that consideration be given to widening the roadway platform and implementing paved shoulders on both sides of the road (with a desired width of 1.5 metres) to support and provide a designated cycling facility.

For example, the Township's active transportation network includes a proposed signed bike route on Concession 7 south of Wagg Road. Though there are no plans in the Township's current Capital Budget to reconstruct this section of Concession 7, providing a signed route can alert motorists that cyclists may be present on this road. From a municipal risk management perspective, implementing the green Bicycle Route Marker sign (on roads considered appropriate for such application) or the yellow Share the Road warning sign can also demonstrate the Township's awareness that people are already biking on the road. When rural roads on the proposed cycling network are scheduled for life cycle improvements, Township staff should consider the feasibility of widening the roadway platform to implement paved shoulders to improve conditions for cycling. Paved shoulders can also benefit pedestrians in rural areas – as per the Highway Traffic Act, people are permitted to walk in a roadway shoulder facing the direction of oncoming traffic.

New Development Areas

New development areas should be reviewed to identify opportunities to connect the future community to the active transportation network, particularly off-road trails within the Township. This will require identifying conceptual trail linkages to the development community and ensuring their implementation at the time of development. It is imperative that the Township work with the development community to ensure that active transportation facilities and amenities are incorporated in new developments and that the communities are designed in a manner than encourages active travel.

Zoning By-law

The Township is recommended to strengthen language supporting active transportation in the current zoning by-law, either when a new zoning by-law is developed, or as part of a municipally initiated zoning by-law amendment(s). An amendment should focus on enhancing active transportation amenities in private developments, such as increasing the number of bicycle parking spaces as part of residential, commercial, and institutional developments, as well as building forms that accommodate the awnings and other covered-walkway structures that protect pedestrians from the elements. Modifications to the zoning by-law, like the two examples noted above, have the ability to incorporate design elements into new developments over time and create a public realm that encourages and supports active travel.

Development Charges

The Township's current development charges (DC) by-law (2019-076) outlines fees that can be levied on new residential and non-residential properties to help pay for a portion of the growth-related infrastructure requirements. Development charges represent a potential source of funding for active transportation projects associated with growth areas in a municipality. Projects that are adjacent to new developments should be considered to be partially funded through development charges and reflected in the budget and capital plans.

New Mobility Implications

The Township's existing by-laws can be enhanced to clarify cycling operations and specifically define and provide direction on the use of electric bikes, electric scooters and power assisted bicycles. In 2020, MTO launched a five-year e-scooter pilot program allowing municipalities to pass by-laws to determine where e-scooters can operate.

As part of this initiative, MTO has addressed legal definitions and operational concerns that should be reviewed prior to establishing or amending a by-law. The Township could review existing by-laws and amend where appropriate to provide more clear provisions regarding permitted and prohibited uses for electric bikes, electric scooters and power assisted bicycles. Consideration could also be given to installing publicly accessible charging outlets for the charging of e-bikes and e-scooters within Uxbridge.

4.5.2 Operations and Asset Management

A key consideration when implementing the ATP is the operations and maintenance of active transportation routes and the asset management of infrastructure. Regular and appropriate maintenance of active transportation facilities can help protect the Township's capital investments by maintaining the lifespan of infrastructure.

As the active transportation network expands and best practices emerge, consideration should be given to adapting maintenance practices and the level of service to address new facilities and standards such as the Province's Minimum Maintenance Standards (MMS) for Municipal Highways (O.Reg. 239/02). The MMS outlines various elements of road maintenance and operations including the frequency of road inspections, weather monitoring, ice formation on roadways, snow accumulation and sidewalk trip ledges. The MMS are non-mandatory guidelines but should be applied unless a municipality has established their own Council-approved level of service maintenance standards. If a municipality develops their own standards, it is still recommended to align with the current MMS.

Maintenance practices for active transportation facilities can include:

- Sweeping;
- Surface repairs;
- Pavement markings and signage;
- Vegetation management;
- Snow clearance / ice control; and
- Drainage improvements and drainage grates.

Clear guidance on asset management is provided in the Township's current Assessment Management Plan. The plan outlines level of services standards, asset management strategies and actions for trails, sidewalks and roads. It is recommended that as the Township builds out their active transportation network, that the strategies (specifically for roadways) outlined in the Asset Management Plan be applied to on-road segments that form part of Uxbridge's active transportation network.

Table 20 outlines asset management assumptions and typical service life for various elements of an active transportation network. This information is based on best practices outlined in OTM Book 18; however, it is recommended that Township review this information and consider the various strategies to manage their active transportation network.

Table 20 - Asset Management Strategies
Source - OTM Book 18 Update

Type	Useful Life	Asset Management Strategies
Asphalt bikeway	25 years	– Minor repairs – Resurfacing – Rehabilitation – Full-depth replacement
Concrete bikeway	50 years	– Minor repairs – Replace deteriorating segments – Full replacement
Bridge (active transportation or motor vehicle)	25–75 years	– Bridge repairs – Minor rehabilitation – Full replacement
Culvert	25–50 years	– Culvert repair – Minor rehabilitation – Full replacement
Painted Line Markings and Symbols	1–2 years	– Refresh annually or depending on wear
Durable Line Markings, Symbols and Green Surface Treatments	3–7 years	– Depends on type, weather conditions, amount of wear, preparation of surface during application
Signage	20 years	– Replace damaged or faded signs
Physical separation (bollards, curbs, planters, etc.)	Until damaged	– Repair or replace damaged or missing bollards and other separators

4.5.3 Monitoring

A monitoring plan is an important component post-implementation to evaluate the success of a route, and to inform smarter investments through data-driven measures. Research indicates that meaningful performance measures can help to prioritize future projects and appropriately allocate resources . The following approaches are recommended to be explored by Township staff in further detail, for inclusion into the on-going workplans of monitoring for maintenance and operations staff.

Monitoring of Off-Road Trails

As part of the successful implementation of this plan, it is recommended that supplementary monitoring efforts be undertaken by Township staff, to gain a better understanding of the active transportation network and how it's being used. Similar to how Township staff monitor the road network for deficiencies such as potholes and broken streetlights in need of repair, bike lanes and trails also require monitoring to ensure issues are promptly addressed. Doing so ensures that active transportation facilities remain in a state of good repair and can continue to accommodate the needs of people using it.

Monitoring efforts can also be formalized on the part of volunteers and Township staff that currently maintain the trails. Regular communication and coordination can help ensure that the Township can rely upon accurate information to react to issues quicker and ensure that the facilities remain maintained.

Undertake Survey of Residents

Another approach to monitoring the overall active transportation network is to conduct a survey of Uxbridge residents on a regular basis. Such survey could be carried out on an annual or bi-annual basis and ask residents about what they like and dislike about the network. The results can then be used to inform short-term actionable items that respond to the immediate needs and requests of residents, contingent on the scale and scope of the project. Surveying of residents ensures regular dialogue between Township staff and the users of the network themselves.

Provision of Permanent Data Collection Tools

Permanent automated data collection tools have the ability to allow Township staff to effectively monitor the active transportation network in real time and collect a significant amount of data with which to inform decision making. For the purpose of this plan, the two forms of permanent data collection include automated trail counters and intersection cameras that monitor the movement of all modes of transportation.

Automated trail counters are pieces of monitoring infrastructure that count the number of pedestrians and cyclists on an off-road trail. Township staff would be able to retrieve data from the automatic trail counter to review pedestrian and cyclist data over the long-term and assess a facility's use. Alternatively, LTE and Wi-Fi enabled traffic cameras at select intersections within the Township can monitor the number of pedestrians and cyclists using on-road infrastructure in real time. Both pieces of monitoring equipment will allow for better informed decision making through real-time data.

4.6 Next Steps and Recommendations

The Active Transportation Plan identifies a comprehensive approach to implementing an active transportation network. This includes implementing the various accompanying policies, programs, and procedures that support the implementation of physical infrastructure. A series of recommendations have been identified to guide Township staff in moving forward with implementing this plan, in partnership with internal and external stakeholders.

This plan, at its foundation, is a guide for the Township to encourage and enhance active and sustainable modes of transportation, embracing its status as the Trail Capital of Canada. Different stakeholder groups are responsible for overseeing different components of the overall active transportation network. A collaborative effort will allow the Township and its stakeholders to work together to bring the recommendations set out within this plan to fruition. Doing so will serve to enhance the quality of life for Uxbridge residents, attract visitors to enjoy all that the Township has to offer, and support the local economy in the process.

Moving forward, the Township is encouraged to work in close partnership with key stakeholders to both implement new programs, policies, and infrastructure, as well as to promote all that Uxbridge has to offer, well beyond its borders. The following table provides a formal summary of 18 core recommendations that Township staff are encouraged to pursue as part of the broader implementation of this plan.

Recommendations

Recommendations	Township of Uxbridge Official Plan Objectives Achieved				
	To establish the Downtown as the social, business and retail centre of the community.	To ensure the health of the Township's local economy by supporting its business and tourism sectors.	To manage the growth of the community in a sustainable manner that balances environmental protection, the preferred lifestyle of residents, and economic viability.	To protect, enhance and restore natural resources in Uxbridge Township in a manner that contributes to the community's quality of life, identity and economy.	To maintain and enhance where possible community services to support a high quality of life for Township residents.
1. Incorporate the proposed active transportation network illustrated in Maps 1a and 1b as a Schedule in the Township's Official Plan when next updated.	●	●	●	●	●
2. The proposed active transportation network should be flexible enough to provide for change in routing and / or facility types based on new information, Township policy and data as it becomes available. There may be opportunities for additional or alternate connections to be made in the future.			●		
3. It is recommended that the Township work with Metrolinx and undertake a strategy (e.g. Design Feasibility Study) in the short-term to investigate the opportunity and feasibility of providing an active transportation crossing at South Balsam Trail and the rail corridor, as well as a connection(s) from Railway Street / Victoria Street, when these lands are next redeveloped and / or part of future rail expansion improvements.	●	●	●		
4. Roads proposed for signed bike route in the urban / built-up areas of Uxbridge should be subject to review to identify potential traffic calming design measures that could be appropriate for implementation.	●	●	●		●
5. Reference should be made to OTM Book 18: Cycling Facilities (2020) to inform and guide the design and implementation of cycling and in-boulevard facilities.			●		●
6. Reference should be made to OTM Book 15: Pedestrian Crossings to inform and guide the design and implementation of pedestrian crossing treatments.			●		●
7. The Township should consider the information in section 2.3.4 including Table 9 and Table 10 to select appropriate feasible and cost-effective facilities at trailheads and trail access points.	●	●	●	●	●
8. The Township should consider establishing an Active Transportation Coordinator to deliver and champion the recommended outreach initiatives identified in Chapter 3.	●	●	●	●	●

Recommendations	Township of Uxbridge Official Plan Objectives Achieved				
	To establish the Downtown as the social, business and retail centre of the community.	To ensure the health of the Township's local economy by supporting its business and tourism sectors.	To manage the growth of the community in a sustainable manner that balances environmental protection, the preferred lifestyle of residents, and economic viability.	To protect, enhance and restore natural resources in Uxbridge Township in a manner that contributes to the community's quality of life, identity and economy.	To maintain and enhance where possible community services to support a high quality of life for Township residents.
9. The Township should continue to work with Durham Region and specifically for the planning, design and implementation of in-boulevard multi-use pathways proposed along Regional roads in Uxbridge. The Township should leverage the Region's existing Regional Cycling Planning Formula to secure cost-sharing for in-boulevard multi-use pathways proposed along Regional roads that form part of the Region's Primary Cycling Network.		●	●		●
10. The Township should continue to work with Trans Canada Trail to explore future opportunities for route enhancements and trail crossings.		●	●	●	●
11. The Township should continue to explore external funding sources and partnerships to help fund implementation of the ATP.			●		●
12. The Township should identify opportunity to implement active transportation routes / facilities in conjunction with capital infrastructure projects to achieve economies of scale and cost savings.			●		●
13. As part of the annual capital budget review process, Township staff should use the ATP to inform prioritization and implementation of active transportation infrastructure.			●		●
14. Review Maps 2a and 2b to identify opportunities include projects identified as short term within the Township's capital plan. Additionally, Township staff should explore the opportunities to advance long term projects into the short term should any opportunities arise in the future.			●		●
15. Township staff are encouraged to advance implementation of the short-term priority projects identified in section 4.1.1.			●		●
16. As part of scheduled roadway projects in the Township's Capital Budget, consideration should be given to widening the roadway platform (where possible / feasible) and implementing paved shoulders on both sides of the road to support and provide a designated cycling facility.			●		●
17. As part of the annual review process, ensure an adequate operational / maintenance budget is provided to account for new active transportation facilities. The Township should also review and update maintenance and operations practices / level of service standards to take into account the expansion of the active transportation network.			●		●
18. Acquire automated counting technology to provide Township staff with real time data along active transportation corridors on pedestrian and cyclists volumes.		●	●		●

Photo Sources

Page	Source
1	WSP (Dave McLaughlin, 2018)
10	Township of Uxbridge Community Tourism Plan
24	Township of Uxbridge Community Tourism Plan
25	https://www.facebook.com/discoveruxbridge/photos/2712852985618477
38	4 photos at the Trans Canada Trail - WSP (Dave McLaughlin, 2020)
55	https://www.facebook.com/uxbridgeoptimistpumppark/photos/1783764561836114
64	Wayfinding Signage in Uxbridge – Photo from Township staff
64	Wayfinding Signage in Brant County – Photo from Brant County
70	https://www.facebook.com/media/set/?set=a.2334953146519604&type=3
71	https://www.facebook.com/uxbridge.ca/photos/1803093193038938

APPENDIX A

Public and Stakeholder Consultation

Township of Uxbridge ATP | Final June 2021

Uxbridge Active Transportation Plan
Notice of Study Commencement

Public Works and Operations Deparment | July 24, 2020 | Public Notice

About the Study

The Township of Uxbridge has initiated a project to develop an Active Transportation Plan (ATP). The Township has retained WSP Canada Group Limited with Share the Road Cycling Coalition to support the development of the ATP which is scheduled to be completed by the end of 2020. The goal of the ATP is to:

- Expand educational and promotional initiatives that raise awareness of active transportation opportunities for people of all ages and abilities;
- Develop a continuous Township-wide active transportation network that connects to all communities within Uxbridge and builds upon existing trail systems found within the Township; and
- Collaborate with the Active Transportation Committee, the Trails Committee and the Accessibility Advisory Committee as well as local municipal stakeholders, residents and Durham Region staff to ensure the community's interests are addressed in the plan.

How you can get involved

Public and stakeholder input will be critical part of developing the Active Transportation Plan. Here are some ways that you can stay involved:

- Visit the project website to learn more about the study: https://www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx
- Complete an online survey so we can better understand your priorities, preferences and route ideas for active transportation in Uxbridge: https://uxbridgeatp.metroquest.ca/
  Email the study team with your questions and comments:

Lukas Gillham C.E.T.
Operations and Capital Projects Technologist
Township of Uxbridge
lgillham@uxbridge.ca
647-228-3916

Cristina Valente, BA
Senior Project Planner
WSP Canada Group Limited
cristina.valente@wsp.com
647-730-7154

Please note: due to COVID-19 public health restrictions on public gatherings, opportunities for involvement will be available online, over the phone, or by mail; however, as public health directives evolve, in-person consultation sessions may be held. We are interested in hearing any comments or input you may have about this study. If you have any questions, comments, or wish to obtain more information about the ATP, please contact the study team contacts noted above.

The Township of Uxbridge
51 Toronto Street South,
Uxbridge ON L9P 1T1
Tel: 905 852-9181 | Fax: 905-852-9674

MEMO

TO: Lukas Gillham, Township of Uxbridge
Ben Kester, Township of Uxbridge

FROM: Cristina Valente, WSP
Justin Jones, Share the Road

SUBJECT: Uxbridge ATP – Interview with Key Stakeholders & Best Practices Research Approach

DATE: July 7, 2020

1.0 APPROACH

To inform the completion of Task 1-1: Undertake Analysis and Recommend Action Items, Task 2-9: Establish Educational, Promotional and Programming Recommendations and Task 2-10: Establish Supportive Policies related to Development, the consultant team is proposing to undertake best practices research and interviews with key stakeholders. To achieve this, Share the Road Cycling Coalition, in partnership with WSP, is proposing to conduct telephone and online interviews with critical stakeholders who will have a role in the implementation of the Active Transportation Plan (ATP).

This proposed approach is being recommended to supplement the planned Advisory Committee workshops which are anticipated to be held in Phase 1 of the ATP project and involves the scope of work planned in Tasks 3-4 and 3-5 in WSP's proposal to the Township.

More specifically, the interviews are intended to be used to achieve the following objectives:

- To develop the foundations for a Strengths, Weaknesses, Opportunities and Challenges analysis related to the six key themes of the ATP as identified in the proposal submitted by WSP to the Township: safety; convenience; connectivity; accessibility; development and redevelopment; and education and awareness;
- To provide key stakeholders with an update on the work that has been completed to date and how their input will be used going forward;
- To identify best practices and lessons learned related to education, outreach, implementation and programming for comparable assignments completed by both upper and lower-tier municipalities;
- To discuss opportunities for coordination and collaboration between the stakeholder and the Township and to confirm level of commitment and capacity for support;
- To identify shared resources that can be coordinated and delivered by the Township for use to support active transportation; and
- To gain buy-in from key stakeholders and partners in support of implementation of elements of the Active Transportation Plan and / or to continue to support the Township in it's work going forward.

This memo provides an overview of the recommended approach that WSP and Share the Road intends to use to fulfill this project task including the recommended interviewees, suggested questions and the overall format for communication and documentation.

2.0 PROPOSED INTERVIEWEES

The interviewees will include a mix of municipal staff, technical agencies and select interest groups who have some form of jurisdiction over potential recommendations made through the ATP as well as staff from municipalities with a similar experience or geography from which Uxbridge can learn from and / or partner with.

Each of these groups has a distinct role in the plan's development and, more importantly, its implementation. It is important to review and confirm their level of understanding, commitment and capacity to support the Township's next steps. Based on initial discussions with Township staff and past work with stakeholders a high level of interest for partnership and collaboration between these groups, and Township Staff is desired. That said, there are still a number of coordination, collaboration and implementation challenges that need to be investigated and addressed in order to inform the development of future recommendations.

The following table provides an overview of the three groups.

	Township Staff and Committees	Technical Agencies and Interest Groups	Other Municipalities
Description	Individuals who are employed by the Township of Uxbridge – with representation from each department	Individuals who are employed by other technical agencies or interest groups within the area	Individuals who are employed or involved in other municipal cycling related initiatives
Groups	- Municipal staff – all departments - Active Transportation Committee - Trails Committee - Accessibility Committee	- Region of Durham - Durham Regional Police - Uxbridge Cycling Club - Durham Mountain Biking Association - Green Communities Canada - Durham Region Cycling Coalition	- Saugeen Shores - Essex County - Elgin County

A copy of the contact list that has been prepared which has already been submitted to Municipal staff for review, consideration and population. If there are any changes to the contacts that the Township of Uxbridge would like to identify, please let the consultant know via email or make the changes directly in the contact list document.

3.0 INTERVIEW FORMAT

As noted above, the intent will be for the interviews to be completed in three parts:

— A brief overview of the project purpose and objectives of the project including an update on the work completed to date.

— Interviews will be hosted by Share the Road and the questions will be asked sequentially.

— Interviewees will be given the opportunity to ask any questions of the interviewers.

— Final closing remarks and next steps will be noted.

The intent is for these interviews to be more of an informal conversation between colleagues as opposed to a formal session. The approach above provides structure to the session, but Share the Road will ensure that the interviewees feel as though they are engaged and are driving their involvement. The same interview questions will be asked of all interviewees with the purpose of fulfilling the objectives noted above. The following are draft questions that have been identified for the Township's review and consideration.

1. What is the biggest strength Uxbridge currently has with relation to active transportation? What is the biggest weakness?
2. Thinking of the biggest strength, how can the ATP help the Township to build on that success?
3. Thinking of the biggest weakness, what should the ATP include to help to address that?
4. What do you think the single most important priority is for the ATP to address? How can the plan best address that issue?
5. What stakeholders are currently playing a role in improving active transportation within the Township? What groups are not represented that should be?
6. When you think about a community that is successful in implementing new active transportation infrastructure or programs, what community comes to mind? What lessons can Uxbridge learn from that community?
7. What has been Uxbridge's most significant success in terms of active transportation in the past 5 years?
8. What has been its most significant failure?
9. What types of programs already exist to either educate or encourage residents about using active transportation in Uxbridge?
10. What types of education programs would you like to see in Uxbridge moving forward?
11. What types of encouragement programs would you like to see in Uxbridge moving forward?
12. Is there anything else you would like to add?

4.0 COMMUNICATION

The primary method of invitation and communication will be via email including an invitation to participate in a telephone / web video interview session. If requested by the invitee, an electronic version of the survey questions can be made available to gather their input. The first communication is anticipated to occur on Thursday July 9th, 2020 with the follow-up reminder occurring on Thursday July 16th, 2020. The following is a suggested text for the initial email invitation:

As a key stakeholder within Uxbridge Township, we would like to invite you to participate in a stakeholder interview to help in the development of the Township's new Active Transportation Plan. The interviews will be focused on exploring the strengths and weaknesses of Uxbridge's existing active transportation efforts and on developing a stronger culture of cycling in Uxbridge through the deployment of new outreach and education programs. It is our goal to identify existing conditions and capacity within the community to ensure that the recommendations outlined within the final plan are community-supported and implementable.

We would like to schedule an interview with you in the coming weeks for you to provide your input about how Uxbridge can become a better place for people who ride bikes. Each interview should take between 30 and 60 minutes and will take place utilizing Zoom Teleconferencing technology. Interviews will be recorded to ensure that the project team is able to accurately capture the key points from every interview. Recordings will not be shared and will be deleted once key findings have been transcribed.

Please select a time here: <Doodle Link> for your interview. If desired, you are welcome to invite one additional representative from your agency or department to join you at the interview, but this is not required.

Thank you for your time;

Justin Jones
On Behalf of
The Uxbridge Active Transportation Plan Consulting Team

5.0 NEXT STEPS

By Wednesday July 8th, 2020 we would appreciate any questions, comments or revisions the Township has with regard to the proposed approach and interviewees identified within this memo. Once these have been confirmed, we will proceed with initial communication and will provide an update on the status update on a weekly basis as we progress.

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

TRAILS COMMITTEE WORKSHOP

August 6, 2020

wsp + SHARE THE ROAD CYCLING COALITION

The Township of UXBRIDGE
Trail Capital of Canada

Agenda

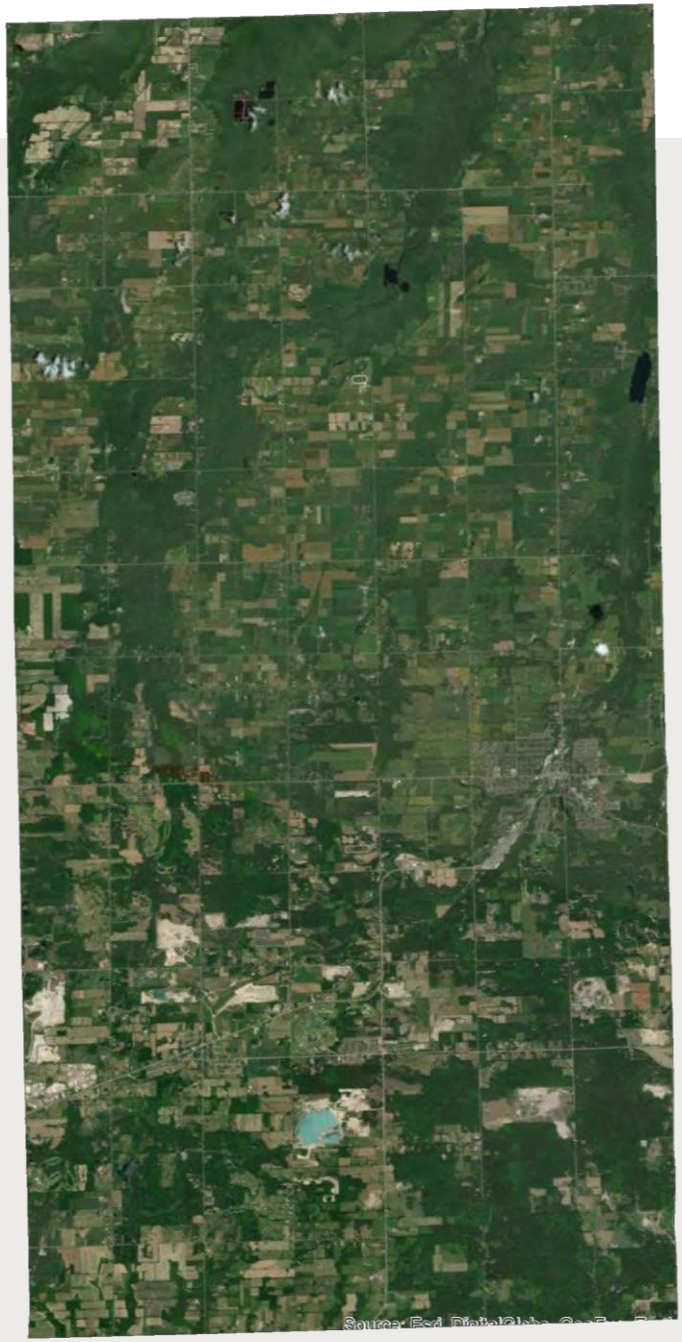
Introductions and Project Overview	20 min
Strengthen, Weakness, Opportunities, Threats	30 min
Mapping Exercise	30 min
Wrap-up and Next Steps	10 min

Today's Objectives

1. To gain a better understanding of the existing conditions for active transportation within Uxbridge, related to trails.

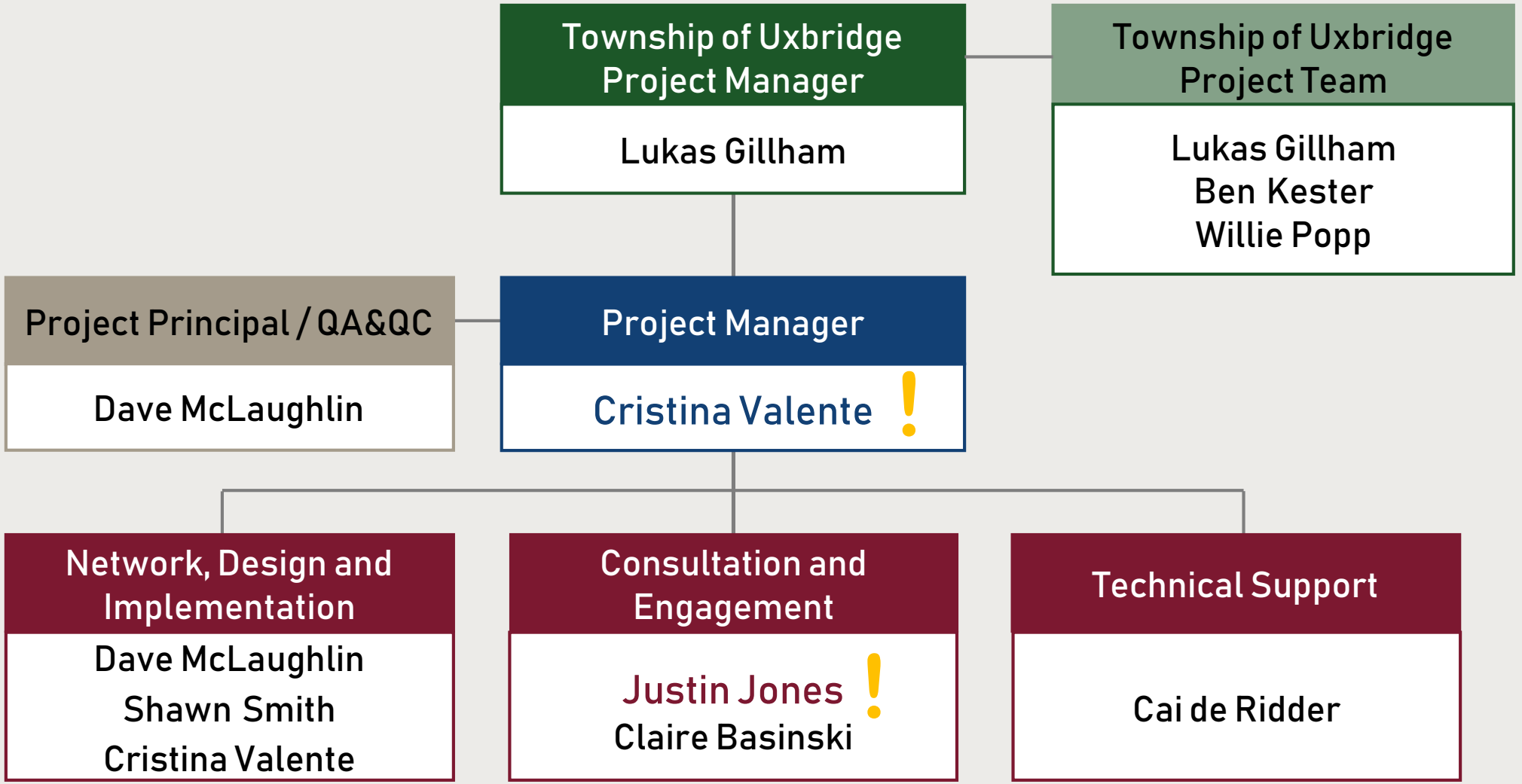
2. To undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis for active transportation in Uxbridge, related to trails.

3. Obtain feedback on potential active transportation routes / trails to be explored through the study.



PROJECT OVERVIEW

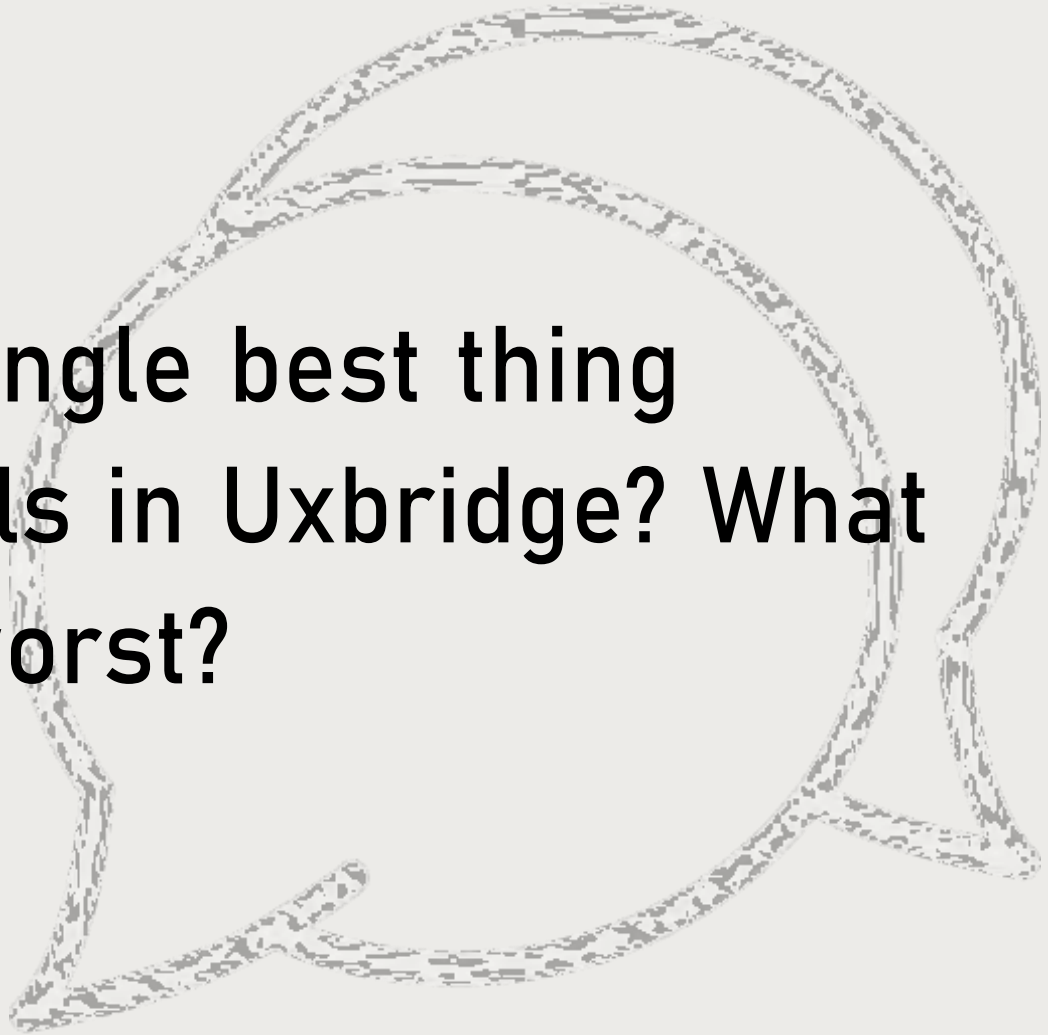
Meet the Project Team



Introductions

Please tell us:

1. Your name
2. What is the single best thing about the trails in Uxbridge? What is the single worst?



What is an ATP?

The Active Transportation Plan (ATP)

Is:

- ✓ Long-term vision
- ✓ Flexible document
- ✓ Community building asset
- ✓ Communication tool
- ✓ Implementation guide
- ✓ Support for existing plans

Is not:

- ✗ Detailed or final design
- ✗ Authority to construct
- ✗ Prescriptive
- ✗ Requirement
- ✗ Financial commitment

Study Process

SUMMER 2020

PART 1

Future Directions, Strategies and Actions

- Undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis of active transportation in Uxbridge.
- Assess demand and potential for active transportation in Uxbridge, using available data from Statistics Canada, Transportation Tomorrow Survey and Strava.

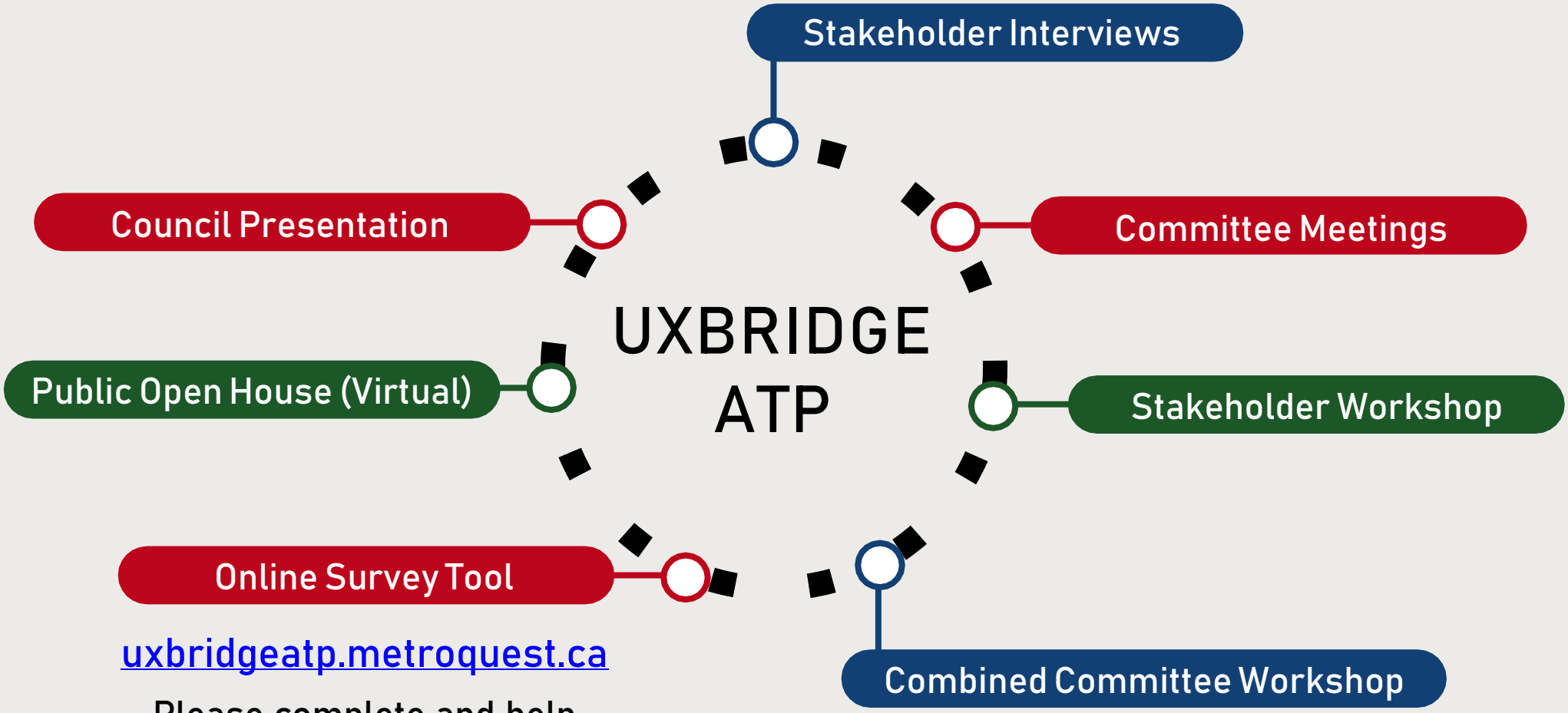
PART 2

WINTER 2020

Implementation, Operations and Maintenance Plans

- Review existing conditions and identify missing links.
- Identify an active transportation network including preferred facility types.
- Develop an implementation strategy including phasing, priorities and costing estimates.
- Establish educational, promotional and programming recommendations.
- Draft and finalize the plan.

Engagement and Consultation



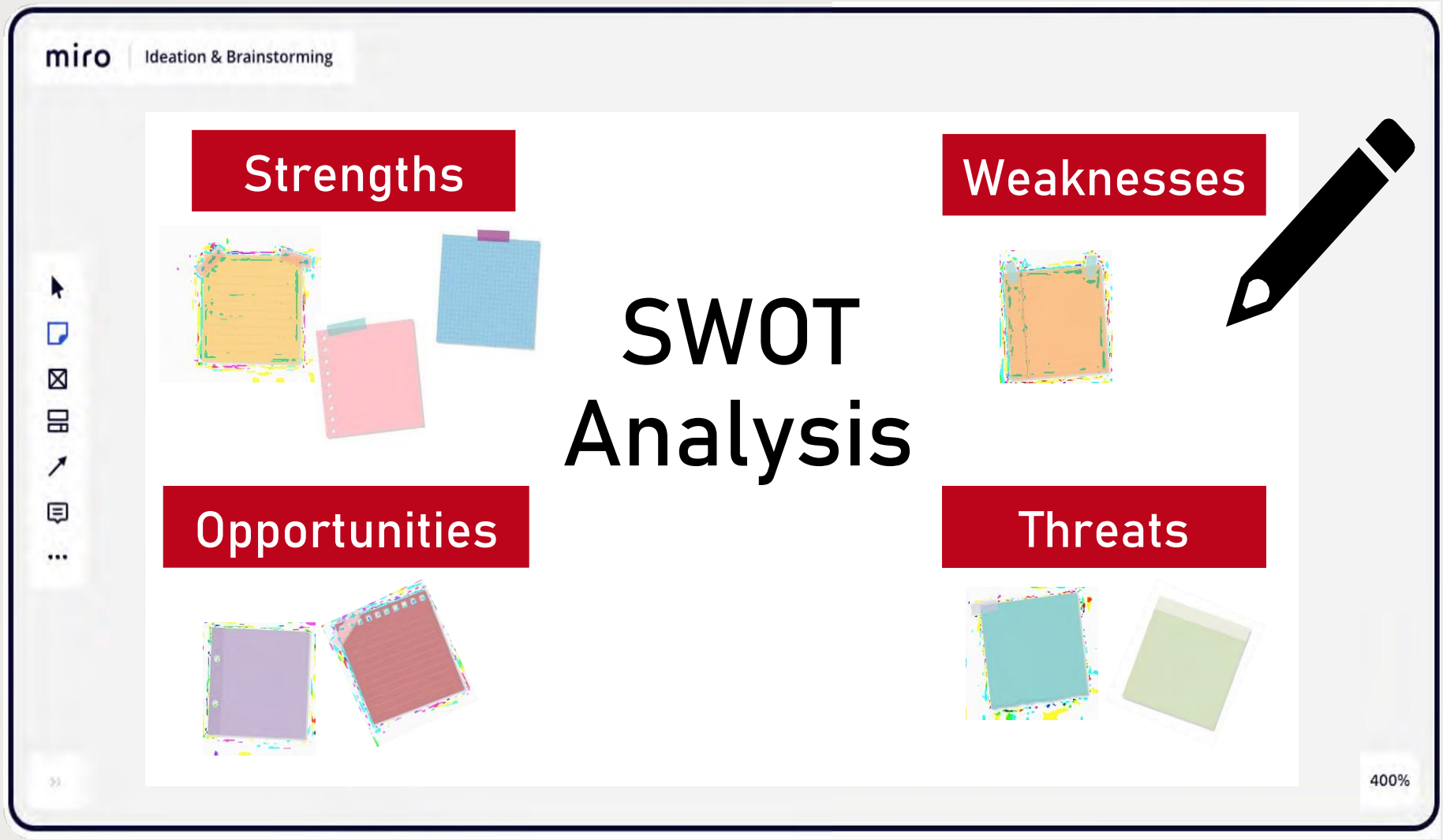
uxbridgeatp.metroquest.ca

Please complete and help promote the survey!

INTERACTIVE ACTIVITIES

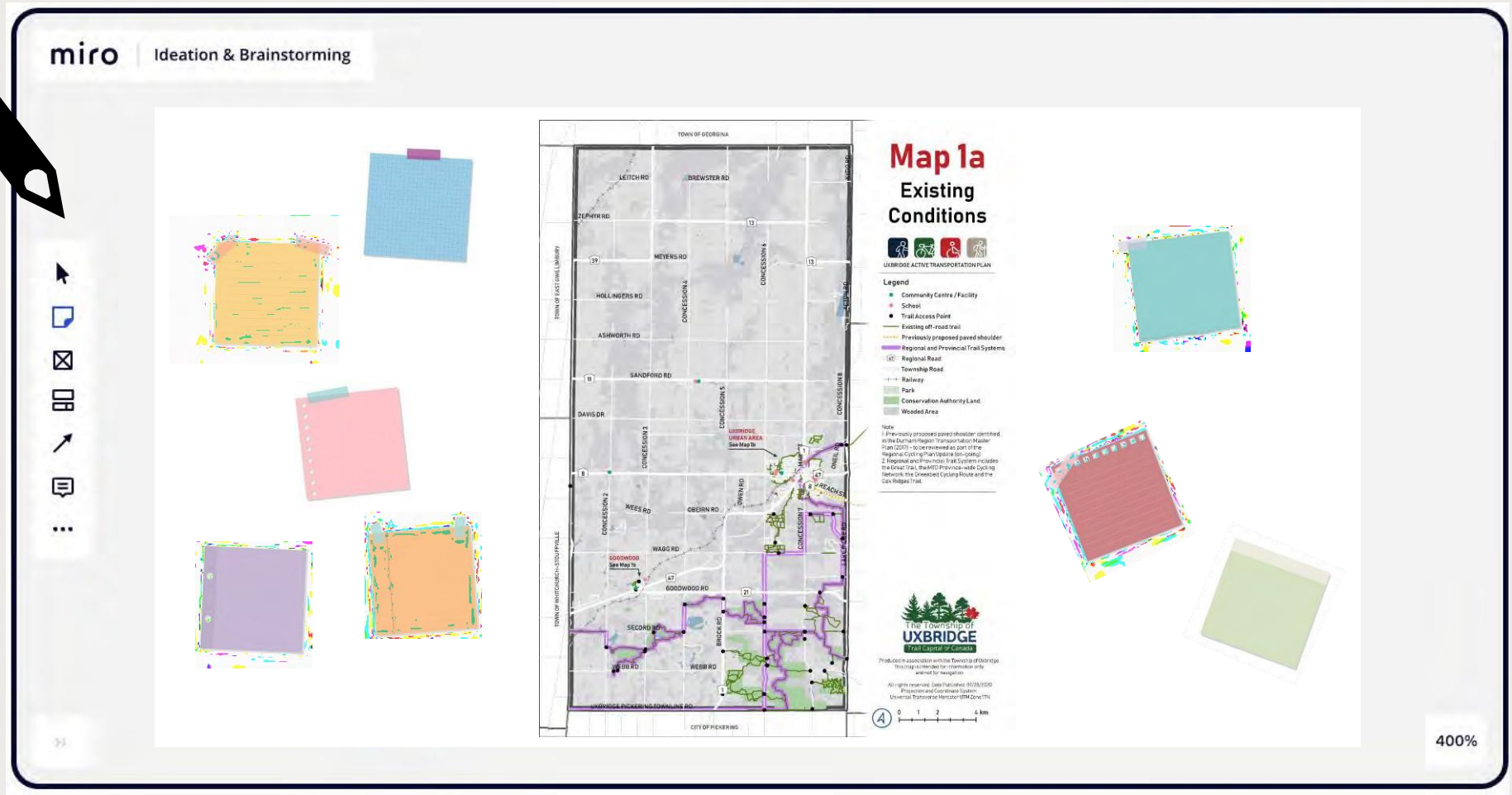
SWOT Analysis

Go to https://bit.ly/UxbridgeTrails (case sensitive)



Active Transportation Routes

Go to https://bit.ly/UxbridgeTrails (case sensitive)



We want to know:

Go to https://bit.ly/UxbridgeTrails (case sensitive)

1. Are there any existing routes that are missing from the map?

2. Where are the missing links / gaps that should be connected?

3. Are there destinations that need to be connected?

WRAP-UP

Next Steps

1. Summarize and document input received today.
2. Document analysis, findings and recommendations from Part 1.
3. Identify active transportation candidate routes.
4. Prepare for upcoming consultation activities.

uxbridgeatp.metroquest.ca

Please complete the survey and help promote the study survey!

Thank you for participating!

Visit the project website for more information and updates:
www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Contact Information

Lukas Gillham
Township of Uxbridge
lgillham@uxbridge.ca
647-228-3916

Cristina Valente
WSP
cristina.valente@wsp.com
647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

ACTIVE TRANSPORTATION COMMITTEE WORKSHOP

August 11, 2020

wsp + SHARE THE ROAD CYCLING COALITION

The Township of UXBRIDGE
Trail Capital of Canada

Agenda

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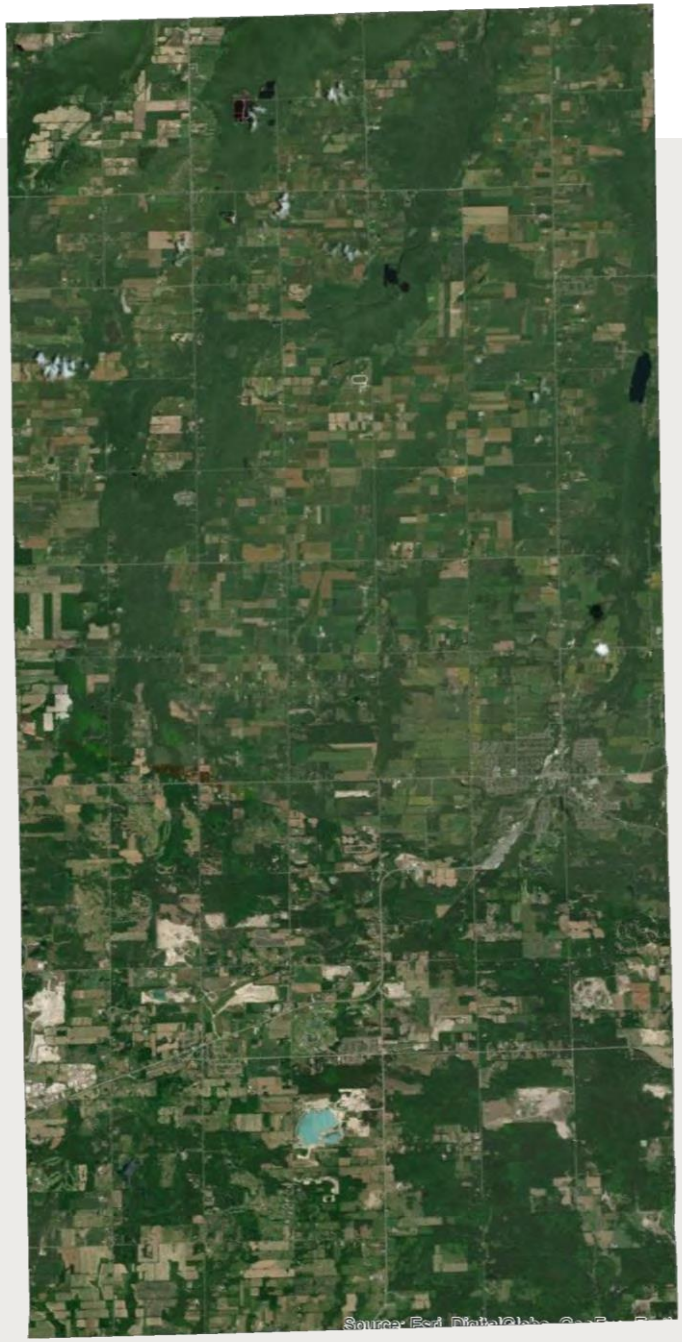

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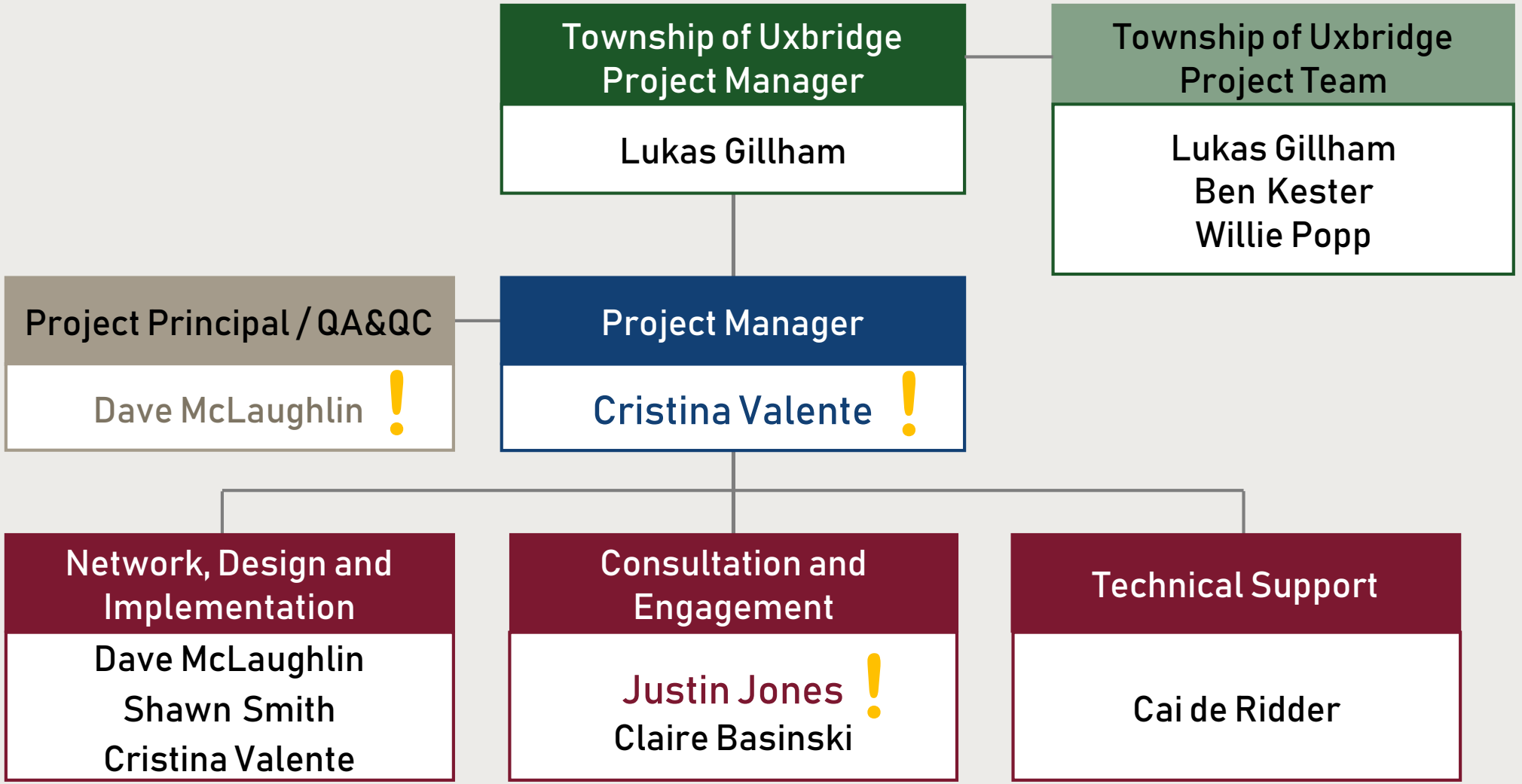
Meet the Project Team



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Please tell us:

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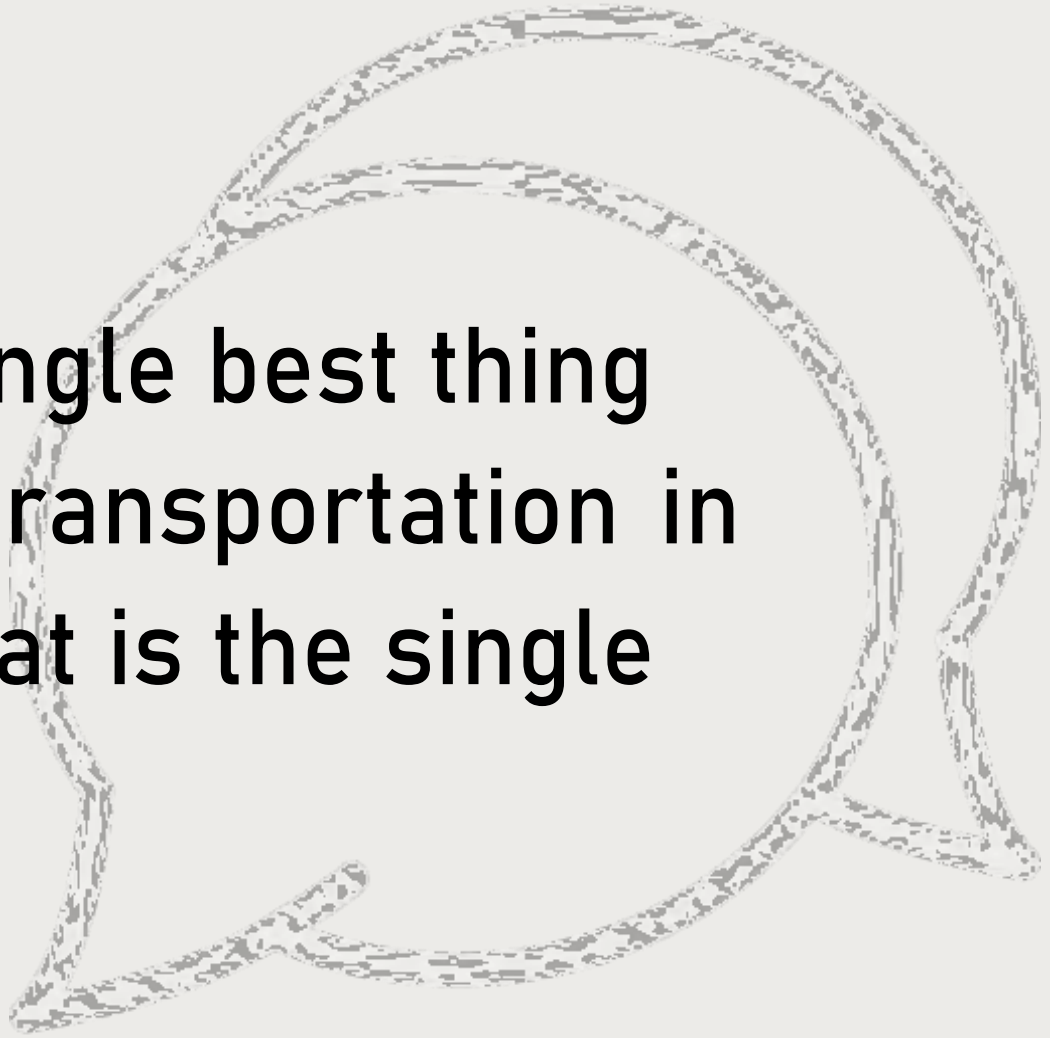

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- Review existing conditions and identify missing links.
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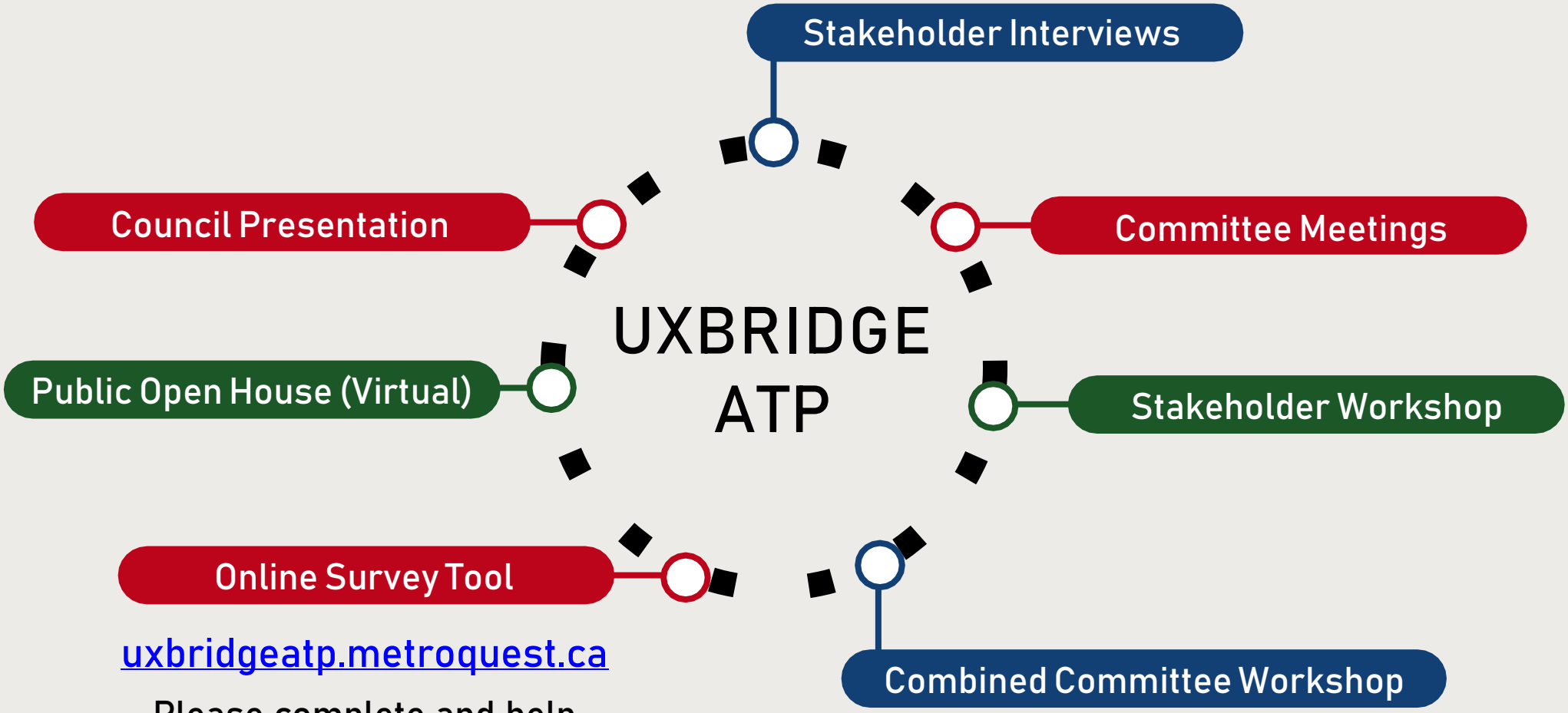

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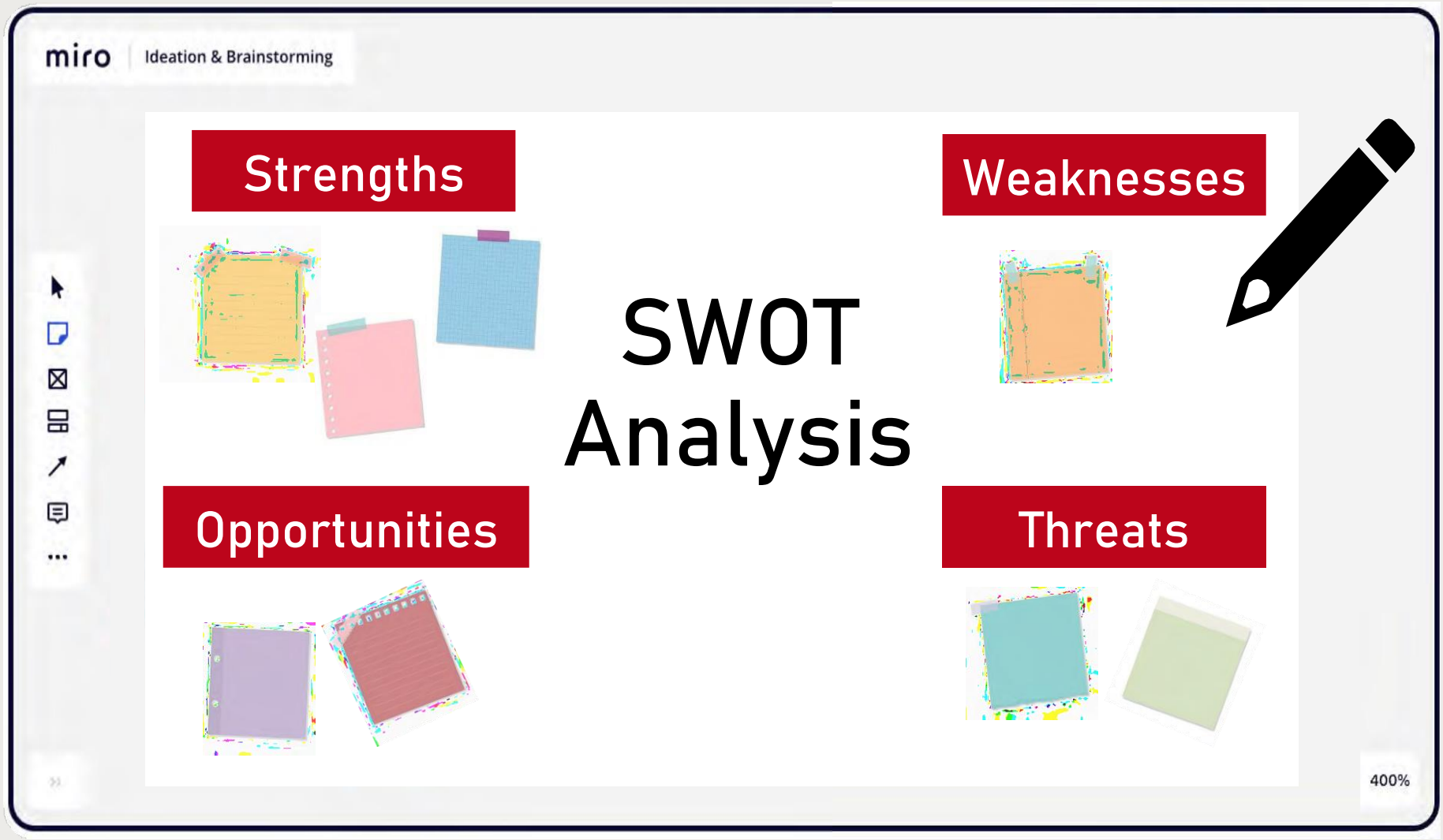

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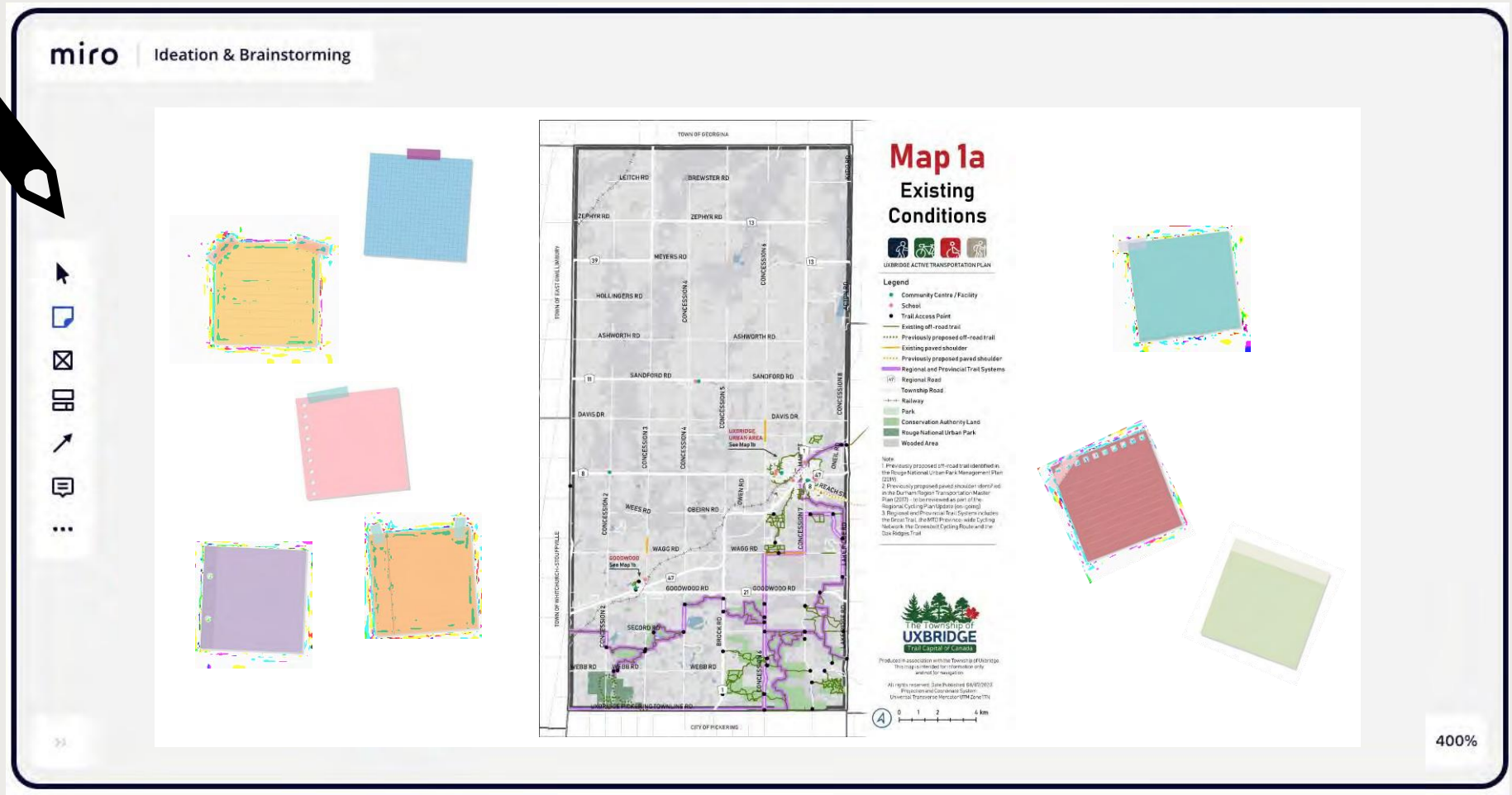

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TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

ACCESSIBILITY ADVISORY COMMITTEE WORKSHOP

August 17, 2020

wsp + SHARE THE ROAD CYCLING COALITION

The Township of UXBRIDGE
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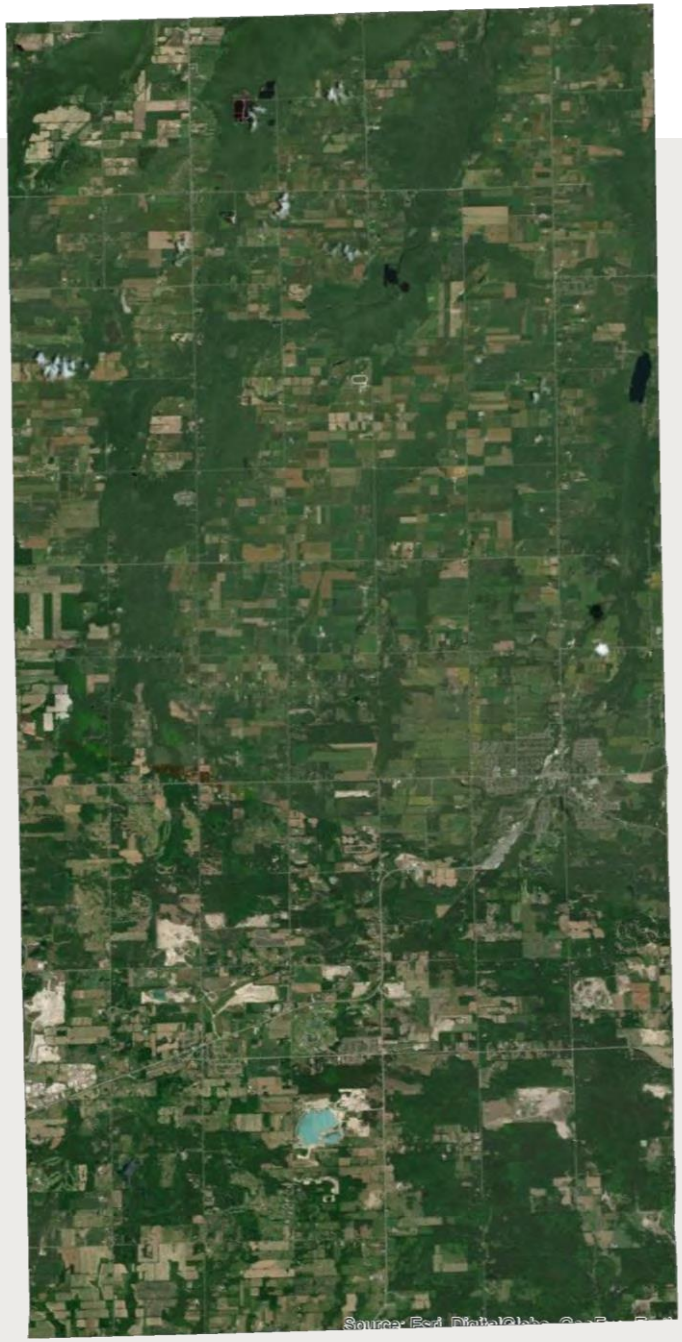

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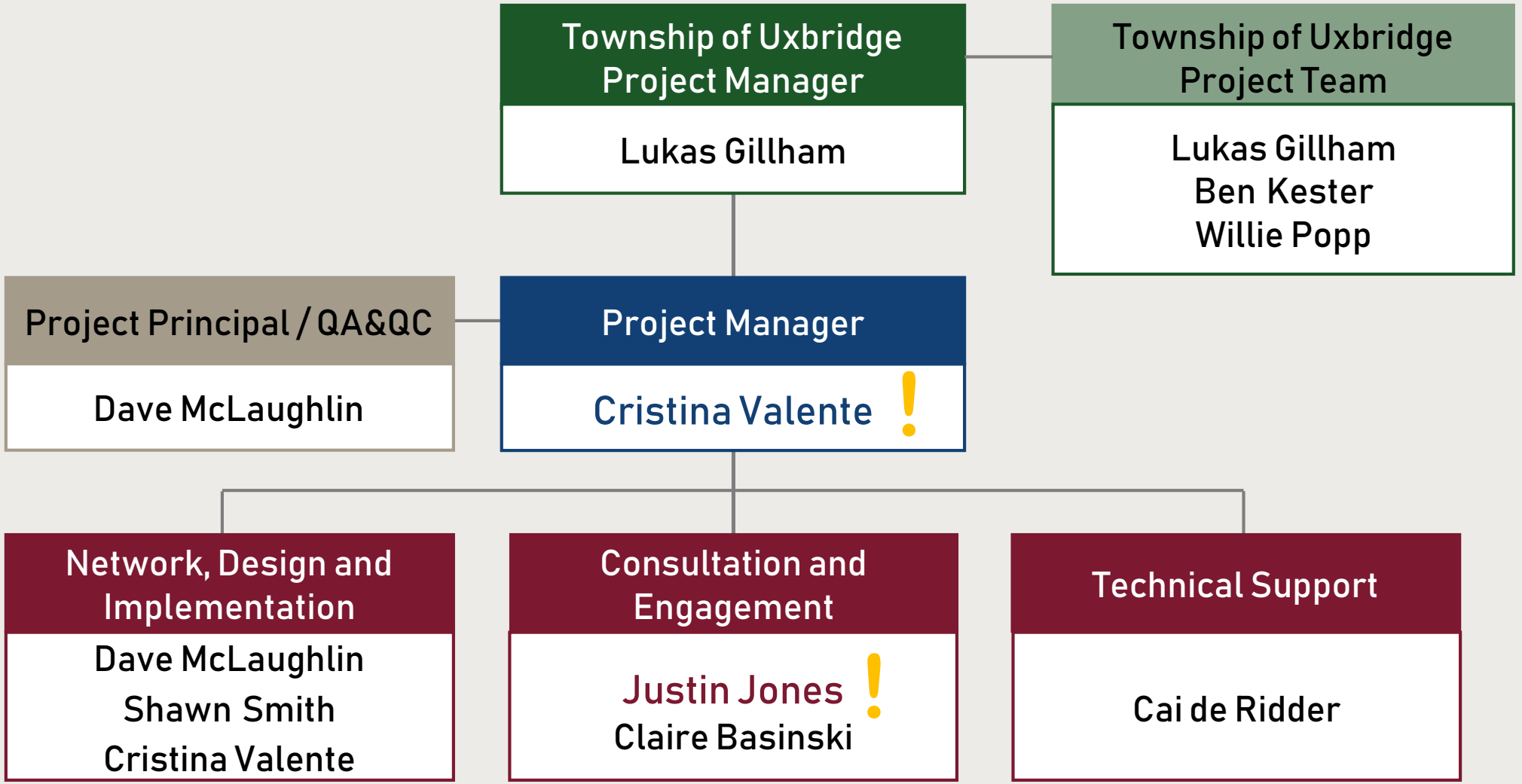

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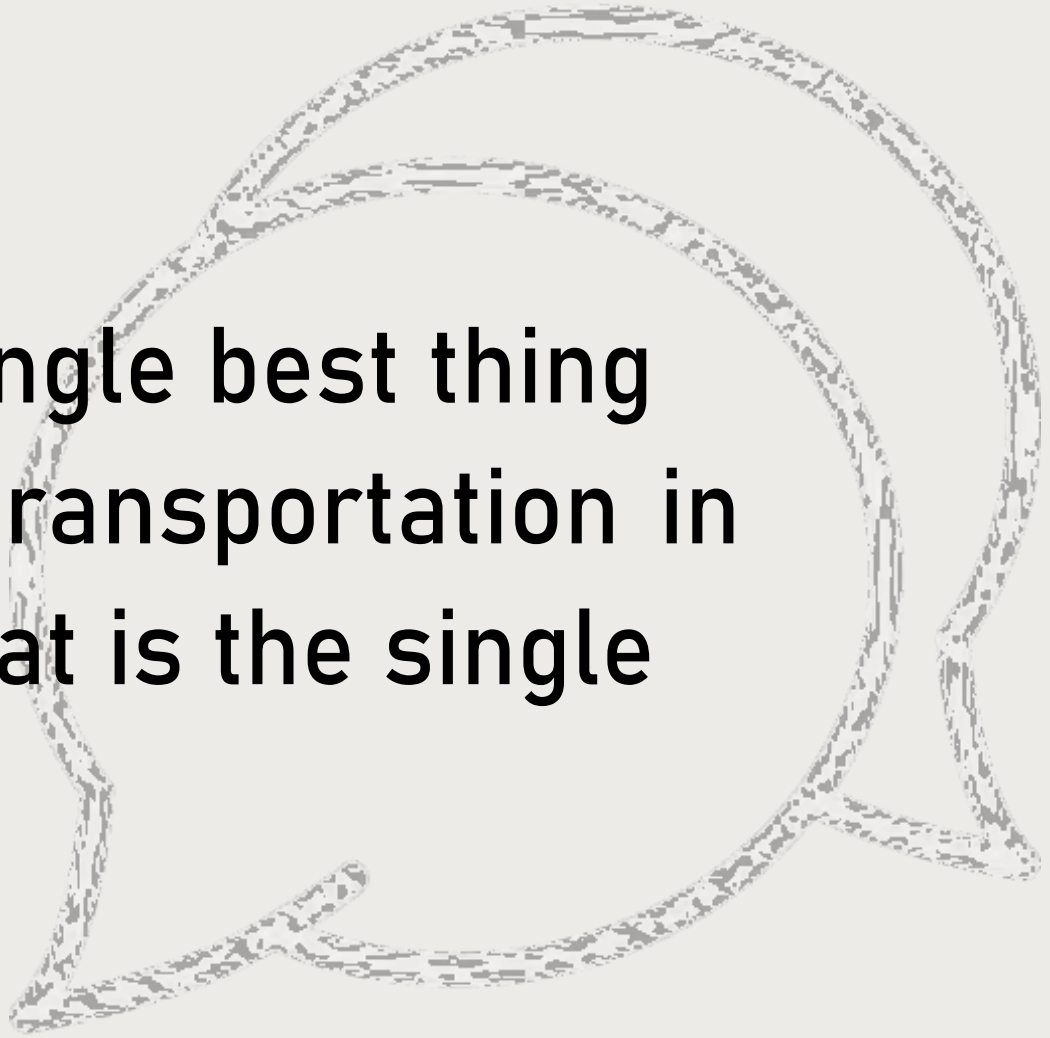

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Implementation, Operations and Maintenance Plans

- Review existing conditions and identify missing links.
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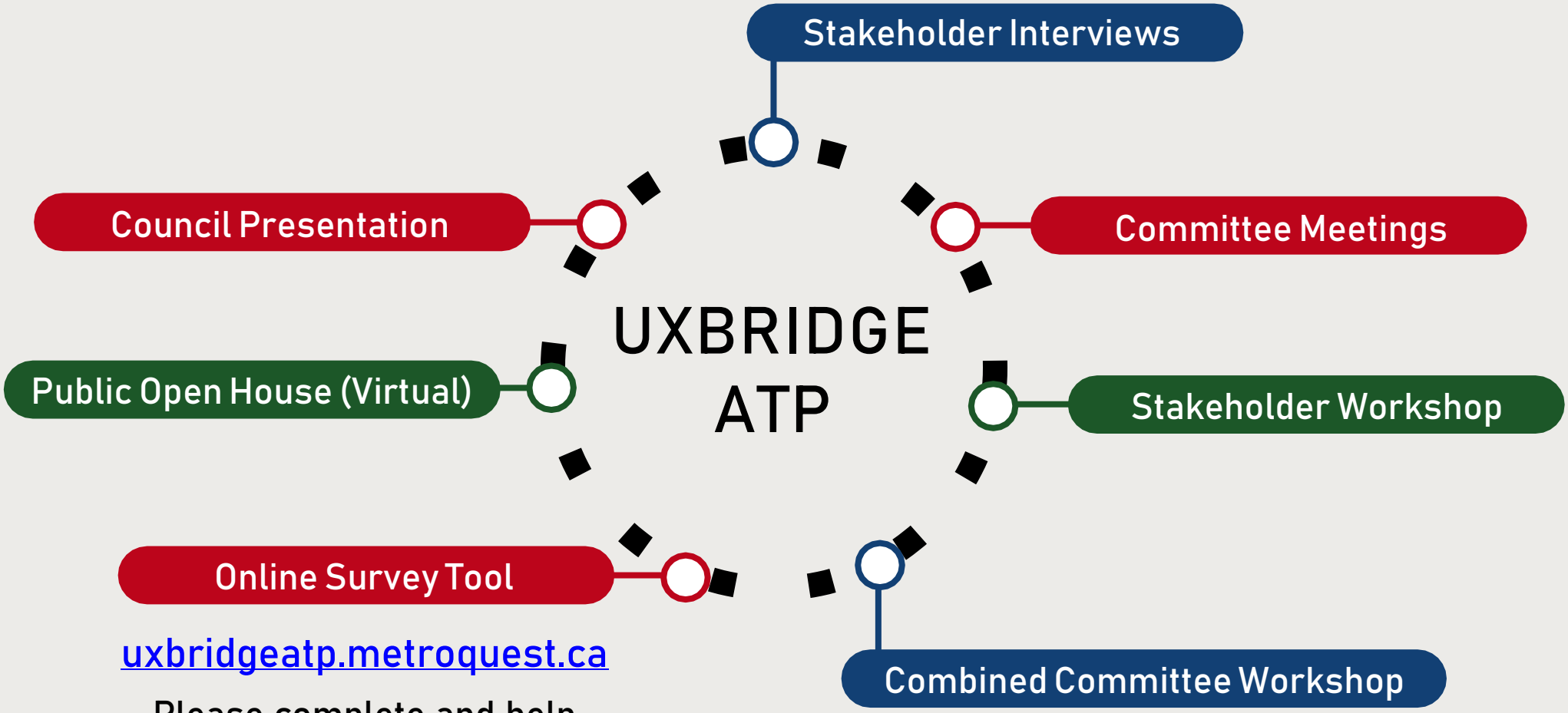
WINTER 2020

Engagement and Consultation



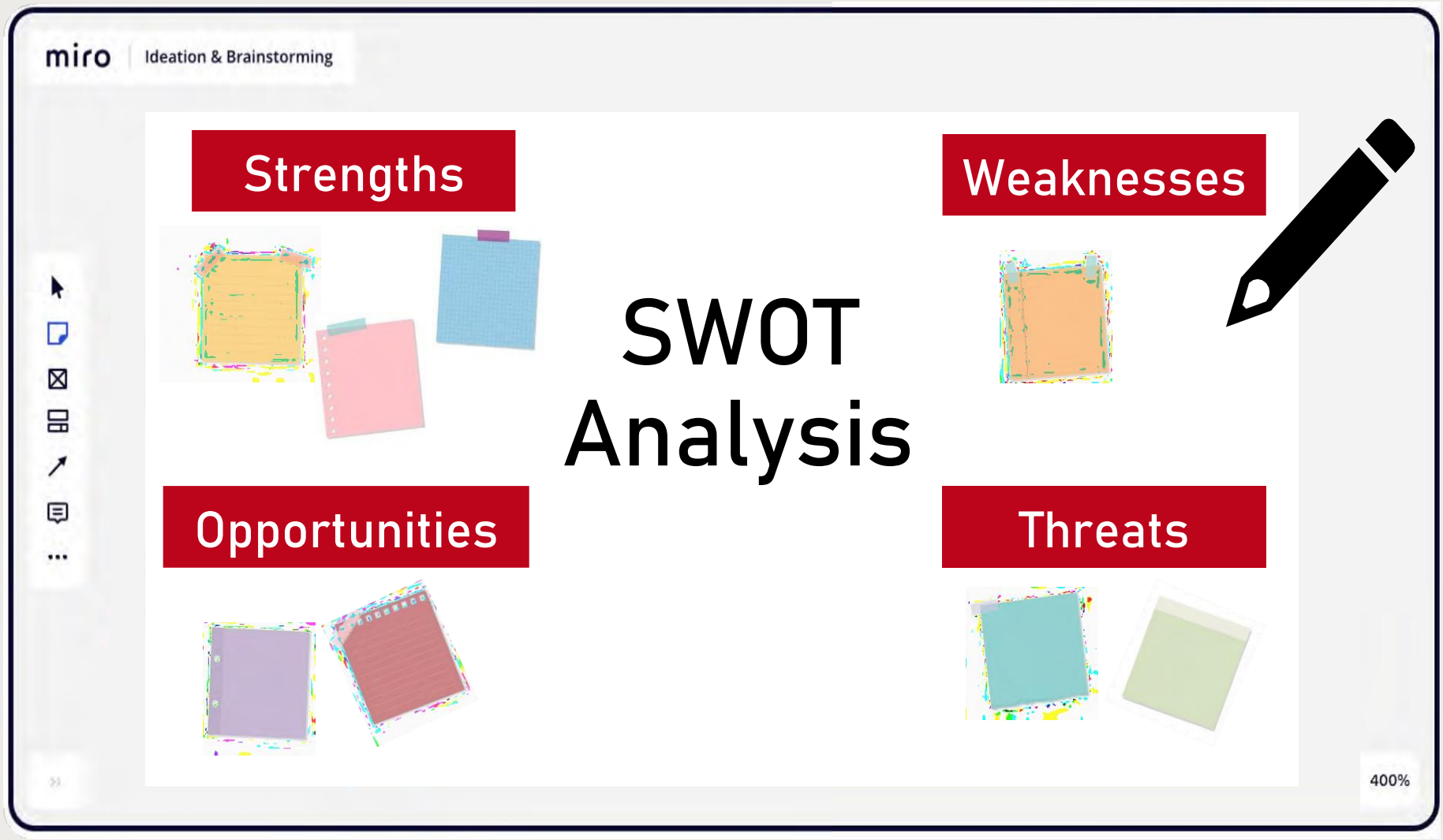
uxbridgeatp.metroquest.ca

Please complete and help promote the survey!

INTERACTIVE ACTIVITIES

SWOT Analysis

Go to https://miro.com/app/board/o9J_knJHelA=/ (case sensitive)



Active Transportation Routes

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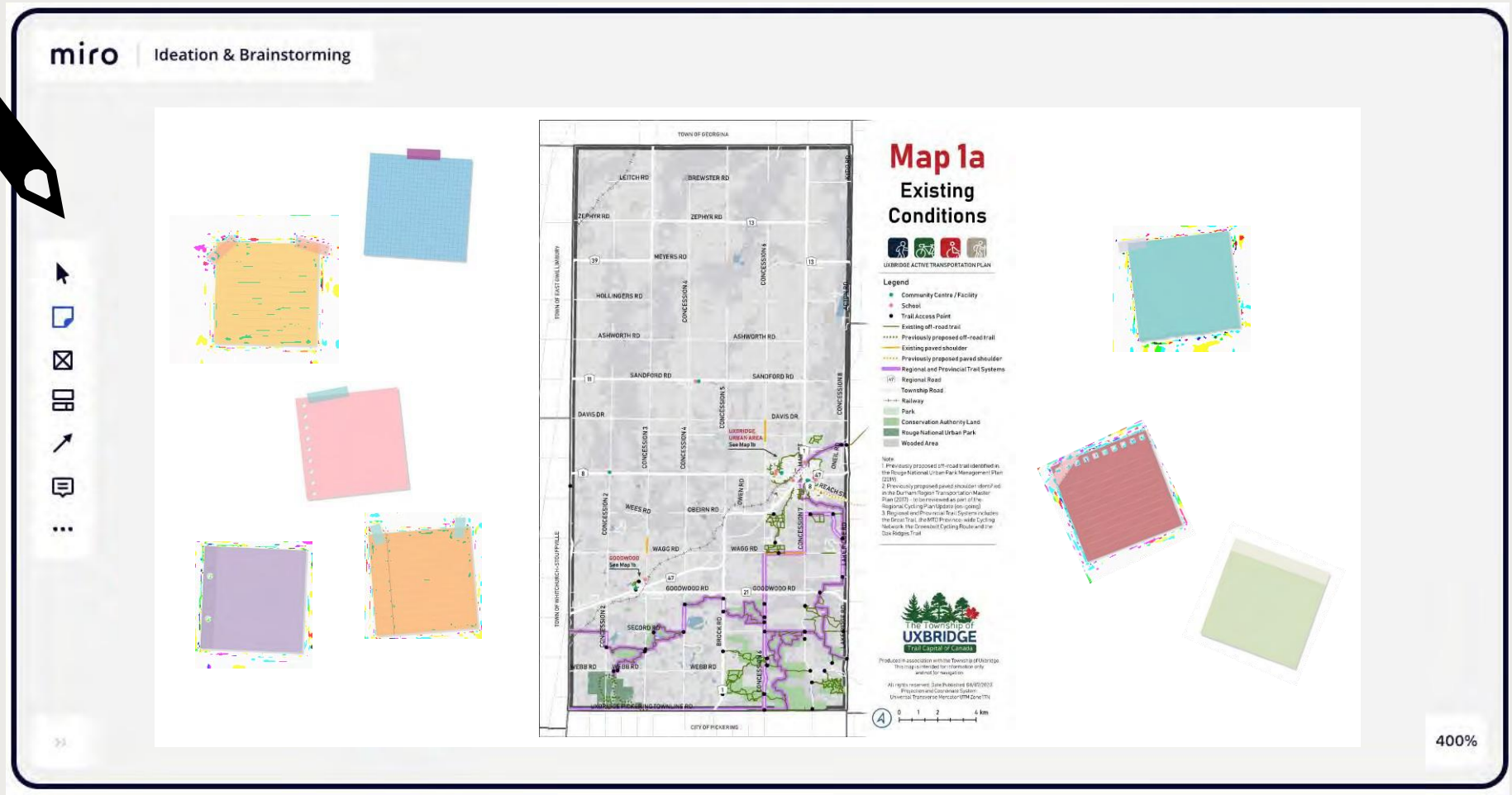


We want to know:

Go to https://miro.com/app/board/o9J_knJHelA=/ (case sensitive)

1. Are there any existing routes that are missing from the map?

2. Where are the missing links / gaps that should be connected?

3. Are there destinations that need to be connected?

WRAP-UP

Next Steps

1. Summarize and document input received today.
2. Document analysis, findings and recommendations from Part 1.
3. Identify active transportation candidate routes.
4. Prepare for upcoming consultation activities.

uxbridgeatp.metroquest.ca

Please complete the survey and help promote the study survey!

Thank you for participating!

Visit the project website for more information and updates:
www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Contact Information

Lukas Gillham
Township of Uxbridge
lgillham@uxbridge.ca
647-228-3916

Cristina Valente
WSP
cristina.valente@wsp.com
647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

COMBINED COMMITTEE WORKSHOP:

- Accessibility Advisory Committee
- Active Transportation Committee
- Uxbridge Township Trails Committee

September 22, 2020

WSP + SHARE THE ROAD CYCLING COALITION

Agenda

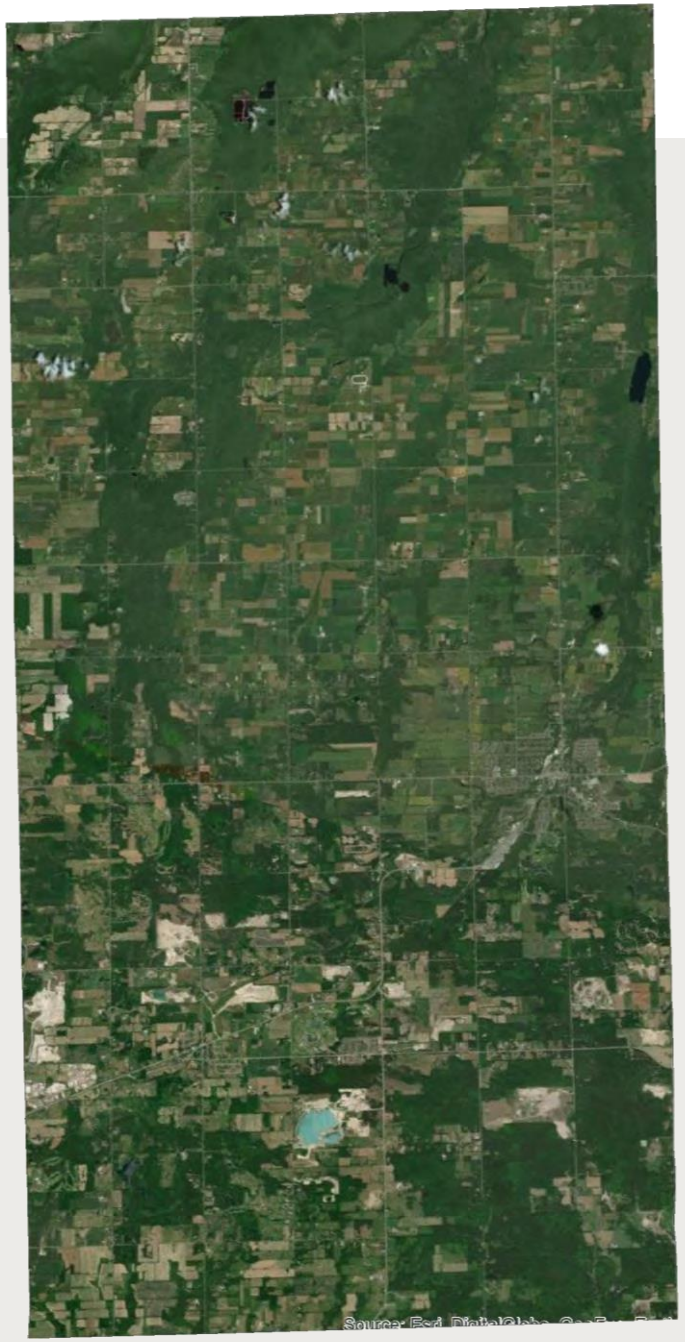
1. Project Update — 20 min
   - Study Process
   - ATP Part 1 Engagement Overview
   - ATP Part 1 Outcomes
   - ATP Part 2 Considerations
2. Interactive Activities — 60 min
   - Draft Candidate Network
   - Programs and Outreach
3. Wrap-up and Next Steps — 5 min

Today's Objectives

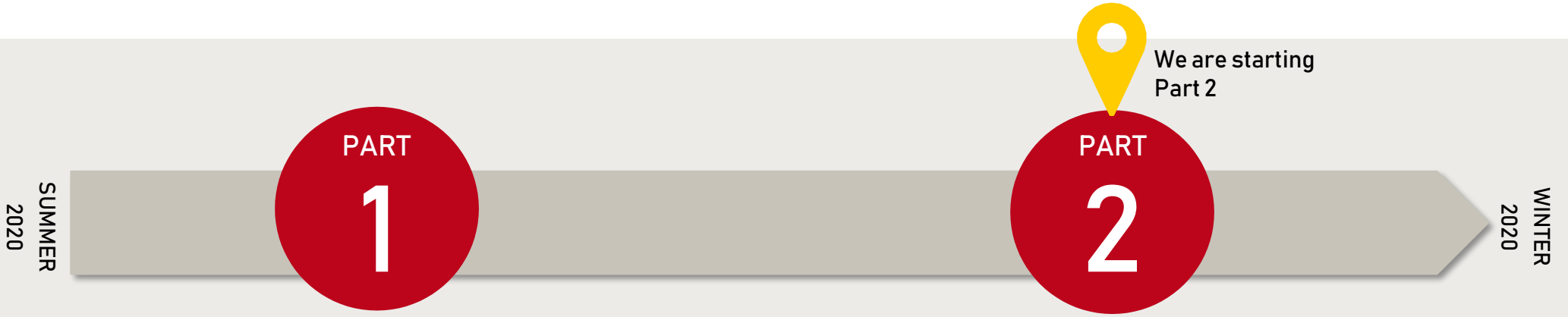
1. Gather input on a draft candidate network including any modifications to proposed routes and facility types.

2. Gather input on network priorities that should be identified in the plan.

3. Prioritize education, encouragement and outreach initiatives.



Where are we now?



Future Directions, Strategies and Actions

- Undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis of active transportation in Uxbridge.
- Assess demand and potential for active transportation in Uxbridge, using available data from Statistics Canada, Transportation Tomorrow Survey and Strava.

Implementation, Operations and Maintenance Plans

- Review existing conditions and identify missing links.
- Identify an active transportation network including preferred facility types.
- Develop an implementation strategy including phasing, priorities and costing estimates.
- Establish educational, promotional and programming recommendations.
- Draft and finalize the plan.

Shaping the Process

A number of activities were undertaken in Part 1 to inform the study process and next steps in Part 2:

6

stakeholder interviews

Interviews with:

Township staff
Committees
Interest groups

3

committee meetings

Meetings with:

Trails – August 6
AT – August 11
Accessibility – August 17

1

online survey

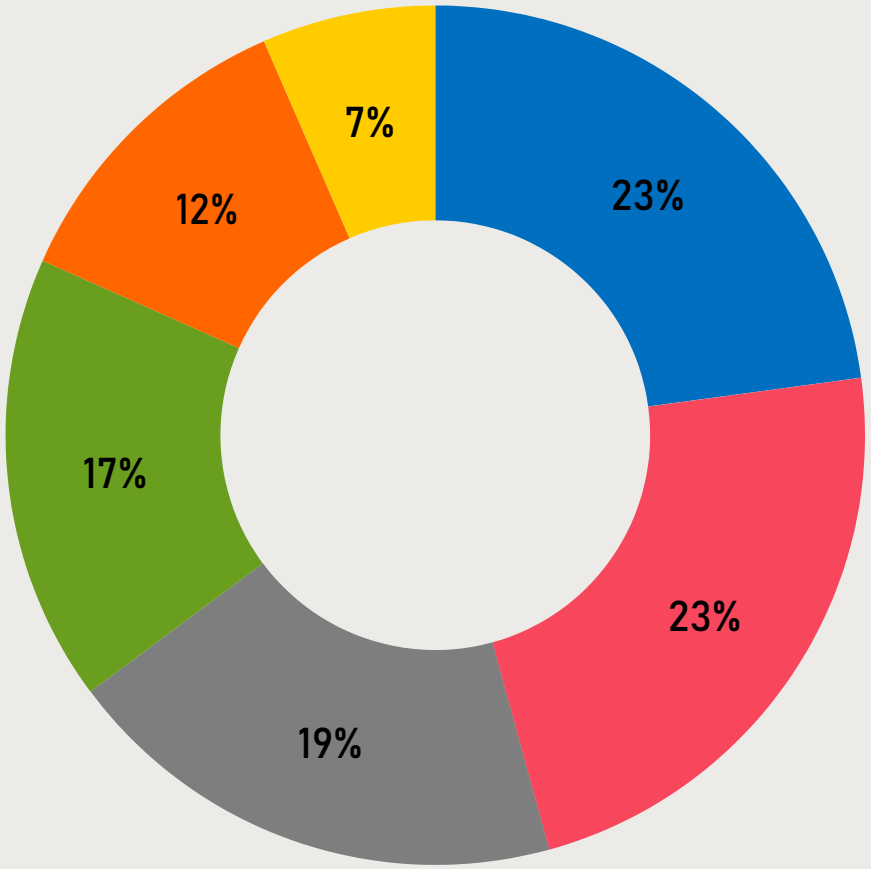
140 participants

survey was active from July 24 to August 31

Plus calls / meetings with Township staff

Online Survey Results

Most important principles that should be used to identify routes in the plan:



Top 3 principles:

1. Safety (23%)
2. Connected (23%)
3. Convenient (19%)

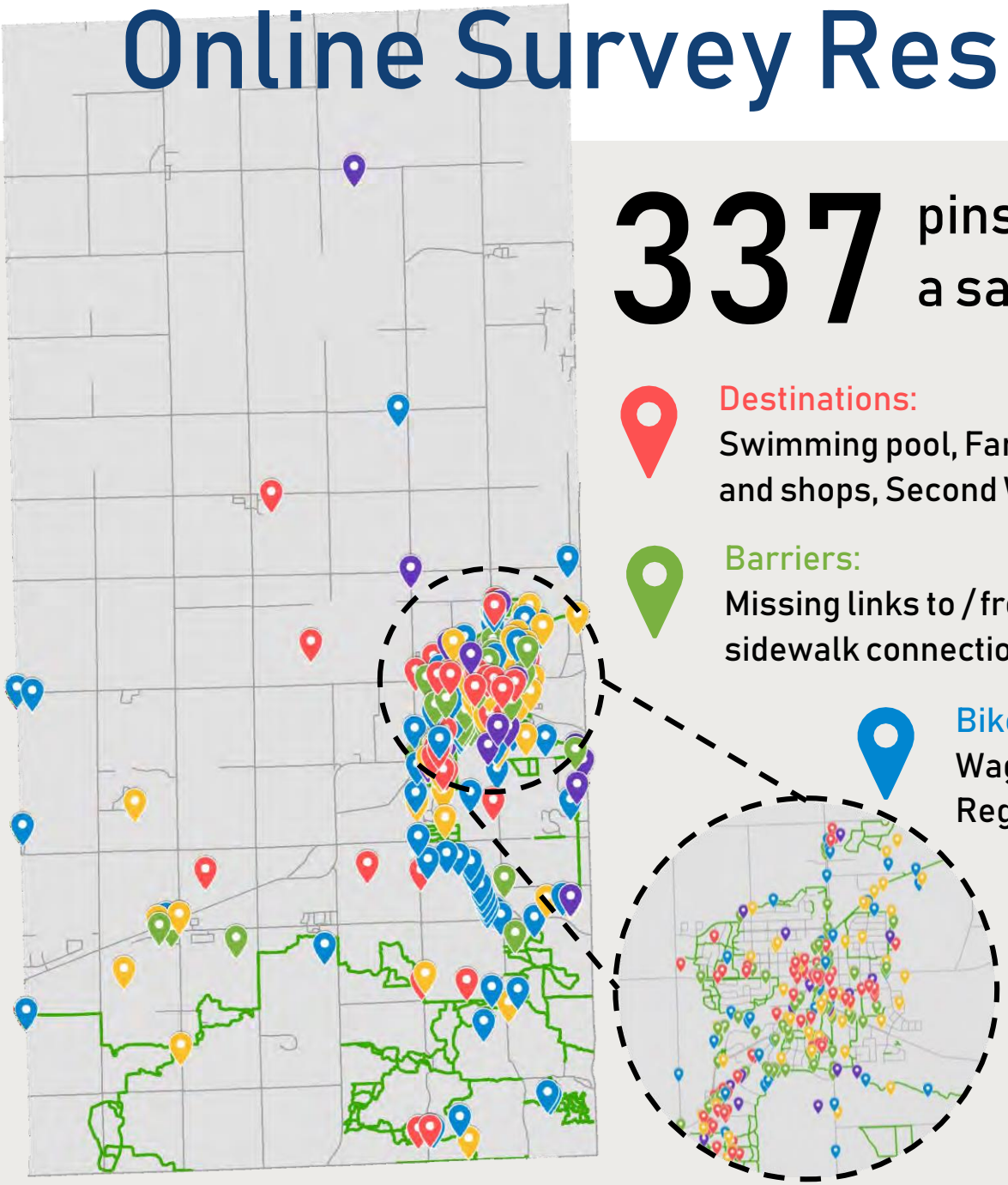
- Accessible
- Development-driven
- Education and awareness

What does this tell us?

When identifying an active transportation network for Uxbridge, consideration should be given to routes that:

- Improve a user's sense of **safety** and ultimately makes them feel more comfortable to walk, bike and user other non-motorized forms of travel.
- **Connect** to where people live and where they want to go,
- Are a **convenient** and realistic option for people to use for travel or recreation.

Online Survey Results



337 pins were placed
a sample of the input:

Destinations:
Swimming pool, Farmers Market, Fields of Uxbridge, downtown area and shops, Second Wedge, Elgin Park, schools

Barriers:
Missing links to / from existing trails, lack of trail crossings, missing sidewalk connections, truck traffic, narrow roads

Bike Routes:
Wagg Road, Maple Bridge Trail, connections to Regional Forests, York-Durham Line, Ashworth Road

Walking Routes:
Elgin Park, to / from schools and shops, trails in Countryside Preserve

Other Comments:
Need improvement beyond downtown, parking, trail conditions, crossings

Online Survey Results

Types of users:

37%
Pedestrians

22%
Cyclists

What would encourage more people to be active:

22% a connected Township-wide network

19% more infrastructure / facilities such as paved shoulders

14% better connections to key destinations

Trip purpose:

39%
For recreation and leisure

36%
For health and fitness

Summary of priorities

1. Provide opportunities for people to walk, bike and be more active (27%)
2. Improve the quality of life and health of residents (20%)
3. Improve biking and walking as a viable transportation option (15%)

SWOT Analysis

Informed by input collected from stakeholder interviews and Committee meetings

Strengths	Weaknesses	Opportunities	Threats
• Presence of existing Committees • Existing trail systems • Engaged community volunteers and local groups • Community is a good size for walking and biking • Strong BIA • Supportive Council and staff • Common interest amongst residents to be more active • Variety of trail levels that allow people to explore Uxbridge	• Lack of driver awareness • Sidewalk gaps • Trails that do not make the final connection to a destination • Previous developments have no / minimal provisions for AT infrastructure • Lack of crosswalks • Lack of funding to implement routes • Lack of trailheads, parking and other amenities at trails • No safe way to get in / out of Uxbridge	• Expand outreach through Committees • New policies to support AT and complete streets • Uxbridge PS has a student AT Committee – leverage resources • Shovel ready projects for the Federal COVID funding stream • Work with partners, BIA and CoC to demonstrate economic benefits of investing in active transportation • Create loops connections • Cycle tourism benefits	• Lack of available funding programs • Many stakeholders involved • Population growth is slow – small tax base • Constrained road right-of-way could limit desired facility type • Temporary easements • Aggregate industry is increasing, busy roads • Maintenance costs • Regional roads have many destinations along them - implementation determined by Region

Part 1 Outcomes

SWOT Analysis

Build a better understanding of the needs, interests and priorities to ensure recommendations are best-suited for success in Uxbridge.

Demand and Potential

Understand travel patterns (where people are walking and biking within the Township) and popular destinations, to help identify potential areas for improvement.

Existing Conditions

Identify and map where active transportation infrastructure currently exists within the Township including off-road trails and on-road routes on local and regional roads.

The findings from Part 1 will be used to inform the recommendations developed and identified in Part 2.

What's Next?

SUMMER 2020

PART 1

Future Directions, Strategies and Actions

- Undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis of active transportation in Uxbridge.
- Assess demand and potential for active transportation in Uxbridge, using available data from Statistics Canada, Transportation Tomorrow Survey and Strava.

PART 2

WINTER 2020

Implementation, Operations and Maintenance Plans

- Review existing conditions and **identify missing links.**
- Identify an active transportation network including **preferred facility types.**
- Develop an **implementation strategy** including phasing, priorities and costing estimates.
- Establish **educational, promotional and programming** recommendations.

Informing Part 2

A number of factors to be considered and integrated when undertaking Part 2:

Current standards and guidelines

Including the forth-coming update to OTM Book 18: Cycling Facilities

Updates to the Durham Region RCP

Study is on-going: routes and recommendations will be integrated into the ATP

Planning and design principles

All ages and abilities
Complete streets
Equity

Input and feedback through on-going engagement

Applying OTM Book 18

Route Selection Criteria

Network connectivity
- Connectivity and physical barriers
- Directness
- Existing and potential future demand

Conflict mitigation

Social and economic factors
- Equity
- Social and economic trends
- Public and stakeholder input

Attractiveness
- Natural scenery and urban streetscape
- Tourism, business strategies and goals

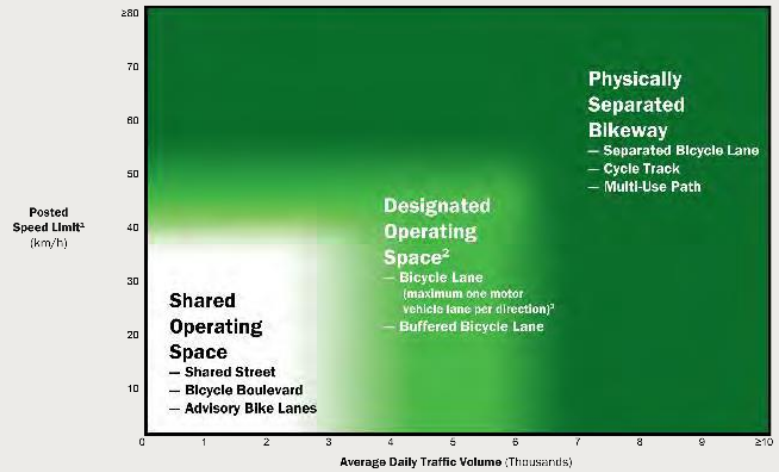
Feasibility
- Constructability
- Potential cost

How are the criteria applied?

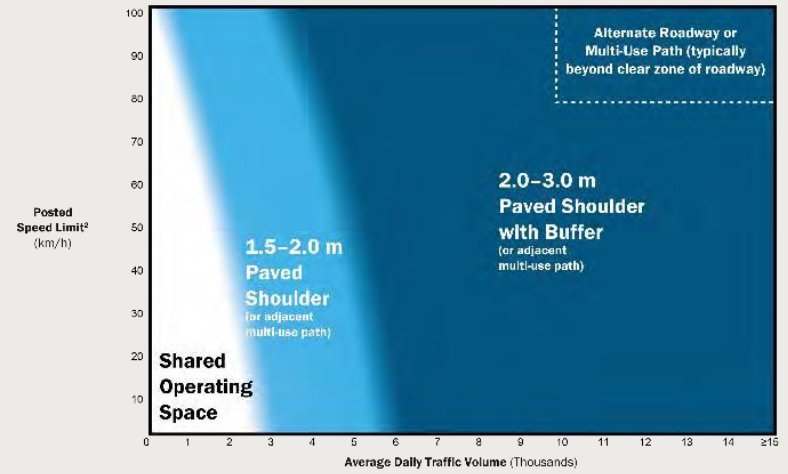
- Potential new linkages (candidate routes) are assessed using the route selection criteria

Desirable Level of Separation

Desirable Cycling Facility Pre-Selection Nomograph
Urban/Suburban Context



Desirable Cycling Facility Pre-Selection Nomograph
Rural Context¹



INTERACTIVE ACTIVITIES

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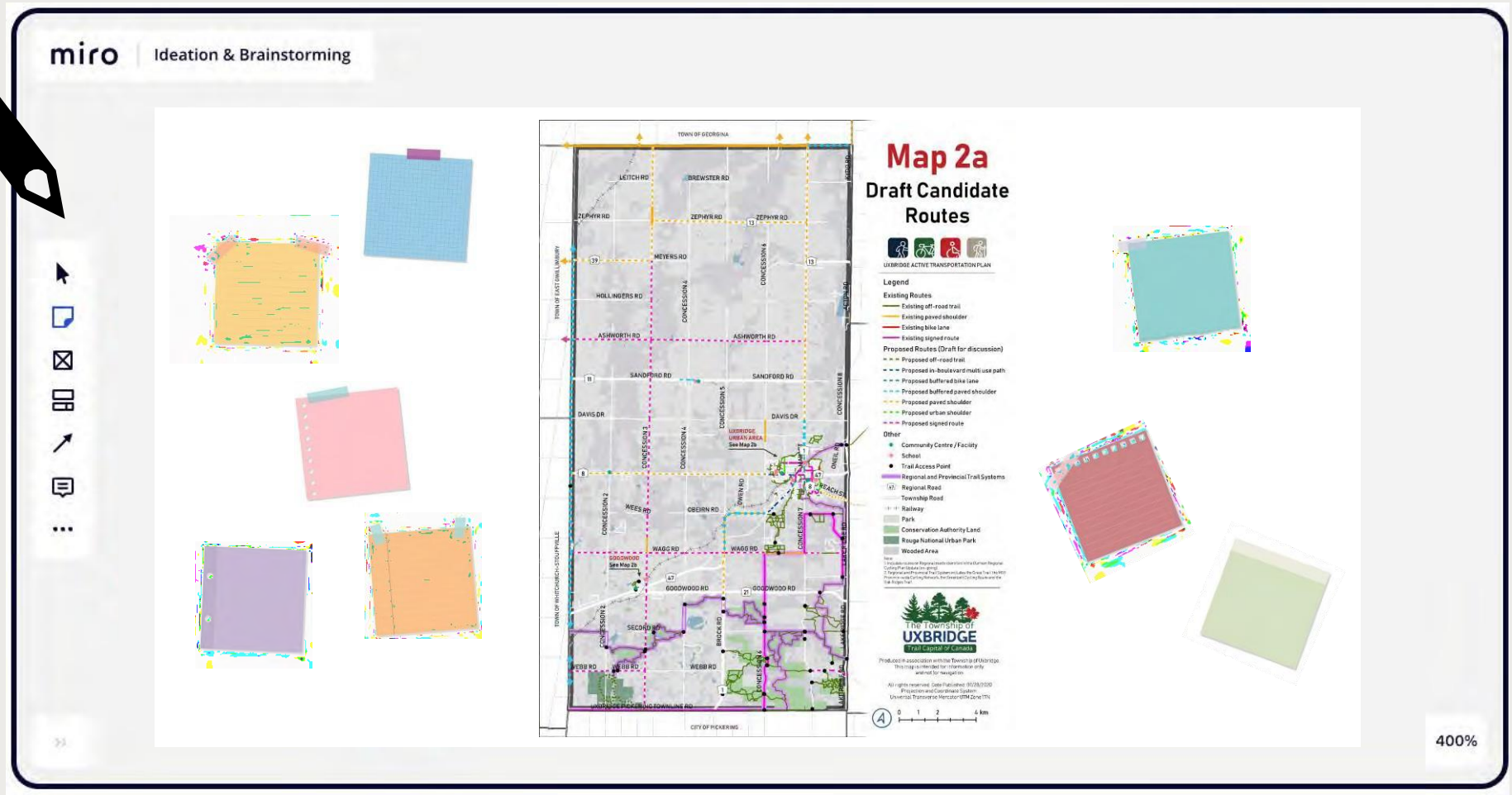

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3. Routes / projects that should be prioritized in the short term.

Programming and Outreach

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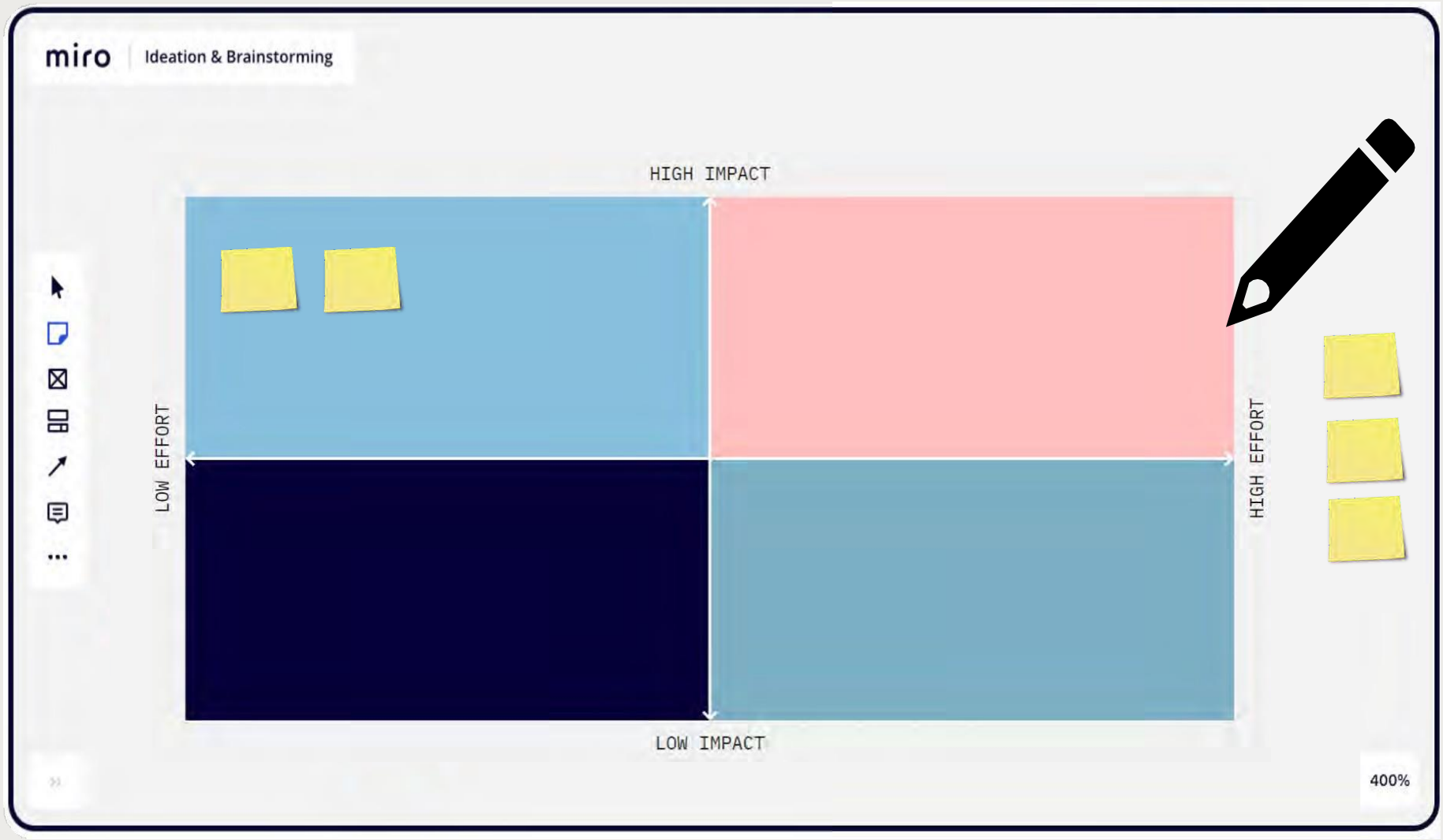

WRAP-UP

Next Steps

1. Summarize input received today.
2. Refine and prioritize routes to form part of a preferred active transportation network.
3. Refine and prioritize programming and outreach initiatives.
4. Prepare for Fall consultation activities:
    - External Stakeholder Workshop (October – TBD)
    - Final combined Committee Meeting in (October – TBD)
    - Virtual Public Open House (October / November – TBD)
5. Prepare draft Active Transportation Plan (ATP) report.

Thank you for participating!

Visit the project website for more information and updates:
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Contact Information

Lukas Gillham
Township of Uxbridge
lgillham@uxbridge.ca
647-228-3916

Cristina Valente
WSP
cristina.valente@wsp.com
647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

EXTERNAL STAKEHOLDER WORKSHOP

Thursday November 5th, 2020

WSP + SHARE THE ROAD CYCLING COALITION

Agenda

1. Introductions — 10 min
2. Project Overview — 20 min
   - Study Process
   - ATP Part 1 Engagement Overview
   - ATP Part 1 Outcomes
   - ATP Part 2 Considerations
3. Interactive Activities — 60 min
   - Draft Candidate Network
   - Programs and Outreach
4. Wrap-up and Next Steps — 5 min

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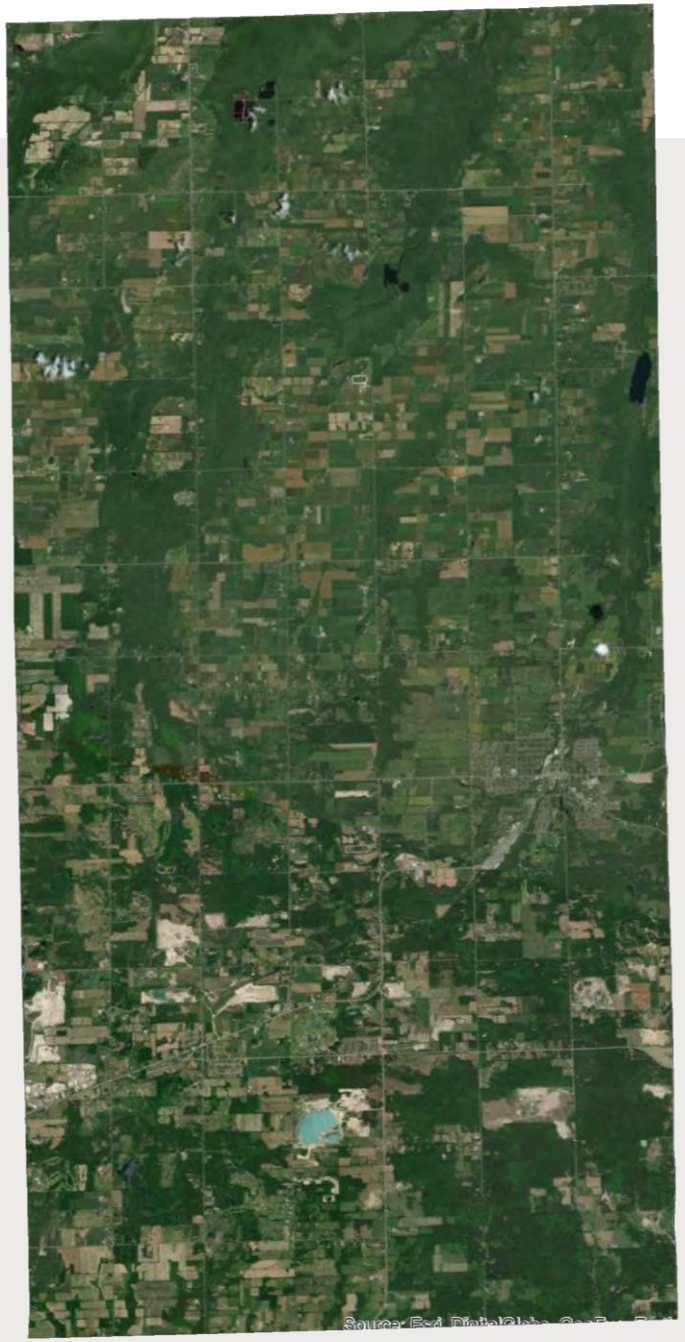


PROJECT OVERVIEW

What is an ATP?

The Active Transportation Plan (ATP)

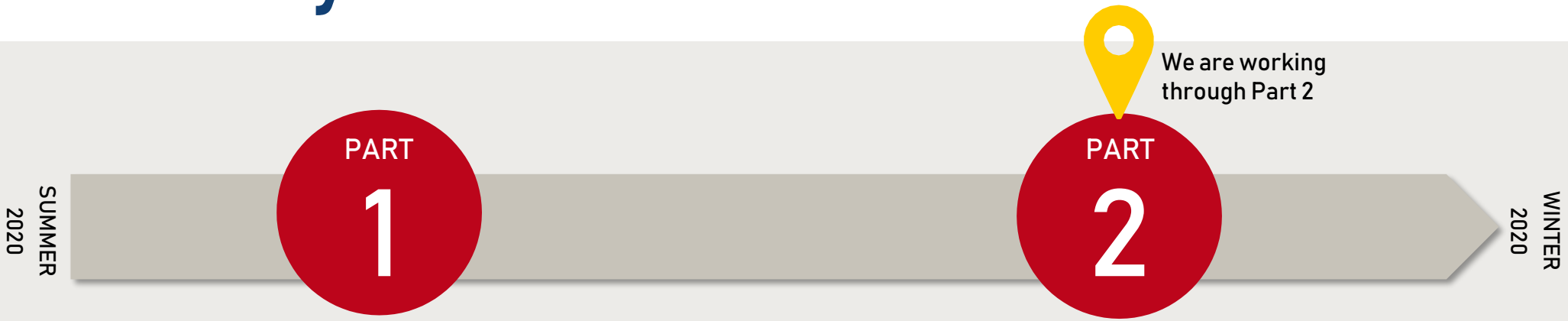
Is:

- ✓ Long-term vision
- ✓ Flexible document
- ✓ Community building asset
- ✓ Communication tool
- ✓ Implementation guide
- ✓ Support for existing plans

Is not:

- ✗ Detailed or final design
- ✗ Authority to construct
- ✗ Prescriptive
- ✗ Requirement
- ✗ Financial commitment

Study Process



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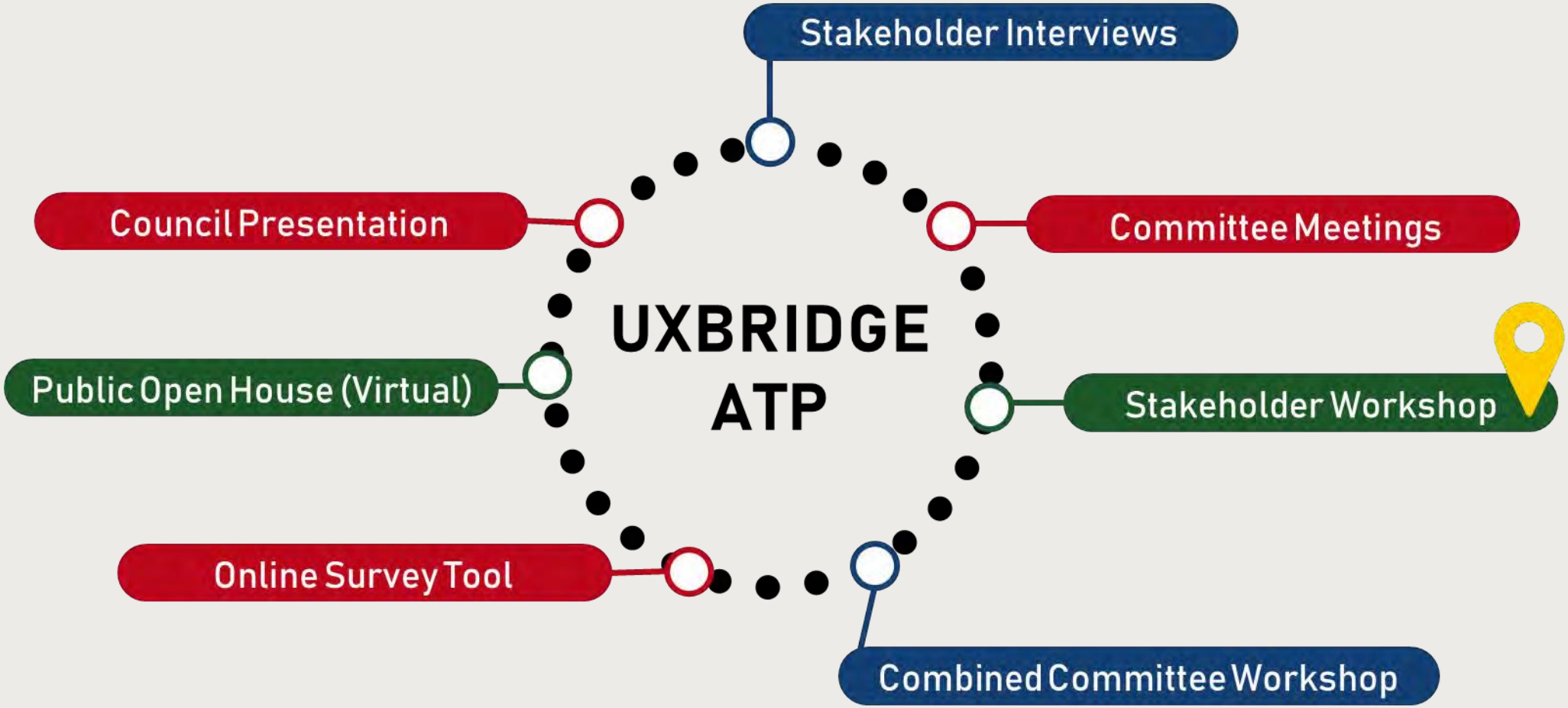

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Combined Committee meeting – September 22

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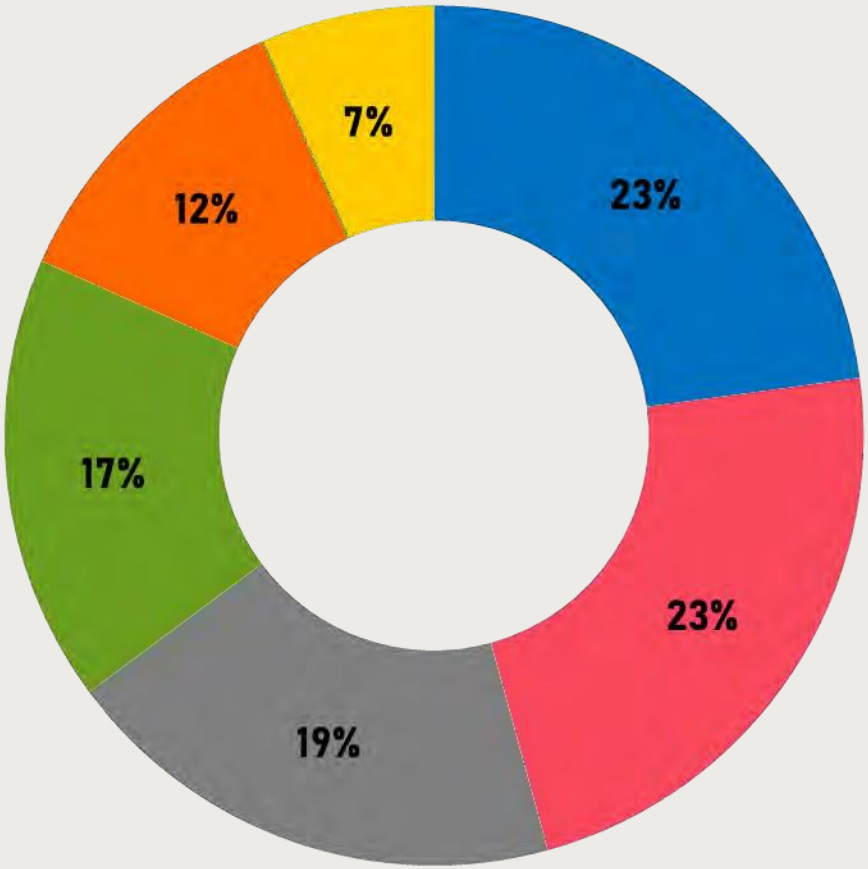

Top principles:

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4. Accessible (17%)
5. Development-driven (12%)
6. Education and awareness (7%)

What does this tell us?

When identifying an active transportation network for Uxbridge, consideration should be given to routes that:

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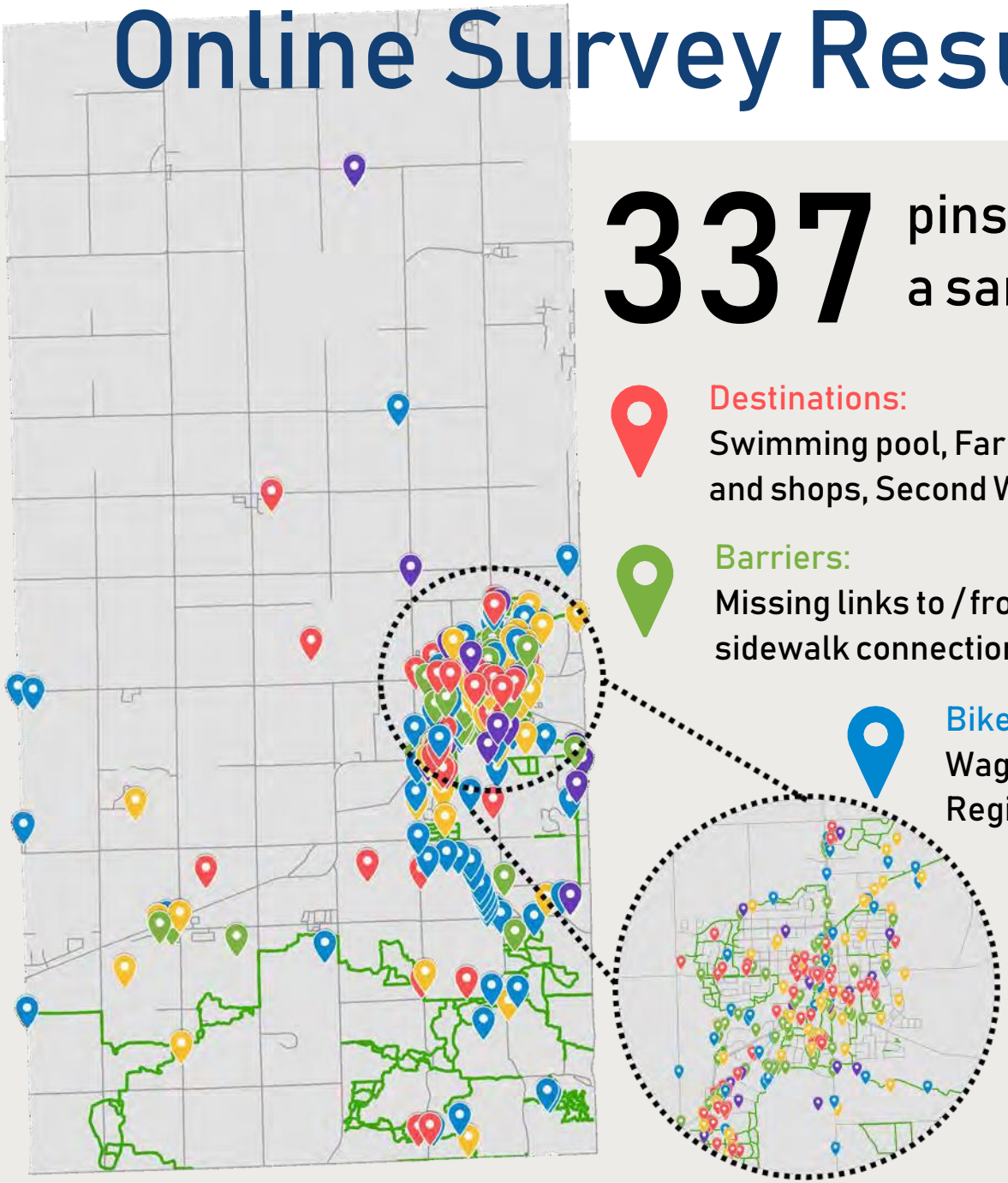

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The findings from Part 1 will be used to inform the recommendations developed and identified in Part 2.

What's Next?

SUMMER 2020

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PART 2

WINTER 2020

Implementation, Operations and Maintenance Plans

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Feasibility
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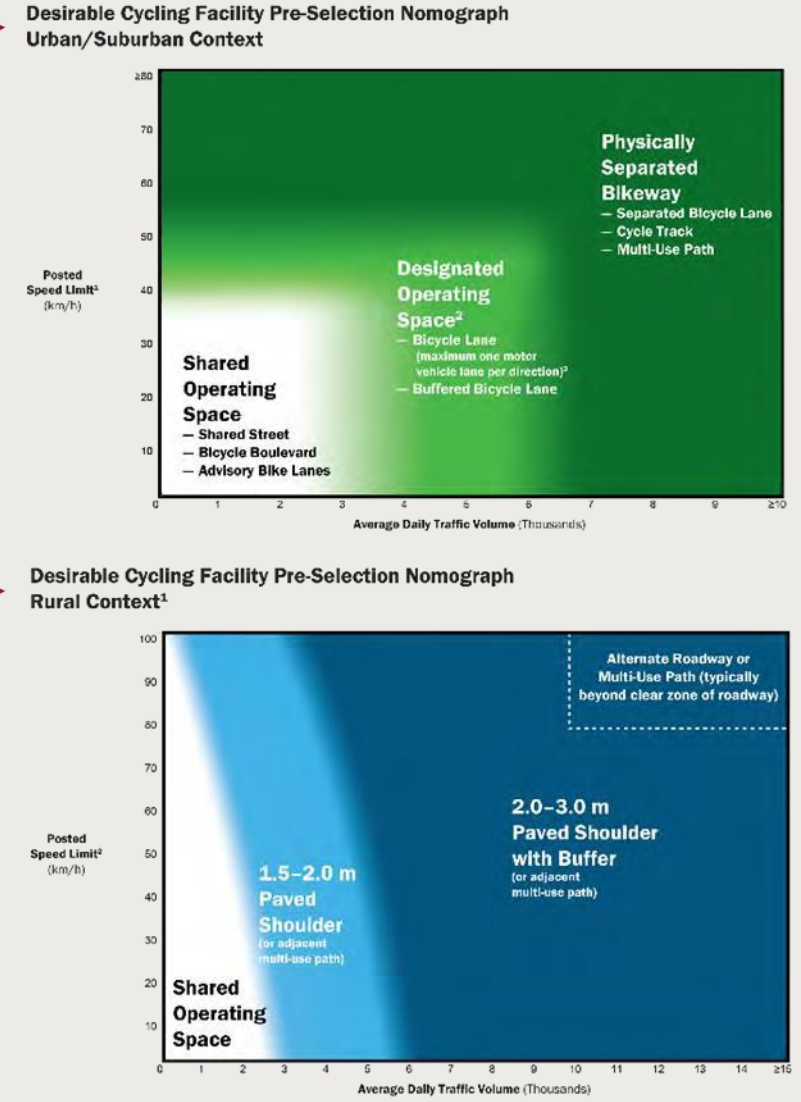
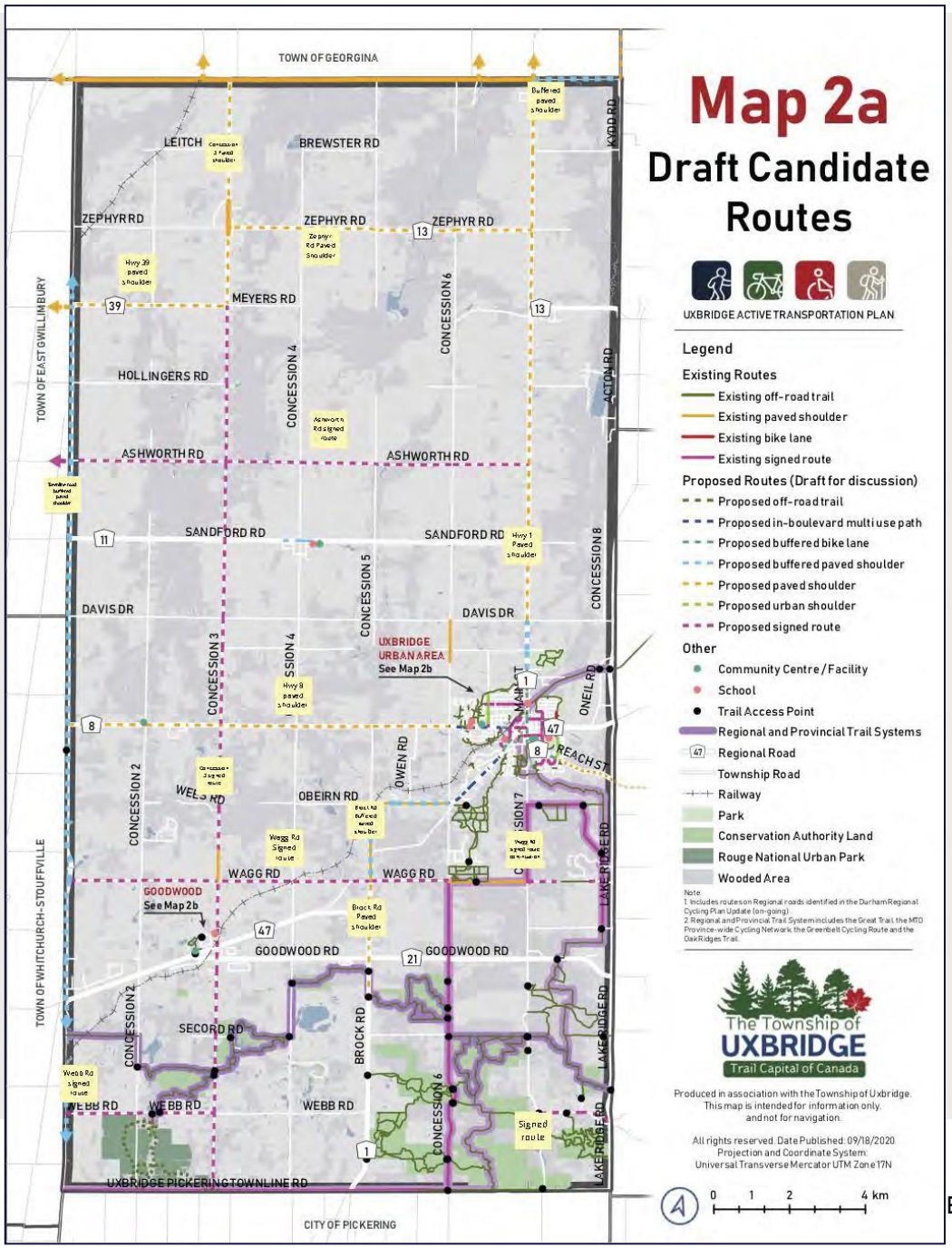


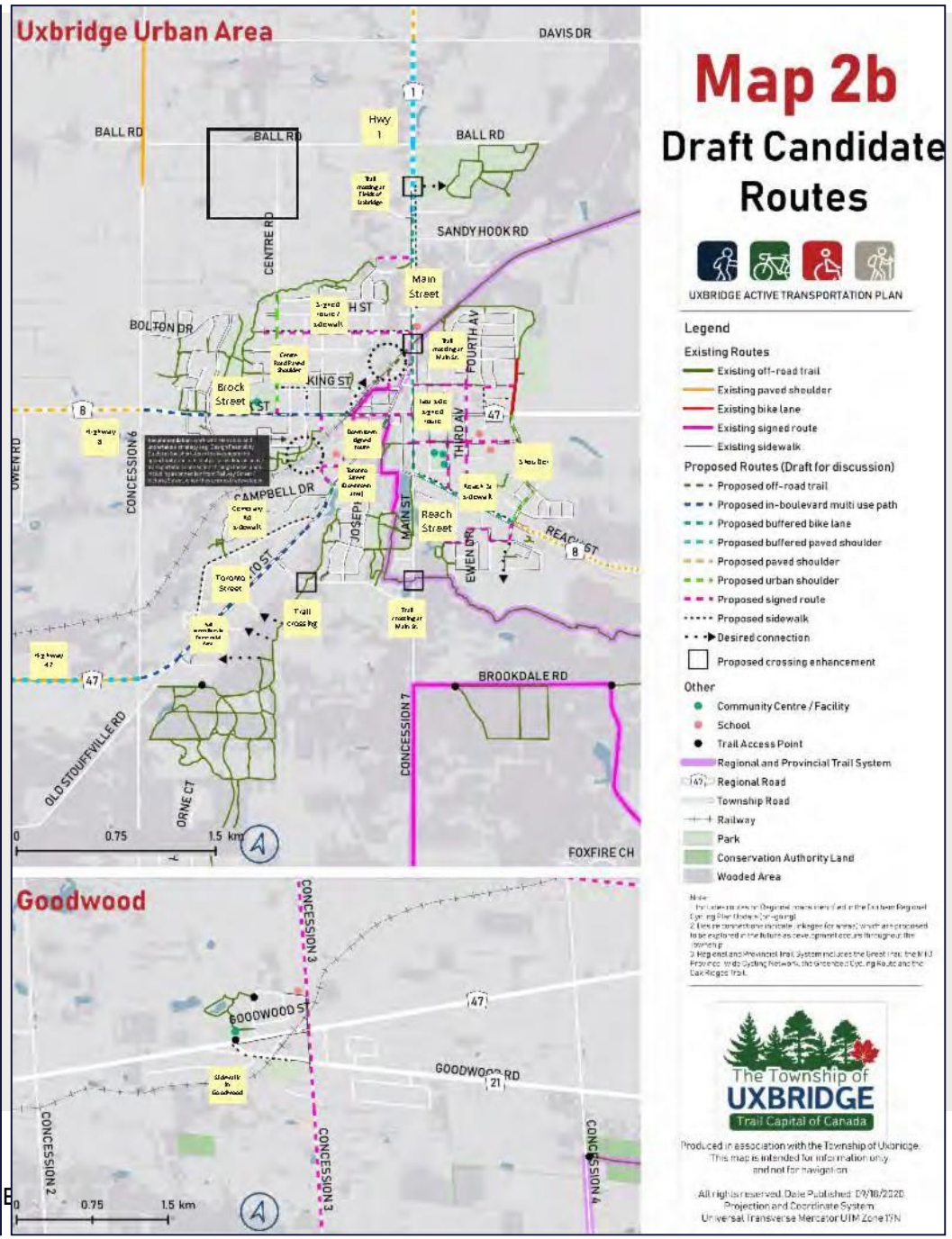
INTERACTIVE ACTIVITIES

Draft Candidate Routes

The intent of this activity was to use an online interactive tool to collect your feedback and mark-ups on candidate active transportation routes in Uxbridge.

For reference, we have inserted a snippet of the input we received from the Town's AT, Trails and Accessibility Committees during a meeting on September 22, 2020.





We want to know:

1. Additional candidate routes that should be explored / identified.

2. Your comments and feedback on the proposed facility types and / or location of routes.

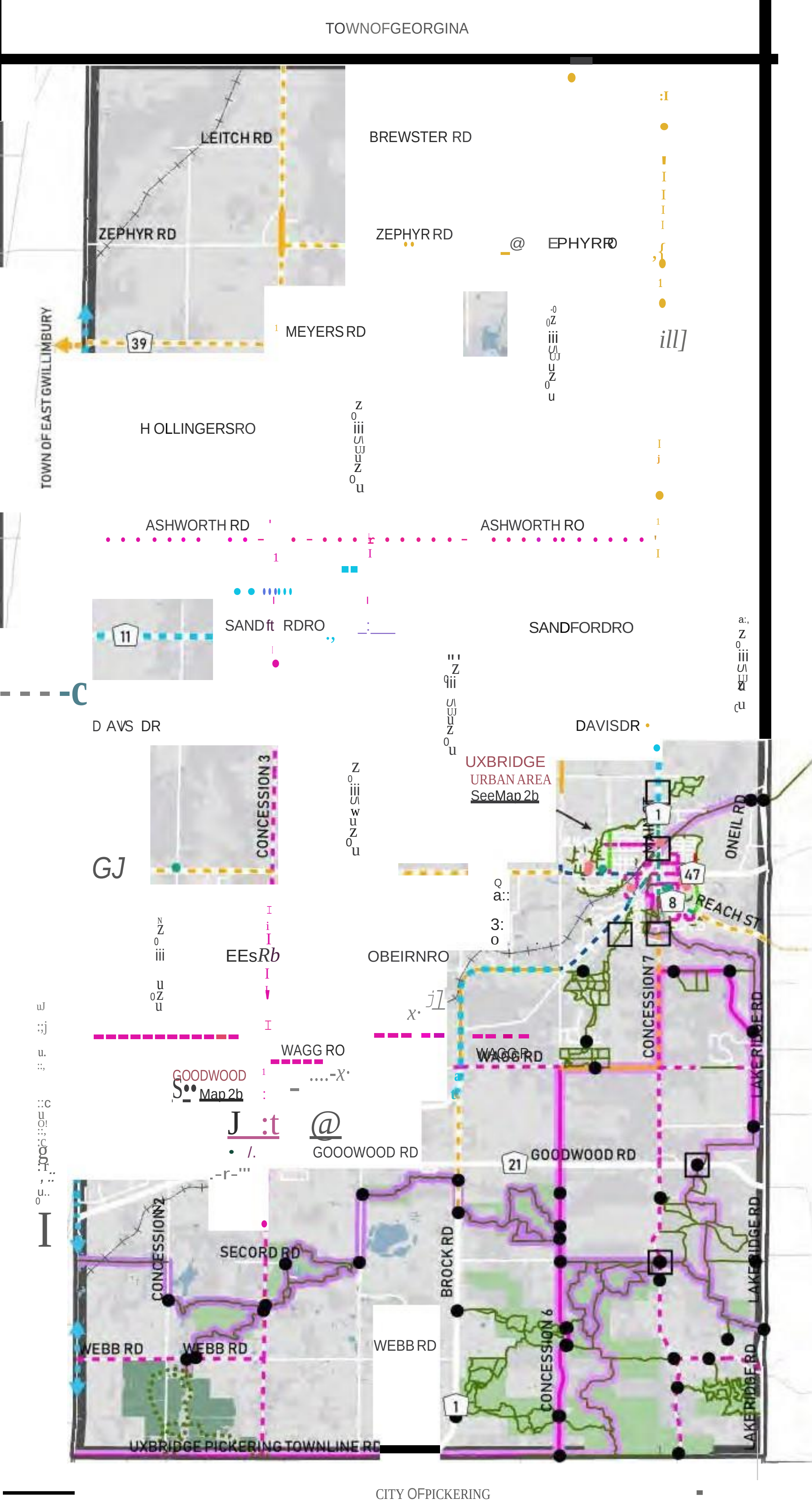
3. Routes / projects that should be prioritized in the short term.

Please feel free to mark-up the following maps with your comments and input, and send this back to Lukas Gillham (lgillham@uxbridge.ca).

Map2a

Draft Candidate Routes

UXBRIDGE ACTIVE TRANSPORTATION PLAN



Legend

Existing Routes

- Existing off-road trail
- Existing paved shoulder
- Existing bike lane
- Existing signed route

Proposed Routes (Draft for discussion)

- Proposed off-road trail
- Proposed in-boulevard multiuse path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route
- Proposed crossing enhancement

Other

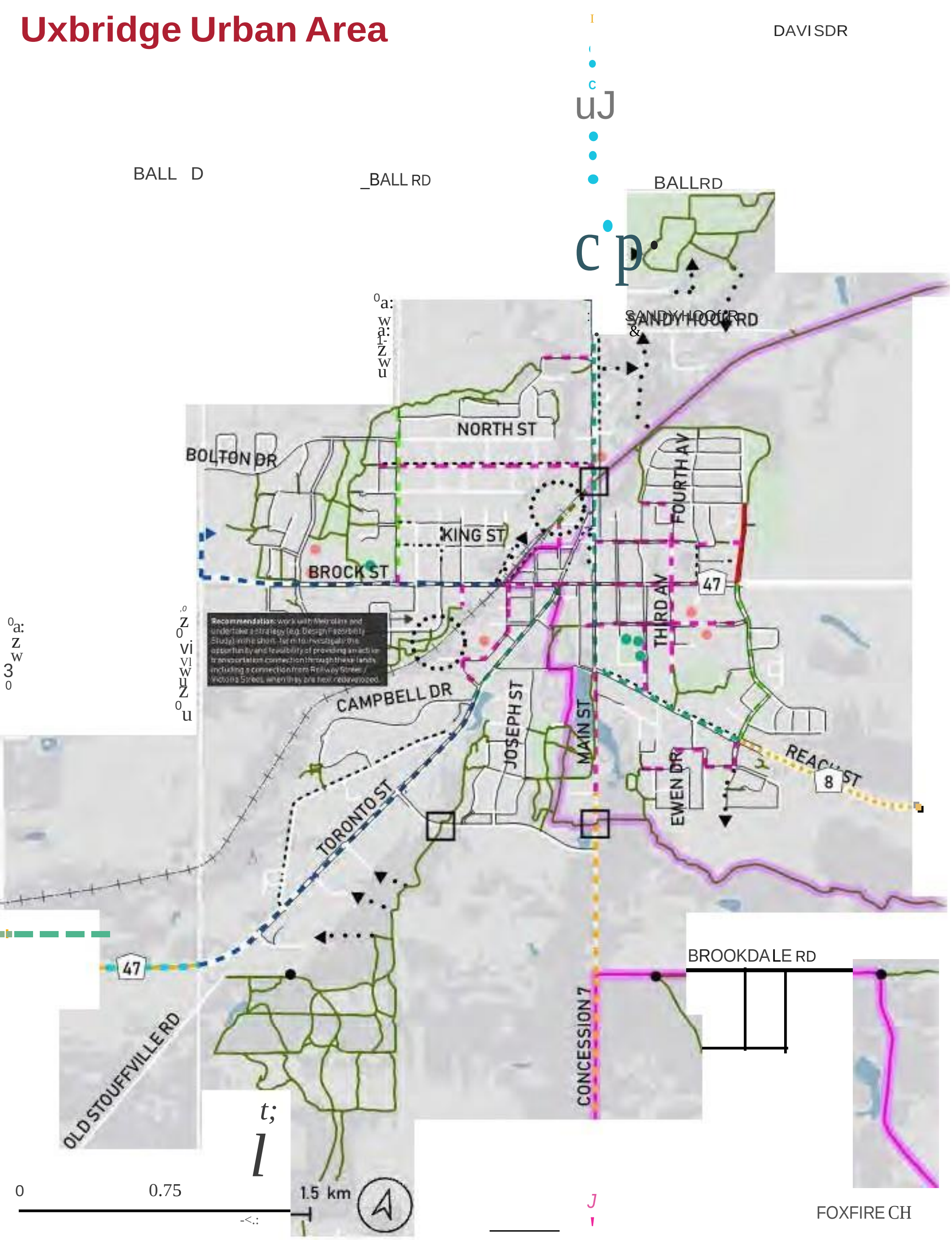
- Community Centre / Facility
- School
- Trail Access Point
- Regional and Provincial Trail Systems
- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Rouge National Urban Park
- Wooded Area

The Township of UXBRIDGE

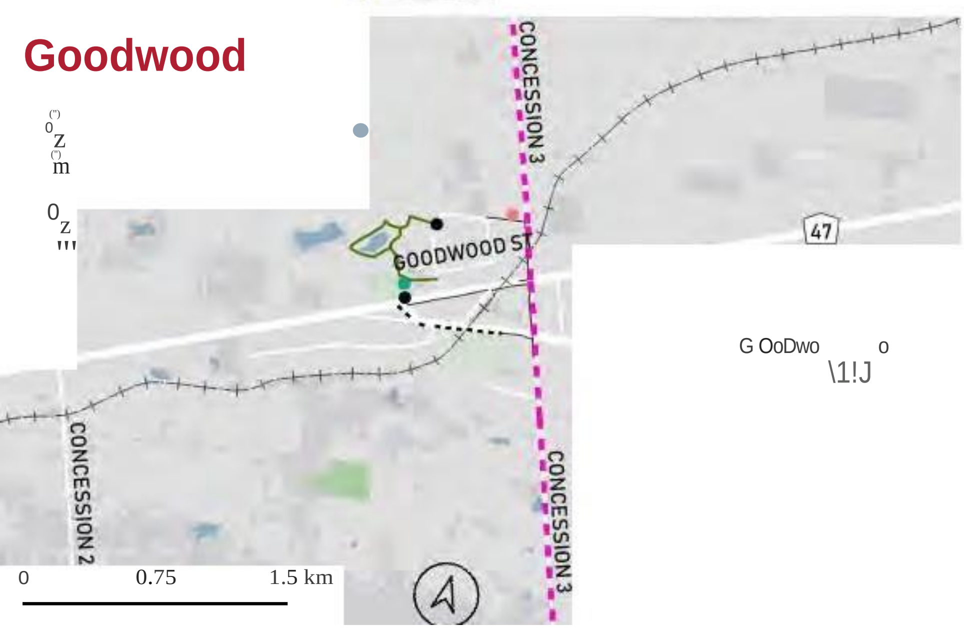
Produced in association with the Township of Uxbridge. This map is intended for information only.

0 1 2 4 km

Uxbridge Urban Area



Goodwood



Map2b

Draft Candidate Routes

UXBRIDGE ACTIVE TRANSPORTATION PLAN

legend

Existing Routes

- Existing off-road trail
- Existing paved shoulder
- Existing bike lane
- Existing signed route
- Existing sidewalk

Proposed Routes (Draft for discussion)

- Proposed off-road trail
- Proposed in-boulevard multi use path
- Proposed buffered bike lane
- Proposed buffered paved shoulder
- Proposed paved shoulder
- Proposed urban shoulder
- Proposed signed route
- Proposed sidewalk
- Desired connection
- Proposed crossing enhancement

Other

- Community Centre / Facility
- School
- Trail Access Point
- Regional and Provincial Trail System
- Regional Road
- Township Road
- Railway
- Park
- Conservation Authority Land
- Wooded Area

Note

1 Include routes (...) identified in the Durham Regional Cycling Plan Update (...)

2 Desired connections (...) linkages (...) proposed to be explored in the future (...)

3 (...) Regional Cycling Route (...)

The Township of UXBRIDGE

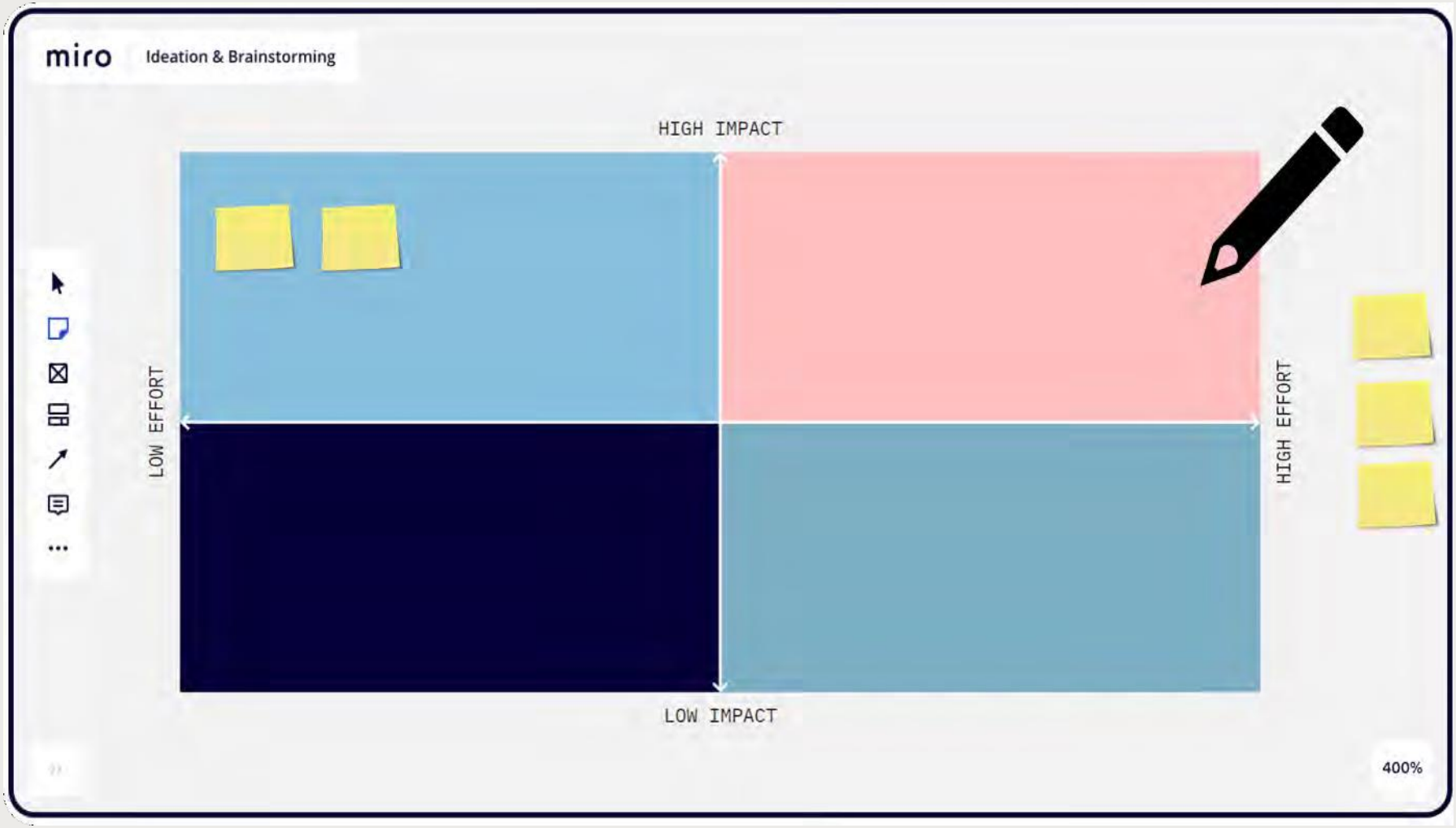
Trail Capital of Canada

Produced in association with the Township of Uxbridge
This map is intended for information only.
and not for navigation.

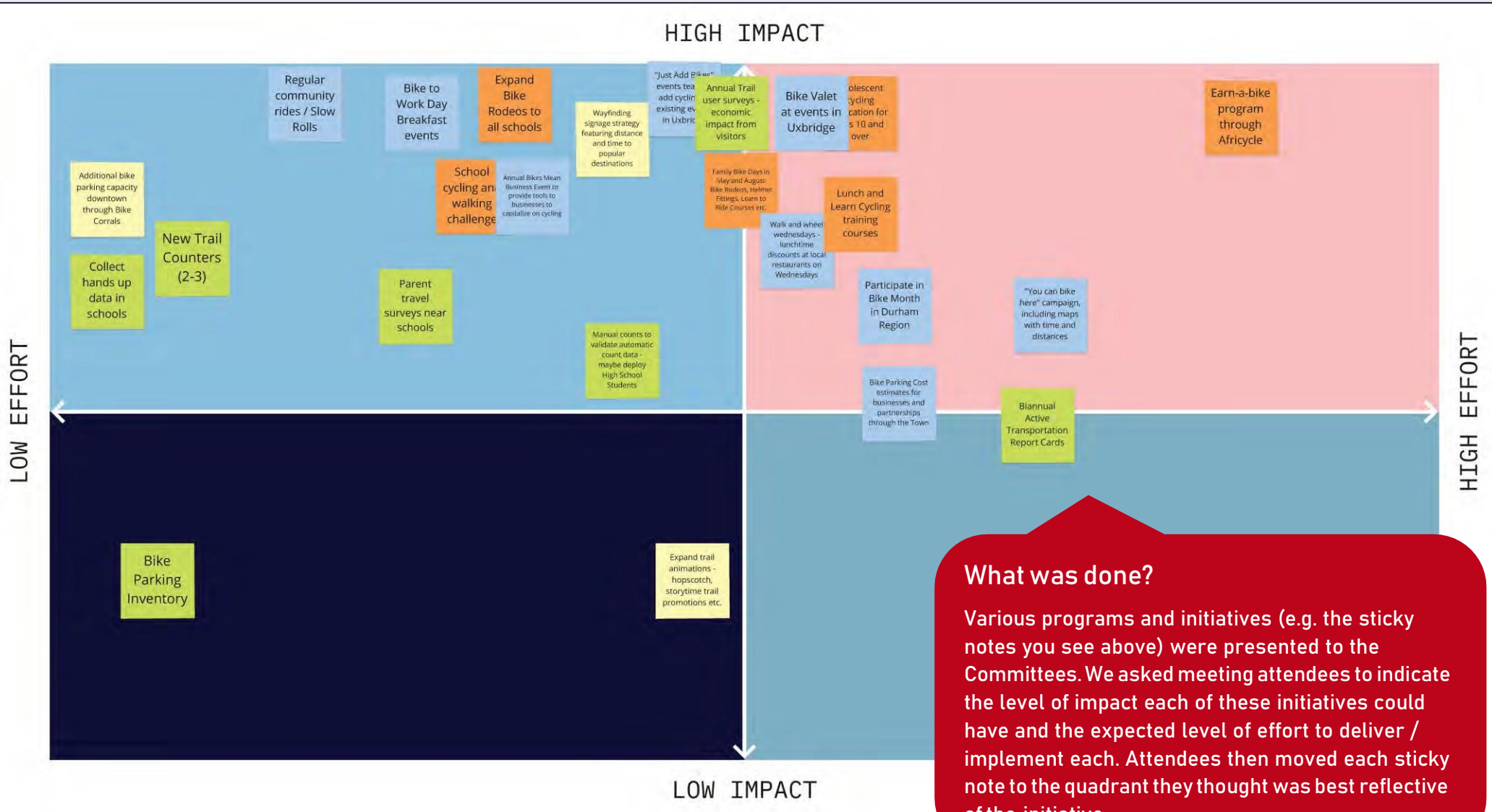
 Date Published 11/04/2020
Projection and Coordinate System
Universal Transverse Mercator (UTM) Zone 17N

Programming and Outreach

The intent of this activity was to use an online interactive tool to collect your feedback and input on potential programs and initiatives for Uxbridge.



For reference, we have inserted a snippet of the input we received from the Town's AT, Trails and Accessibility Committees during a meeting on September 22, 2020.



What was done?

Various programs and initiatives (e.g. the sticky notes you see above) were presented to the Committees. We asked meeting attendees to indicate the level of impact each of these initiatives could have and the expected level of effort to deliver / implement each. Attendees then moved each sticky note to the quadrant they thought was best reflective of the initiative.

We want to know:

1. Do you agree with the identified level of impact and effort for the proposed programs and initiatives?

2. Are there any other programs and / or initiatives that could be considered in the Township's AT Plan?

Please feel free to provide your comments and input to Lukas Gillham (lgillham@uxbridge.ca).

WRAP-UP

Next Steps

1. Summarize input received today.
2. Refine and prioritize routes to form part of a preferred active transportation network.
3. Refine and prioritize programming and outreach initiatives.
4. Prepare for upcoming consultation activities:
    - Final combined Committee Meeting (TBD)
    - Virtual Public Open House (TBD)
5. Prepare draft Active Transportation Plan (ATP) report.

Thank you for participating!

Visit the project website for more information and updates:
www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Contact Information

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WSP
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647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

COMBINED COMMITTEE WORKSHOP:

- Accessibility Advisory Committee
- Active Transportation Committee
- Uxbridge Township Trails Committee

March 2nd, 2021

wsp

About the Active Transportation Plan

The Active Transportation Plan was developed in two parts:

PART 1

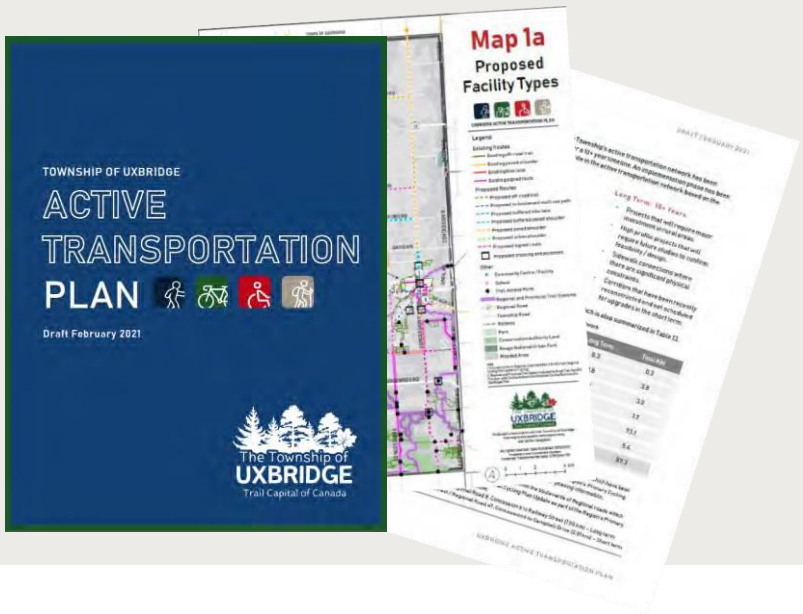
Reviewed existing conditions to understand the current context of active transportation and trails within Uxbridge.

KEY OUTCOME
Existing active transportation context and infrastructure

PART 2

Built upon existing conditions to identify an active transportation network, supportive programs and an implementation strategy.

KEY OUTCOME
Draft Active Transportation Plan and recommendations



Uxbridge's Active Transportation Plan

- 17 recommendations as part of broader implementation of the plan.
- Recommendations address the planning, design, implementation, operations and promotion / marketing of active transportation in Uxbridge.

What have we done since the last meeting?

September 9, 2020 Presented to the Township's Advisory Committees on the Part 1 outcomes and Part 2 considerations.

November 5, 2020 Reached out to stakeholders to provide an update on the study process and to solicit feedback on the draft candidate network as well as potential programs / initiatives.

November to December 2020 Drafted the Active Transportation Plan and incorporated feedback received from the Advisory Committees, stakeholders and Township staff.

January 5, 2021 Submitted the first draft Active Transportation Plan to Township staff for review and commentary.

End of January 2021 Received initial / preliminary comments from Township staff.

End of February 2021 Re-issued the revised draft Active Transportation Plan to Township staff.

What did we hear from you?

The following is a summary of input we received at the last combined Committee Meeting as well as feedback received from Township staff.

- Priority should be placed on "filling gaps" in the existing sidewalk network.
- Emphasis on improving trail crossings including for those who drive to / park at trailheads and identifying locations where parking can be provided or expanded upon.
- Improve connectivity to smaller communities in the rural areas of Uxbridge.
- Several "high impact, low effort" programs / initiatives were identified to increase community awareness and support for active transportation.
- Improve access for people on bike and foot accessing commercial areas / businesses in downtown Uxbridge.

Integrating the input received

The following is a summary of how the input and feedback we received has been incorporated into the draft Active Transportation Plan:

- Identifying priority projects for sidewalks and in-boulevard multi-use pathways that connect people to key destinations.

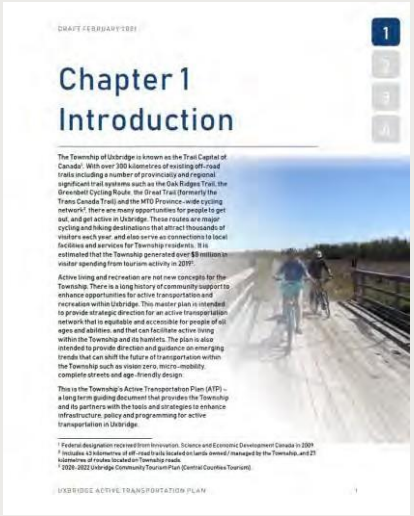
- Identifying two locations that could be considered for improving trail access as well as information on features that could be planned, design and implemented as part of a trailhead.

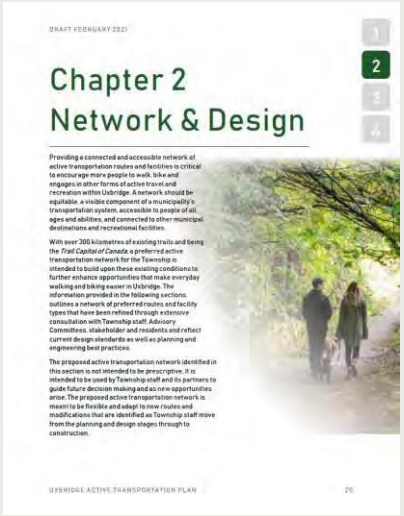
- Through the Durham Regional Cycling Plan identifying routes and facilities on Regional roads that connect smaller communities in the rural areas in Uxbridge.

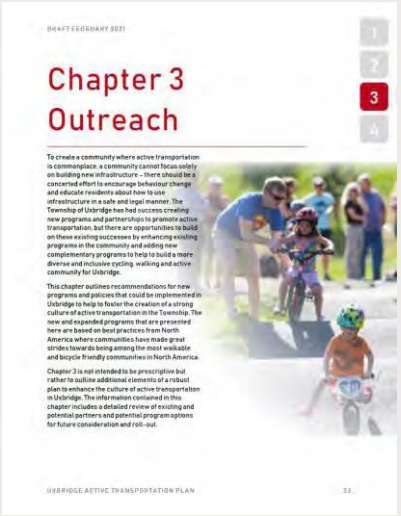
- Identifying a phased approach to potential program and initiatives that can be rolled out in Uxbridge .

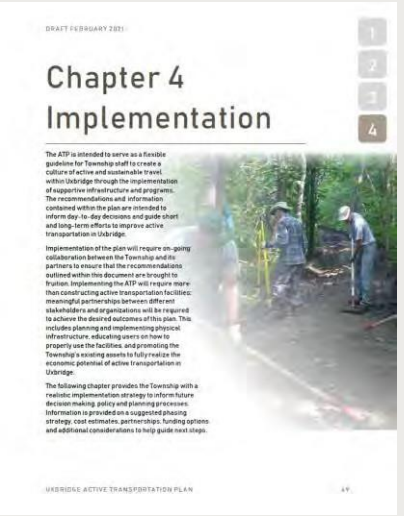
- Identifying a priority project for the revisioning of Brock Street in downtown Uxbridge.

The draft Active Transportation Plan









Chapter 1

outlines the plan's foundations and context for active transportation in Uxbridge. This is the introductory chapter that provides the framework for how the Active Transportation Plan was developed and what is aims to achieve.

Chapter 2

outlines the process that was undertaken to identify the preferred active transportation network including routes and facilities. Additional design guidance is outlined for key issues addressed during the study process.

Chapter 3

outlines suggested programs and initiatives that are designed to increase the profile of active transportation in Uxbridge, improve user awareness, and normalize everyday biking and walking in Uxbridge.

Chapter 4

outlines suggested phasing for proposed active transportation routes. Information is provided to guide next steps beyond the study process including estimated capital costs, partnerships, funding sources, monitoring tools and policy considerations.

The proposed AT network

Click here to view interactive maps of the proposed AT network:
https://miro.com/app/board/o9J_lSG-fgQ=/

Off-road trails
0.3 km

In-boulevard multi-use pathways
3.8 km

Paved shoulders
3.0 km

Signed routes
73.1 km

Signed route with edgelines
1.7 km

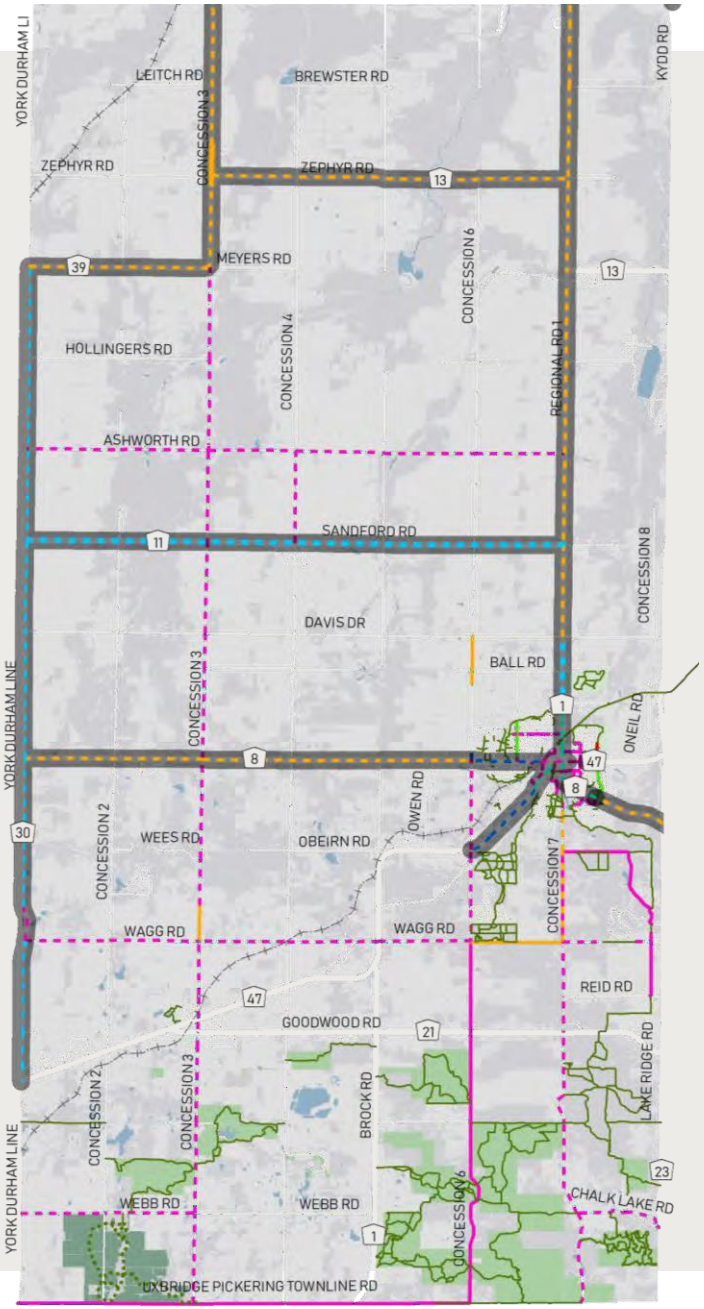
Sidewalks
5.3 km

Proposed KMs only includes routes under the jurisdiction of Uxbridge

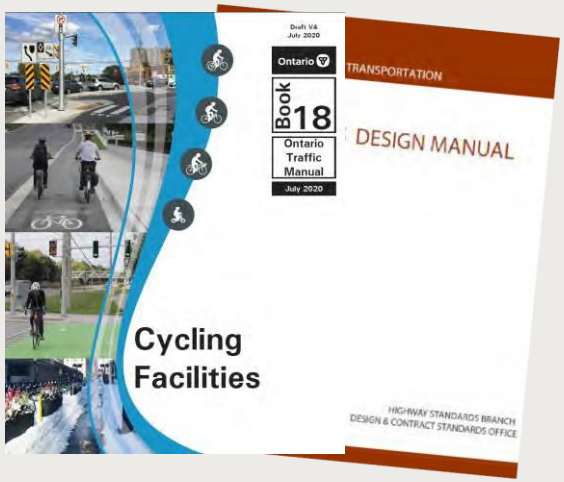
Durham Region's Primary Cycling Network in Uxbridge

87 KM

routes under Uxbridge's jurisdiction



Planning and Design Considerations



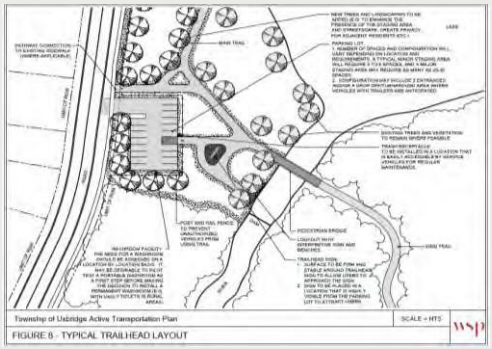
PLANNING AND DESIGN PRINCIPLES

- Motor vehicle speed influences cyclist safety
- All ages and abilities (AAA) design requires low-stress
- Design criteria need to recognize context
- Integration of Complete Streets planning and design
- Providing equitable means of transportation
- Supporting economic development and tourism goals

ENHANCING SIGNED BIKE ROUTES

Traffic calming techniques that could be considered:

- Speed hump / table
- Speed cushion
- Curb extension
- Pinch points
- Median island
- Traffic circle / mini-roundabout



TRAILHEAD GUIDANCE

- Parking, drop-off areas and loading zones
- Rest areas
- Lighting
- Signage
- Waste management
- Gates
- Barriers
- Shelter
- Potable water
- Washrooms

Promotion and Outreach

PHASE 1: FOUNDATIONS

- Routine Community Rides and Walks
- Uxbridge Bike Month
- Family Bike Days
- Annual Bike Rodeos
- School Cycling Challenge
- Downtown Bike Corrals
- Preliminary Data Collection
- Preliminary In-School Data Collection

PHASE 2: BASIC PROGRAMMING

- Cycling and Walking Wayfinding Signage
- Add a "Make it Active" Events Team
- Bike Valet Program
- Community Cycling Promotions
- Active School Travel

PHASE 3: ADVANCED PROGRAMMING

- Advanced Data Collection
- Earn-A-Bike Program with Africycle

KEY TAKEAWAY:

These programs represent a significant shift in how the Township communicates and promotes active transportation. It is recommended that the Township add between 0.25 and 0.75 FTE to deliver the programs and initiatives outlined in Chapter 3 of the draft Active Transportation Plan.

ESTIMATED PROGRAM COSTS:

PHASE 1: FOUNDATIONS

- $9.000 (annual) + $4,900-$14,000 (one-time)

PHASE 2: BASIC PROGRAMMING

- $25.000 (annual) + $25,000 (one-time)

PHASE 3: ADVANCED PROGRAMMING

- $5.000 (annual)

Implementing Approach

Click here to view interactive maps of the proposed phasing:
https://miro.com/app/board/o9J_lSG-fgQ=/

Short Term

0 to 10 years

- Low investment projects (all signed bike routes) to achieve quick wins.
- Coordination with projects identified in the Township's current Capital Budget.
- Critical sidewalk connections identified by feedback received.
- Future studies to assess the feasibility and design of active transportation routes.

Long Term

10+ years

- Projects that will require major investment in rural areas.
- High profile projects that will require future studies to confirm feasibility / design.
- Sidewalk connections where there are significant physical constraints.
- Corridors that have been recently reconstructed and not scheduled for upgrades in the short term.

Implementing the Plan

The proposed phasing plan is meant to be flexible and adapt to future changes, new opportunities and available resources at the time of implementation. The phasing plan does not imply a commitment to monies or schedule of projects.

	Short Term KM	Long Term KM
Off-road multi-use trail	0.0	0.3
In-boulevard multi-use path	2.0	1.8
Paved shoulder	0.3	2.7
Signed route with edgeline	1.7	0.0
Signed route	73.1	0.0
Sidewalk	1.8	3.5
Total	79.0	8.3

Township staff are encouraged to seek opportunities (where feasible) to advance long-term projects as part of scheduled capital works through future annual budget reviews to achieve cost savings.

Notes:

1. The phasing breakdown is intended to be reviewed on an annual basis to ensure that it remains relevant, aligns with planned capital projects and the Township's priorities.
2. Municipal planning documents are typically updated every 5-10 years; as such, the ATP focus for implementation are short term projects.

How much will it cost to build?

The focus for implementation is the short term (first 10 years):

$1.27 million for 79 km over 10 years

=

$510,795
for projects that can be funded through the general tax revenue (or 40% of the total cost)

+

$766,192
for projects that can be funded through the grants, DCs and tax levies (or 60% of the total cost)

It is important for the Township to seek a diverse range of funding sources. External funding is an effective way to reduce the Township's costs and can be an opportunity to strengthen partnerships for the implementation of the plan.

- Provincial and federal grants
- Durham Region cost-sharing programs / funding options
- External sources such as service clubs, corporate funds and private donations

Supporting Implementation

Partnerships

Implementation will require on-going collaboration with those will have a role in different components of the plan. Partners can include:

- Township's Advisory Committees
- BIA and local businesses
- Local organizations and advocacy groups
- Durham Regional Police Service (DRPS)
- Durham Region
- Durham Public Health
- Durham Region Tourism
- Conservation Authorities
- Provincial Stakeholders

Funding

Coordinating projects with future opportunities and capital plans, to ensure projects can be implemented in a fiscally-responsible and realistic manner. Seek opportunities for external grants and cost-sharing programs such as :

- Canada Healthy Communities Initiative is providing up to $31 million in funding (second round of applications in May 2021)

Policy

Policy considerations to create top-down change within a municipality and provide provisions for active transportation early in the planning stages of a project. Policy considerations include:

- New development areas
- Zoning by-law
- Development charges
- New mobility implications

Post Implementation

Once active transportation infrastructure has been implemented, there should be consideration for:

- Operations and assessment management to protect the Township's capital investments;
- Level of service standards for maintenance to provide high-quality infrastructure; and
- Monitoring and data collections tools to inform data-driven decision making.

Next Steps and Staying in Touch

1. Virtual Public Open House on March 18th, 2021.
2. Review input received from the Township's Advisory Committees and the public, and integrate into a revised draft Active Transportation Plan.
3. Present the revised Active Transportation Plan to Township Council in Spring 2021.

Contact Information

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647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

VIRTUAL PUBLIC MEETING

March 18, 2021

wsp + SHARE THE ROAD CYCLING COALITION

The Township of UXBRIDGE
Trail Capital of Canada

Introductions

Township of Uxbridge Team:

- Lukas Gillham, Operations and Capital Projects Technologist
- Ben Kester, Director of Public Works
- Willie Popp, Deputy Mayor, Ward 4 Councillor

Consultant: WSP

- Cristina Valente, Senior Project Planner
- Dave McLaughlin, Manager - National Active Transportation Practice
- Justin Jones, Community Engagement Specialist

Link to project website: https://www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Email us: lgillham@uxbridge.ca cristina.valente@wsp.com

Today's Objectives

1. To gain a better understanding of the Township's Active Transportation Plan and what it includes.

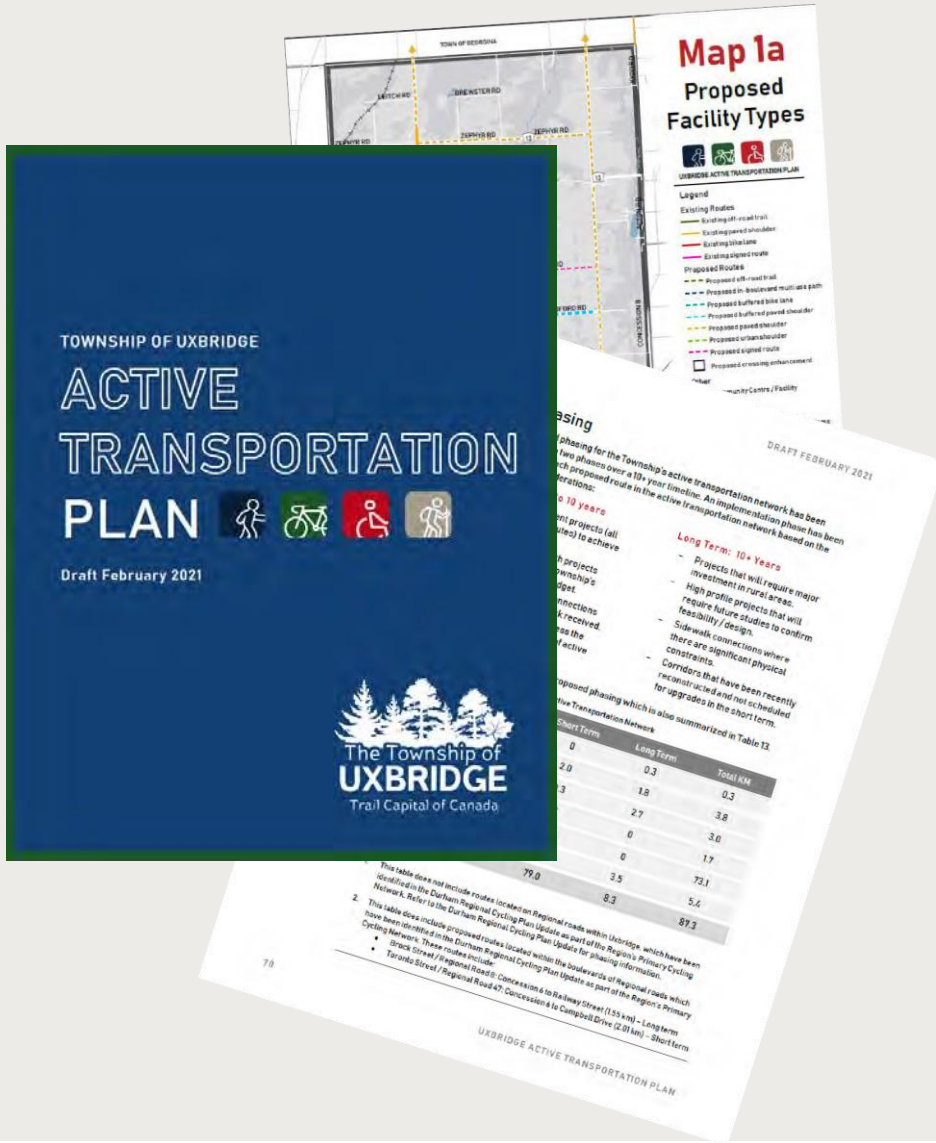
2. To provide an overview of how the plan was developed and the input we received and integrated into it.

3. Hearing from you, listening to your feedback, and answering your questions.

About the Active Transportation Plan

The Active Transportation Plan has been drafted to:

1. Identify a continuous active transportation network that connects to all communities in Uxbridge and builds upon existing routes and trail systems.
2. Expand education and promotion to raise awareness of active transportation and normalize walking and cycling as everyday options.
3. Ensure the community's interests are addressed in a plan that outlines short and long term actions.



The Active Transportation Plan

Is:

- ✓ Long-term vision
- ✓ Flexible document
- ✓ Community building asset
- ✓ Communication tool
- ✓ Implementation guide
- ✓ Support for existing plans

Is not:

- ✗ Detailed or final design
- ✗ Authority to construct
- ✗ Prescriptive
- ✗ Requirement
- ✗ Financial commitment

The Study Process

SUMMER 2020

PART 1

Future Directions, Strategies and Actions

- Undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis of active transportation in Uxbridge.
- Assess demand and potential for active transportation in Uxbridge, using available data from Statistics Canada, Transportation Tomorrow Survey and Strava.

PART 2

Implementation, Operations and Maintenance Plans

- Review existing conditions and identify missing links.
- Identify an active transportation network including preferred facility types.
- Develop an implementation strategy including phasing, priorities and costing estimates.
- Establish educational, promotional and programming recommendations.
- Draft and finalize the plan.

WINTER 2020/2021

Shaping the Process

A number of engagement and consultation activities were undertaken to inform the plan:

6

stakeholder interviews

5

committee meetings

1

online survey

Interviews with:

Township staff
Committees
Interest groups

Meetings with:

Trails Committee – August 6, 2020
AT Committee – August 11, 2020
Accessibility Committee – August 17, 2020
Combined Meeting – September 22, 2020
Combined Meeting – March 2, 2021

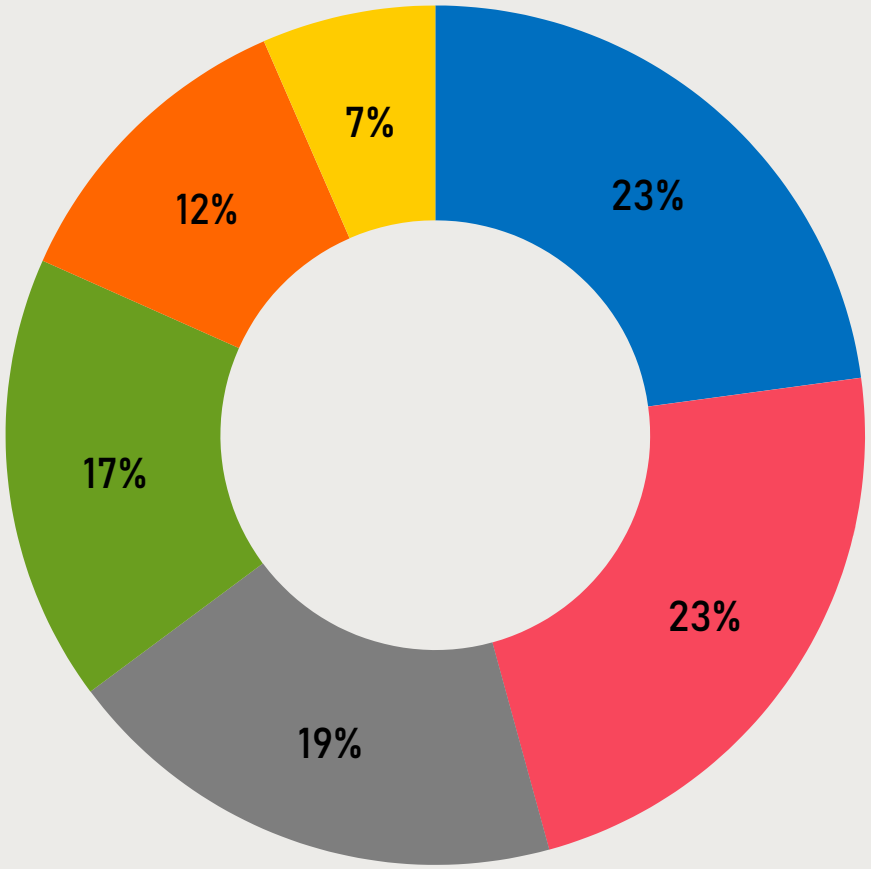
140 participants

survey was active from July 24 to August 31

Plus calls / meetings with Township staff

Online Survey Results

Most important principles that should be used to identify routes in the plan:



Top principles:

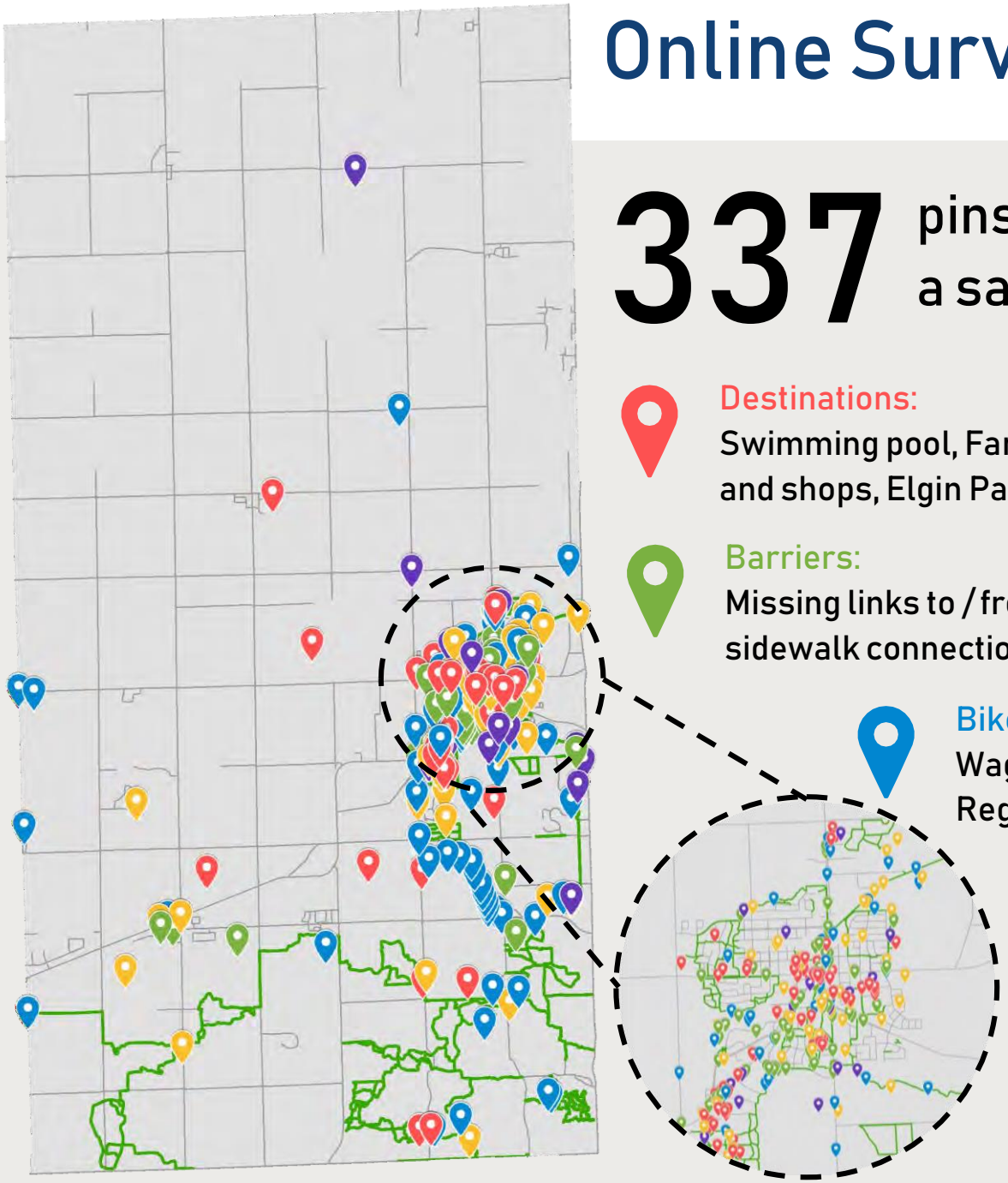
1. Safety (23%)
2. Connected (23%)
3. Convenient (19%)
4. Accessible
5. Development-driven
6. Education and awareness

What does this tell us?

When identifying an active transportation network for Uxbridge, consideration should be given to routes that:

- Improve a user's sense of **safety** and ultimately makes them feel more comfortable to walk, bike and user other non-motorized forms of travel.
- **Connect** to where people live and where they want to go,
- Are a **convenient** and realistic option for people to use for travel or recreation.

Online Survey Results



337 pins were placed
a sample of the input:

Destinations:
Swimming pool, Farmers Market, Fields of Uxbridge, downtown area and shops, Elgin Park, schools

Barriers:
Missing links to / from existing trails, lack of trail crossings, missing sidewalk connections, truck traffic, narrow roads

Bike Routes:
Wagg Road, Maple Bridge Trail, connections to Regional Forests, York-Durham Line, Ashworth Road

Walking Routes:
Elgin Park, to / from schools and shops, trails in Countryside Preserve

Other Comments:
Need improvement beyond downtown, parking, trail conditions, crossings

Online Survey Results

Types of users:

37%
Pedestrians

22%
Cyclists

What would encourage more people to be active:

22% a connected Township-wide network

19% more infrastructure / facilities such as paved shoulders

14% better connections to key destinations

Trip purpose:

39%
For recreation and leisure

36%
For health and fitness

Summary of priorities

1. Provide opportunities for people to walk, bike and be more active (27%)
2. Improve the quality of life and health of residents (20%)
3. Improve biking and walking as a viable transportation option (15%)

Stakeholder Interviews

Strengths

- Presence of existing Committees
- Engaged community volunteers and local groups
- Existing trail systems
- Variety of trail types for different users
- Community is a good size for walking and biking
- Supportive Council and staff
- Strong BIA

Weaknesses

- Lack of driver awareness
- Sidewalk gaps
- Missing "final connections" to a destination
- Previous developments with no / minimal provisions for infrastructure
- Lack of crosswalks, parking and trailheads
- Lack of funding to implement new routes

Opportunities

- Expand outreach through Committees
- Shovel-ready projects for Federal COVID funding stream
- Work with partners, BIA and CoC to demonstrate economic benefits of investing in active transportation
- Cycle tourism benefits / industry
- Municipal policies to support active transportation

Threats

- Lack of available funding programs
- Population growth is slow – small tax base
- Constrained road right-of-way could limit desired facility type
- Temporary easements
- Aggregate industry is increasing, busy roads
- Maintenance costs

Committee Meetings

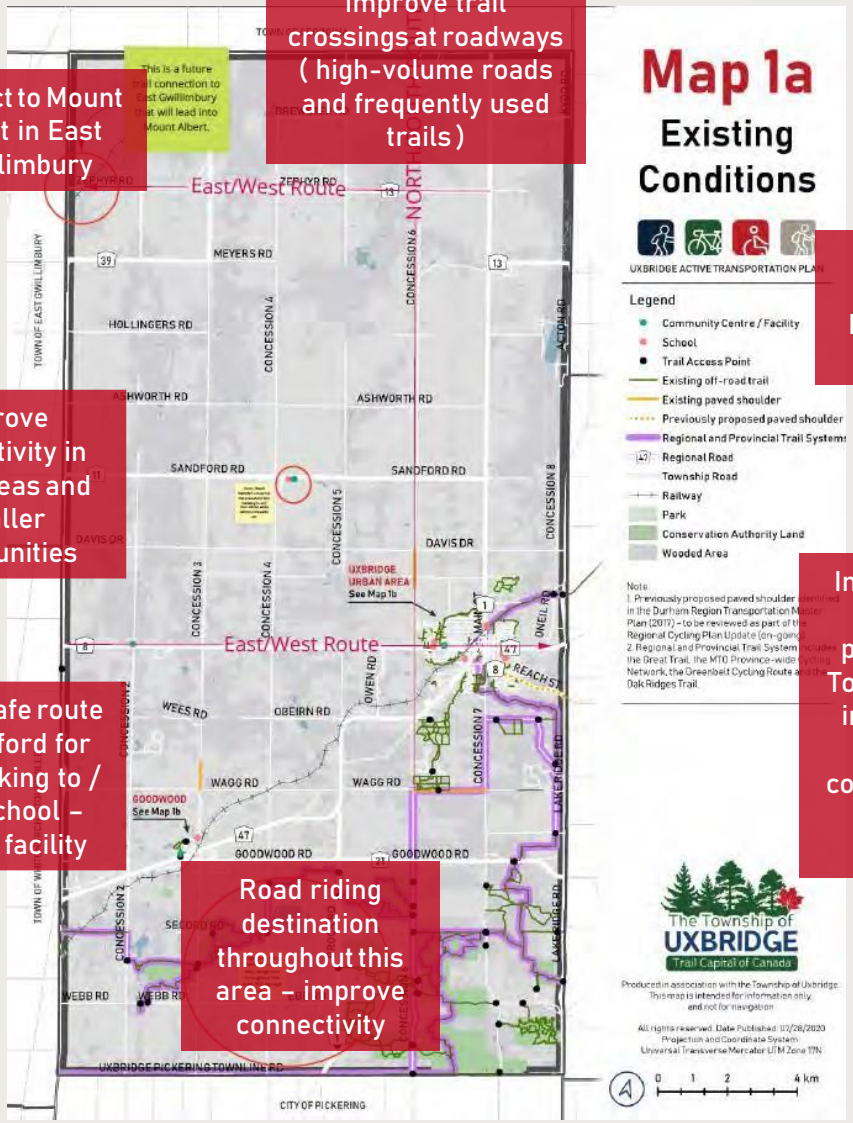
Connect to Mount Albert in East Gwillimbury

Improve trail crossings at roadways (high-volume roads and frequently used trails)

Improve connectivity in rural areas and smaller communities

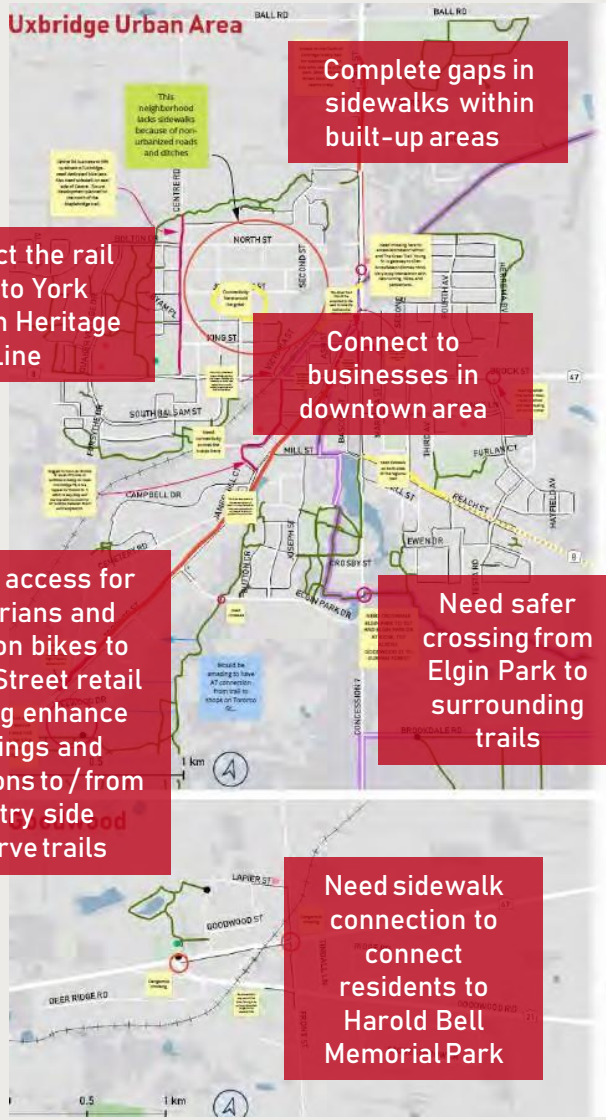
Need a safe route in Sandford for kids walking to / from school – provide facility

Road riding destination throughout this area – improve connectivity



Connect the rail trail to York Durham Heritage Line

Improve access for pedestrians and people on bikes to Toronto Street retail including enhance crossings and connections to / from Country side Preserve trails

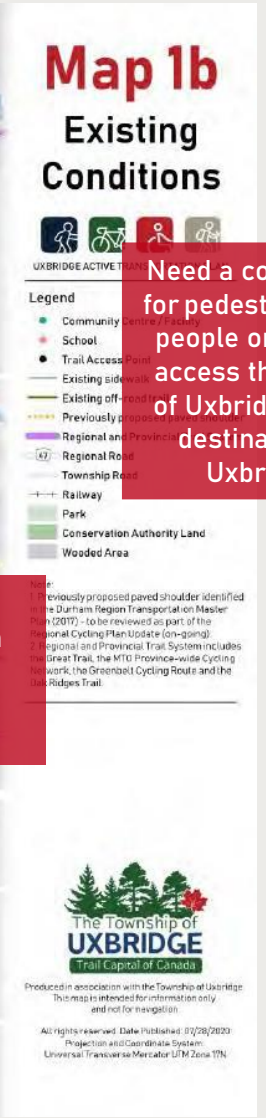


Complete gaps in sidewalks within built-up areas

Connect to businesses in downtown area

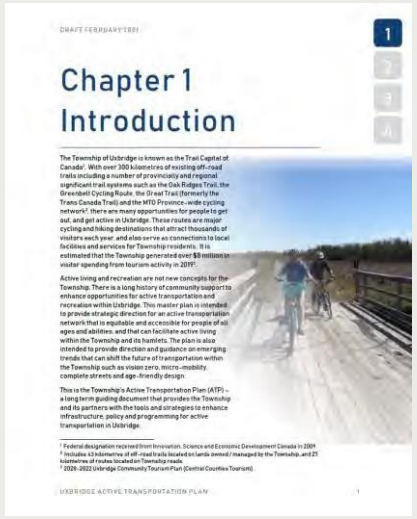
Need safer crossing from Elgin Park to surrounding trails

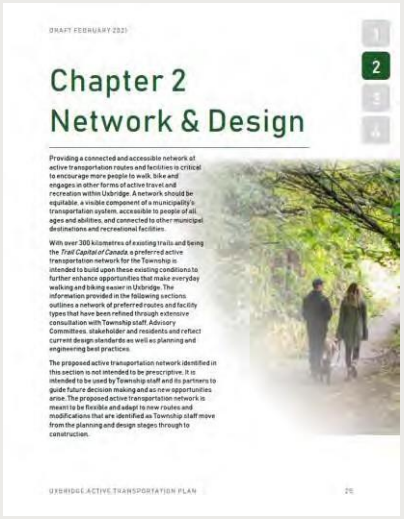
Need sidewalk connection to connect residents to Harold Bell Memorial Park

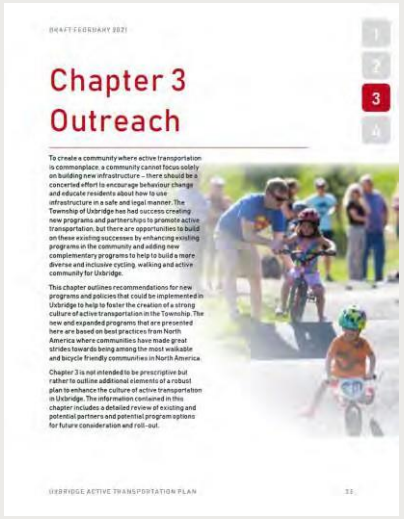


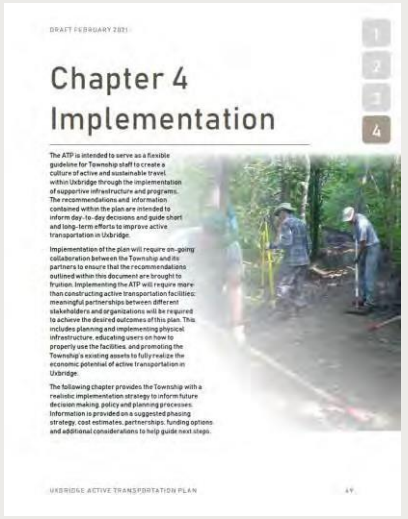
Need a connection for pedestrians and people on bike to access the Fields of Uxbridge – key destination in Uxbridge

The draft Active Transportation Plan









Chapter 1

provides context and the framework for how the Active Transportation Plan was developed and what the plan aims to achieve.

Chapter 2

outlines the process that was used to identify the preferred active transportation network including routes and facilities.

Chapter 3

outlines suggested programs and initiatives that are designed to increase the profile of active transportation in Uxbridge.

Chapter 4

provides a proposed implementation strategy and supportive tools / considerations to guide next steps beyond the study process.

18 recommendations as part of broader implementation of the plan.

Network Development Approach

A number of factors were considered and reviewed when identifying the preferred active transportation network for Uxbridge:

Current standards and guidelines

Including the forth-coming update to OTM Book 18: Cycling Facilities

Updates to the Durham Region RCP

Integrating routes and phasing identified in the RCP into Uxbridge's ATP

Planning and design principles

All ages and abilities
Complete streets
Traffic calming

Input and feedback through on-going engagement

Applying OTM Book 18

Route Selection Criteria

Network connectivity
- Connectivity and physical barriers
- Directness
- Existing and potential future demand

Conflict mitigation

Social and economic factors
- Equity
- Social and economic trends
- Public and stakeholder input

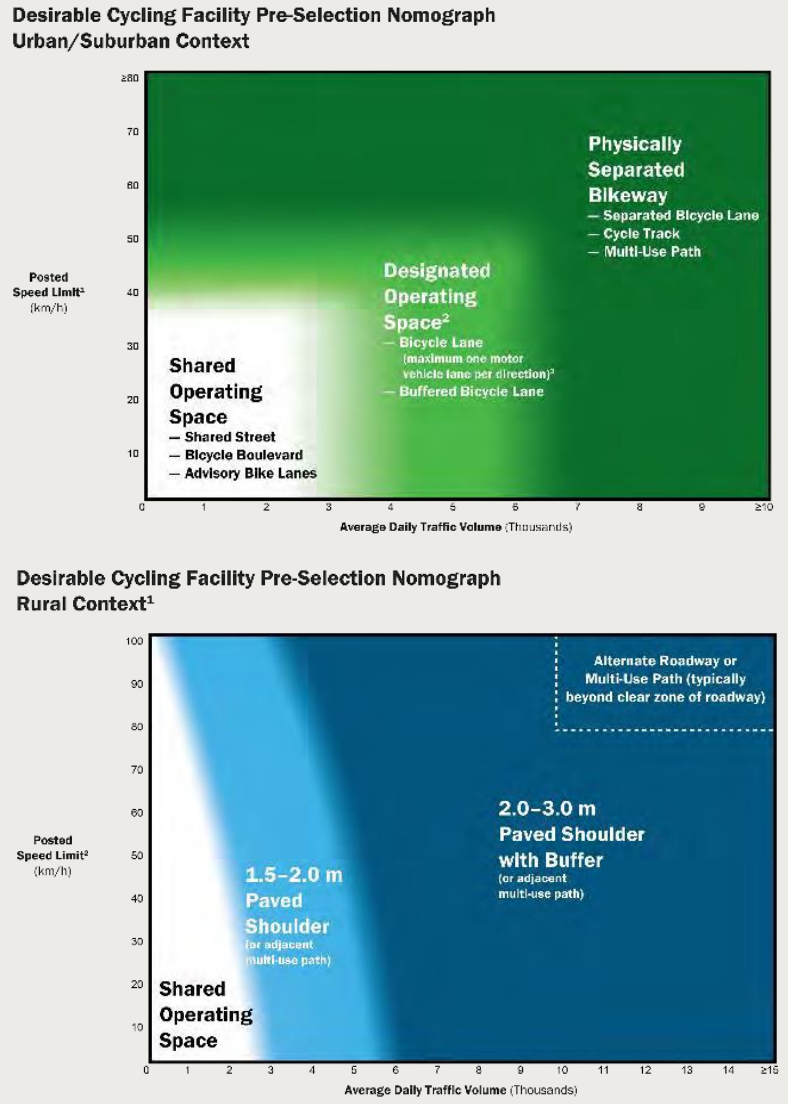
Attractiveness
- Natural scenery and urban streetscape
- Tourism, business strategies and goals

Feasibility
- Constructability
- Potential cost

How are the criteria applied?

- Potential new linkages (candidate routes) are assessed using the route selection criteria

Desirable Level of Separation



Potential Facility Types

Signed route	Urban shoulder	Paved shoulder	Buffered paved shoulder	Buffered bike lake	In-boulevard multi-use path	Off-road trail
						
LOCATION / CONTEXT						
Rural	✓		✓	✓		✓
Urban / Suburban	✓	✓			✓	✓	✓

SPATIAL SEPARATION — PHYSICAL SEPARATION

Low to moderate traffic volumes and speeds — High traffic volumes and speeds

The proposed AT network

87 KM

routes under Uxbridge's jurisdiction

Off-road trails

0.3 km

In-boulevard multi-use pathways

3.8 km

Paved shoulders

3.0 km

Signed routes

73.1 km

Signed route with edgelines

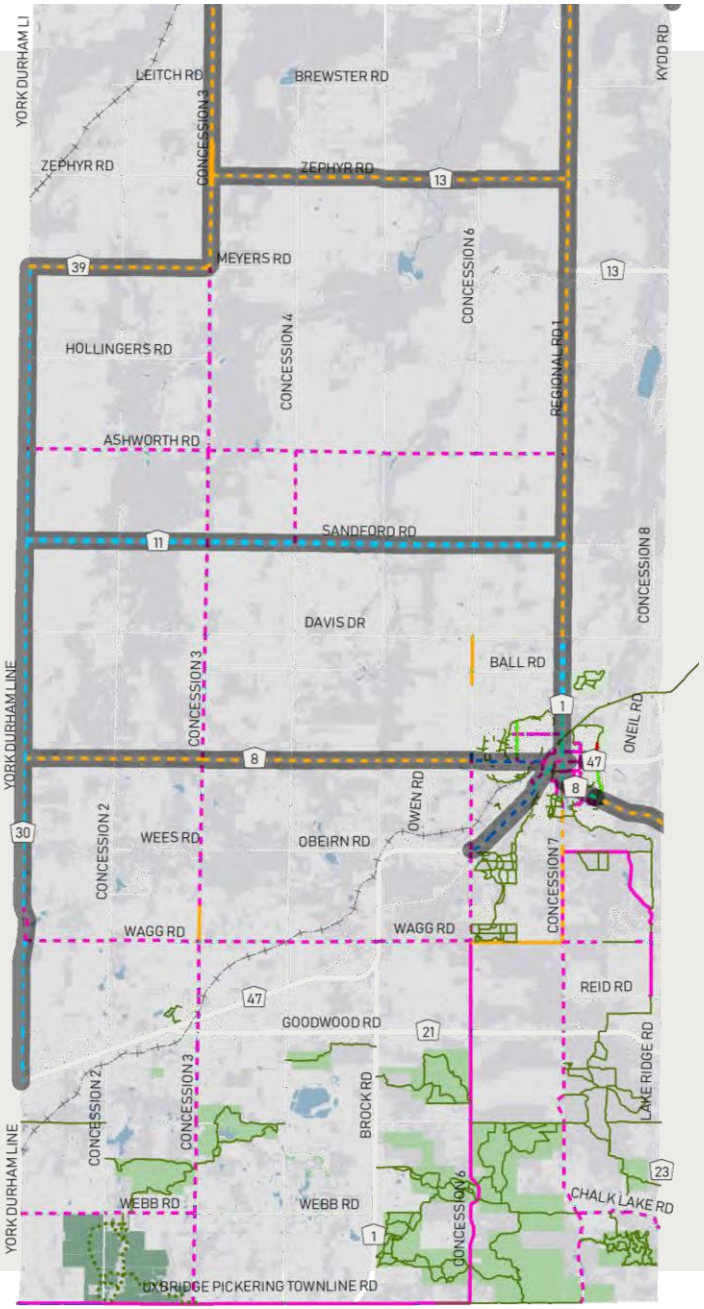
1.7 km

Sidewalks

5.3 km

Proposed KMs only includes routes under the jurisdiction of Uxbridge

Durham Region's Primary Cycling Network in Uxbridge



Promotion and Outreach

Phase 1: Foundations

- Routine Community Rides and Walks
- Uxbridge Bike Month
- Family Bike Days
- Annual Bike Rodeos
- School Cycling Challenge
- Downtown Bike Corrals
- Preliminary Data Collection
- Preliminary In-School Data Collection

Phase 2: Basic Programming

- Cycling and Walking Wayfinding Signage
- Add a “Make it Active” Events Team
- Bike Valet Program
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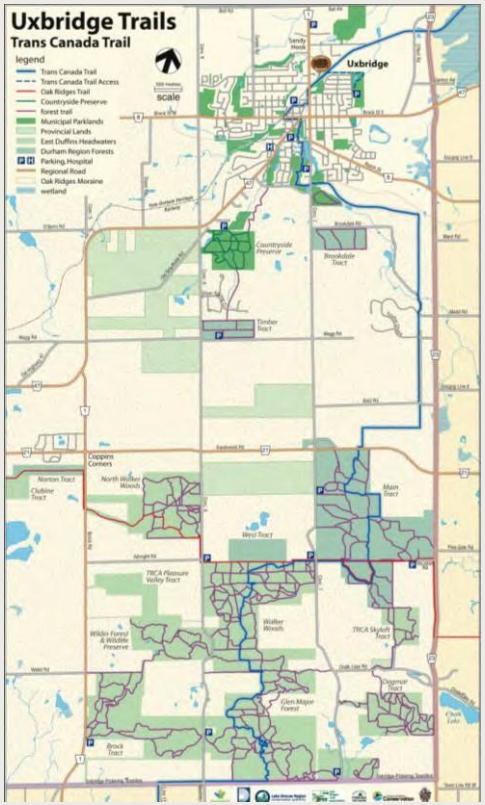
- Active School Travel

Phase 3: Advanced Programming

- Advanced Data Collection
- Earn-A-Bike Program with Africycle



Implementation Approach

Short Term
0 to 10 years

- Low investment projects (all signed bike routes) to achieve quick wins.
- Coordination with projects identified in the Township's current Capital Budget.
- Critical sidewalk connections identified by feedback received.
- Future studies to assess the feasibility and design of active transportation routes.

Long Term
10+ years

- Projects that will require major investment in rural areas.
- High profile projects that will require future studies to confirm feasibility / design.
- Sidewalk connections where there are significant physical constraints.
- Corridors that have been recently reconstructed and not scheduled for upgrades in the short term.

Implementing the Plan

The proposed phasing plan is meant to be flexible and adapt to future changes, new opportunities and available resources at the time of implementation. The phasing plan does not imply a commitment to monies or schedule of projects.

	Short Term KM	Long Term KM
Off-road multi-use trail	0.0	0.3
In-boulevard multi-use path	2.0	1.8
Paved shoulder	0.3	2.7
Signed route with edgeline	1.7	0.0
Signed route	73.1	0.0
Sidewalk	1.8	3.5
Total	79.0	8.3

Township staff are encouraged to seek opportunities (where feasible) to advance long-term projects as part of scheduled capital works through future annual budget reviews to achieve cost savings.

Notes:

1. The phasing breakdown is intended to be reviewed on an annual basis to ensure that it remains relevant, aligns with planned capital projects and the Township's priorities.
2. Municipal planning documents are typically updated every 5-10 years; as such, the ATP focus for implementation are short term projects.

How much will it cost to build?

The focus for implementation is the short term (first 10 years):

$1.27 million for 79 km over 10 years

=

$510,795
for projects that can be funded through the general tax revenue (or 40% of the total cost)

+

$766,192
for projects that can be funded through the grants, DCs and tax levies (or 60% of the total cost)

It is important for the Township to seek a diverse range of funding sources. External funding is an effective way to reduce the Township's costs and can be an opportunity to strengthen partnerships for the implementation of the plan.

- Provincial and federal grants
- Durham Region cost-sharing programs / funding options
- External sources such as service clubs, corporate funds and private donations

Supporting Implementation

Partnerships

Implementation will require on-going collaboration with those will have a role in different components of the plan. Partners can include:

- Township's Advisory Committees
- BIA and local businesses
- Local organizations and advocacy groups
- Durham Regional Police Service (DRPS)
- Durham Region
- Durham Public Health
- Durham Region Tourism
- Conservation Authorities
- Provincial Stakeholders

Funding

Coordinating projects with future opportunities and capital plans, to ensure projects can be implemented in a fiscally-responsible and realistic manner.

- Canada Healthy Communities Initiative is providing up to $31 million in funding (second round of applications in May 2021)
- Federal gov't: $400 million in 5 years (part of $14.9 billion transit program)

Policy

Policy considerations to create top-down change within a municipality and provide provisions for active transportation early in the planning stages of a project. Policy considerations include:

- Paved shoulders
- New development areas
- Zoning by-law
- Development charges
- New mobility implications

Post Implementation

Once active transportation infrastructure has been implemented, there should be consideration for:

- Operations and assessment management to protect the Township's capital investments;
- Level of service standards for maintenance to provide high-quality infrastructure; and
- Monitoring and data collections tools to inform data-driven decision making.

Next Steps and Staying in Touch

1. Provide your input and feedback by Thursday , April 1st, 2021.
2. Review input and feedback received, and integrate into a revised draft Active Transportation Plan.
3. Present the revised Active Transportation Plan to Township Council on April 19, 2021.

Link to project website: https://www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Contact Information

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647-730-7154

TOWNSHIP OF UXBRIDGE

ACTIVE TRANSPORTATION PLAN

COUNCIL PRESENTATION

April 19, 2021

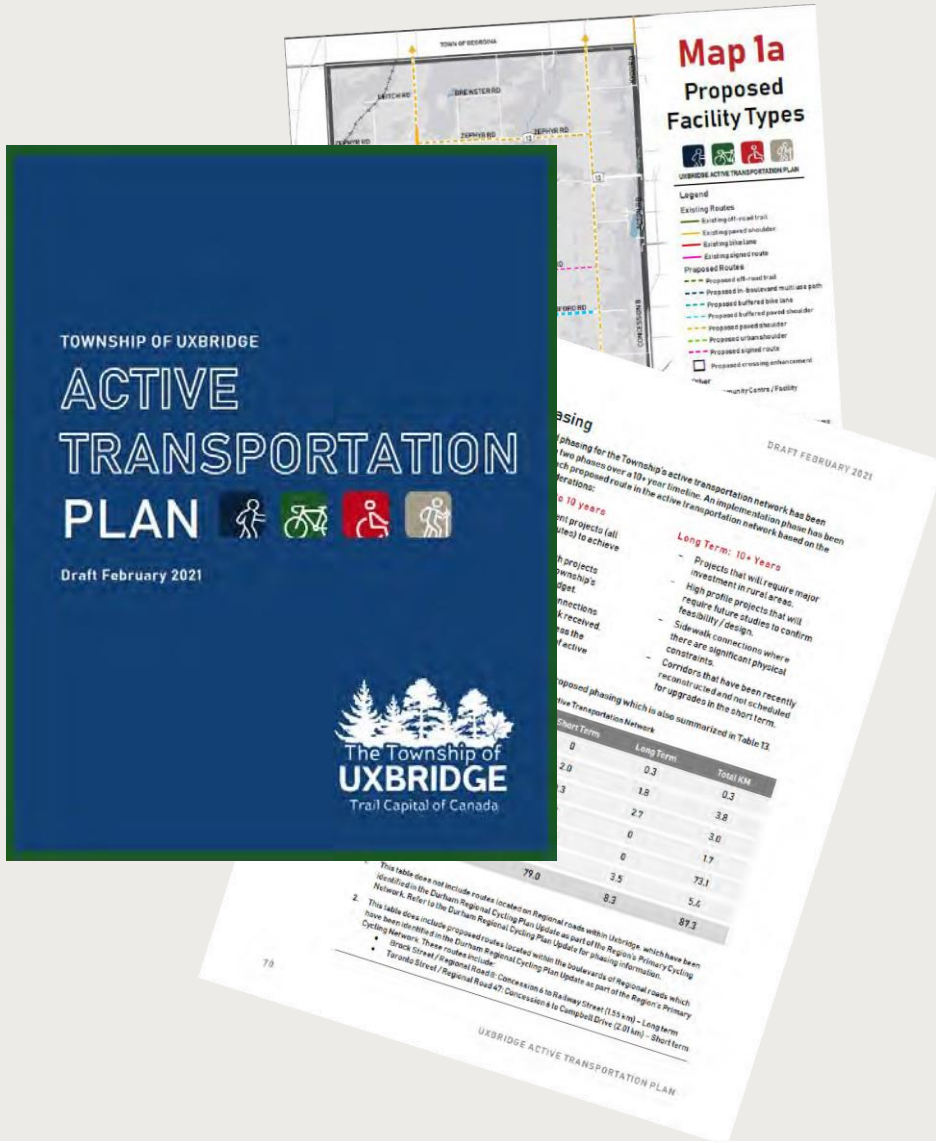
wsp + SHARE THE ROAD CYCLING COALITION

The Township of UXBRIDGE Trail Capital of Canada

About the Active Transportation Plan

The Active Transportation Plan is intended to:

1. Identify a continuous active transportation network that connects to all communities in Uxbridge and builds upon existing routes and trail systems.
2. Expand education and promotion to raise awareness of active transportation and normalize walking and cycling as everyday options.
3. Ensure the community's interests are addressed in a plan that outlines short and long term actions.



The Active Transportation Plan

Is:

- ✓ Long-term vision
- ✓ Flexible document
- ✓ Community building asset
- ✓ Communication tool
- ✓ Implementation guide
- ✓ Support for existing plans

Is not:

- ✗ Detailed or final design
- ✗ Authority to construct
- ✗ Prescriptive
- ✗ Requirement
- ✗ Financial commitment

The Guiding Principles

How can the ATP help support the Township's priorities?

- Identify recommendations to enhance the public realm in the downtown area and in-turn, benefit economic development.
- Identify connections to / from and within the Township's rural communities.
- Leverage the Township's existing tourism assets.
- Establish recommendations related to new developments and development charges.
- Establish recommendations that encourage more people to walk, bike and use non-motorized forms of travel.
- Identify an active transportation network that can be used by people of all ages and abilities.

The Study Process

SUMMER 2020

PART 1

Future Directions, Strategies and Actions

- Undertake a strengths, weaknesses, opportunities and threats (SWOT) analysis of active transportation in Uxbridge.
- Assess demand and potential for active transportation in Uxbridge, using available data from Statistics Canada, Transportation Tomorrow Survey and Strava.

PART 2

Implementation, Operations and Maintenance Plans

- Review existing conditions and identify missing links.
- Identify an active transportation network including preferred facility types.
- Develop an implementation strategy including phasing, priorities and costing estimates.
- Establish educational, promotional and programming recommendations.
- Draft and finalize the plan.

SPRING 2021

Shaping the Process

A key component of the study process was to provide meaningful opportunities for residents, Committee Members, decision makers and Township staff to engage with the study team and provide their input.

6

Stakeholder Interviews

Interviews with:

Township staff
Committees
Interest groups

5

Committee Meetings

Meetings with:

Trails Committee
AT Committee
Accessibility Committee

1

Online Survey

140 participants

survey was active from July 24 to August 31

1

Virtual Public Meeting

24 participants

including the CAO, 3 Councillors and the Mayor of Uxbridge

Plus calls / meetings with Township staff

Understanding the Opportunities and Challenges

Strengths

- Presence of existing Committees
- Engaged community volunteers and local groups
- Existing trail systems
- Variety of trail types for different users
- Community is a good size for walking and biking
- Supportive Council and staff
- Strong BIA

Weaknesses

- Lack of driver awareness
- Sidewalk gaps
- Missing "final connections" to a destination
- Previous developments with no / minimal provisions for infrastructure
- Lack of crosswalks, parking and trailheads
- Lack of funding to implement new routes

Opportunities

- Expand outreach through Committees
- Shovel-ready projects for Federal COVID funding stream
- Work with partners, BIA and CoC to demonstrate economic benefits of investing in active transportation
- Cycle tourism benefits / industry
- Municipal policies to support active transportation

Threats

- Lack of available funding programs
- Population growth is slow – small tax base
- Constrained road right-of-way could limit desired facility type
- Temporary easements
- Aggregate industry is increasing, busy roads
- Maintenance costs

Infrastructure Improvements

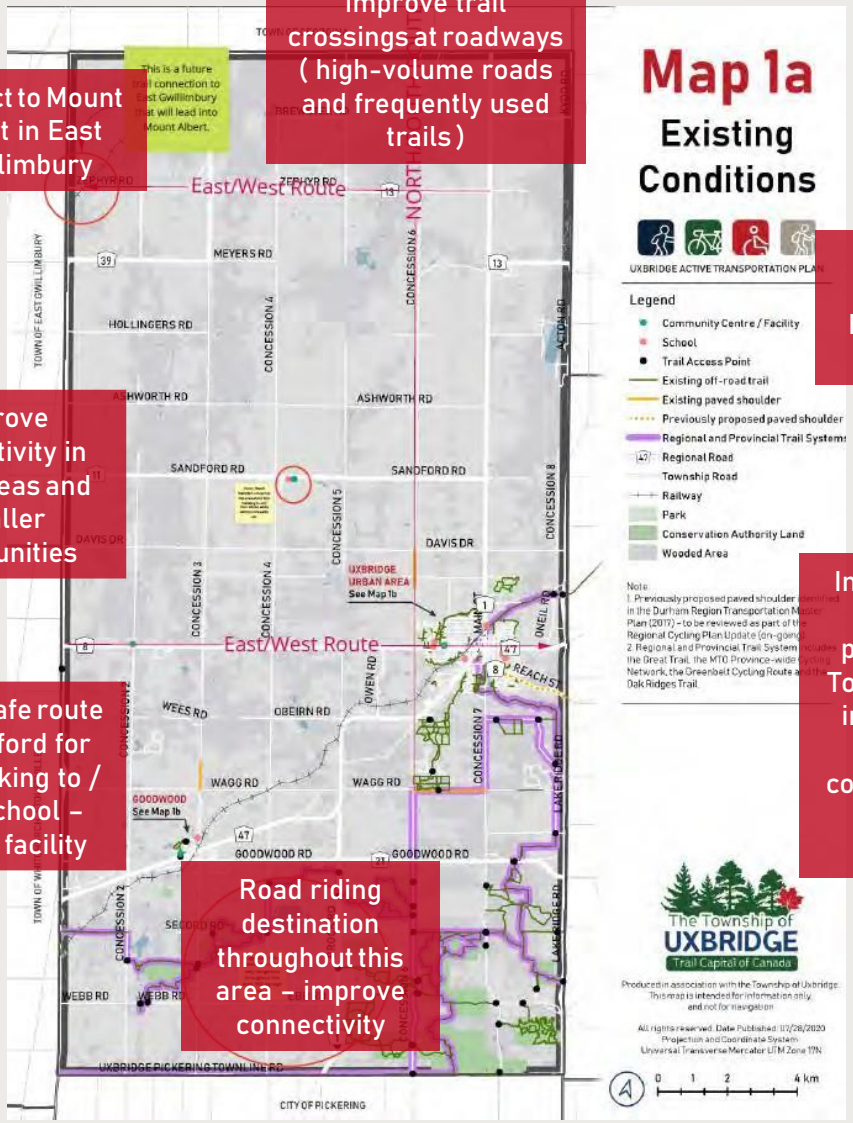
Improve trail crossings at roadways (high-volume roads and frequently used trails)

Connect to Mount Albert in East Gwillimbury

Improve connectivity in rural areas and smaller communities

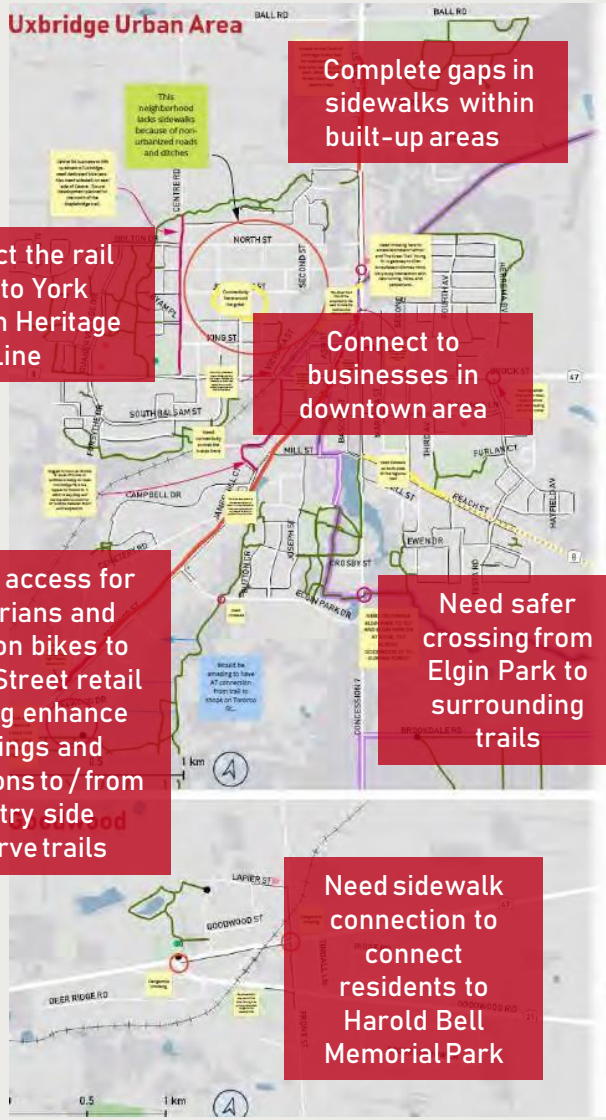
Need a safe route in Sandford for kids walking to / from school – provide facility

Road riding destination throughout this area – improve connectivity



Connect the rail trail to York Durham Heritage Line

Improve access for pedestrians and people on bikes to Toronto Street retail including enhance crossings and connections to / from Country side Preserve trails



Complete gaps in sidewalks within built-up areas

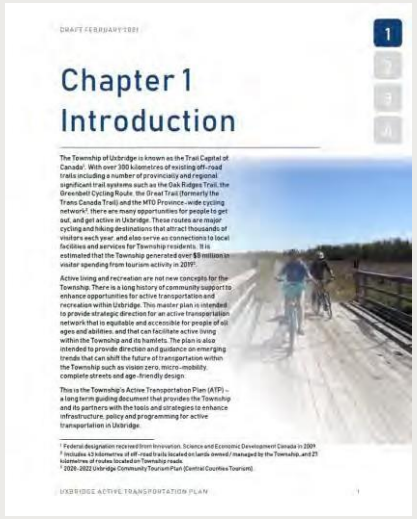
Connect to businesses in downtown area

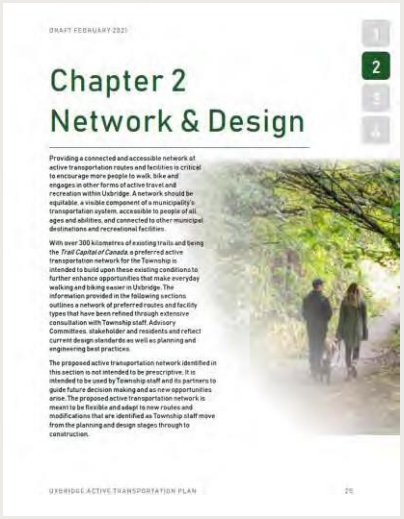
Need safer crossing from Elgin Park to surrounding trails

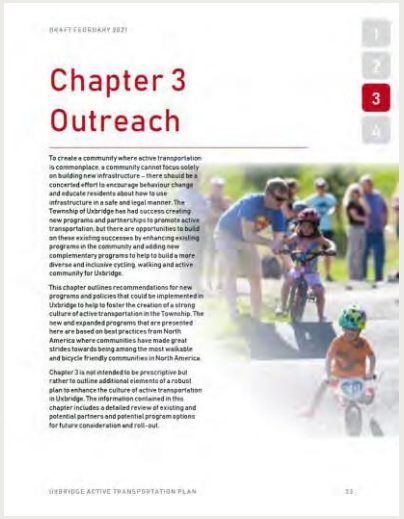
Need sidewalk connection to connect residents to Harold Bell Memorial Park

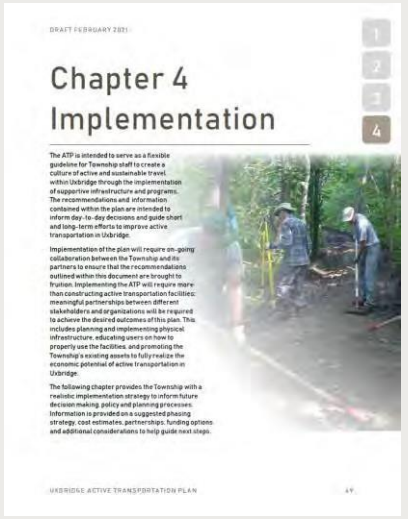
Need a connection for pedestrians and people on bike to access the Fields of Uxbridge – key destination in Uxbridge

The draft Active Transportation Plan









Chapter 1

provides context and the framework for how the Active Transportation Plan was developed and what the plan aims to achieve.

Chapter 2

outlines the process that was used to identify the preferred active transportation network including routes and facilities.

Chapter 3

outlines suggested programs and initiatives that are designed to increase the profile of active transportation in Uxbridge.

Chapter 4

provides a proposed implementation strategy and supportive tools / considerations to guide next steps beyond the study process.

18 recommendations as part of broader implementation of the plan.

Network Development Approach

A number of factors were considered and reviewed when identifying the preferred active transportation network for Uxbridge:

Current standards and guidelines

Including the forth-coming update to OTM Book 18: Cycling Facilities

Updates to the Durham Region RCP

Integrating routes and phasing identified in the RCP into Uxbridge's ATP

Planning and design principles

All ages and abilities
Complete streets
Traffic calming

Input and feedback through on-going engagement

Potential Facility Types

Signed route	Urban shoulder	Paved shoulder	Buffered paved shoulder	Buffered bike lake	In-boulevard multi-use path	Off-road trail
						
LOCATION / CONTEXT						
Rural	✓		✓	✓		✓
Urban / Suburban	✓	✓			✓	✓	✓

SPATIAL SEPARATION — **PHYSICAL SEPARATION**

Low to moderate traffic volumes and speeds — High traffic volumes and speeds

The proposed AT network

87 KM

routes under Uxbridge's jurisdiction

Off-road trails

0.3 km

In-boulevard multi-use pathways

3.8 km

Paved shoulders

3.0 km

Signed routes

72.7 km

Signed route with edgelines

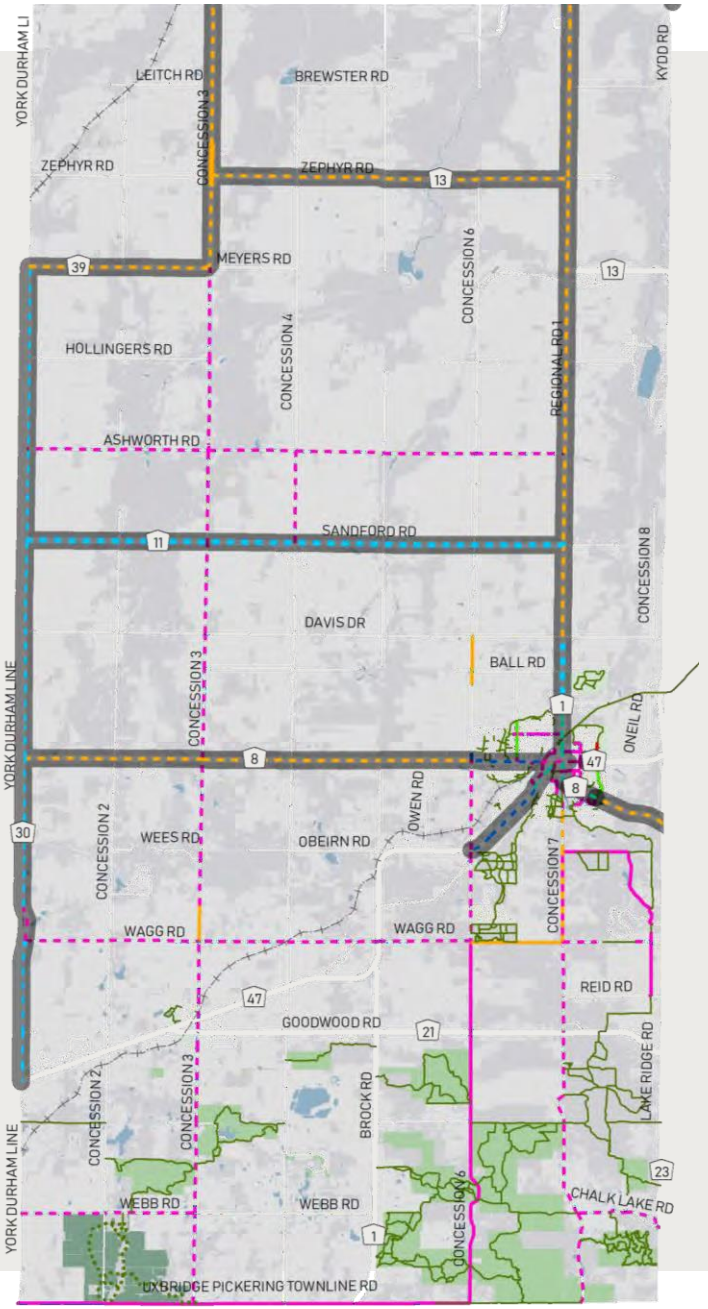
1.7 km

Sidewalks

5.3 km

Proposed KMs only includes routes under the jurisdiction of Uxbridge

Durham Region's Primary Cycling Network in Uxbridge



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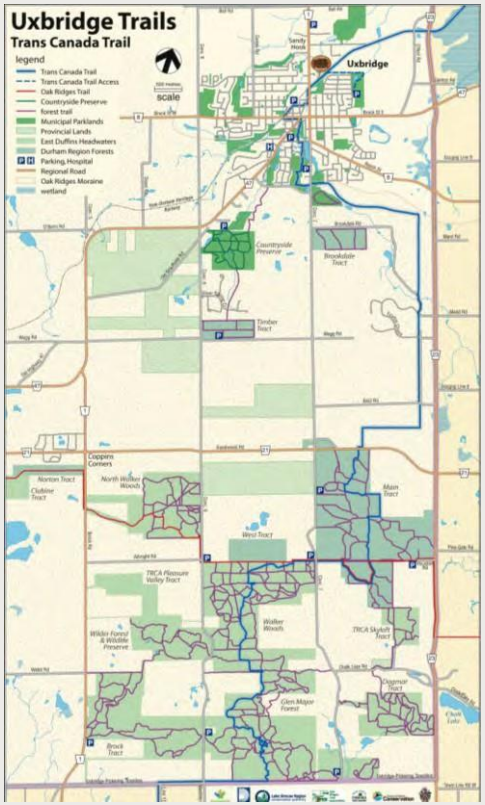

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In-boulevard multi-use path	2.0	1.8
Paved shoulder	0.3	2.7
Signed route with edgeline	1.7	0.0
Signed route	72.7	0.0
Sidewalk	1.8	3.5
Total	78.6	8.3

Staff are encouraged to seek opportunities (where feasible) to advance long-term projects as part of scheduled capital works through future annual budget reviews to achieve cost savings.

Notes:

1. The phasing breakdown is intended to be reviewed on an annual basis to ensure that it remains relevant, aligns with planned capital projects and the Township's priorities.
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for projects that can be funded through the general tax revenue (or 40% of the total cost)

+

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for projects that can be funded through the grants, DCs and tax levies (or 60% of the total cost)

It is important for the Township to seek a diverse range of funding sources. External funding is an effective way to reduce the Township's costs and can be an opportunity to strengthen partnerships for the implementation of the plan.

- Provincial and federal grants
- Regional Cycling Plan Formula for in-boulevard multi-use pathways on the Region's Primary Cycling Network
- External sources such as service clubs, corporate funds and private donations

Federal Funding Options

Canada Healthy Communities Initiative (CHCI)

The CHCI is providing up $31 million in federal funding over the next 2 years (for municipalities all across Canada). Funding will support projects under 3 themes:

- Safe and vibrant public spaces
- Improved mobility options
- Digital solutions

Applications for Round 2 will begin on May 14, 2021 and applications must be submitted by June 25, 2021.

https://communityfoundations.ca/initiatives/chci/

Canada's first National Active Transportation Fund

$400 million in funding over 5 years (part of the Federal $14.9 billion, 8-year public transit fund).

Funding is meant to support new / expanded active transportation infrastructure and network (such as pathways, bike lanes, trails and pedestrian bridges) and planning studies.

https://www.infrastructure.gc.ca/trans/active-actif-eng.html#4

Supporting Implementation

Partnerships

Implementation will require on-going collaboration with those will have a role in different components of the plan. Partners can include:

- Township's Advisory Committees
- BIA and local businesses
- Local organizations and advocacy groups
- Durham Regional Police Service (DRPS)
- Durham Region
- Durham Public Health
- Durham Region Tourism
- Conservation Authorities
- Provincial Stakeholders

Policy

Policy considerations to create top-down change within a municipality and provide provisions for active transportation early in the planning stages of a project. Policy considerations include:

- Paved shoulders
- New development areas
- Zoning by-law
- Development charges
- New mobility implications

Post Implementation

Once active transportation infrastructure has been implemented, there should be consideration for:

- Operations and assessment management to protect the Township's capital investments;
- Level of service standards for maintenance to provide high-quality infrastructure; and
- Monitoring and data collections tools to inform data-driven decision making.

Next Steps

1. Final draft version of the ATP will be posted on the project website for public and Council review and commentary (for a 30-day review period).
2. Bring revised plan for Council adoption in May / June 2021.

Project website: https://www.uxbridge.ca/en/your-local-government/active-transportation-plan.aspx

Thank you! Questions?

Contact Information

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Cristina Valente
WSP
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647-730-7154

APPENDIX B

Active Transportation Coordinator Position Sample

Township of Uxbridge ATP | Final June 2021

Parks and Facilities Positions, Specialized Positions

Waterfront Stewardship Specialist

Interested in the environment? This position will be assigned work along the waterfront of Saugeen Shores. Duties include: environmental education and stewardship, public presentations, site meetings with waterfront property owners, preparation of educational materials on waterfront stewardship to increase understanding and awareness of the Waterfront maintenance plan.

Job requirements: This position requires an experienced student with at least 2 years post-secondary education in environmental sciences/studies, communications, education studies or equivalent experience.

Wage: $17.50/hr

Cycling Coordinator and Trails Specialist

Do you love to ride your bike? Do you enjoy exploring trails and being outdoors? This job may be for you!

This position will assist with coordinating bicycle programs and events (such as Bike Month, and the Bike to School Challenge), implementing bicycle safety initiatives and community engagement. This position will also assist with trail maintenance, inspections and the installation of wayfinding and trailhead signage.

Job requirements: This position requires an experienced student with at least 2 years post-secondary education in recreation and leisure studies or equivalent experience. Experience with event planning and communications an asset.

Wage: $17.50/hr.

Parks and Facilities Position Requirements

Requirements	Duration	Shifts	Wage (hr)
• Standard First Aid, Current • Current Driver's License • CSA Approved Footwear • CSA approved Hardhat • Police Check (for those 18+)	Positions and hours will vary, most positions are: • 35 hours per week • Most jobs are early May until Labour Day • Some jobs are late June until Labour Day	Days, Afternoons & Weekends, Statutory Holidays	$14.00 - $15.00 Garbage and Washroom Crew $14.50 - $15.50 Specialized Positions $17.50

APPENDIX C

Network and Costing Management Tool

Township of Uxbridge ATP | Final June 2021

Table 1 - Active Transportation Unit Costs

This table provides an overview of the estimated unit costs for active transportation and cycling facilities, structures and crossings and other elements of an active transportation / cycling network. All unit prices exclude tax, contingency, design and approvals costs.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS/ASSUMPTIONS
1.1	Signed Bike Route in Urban Area	linear KM	$1,200	Price for both sides of the road, assumes one sign a minimum of every 500 metres in the direction of travel. Price assumes that signs will be mounted on an existing post. Price includes: - $300 per sign x 4 signs (2 signs on each side of the road)
1.2	Signed Bike Route in Rural Area	linear KM	$1,000	Price for both sides of the road, assumes one sign a minimum of every 2 kilometres in the direction of travel. Price assumes that signs will be mounted on a new post. Price includes: - $500 per sign x 2 signs (1 sign on either side of the road)
1.4	Signed Route with Edgeline	linear KM	$12,200	Price for both sides of the road, includes signs and painted edgeline (100mm solid white line). Price includes: - $300 per sign x 4 signs (2 signs on each side of the road) - $5.5 per metre for painted solid white line
1.5	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	linear KM	$100,000 to $200,000	1.5 metre paved shoulder on both sides of the road. Assumes cycling project pays for additional granular base, asphalt and painted line. Price may vary from $100,000 to $200,000 depending on work needed to improve platform. Price includes: - $300 per sign x 4 signs (2 signs on each side of the road) - $5.5 per metre for painted solid white line (both sides of the road) Price may be higher if road platform needs to be widened.
1.29	Two Way Active Transportation Multi-use path within road right-of-way	linear KM	$275,000 - $375,000	3.0m wide hard surface pathway (asphalt) within road right of way (no utility relocations). Price depends of scale / complexity of project and if existing sidewalk is being removed (i.e. crushing of existing sidewalk and compacting for trail base).
1.31	Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in an Urban Setting (New)	linear KM	$300,000 - $400,000	3.0m wide hard surface pathway (asphalt) within park setting (normal conditions) 90mm asphalt depth. Price depends of scale / complexity of project.
2.1	Sidewalk	linear KM	$300,000	Price for 1.5m concrete sidewalk. Include site prep., select utility relocation, minor drainage modifications / traffic control.

Notes:

1. Unit Prices are for functional design purposes only, include installation but exclude contingency, design and approvals costs (unless noted) and reflect 2021 dollars, based on projects in southern Ontario.
2. Estimates do not include the cost of property acquisitions, signal modifications, utility relocations, major roadside drainage works or costs associated with site-specific projects such as bridges, railway crossings, retaining walls, and stairways, unless otherwis noted.
3. Assumes typical environmental conditions and topography.
4. Applicable taxes and permit fees are additional.

Global Factors	
13.0%	Design & Approvals
24.0%	Contingency
1.8%	HST

Note: Fields above in RED are editable

Table 2 - Estimated Costs by Facility Type and Phase

Facility Type	Short Term (0 to 10 years)			Long Term (10+ years)			Total (Full Build out)		
	Length (km)	% of ST network	Estimated Cost	Length (km)	% of LT network	Estimated Cost	Length (km)	%	Estimated Cost
Off-road multi-use trail	0.2	0.2%	$ 81,591	0.3	4%	$ 143,894	0.5	1%	$225,484
In-boulevard multi-use path	2.0	2.5%	$ 905,561	1.8	22%	$ 823,235	3.8	4%	$1,728,796
Paved shoulder	0.7	0.8%	$ 137,528	2.7	32%	$ 556,940	3.3	4%	$694,467
Signed route with edgeline	1.7	2.2%	$ 29,563	0.0	0%	$ -	1.7	2%	$29,563
Signed route	72.7	91.9%	$ 102,365	0.0	0%	$ -	72.7	83%	$102,365
Sidewalk	1.8	2.3%	$ 176,206	3.5	42%	$ 1,447,549	5.3	6%	$1,623,755
	Short Term			Long Term			Total (Full Build out)		
Total	**79.1**		**$ 1,432,814**	**8.3**		**$ 2,971,617**	**87.4**		**$ 4,404,430**
Percent of network totals	91%		33%	9%		67%			

Notes:

1. The estimated capital cost to implement the Township's AT network is based on unit prices (refer to the yellow highlighted rows in Tab 1). Costs for Contingency (24%) and Design and Engineering (13%) have been factored into the total network costs. Unit prices reflect 2020 dollars, but will vary based on current market demand, inflation and pricing. Unit prices are being used (and have been reviewed) by Durham Region staff. In addition, this approach has also been applied to the network costing for the Regional Cycling Plan Update.

2. This table includes the estimated costs for proposed in-boulevard paths that are located along Regional roads and part of the Region's RCPU. These routes are highlighted in yellow in Tab #2 and include:
- Brock Street / Regional Road 8: Concession 6 to Railway Street (1.55 km) - $699,581, Long Term
- Toronto Street / Regional Road 47: Concession 6 to Campbell Drive (2.01 km) - $905,561, Short Term

3. Desire lines indicate routes which are proposed to be explored in the future as development occurs throughout the Township. Desire Lines have been identified in areas where there is not currently a designated road system, available and / or the land is not under the jurisdiction of the Township. The exact design / facility type should be determined through future investigation / detailed studies and have not been included in the table above.

Table 3 - Estimated Costs by Funding Source

Funding Source	Adjustable %s	Short Term Cost	Per year over 10 years
General tax revenue	40%	$ 573,125	$57,313
Grants, DCs and Tax Levy	60%	$ 859,688	$85,969
Total Short Term Cost		**$ 1,432,814**	