SMITHS FALLS

RISE AT THE FALLS

ACTIVE TRANSPORTATION PLAN

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ACTIVE TRANSPORTATION PLAN

Chapter One

1 Introduction and Community Context

Smiths Falls has developed its first Active Transportation Plan – a guide to help inform future decision-making and investments in non-motorized modes of transportation. The Active Transportation Plan is a flexible strategic policy document that serves as an outline to achieve the Towns active transportation goals by identifying a connected and implementable network with actionable and supporting tools and recommendations.

On the borders of Lanark County and the United Counties of Leeds and Grenville and along the UNESCO World Heritage Rideau Canal with Combined Lock 29a, Smiths Falls is the joining point for users of any mode with Trail connections to the Cataraqui, Trans Canada and Rideau Trails, waterway connections with the Rideau Canal and County facilities.

In 2020 Smiths Falls implemented their first cycle track on Beckwith Street in the Town's downtown demonstrating that Council and Town staff believe the streets are for all modes of transportation and taking a step in moving forward with a Complete Streets vision. In addition, the Town has an extensive sidewalk network and while some facilities may be showing some wear and need updating it demonstrates the long-term thinking in serving active modes in the community.

This Plan is intended to build on the Town's and their partners' Vision, lessons learned and existing assets to enhance the experience for active transportation and provide residents with a choice in what mode of transportation they use. The Active Transportation Plan sets the foundation for a short and long-term strategy to implement infrastructure, establish supportive policy and identify meaningful programs as a means of improving active transportation opportunities in Smiths Falls.

1.1 Developing the Active Transportation Plan

The Active Transportation Plan was developed in four phases using an iterative between approach informed by input collected from Town staff, stakeholders and members of the public. Figure 1-1 provides and overview of the study process and tasks completed for all phases of project work.

To inform the Active Transportation Plan, the following key audiences were engaged:

Members of the public: those who live within Smiths Falls who will be using / experiencing the outcomes of the Plan.

Local businesses: businesses play an active role in supporting cycling and transportation within the Town.

Interest groups: representatives of clubs or organizations that provide promotion and outreach support.

Local advisory committees: committee representatives with a strong understanding of factors that can influence the experience of the user (e.g. Accessibility Advisory Committee and Transportation Advisory Committee).

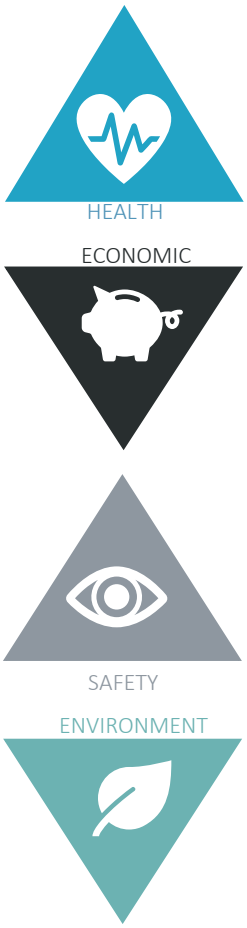
Council members: All members of Council.

Government agencies: representation from external agencies who have jurisdiction over some elements of the plan or an interest in its success (e.g. Leeds, Grenville and Lanark District Health Unit).

1 Background and Existing Conditions Review	Review background information and establish the active transportation vision and goals	- Identify and map existing facilities, review and document existing policies and initiatives - Identify route selection criteria - Identify network gaps - Carry out online public engagement survey to identify priorities and objectives - Develop Project List (incl. facility type recommendation) - Prioritization / Phasing of Projects - Presentation to Council - Conduct comprehensive public engagement through Public Open House and Presentation to Council to hear from the end users on the proposed projects - Cost and phase proposed network based of high-level unit costs and stakeholder priorities - Develop supportive policy and initiatives for the implementation of the plan - Document study process and recommendations in a final report
2 Network Development	Identify proposed routes	
3 Implementation Plan	Confirm the network and develop a plan for implementation	
4 Plan Preparation	Develop final report to summarize study process, findings and recommendations	

1.2 Why Active Transportation?

There are many benefits that can be realized through the implementation of active transportation infrastructure, programs and policies. Creating a livable environment with active and engaged residents has been shown to contribute to the creation of a happy, growing community. Understanding the benefits of active transportation can help support and rationalize future investments. Using the benefits of active transportation in future communication and outreach helps to emphasize the value of investment and support future decisions, commitments and priorities.



Active transportation promotes active lifestyles which can reduce the risk of heart disease, cancer and obesity as well as decreases the incidence of depression and stress and increases emotional well-being overall

Cycle tourists can help with economic growth on both a local and regional scale. They are also more likely to spend time within the community when visiting than motorists

Increasing the number of cyclists and pedestrians also means an improved sense of safety. Cities and towns with high levels of walking and cycling typically see a lower rate of collisions.

Significant environmental benefits can happen when people walk and cycle. Even short distance (1-3km) trips greatly reduce carbon emissions.

1.3 Who is the Active Transportation Plan For?

From a cycling perspective, the Plan is meant to address the needs of a range of cyclists that have different interests, abilities and skill levels. The recommendations contained within the Plan reflects the needs and preferences of all cycling user groups to help encourage a broader range of people to cycle more often.

Research indicates there are four general categories of existing and potential new cyclists. These categories are meant to represent user comfort levels, experience and in some cases preferences when selecting a cycling route / facility. The four types of cyclists are presented in Figure 1-1.

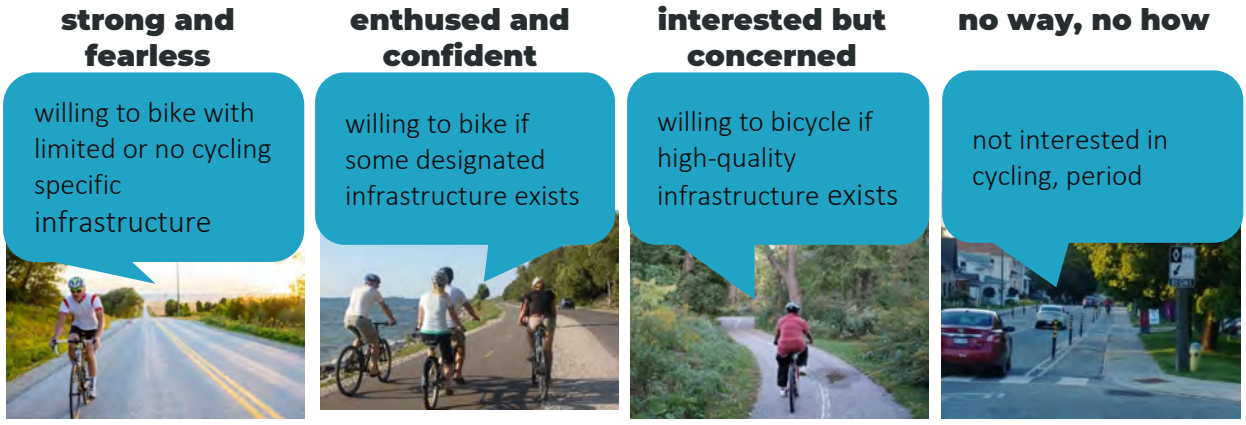


Figure 1-1 | Types of Cyclists

Typically, the majority of the population falls within the interested but concerned category and with 22% of our survey respondents indicating that they feel somewhat comfortable biking on the existing facilities and almost 25% responding that they are not comfortable biking in Town, this reigns true of Smiths Falls as well.

Understanding the factors that impact a user's behaviour and preferences as well as the local context help shape the information, tools and resources contained within the Plan to ensure the recommendations are tailored to influence the change desired.

1.4 Engaging Smiths Falls

The development of the Active Transportation Plan was consistent with Master Plan Approach #1 of the Municipal Class Environmental Assessment (MCEA) Process. A key component of the MCEA Process is to provide meaningful engagement and consultation with a minimum of two points of contact during the study process. Given the timing of the Plan development during the global pandemic, all consultation activities were held on-line. Two types of engagement were held during the study process: self-guided and facilitator lead.

self-guided

Purpose: to gain an understanding of residents' current behaviours and provide the opportunity for residents to speak of their visions and experiences with active transportation in the community including key priority areas for facilities or destinations.

Activity: online survey

244 participants

600+ individual comments

facilitator lead

Purpose: to hear the local context and feedback on what key destinations should be highlighted, on the proposed cycling network and sidewalk links, facility types and priorities and hear about the level of importance for suggested programming initiatives.

Activity: virtual public open house

15 participants

40+ sticky notes

Highlights of the survey results are throughout Chapter 1. The full summary of the facilitator led workshop is available in Appendix B.

1.5 About Smiths Falls

To have a comprehensive and affordable Plan we want to build on what has previously been done within Smiths Falls, the neighbouring communities and throughout the County of Lanark. The first step is understanding the local context, existing active transportation network and existing active transportation policies and programs that work to promote an active culture.

1.5.1 At a Glance

To establish a community profile the Town's current demographics were reviewed to understand the conditions, influences and trends within the community. Two data sources were used:

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.

Smiths Falls – Online Survey: the online survey included 27 questions and collected information about existing travel habits, priority locations for expanded pedestrian/cycling facilities and target actions for investing in active transportation in the Town.

The key findings are illustrated below.

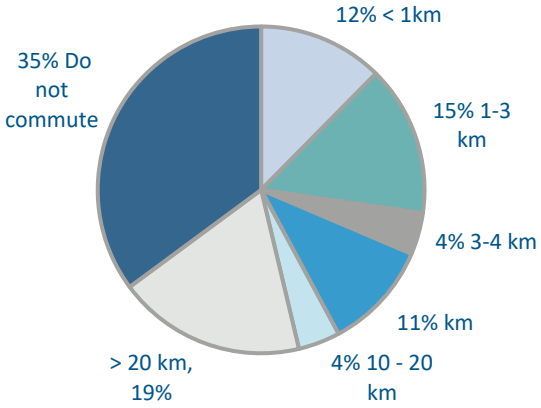
9.66 km^2
Land Area

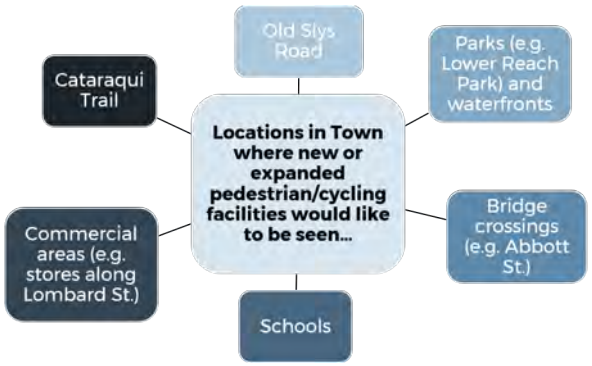
909
Population Density per Square Kilometre

8,780
Population

44.7
Average Age of the Population

What is the distance between home and place of work or school?





1.5.2 Policy Framework

There are policies and plans within each level of government that provide guidance on the planning, design, implementation and operation of cycling facilities. A policy review was undertaken to better understand the various levels of support that exist within the Federal, Provincial, County and Municipal levels of government to develop the Plan. Table 1-1 provides a summary of existing policies within each level of government and their applicability to active transportation in Smiths Falls. A summary of all policies that were reviewed can be found in Appendix A.

At a high-level, each of these policies provides support for active transportation; however, few of these documents provide specific policy direction to guide future planning and design. By understanding the opportunities and gaps in these policies, there is a greater potential for the projects and strategies identified within the Active Transportation Plan to be considered and implemented. Aligning recommendations outlined in the Active Transportation Plan with these policies and plans can also help with future funding applications and opportunities.

Table 1-1 | Existing Policy Support

	Federal	Provincial	County	Municipal
Function of Jurisdiction	Though the federal government isn't directly responsible for the planning and implementation of active transportation facilities, they support local municipalities through the provision of funding as well as suggested implementation frameworks and high-level strategies.	Provincial statues provide legislated documentation which must be enacted without interpretation and provincial policies are statutory documents which outline actionable policies to achieve the statues. Policies can be interpreted based on the condition and context of the municipality.	The County is responsible for adhering to provincial directives related to active transportation by adopting policies and initiatives. This includes measures that deliver an environment conducive to active modes such as new facility infrastructure, supportive programming and compatible urban form.	The Town is responsible for the direct implementation of active transportation facilities. This is done through municipal planning documents such as Official Plans, Zoning By-laws and design guidelines. Through the Town's planning process, priority active transportation initiatives are identified. The Town is then responsible for the coordination of resources, construction and maintenance of these initiatives.
Policies Reviewed	Federal Sustainable Development Act Transport Canada 2019-2020 Departmental Plan (2019) Transportation 2030: A Strategic Plan for Transportation in Canada	#CycleON: Ontario's Cycling Strategy Accessibility for Ontarians with Disabilities Act Provincial Policy Statement Municipal Act Tour by Bike: Ontario's Cycling Tourism Plan (2017)	Lanark County Sustainable Communities Official Plan (SCOP) 2018-2020 Lanark County Economic Development Strategic Plan Ottawa Valley Recreation Trail Management Plan County Roads Paved Shoulder Program 2021 United Counties of Leeds and Grenville Official Plan 2018 Leeds and Grenville Asset Management Plan	2019-2022 Strategic Plan Parks and Recreation Master Plan Official Plan Zoning By-law Asset Management Plan & Long Term Financial Sustainability Plan Parking By-law

1.5.3 Active Transportation Patterns

Understanding where people currently use active transportation in Smiths Falls can help establish the context and identifying areas where investments to infrastructure could have the largest benefit to the community. Information was gathered from Statistics Canada, the Online Survey and Strava to better understand the current travel patterns in Smiths Falls.

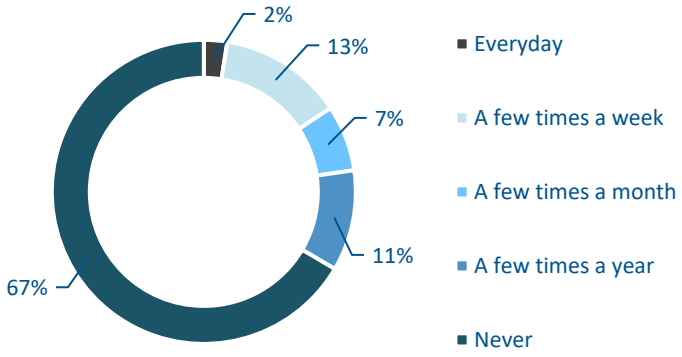
What non-motorized group do you most identify with?

- **70%** Pedestrian
- **25%** Cyclist, e-bike or mountain bike user
- **18%** Jogger/Runner/Hiker
- **3%** Mobility-assisted user

What is the purpose of your active transportation travel?

- **65%** Fitness, health and recreation
- **42%** Shop, run errands and visit friends
- **11%** Go to and from work
- **10%** Tourism

How often do you cycle within the Town?



What is Strava?

Strava is a website and mobile application that allows users to track their activity using GPS technology. Using the data collected, a spatial representation is generated (i.e. heat map) based on volume and frequency of routes travelled.

The lighter and brighter lines shown in this Strava Global Heatmap of Smiths Falls represent frequently travelled routes, whereas the darker or cooler coloured lines represent routes that are not as frequently travelled.

It is important to note that Strava is typically marketed and used by those using active modes for fitness purposes and/or long touring trips. As such it is a used as a supplementary piece of information with other tools and datasets.

1.5.4 Existing Facilities

The existing active transportation network is shown in Figure 1-2 and a summary of the existing facilities is provided below:

20 km of Off-Road Regional Trails

Cataraqui Trail

A 104 km year-round multi-use recreation trail that travels along the former CN line from Smiths Falls to Strathcona near Napanee.

Rideau Trail

A 387 km trail that runs between Ottawa and Kingston. The majority of the trail is only suited for hiking, but sections along the Trans Canada Trail and Cataraqui Trail or within urban areas are suitable for cycling. This can be seen in Smiths Falls where roadways and local trails form part of the Rideau Trail.

Trans Canada Trail

Approximately 80 km of the Cataraqui Trail is a designated part of the Trans Canada Trail.

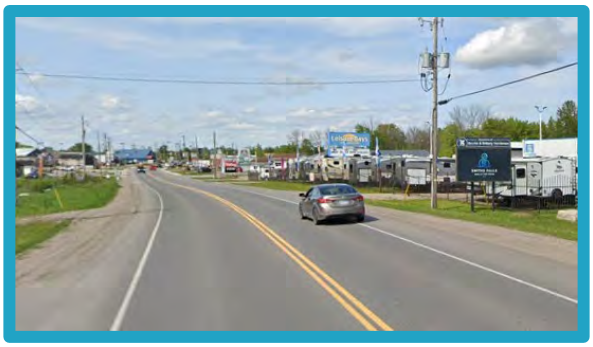
19.8 km of Off-Road Local Trails

Smiths Falls has a local multi-use trail network and paths with varying surface types that embraces the Rideau River and parks and green space. It includes the Smiths Falls Walking Trail, which is a 5.1 km trail that is primarily used for hiking, walking and running.

600 m of Physically Separated Cycling Facilities

The Beckwith Street Revitalization project is a two-phase road reconstruction project between Chambers Street and Elmsley Street that includes a fully separated cycle track.

The first phase of the project was completed between Chambers Street and Russell Street in 2020.

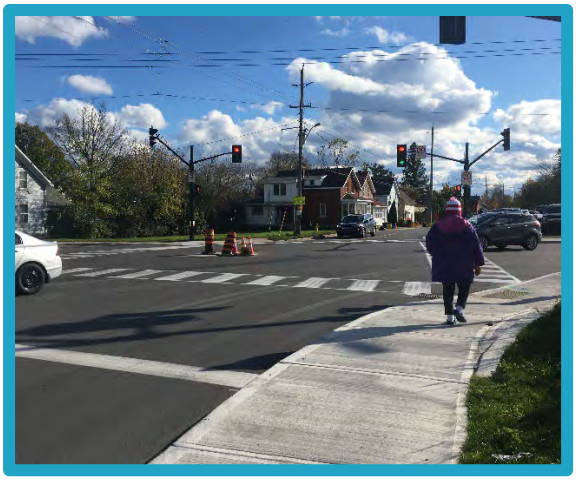


1.6 km of On-Road Facilities

The on-road facilities primarily include paved shoulders on the Lanark County Roads that run through Town.

82 km of Sidewalks

Sidewalks are located all throughout Smiths Falls and will continue to be constructed with ongoing developments.



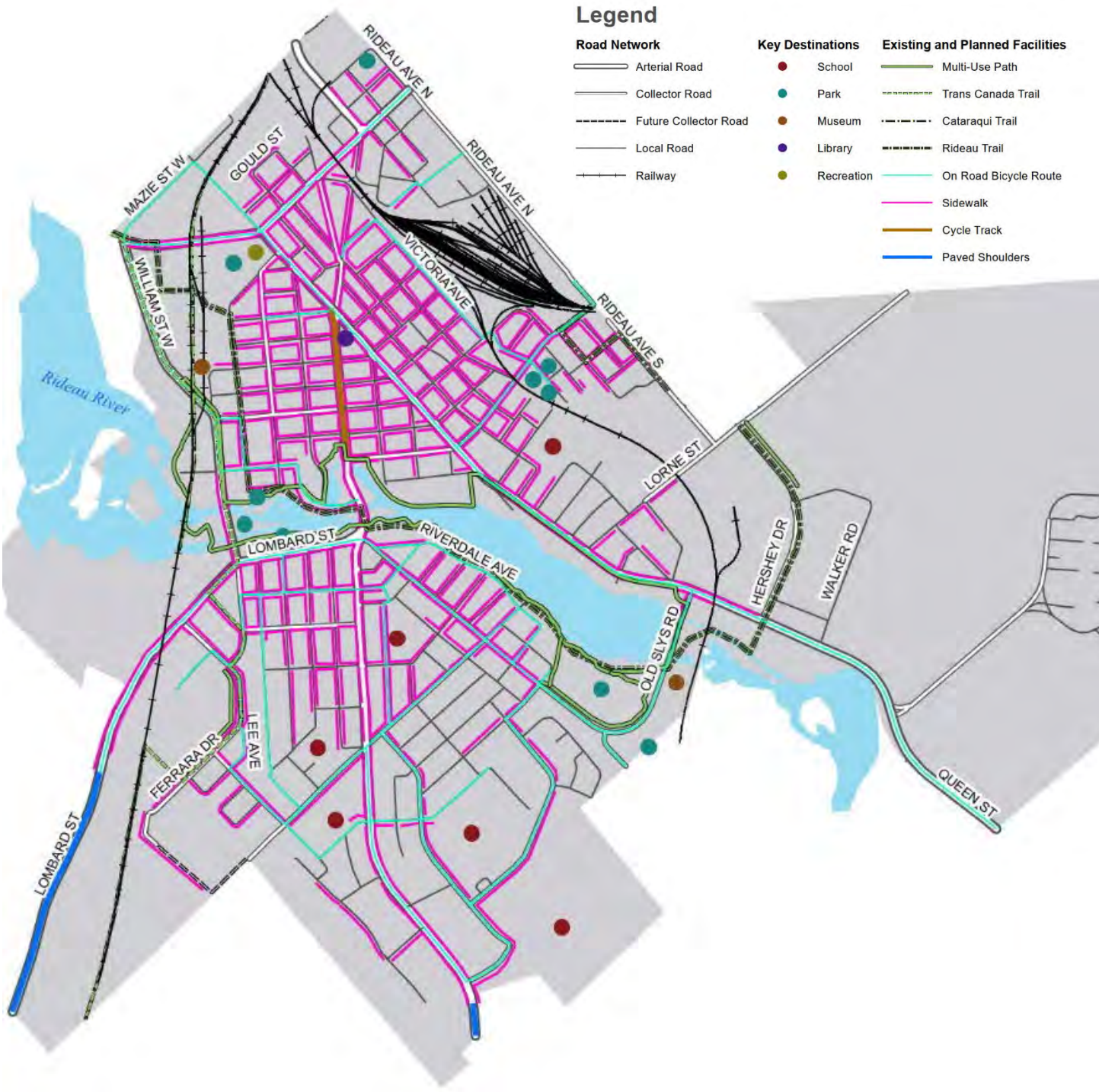
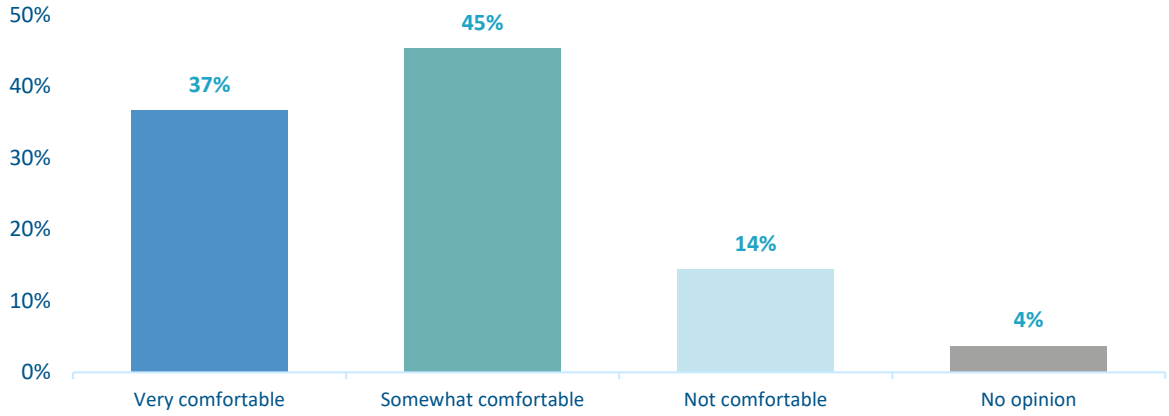


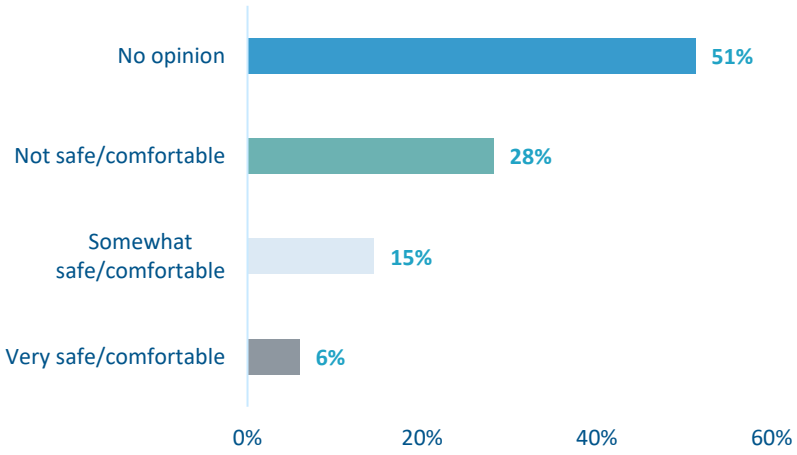
Figure 1-2 | Map 1 Existing and Planned Facilities

Based on the existing active transportation facilities provided within Smiths Falls, participants of the Online Survey were asked to comment on and/or rank their experiences using these facilities on a basis of safety, comfort and convenience. Key findings that illustrate local attitude towards current active transportation infrastructure and modes are shown below.

How safe or comfortable do you feel walking on existing Town roads and sidewalk infrastructure?



How safe or comfortable do you feel cycling on existing Town roads and cycling infrastructure?



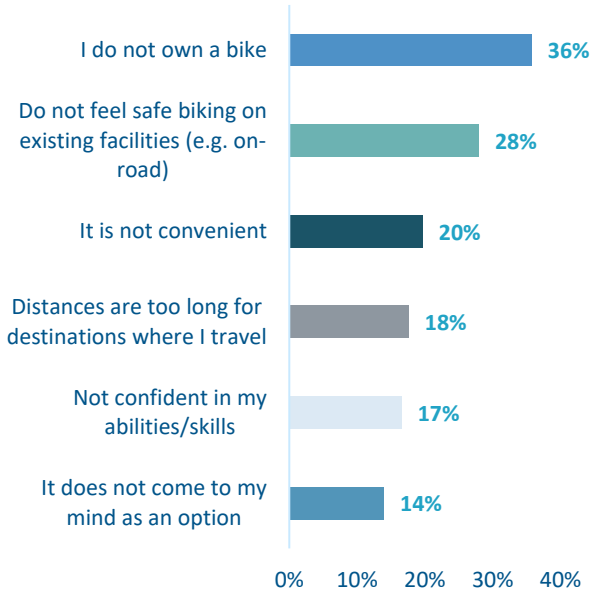
In which of the following situations do you feel the most comfortable when riding a bike?

8%	43%	48%	56%
Cyclists and vehicles share the road (e.g. signed bike route)	Cyclists have a dedicated space on-road (e.g. paved shoulder)	Cyclists are physically separated from vehicles (e.g. buffered paved shoulder, physically separated bike lane etc.)	Off-road multi-use trails

What are the main barriers for not walking in the Town more often?

34%	Conditions of sidewalks or trails
27%	Weather
25%	Lack of sidewalks or trails
22%	Intersection safety
18%	Distance to destinations

What are the top reasons not to cycle within the Town?



1.6 Vision and Goals for Active Transportation in Smiths Falls

The Active Transportation Plan contains a Vision Statement and set of corresponding goals that are intended to encourage and promote active transportation modes in Smiths Falls. The Vision Statement acts as a formal, aspirational statement that identifies what is important to a community, now and in the future. It provides a foundation for establishing the specific goals of the Plan. In order to implement the Vision Statement, a series of key goals have been identified based on the existing guidelines and plans as well as input from the community during the online survey, shown in the word cloud below.

Vision Statement

"Provide a safe, accessible and convenient active transportation network that connects major local and regional destinations, encourages diverse travel options and promotes a high quality of life for residents of all ages and abilities."

GOALS

1. Design a continuous and connected AT network with connections to key destinations such as schools, parks, trails employment centres and commercial areas by identifying routes and facilities that provide a comfortable and safe environment for users of all ages and abilities all-year-round. *[Making Active Transportation a Viable Travel Choice]*
2. Provide facility, project and initiative recommendations that leverage the Town's current and planned infrastructure investments. Guide future network improvements through a prioritized network implementation plan using efficiency of carrying out work with other planned projects, design guidance and funding strategies. *[Financial Sustainability]*
3. Encourage active transportation as a means to reduce the negative health effects caused by higher air pollution as a result of a higher proportion of motor vehicle trips. *[Healthy and Liveable Communities]*
4. Define programming and outreach initiatives that educate potential active transportation users, enhance the active transportation experience and provide opportunities to engage the community in active transportation activities. *[Support an Active Transportation Culture]*
5. Recognize opportunities to work proactively with partners, including the County of Lanark, on local and regional transportation network improvements including Trails. *[Make Active Transportation Convenient and Enjoyable]*
6. Develop a transportation network that is integrated with the Town's recreational, commercial and natural amenities, and supports a range of active transportation modes. Promote the development of new and expanded active transportation facilities in Smiths Falls' commercial core anchored by Beckwith Street and Lombard Street. *[Provide Tourism and Economic Growth Opportunities]*
7. Provide the means to continue the conversation about active transportation and provide opportunities for community involvement by identifying a network of committed and involved partners including staff, community members, stakeholders, local businesses and Council representing the community and all socio-economic groups. *[Community Involvement]*

Chapter Two

Network

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ACTIVE TRANSPORTATION PLAN

Chapter Two

2 Network

The recommended cycling routes/pedestrian linkages and facility types for a continuous and connected active transportation network in Smiths Falls provides the foundation of the Plan and is supported by policies and programming initiatives. The network builds on existing routes and facilities, regional and local trail systems, and routes proposed in other approved plans.

The following section outlines the process for how the network of proposed routes was developed and the facility type identification for the cycling network and proposed pedestrian links and trail connections.

The network as proposed is not intended to be static and unaltered. The network is shaped by a set of tools and resources that are intended to be used by staff and partners to guide the future decision making as new opportunities arise. The proposed network is flexible in that it can adapt to new routes and facilities as the Plan moves through the planning, design and construction stages.

2.1 Network and Project Development

The development of the Smiths Falls cycling network and subsequent identification of cycling and pedestrian projects was carried out as an iterative 5-step process and informed by input from the public, stakeholders, and Town staff. Each step with their corresponding outcome is outlined in below, with additional information provided in the following sections.

Table 2-1 | Steps to Develop the Cycling Network and Identification of Cycling and Pedestrian Projects.

1 Step 1: Existing Conditions	
Input	GIS Data received from the Town and consultation, Provincial, Regional and Municipal approved planning documents and input from stakeholders and staff
Assessment	Identify existing and planned facilities as well as routes under construction through document and data review including off-road trails (regional and local), on-road bicycle routes, paved shoulders, sidewalks and cycletracks.
Outcome	Map of Existing and Planned Facilities (Map 1)
2 Step 2: Route Selection Criteria	
Input	Input from Town staff, stakeholders, residents and project Team
Assessment	Identify a set of criteria to help select, assess, and refine routes to form part of the preferred cycling network. The route selection criteria are meant to be a guide to help achieve the vision and overall Plan goals.
Outcome	Selection Criteria for Cycling Routes and Pedestrian Links (see Table 2-2)
3 Step 3: Candidate Routes	
Input	Existing Conditions, desktop and field review of corridors, input from Town staff and stakeholders, 2021 Cycle Tourism Destination Assessment, On-road bicycle routes in Schedule B of Smiths Falls' 2016 Official Plan
Assessment	A proposed route is identified if a connection that touches on a sufficient number of route selection criteria (Step 2) or identified through the engagement process. Routes are identified to complete gaps in the existing and planned network and consider the appropriateness and suitability of the route.
Outcome	Map of Proposed Cycling Network (Map 2)
4 Step 4: Confirm Proposed Network and Identify Facility Type	
Input	Desktop review, input from Town staff and stakeholders, OTM Book 18 Cycling Facilities Nomographs for facility type.
Assessment	Review the potential for cycling facilities on the proposed routes including the proposed facility types while confirming the preferred cycling network. Review the potential for pedestrian facility implementation and if a combined cycling and pedestrian facility should be considered.
Outcome	Proposed Pedestrian Projects by Type (Map 3) Proposed Cycling Projects by Type (Map 4)

5	Step 5: Project Prioritization	
	Input	Asset Management Plan, information from Town staff, traffic volumes and significance of connection
	Assessment	Prioritize the identified projects into groupings of high, medium and low based on prioritization criteria and input from Town staff that coincides with the phasing of roadway projects.
	Outcome	Proposed Pedestrian Projects by Priority Phasing (Map 5) Proposed Cycling Projects by Priority Phasing (Map 6)

The selection criteria for cycling routes and pedestrian links as developed through consultation with Town staff, stakeholders and the public are established to help inform the selection of cycling routes and pedestrian facility links. The criteria is based on widely accepted planning and engineering guidelines and are meant to be used into the future as opportunities arise to see how any newly identified facilities best fit within the network. The route selection criteria are a guide and are set to help achieve the vision and overall Plan goals and are listed in Table 2-2.

Table 2-2 | Selection Criteria for Cycling Routes and Pedestrian Links

Criteria		Description
Desirable	Scenic & Attractive	Routes take advantage of scenic areas
	Comfortable & Safe	Reduces risk to users and provides comfortable facilities
	Conveniently Direct	Does not deviate between the origin and destination; route is fast for those who want to move quickly
	Topography	Route does not contain extended uphill or downhill segments at high grade
Connected	Commerce & Employment	Provides residents and visitors with connections to commercial and employment nodes
	Schools & Community Hubs	Provides connections to schools and community facilities
	Parks & Recreation	Provides connections to neighbourhood parks and recreation facilities such as Lower Reach Park, Centennial Park, and Duck Island
	Links Existing Natural Areas & Trails	Connects to existing natural areas such as the Rideau River, and to existing and planned trails

Criteria		Description
	Tourism	Connects to attractions such as the Rideau River, Rideau Canal Locks, and Canopy Growth Corporation, and encourages long-distance trips from other areas
	Services & Amenities	Facility is accessible by a convenient parking lot, and provides amenities such as bicycle repair stations, benches, water fountains, and washrooms
Logical	Easy to Follow	Logical, well signed, and minimizes the number of turns
	No Major Barriers	Avoids crossing roads with heavy traffic, and / or provides safe crossings when necessary
	Consistent	Facility type and presence of dedicated or signed cycling infrastructure is consistent along route
Cost Effective	Capital Cost	Proposed routes are feasible and appropriate in scale for the Town
	Sustainable	Locate, align, and design routes so they can be sustained over the long-term

Using the selection criteria as established in Step 2 proposed routes are identified to form a connected network filling in gaps, connecting key destinations, considering future planned road works and providing the priority routes as identified by the project team, Town staff and the public. The resulting proposed routes are identified in Figure 2-1.

Figure 2-1 | Map 2 Proposed Cycling Network

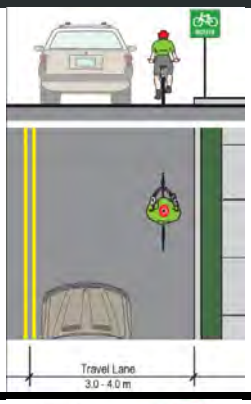
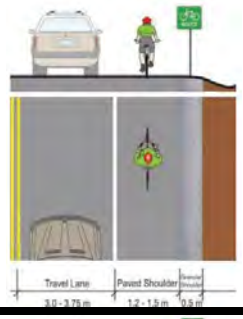
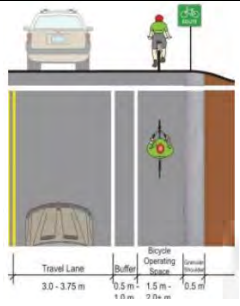
2.2 Project and Facility Type Identification

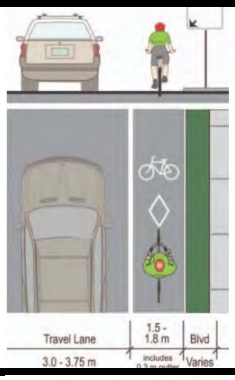
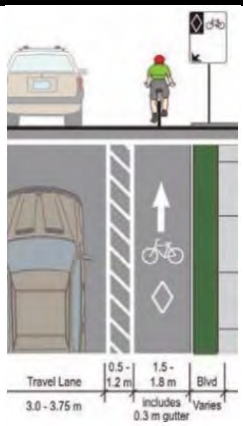
2.2.1 Understanding the Facility Types

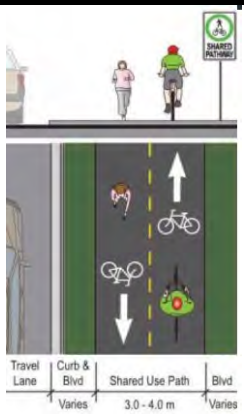
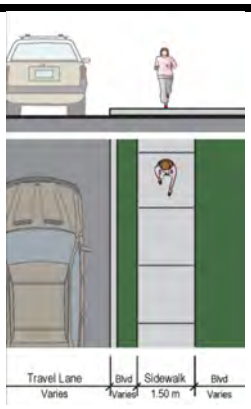
There are a number of facility types proposed as part of the Active Transportation Plan network development Active transportation facilities can generally be categorized as **on-road** or **off-road** facilities, with various subcategories based on users, level of separation, and street context.

On-road cycling facility types are often classified by their separation from motorized traffic. Users are generally more comfortable with increasing separation between the cycling facility and motorized traffic, which holds true in Smiths Falls based on the survey results. Paved shoulders can be implemented as a means of separating cyclists on rural roads (i.e. without curb and gutter) where budget and/or space do not allow for a fully separated facility. Table 2-3 provides a description of the different facility types available.

Table 2-3 | Facility Types

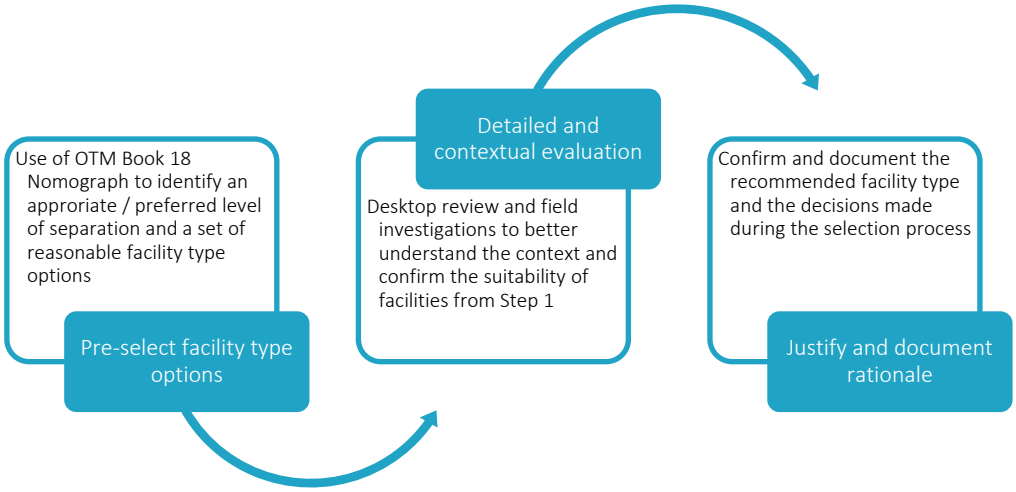
Facility Type	Cross Section	Description
Shared Space		A signed bike route is a shared facility that is formally marked by a green bike marker sign. The marker sign is intended to indicate to motorists that they should be aware of cyclists on the road and provides route confirmation for cyclists. Supplementary signage or pavement markings can be used such as “Share the Road” or painted sharrow symbols for wayfinding. Signed bike routes are only to be implemented on roadways with low motor vehicle operating speed, traffic volumes and truck volumes.
Paved Shoulder		Paved shoulders provide a designated space along the edge of the road. The shoulder is intended to be a priority space for cyclists and other active transportation users. The route should be signed as a bike route with supplementary markings and signage to denote that other users such as pedestrians may use the paved shoulder.
Buffered Paved Shoulder		Buffered paved shoulders provide horizontal separation between the shoulder and adjacent motor vehicle traffic. Buffered paved shoulders are suited to roadways with medium to high motor vehicle operating speeds and traffic volumes. It is recommended that buffer zones be implemented if there are more than 30 trucks operating on the route per hour.

Facility Type	Cross Section	Description
Bike Lane		A bike lane is a portion of a roadway which has been designated for the exclusive use of cyclists through the use of pavement markings and signage. Typical applications for bike lanes are on arterial or collector roadway where there are higher traffic volumes and/or travel speeds and should typically be applied to both sides of the street.
Buffered Bike Lane		A buffered bike lane has the same general application as a bike lane, the difference is that where a bike lane is typically placed adjacent to the curb, their location may shift if adjacent to a parking lane and additional buffer space may be provided to have a clear 'door zone' or for additional separation where volumes are very high.
Cycletrack		A cycletrack combines the user experience of a separated trail or multi-use path with the on-street infrastructure. It is physically separated from motor traffic with either a vertical or horizontal separation and is also distinct from the sidewalk space. The space is exclusively to be used by cyclists and can be one-way or two-way. They can also be at either the road level or sidewalk level. Cycletracks offer a high level of security for cyclists and demonstrate that bicycles are part of the road network by dedicating a space to them. Cycletracks are used in an urban setting where volumes and speeds are high as well as there being anticipation of high cycling volumes.

Facility Type	Cross Section	Description
In-boulevard Multi-use Path		In-boulevard multi-use paths are physically separated from motor vehicle traffic by a boulevard between the path and motor vehicle traffic lane. The multi-use path is constructed adjacent to the roadway but within the road right-of way. They are shared among pedestrians, cyclists and other active transportation users. In-boulevard facilities provide the highest level of separation for cyclists and are typically used when motor vehicle operating speed and volumes are very high. The increased separation can improve the comfort level for all users of the facility. The path is typically 3.0 to 4.0 metres wide. If there are significant constraints such as utilities or major natural features, a two-way shared path may be narrowed down to 2.4 metres such that costly construction activities can be avoided.
Off-road Trail		Off-road trails are located outside of a road right-of-way are typically found within hydro corridors, forest tracts and parks. These connections function as recreational facilities or convenient connections between core cycling routes. Similar to an in-boulevard trail, an off-road trail is intended to be shared between cyclists, pedestrian and other non-motorized users. Off-road trails could be a variety of surface types depending on the location and context and surrounding land uses. Natural surfaces or crushed limestone are appropriate surface types. If the demand for trail usage is high or if the trail forms part of a larger trail system, consideration could be given to pave the trail. In the planning and design of off-road trails, due diligence should be completed to ensure AODA compliance and environmental impacts are analyzed and mitigated.
Sidewalk		Located within the boulevard space a sidewalk provided a dedicated space for pedestrians. So as to be in compliance with the AODA sidewalks should be a minimum width of 1.5m to allow for a mobility device to turn around. The surface is typically concrete and on roads with on-street parking or a cycling facility, the curb to sidewalk spacing should be 1.0m to allow for snow storage. 2.0m is recommended for arterial roads.

2.2.2 Defining the Facility Types in Smiths Falls

A facility type for a proposed route is identified based on the pre-selection nomographs in OTM Book 18: Cycling Facilities. Prior to having a better understanding of the surrounding context, facility types are determined from the annual average daily traffic volumes (AADT) and posted speed limit on a proposed cycling route for safety and comfort purposes. In other words, roadways with higher traffic volumes and higher posted speed limits would constitute the implementation of cycling facilities that have an increased level of separation from traffic. A review of the surrounding context is then carried out to identify at a planning level whether the recommended facility type would be feasible for implementation based on a multitude of factors, such as existing road right-of-way, presence of vegetation and driveways, utility pole locations, etc. A summary of the 3-step facility selection process is provided below.



There are two types of pre-selection nomographs that are to be used depending on location and context. Given the urban / suburban context of Smiths Falls based on Schedule A of the Official Plan and indicated by mixed uses, closely spaced driveways, on-street parking and pedestrian activity, the facility selection guidance for urban / suburban environments was used. Paved shoulders and buffered paved shoulders were still recommended in areas that have no concrete curb or have gravel shoulders. In addition, this criteria for cycling facilities was applied to pedestrian facilities in instances where a proposed facility is intended to be shared between pedestrians and cyclists given the limitations and barriers of the surrounding context. The recommended facility type out of OTM Book 18 for each project was treated as the minimum facility type required provided that the surrounding context is able to accommodate such a facility without the requirement to purchase property. In cases where a lower separation level than that recommended based on OTM Book 18 was proposed due to limitations in the road right-of-way, supplemental actions were suggested to ensure user safety and comfort is at the forefront. For example, proposing a potential reduction in the posted speed limit or other traffic calming measures and the use of delineator posts. The selection nomograph tools from OTM Book 18 are shown in Figure 2-2. The results of the corridor review is the confirmation of the

proposed routes and facility types as shown in Figure 2-3 for pedestrian projects and Figure 2-4 for cycling projects.

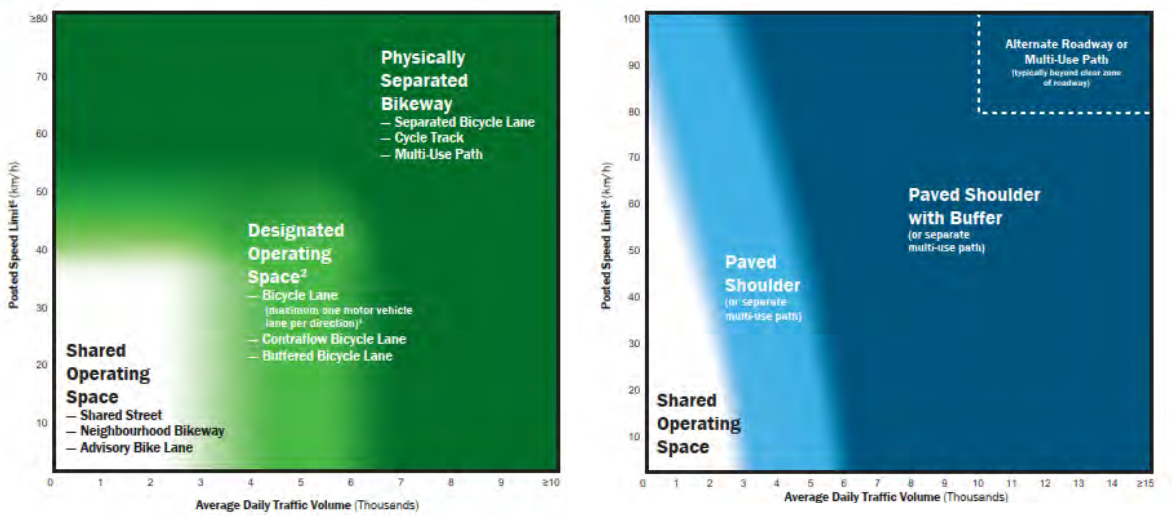


Figure 2-2 | OTM Book 18 Facility Pre-Selection Nomographs, Urban/Suburban Context (left) and Rural Context (right)

Figure 2-3 | Map 3 Proposed Pedestrian Projects by Facility Type

Figure 2-4 | Map 4 Proposed Cycling Projects by Facility Type

2.2.3 Summary of Active Transportation Network Facilities

The proposed Smiths Falls active transportation network in total, including cycling and pedestrian facilities, for municipal and county roads and a provincial highway, is comprised of 29.7 km; 22 km of which would be new infrastructure and 7.7 km of which would be shared space. When adding this to the existing facilities, the overall network would have a total of 144.9 km of cycling and pedestrian facilities. A summary of the network breakdown by facility type is shown in Table 2-4.

Table 2-4 | Summary of Smiths Falls Active Transportation Network

Facility Type	Existing KM	Proposed KM	Total KM
Shared space (signed route)	0	7.69	7.69
Paved shoulder	1.55	1.61	3.16
Buffered paved shoulder	0	3.27	3.27
Bike lane	0	4.98	4.98
Buffered bike lane	0	4.95	4.95
Cycle track	0.82	2.05	2.87
Off-road multi-use path	11.01	1.79	12.80
Off-road trail	19.82	0	19.82
Sidewalk	81.99	3.32	85.31
Total KM	115.19	29.66	144.85

The recommended active transportation network is intended to be flexible such that if new opportunities arise it can be accommodated within the Plan. This could include the addition or routes or revision of facility types as the Plan evolves and development within the Town occurs over time.

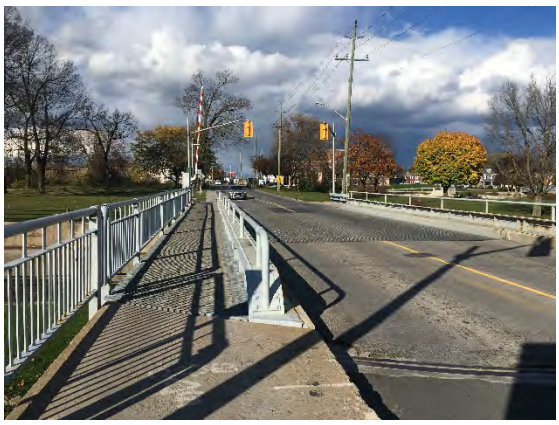
2.3 Other Network Considerations

2.3.1 Network Barriers

The Smiths Falls Bascule Bridge, shown in Figure 2-5, was built by the Canadian Northern Railway to transport the rail line over the Rideau Canal. Once a rolling lift system, the Smiths Falls Bascule Bridge is recognized as a National Historic Site of Canada and is permanently raised. The permanently raised Bridge has created a direct missing link in the Cataraqui / Trans Canada Trail running through Smiths Falls.

Figure 2-5 | Smiths Falls Bascule Bridge

In addition, Smiths Falls has two swing bridges owned and operated by Parks Canada as shown in Figure 2-6; one located on Abbott Street that forms part of the Detached Lock Station and one located on Old Slys Road that forms part of Old Slys Lock Station. While vehicles and pedestrians have their designated facilities to cross these swing bridges, cyclists will need to dismount their bikes and walk across if they are to not travel in mixed traffic as these bridges cannot be modified.



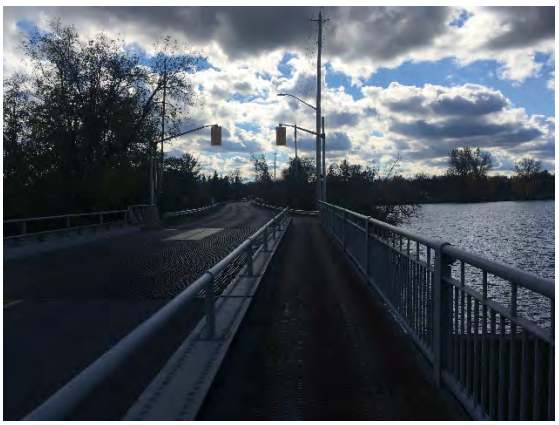


Figure 2-6 | Abbott Street swing bridge (left) and Old Slys swing bridge (right)

2.3.2 Rail Right-of-Way Protection

Decommissioned rail lines are ideal corridors to repurpose as cycling facilities. They can be very cost efficient as they typically have a structural base, a protected right of way and the vegetation has been cleared. In addition, in some instances, there can be existing structures in place at barriers such waterways and/or highways. As a cycling facility, these decommissioned rail corridors also have a relatively flat grade which makes them suitable for all ages and abilities and give them the potential to be AODA compliant.

Specific rail corridors within the Town boundary that should be considered includes the former CN line that is known as the Cataraqui Trail / Trans Canada Trail as the trail is unpaved and is in various states of repair, which cannot accommodate all trail users. It has been mentioned within the Smiths Falls' 2019-2022 Strategic Plan to extend the Ottawa Valley Recreational Trail to the Railway Museum. The Railway Museum of Eastern Ontario is adjacent to the Catarqui Trail / Trans Canada Trail and the Ottawa Valley Recreational Trail currently ends in the Township of Montague, located north of Smiths Falls.

2.3.3 Pedestrian Crossovers

Pedestrian crossovers were introduced in the updated OTM Book 15: Pedestrian Crossing Treatments and provides a crossing of a roadway where the pedestrian has the right-of-way in any stretch of roadway, not just at an intersection. There are four different types of pedestrian crossovers and the type selected is based on the volume and speed of the road with Type A being a typical traffic signal light. Figure 2-7 shows the other three types of crossings.

Figure 2-7 | Pedestrian Crossing Types (source: City of Oakville)

Pedestrian crossovers provide the opportunity to connect trails or defined routes that cross roadways without users needing to travel out of their way to a signalized intersection to have a defined crossing. As well, a pedestrian crossover can be used to adjoin any existing infrastructure on the opposite side of the road as an alternative to installing a second sidewalk on a road that would front a key destination. Pedestrian crossovers can be beneficial in instances where there is a limited road right-of-way or capital budget to provide a second sidewalk.

As part of the project identification pedestrian crossovers were suggested at ten (10) locations and identified in Figure 2-4 (Map 3) as listed below.

- Old Slys Road / Smiths Falls Curling Club
- Queen Street / Hershey Drive
- Ferrera Drive / Abbott Street S
- Broadview Avenue E / John Street
- Jasper Avenue / Vincent Street
- Elmsley Street N / Maple Avenue
- Elmsley Street N / Russell Street E
- Brockville Street / Ross Street

- Abbott Street N / Water Treatment Plant
- Abbott Street N / Swing Bridge (north side)

Many municipalities are now implementing pedestrian crossovers as part of their pedestrian safety programs with the intention of covering proposed crossings within typically a 10-15 year timeframe. Pedestrian crossovers were suggested at a number of locations during the engagement for the Plan development and while a number of crossings have been proposed as part of the plan, additional crossing locations would be a strong benefit for the community and active transportation users providing safe crossings where out-of-way travel is not required.

Where pedestrian crossover installations may be within the road allowance of County roads, the County of Lanark may require a road occupancy permit be obtained to commence any work.

Recommendations

The route selection criteria identified should be used when new routes are being considered to identify how best to integrate new routes into the planned network. In addition, OTM Book 18: Cycling Facilities should continue to be used by staff and its partners for new routes to select the recommended facility type.

When opportunities to "upscale" recommended facilities is possible due to planned road reconstruction these opportunities should be leveraged so as to provide additional separation between road cyclists and road users.

Adopt the recommended cycling and sidewalk projects as shown in Figures 2-4 (Map 3) and 2-5 (Map 4) for the development of a connected and continuous network.

When feasible Smiths Falls should consider purchasing and protecting abandoned rail lines within the Town limits for future network connectivity through off-road trails (e.g. extension of Ottawa Valley Rail Trail).

Where there are budgetary and right-of-way constraints for a second sidewalk, consideration should be given to installing pedestrian crossovers to increase the network connectivity.

Consider developing a Pedestrian Program for identifying key locations within Town where Pedestrian Crossovers would be beneficial.

Chapter Three

Outreach

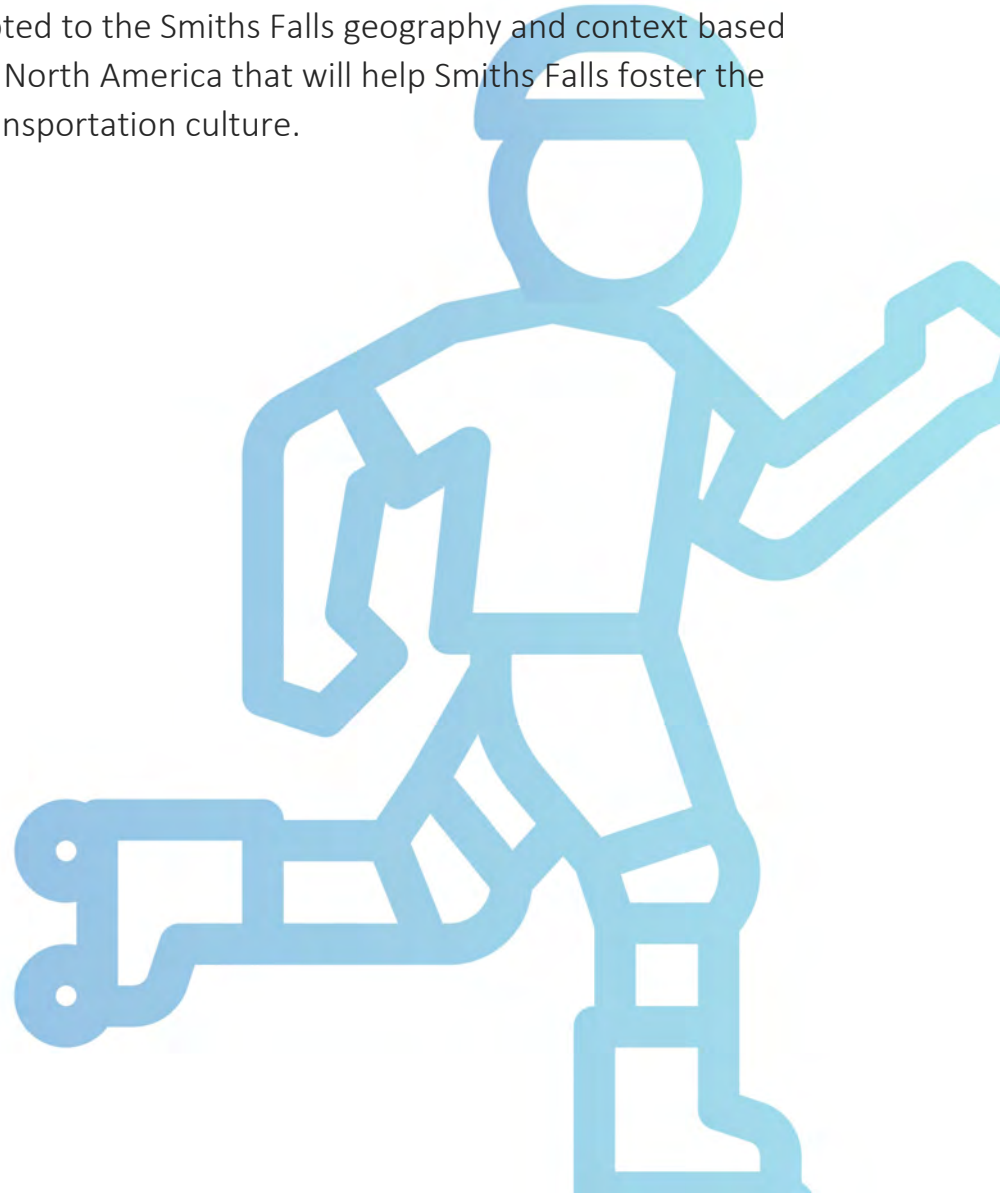
ACTIVE TRANSPORTATION PLAN

Chapter Three

3 Outreach

To create a culture of active living infrastructure initiatives are supported by programs and partnerships that raise awareness and promote active transportation. To achieve the vision for active transportation to be a viable travel mode choice in Smiths Falls encouraging behaviour change, creating community awareness and educating residents on facilities and amenities available, how to share space with all modes and proper cycling techniques and skills is essential in supplementing the proposed facilities.

The key to having successful programs is maintaining existing and forming new lasting partnerships with the surrounding communities, key agencies, local businesses and local interest groups. The following sections outline recommended programs and initiatives adapted to the Smiths Falls geography and context based on best practices throughout North America that will help Smiths Falls foster the creation of a strong active transportation culture.



3.1 Partners

Local community partnerships existing and new are key in supporting the implementation of the Active Transportation Plan in Smiths Falls. For the promotion and outreach activities, Table 3-1 provides a brief description on some of these relationships to grow and establish as the plan is implemented.

Table 3-1 | Suggested Partners for Outreach and Programming

Partner	Role
County of Lanark	Coordination of connections and initiatives that go beyond the Smiths Falls town limits (e.g. regional maps and route connections.) Coordination of projects on County Roads within Smiths Falls where facilities are recommended.
United Counties of Leeds and Grenville	Coordination of connections and initiatives that go beyond the Smiths Falls town limits (e.g. regional maps and route connections.)
Leeds, Grenville and Lanark District Public Health	Promote the connection between health and active transportation and promote safe walking and cycling practices and policies to schools, workplaces, and communities. Help promote events through their social media platforms to reach a broader population.
Smiths Falls Police Service	Promote safe road use for all users. Deliver educational and public awareness messaging and provide help with education events and initiatives (e.g. Family Bike Days). Provide data on collisions or citations to assist with monitoring initiatives and project implementation.
School Boards Upper Canada District School Board (UCDSB), Catholic District School Board of Eastern Ontario (CDSBEO), and Le Conseil des ecoles catholiques du Centre-Est	Provide input on opportunities to partner with local schools who may be interested in participating in local educational events, getting students involved in school challenges.
Local Businesses (e.g. Pedal & Paddle, 4 Degrees Brewery, Independent Grocer, Canopy Growth Corporation, Smiths Falls Downtown Business Association)	Provide trip-end amenities (i.e. washrooms, repair stations, rest areas) to support active transportation, provide bike parking, contribute through sponsorship or donations of prizes for local events and map production.
Local Advocacy Groups / Organizations (e.g. Eastern Ontario Active Transportation Network (EOATN) ,	Promote and volunteer at local planned events (e.g. providing leaders for community rides, running local bike repair workshops, handing out promotional bike gear, etc.)

Partner	Role
Ontario Active School Travel, Smiths Falls Public Library, Cycling Without Age, Smiths Falls District Collegiate Institute Student Council, Smiths Falls Child Development Centre, Ontario by Bike)	

3.2 Action Plan

The following actions have been identified and are recommended to be implemented over the next five-year timeframe. The intention of these initiatives are to create community awareness, demonstrate the benefits of active transportation and educate users of all ages on proper techniques for cycling but also what active transportation options exist such that they feel comfortable choosing to use active transportation as the choice of travel.

1

Establish and Active Transportation Committee

Establishing a committee where lessons and best practices can be shared, and where resources can be pooled to maximize the impact of new programs would help Smiths Falls to build its own cycling culture more quickly. Committee members could be representatives that were engaged as part of the Smiths Falls Active Transportation Plan. It is suggested that this committee have sub-committees or working groups focused on different areas (e.g. education, encouragement) to ensure that the broader committee can focus on building partnerships and discussing "big picture" topics.

Potential Partners:

- Non-profit/Volunteer Organizations
- Smiths Falls Committees of Council
- Local businesses
- Smiths Falls Police Service
- Leeds, Grenville and Lanark District Public Health
- School Board Representatives

INSPIRATION

- Essex County CWATS Committee (here)
- Pelham Active Transportation Committee (here)

Key Outcome

A Terms of Reference is developed to guide the objectives for the Committee and guide future efforts and membership. Committee provides consistency in delivery of active transportation initiatives throughout the Town and guidance on best practices and lessons learned from past projects.

$

EST. BUDGET

Volunteer positions

2 Develop a Comprehensive Wayfinding Strategy and Signage Plan

A wayfinding strategy consists of a system of signs, pavement markings and other tools to help people walking or cycling navigate their way to destinations along the active transportation network regardless of their familiarity with the area. Wayfinding does not simply consist of the typical "Bike Route" sign, the signage design should help provide direction to popular destinations or amenities, as well as provide information about distance, area tourism/feature information (e.g. history of an area), promote healthy or green habits by indicating how many calories are burned or greenhouse gases saved, etc. An effective wayfinding strategy gives a user confidence that they know how far (in either time or distance) it will take to get to their destination. The design, materials, symbology and placement of the signages are consistent so as to add to the overall culture and experience of using the facilities.

Potential Partners:

- Smiths Falls Traffic Advisory Committee / Accessibility Advisory Committee / Active Transportation Advisory Committee
- Local Businesses
- Eastern Ontario Active Transportation Network
- Discover Leeds Grenville

INSPIRATION

- Wasaga Beach AT Wayfinding Plan (here)
- Every Metre Counts – "It's Closer Than You Think" map (here)

Key Outcome

A wayfinding strategy that clearly defines the information to include for different types of facilities, graphics for signage production and design guidance on placement of signage.

EST. BUDGET

$20,000 for development of wayfinding strategy, $10,000 annually for production and installation of signage

3 Increase Participation in Active School Travel Program

An initiative with local school boards to implement a program that encourages greater active transportation adoption among students. The program may include: cycling workshops (i.e. bike rodeo), promotional campaigns targeted towards students, and developing school travel plans for each elementary and high school. Communities across Ontario have experienced success with promoting Active School Travel. Having Active School Travel programs at elementary schools is an effective way of setting

	behaviour change in the community through the younger generation and sets up life-long habits.
Potential Partners:	- School Boards and local schools (typically done through School Councils) - Leeds, Grenville and Lanark District Public Health - Smiths Falls Police Service
INSPIRATION	- Active & Safe Routes to School throughout the Counties of Elgin, Middlesex, Oxford, and the cities of London and St. Thomas (here)

Key Outcome

An action plan that responds to the challenges and opportunities for promoting active school travel. Typically a pilot project for 1 or 2 years and developed in consultation with Ontario Active School Travel (funding available) through the schools and School Councils; which can be rolled out to other schools in the community.

$ EST. BUDGET

$10,000 per year for advertising materials, purchase of prize packs for participating students, and installation of temporary low-cost infrastructure improvements near selected schools for the pilot program

4

Collect data to support evaluation of the Active Transportation Plan Implementation

Assessing the ATP implementation against a set of evaluation measures will help the Town to adjust priority of future projects and rationalize funding support requests and resource allocation. A database, which can be managed in an excel spreadsheet or a geographic information system (GIS), can be considered for use to keep track of the Town's active transportation facility inventory and utilization data.

The AT facility utilization data can be acquired from other organizations such as the Smiths Falls Police Service and the Health Unit. In addition, it is recommended that the Township consider investing in the installation of counters at key locations along cycling routes and trails to capture the number of cyclists and pedestrians. Counters that display the tally can be an easy and cost effective way to provide awareness to the community on a facilities usage. An annual in-person count program is also recommended by partnering with a high school to offer volunteer hours for students who participate in the counting program.

Potential Partners:	- Smiths Falls Active Transportation Advisory Committee - School Boards and local schools - Leeds, Grenville and Lanark District Public Health - Smiths Falls Police Service
INSPIRATION	- City of Vancouver – Annual Transportation Survey (here) and Report Card (here) - Trail User Counters – City of Owen Sound (here)

Key Outcome

Installation of counters and annual database of user counts to support budget requests and monitor the Active Transportation Plan success areas. Counters with a visual display also serve as promotion of the facility and increases awareness of potential new users.

$ EST. BUDGET

$2,000 per year for the installation of two (2) counters

5 Bike Rodeo at Schools and Special Events

Hands-on events consisting of fun and engaging activities that teach participants proper cycling behaviour. Workshops are hosted in local schools and at events held locally. It is a program which makes cycling accessible for all demographics. By educating children safe bicycle use within the community, cycling can become a source of transportation and fun while promoting the health and safety of all members of the community.

Potential Partners:

- School Boards and local schools
- Local Advocacy and Interest Groups
- Smiths Falls Police Service
- Local Business

INSPIRATION

- City of Vancouver – Annual Transportation Survey (here) and Report Card (here)
- Trail User Counters – City of Owen Sound (here)
- Cariboo Memorial Recreational Complex at Williams Lake, British Columbia (here)
- Cycling into the Future at Waterloo, Ontario (here)

Key Outcome

Promotes safe bicycling habits to reduce collisions/accidents involving elementary school students.

$ EST. BUDGET

$1,000 per year for insurance and materials

6 Open Streets Events

Open Streets opens up the streets for cycling and active modes of transportation while closing it off to motorized vehicles. They typically include a series of active programming events and activities and they remind local residents of the valuable potential that streets

	hold as a space for active travel and recreation. Events can be organized on a recurring weekly basis or organized as one large event during warmer months.
Potential Partners:	- Local Advocacy and Interest Groups - Local Businesses - Leeds, Grenville and Lanark District Health Unit - Smiths Falls Police Service - Cycling Without Age
INSPIRATION	- NCC Weekend Bikedays (here) - Peterborough Pulse – Open Streets (here)

Key Outcome

An event that encourages active transportation users of all ages and abilities to come out and experience Smiths Falls.

$ EST. BUDGET

$2,000 for initial purchase of signage, utilize existing traffic barriers. Could be through sponsorship of local businesses.

7 Inventory and purchase of bike racks for bike parking program

An inventory of the existing bike parking should be taken to understand where there are gaps. Providing bike parking at the key destinations as identified ensures it is easy to make the trip to that destination.

By purchasing bike racks in bulk the Town can offer local businesses the opportunity to install high-quality bike parking at a low cost while maintaining a consistent aesthetic and quality to the available bike parking in the community. Bike racks can be customized to feature the Smiths Falls logo, can be designed by local artists or they could be chosen to reflect the character of the community. Adding capacity for 15 to 25 bikes per year would have a significant impact on the available parking in the community.

Potential Partners:	- Bike Gear Supplier - Local Businesses
INSPIRATION	- Oakville – Downtown Bike Corrals (here) - Thunder Bay – Bike Rack Program (here)

Key Outcome

The result is an inventory of existing bike parking, schedule for bike parking implementation and plan to update any insufficient bike parking structures that provides the plan to install consistent and aesthetic bike racks that add to the culture and aesthetics of the area. Users gain confidence that there will be somewhere to park when they arrive at their destination thereby providing support for active

$ EST. BUDGET

$8,000 (assumes 10 five-ring bike racks)

transportation as a travel choice for users and businesses.

8 Community-based bike sharing program

An initiative and partnership with local bike groups (e.g. Eastern Ontario Active Transportation Network (EOATN), Ottawa Valley Cycling and Active Transportation Alliance (OVCATA)) to establish a bike donation/share program for those residents that may not have access to a bike. Residents who are willing to donate or share bikes with other residents register their bikes in the "bike pool" managed by local bike group or businesses with Town support. Residents who do not own or do not have the means to buy a bike can borrow a bike when requested. "Payment" could take the form of volunteer duties that contribute to the community. There are also initiatives that have donated bikes refurbished by the volunteer organization and donate them back into the community.

Potential Partners:

- Bike Gear Supplier(s)
- Local Businesses
- Non-profit / Volunteer Organizations
- School Boards

INSPIRATION

- OVCATA Bike Bank (here)

Key Outcome

A pool of bikes available for all residents, including students and children to provide equal opportunity amongst the community.

$ EST. BUDGET

Potential staff time resources to manage the "bike pool"

9 Earn a bike program

Initiative to provide youth and other community members with the training and skills necessary to build and maintain a quality, working bike. 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.

Potential Partners:	- Bike Gear Supplier(s) - Local Businesses - Non-profit / Volunteer Organizations - Schools and School Boards
INSPIRATION	- Earn-a-Bike Program –Bike Community Bike Shop, City of Peterborough (here)

Key Outcome

Provides opportunities for residents to earn a bike, contribute back to other areas within the community and learn skills to maintain their own mode of transportation. Can be run in coordination with the Community-based bike sharing program.

$ EST. BUDGET

Potential staff time

10

Expand education and awareness of active transportation laws and by-laws

Changes to the Ontario's Highway Traffic Act and local by-laws occur without educating road users as to how they apply to them and how their behaviours should change. Focusing on a select number of these changes annually help educate all users of the road. Examples include: who has the right of way at different types of pedestrian crossings, where can a pedestrian cross and have the right of way and the 1 metre safe passing rule. Instituted in the Ontario Highway Traffic Act in 2015; drivers and cyclists alike still do not fully understand this rule whereby a motorist is to provide 1 metre of space between their vehicle and a person on a bike when passing. The Township and police departments (OPP) both have a role to play in ensuring that people have a better understanding of the requirements under the law.

Potential Partners:	- Local Schools and School Boards - Smiths Falls Police Service - Non-profit / Volunteer Organizations - Local Advocacy Groups - Active Transportation Advisory Committee - County of Lanark
INSPIRATION	- Peterborough County – A Metre Matters campaign (here) - Ottawa Police Service – Sonar electronic device

Key Outcome

Development of a webpage to provide comprehensive and east-to-read information regarding transportation laws / by-laws. This results in a broader understanding by all road

$ EST. BUDGET

$500 annually for printing informational materials and running social media

users on the rules of the road and how to share amongst different modes.	ads with existing campaigns

11

Trip-end amenities and Hubs

"Rest Areas" provide active transportation users on the network amenities such as bicycle parking, benches, water fill-up stations, bike repair stations, charging stations, waste receptacles and washrooms such that they can feel comfortable in extending their trip beyond their comfort zone. Leveraging existing key destinations with established public amenities such as libraries, parks and recreation centres help with cost effective implementation. Level of service and what amenities are needed at a "Rest Area" can be determined based on the estimated visit frequency of users, potential needs of various types of users and available existing amenities in the vicinity area.

Working with local businesses, provincial and county agencies can help identify some of the best locations for locating "rest areas". A warrant checklist can be developed to identify the distance from other "rest areas" and available area amenities to develop which amenities should be added.

Potential Partners:

- Local businesses
- Accessibility Advisory Committee
- Lanark County Tourism Association
- Parks Canada

INSPIRATION

- National Capital Commission (NCC) Bistro by SJAM in support of Weekend Bikedays (here)
- Cyclist stops along Jacques-Cartier Street promenade, Gatineau (here)

Key Outcome

Development of a warrant checklist to verify which amenities are required at selected locations and the implementation of "rest areas" at key locations on the network.

$

EST. BUDGET

$3,000 to 15,000 depending on the amenities provided. Budget $5,000 annually

12

Organize community rides and walks

Hosting regular community rides / walk events can be an effective method to connect with individuals and encourage behaviour change. 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 Smiths Falls actively. The community rides and walks should be held on a regular basis and designed as family friendly social events. These events also provide the Town with a great opportunity to educate on elements of active transportation and promote what is being done in the community for active transportation. Incentives for attendees, including discounts or giveaways at local restaurants, cafes or cycling accessories like lights, bells etc. can be made available for participants.

Potential Partners:

- Local businesses
- Leeds, Grenville and Lanark District Health Unit
- Lanark County Tourism Association
- Local Advocacy Groups

INSPIRATION

- Tour de Whitewater held by the Westmeath District Recreation Association (WDRA) (here)
- Windsor-Tecumseh Slow Ride (here)
- Jane's Walk at Ottawa Architecture Week (here)

Key Outcome

An opportunity to provide promotion and education on key active transportation initiatives and safety measures and developing a sense of community for active transportation users of all abilities.

$

EST. BUDGET

$1,000 for insurance and promotional materials

13

Cycle skills training

An annual sum of money to train and maintain certified cycling instructors to run instructional courses that teach interested cyclists of proper cycling behaviour etiquette and behavior. Courses offered should be based off the CAN Bike Level 4 curriculum. While dependent on the size of the municipality and the availability of financial resources, it is suggested that the program begin with the hiring of 2 certified instructors and aim to increase to 6, after 3 years.

Potential Partners:

- Leeds, Grenville and Lanark District Health Unit
- Lanark County Tourism Association

	- Local Advocacy Groups
INSPIRATION	- CAN bike courses (here) - Safe Cycling Thunder Bay (here)

Key Outcome

Provides a valuable community resource to help educate and encourage more residents to consider cycling particularly beneficial in getting less experienced riders more comfortable.

EST. BUDGET

$1,000 to $2,000 for training materials

14 Active Transportation Coordinator

While the programs identified in this report are to help generate momentum towards building a stronger active transportation culture in Smiths Falls and they are to be developed in such a way as to capitalize on potential partnerships, without a centralized resource to build this capacity and continue the developing and maintaining the partnership relationships, the expansion of these of these programs are unlikely to succeed.

Potential Partners:	- County of Lanark
INSPIRATION	- Town of Saugeen Shores has had success through hiring a Bicycle Community Coordinator for the last four years

Key Outcome

A part-time Active Transportation Coordinator position ensures that programs can be delivered in a coordinated manner. Without an Active Transportation Coordinator, the implementation of these programs would need to be carried out with dedicated staff resources and a significant level of volunteer efforts to succeed.

EST. BUDGET

$12,000 per year for wages

3.3 Supporting and Implementing the Action Plan

As the demand for active transportation continues to grow, consideration should be given to increasing resources and budget to support the proposed action item as identified in this section. The proposed outreach initiatives are to support the development and promote having an active transportation culture in Smiths Falls.

The following tables summarize and outline the proposed budgets for the next five years. The order the items are listed in the table are by priority. Should the full budget not be available to implement the full Action Plan within a given year, the items at the bottom could be deferred to

the next year. The budget for the complete Action Plan is $188,500, with an average annual budget of $37,700 throughout the 5-year timeframe.

Municipal planning documents are typically updated every 5-10 years. It is recommended at the time of the next ATP update that the outreach initiatives are reviewed to identify lessons learned, successes and what worked for the community such that they can be adjusted in the next plan.

Table 3-2 | Summary of Suggested Outreach Actions and Budget for Year 1

Suggested Action	Annual Cost
Active Transportation Coordinator	$12,000
Develop Monitoring and Reporting Program, install 2 counters	$3,000
Create an Active Transportation Advisory Committee	N/A
Development of Active School Travel Program	$10,000
Community-based Bike Share/Donation Program	N/A
Purchase Bike Racks	$8,000
Develop Earn-a-Bike Program	N/A
Expand Education and Awareness	$500
Total	$33,500

Table 3-3 | Summary of Suggested Outreach Actions and Budget for Year 2

Suggested Action	Annual Cost
Active Transportation Coordinator	$12,000
Develop Cycling and Walking Wayfinding Signage	$20,000
Monitoring Program - Install 2 Counters	$2,000
Bike Rodeo at Schools and Special Events	$1,000
Trip-end Amenities and Hubs	$5,000
Open Streets Events	$2,000*
Purchase Bike Racks	$8,000
Community-based Bike Share/Donation Program	N/A
Earn-a-Bike Program	N/A
Organize Community Rides and Walks	$1,000*
Expand Education and Awareness	$500
Total	$51,500

**potential cost savings through sponsorship opportunities.*

Table 3-4 | Summary of Suggested Outreach Actions and Budget for Year 3

Suggested Action	Annual Budget
Active Transportation Coordinator	$12,000
Install Signage as Part of Wayfinding Strategy	$10,000
Bike Rodeo at Schools and Special Events	$1,000
Bike/Trails Hubs at Key Locations	$5,000
Open Streets Events	$2,000*
Organize Community Rides and Walks	$1,000*
Community-based Bike Share/Donation Program	N/A
Earn-a-Bike Program	N/A
Expand Education and Awareness	$500
Total	$31,500

**potential cost savings through sponsorship opportunities*

Table 3-5 | Summary of Suggested Outreach Actions and Budget for Year 4

Suggested Action	Annual Budget
Active Transportation Coordinator	$12,000
Maintain Monitoring and Reporting Program (install 2 counters)	$2,000
Install Bike Racks	$8,000
Bike Rodeo at Schools and Special Events	$1,000
Organize Community Rides and Walks	$1,000*
Bike/Trails Hubs at Key Locations	$5,000
Open Streets Events	$2,000*
Community-based Bike Share/Donation Program	N/A
Earn-a-Bike Program	N/A
Expand Education and Awareness	$500
Total	$31,500

**potential cost savings through sponsorship opportunities.*

Table 3-6 | Summary of Suggested Outreach Actions and Budget for Year 5

Suggested Action	Annual Budget
Active Transportation Coordinator	$12,000
Maintain Monitoring and Reporting Program	$2.000
Install Signage as Part of Wayfinding Strategy	$10,000
Bike Rodeo at Schools and Special Events	$1,000
Bike/Trails Hubs at Key Locations	$5,000

Suggested Action	Annual Budget
Organize Community Rides and Walks	$1,000*
Open Streets Events	$1,000*
Community-based Bike Share/Donation Program	N/A
Purchase Bike Racks	$8,000
Earn-a-Bike Program	N/A
Expand Education and Awareness	$500
Total	$40,500

**potential cost savings through sponsorship opportunities.*

Recommendations

Smiths Fall consider establishing an Active Transportation Coordinator part-time position and hire this individual on an annual basis (March-October) to coordinate and deliver the recommended outreach initiatives.

Staff should consider carrying out the annual action plans as identified to encourage behaviour change, enhance community awareness and provide education to support the Active Transportation Plan and proposed infrastructure implementation.

Prior to updating the ATP over the next five years, staff should monitor the outreach initiative to identify which have resulted in the highest and lowest success rates for the community.

Chapter Four

Implementation Plan

wsp

ACTIVE TRANSPORTATION PLAN

Chapter Four

4 Implementation Plan

To achieve the long-term vision to make Active Transportation a viable transportation choice in Smiths Falls, significant financial investment and supportive resources will be needed to start implementing the plan. The strategies and recommendations of the plan are intended to inform day-to-day decision making to support the development of an active community.

The following sections provide the phased implementation strategy for infrastructure and supporting policy and planning processes. While the focus of the plan will be towards the short and medium terms (up to the next 10 years), the project priority phasing strategy goes beyond this timeframe. Should additional funds be made available, project phasing can be moved up within the program. In addition to the phasing plan and costing of proposed infrastructure, the following sections provide guidance on design considerations for AT network infrastructure, new and updated policy recommendations, funding availability, maintenance considerations, asset management and monitoring.

Planning documents are typically updated every five to ten years and it is recognized that projects beyond this horizon may change over time. This document serves to guide Town staff for the implementation of projects and initiatives to achieve the long-term vision for Smiths Falls.

4.1 Design Resources

The principal source of design guidance for cycling facilities in Ontario is *Ontario Traffic Manual (OTM) Book 18: Cycling Facilities*. This document provides general guidance on facility types, selection, design considerations, intersection treatments, maintenance, and unique considerations such as bicycle parking. OTM Book 18 was most recently updated in October 2021[1]. For Pedestrian facilities design guidance is provided in Ontario Traffic Manual (OTM) Book 15: Pedestrian Facilities.[2]

Additional sources of design guidance available for use include the following:

- TAC Geometric Design Guide for Canadian Roads (2017), Chapter 5: Bicycle Integrated Design and Chapter 6: Pedestrian Integrated Design[3]
- MTO Bikeway Design Manual (2014)[4]
- FHWA Small Town and Rural Design Guide: Facilities for Walking and Biking (2017)[5]

4.2 Design Considerations

4.2.1 Converting a Maintenance Strip to a Shared Walking/Cycling Facility

A common roadway configuration in built-up areas is an asphalt maintenance strip separated from the roadway by a mountable curb. Though not always designed to be used by active travel users, these are commonly used for this purpose as they provide separation from motor vehicle traffic. During retrofit and reconstruction projects, it may be possible to design these as active travel facilities:

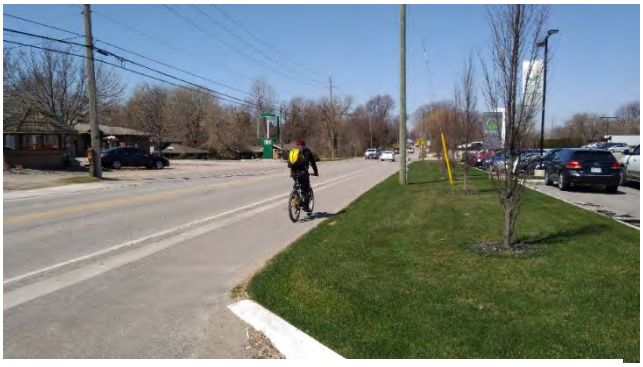


Figure 4-1 | A maintenance strip repurpose as a shared walking and cycling facility in Essex County, ON

- Ensure that AODA requirements for an exterior path of travel are met, as mentioned above.
- While 1.5m is the minimum width for an exterior path of travel, the expected volume of cyclists and pedestrians should be considered when selecting the desired width. The minimum operating envelope width for a pedestrian and cyclist are 0.75m and 1.2m

[1] October 2021 Updated OTM Book 18 can be downloaded from the MTO library here.
[2] OTM Book 15 here
[3] https://www.tac-atc.ca/en/publications/ptm-geodes5-e
[4] MTO Bikeway Design Manual
[5] https://ruraldesignguide.com/

respectively[6], so a facility width of at least 1.95m allows a cyclist to pass a pedestrian without entering the roadway.

- Where a shared walking/cycling facility is provided on both sides of the road, it is recommended that shared walking/cycling facilities be designated as one-way for bikes and two-way for pedestrians.
- While a mountable curb provides more flexibility for cyclists to enter and exit the maintenance strip, this curb type may also lead to motorists using the strip as on-street parking in high-demand areas. In this case, a barrier curb may be preferred.

There are instances within the Plan where converting an existing maintenance strip to a shared walking/cycling facility is proposed so as to not widen the roadway. Before implementing these changes, the proposal should be reviewed with road operations staff to identify the feasibility of and how maintaining the facility in the winter would be carried out.

4.2.2 Community Safety Zones

While higher speeds directly increase the severity of all crash types, they are especially impactful on pedestrian and cyclist safety. For example, when a vehicle strikes a pedestrian the probability of death is very low at impact speeds up to 30km/h. At impact speeds above 40km/h, the probability of death increases significantly[7].

A Community Safety Zone is a designated area where fines for infractions like speeding are significantly increased. Under section 214.1 of the Highway Traffic Act, "The Council of a municipality may by by-law designate a part of a highway under its jurisdiction as a Community Safety Zone if, in the Council's opinion, public safety is of special concern on that part of a highway."

Given the potential for speeding to significantly increase the risk of injury, Community Safety Zones may be applied as a tool for improving safety, especially in built-up areas where higher rates of pedestrians and cyclists are present.

4.2.3 When to Use Delineator Posts

Delineator posts, also known as “flexible bollards” or “flex posts” are flexible plastic cones fixed to the roadway and can be found in a range of colours. Their applications include:

- Providing continuous physical separation for an active transportation facility and preventing encroachment from motorists for parking.
- Adding inexpensive traffic calming measures like curb extensions.

[6] Based on TAC Geometric Design Guide
[7] TAC Geometric Design Guide, Section 6.2.5 Speed and Volume Management

While delineator posts are impact resistant, they will be destroyed if impacted repeatedly by vehicles. To mitigate damage, consider the following measures:

- When used as separation for an active transportation facility, posts should be discontinued across driveways, with some buffer in both directions, especially where larger truck traffic is present. A horizontal offset from both travel lanes and the AT facility is generally recommended to reduce risk of users impacting the posts.
- Consultation with road operations is recommended to minimize risk of damage. Typically, delineator posts are removed and reinstalled seasonally to minimize conflicts with winter maintenance.

Figure 4-2 | Delineator posts separating multi-use pathway from traffic in the village of Kars in Ottawa

- Any plan to incorporate delineator posts should include some operational budget for ongoing replacement. Damaged posts may create a tripping hazard and should be regularly inspected and replaced as needed.

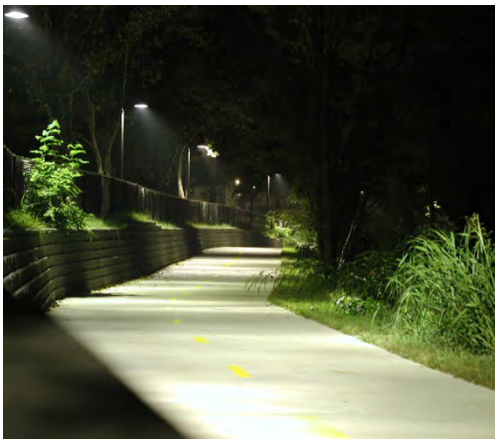
Additional guidance on the use of delineator posts, as well as other separation treatments, can be found in OTM Book 18, Section 4.3.1 Separation Techniques.

4.2.4 Installation of Green Thermoplastic at High Conflict Crossings

A green thermoplastic pavement treatment may be applied to highlight conflict areas where bicycles and motor vehicles will cross paths, this raises awareness to each user group such that they are more aware of the other. Typical locations are at high volume entrances, through intersections (e.g. crossrides) or where right-turning vehicles cross a bike lane on the approach to an intersection. The green treatment may be outlined by “elephant’s feet” marking of a dashed white bicycle lane line depending on the facility type.

Possible locations to consider green thermoplastic pavement treatment are at the vehicle entrance at Lower Reach Park where the multi-use pathway transitions from being adjacent to the roadway to being separated within the park (i.e. bidirectional path across entrance), where Jasper Avenue intersects with Old Slys Road or at the Gallipeau Centre entrance at Queen Street. The intersection of Union Street and Cornelia Street could also be reviewed for the installation of traffic signals and associated crossrides due to multiple cycling facilities intersecting at this location.

4.2.5 Lighting of Off-Road Facilities



Lighting is an essential component of active transportation infrastructure. The most important areas for lighting are near intersections, which allow approaching AT users to be seen, and see others. Where the AT facility is separated from a roadway by more than 5 metres, lighting design should follow the TAC Guide for the Design of Roadway Lighting, Chapter 16 (Off-Road Facilities).

Locations to consider pathway lighting in Smiths Falls includes the new multi-use pathway parallel to Jasper Avenue / Old Slys Road in Lower Reach Park as well as the existing stonedust pathway parallel to Riverdale Avenue and the Rideau River.

4.3 Project Priority

Each proposed pedestrian and cycling project was assigned a priority level of either high, medium, or low. High priority projects are intended to be the first of projects to be implemented, followed by medium priority projects and then low priority projects. The project phasing plan (see Section 4.4) is dependent on the the project's assigned priority level, which is shown in Figure 4-3 and Figure 4-4. In other words, all high priority projects have been assigned to Phase 1 of the implementation plan, all medium priority projects have been assigned to Phase 2, and all low priority projects have been assigned to Phase 3. The priority of each project was based on a list of prioritization criteria established from the Plan goals (see Section 1.6) and Selection Criteria listed in Step 2 of Section 2.1. Additional considerations for project prioritization are listed below.

High

- Online public survey results
- Input from staff and stakeholders
- Strategic Plan initiatives
- Connection to multiple key destinations

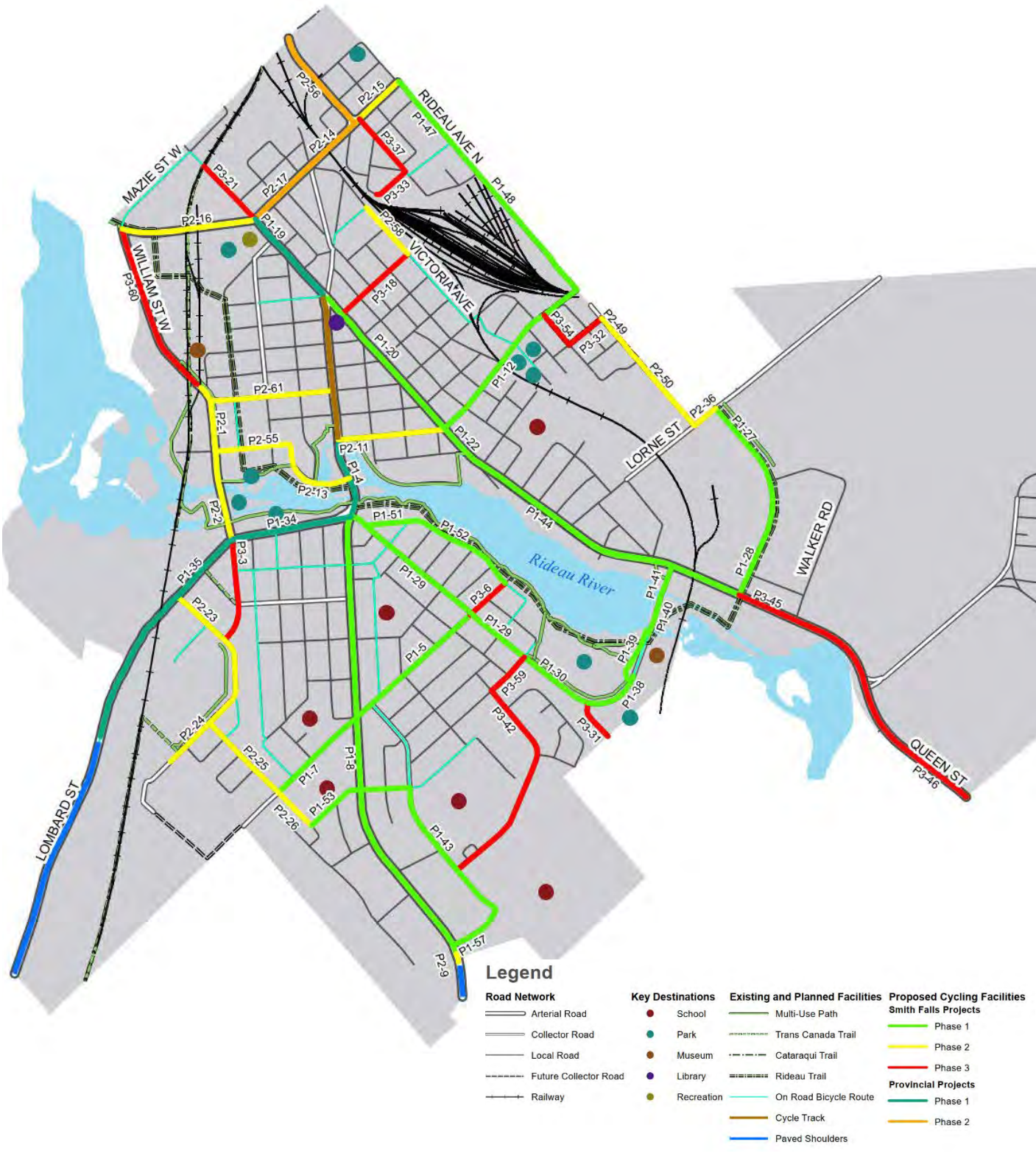
Medium

- Frequently travelled cycling routes
- Connection between high priority routes

Low

- Difficult to implement projects (with less benefit)
- Few to no connections to key destinations
- Lower traffic volume and speed roadways

Figure 4-3 | Proposed Pedestrian Projects by Priority Phasing (Map 5)



Legend

Road Network
- Arterial Road
- Collector Road
- Local Road
- Future Collector Road
- Railway

Key Destinations
- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities
- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- On Road Bicycle Route
- Cycle Track
- Paved Shoulders

Proposed Cycling Facilities

Smith Falls Projects
- Phase 1
- Phase 2
- Phase 3

Provincial Projects
- Phase 1
- Phase 2

Figure 4-4 | Proposed Cycling Projects by Priority Phasing (Map 6)

4.4 Project Phasing

The implementation plan for the Town's active transportation network has been organized into three phases that are based on project priority:

Phase 1	Phase 2	Phase 3
• High priority	• Medium priority	• Low priority
• Short term	• Medium term	• Long term
• 0 to 5 years	• 6 to 10 years	• 10+ years
• 2022-2027*	• 2028-2032	• 2032 and beyond

*Town funding towards active transportation is primarily committed to completing Phase 2 of the Beckwith Street Revitalization project in 2022. Should additional funds be made available in 2022, Phase 1 projects of the Active Transportation Plan are recommended to be undertaken.

The proposed projects within the Town are located on municipal and county roads, as well as a provincial highway. As projects on Ontario Highway 15 are dependent on Provincial funding, priorities and planned road reconstruction/rehabilitation projects, all projects have been divided according to the two separate responsible agencies: Town of Smiths Falls and Province of Ontario. Figure 4-3 and Figure 4-4 distinguish between Smiths Falls projects and Provincial projects in addition to their assigned phasing. Smiths Falls operates as a single-tier government structure such that it assumes all municipal responsibilities that are set out under the Municipal Act and other Provincial legislation. This means that Smiths Falls receives no funding from Lanark County (in which it is geographically situated) for roadway projects on County Roads 4 and 43 that run through the Town. This is regardless of whether the proposed facilities are located within or outside of the pavement edge. In addition, this also applies to the United Counties of Leeds and Grenville that borders Lanark County at the southern Town limit where County Roads 17 and 29 run through Smiths Falls.

This implementation plan method is intended for Town staff to review the feasibility of each project based on planned roadway construction projects, Provincial projects and/or public comment. Town staff should work with the Province of Ontario to coordinate projects on Highway 15 as a connecting link within the Town to verify whether these projects can be implemented within the assigned phase, address public comments, and ensure a connected AT network. Town staff should also consider the timing of the paving of County road shoulders to ensure there are continuous AT connections outside of Smiths Falls.

To support the implementation of the proposed Phase 1 projects and the Town's decision making for projects to move froward from the Phase 1 list, three (3) strategic priority projects

have been identified. These projects represent projects that are of the highest interest for implementation based on the connection they provide, the consultation and engagement process and notable mentions within policy documents. These are projects that may require further investigation based on additional costs, surrounding context and/or the agency within which the road is in jurisdiction. These projects are further described in Table 4-1.

Table 4-1 | Proposed Strategic Priority Projects for Phase 1

Priority Projects	Description
Jasper Avenue / Old Slys Road	• **Location :** Lower Reach Park and Old Slys Road bridges • **Responsible agency :** Town of Smiths Falls • **AT user(s) :** Pedestrians and cyclists • **Proposed facility type(s) :** Off-road multi-use path and cycle track • **Rationale :** Old Slys Road is a high volume roadway that has had several safety concerns with regards to pedestrians travelling between Lower Reach Park and the east side of the Rideau. This road has had notable mention in the Online Public Survey, Strategic Plan, and through consultation. • **Additional details :** Existing stonedust multi-use path in Lower Reach Park is proposed to be upgraded to a hard surfaced multi-use path (3.0m wide asphalt surface). A bi-directional cycle track (raised and curb separated) that is intended to be a shared facility is proposed between the two bridges along Old Slys Road which will require the relocation of the existing steel beam guiderail. A feasibility review should be carried out to assess if the MUP could be accommodated on the existing bridge deck, this would require a raising of the existing bridge railing to cycling height (1.37m). Additional costs will be incurred to widen Old Slys Bridge to the west to provide sufficient space for the cycle track.
Hershey Drive	• **Location:** Between Queen Street and Lorne Street • **Responsible agency :** Town of Smiths Falls • **AT user(s) :** Pedestrians and cyclists • **Proposed facility type(s) :** Buffered paved shoulders • **Rationale :** Provides a connection to a large employment node (Tweed) and forms part of the Rideau Trail
Elmsley Street	• **Location :** Between Cornelia Street and Thurber Street

Priority Projects	Description
	• **Responsible agency :** Town of Smiths Falls and Province of Ontario • **AT user(s) :** Cyclists • **Proposed facility type(s) :** Buffered bike lane (includes pre-cast curbs and flexible bollards in the buffer) • **Rationale :** As prioritized by Town staff and the public through the consultation and engagement process

A summary of the proposed Smiths Falls projects and Provincial projects by phase and type is provided in Table 4-2 and Table 4-3, respectively.

Table 4-2 | Smiths Falls Project Breakdown by Phase

Facility Type	Phase 1 (0-5 years)	Phase 2 (6-10 years)	Phase 3 (10+ years)	Total KM
Shared space (signed route)	2.65	2.04	3.00	7.69
Paved shoulder	0.76	0.60	0.25	1.61
Buffered paved shoulder	1.37	0	1.90	3.27
Bike lane	2.22	1.96	0	4.18
Buffered bike lane	3.90	0.31	0	4.21
Cycle track	0.24	0.25	0	0.49
Off-road multi-use path	0.67	1.12	0	1.79
Sidewalk	0.12	1.66	1.12	2.89
Total KM	11.92	7.94	6.27	26.13

Table 4-3 | Provincial Project Breakdown by Phase

Facility Type	Phase 1 (0-5 years)	Phase 2 (6-10 years)	Phase 3 (10+ years)	Total KM
Bike lane	0.47	0.30	0	0.77
Buffered bike lane	0.70	0	0	0.70
Cycle track	0.91	0.65	0	1.56
Sidewalk	0	0.43	0	0.43
Total KM	2.09	1.37	0	3.46

A summary of the estimated cost breakdown for the proposed Smiths Falls projects and Provincial projects by phase and type is provided in Table 4-3 and Table 4-4, respectively.

Table 4-4 | Smiths Falls Project Cost Breakdown by Priority Phasing

Facility Type	Phase 1 (0-5 years)	Phase 2 (6-10 years)	Phase 3 (10+ years)	Total
Shared space (signed route)	$21,840	$8,460	$3,600	$33,900
Paved shoulder	$152,000	$120,200	$50,600	$322,800
Buffered paved shoulder	$343,000	$-	$473,750	$816,750
Bike lane	$172,480	$56,930	$-	$229,410
Buffered bike lane	$611,830	$48,830	$-	$660,660
Cycle track	$896,050	$99,600	$-	$995,650
Off-road multi-use path	$150,750	$252,000	$-	$402,750
Sidewalk	$23,000	$417,000	$223,600	$663,600
Total	$2,370,950	$918,010	$751,550	$4,040,520

Table 4-5 | Provincial Project Cost Breakdown by Priority Phasing

Facility Type	Phase 1 (0-5 years)	Phase 2 (6-10 years)	Phase 3 (10+ years)	Total
Bike lane	$179,170	$8,700	$-	$187,870
Buffered bike lane	$81,640	$-	$-	$81,640
Cycle track	$365,600	$258,800	$-	$624,400
Sidewalk	$-	$85,000	$-	$85,000
Total	$626,410	$352,500	$-	$978,910

4.5 Partners

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 Town 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 Town and its partners to advance the implementation of infrastructure and accompanying programs, as well as opportunities for cost-sharing and post-implementation promotion.

A comprehensive table of proposed partners and their anticipated role is shown in Table 4-6. This is list is not exhaustive and there could be new partnership opportunities in the future. The Town of Smiths Falls should leverage any future opportunities for additional partners to support the implementation of the ATP.

Table 4-6 | Potential Partners and Roles

	Anticipated Role							
Potential Partners	Planning	Design	Policies	Construction	Maintenance	Enforcement	Education	Promotion
Town of Smiths Falls Staff (Public Works and Operations, Recreation Program, Culture and Tourism and Development Services)	X	X	X	X	X			
County of Lanark	X	X						
United Counties of Leeds and Grenville	X	X						
Cycling Clubs and Active Transportation Groups							X	X
Local Businesses								X
Local Organizations and advocacy groups							X	X
School Boards (Upper Canada District School Board (UCDSB), Catholic District School Board of Eastern Ontario (CDSBEO), and Le Conseil des ecoles catholiques du Centre-Est)							X	X
Smiths Falls Police Service						X	X	
Leeds, Grenville and Lanark District Public Health			X				X	X
Provincial Stakeholders (MTO)	X	X	X				X	X

	Anticipated Role							
Potential Partners	Planning	Design	Policies	Construction	Maintenance	Enforcement	Education	Promotion
Federal Stakeholders (Parks Canada)								

4.6 Funding Considerations

Funding considerations refer to the alternatives that can be used by the Town of Smiths Falls to annually address the costs associated with the implementation of the infrastructure and programming recommendations of the ATP. The intent of the ATP is to build on existing internal and external funding sources already being considered to fund cycling- or pedestrian-related projects and to identify new or alternate funding sources. Opportunities – through partnerships – should be explored to augment the implementation of the programming and outreach initiatives.

A review of internal and external funding options was undertaken to identify different funding options available. The Town 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.

Approved Capital Budgets: Proposed AT routes may be funded through previously planned and/or budgeted large-scale projects such as road rehabilitation or water/sewer works. When updating capital plans, Town staff should investigate opportunities to coordinate the implementation of AT infrastructure as part of these larger-scale projects so as to minimize mobilization costs and small-scale project premiums.

Development Charges By-Law: Future planned infrastructure is funded through budgets based on the Town's proposed Development Charges By-law. The cost to build an AT facility is part of the overall development cost and integrated with the project budget.

Coordination with Provincial Projects: Implementation of the Town of Smiths Falls AT Network will require coordination with on-going and future planned Provincial projects. The Township and Province of Ontario should work together to identify funding opportunities for implementation of routes located on roads under the Province's jurisdiction.

External Funding Sources: The Town 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 Town. A sample of federal and provincial funding sources are provided in Table 4-7.

Table 4-7 | External Funding Sources

Funding Source	Description
Federal Funding Sources	
Canada Community-Building Fund (formerly Federal Gas Tax Fund)	A permanent source of funding provided up front, twice a year, to provinces and territories. This money is then turned over to municipalities to support local infrastructure priorities. https://www.infrastructure.gc.ca/plan/gtf-fte-eng.html
Federation of Canadian Municipalities (FCM) including Green Municipal Fund	Through this fund the Federation of Canadian Municipalities support initiatives that demonstrate an innovative solution or approach to a municipal environmental issue, and that can generate new lessons and models for municipalities of all sizes. Examples: https://fcm.ca/en/funding/gmf/capital-project-transportation-networks-commuting-options https://fcm.ca/en/funding/gmf/pilot-project-transportation-networks-commuting-options
Investing in Canada Program Green Infrastructure stream	Through the Investing in Canada Infrastructure program the funding is available through different streams to help communities reduce air and water pollution. The Green Infrastructure stream supports projects that improve access to clean energy transportation. https://www.infrastructure.gc.ca/plan/icp-pic-INFC-eng.html
Federation of Canadian Municipalities - Municipalities for Climate Innovation Program (MCIP)	Is a five-year program that helps municipalities prepare for climate change and reduce emissions of greenhouse gas. Types of initiatives the program supports include plans to encourage residents to use less polluting forms of transportation by encouraging cycling, walking and transit. https://fcm.ca/en/programs/municipalities-climate-innovation-program
Active Transportation Fund	Funding is available for planning and design projects, as well as capital projects. The Fund is intended to support new and expanded networks of pathways, bike lanes, trails, and pedestrian bridges, as well as Active Transportation planning and stakeholder engagement activities. https://www.infrastructure.gc.ca/trans/active-actif-eng.html
Provincial Funding Sources	
Ontario Trillium Foundation	The OTF recognizes that building healthy and vibrant communities takes time and resources. They offer a number

Funding Source	Description
	of streams of grant programs for varying amounts and timeframes.
Ontario Heritage, Sport, Tourism and Culture Industries Grants	A grant program that provides project and operating grants related to municipalities to support industry development and increased visitation. Recent examples include: **2021 Reconnect Festival and Event Program** which provided funding to provide experiences to provide safe experiences that encourage people to rediscover the communities in Ontario; this could have included a Family Bike Day Event. **Safe Cycling Education Fund** which provides funding to deliver safe cycling education initiatives to support the implementation of #CycleON: Ontario's Cycling Strategy. http://www.mtc.gov.on.ca/en/awards_funding/funding.shtml
EcoAction Community Funding Program	Funding is available for new projects that demonstrate measurable, positive environmental results related to climate change. While municipal governments are not eligible for this grant, they are encouraged to partner with non-profit organizations to support a project proposal. https://www.canada.ca/en/environment-climate-change/services/environmental-funding/ecoaction-community-program.html
Ontario Active School Travel Fund	Funding is available for communities wishing to expand and strengthen existing active school travel initiatives or help get initiatives started. Round 3 has recently closed but the program has been carried forward since 2018. https://ontarioactiveschooltravel.ca/round-3/
Other	
TD Friends of the Environment Foundation Grant	Funding in support of trail building and indoor or outdoor environmental education programming. https://www.td.com/ca/en/about-td/ready-commitment/funding/fef-grant/

4.7 Policy Considerations

Policies are the framework to create top-down change in a municipality. The following policy recommendations should be considered by Town of Smiths Falls staff when new policy is being developed or through municipal planning document update cycles.

4.7.1 Establish a Connection with Municipal Planning and Policy Documents

Implementing the ATP depends on strong and effective top-down policy initiatives that reflect the benefits and importance of AT development in Smiths Falls. The key components of the ATP, such as the network and implementation plan, should be adopted into municipal

planning and policy documents to connect the strategy to the broader goals of the Town. As such, AT projects and initiatives should be reflected in the Town of Smiths Falls Official Plan (OP).

Affected Policies and Plans

Town of Smiths Falls Official Plan

- Update Schedule "B" of the Town of Smiths Falls OP to include AT network (i.e. trails and cycling routes).

4.7.2 Opportunity with New Development Areas

New development areas should be reviewed to identify opportunities to connect future communities to the AT network within the Town. It is important that the Town works with the development community to ensure that AT facilities and amenities are incorporated into their design in a manner that encourages active modes of travel.

The conceptual plan of new developments should include typical details for AT facilities, including an on-site circulation network that incorporates AT elements and connects to the broader network, through new or planned connections. These improvements could include traffic-calming infrastructure at strategic locations, streetscaping features and supportive infrastructure for active transportation, such as pedestrian rest areas. These features should be included prior to draft plan approval during the re-zoning stage and to subdivision approval and registration. Detailed design drawings, specifications and cost estimates for construction for AT facilities should be included in the document package as part of the Site Plan Control application.

The Town is recommended to strengthen language supporting active transportation in the Town's current Zoning By-Law and Site Plan Control Approval By-Law. This should include language focusing on enhancement of AT amenities in private developments, such as increasing the number of bicycle parking spaces as part of residential, commercial, and institutional developments, as well as promoting building forms that accommodate structures to encourage people to access the development using active transportation modes.

Affected Policies and Plans

Zoning By-Law No. 6080-94

- Add by-law regulation regarding parking space requirement for bikes (i.e. number of bike parking spaces, location of bike parking).

Site Plan Control By-Law

- Add by-law regulation that provides direction on logical connection between private walkway and public sidewalks or other walking facilities.

Proposed Development Charges By-Law

- Add Off-site Levy in the proposed Development Charges By-Law to include active transportation infrastructure beyond the development site as the developer contribution for improvements of walking and cycling facilities and infrastructure in the broader transportation network.

4.7.3 Established Areas

Creating changes within established neighbourhoods in an effort to support urban growth can be challenging. The implementation of new or enhancements to existing AT facilities within established neighbourhoods is important to ensure that transportation planning reflects existing and emerging trends. Though planned improvements are identified within a strategic planning document, they may prove to be more challenging to implement during detailed design and construction and require a collaborative consultation process with the public and stakeholders to ensure they are implemented effectively.

One way to improve AT within existing neighbourhoods is to incorporate AT facilities into new and/or reconstructed roadways and developments. Where new on or off-road facilities or linkages are proposed and/or significant improvements are being made to the existing routes, varying levels of consultation is required. The level of consultation should be determined based on the project location, required design approvals, scope / complexity and/or past support or issues raised by the community. Four levels of consultation should be considered:

1. Notification – for projects proposed on Town-owned lands produce a public notice.
2. Neighbourhood meetings – for projects approved through the Town's strategic plans but not yet tendered.
3. Focus group sessions – an outcome of a neighbourhood meeting where revisions to the design concept are made to move forward with approvals.
4. Broad Consultation for EA – where a project triggers an EA study and consultations are completed to meet EA requirements.

4.7.4 Sidewalk policy

Properly planned sidewalks are essential to enhance the mobility, safety and accessibility of pedestrians of all ages and abilities. They connect residents to local destinations, community amenities, schools, commercial areas, etc. A holistic review of the existing sidewalk network for the necessity of existing sidewalk linkages was not carried out, rather the proposed sidewalk facilities as part of this plan have been identified as gaps in the current network and are to establish a continuous and connected network that serves the key destinations as identified. As well as some upgrades to surfaces of pathways based on engagement activities.

If evaluating the existing sidewalks against the criteria used in defining the missing links, there may be some instances where the existing sidewalks would not have been implemented.

At times of new and/or reconstruction of roadways, the consideration on whether sidewalks should be implemented could depend on the following: sufficient road allowance to ensure Accessibility of Ontarians with Disability Act (AODA) requirements can be met, private land acquisition requirements, potential grading issues, excessive costs for benefit of use (including capital and maintenance costs) and if space should be allocated to a different road user (e.g. cycling facility).

Many sidewalk policies are based on roadway classifications and traffic volumes. Arterial roads typically require sidewalks on both sides of the road. Collectors often require sidewalks on one side of the road unless certain criteria identify when they can be implemented on both sides (e.g. daily traffic in excess of 2,000 vehicles per day (vpd), there is sufficient road space or it is adjacent to a high pedestrian generator such as a school, park or pedestrian link). The requirement for local roads are very dependent on the municipality and several Ontario Municipalities, national and international guidelines specify contexts for where sidewalks are not required, for example:

- The City of Burlington City Sidewalk Warrant and Installation Policy (1998) does not require sidewalks on local streets serving fewer than 30 dwellings and only requires sidewalk on one side of local streets serving 30 to 100 dwellings. On streets with rural cross-sections with traffic volumes of less than 1,000 vpd, sidewalks are not required on roads with adequate width, or where road shoulders are sufficient to be used in place of sidewalks.
- The Town of Newmarket Sidewalk Installation Policy (2005) does not require sidewalks on cul-de-sacs with fewer than 22 dwelling units in new development areas. In addition, the Policy states that sidewalks are required on one side of local streets during reconstruction; however, if construction of a sidewalk is not feasible due to insufficient road allowance, zoning constraints, severe geometrics or grading issues, excessive costs, etc., the Public Works and Environmental Services Department can, at their discretion and with a written rationale to Council, determine to not implement a sidewalk.
- The Pedestrian Safety Guide and Countermeasure Selection System (United States Federal Highway Administration, 2013) state that sidewalks may not be required on short (e.g. approximately 60 m) residential cul-de-sacs if there as a trail system that is accessible to residents and driveway aprons that are accessible for pedestrians with disabilities. Despite this, the guidelines do not recommend that entire neighbourhoods, regardless of the length of cul-de-sacs, do not go without sidewalks.
- The National Association of City Transportation Officials (NACTO) Urban Street Design Guide (2013) states that streets without sidewalks in residential areas with “sufficiently

low" traffic volumes may be upgraded to a shared street, where pedestrians and cyclists are intended to operate in the same space as vehicles. The Guidelines recommend the lowest possible speed limits (15 km/h) on shared streets and requires the addition of traffic calming measures to offset conflicts between pedestrians and vehicles accessing properties. It is noted that these Guidelines are intended for application on urban streets.

Where implementing a sidewalk on one side of the road, consideration should be given to connectivity of generators and users; however, if there are no discerning factors, sidewalks should typically be constructed on the north and west sides of the streets to take advantage of the environment.

Town staff should continue communication with Parks Canada for the implementation and/or improvement of pedestrian infrastructure on Parks Canada land surrounding the Rideau River, such as Duck Island and Turtle Island to the east of Abbott Street. This is a popular area for Town residents based on the existing local trails and greenspace where the presence of desire lines can be seen as a potential to improve AT connections, while preserving natural and cultural heritage.

4.7.5 Reduced Speed Zones

The risk of a road crash and severity of that crash is directly related to speed. In defining the facility types for cycling routes, recommendations are based on the Ontario Traffic Manual (OTM) Book 18 nomographs that identify the recommended type of separation between motor vehicles and vulnerable road users based on the Average Annual Daily Traffic (AADT) volume and travel speed. The World Health Organization (WHO) have stated that when vehicle speed is reduced, the chance of survival for a pedestrian or cyclist involved in a crash is drastically increased. For example, at a vehicle travel speed of 30 km/h, a pedestrian struck by the vehicle has a 90% chance of survival. This is reduced to less than 50% at a speed of 45 km/h and with a 0% chance at 80 km/h.

Figure 4-5 | Reduced Speed Gateway Signage

On May 1, 2018, the Government of Ontario updated the Highway Traffic Act regulations to provides municipalities with the authority to establish speed limits lower than 50 km/h within neighbourhoods using specialized gateway speed limit signage.

A policy to establish criteria based on the roadway definition and users promotes a consistent application for establishing reduced speed zone areas within the town. These policies are often established based the following criteria: road type, context and surrounding land use, traffic volumes, existing speed limits, roadway widths and the active transportation environment. It is based on this last criterion that a speed reduction policy is recommended

for Smiths Falls. In a number of instances, there is insufficient space or opportunity to provide the recommended separation for cyclists or a dedicated facility for pedestrians which is primarily related to speed and not traffic volumes. Reducing the speed limit in these instances can provide a more comfortable operating space for vulnerable users.

The policy should outline what defines the active transportation environment. Per the City of Ottawa's 30 km/h Speed Limit Policy, at least one of the following conditions must be met: elementary or junior high school abutting the roadway, parkland abutting the roadway, significant pedestrian generator (e.g. older adult residences) abutting the roadway, no dedicated cycling facility, no sidewalks, existing physical traffic calming measures currently in place and lack of safe stopping distance.

Reduced speed limits do not come with changing the posted signs alone. Additional measures may be required such as: education, signage and pavement markings (e.g. edge lines to narrow lane widths) or traffic calming measures. These should be considered as part of the policy development.

Affected Policies and Plans

Designation of Community Safety Zones By-law No. 7656-2001

- Amend existing by-law to include options for reduced speed zones when roadway is part of the active transportation environment.

4.7.6 Complete Streets

Complete Streets are streets that are planned, designed, constructed, operated and maintained for all modes of transportation and all street users. The street network functions in such a way that it allows people to arrive at their destination using a wide range of travel modes with a sense of comfort.

A Complete Streets Policy can be considered for all types of projects and policies at any stage. It can be used as a guiding tool for Town staff, agencies, planners and developers to build, design and retrofit existing or new infrastructure. The goal of the policy should be to promote equal consideration to multiple transportation mode users in order to provide a balanced and inclusive transportation network.

It is recommended that the Town of Smiths Falls adopt the Complete Streets policy, see Appendix B, to provide a standardized guideline in planning, constructing and maintaining infrastructure for all modes of travel and all transportation system users.

4.7.7 Electric Bikes and Scooters

Micro-mobility and electric-powered vehicles such as e-bikes and kick style e-scooters have emerged as a potential solution for mobility needs for people of various ages and abilities at the provincial, national and international level.

E-bikes and other forms of micro-mobility can help municipalities support sustainable and inclusive travel choices such as the first and last mile travel and can help to reduce the physical stress of biking by permitting a rider to travel longer and farther than a traditional bike. A power assisted bicycle, such as an e-bike or e-scooter, refers to a vehicle that:

1. Has steering handlebars and is equipped with pedals;
2. Is designed to travel on not more than three wheels in contact with the ground;
3. Is capable of being propelled by muscular power;
4. Has one or more electric motors that have, singly or in combination, the following characteristics:
    a. It has a total continuous power output rating, measured at the shaft of each motor, of 500 W or less,
    b. If it is engaged by the use of muscular power, power assistance immediately ceases when the muscular power ceases,
    c. If it is engaged by using an accelerator controller, power assistance immediately ceases when the brakes are applied, and
    d. It is incapable of providing further assistance when the bicycle attains a speed of 32 km/h on level ground,
    e. Bears a label that is permanently affixed by the manufacturer and appears in a conspicuous location stating, in both official languages, that the vehicle is a power-assisted bicycle as defined in this subsection; and
    f. Has one of the following safety features:
        i. An enabling mechanism to turn the electric motor on and off that is separate from the accelerator controller and fitted in such a manner that it is operable by the driver, or
        ii. A mechanism that prevents the motor from being engaged before the bicycle attains a speed of 3 km/h.

It is recommended that the Town of Smiths Falls establish and / or amend relevant by-laws to pronounce where electric bikes and scooters are prohibited and permitted, and to clarify the use along on and off-road facilities.

4.7.8 Age-friendly Communities and Equity

Age-friendly communities help create more accessible environments for people of all ages and abilities. These communities respond to the opportunities and challenges of an aging population by creating physical and social environments that:

- Support independent and active living; and
- Enable older adults and people with disabilities to continue contributing to all aspects of community life.

The WHO identified Age-friendly communities as having a range of accessible transportation options, facilitating mobility and connected neighbourhoods that save residents time and money and improve quality of life.

The Town of Smiths Falls should provide for age-friendly communities and apply an equity lens when updating and establishing policies for active transportation facilities, such as ensuring AODA requirements are met and "rest areas" provided.

4.7.9 Sidewalk Cycling

The Highway Traffic Act (HTA) has been interpreted to generally prohibit cyclists from riding on a sidewalk unless authorized by a specific municipal by-law and/or directed by traffic signs or traffic control devices. Municipal by-laws do not currently define permissions for bicycles on sidewalks in Smiths Falls. Relevant policies and by-laws should be updated to prohibit cyclists from riding and/or parking bicycles on sidewalks with the exception of youth (i.e. children 12 years and under 12) with an accompanying parent.

The Town of Smiths Falls should update impacted existing by-laws to make reference to the provision of sidewalk cycling being permitted for youth 12 and under.

4.8 Operations, Maintenance and Asset Management

A key consideration when implementing the ATP is the maintenance of active transportation routes and the asset management of infrastructure. Regular and appropriate maintenance of active transportation facilities can help protect the Town's capital investments by maintaining the lifespan of infrastructure. In addition, maintenance is inclusive of all activities carried out to ensure appropriate operation of active transportation facilities. This includes those related to the resurfacing and repair of road surfaces that have cycling and pedestrian facilities. As bicycle tires are more sensitive to irregular surface conditions, such as debris and vegetative overgrowth, and these elements can cause tripping hazards for pedestrians, maintenance practices for active transportation facilities needs to be enhanced.

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). Having been amended in 2018 to include guidance for cycling facilities, the document sets out the operational requirements of all roadways including active transportation facilities found along them. 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 Council-approved level of service maintenance standard exists. Maintenance practices for active transportation facilities should include:

- Sweeping;
- Surface repairs such as cracks and potholes;
- Pavement markings and signage;
- Vegetation management;
- Snow clearance / ice control; and
- Drainage improvements and bike friendly drainage grates.

It is recommended that the Town continue to apply their maintenance standards consistent with the Province's Minimum Maintenance Standards. Guidance on asset management is provided in the Town of Smiths Falls' current Asset Management Plan and Long Term Financial Sustainability Plan and components to consider as part of asset management could include:

- Work with maintenance staff during the planning and design stages of active transportation facilities to ensure they have the equipment and resources available to maintain new routes.
- Maintain a GIS inventory to track infrastructure and other elements such as pavement markings, signage, etc.
- Maintain a database of actual costs of facilities to help with budgeting for future projects.
- Table 4-8 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 Town review this information and consider various strategies to manage the Town's network.

Table 4-8 | Asset Management Strategies[8]

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

4.9 Monitoring

The implementation of active transportation infrastructure is not the end of the journey. So as to identify successes and challenges, that inform lessons learned and areas of improvement, the active transportation infrastructure being implemented should routinely be monitored. 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.

[8] OTM Book 18 Asset Management Strategies

While unique to different agencies, an effective monitoring plan for active transportation initiatives should generally strive to:

- Demonstrate the value in investing in active transportation infrastructure to all stakeholders;
- Meaningfully describe how active transportation has been impacted through the recommended actions (qualitative and quantitative measures);
- Respect funding requirements set out by higher levels of government to be able to capitalize on external funding opportunities;
- Inform decisions on optimizing the community benefit of investing in active transportation;
- Provide the information in a consistent manner that is easily understood and attainable by all stakeholders; and,
- Adapt to new methods of collecting data on active transportation facilities as new innovations and technologies become available.

The data being collected would be carried out by Town staff with partners to leverage any existing data collection currently being carried out. Table 4-7 provides some suggested performance measures that could be considered, including suggested indicators and data collection methods.

Table 4-9 | Suggested Performance Measures

Category	Metric	Indicator	Data Collection Method
Safety	Number of collisions involving cyclists and pedestrians / capita	#	OPP / census data
	Perceived safety	Qualitative	Public Survey
	Number of school trips made by bike	#	Survey
Cycling Adoption	User counts	#	Count Survey
	Duration of Trip	#	Public Survey
On-Road Network	KMs of proposed cycling network built	#	Annual Reporting
	KMs of existing facilities refurbished	#	Annual Reporting
	KMs of proposed sidewalks built	#	Annual Reporting
Supportive Features	Number of bike parking spots added	#	Annual Reporting
	Use of bike parking spots	%	Annual Reporting

Category	Metric	Indicator	Data Collection Method
	Number of new trail / route signs added	#	Annual Reporting
Investment	Capital allocation towards cycling projects	$	Annual Budgetary Report
	Capital allocation towards pedestrian projects	$	Annual Budgetary Report
	Amount of external funding received for Active Transportation projects	$	Annual Budgetary Report
Economic Development	Number of cycle tourists	#	Data from local tourism office / local business
Promotion	Number of promotional campaigns undertaken	#	Annual Communications / Marketing Report
	Number of cycling events held	#	Annual Communications / Marketing Report
	Participant feedback	Qualitative	Report of activity on website for reporting

Recommendations

OTM Book 15 and 18 and the Transportation Association of Canada Design Guidelines (2017) should be the primary design guidance used for pedestrian and cycling design.

Staff should consider the additional design considerations when implementing facilities on the network, outlined in Section 4.2.

Implement infrastructure as recommended according to priority and phasing such that the active transportation network is connected and continuous and corresponds with what is set out in the Capital Budget and Asset Management Plan. Consider strategic priorities when selecting projects.

Provide updated mapping for inclusion in Official Plan Update.

Update Zoning By-law, Site Plan Application By-law and proposed Development Charges By-law to reflect inclusion of active transportation facilities within site plan developments and applications.

Update Zoning By-law to make references to provision of bicycle parking in new development and employment areas to ensure that adequate, ample bike parking is provided along on and off-road facilities

Develop a policy for sidewalk implementation for new and re-construction instances that provides key criteria for consideration of need (e.g. number of residential units, or pedestrian generators) and ability to provide and maintain a facility that meets the requirements of the current design guides and AODA requirements.

Update existing by-laws as required to permit reduced speed zones within the Town. It is also recommended that Town of Smiths Falls establish a reduced Speed Limit Policy to define the criteria required to be met to establish a posted speed limit less than 50 km/h on an existing roadway within the town.

Adopt Complete Streets policy to provide a standardized guideline in planning, transportation system users.

Establish and / or amend relevant by-laws to pronounce where electric bikes and facilities.

Provide for age-friendly communities and equity lens when updating and establishing policies for active transportation facilities.

Annual maintenance budgets should be refined to accommodate the maintenance of new cycling and pedestrian, including off-road trail, facilities. As the proposed network is implemented the maintenance budget should increase to address the increasing number / length of active transportation facilities that have been implemented.

Update existing by-laws to reflect the change in permitting youth 12 years and younger to ride their bicycle on the sidewalk as well as accompanying adults.

Chapter Five

Next Steps and Recommendations

wsp

ACTIVE TRANSPORTATION PLAN

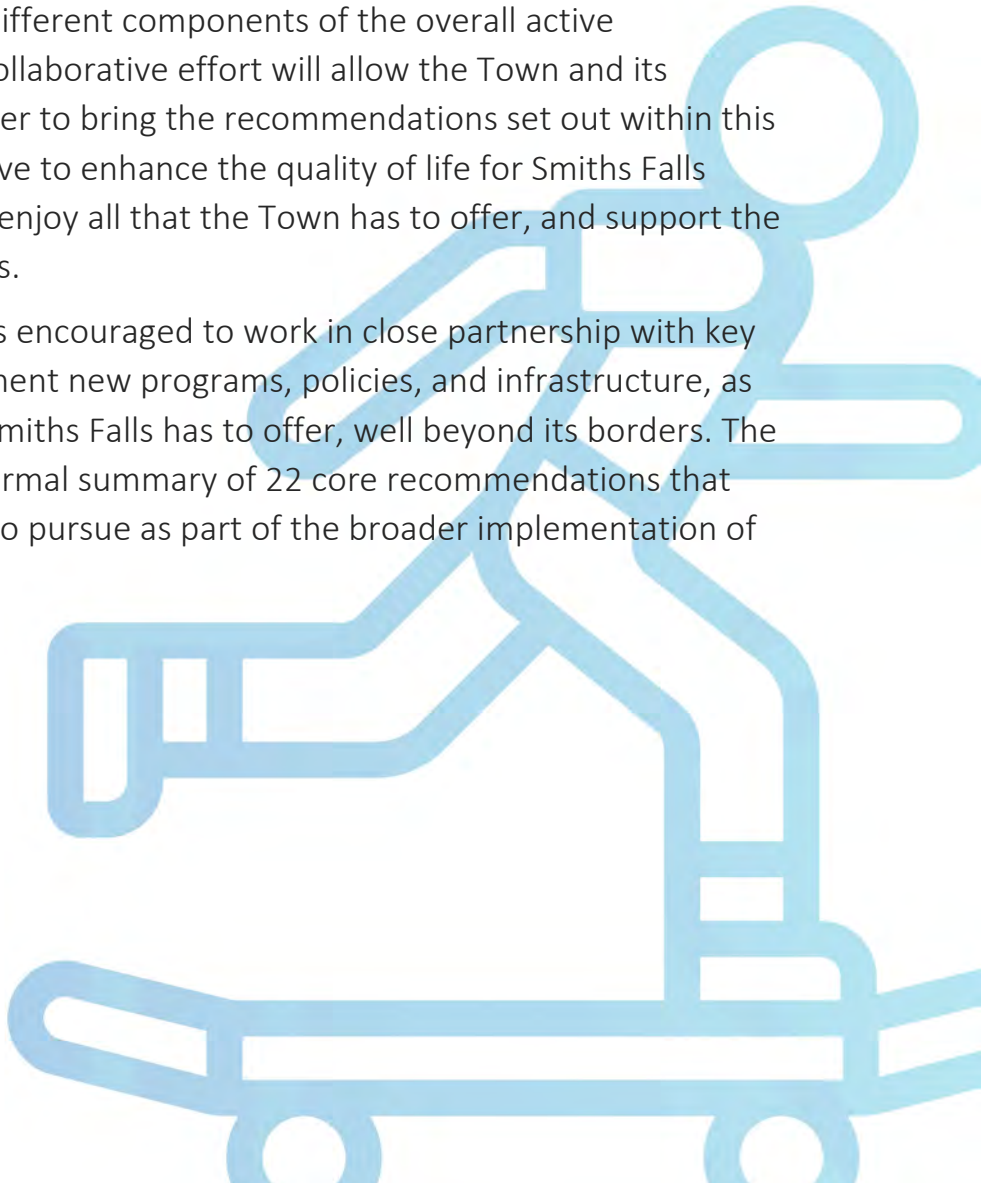
Chapter Five

5 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 Town staff in moving forward with implementing this plan, in partnership with internal and external stakeholders.

This Plan, at its forefront, is a guide for the Town to encourage and enhance active and sustainable modes of transportation to support the existing facilities and key destinations within the Town. Different stakeholder groups are responsible for overseeing different components of the overall active transportation network. A collaborative effort will allow the Town and its stakeholders to work together to bring the recommendations set out within this plan to life. Doing so will serve to enhance the quality of life for Smiths Falls residents, attract visitors to enjoy all that the Town has to offer, and support the local economy in the process.

Moving forward, the Town 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 Smiths Falls has to offer, well beyond its borders. The following table provides a formal summary of 22 core recommendations that Town staff are encouraged to pursue as part of the broader implementation of this Plan.



Recommendations	Achieving the ATP Goals						
	Making Active Transportation a Viable Travel Choice	Financial Sustainability	Healthy and Liveable Communities	Support an Active Transportation Culture	Make Active Transportation Convenient and Enjoyable	Provide Tourism and Economic Growth Opportunities	Community Involvement
1. The route selection criteria identified should be used when new routes are being considered to identify how best to integrate new routes into the planned network. In addition, OTM Book 18: Cycling Facilities should continue to be used by staff and its partners for new routes to select the recommended facility type.	■	■	■		■	■	
2. When opportunities to "upscale" recommended facilities is possible due to planned road reconstruction these opportunities should be leveraged so as to provide additional separation between road cyclists and road users.	■	■	■		■	■	
3. Adopt the recommended cycling and sidewalk projects as shown in Figures 2-4 (Map 3) and 2-5 (Map 4) for the development of a connected and continuous network.	■		■			■	
4. When feasible Smiths Falls should consider purchasing and protecting abandoned rail lines within the Town limits for future network connectivity through off-road trails (e.g. extension of Ottawa Valley Rail Trail).	■	■	■	■	■	■	■
5. Where there are budgetary and right-of-way constraints for a second sidewalk, consideration should be given to installing pedestrian crossovers to increase the network connectivity.	■	■	■				
6. Consider developing a Pedestrian Program for identifying key locations within Town where Pedestrian Crossovers would be beneficial.	■	■	■	■	■	■	■
7. Smiths Fall consider establishing an Active Transportation Coordinator part-time position and hire this individual on an annual basis (March-October) to coordinate and deliver the recommended outreach initiatives.				■			■
8. Staff should consider carrying out the annual action plans as identified to encourage behaviour change, enhance community awareness and provide education to support the Active Transportation Plan and proposed infrastructure implementation.	■	■	■	■	■	■	■

Recommendations	Achieving the ATP Goals						
	Making Active Transportation a Viable Travel Choice	Financial Sustainability	Healthy and Liveable Communities	Support an Active Transportation Culture	Make Active Transportation Convenient and Enjoyable	Provide Tourism and Economic Growth Opportunities	Community Involvement
9. Prior to updating the ATP over the next five years, staff should monitor the outreach initiative to identify which have resulted in the highest and lowest success rates for the community.				■			■
10. OTM Book 15 and 18 and the Transportation Association of Canada Design Guidelines (2017) should be the primary design guidance used for pedestrian and cycling design.	■	■					
11. Staff should consider the additional design considerations when implementing facilities on the network, outlined in Section 4.2.	■	■					
12. Implement infrastructure as recommended according to priority and phasing such that the active transportation network is connected and continuous and corresponds with what is set out in the Capital Budget and Asset Management Plan. Consider strategic priorities when selecting projects.	■	■			■	■	
13. Provide updated mapping for inclusion in Official Plan Update.	■						
14. Update Zoning By-law, Site Plan Application By-law and proposed Development Charges By-law to reflect inclusion of active transportation facilities within site plan developments and applications.	■	■	■		■		
15. Updating Zoning By-law to make references to provision of bicycle parking in new development and employment areas to ensure that adequate, ample bike parking is provided along on and off road facilities.	■		■		■	■	
16. Develop a policy for sidewalk implementation for new and re-construction instances that provides key criteria for consideration of need (e.g. number of residential units, or pedestrian generators) and ability to provide and maintain a facility that meets the requirements of the current design guides and AODA requirements.	■	■			■	■	

Recommendations	Achieving the ATP Goals						
	Making Active Transportation a Viable Travel Choice	Financial Sustainability	Healthy and Liveable Communities	Support an Active Transportation Culture	Make Active Transportation Convenient and Enjoyable	Provide Tourism and Economic Growth Opportunities	Community Involvement
17. Update existing by-laws as required to permit reduced speed zones within the Town. It is also recommended that Town of Smiths Falls establish a reduced Speed Limit Policy to define the criteria required to be met to establish a posted speed limit less than 50 km/h on an existing roadway within the town.	■		■				
18. Adopt Complete Streets policy to provide a standardized guideline in planning, transportation system users.	■	■	■			■	
19. Establish and / or amend relevant by-laws to pronounce where electric bikes and facilities.	■		■			■	
20. Provide for age-friendly communities and equity lens when updating and establishing policies for active transportation facilities.	■		■		■	■	
21. Annual maintenance budgets should be refined to accommodate the maintenance of new cycling and pedestrian, including off-road trail, facilities. As the proposed network is implemented the maintenance budget should increase to address the increasing number / length of active transportation facilities that have been implemented.	■	■			■		
22. Update existing by-laws to reflect the change in permitting youth 12 years and younger to ride their bicycle on the sidewalk as well as accompanying adults	■						

Existing Policy Review

APPENDIX

A

SUPPORTING POLICY AND DESIGN GUIDANCE

The development and construction of active transportation infrastructure should be integrated with active transportation planning, design, promotion, outreach and monitoring strategies and practices in day-to-day decision making by Town Staff to establish a long-lasting shift towards more sustainable and active transportation.

Developing a comprehensive active transportation plan requires a collaborative and coordinated process that builds on what has been done previously within the Town, the surrounding municipalities and throughout Lanark County. It also relies on strengthened partnerships with community members, businesses and key stakeholders. The experience and expertise of those who live, work and play throughout Smiths Falls is founded on best practices and lessons learned of municipalities of similar scope and scale. A vital element of implementing a functional AT Plan is incorporating existing policy and creating new policy to shape an effective AT network. Existing policy will be used to guide recommendations in the Plan and to help identify where policy gaps exist.

EXISTING POLICY

The planning, design, construction, operation and maintenance of cycling infrastructure in Smiths Falls is shaped by Provincial, County, and Municipal policy. All applicable existing policy at all levels of government listed below were reviewed to accurately shape the Plan and form implementable recommendations.

Federal Government	Province of Ontario	Lanark County	The United Counties of Leeds and Grenville	Town of Smiths Falls
Federal Sustainable Development Act	#CycleON: Ontario's Cycling Strategy	Lanark County Sustainable Communities Official Plan (SCOP)	2021 United Counties of Leeds and Grenville Official Plan	2019-2022 Strategic Plan
Transport Canada 2019-2020 Departmental Plan (2019)	Accessibility for Ontarians with Disabilities Act	2018-2020 Lanark County Economic Development Strategic Plan	2018 Leeds and Grenville Asset Management Plan	Parks and Recreation Master Plan
Transportation 2030: A Strategic Plan for Transportation in Canada	Provincial Policy Statement	Ottawa Valley Recreation Trail Management Plan		Official Plan
	Municipal Act	County Roads Paved Shoulder Program		Zoning By-law
	Tour by Bike: Ontario's Cycling Tourism Plan (2017)			Asset Management Plan & Long Term Financial Sustainability Plan
				Parking By-law

FEDERAL GOVERNMENT

Federal Sustainable Development Act (2008)

The Federal Sustainable Development Act (FSDA) requires the development of a federal sustainable development strategy. The FSDA provides a framework through which to conduct sustainable planning and will strengthen sustainable development practices within the federal government. This policy allows the government to set environmental sustainability policies more effectively and to align the work of other federal departments with these sustainable policies. Its guiding principles focus on clean air and water, natural protection and shrinking the environmental footprint of government. The strategy intends to produce:

- An integrated view of federal actions and results to achieve environmental sustainability;
- Effective measurement and monitoring of sustainability progress to Canadians; and
- Equal footing of environmental with economic and social considerations in federal decision-making.

Relevance to Active Transportation Plan

While not binding on any other order of government, the FDSA sets a policy precedent at the federal level, asking other orders of government to take sustainability seriously as well. The FDSA includes goals for sustainable development, along with an implementation strategy for each.

Transport Canada 2019-2020 Departmental Plan (2019)

Transport Canada's 2019-2020 Departmental Plan is a visionary document which sets out the federal transportation department's goals and directions for the coming annual period. Guidance for which relies on the "Transport 2030: A Strategic Plan for Transportation in Canada" which envisions such objectives over a broader decade-long horizon. Accordingly, underlying of both plans are actions related to improving the safety, accessibility, robustness and environmental sustainability of the nation's transportation systems.

Relevance to Active Transportation Plan

While generalist, the Departmental Plan does specify an action item related to cycling specifically. Such involves financial sponsorship or research towards after-market technology within commercial vehicles that assist with the detection of vulnerable road users (including cyclists) and prevent potential collisions.

Transportation 2030: A Strategic Plan for Transportation in Canada (2016)

The Transportation 2030: A Strategic Plan for Transportation in Canada" lays out a blueprint for how the nation's transportation sector is to be developed within the oncoming decade. Guiding of which is a goal to reform the sector in support of trade and economic growth, a cleaner environment and the well being of Canada's middle class.

Relevance to Active Transportation Plan

Most specific to cycling, the Strategic Plan recognizes investment into new green and innovative transportation as a central priority. Demonstratively, the plan includes a pledge of funding, in support of Clean Energy and Transportation Innovation programming.

PROVINCE OF ONTARIO

#CycleON: Ontario's Cycling Strategy

In August 2013 the Ontario Cycling Strategy - #CycleON was released by the MTO with a clear set of action plans. The strategy acknowledges the importance of developing cycling infrastructure to help reduce GHG emissions, ease gridlock, enhance the economy, increase tourism and increase quality of life for Ontario residents. The vision for 2033 is that "Cycling in Ontario is recognized, respected, and valued as a core mode of transportation that provides individuals and communities with health, economic, environmental, social and other benefits." The actions were defined under one of five strategic directions:

- Design healthy, active and prosperous communities;
- Improve cycling infrastructure;
- Make highways and streets safer;
- Promote cycling awareness and behavioural shifts; and
- Increase cycling tourism opportunities.

These directions ensure that the action plan continues to advance cycling in Ontario. The Action Plan also guides efforts across governments, provincial policies and initiatives.

Relevance to Active Transportation Plan

The #CycleON Action Plan 2.0 was released in 2018 as the five-year update. Action Plan 2.0 lays out a series of initiatives under the five strategic directions to be implemented between 2018 and 2023. Several actions call upon collaboration with municipalities:

- Identify opportunities to encourage safe cycling near and around schools

- Support and celebrate Bike Month to promote cycling at the local, community and provincial levels
- Support the development of municipal minimum maintenance standards for cycling infrastructure
- Make Ontario's roads safer by engaging road safety groups and community members across the province to work together to promote road and cycling safety
- Develop a comprehensive cycling education program that will provide program standards for cycling curriculum, instructional development and certification, and province-wide course delivery
- Develop tools to make it easier for cycling tourists, including route mapping and an enhanced cycling portal
- Improve wayfinding for cyclists

A key action to improve cycling infrastructure is to support municipal implementation of the Province-Wide Cycling Network, a long-term aspirational network that support the vision of #CycleON. Proposed on-road routes through Smiths Falls include Mazie Street, which would be in connection with the existing on-road routes on Lanark County Road 43 and William Street West.

Accessibility for Ontarians with Disabilities Act

The Accessibility for Ontarians with Disabilities Act (AODA) was passed on June 13, 2005. The policy calls on the business community, public and not-for-profit sector and people with disabilities to develop, implement and enforce mandatory standards.

Relevance to Active Transportation Plan

A revision and update of the Built Environment Standard was released in 2013. "The goal of the Accessibility Standards for the Built Environment is to remove barriers in public spaces and buildings. This will make it easier for all Ontarians – including people with disabilities, seniors and families – to access the places where they work, travel, shop and play." The standards for public spaces cover: Recreational Trails and Beach Access Routes, Outdoor Public Use Eating Areas, Outdoor Play Spaces, Exterior Paths of Travel, Accessible Parking and Obtaining Services.

Some highlights of the technical requirements for recreational trails under the regulation 80.8(1) include a minimum clear width of 1,000mm; a clear height that provides a minimum head room clearance of 2,100mm above the trail; a firm and stable surface type; edge protection where the trail is constructed adjacent to water or a drop-off, a clear opening of between 850mm and 1,000mm (even where the entrance includes a gate, bollard or other

entrance design) and trail head signage that provides relevant accessibilities information (i.e. length of the trail, type of surface, average and minimum trail width).

Provincial Policy Statement Update (2020)

The 2020 Update of the Provincial Policy Statement (PPS) sets the foundation for regulating land use planning and development within the Province of Ontario while supporting provincial goals and interests. Municipal Official Plans are identified as the most important vehicle for implementing the PPS.

Relevance to Active Transportation Plan

The PPS promotes land use patterns that support active transportation. Densities for new housing, public streets and spaces must facilitate active transportation and promote it by minimizing the length and number of vehicle trips. The PPS also encourages the reuse of abandoned transportation corridors to maintain their integrity and continuous linear characteristics.

Municipal Act (2001)

The Municipal Act gives municipalities flexibility when dealing with issues which influence municipal development. It recognizes that municipal governments are responsible and accountable when addressing matters within their jurisdictions.

Relevance to Active Transportation Plan

The Municipal act sets out policies pertaining to municipal jurisdiction over municipal roadways and the maintenance of those roadways which, in turn, has significant impact on the design and development of cycling facilities identified within the road right-of-way.

Tour by Bike: Ontario's Cycling Tourism Plan (2017)

The Ontario Cycling Tourism Plan was developed in recognition of cycling's growing potential as a source of tourism and subsequent driver of economic growth. Building upon the direction of the province's cycling and trails action plan, the Ontario Cycling Tourism Plan aims to promote cycling tourism and position Ontario as a respective industry leader.

Relevance to Active Transportation Plan

Among the various actions prescribed in support of cycling tourism across Ontario, the Cycling Tourism plan recommends additional funding be given to local tourism agencies, cycling trail organizations, festivals and other stakeholder tied to cycling promotion.

LANARK COUNTY

Lanark County Sustainable Communities Official Plan (SCOP)

The Lanark County Sustainable Communities Official Plan (adopted in 2012) combines an Integrated Community Sustainability Plan (ICSP) called Sustainable Lanark, with an Official Plan to emphasize local municipal land use priorities within a broader framework of county sustainability. The SCOP focuses on the integration of sustainable practices regardless of political boundaries and enables the implementation of land use policies.

Relevance to Active Transportation Plan

The County of Lanark recognizes the importance of other infrastructure corridors, such as abandoned rail lines for use as trail or transit services, and seasonal corridors, such as those used by snowmobile / ATV clubs, the Trans-Canada Trail and County and local recreational trails. Infrastructure policies consider the on-going development of multi-purpose recreational trails by the County and local municipalities.

Select themes outlined in the ICSP component of the Plan that support Sustainable Lanark's overall vision as they relate to active transportation are listed below:

Infrastructure and Quality of Life - Lanark County is a popular cycling destination and continues to grow in popularity with the improvement of roads and trails. Active transportation is to be made a priority in all towns and villages by supporting the development of infrastructure to create walkable communities and provide safe routes for cycling.

Age-Friendly Communities - Support efforts to provide recreation and leisure opportunities for residents of all ages that include senior citizens, young families, and youth.

Transportation - Focus on building communities that reduce the need for personal vehicles and provide many options for mobility including environmentally friendly transportation alternatives through active transportation and various forms of public transportation. Encourage efforts to develop a transportation system that is affordable, multi-modal, accessible and interconnected, this includes improving the local road system. Develop an active transportation plan to focus both on safe pathways for cycling and walking in communities.

Healthy Communities - Support efforts to increase physical activity by all residents by providing access to excellent programs and facilities and through efficient land use and development patterns.

Safety - Reduce the risks associated with transportation by designing roads that are safe for all users, including cyclists and pedestrians, which also means being proactive in maintaining infrastructure. Pathways are to be accessible and designed for a range of mobility – from toddlers on strollers to motorized wheelchairs and scooters.

2018-2020 Lanark County Economic Development Strategic Plan

The Lanark County Economic Development Strategic Plan provides a framework to leverage future community economic development partnerships, programs, and services for Lanark County and its municipalities.

Relevance to Active Transportation Plan

Of the 5 main themes identified for the action plans developed, investing in infrastructure can be directly related to active transportation. The action plans under the theme of investing in infrastructure include the following:

- Improve core connectivity broadband infrastructure (fixed and mobile) throughout the County
- Develop and promote public transportation system linkages (roads, trails, services) within the County, and to major centres including Ottawa, Kingston, and Brockville
- Improve and maintain roads and signage, including paved shoulder for cyclists
  - As part of short-term action, road shoulders throughout the County are currently being paved
  - As part of longer-term action, the plan is to pave municipal roads/shoulders and have more way-finding signage

Ottawa Valley Recreation Trail Management Plan

The Ottawa Valley Recreation Trail (OVRT) is the former Canadian Pacific Rail bed approximately between Mattawa and Smiths Falls that is currently undergoing conversion to a multi-use trail. The OVRT is co-owned by the County of Renfrew, Township of Papineau-Cameron and Lanark County. The section through Lanark County ends in the Township of Montague, just north of the Town of Smiths Falls. A management plan initiated by the Ontario Trails Council was developed in 2017 to guide future development of the trail, define intended user groups, and establish trail maintenance standards. The boundaries of each agency's trail ownership were defined in the Management Plan, and each owner is responsible for the maintenance of their section of trail.

Relevance to Active Transportation Plan

The goal of the OVRT is to provide a continuous corridor for all users, including nonmotorized and motorized off-road vehicles. Users permitted on all trail sections include hikers, cyclists, cross-country skiers and equestrians on all sections. Owners may restrict sections of the trail to off-road vehicles and snowmobiles but must provide properly maintained by-pass routes with signage for these users.

The Plan also includes recommendations for maintenance practices (e.g. trail clearance width and height, fencing, amenities, recommended responses to catastrophic weather events, etc.) and their frequency, which are the responsibility of the trail section owners.

Lanark County Roads Paved Shoulder Program

There is no existing policy for paved shoulders on County roads. Lanark County Council, however, has approved a 10 Year County Roads Paved Shoulder Program that aims to pave the shoulders of all County roads, as documented in the Public Works Committee of the Whole Meeting Minutes on December 4, 2013.

A Cost-Benefit Analysis of the County Roads Paved Shoulder Program was prepared by the Lanark County Public Works Committee and presented to Lanark County Council outlining the benefits of having paved shoulders. It was concluded that a 10 Year County Roads Paved Shoulder Program would reduce road maintenance costs, improve road safety, and promote active transportation.

Approximately 50% of County road shoulders are currently paved and the remainder of County road shoulders will be paved based on annual rehabilitation projects at an average of 25 km to 30 km per year. It will take approximately 8 to 10 years to for all County roads to have paved shoulders.

Relevance to Active Transportation Plan

Cycling facilities have been proposed on County roads, with the initiative in place for paved shoulders the implementation of these facilities are just a matter of time.

THE UNITED COUNTIES OF LEEDS AND GRENVILLE

2021 United Counties of Leeds and Grenville Official Plan

The United Counties of Leeds and Grenville's Official Plan provides policy direction with consideration for growth management and land use planning to be adopted by the Counties' ten member Municipalities. The Plan's objectives related to transportation are to:

- Promote the establishment of a comprehensive and efficient transportation system to move people and goods to support the economic development objectives of the Counties;
- Support and encourage active transportation to contribute to the development of healthy, safe and complete communities and minimize automobile dependence;
- Optimize the use of existing infrastructure and public facilities prior to considering the development of new infrastructure; and
- Plan for and protect corridors and rights-of-way for infrastructure, including transportation and transit facilities to meet current and projected needs.

The Plan also includes policy supporting active transportation. The following are highlights from the Counties' AT policy:

- The Counties will consult and work cooperatively with the local municipalities to ensure that a future Counties-wide network is contiguous with local active transportation networks.
- The Counties and local municipalities will work towards providing safe bicycle and pedestrian paths, both along the roadway or separated from the roadway, on existing and proposed roads, on abandoned transportation corridors, on trail dedications or easements associated with rehabilitated mineral aggregate operations, and connecting parks and open spaces, as appropriate.
- The Counties and local municipalities will support the interconnectivity of existing walking trails and bicycle paths and, where feasible and appropriate, provide continuous trail system linkages.
- The Counties and local municipalities will support to promote accessible and convenient trail systems.
- The Counties, local municipalities and partners will pursue alternative funding from other levels of government and the private sector to implement active transportation and trail routes in the Counties, and have a lead role in public outreach and in promoting the benefits of active transportation.
- The Counties and local municipalities will support the use of inactive rail corridors for use as multi-use trails where feasible and appropriate.

- Existing County roads having substandard widths or engineering standards and when scheduled for reconstruction, may be reconstructed to currently accepted standards as determined by the Counties.

Relevance to Active Transportation Plan

As the neighbouring county to the south, the supportive active transportation policy outlined in the Official Plan ensures that access to or from Smiths Falls will not fall short at the boundary and that active transportation users will be provided with continuous and connected systems supportive of each other throughout different jurisdictions.

2018 Leeds and Grenville Asset Management Plan

The Leeds and Grenville Asset Management Plan (2018) is intended to be a resource for the Counties for decision-making processes with regards to the annual budgeting process and capital grant application process. It is a long-term plan for six categories of capital assets, among which Roads and Bridges/Culverts are included, and supplemented with a 10-year financing strategy and a 10-year financing plan. Overall, the Asset Management Plan provides an overview of the United Counties asset inventory for each category, including current level of service and performance, condition, approach for condition assessment, risk assessment, lifecycle activities, proposed level of services and financing strategy. Road assets include roads located across the Counties, but does not include roads owned by the separated municipalities (i.e. Brockville, Gananoque and Prescott).

As part of the asset management strategy for roads, the maintenance activities include crack sealing, cold patching, repaving (minor), drainage improvements, shoulder rehabilitation and right-of-way vegetation clearing and brushing. The service life of surface treatment activities varies from 6 years to 20 years.

Relevance to Active Transportation Plan

The Asset Management Plan identifies roads assigned with high importance, which include County Road 2, County Road 26, County Road 29, County Road 32, County Road 43, and County Road 44. Bridges on high importance roads will be assigned the same importance rating. County Road 43 and 29 are access point to Smiths Falls. In 2020, Counties Council endorsed that paved shoulders be included on major county road projects after the findings of a Staff Report recommended their implementation which will provide for continuous connected facilities between jurisdictions.

TOWN OF SMITHS FALLS

Smiths Falls 2019-2022 Strategic Plan

The Town's Strategic Plan aims to maintain a superior quality of life through effective and innovative services. Its four-year vision is supported by strategic priorities related to Housing, Quality of Life, Transportation Networks, Waterfront Development and Placemaking, Tourism, and Town Hall Campus and Square.

Relevance to Active Transportation Plan

Select strategic priorities and specific actions related to active transportation are listed below. Those in blue text are directly related to the Active Transportation Plan.

Quality of Life	Transportation Networks	Waterfront Development & Placemaking / Tourism
Priority: Improve the quality of life for Smiths Falls' residents **Goal:** Invest in quality of life features, including activities, to attract and retain people **Initiatives:** - Develop a Recreational Plan to understand current inventory and demand, understand expectations, and forecast future needs and wants - Create a Parks Master Plan to identify opportunities with a focus on connectivity around waterfront and regional trail networks	**Priority:** Facilitate improvements to transportation networks in Smiths Falls **Goal:** To enable improved mobility by examining existing transportation networks both within Town and beyond in a way that supports employment and accessibility **Initiatives:** - Develop a Transportation Master Plan - Improve pedestrian accessibility at Old Slys. - Develop an active transportation plan and a complete streets policy - Improve active transportation networks leading to Tweed Campus - Make a decision regarding Confederation Bridge	Priority: Facilitate the development of Smiths Falls' waterfront destinations / Improve Smiths Falls as a tourism destination **Goal:** Enhance the waterfront experience for residents and visitors by developing places that attract people / Attract visitors to expand the local economy **Initiatives:** - Develop a phasing plan to complete Waterfront Trail (as per Waterfront Integration Master Plan) and pedestrian bridges - Investigate active transportation through trail connections between settlement areas and pathway connections in communities (2021) - Create a central hub for the trails that come through Town by extending the Ottawa Valley Rail Trail to the Railway Museum - Develop and implement a Cycle Tourism Strategy

Quality of Life	Transportation Networks	Waterfront Development & Placemaking / Tourism
	- Full redevelopment of Lombard and Abbott intersections - Complete Beckwith Street redevelopment (Phases 1 & 2) - Complete Downtown Parking Study	

Parks and Recreation Master Plan

The Parks and Recreation Master Plan is currently nearing completion. The State of Parks and Recreation in the Town of Smiths Falls report reflects research and data pertaining to community needs and priorities that will be used to guide the development of the Parks and Recreation Master Plan. The Parks and Recreation Master Plan is intended to strengthen the Town's relationship with community organizations that provide parks and recreation services and managing these services.

Based on a resident survey that had 221 responses, 82% of respondents identified physical health / exercise as one of their main reasons to participate in parks and recreation activities, 79% of respondents identified hiking / walking / running on a trail or pathway as one of their most frequent outdoor activities, and 46% of respondents identified trails – natural surface (not paved) as one of their outdoor facility priorities.

Trends and leading practices within parks and recreation that apply to active transportation include:

- Age-friendly communities;
- Climate change is impacting recreation and parks;
- Recreation, sport and trails are economic engines;
- Natural spaces, trails and outdoor recreation as tools to drive health and wellness; and
- Equity and inclusion.

Relevance to Active Transportation Plan

Multi-purpose routes and trails, road routes, motorized off-road trail, water passages, and hiking and nature trails for recreational purposes are provided and maintained by the Town of Smiths Falls, community trail clubs and provincial organizations. Based on insights and findings of the inventory and supply of facilities, parkland, and trails, the presence of undeveloped

connections between regional and local multi-use recreational trails is an opportunity to encourage tourism development and active transportation facilities. As well, parks are a key destination for active transportation users and serve as a connection point within the Plan.

Smiths Falls Official Plan

Smiths Falls Official Plan (2016) establishes strategies for managing growth and related land use requirements over 20 years to 2034. The OP guides Council on matters related to land use planning and growth and promotes the Provincial policy-led planning system. The OP supports a comprehensive, integrated and long-term approach to planning and recognizes linkages among policy areas.

Relevance to Active Transportation Plan

Throughout the Official Plan active transportation is recognized and promoted primarily as an opportunity to improve community health, environmental sustainability and mobility. Demonstratively the plan recommends a Bicycle Master Plan be developed to supplement the Town's Pedestrian Linkages Study (2012). Specifically, there are goals within the OP that support the development of an active transportation network:

Provide environmentally sustainable programs, facilities, and infrastructure assets, supported by a network of trails and pathways throughout the Town to provide an alternate means of transportation. Policies include:

- Develop trails, parks, and recreation facilities in an environmentally sensitive and fiscally sustainable manner that can contribute to the natural heritage system.
- Expand Smiths Falls' trail network and, where feasible, develop interconnected trails with bike lanes to facilitate bicycle commuting and recreational uses.
- Encourage environmentally sustainable connections (such as pedestrian/bike trails, bike lanes and routes, etc.) between community elements like schools, parks, recreation areas, libraries, etc.

Create a well-designed, unique, and vibrant public realm with appropriate uses and facilities to maximize pedestrian activity; support community interaction; and attract residents, business, and visitors to Smiths Falls (Town Centre). Policies include:

- In pedestrian-oriented areas such as the Downtown, provide high-quality pedestrian facilities that promote pedestrian activity, including adequate sidewalk dimensions for both circulation and outdoor activities related to the adjacent land use and other pedestrian amenities. In these areas, strongly discourage parking areas located between the front of

buildings and the street to promote a safe and attractive street façade and pedestrian access to buildings.

Complete and maintain a transportation system that supports the mobility needs of bicyclists and pedestrians while also providing for the safe and efficient movement of automobiles, buses, and trucks. Policies include:

- Accommodate and encourage use of non-automobile transportation modes to achieve Smiths Falls' goals and reduce vehicle trip generation.

Improve walking and bicycling facilities to be more convenient, comfortable, and safe, so that they become primary transportation modes in Smiths Falls. Policies include:

- Coordinate the planning and implementation of Town wide bicycle and pedestrian facilities and supporting infrastructure. Give priority to bicycle and pedestrian safety and access improvements at street crossings.
- Provide a continuous pedestrian and bicycle system to enhance connectivity throughout the Town by completing missing segments.
- Construct crosswalks and sidewalks that are universally accessible and designed for use by people of all abilities.
- Encourage walking and bicycling and increase pedestrian and bicycle safety through education programs.
- Integrate the financing, design and construction of pedestrian and bicycle facilities with street projects. Build pedestrian and bicycle improvements at the same time as improvements for vehicular circulation.
- Develop a Smiths Falls Bicycle Master Plan.

Develop a network of trails which will make Smiths Falls a leader in terms of the scale and quality of trails taking advantage of the Rideau Canal and other trail systems. Policies include:

- Provide gateway elements, interpretive signage, public art, and other amenities along trails to promote use and enhance the user experience.

Develop a safe and accessible Trail Network to serve as a primary means of active transportation and recreation. Policies include:

- Support off-street travel by interconnecting individual trail systems to each other and to regional trail systems.
- Provide direct, safe and convenient bicycle and pedestrian connections between the trail system and adjacent neighbourhoods, schools, employment areas and shopping areas.
- Coordinate and connect the trail system with the on-street bikeway system.

Zoning By-law No. 6080-94

Within the general provisions of Zoning By-Law No. 6080-94 (June 18, 2021), there are parking area regulations that indicate the minimum parking requirement (i.e. number of parking spaces) based on type of use. The parking area requirements that are listed for non-residential uses are to be reduced by 50 percent if they are located within the commercial core (lands zoned as C1 – General Commercial Zone and indicated in Schedule A of the Official Plan). An exception zone to the 50 percent reduction in parking requirement pertains to the lands zoned C1-4 at 127 Beckwith Street North, where this reduction is not permitted.

Relevance to Active Transportation Plan

There is no reference to bike parking in the parking areas regulations which provides an opportunity to update the Zoning by-law to be inclusive of other modes of transportation and reduce the parking footprint within the Town.

Asset Management Plan & Long Term Financial Sustainability Plan

The Town of Smiths Falls Asset Management Plan & Long Term Financial Sustainability Plan (2016) is intended to be a resource for Town staff for decision-making processes with regards to the annual budgeting process and capital grant application process. It is a long-term plan for capital assets, such as road related (roads, curbs, bridges, streetlights, traffic lights, signs and sidewalks), and the levels of service at which the capital assets are being maintained. Overall, the Asset Management Plan provides an overview of the Town's asset inventory including asset attributes, replacement costs, and asset condition, the expected levels of service within the area, an asset management strategy that indicates the requirements for maintaining, rehabilitating, replacing/disposing and expanding the Town's assets, and a financing strategy to establish a funding plan for the asset management strategy.

Relevance to Active Transportation Plan

As part of the asset management strategy, Town staff prioritized select assets based on having an extreme/high total risk if a particular asset were to fail and are listed below. These prioritized select assets will be utilized in identifying the overall implementation strategy for the Active Transportation Plan.

Roads	Bridges
Lombard Street / Connecting Link	Stone Arch Bridge (Beckwith Street)
Foster Ave. – Ogden to Victoria	Pedestrian Bridges
Brockville St. – Alfred to Broadview	Confederation Bridge
Gilroy St. – Lorne to Mackenzie	
Rideau Ave. – Cornelia to 20m S of Stephen	
William St. E – Beckwith to Market	
Lorne St. – Queen to CPR	
Alfred St. – Lombard to Abbott	
Catherine St. – Oak to Davidson	
Condie St. – Greig to McDonald	
Jasper Ave. – Brockville/Beckwith to Elm	
Beckwith St. – Chambers to Main	
Beckwith St. – Main to Russell	
Oak St. – Brockville to Jasper	
Beckwith St. – Russell to Daniel	
Beckwith St. – Daniel to Elmsley	

Parking By-law 7252-97

Parking By-law 7252-97 (updated March 2021) regulates and controls vehicle parking. Schedules A to S provided in this by-law indicate locations with distinct parking allowance, as well as parking restrictions.

Relevance to Active Transportation Plan

There are locations with the Plan where parking will be removed on streets to re-allocate the space to active transportation facilities. Amendments to the by-law will be required as facilities are implemented.

Complete Streets Policy

APPENDIX

B

Smiths Fall Active Transportation Plan

COMPLETE STREETS POLICY

SEPTEMBER 2021

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WHAT ARE COMPLETE STREETS

Complete Streets are streets that are planned, designed, constructed, operated and maintained for all modes of transportation and all street users. Through a Complete Streets design and mindset, the street network functions in such a way that it allows people to arrive at their destination using a wide range of travel modes with a sense of comfort.

A Complete Streets Policy can be considered for all types of projects and policies at any stages. It can be used as a guiding tool for Town staff, agencies, planners and developers to build, design and retrofit existing or new infrastructure. The policy promotes equal consideration to multiple transportation mode users in order to provide a balanced and inclusive transportation network.

PURPOSE & OBJECTIVES

For the Town of Smiths Fall, the Complete Streets policy is to provide a standardized guideline in planning, constructing and maintaining infrastructure for all modes of travel and all transportation system users. The Complete Streets Policy is built upon a collective vision to balance safety, equity, and efficiency of transportation. This Policy will act as a roadmap for any expansion and maintenance of existing and future roadways in Smiths Falls as well as potential expansion of service (e.g. transit service).

This Complete Streets Policy provides a consistent guideline to follow when reviewing, planning, retrofitting, building and maintaining roads. The purpose is to ensure all road users are familiar with roadway features and facilities and are accommodated for their needs regardless of their travel mode choice.

The objectives that the Complete Streets Policy is seeking to achieve include:

- Provide a safe and comfortable street environment for all ages and abilities as pedestrians, cyclists, potential future transit riders, mobility devices, other non-motorized devices and motorists;
- Promote sustainable travel and improve public health; and
- Review and encourage more comprehensive capital program planning.

THE 10 COMPLETE STREETS GUIDING ELEMENTS

The National Complete Streets Coalition is the leading association that developed 10 elements of Complete Streets. These 10 elements have been adapted by **Complete Streets for Canada** to use as guidelines to develop policies. These 10 elements are key points that can guide the Town

of Smiths Falls design and planning processes for equitable and context-sensitive transportation and streetscape projects. The 10 guiding elements include:

	Guiding Element	Description
Vision		
1.	Embodies a Community Vision	Establishes a motivating community vision, objectives and purpose for implementing Complete Streets elements
Core Commitments		
2.	Defines All Users and Modes	Specifies and provides equal consideration to people of all ages and abilities, as well as all modes of travel, especially walking, cycling, riding transit (if provided in the future), on wheelchairs or scooters, driving trucks, buses and automobiles
3.	Applies to All Projects and Phases	Recognizes opportunities of application to new and retrofit transportation projects are subject to the policy, including design, planning, construction, maintenance, and operations
4.	Identifies Clear, Accountable Exceptions	Accounts for any appropriate exemptions due to legislative, topographical, technical, cost-benefit limitations or other exemptions that are specified and approved by a high-level official
5.	Encourages Network Connectivity and Integration	Promotes continuous integration of different modes in a comprehensive and connected street network
Best Practices		
6.	Adoptable by All Agencies and Jurisdictions	Establishes an approach that can be adopted and understood by all departments and other agencies that may be involved in the process
7.	Utilizes Latest Design Guidelines	Draws from the use of the latest and best design criteria and guidelines while recognizing the need for flexibility to balance user needs
8.	Acknowledges Context Sensitive Solutions	Considers the current and planned context, buildings, land use and transportation needs to recommend planning and design solutions to be adapted
9.	Defines Performance Standards with Measurable Outcomes	Establishes qualitative or quantitative performance indicators to evaluate and monitor policy impacts over time
Implementation		
10.	Proposes Specific Implementation Steps	Lists specific steps and identifies a timeline for implementing Complete Streets

SMITHS FALLS' COMPLETE STREETS POLICY USING THE 10 GUIDING ELEMENTS

The Smiths Falls' Complete Streets Policy is an adaptation of these 10 guiding elements.

VISION

The Smiths Falls' Official Plan and the Active Transportation Plan support the Complete Streets approach. The Official Plan emphasises building a connected community through an integrated, accessible and efficient transportation system for multiple modes of travel. This is emphasized in the Active Transportation Plan, which has a vision to provide a safe and reliable network plan for people of all ages and abilities to create healthier communities.

The Complete Streets vision for the Town of Smiths Falls is:

> *The Town of Smiths Falls plans, designs, builds, operates, and maintains a connected street network that provides a sense of comfort for all road users regardless of their age, ability and travel mode of choice.*

CORE COMMITMENT

DEFINES ALL USERS AND MODES

The roadway functions differ depending on the road classification. Arterial roads are designed to move people at larger volumes at higher speeds compared to local roads, which are designed for proving access to properties and destinations. Depending on the roadway function, the design should be planned for the appropriate users and modes.

During the planning stage for new and updates to existing roadways, all road users should be considered to be aligned with the overall network connectivity and within the space available on the roadway or within the ROW. Facilities should be free of barriers for pedestrians, cyclists, and drivers as well as children, seniors, and those with disabilities to ensure safety, reliability and convenience.

APPLIES TO ALL PROJECTS AND PHASES

The Complete Streets approach should be considered at all stages of a project that may require physical changes to the road and for maintenance and operational updates. The Town should develop a process to integrate Complete Streets elements to allow for designs to accommodate all road users and for efficiency and cost saving purposes. Connectivity of facilities such as gaps and transition between facilities at intersections should be especially reviewed for retrofitting and upgrading existing roadways.

For any County Roads within the Town jurisdiction and roadways intersecting with County Roads, the Town will work with Lanark County to ensure that the policy is applied. Privately funded projects within the Town boundaries will also adhere to this policy and be constructed with special attention to vulnerable road users.

IDENTIFIES CLEAR, ACCOUNTABLE EXCEPTIONS

The Complete Streets Policy is intended for all road and streetscape projects within the practical, technical and financial boundaries. While the Complete Streets Policy will be considered for all relevant opportunities, there may be exceptions that may hinder its full applicability. The following exceptions will be granted with approval from the Town:

- Where there may be negative impacts to the natural environment and topographical limitations exist;
- The benefit or the expected outcome cannot be justified by the use and the overall implementation cost of Complete Streets elements;
- When emergency and maintenance operations are compromised; and
- The travel demand or the future needs are not supported.

ENCOURAGES NETWORK CONNECTIVITY AND INTEGRATION

The Complete Streets Policy encourages facility and network connection by providing seamless transitions between multiple travel modes. To support pedestrians, the policy encourages to plan for a continuous sidewalk network. To support cyclists, either for recreational or commuting, the policy encourages connection between on-road bike routes to trails as well as key destinations such as schools, libraries, community centres and the Downtown.

The end-of-trip infrastructure such as bike parking will be planned to support accessibility needs and to encourage higher non-motorized trips at popular destinations and at transition points such as the VIA train station. Streetscaping elements within the boulevard should be designed and placed to prioritize the mobility of pedestrians, cyclists, wheelchairs and other mobility assisted devices.

BEST PRACTICES

ADOPTABLE BY ALL AGENCIES AND JURISDICTIONS

The Complete Streets Policy will be reviewed by all appropriate Town departments to review impacts to their operations. External stakeholders such as Lanark County, VIA Rail, school boards, downtown business association and conservation authorities will be informed and consulted on an ongoing basis.

UTILIZES LATEST DESIGN GUIDELINES

The Town's policies, bylaws, standards and guidelines will be used in combination with the latest industry's best practices when designing for the Town's streets. The following are recommended design guidelines used in best practices in Canada:

- Transportation Association of Canada – Geometric Design Guide for Canadian Roads (2017);
- The Province of Ontario – Ontario Regulation 191/11 Integrated Accessibility Standards (2016);
- Transportation Association of Canada – Manual of Uniform Traffic Control Devices for Canada (2021);
- The Ministry of Transportation Ontario - Ontario Traffic Manual Book 15 Pedestrian Crossing Treatments,
- The Ministry of Transportation Ontario - Ontario Traffic Manual Book 18 Cycling Facilities; and
- Active Transportation Alliance – Complete Streets Rural Context (2014).

ACKNOWLEDGES CONTEXT SENSITIVE SOLUTIONS

The Complete Streets Policy notes that every project will have location-specific concerns and needs. With the same vision, to enhance mobility experience for all people, the recommendations may differ depending on the location. There are many factors that are considered: land use, demographics, topography, available width, travel demand, operating speed, road capacity, resident concerns, future plans, maintenance requirements and other geographical and technical circumstances.

The following considerations should be followed: supported road users, potentially excluded road users, impacts to the parallel roadways, and road network impact after implementation.

DEFINES PERFORMANCE STANDARDS WITH MEASURABLE OUTCOMES

Once a Complete Streets project is implemented, regular monitoring and evaluation by Town staff is recommended to gauge how well the street operates as a complete street. A set of evaluation criteria are used to understand future needs and the performance of complete streets elements. Suitable evaluation criteria include:

Network-wide	Project-specific
- Ratio of travel choice (mode split) - Number, type, and severity of any collisions; - Total km of cycling facilities and trails by facility types - Total km of sidewalks built, widened and repaired - Number of new projects with Complete Streets elements incorporated - Number of safety improvement projects - Number of AODA accommodations implemented and updated;	- 85th percentile vehicle travel speed; - Number of end-of-trip facilities installed - Number of streetscaping elements such as trees planted and streetlights installed - Number of safety improvement projects - Number of AODA accommodations implemented and updated;

It is recommended the Town confirm measurable criteria and then develop thresholds for the criteria to monitor success and rate of implementation. An audit of existing infrastructure in queue for capital works, future road improvements being considered in capital budgets, and policy frameworks would provide an appropriate starting point for developing a measuring and monitoring tool.

IMPLEMENTATION

PROPOSES SPECIFIC IMPLEMENTATION STEPS

The Complete Street Policy is a guiding document that outlines principles and parameters. There are a series of next steps to follow in order to achieve a full cycle of designing and implementing Complete Streets. The following action items are for Smiths Falls Town staff to consider and identify how best to move forward with promoting the application of its Complete Streets Policy:

1. Gather input from appropriate Town departments and staff to confirm and incorporate into the Complete Streets Policy as part of the Town's best practices.
2. Consider developing an internal working committee of Town staff involved with the delivery, operations, and maintenance of the street network to help ensure construction and maintenance of complete streets.

3. Consider existing design standards against the Complete Streets principles and determine where changes may be required to support implementation. One objective can be to establish design guidelines based on a Complete Streets approach as part of the Town's practices.
4. Review ongoing projects and new projects to implement Complete Streets elements.
5. Support and provide education opportunities to Town staff for staff development and training through workshops and seminars.
6. Develop a measuring and monitoring tool to evaluate implementation of complete streets elements.

Consultation & Engagement Summary

APPENDIX

C

Smiths Falls Active Transportation Plan

Public Open House
Summary Report

Draft Report | November 2021

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1.0 INTRODUCTION

The Town of Smiths Falls has retained WSP Canada to lead the development of an Active Transportation Plan (ATP) to identify a long-term strategy to improve walking, cycling and other active transportation modes throughout the Town. The Plan is a living document that will serve as a foundational guide as to how the Town can enhance active transportation options and recreational opportunities for people of all ages and abilities who either live in or visit the community.

As part of the Plan development, a Public Open House was held to ensure that a strong understanding of the surrounding context is reflected in the Plan and its recommendations through local knowledge to ensure that the needs of residents and stakeholders are met.

This report provides a summary of the Public Open House including: an overview of the Public Open House purpose and format, a summary of the comments received during the Public Open House and how they will be incorporated into the Plan, and next steps in the study process.

2.0 OVERVIEW OF PUBLIC OPEN HOUSE

2.1 PURPOSE

The purpose of the Public Open House was to engage a wide range of community members and representatives to:

- Comment on the proposed cycling network and pedestrian facilities based on location, facility type and project priority;
- Gain a stronger understanding of local needs with regards to municipal and County owned roadways; and
- Understand preferences in program delivery and future priorities to support active transportation through education and outreach efforts.

2.2 NOTIFICATION

To ensure that a wide range of community members and representatives were engaged, an invitation to participate was sent via email on October 6, 2021 to stakeholders and members of the public who had previously filled out the Smiths Falls ATP Online Public Survey and expressed interest in receiving notification of project updates, including events. A follow-up reminder was sent on October 18, 2021. In addition, a notice of the Public Open House was advertised on the Town's social media pages, Speak Up Smiths Falls website, and the local newspaper. The Public Open House invitation is provided in Appendix A.

2.3 FORMAT

The Public Open House was held on October 20, 2021 from 7:00 pm to 8:30 pm. Due to COVID-19 public health restrictions, the Public Open House was conducted online using ZOOM video teleconferencing. A link to the Zoom video teleconference was provided to all confirmed participants in advance of the meeting.

The format of the Public Open House was both informative and interactive to allow participants to share their experience-based knowledge of the Town's history, current resources, and underlying aspirations and concerns related to active transportation.

A presentation was delivered at the beginning of the Public Open House to introduce the Project Team, provide an outline of the Open House format and to provide an overview of the Plan and its development, including the study purpose and goals, project objectives, public survey findings, network development process, and proposed outcomes such as policy and outreach initiatives. A copy of the presentation is provided in Appendix B.

Following the presentation, an interactive whiteboarding tool (Miro) was utilized to engage participants and gather their input. Two activities were undertaken using this tool, as follows:

- Activity 1 – Active Transportation Network Map Mark-Up
- Activity 2 – Programming Ideas Prioritization

The Public Open House concluded with a summary and closing remarks, including an overview of next steps in the study process.

2.4 ATTENDANCE

There was a total of approximately 15 participants in the Public Open House, including community members and representatives. The following members of the Project Team were present to facilitate the Public Open House and discuss the Plan with the participants and answer any questions:

- Vanessa Bernicky – Town of Smiths Falls
- Paul McMunn – Town of Smiths Falls
- Kimberley Hunton – WSP
- Nicole Tsiolas – WSP
- Erica Stone – WSP

3.0 SUMMARY OF FEEDBACK RECEIVED

3.1 ACTIVITY 1 – ACTIVE TRANSPORTATION NETWORK MAP MARK-UP

The first activity provided participants with the opportunity to add comments using Miro to the following 6 maps that form the proposed active transportation network:

- Map 1 – Existing and Planned Facilities
- Map 2 – Proposed Cycling Network
- Map 3 – Proposed Pedestrian Projects by Type
- Map 4 – Proposed Cycling Projects by Type
- Map 5 – Proposed Pedestrian Projects by Priority
- Map 6 – Proposed Cycling Projects by Priority

The majority of comments were directed towards Maps 3, 4 and 6. Table 1 provides a summary of the comments received.

Table 1: Maps 3, 4 and 6 - Summary of Comments Received

Comment Received
Map 3 – Proposed Pedestrian Projects by Type
New pedestrian crossings are needed in the Town at the following locations: • Jasper Avenue / Vincent Street • Along Elmsley Street • William Street / Beckwith Street • Jasper Avenue / Brockville Street • Lombard Street / Aberdeen Avenue • Abbott Street / Ferrara Drive • Ross Street / Brockville Street • Abbott Street / the sidewalk south of the water treatment plant
Crossing at the Abbott Street bridge if difficult and dangerous due to the amount of vehicle traffic at the Abbott Street / Lombard Street intersection.
There is an opportunity for the sidewalk south of the water treatment plant to be extended along the waterway west of Abbott Street. Currently a bridge and town walkway lead pedestrians to the side of road with no sidewalk. Recommend installing a safe landing area with a pedestrian crosswalk for safe travel across a busy street.

Comment Received
A route for cyclists and pedestrians is needed along Rideau Avenue.
A separate walkway is needed instead of the proposed paved shoulder along Queen Street between the Gallipeau Centre and Hershey Drive.
A sidewalk or multi-use path should be located along Old Slys Road. Concern regarding the walkway between bridge and canal and bridge at the falls. Trying to get a sidewalk here.
Access to parks and green space for the Ferrara Meadows subdivision should be planned for.
The pedestrian subway exit at Victoria Avenue / Robinson Avenue could be improved by keeping the lights on during the day.
Support the proposed pathway along the Rideau River south of Centre Street as it would provide separation from traffic along water.
Sidewalks on Marguerite and Allan Street
Map 4 – Proposed Cycling Projects by Type
Support for Rideau Avenue cycling infrastructure improvements.
The Town may consider working with the Rideau ATV Club to allow for pedestrians and cyclists to use the club's trails near Smiths Falls.
Support for protected cycling infrastructure between Queen Street and Beckwith.
Recommend the development of a Bicycle Master Plan showing bike entries into town and key areas where biking tourist may be directed (restaurants and shopping), and the use of protected bike lanes.
Road improvements are needed along Lombard Street due to the condition of the pavement. A shared cycling facility is acceptable because the road is wide and vehicle speeds are not typically too fast.
A separate path is needed along Old Slys Road.
Suggest working with Lanark County to improve the safety of Hwy 43 for cyclists.
Increased bicycle parking options are needed in the Town.
Routes that children can use to bike to school should be prioritized in the Plan.
The Plan should take into consideration that Lanark County is paving all shoulders as they rebuild roads.
Supportive of protected space for cyclists between Queen and Beckwith, this stretch is currently unsafe with cars parked on either side.
Safe, adequate cycling routes are needed leading out of Town. Cyclists don't normally use this route along the Cataraqui Trail - if leaving town they use Golf Club Road to Bay Rd and linking to bike lanes on CR1.

Comment Received
The existing trail shown between Cornelia Street and Elmsley Street does not exist.
Suggest that the Town work with CP to connect to the OVR without using roads.
Map 6 – Proposed Cycling Projects by Priority
Van Horne Avenue should be reduced to a medium or low priority due to the low traffic volume and slower speeds on the road.
Consideration should be given for the impacts on road safety as the Gallipeau Centre is developed.
Cornelia Street should be elevated from a medium to a high priority because it connects to many businesses and services, including the intersection at Cornelia Street / Union Street.

The results of Activity 1 are illustrated in Figures 1 and 2. All maps that were showcased during the Public Open House are provided in Appendix C. The comments made will be used to refine the maps and ultimately the project list.

Figure 1: Activity 1 - Maps 1, 2 and 3

Figure 2: Activity 1 - Maps 4, 5 and 6

3.2 ACTIVITY 2 – PROGRAMMING IDEAS PRIORITIZATION

The second activity involved participants providing feedback on programming ideas to support active transportation through a voting exercise. Participants were able to identify their high priority, medium priority, and low priority programming ideas by copying and pasting a selection of coloured dots, as shown below, and dragging them to the correct location.

There was a total of 19 different programming ideas to prioritize and are listed below with their priority voting:

	Programming Idea	Priority Vote			Additional Comment
		High	Med	Low	
1	Wayfinding system (cycling/hiking time maps at key travel destinations)	3			- An app would be a great addition to this idea.
2	Create an Active Transportation Advisory Committee to establish priorities, bridge gaps in	1	1		- I agree, most transportation discussion seems to be about drivers instead of active transportation.

	Programming Idea	Priority Vote			Additional Comment
		High	Med	Low	
	knowledge and facilitate implementation				- We have this but it is mostly drivers. - There are spaces open on the Transportation Advisory Committee.
3	Open Streets Events	3	1		- An event similar to the Promenade on Princess Street in Kingston would be really great. We used to have a healthy living festival that I would love to see returned.
4	Host a community cycling challenge that incents people to log cycling kilometers in exchange for a potential prize		2		
5	E-bike loan service out of local service (i.e. provide from local institutions, dual as a entry level cyclist service and tourism opportunity)	1	2		- Bikes that seniors sit in the front. - A ride sharing program would be great to have bikes available to those who don't currently have one.
6	Bike rodeos in schools and at special events	4			
7	Earn a Bike Bicycle Repair Program in partnership with local high schools	3	2		- The teens will benefit from this.

	Programming Idea	Priority Vote High	Priority Vote Med	Priority Vote Low	Additional Comment
8	Monitoring and reporting scheme (i.e. trail counters at key locations, biannual monitoring report)	3			- This is critical for showing that these projects are good investments!
9	1m Safe Passing Public Awareness Campaign	2			- High. Police could be involved. - Yes, yes, yes! - There is a huge issue with sharing the road with anyone other than those in a vehicle. I experience this every time I cycle or run. Local police need to be on board, they give out information that is counter to Ontario's official cycling rules.
10	Winter Wheels Program	1	2		
11	Cycling skills training – train the trainer funding stream	4			- Town involved with run/bike/swim event organizers. Bringing weekend events town. - Smiths Falls is home to Canada's oldest triathlon, it would be great to engage more people in this fun and friendly event.
12	Equity seeking initiative programs, bike shares for all demographics	2	1		- A ride sharing program would be great to have bikes available to those who do not currently have one.

	Programming Idea	Priority Vote			Additional Comment
		High	Med	Low	
13	Bike equipment giveaways from local institutions (i.e. lights, bells, water bottles from trail facilities, local libraries/offices)		3		
14	Formalize and expand the number of designated "bike/trail hubs" at key locations (i.e. bike repair stands, shelters, benches, bike parking – prioritize at key travel destinations)	4			
15	Increase participation in Active School Travel Program	3			
16	Weekly Slow Rolls to showcase local destinations		2	1	
17	Bike valet at community events			2	
18	Lunch and Learn Active Transportation Sessions at workplaces			3	
19	Bike Month	1	1	1	

The top three programming ideas based on voting frequency and priority level were:

- Bike Rodeos in schools and at special events

- Formalize and expand the number of designated “bike/trail hubs” at key locations (i.e. bike repair stands, shelters, benches, bike parking – prioritize at key travel destinations)
- Cycling skills training – train the trainer funding stream

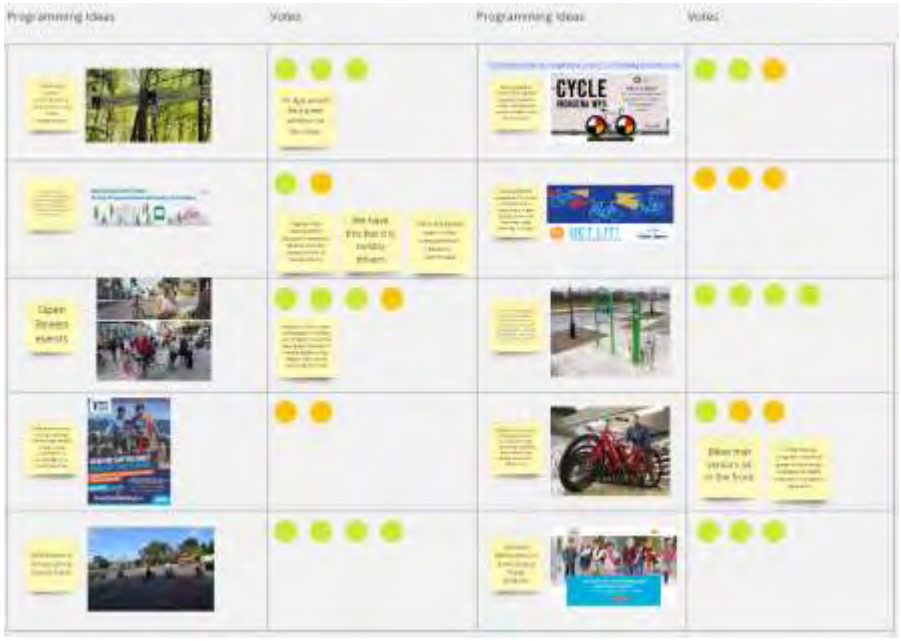

Figure 3: Activity 2 – Programming Ideas and Corresponding Priority Votes (Part 1)

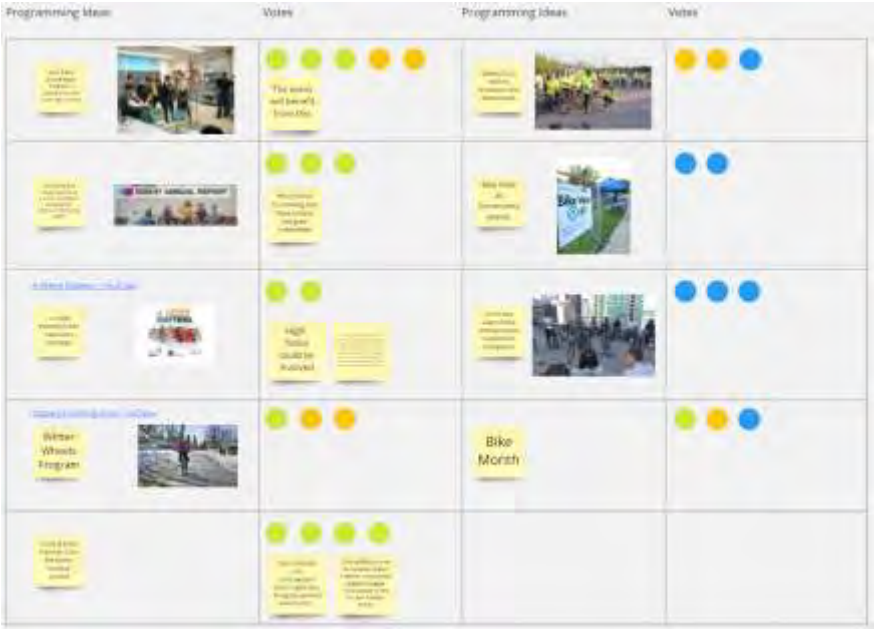

Figure 4: Activity 2 – Programming Ideas and Corresponding Priority Votes (Part 2

4.0 NEXT STEPS

The feedback received during the public open house session will be used to inform the next steps of the Plan development process, including:

- Confirmation of the network and prioritized projects;
- Development of implementation plan (phased approach);
- Development of supportive policies and programming initiatives; and,
- Development of the Active Transportation Plan.

Appendix A

Public Open House Invitation

SMITHS FALLS
RISE AT THE FALLS

Notice of Online Public Open House
Smiths Falls Active Transportation Plan

You are invited to participate in an Online Public Open House for the Smiths Falls Active Transportation Plan:

- **Wednesday, October 20th, 2021 from 7:00 pm to 8:30 pm**
- **Zoom Meeting:**
  https://smithsfalls-ca.zoom.us/j/85864178902?pwd=ODdOV0NDRU9FM0VQM0FFY2pMMWI2dz09
  Meeting ID: **858 6417 8902** and Passcode: **321058**

The Town of Smiths Falls has retained WSP, a consulting firm, to prepare an Active Transportation Plan to develop a strategy for the enhancement and implementation of routes, infrastructure and policy for non-motorized transportation within the Town.

The Active Transportation Plan will include a proposed network and a prioritized project list for implementation within the short, medium and long-term planning horizons as well as proposed policies and outreach programs to support the developing network. The plan will facilitate the provision of improved transportation options for residents to travel to and from work, school, for recreation and for running errands using non-motorized modes and support healthy living and tourism through an expanded, well-connected network and initiatives that promote increased recreational experiences including walking and cycling.

The Online Public Open House will include:

- A presentation by WSP, to provide an overview on the project process, summarize the results of the public survey that was carried out and identify how projects were identified and prioritized;
- An interactive opportunity using the online tool Miro to comment on the proposed cycling routes, sidewalk links, facility types for the cycling network and project priorities; and
- A Question and Answer period with Town Staff and members of the WSP Project Team.

The Public Open House presentation will be recorded and made available on the Speak Up Smiths Falls website following the Public Open House meeting at: https://speakupsmithsfalls.com/active-transportation-plan.

Please submit any questions or comments on the Active Transportation Plan to:

Vanessa Bernicky, C.E.T.
Engineering Technologist, Public Works and Utilities
(613) 283-4124 ext. 1147
vbernicky@smithsfalls.ca

Thank you for your participation and interest in this project.

Appendix B

Presentation Materials

Town of Smiths Falls

Active Transportation Plan

Public Open House

October 20, 2021

Study Purpose

- The Town of Smiths Falls is developing a long-term active transportation strategy to…
  - Identify a comprehensive active transportation network using county and municipal infrastructure
  - Provide a safe and accessible prioritized network plan to encourage users to integrate AT into their lives to reduce greenhouse gases and create healthier communities.
  - Recommend policies, design guidelines and maintenance practices to support the network implementation

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RISE AT THE FALLS

wsp

Study Goals

Goals

- Develop a well-connected, implementable and affordable AT network of prioritized projects
- Establish a Vision and Goals based on staff and community's input
- Identify practical, safe, effective and accessible AT connections to and through the Town
- Adopt supportive policies and initiatives to the infrastructure development
- Carry out meaningful and ongoing community engagement to understand local needs
- Collaborate, engage, listen and learn from staff, stakeholders, interest groups and the local community

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Project Objectives and Overview of Process

Step 1

Background and Existing Conditions Review

- Initiation Meeting
- Review studies and compile data
- Inventory of existing and proposed AT infrastructure

Step 2

Network Development

- Public online survey
- Identify network gaps
- TAC and ACC meetings
- Develop Complete Streets Policy Document
- Identify route selection criteria

Step 3

Network Implementation Plan

- Develop Project List
- Prioritization / Phasing of Projects
- Presentation to Council #1
- Public Open House

We are here

Step 4

Plan Preparation

- Develop cost estimates and funding strategies
- Document Strategic Initiatives incl. monitoring program
- Develop report
- Presentation to Council #2

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Public Survey – What we heard

244 total responses

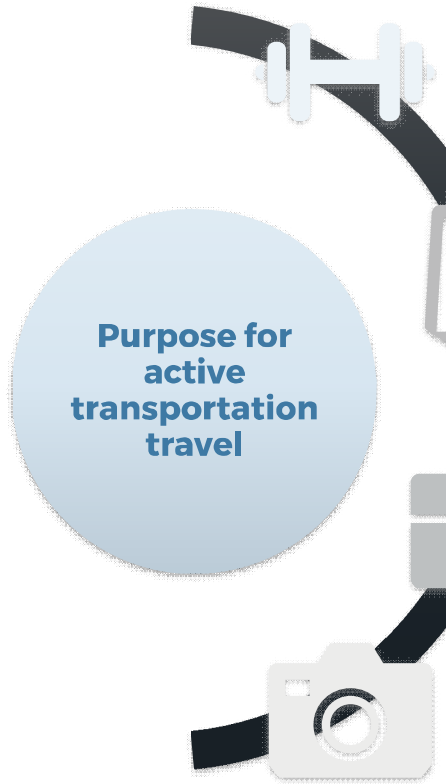
70% identify as a pedestrian for non-motorized travel

37% feel very comfortable walking in Town on existing roads and sidewalk infrastructure

20% identify as a cyclist or e-bike user for non-motorized travel

10% feel very safe/comfortable cycling in Town

Over 40% feel the most comfortable riding a bike on a physically separated facility



65%
Fitness, health and recreation

42%
Shop, run errands and visit friends

11%
Go to and from work

10%
Tourism

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Public Survey – What we heard

Top barriers that prevent people from walking in Town more often...

- **34%** Conditions of sidewalks or trails
- **27%** Weather
- **25%** Lack of sidewalks or trails

Top reasons to not cycle within the Town...

- **36%** No bike ownership
- **28%** Do not feel safe biking on existing facilities (e.g. on-road)
- **20%** It is not convenient

Locations in Town where new or expanded pedestrian/cycling facilities would like to be seen...

- Old Slys Road
- Parks (e.g. Lower Reach Park) and waterfronts
- Cataraqui Trail
- Commercial areas (e.g. stores along Lombard St.)
- Bridge crossings (e.g. Abbott St.)
- Schools

Target actions for investing in active transportation in the Town:

1. Improve maintenance on existing pedestrian and cycling facilities	2. Build more paved trails or multi-use paths	3. Improved crossings, signals and lighting

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Network Development

1 Existing Conditions

- Identify existing facilities, key destinations
- Identify previously proposed routes from planning documents

2 Gaps and Candidate Routes

- Identify route selection criteria
- Identify gaps and opportunities for new cycling routes

3 Field Investigations

- Desktop and field review of existing (can they be considered an existing facility) and proposed routes

4 Confirm Network and Select Facilities

- Confirm routes
- Identify projects and apply best practices to identify preferred facility types – this includes where facilities may need upgrades

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Network Development - Process

- Direct connections throughout the Town
- Linkages to local key destinations (e.g. schools, parks, etc.)
- Connection to the surrounding area (e.g. Lanark County, United Counties of Leeds and Grenville)
- Linkages to existing and proposed routes and trails
- Missing links in Waterfront, Cataraqui, Rideau, and Trans Canada Trails
- Routes promoted by a number of different businesses, organizations and individuals (e.g. Real Action, Friends of the Cataraqui Trail, Rideau Trail Association)
- Identifying key barriers (i.e. busy roads, crossings, etc.)

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Project Prioritization

High

- Strategic Plan
- Survey results
- ACC and TAC input
- Connections to multiple key destinations

Medium

- Frequently travelled routes (Strava)
- Connection between high priority routes

Low

- Difficult to implement projects (with less benefit)
- Fewer connections to key destinations
- Lower volume roadways

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Facility Types

Shared Space

Paved Shoulders

Buffered Paved Shoulders

Multi-Use Path

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Facility Types

Bike Lane

Buffered Bike Lane

Cycle Track

Policy

- Possible Recommendations for Policy Development:
  - Age-friendly communities and equity
    - Pedestrian facilities with hardened surfaces (i.e. crosswalks and sidewalks) must comply with the Accessibility for Ontarians with Disabilities Act (AODA) for mobility assisted users (e.g. wheelchair, walker)
    - Official Plan update (e.g. develop map of equity areas)
  - New developments
    - Site plan development orientation to facilitate active transportation movements (e.g. active modes closer to building fronts)
    - Process update for site plan reviews (e.g. incorporate recommendations of AT Plan)
  - Update zoning by-law to include minimum bike parking for different land uses
  - Update existing by-laws for permitted sidewalk cycling (e.g. children 10 and under)
  - Maintenance policies related to surface treatments or winter maintenance

SMITHS FALLS
RISE AT THE FALLS

Outreach

- Outreach initiatives that help support and promote the development of an active community, could include:
  - Develop Comprehensive Wayfinding Strategy and Signage Plan
  - Community-based bike sharing program
  - Develop dedicated website and/or app for those visiting the community and/or printed promotional materials
  - Family Bike Days (could include bike rodeo / education initiatives, bike safety equipment giveaways, organized rides)
  - Bike parking (incl. with local businesses)
  - Monitoring program

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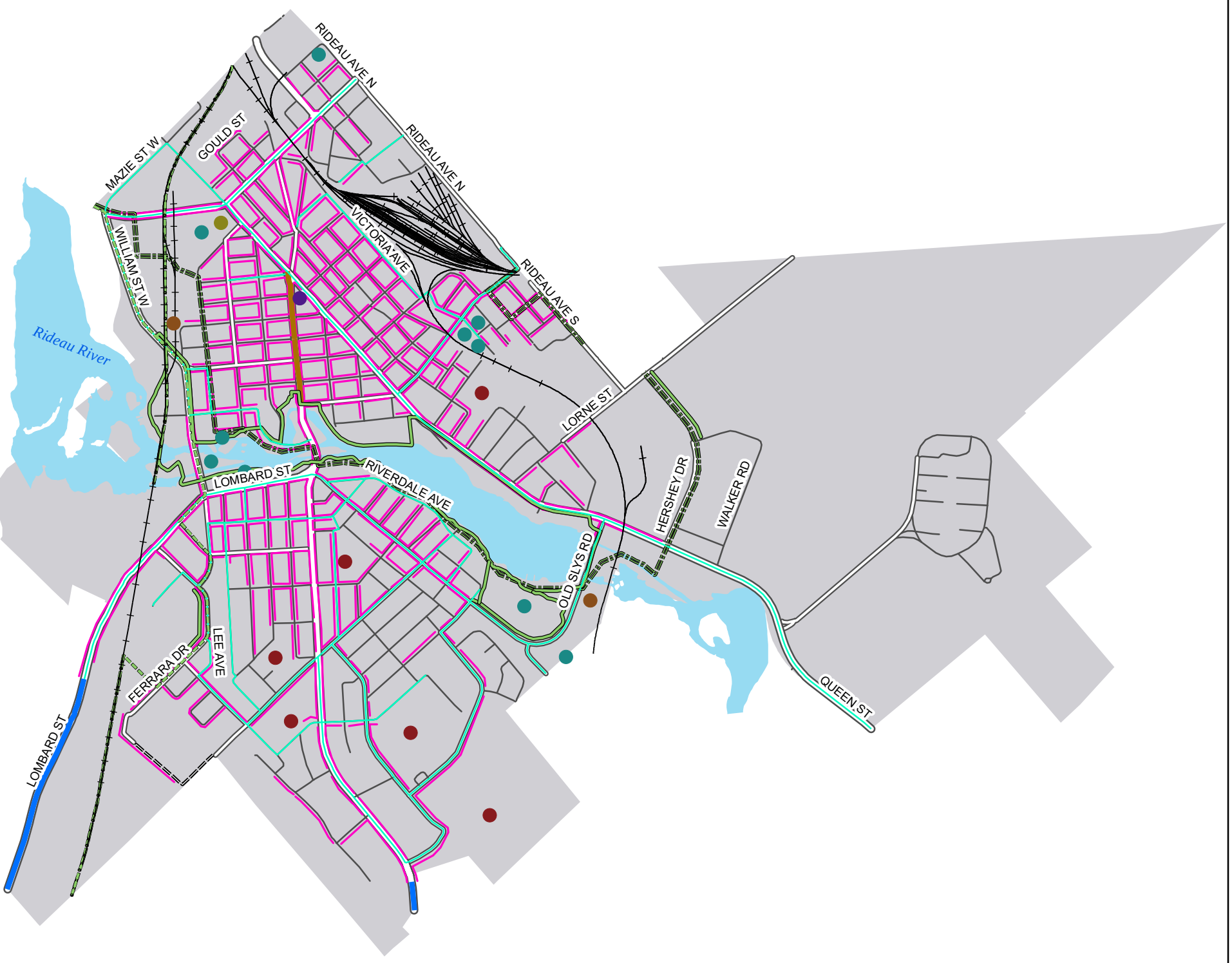
Next Steps

- Refine project list and prioritization with comments received through consultation with the community
- Develop Implementation Plan including suggested policy updates or development
- Develop Active Transportation Plan Report
- Present final Report including Implementation Plan to Council November 22nd

Appendix C

AT Network Maps



Legend

Road Network

- Arterial Road
- Collector Road
- Future Collector Road
- Local Road
- Railway

Key Destinations

- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities

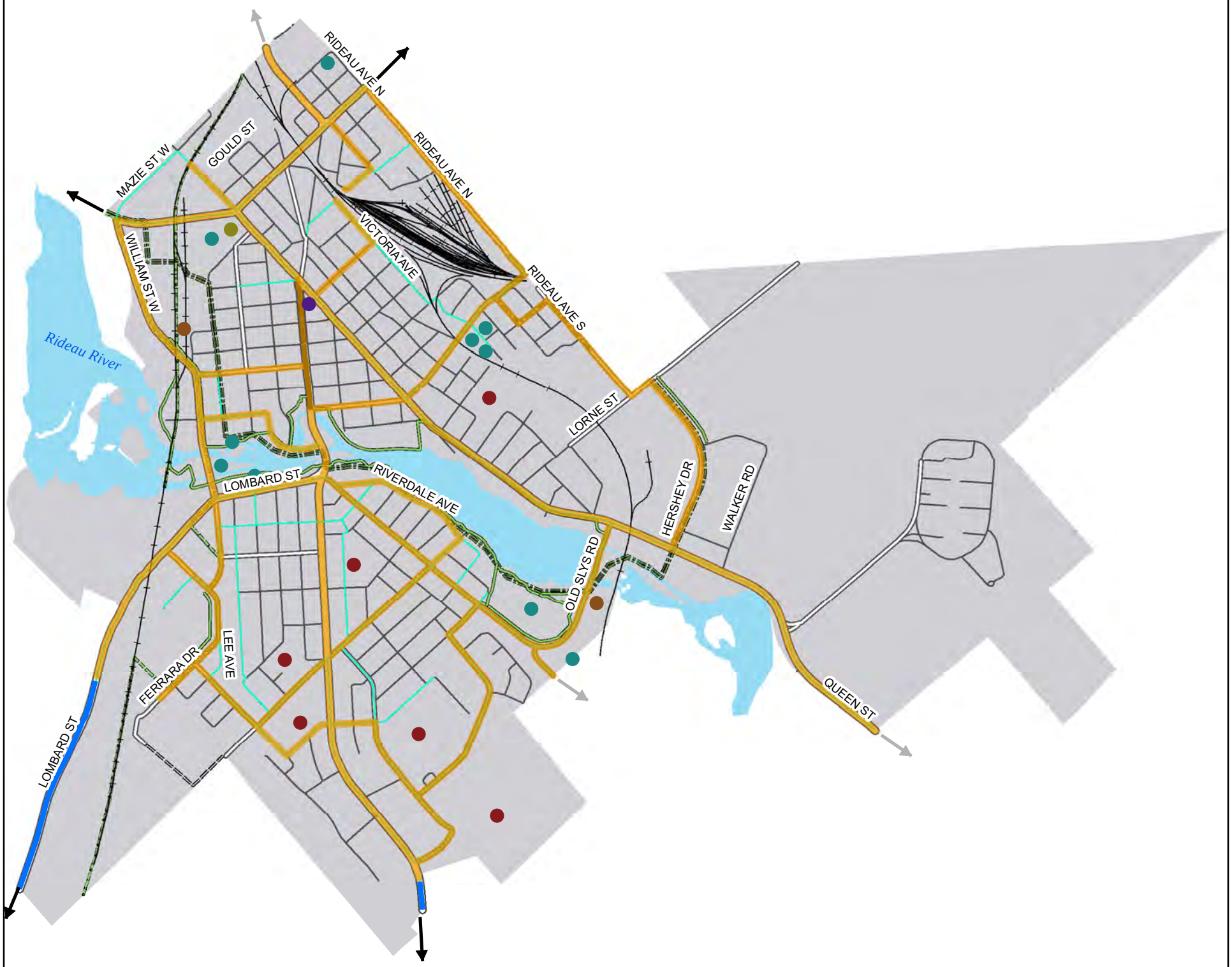
- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- On Road Bicycle Route
- Sidewalk
- Cycle Track
- Paved Shoulders

Map 1 Existing and Planned Facilities

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5 Kilometers



Legend

Road Network

- Arterial Road
- Collector Road
- Local Road
- Future Collector Road
- Railway

Key Destinations

- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities

- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- On Road Bicycle Route
- Cycle Track
- Paved Shoulders

Proposed Facilities

- Cycling Network

Connections Outside Smiths Falls

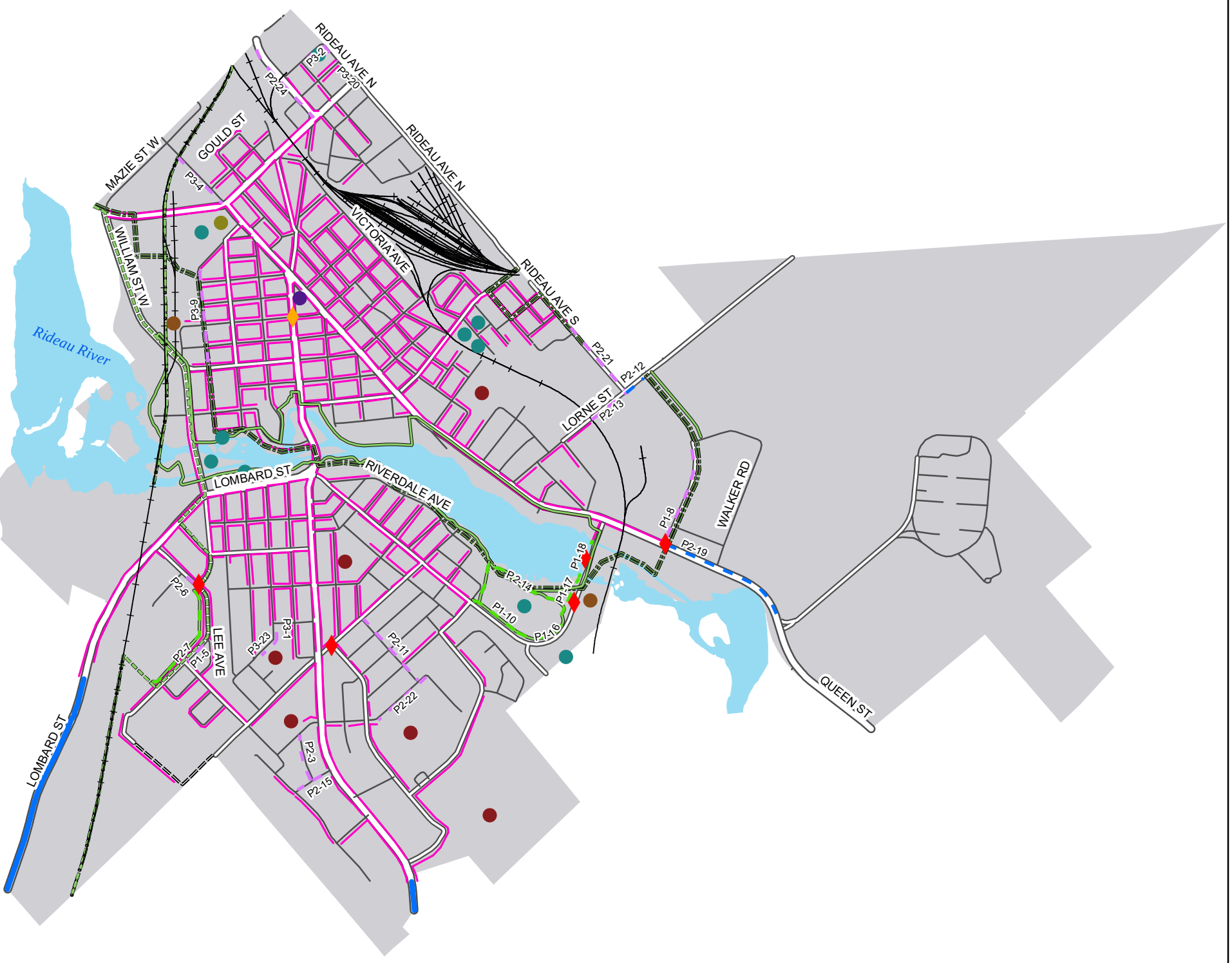
- Existing
- Proposed

Map 2 Proposed Cycling Network

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5 Kilometers



Legend

Road Network

- Arterial Road
- Collector Road
- Local Road
- Future Collector Road
- Railway

Key Destinations

- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities

- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- Sidewalk
- Pedestrian Crossover
- Paved Shoulders

Proposed Pedestrian Facilities

- Concrete Sidewalk
- Multi-Use Path
- Paved Shoulder
- Pedestrian Crossover

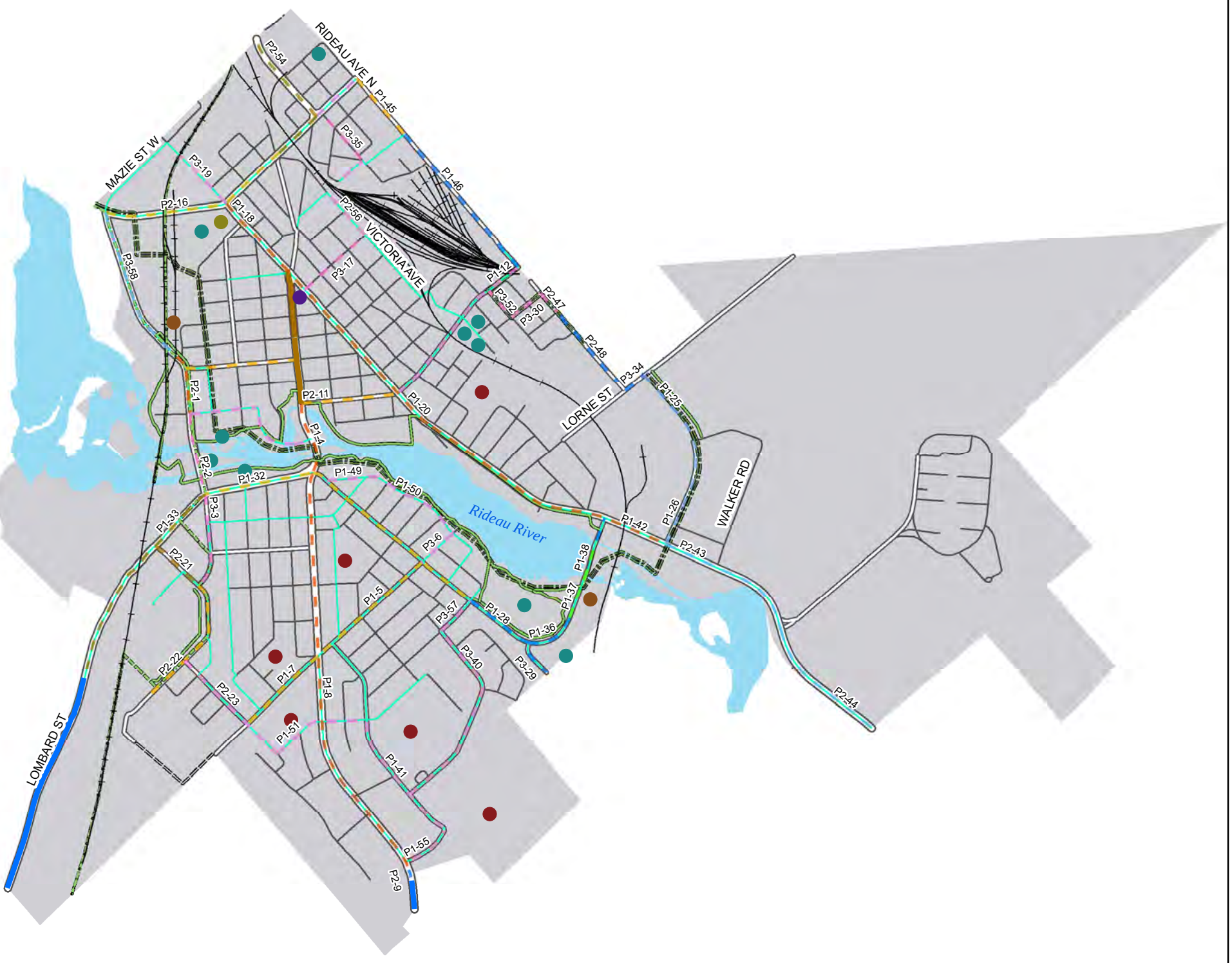
Map 3

Proposed Pedestrian Projects by Type

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5 Kilometers



Legend

Road Network

- Arterial Road
- Collector Road
- Local Road
- Future Collector Road
- Railway

Key Destinations

- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities

- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- On Road Bicycle Route
- Cycle Track
- Paved Shoulders

Proposed Cycling Facilities

- Shared Space
- Bike Lane
- Buffered Bike Lane
- Paved Shoulder
- Buffered Paved Shoulder
- Cycle Track
- Multi-Use Path

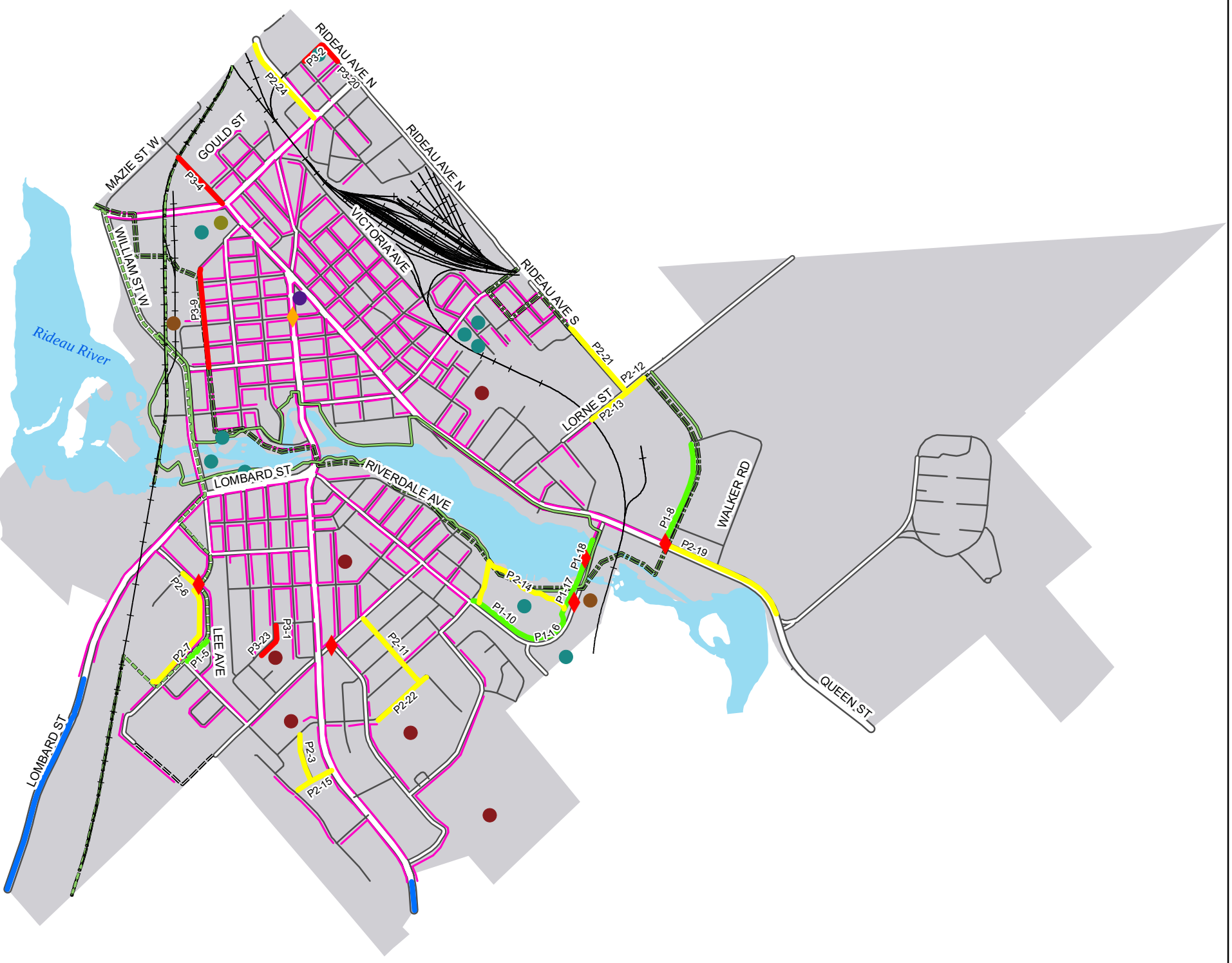
Map 4

Proposed Cycling Projects by Type

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5 Kilometers



Legend

Road Network

- Arterial Road
- Collector Road
- Local Road
- Future Collector Road
- Railway

Key Destinations

- School
- Park
- Museum
- Library
- Recreation

Existing and Planned Facilities

- Multi-Use Path
- Trans Canada Trail
- Cataraqui Trail
- Rideau Trail
- Sidewalk
- Pedestrian Crossover
- Paved Shoulders

Proposed Pedestrian Facilities

- High
- Medium
- Low
- Pedestrian Crossover

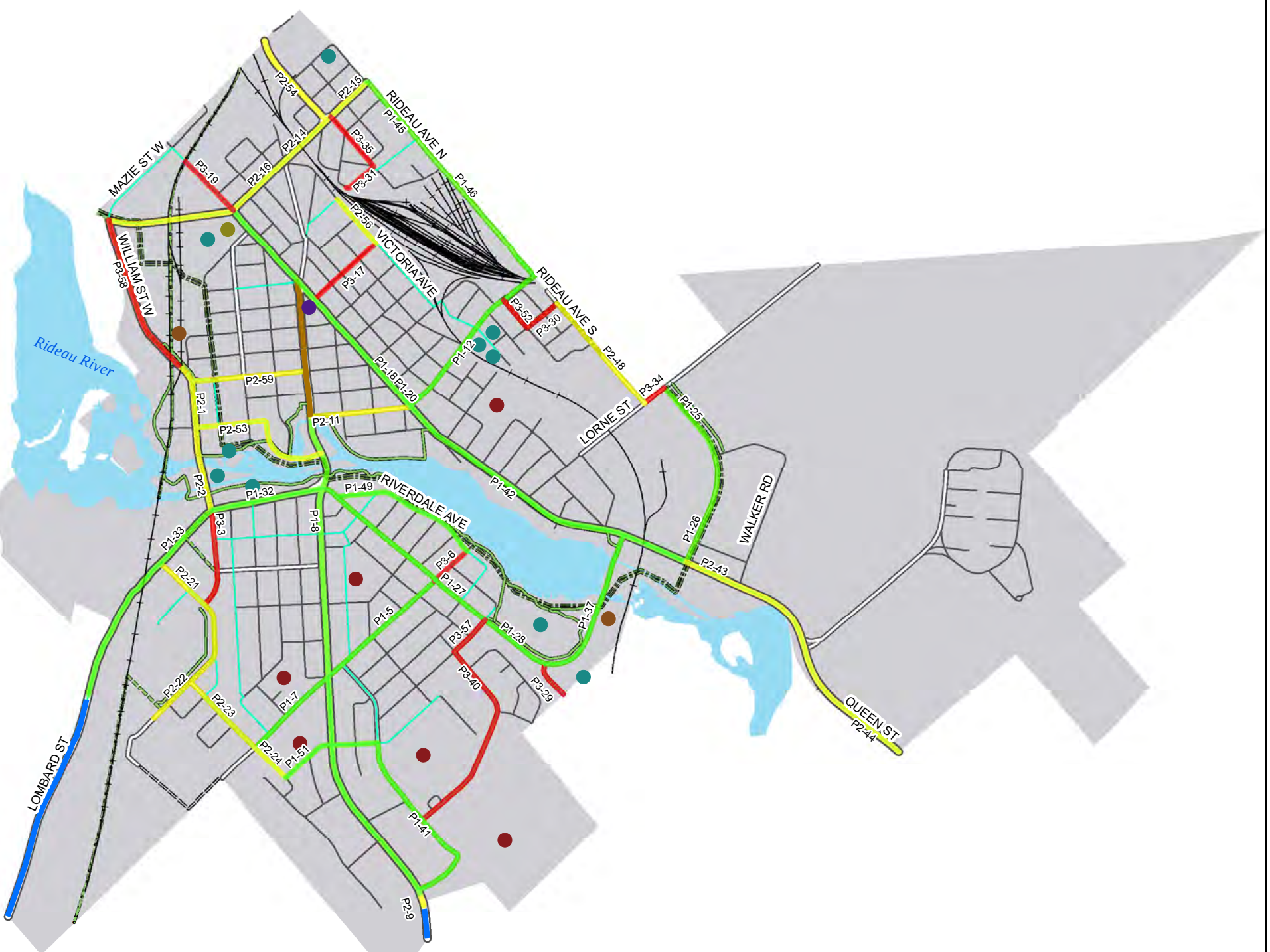
Map 5

Proposed Pedestrian Projects by Priority

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5 Kilometers



Legend

Road Network	Key Destinations	Existing and Planned Facilities	Proposed Cycling Facilities
Arterial Road	School	Multi-Use Path	High
Collector Road	Park	Trans Canada Trail	Medium
Local Road	Museum	Cataraqui Trail	Low
Future Collector Road	Library	Rideau Trail	
Railway	Recreation	On Road Bicycle Route	
		Cycle Track	
		Paved Shoulders	

Map 6

Proposed Cycling Projects by Priority

SMITHS FALLS ACTIVE TRANSPORTATION PLAN

N

0 0.25 0.5 1 1.5

Kilometers

Pedestrian Project List

APPENDIX

D

Project ID - Project Priority	Project ID - Project Number	Road / Project Name	From	To	Road Classification	Segment Length (m)	Context Considerations	Existing Sidewalk?	On a Proposed Cycling Route?	Priority Level	Proposed Facility Type	Proposed Facility Type Location	Project Description / Decision Rationale	Funding Source	Total Cost	Phasing
P3	1	Aberdeen Avenue	Jessie Street	St Lawrence Street	Local	70	- Presence of residential driveways - Concrete curb on both sides of the road - Existing east side concrete sidewalk north of Jessie St.	No sidewalk	No	Low	Sidewalk	Eastside	- Proposed concrete sidewalk on the east side of the road - Low priority as indicated by Town staff	Smiths Falls Project	$ 14,000	Phase 3 (10+ Years)
P3	2	Alexander Street	Condie Street	Rideau Avenue N	Local	120	- In connection with the park at the south-west corner of Alexander St. / Rideau Ave. N	No sidewalk	No	Low	Sidewalk	Southside	- Proposed concrete sidewalk on the south side of the road - Low priority as indicated by Town staff - In connection with a park	Smiths Falls Project	$ 24,000	Phase 3 (10+ Years)
P2	3	Allan Street	Ross Street	Marguerite Street	Local	210	- Presence of residential driveways - Concrete curb on both sides of the road - In connection with St. Francis de Sales Catholic School	No sidewalk	No	Medium	Sidewalk	Westside	- Proposed concrete sidewalk on the west side of the road - Would provide students at St. Franicis de Sales Catholic School with additional pedestrian facilities	Smiths Falls Project	$ 42,000	Phase 2 (6-10 Years)
P3	4	Elmsley Street N	Cornelia Street W	Cataraqui Trail	Local	307	- Discontinuous concrete sidewalk on both sides of the road - Presence of utility poles		Yes	Low	Sidewalk	Westside	- Proposed concrete sidewalk on the west side of the road - Low priority as indicated by Town staff - Would provide continuity in the existing sidewalk and lead pedestrians to the Cataraqui Trail - Utility pole relocation may be required	Smiths Falls Project	$ 61,400	Phase 3 (10+ Years)
P1	5	Ferrara Drive	Harold Street	Lee Avenue	Collector	115	- Presence of residential driveways and a concrete curb - Existing concrete sidewalk on the east side of Harold St. - Planned sidewalk on the east side of Ferrara Drive between Abbott St. S and Lee Ave.	Yes - one side only	Yes	High	Sidewalk	Southside	- Proposed concrete sidewalk on the south side of the road - Would supplement new developments in the south-west end of Town and be in connection to the planned sidewalk on the east side of Ferrara Dr. between Abbott St. S and Lee Ave.	Smiths Falls Project	$ 23,000	Phase 1 (0-5 Years)
P2	6	Ferrara Drive	Ferguson Drive	Abbott Street S	Collector	75	- Worn path/desire line at this location - Existing sidewalk on the west side of Ferrara Dr. ends at Abbott St. S - Ferguson Dr. leads to a large comercial area	Yes - one side only	Yes	Medium	Sidewalk	Westside	- Proposed concrete sidewalk on the west side of the road - In connection with a commercial area and the existing stonedust multi-use path/concrete sidewalk on the west side of Ferrara Dr. south of Abbott St. S	Smiths Falls Project	$ 15,000	Phase 2 (6-10 Years)
P2	7	Ferrara Drive	Abbott Street S	Bellamy Drive	Collector	535	- Stonedust multi-use path that connects to the sidewalk on the west side of Ferrara Dr. (across from Abbott St. S) and continues to Bellamy Dr., which leads towards the Cataraqui Trail		Yes	Medium	Off-Road Multi-Use Path	Northside	- Upgrade existing stonedust path on the north-west side of the road that leads to the Cataraqui Trail to a hard surfaced off-road multi-use path (3.0m wide asphalt surface)	Smiths Falls Project	$ 120,375	Phase 2 (6-10 Years)

Project ID - Project Priority	Project ID - Project Number	Road / Project Name	From	To	Road Classification	Segment Length (m)	Context Considerations	Existing Sidewalk?	On a Proposed Cycling Route?	Priority Level	Proposed Facility Type	Proposed Facility Type Location	Project Description / Decision Rationale	Funding Source	Total Cost	Phasing
P1	8	Hershey Drive	Queen Street	Air Care Drive	Collector	471	- In connection with Tweed Visitor Centre - Gravel shoulders with no parking permitted	No sidewalk	Yes	High	Buffered Paved Shoulder		- Proposed 1.5m paved shoulders with a buffer to be shared between pedestrians and cyclists (documented under "Proposed Cycling Projects") - Limited road right-of-way to work with given the road drainage ditches to provide separate pedestrian and cycling facilities - High priority as indicated by Town staff and what is documented in the Strategic Plan	Smiths Falls Project	$ -	Phase 1 (0-5 Years)
P3	9	James Street	Lansdowne Street	William Street W	Local	426	- Presence of residential driveways - No concrete curb for the majority of the road segment - Forms part of the Rideau Trail	No sidewalk	No	Low	Sidewalk	Eastside	- Proposed concrete sidewalk on the east side of the road - Low priority as indicated by Town staff - Would supplement the Rideau Trail	Smiths Falls Project	$ 85,200	Phase 3 (10+ Years)
P1	10	Jasper Avenue	Vincent Street	Old Slys Road	Collector	265	- Stonedust multi-use path on the north side of the road - Adjacent to Lower Reach Park	No sidewalk	Yes	High	Off-Road Multi-Use Path	Northside	- Upgrade existing stonedust path at Lower Reach Park on the north side of the road to a hard surfaced off-road multi-use path (3.0m wide asphalt surface) - Will help address the safety concerns on Old Slys Road and provide an AODA compliant facility for users of all ages and abilities	Smiths Falls Project	$ 59,625	Phase 1 (0-5 Years)
P2	11	John Street	Broadview Avenue E	Ross Street	Local	362	- Presence of residential driveways and a concrete curb	No sidewalk	No	Medium	Sidewalk	Eastside	- Proposed concrete sidewalk on the east side of the road - Would provide additional pedestrian facilities near Chimo Elementary School	Smiths Falls Project	$ 72,400	Phase 2 (6-10 Years)
P2	12	Lorne Street	Rideau Avenue S	Hershey Drive	Collector	104	- Gravel shoulders	No sidewalk	Yes	Medium	Paved Shoulder		- Proposed 1.5m paved shoulder to be shared between pedestrians and cyclists (documented under "Proposed Cycling Projects")	Smiths Falls Project	$ -	Phase 2 (6-10 Years)
P2	13	Lorne Street	CP Railway	Rideau Avenue S	Collector	190	- Gravel shoulders	No sidewalk	No	Medium	Sidewalk	Southside	- Proposed concrete sidewalk on the south side of the road - Would extend the existing sidewalk on the south side of Lorne St. west of the CP Railway, and lead to Tweed	Smiths Falls Project	$ 38,000	Phase 2 (6-10 Years)
P2	14	Lower Reach Park Loop	Approx. 30m south of Vincent Drive	Smiths Falls Curling and Squash Club entrance (north)		585	- Stonedust multi-use path		No	Medium	Off-Road Multi-Use Path		-Upgrade the remainder of the existing stonedust path loop around Lower Reach Park (portion that does not run parallel/is not adjacent to Jasper Ave. and Old Slys Rd.) to a hard surfaced off-road multi-use path (3.0m wide asphalt surface) - Will improve user experience	Smiths Falls Project	$ 131,625	Phase 2 (6-10 Years)
P2	15	Marguerite Street	Wood Avenue	Brockville Street	Local	170	- Presence of residential driveways - Concrete curb between Allan St. and Marguerite St. - Drainage ditch on both sides of the road between Wood Ave. and Allan St.	No sidewalk	No	Medium	Sidewalk	Northside	- Proposed concrete sidewalk on the north side of the road - Would provide additional pedestrian facilities near St. Francis de Sales Catholic School	Smiths Falls Project	$ 34,000	Phase 2 (6-10 Years)

Project ID - Project Priority	Project ID - Project Number	Road / Project Name	From	To	Road Classification	Segment Length (m)	Context Considerations	Existing Sidewalk?	On a Proposed Cycling Route?	Priority Level	Proposed Facility Type	Proposed Facility Type Location	Project Description / Decision Rationale	Funding Source	Total Cost	Phasing
P1	16	Old Slys Road	Jasper Avenue	Smiths Falls Curling and Squash Club entrance (north)	Collector	260	- Stonedust multi-use path on the north-west side of the road	No sidewalk	Yes	High	Off-Road Multi-Use Path	Westside	- Upgrade existing stonedust path at Lower Reach Park on the west side of the road to a hard surfaced off-road multi-use path (3.0m wide asphalt surface) - Will help address the safety concerns on Old Slys Road and provide an AODA compliant facility for users of all ages and abilities	Smiths Falls Project	$ 58,500	Phase 1 (0-5 Years)
P1	17	Old Slys Road	Smiths Falls Curling and Squash Club entrance (north)	Old Slys Bridge	Collector	145	- Narrow gravel shoulders - Drainage ditch on the west side of the road - Surrounding green space - In connection with the Smiths Falls Heritage House Museum	No sidewalk	Yes	High	Off-Road Multi-Use Path	Westside	- Using the gravel area used for vehicles entering Lower Reach Park (across from the Smiths Falls Curling and Squash Club north entrance), provide a hard surfaced off-road multi-use path (3.0m wide asphalt surface) adjacent to and to the west of the grass boulevard/drainage ditch to eventually align with Old Slys Bridge - The intention is for the multi-use path to branch off from the existing stondedust multi-use path around Lower Reach Park at the Curling Club and lead towards Old Slys Bridge - Will help address the safety concerns on Old Slys Road and provide an AODA compliant facility for users of all ages and abilities leading into and out of Lower Reach Park	Smiths Falls Project	$ -	Phase 1 (0-5 Years)
P1	18	Old Slys Road	Old Slys Bridge	Old Slys Locks	Collector	157	- Narrow paved shoulder on the west side of the road with no buffer from vehicles (dangerous for pedestrians) - Presence of guard rails	No sidewalk	Yes	High	Cycle Track	Westside	- Upgrade concrete sidewalk over the south bridge and the paved shoulder on the west of the road to a bi-directional cycle track (raised and curb separated) that can also be used by pedestrians (essentially a multi-use path) - Documented under "Proposed Cycling Projects" - This road has been mentioned in the Strategic Plan and was frequently referred to in the online public survey to improve active transportation facilities for enhanced safety and comfort	Smiths Falls Project	$ -	Phase 1 (0-5 Years)
P3	19	Queen Street	Hershey Drive	The Gallipeau Centre at Rideau Regional Center	Arterial - County Road	610	- Gravel shoulders	No sidewalk	Yes	Low	Buffered Paved Shoulder	Northside	- Proposed 1.5m paved shoulders with a buffer to be shared between pedestrians and cyclists (documented under "Proposed Cycling Projects") - Limited road right-of-way to work with given the road drainage ditches and surrounding vegetation/water body to provide separate pedestrian and cycling facilities	Smiths Falls Project	$ -	Phase 3 (10+ Years)

Project ID - Project Priority	Project ID - Project Number	Road / Project Name	From	To	Road Classification	Segment Length (m)	Context Considerations	Existing Sidewalk?	On a Proposed Cycling Route?	Priority Level	Proposed Facility Type	Proposed Facility Type Location	Project Description / Decision Rationale	Funding Source	Total Cost	Phasing
P3	20	Rideau Avenue N	Greig Street	Alexander Street	Collector	101	- In connection with the park at the south-west corner of Alexander St. / Rideau Ave. N - Existing sidewalk on the north side of Greig St.	No sidewalk	No	Low	Sidewalk	Westside	- Proposed concrete sidewalk on the west side of the road - Low priority as indicated by Town staff - In connection with a park	Smiths Falls Project	$ 20,200	Phase 3 (10+ Years)
P2	21	Rideau Avenue S	Lorne Street	2nd Street	Collector	368	- Narrow gravel shoulders - Residential driveways on the east side of the road - Concrete sidewalk in very poor condition between 2nd St. and 3rd St. on the east side of the road (separated from the road by a grass boulevard)	No sidewalk	Yes	Medium	Sidewalk	Eastside	- Proposed concrete sidewalk on the east side of the road - Would provide a continuous pedestrian facility in connection with existing sidewalks, especially on a roadway with an increasing traffic volume due to Tweed being nearby	Smiths Falls Project	$ 73,600	Phase 2 (6-10 Years)
P2	22	Ross Street	Glenwood Crescent	Chimo Elementary School Entrance (West)	Local	285	- Presence of residential driveways and a concrete curb - In connection with Chimo Elementary School	No sidewalk	No	Medium	Sidewalk	Southside	- Proposed concrete sidewalk on the south side of the road - Would provide additional pedestrian facilities leading to Chimo Elementary School	Smiths Falls Project	$ 57,000	Phase 2 (6-10 Years)
P3	23	St Lawrence Street	Aberdeen Avenue	Ontario Street	Local	94	- Presence of a concrete curb - In connection with Tr Leger Sch-Adult Alternative	No sidewalk	No	Low	Sidewalk	Southside	- Proposed concrete sidewalk on the south side of the road - Low priority as indicated by Town staff	Smiths Falls Project	$ 18,800	Phase 3 (10+ Years)
P2	24	Union Street	Cornelia Street E	VIA Rail Station	Arterial - Provincial Highway	425	- Presene of commercial driveways - High traffic volume roadway - No concrete sidewalk on the west side of the road between Cornelia St. E and Alexander St. (pavement maintenance strip between Alexander St. and the VIA Rail Station)	Yes - one side only	Yes	Medium	Sidewalk	Westside	- Proposed concrete sidewalk on the west side of the road - In connection with the Smiths Falls VIA Rail Station and other commercial businesses - Will provide pedestrians with a designated space to walk, especially next to a road with a high average annual daily traffic volume	Provincial Project	$ 85,000	Phase 2 (6-10 Years)

Cycling Project List

APPENDIX

E

Project ID - Project Priority	Project ID - Project Number	Road	From	To	Road Classification	Context	Length (m)	Posted Speed Limit (km/h)	AADT	Context Considerations	Priority Level	Proposed Separation Level	Proposed Facility Type (used for Cost Calculation)	Project Description / Decision Rationale	Risks/Notes	Funding Source	Total Cost	Phasing
P2	1	Abbott Street N	Railway Museum of Eastern Ontario Entrance	Strathcona Street	Arterial	Urban / Suburban	311	50	11,483	- Two-lane, two-way road with a painted centreline - Concrete curb on both sides of the road between Railway Museum and William St. W - Concrete sidewalk on the east side of the road and a discontinuous gravel shoulder on the west side of the road between William St. W and Strathcona St. - Residential driveways on the east side of the road - Commercial driveway/parking on the west side of the road	Medium	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - Possible speed reduction for the safety of cyclists - Vehicle lane width reduction will be required		Smiths Falls Project	$ 48,827	Phase 2 (6-10 Years)
P2	2	Abbott Street N	Strathcona Street	Lombard Street	Arterial	Urban / Suburban	346	50	11,483	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on both sides of the road between Strathcona St. and the Water Treatment Plant - Concrete sidewalk on the west side of the road between the Water Treatment Plant and Lombard St. - Surrounding green space (Parks Canada land), in connection with Duck Island - Two bridge crossings (south bridge is a lock bridge)	Medium	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space given the narrow road width and two bridge crossings - Possible speed reduction for the safety of pedestrians and cyclists due to the surrounding context prohibiting the implementation of designated/separated cycling facilities - In connection with surrounding green space and trails	- Proposed pedestrian crossover just north of the lock bridge is within 200m of a signalized intersection (Lombard / Abbott). According to OTM Book 15, pedestrian crossovers are to generally not be located within 200m of a signalized intersection with a pedestrian crosswalk.	Smiths Falls Project	$ 4,014	Phase 2 (6-10 Years)
P3	3	Abbott Street S	Lombard Street	Ferrara Drive	Collector	Urban / Suburban	408	50	2,258	- Two-lane, two-way road with no painted centreline between Lombard St. and Alfred St. and a painted centreline between Alfred St. and Ferrara Dr. - Concrete sidewalk with a grass boulevard on the east side of the road between Lombard St. and Alfred St. (no concrete curb on the west side) - Concrete sidewalk on the west side of the road between Alfred St. and Ferrara Dr. (concrete curbs on both sides of the road) - Presence of residential and commercial driveways - Presence of utility poles within the road right-of-way	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width - Would provide a route that leads to the new developments in the south-west end of Town		Smiths Falls Project	$ 490	Phase 3 (10+ Years)
P1	4	Beckwith Street S	Chambers Street	Lombard Street / Jasper Avenue	Arterial - Provincial Highway	Urban / Suburban	314	50	18,907	- Four-lane, two-way road (including auxiliary turn lanes) with a painted centreline - Presence of a bridge crossing - Presence of vertical and horizontal road curvatures that may affect sightlines - Concrete sidewalk on both sides of the road - No on-street parking with the exception of bus parking in front of Veterans' Memorial Park - In connection with the Beckwith Revitalization project	High	Designated Operating Space	Buffered Bicycle Lane with Hatched Pavement Markings with Road Diet	- Proposed buffered bike lane with hatched pavement markings - Possible speed reduction for the safety of cyclists given the high traffic volume and road curvature that may impact sightlines - Review of a potential road diet to reconfigure the road pavement markings and/or lane reduction to accommodate the bike lanes - Provides a continuation of the Beckwith Revitalization project		Provincial Project	$ 20,410	Phase 1 (0-5 Years)
P1	5	Broadview Avenue E	Jasper Avenue	Brockville Street	Collector	Urban / Suburban	598	50	1,688	- Two-lane, two-way road with a painted centreline - Concrete sidewalk on the north side of the road and no concrete curb on the south side of the road - Presence of residential driveways - No signage indicating that parking is not allowed, but it doesn't appear to be a suitable road for on-street parking - Presence of utility poles within the road right-of-way	High	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Provides cycling facilities in a surrounding school area		Smiths Falls Project	$ 17,342	Phase 1 (0-5 Years)
P3	6	Broadview Avenue E	Riverdale Avenue	Jasper Avenue	Local	Urban / Suburban	173	50	268	- Two-lane, two-way road with no painted centreline - Concrete sidewalk on both sides of the road - Presence of residential driveways - On-street parking on both sides of the road	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 208	Phase 3 (10+ Years)
P1	7	Broadview Avenue W	Brockville Street	Harold Street	Collector	Urban / Suburban	426	50	3,624	- Two-lane, two-way road with a painted centreline and a concrete curb on both sides of the road - Concrete sidewalk on the south side of the road (the sidewalk has a grass boulevard between Brockville St. and Hogan Ave.) - Presence of residential and commercial driveways - Presence of utility poles within the road right-of-way - No signage indicating that parking is not allowed, but it doesn't appear to be a suitable road for on-street parking	High	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Provides cycling facilities in a surrounding school area - Will provide a cycling link to the new developments in the south-west end of Town		Smiths Falls Project	$ 12,354	Phase 1 (0-5 Years)
P1	8	Brockville Street	Lombard Street / Jasper Avenue	Approx. 30m south of Van Horne Avenue	Arterial - County Road	Urban / Suburban	1,840	50	4,971-9,703	- Two-lane, two-way road with a painted centreline and a concrete curb - Sidewalk on both sides of the road - Presence of residential driveways - No on-street parking on either side of the road - Presence of ultility poles within road right-of-way and trees on residential properties	High	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width		Smiths Falls Project	$ 288,880	Phase 1 (0-5 Years)

Project ID - Project Priority	Project ID - Project Number	Road	From	To	Road Classification	Context	Length (m)	Posted Speed Limit (km/h)	AADT	Context Considerations	Priority Level	Proposed Separation Level	Proposed Facility Type (used for Cost Calculation)	Project Description / Decision Rationale	Risks/Notes	Funding Source	Total Cost	Phasing
P2	9	Brockville Street	Approx. 30m south of Van Horne Avenue	Southern Town boundary	Arterial - County Road	Urban / Suburban	55	50	4,971-9,703	- Two-lane, two-way road with a painted centreline - Paved shoulders are in very poor condition - Surrounding vegetation	Medium	Designated Operating Space	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	- Proposed 1.5m paved shoulders to connect to the existing paved shoulders on County Road 29 leading outside of Town southward - Road repaving and addition of edgeline to the existing road infrastructure is required		Smiths Falls Project	$ 11,000	Phase 2 (6-10 Years)
P2	10	Canal Street	Confederation Bridge	Beckwith Street S	Local	Urban / Suburban	70	50	N/A	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on the south side of the road - In connection with Veterans' Memorial Park - Confederation Bridge is currently closed	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width - In connection with surrounding green space	- The Confederation Bridge closure currently provides a discontinuous link. Cyclists would have to dismount their bike and use the surrounding multi-use path along the Rideau River to get around the bridge.	Smiths Falls Project	$ 84	Phase 2 (6-10 Years)
P2	11	Chambers Street	Beckwith Street S	Elmsley Street S	Collector	Urban / Suburban	423	40	2,581-7,770	- Two-lane, two-way road with a concrete curb and a painted centreline between Market St. S and Elmsley St. S - Concrete sidewalk on both sides of the road - Designated on-street parking spaces between Beckwith St. and Bay St. S - Presence of residential and commercial driveways	Medium	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Possibly remove on-street parking (at least on one side of the road) to accommodate bike lanes and vehicle travel lanes - Popular cycling route - In connection with a commercial area (Downtown Core) and the Beckwith Revitalization project		Smiths Falls Project	$ 12,267	Phase 2 (6-10 Years)
P1	12	Chambers Street	Elmsley Street S	Rideau Avenue N	Collector	Urban / Suburban	756	40	2,581-7,770	- Two-lane, two-way road with a painted centreline - Concrete sidewalk on both sides of the road - Railroad crossing - Railroad tracks underpass/tunnel - Presence of residential driveways - No on-street parking on both sides of the road	High	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space due to the narrow paved road width - Commonly used cycling route coming into and going out of Town via Matheson Dr.		Smiths Falls Project	$ 8,770	Phase 1 (0-5 Years)
P2	13	Confederation Drive	Strathcona Street	Confederation Bridge	Local	Urban / Suburban	213	50	N/A	- Two-lane, two-way road with no painted centreline and a concrete curb (narrow road) - Asphalt sidewalk on the south-west side of the road - Road is surrounded by trees and street lights - In connection with Centennial Park - Scenic route - Confederation Bridge is currently closed	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width - In connection with surrounding green space and is a scenic route	- The Confederation Bridge closure currently provides a discontinuous link. Cyclists would have to dismount their bike and use the surrounding multi-use path along the Rideau River to get around the bridge.	Smiths Falls Project	$ 256	Phase 2 (6-10 Years)
P2	14	Cornelia Street E	Beckwith Street N	Union Street	Arterial - Provincial Highway	Urban / Suburban	225	50	11,566	- Four-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk with asphalt boulevard on both sides of the road - Railroad tracks underpass with a retaining wall on both sides of the road	Medium	Physically Separated Bikeway	Uni-directional Cycle Tracks: Raised and Curb Separated - In Conjunction with Existing Road Reconstruction / Resurfacing Project	- Proposed uni-directional cycle tracks on both sides of the road given the high traffic volume and multi-lane road (i.e. upgrade existing pavement maintenance strip to a shared facility behind a mountable curb) - May require a lane width reduction - Potential review of upgrading the Cornelia St. E / Union St. intersection to a signalized intersection with additional crosswalks and/or crossrides		Provincial Project	$ 90,000	Phase 2 (6-10 Years)
P2	15	Cornelia Street E	Union Street	Rideau Avenue N	Arterial - County Road	Urban / Suburban	232	50	6,036	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on the north side of the road - No on-street parking on both sides of the road - Presence of residential driveways	Medium	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space due to the narrow paved road width - Possible speed reduction for the safety of pedestrians and cyclists due to the surrounding context prohibiting the implementation of designated/separated cycling facilities - In connection with Rideau Ave. N, which is a popular cycling route, as well as the paved shoulders on Roger Stevens Dr.		Smiths Falls Project	$ 2,691	Phase 2 (6-10 Years)
P2	16	Cornelia Street W	William Street W	Elmsley Street N	Arterial - County Road	Urban / Suburban	506	50	8,832	- Two/three lane, two-way road (presence of auxiliary turn lanes) with a concrete curb (road appears to have recently been repaved between William St. W and Elmsley St. N - two-way left-turn lane appears to have existed previously) - Sidewalk on both sides of the road - Presence of driveways for commercial and institutional land uses - No on-street parking permitted on both sides of the road	Medium	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - Possible speed reduction for the safety of cyclists due to the surrounding context prohibiting the implementation of physically separated cycling facilities - In connection with a commerical, recreational, and institutional area		Smiths Falls Project	$ 14,674	Phase 2 (6-10 Years)

Project ID - Project Priority	Project ID - Project Number	Road	From	To	Road Classification	Context	Length (m)	Posted Speed Limit (km/h)	AADT	Context Considerations	Priority Level	Proposed Separation Level	Proposed Facility Type (used for Cost Calculation)	Project Description / Decision Rationale	Risks/Notes	Funding Source	Total Cost	Phasing
P2	17	Cornelia Street W	Elmsley Street N	Beckwith Street N	Arterial - Provincial Highway	Urban / Suburban	300	50	8,832	- Two/three lane, two-way road (presence of auxiliary turn lanes) with a concrete curb - Sidewalk on both sides of the road - Presence of residential driveways - No on-street parking permitted on both sides of the road	Medium	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - Possible speed reduction for the safety of cyclists due to the surrounding context prohibiting the implementation of physically separated cycling facilities		Provincial Project	$ 8,700	Phase 2 (6-10 Years)
P3	18	Daniel Street	Elmsley Street N	Victoria Avenue	Local	Urban / Suburban	340	50	630	-Two-lane, two-way road with no painted centreline - Concrete sidewalk with a grass boulevard on both sides of the road - Presence of residential driveways - Presence of utility poles within the road right-of-way - On-street parking on both sides of the road	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways) - Requested route by Town staff		Smiths Falls Project	$ 408	Phase 3 (10+ Years)
P1	19	Elmsley Street N	Cornelia Street W	Beckwith Street N	Arterial - Provincial Highway	Urban / Suburban	390	50	6,934	- Two-lane, two-way road with a painted centreline and a concrete curb - Sidewalk on both sides of the road - Presence of driveways for residential, commerical and institutional land uses (in connection with Smiths Falls Public Library) - No on-street parking permitted on both sides of the road	High	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Identified as a high priority route through consultation		Provincial Project	$ 61,230	Phase 1 (0-5 Years)
P1	20	Elmsley Street N	Beckwith Street N	Main Street E	Arterial - County Road	Urban / Suburban	563	50	6,934	- Two-lane, two-way road with a painted centreline and a concrete curb - Sidewalk on both sides of the road - Presence of driveways for residential, commerical and institutional land uses (in connection with Smiths Falls Public Library) - No on-street parking permitted on both sides of the road	High	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Identified as a high priority route through consultation		Smiths Falls Project	$ 88,391	Phase 1 (0-5 Years)
P3	21	Elmsley Street N	Cataraqui Trail	Cornelia Street W	Local	Urban / Suburban	307	50	1,442	- Two-lane, two-way road with no painted centreline - Concrete curb between Cornelia St. W and Gould St.; narrow gravel shoulders from Gould St. to Cataraqui Trail - Presence of residential, commercial and institutional driveways - Discontinuous concrete sidewalk on both sides of the road - No on-street parking permitted on either side of the road	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width - In connection with the Cataraqui Trail		Smiths Falls Project	$ 368	Phase 3 (10+ Years)
P1	22	Elmsley Street S	Main Street E	Thurber Street	Arterial - County Road	Urban / Suburban	324	50	6,934	- Two-lane, two-way road with a painted centreline and a concrete curb - Sidewalk on both sides of the road - Presence of residential driveways - No on-street parking permitted on both sides of the road	High	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Identified as a high priority route through consultation		Smiths Falls Project	$ 50,868	Phase 1 (0-5 Years)
P2	23	Ferrara Drive	Lombard Street	Abbott Street S	Collector	Urban / Suburban	249	50	3,835-6,459	- Three/four lane, two-way road with a painted centreline and a concrete curb - Asphalt sidewalk on the east side of the road and a discontinuous asphalt sidewalk on the west side - Presence of commercial driveways	Medium	Physically Separated Bikeway	Uni-directional Cycle Tracks: Raised and Curb Separated - In Conjunction with Existing Road Reconstruction / Resurfacing Project	- Proposed uni-directional cycle tracks on both sides of the road given the high traffic volume and multi-lane road (i.e. upgrade existing pavement maintenance strip to a shared facility behind a mountable curb) - In connection with a commercial area		Smiths Falls Project	$ 99,600	Phase 2 (6-10 Years)
P2	24	Ferrara Drive	Abbott Street S	Bellamy Drive	Collector	Urban / Suburban	560	50	3,835-6,459	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on the north-west side of the road - Stonedust multi-use path on the north-west side of the road (leads towards the Cataraqui Trail) - Presence of residential driveways	Medium	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Provides cycling facilities towards the new developments in the south-west end of Town		Smiths Falls Project	$ 16,240	Phase 2 (6-10 Years)
P2	25	Harold Street	Ferrara Drive	Broadview Avenue W	Collector	Urban / Suburban	379	50	3,455-4,430	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on the east side of the road - Presence of residential driveways	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and the presence of several residential driveways - Possible speed reduction and/or other traffic calming measures as this road segment is anticipated to have higher traffic volumes as residential development continues in this area.		Smiths Falls Project	$ 455	Phase 2 (6-10 Years)

Project ID - Project Priority	Project ID - Project Number	Road	From	To	Road Classification	Context	Length (m)	Posted Speed Limit (km/h)	AADT	Context Considerations	Priority Level	Proposed Separation Level	Proposed Facility Type (used for Cost Calculation)	Project Description / Decision Rationale	Risks/Notes	Funding Source	Total Cost	Phasing
P2	26	Harold Street	Broadview Avenue W	Ross Street	Local	Urban / Suburban	175	50	641	- Two-lane, two-way road - In connection with St. Francis de Sales Catholic School - No additional information due to Google streetsview being unavailable	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and the presence of several residential driveways - Possible speed reduction and/or other traffic calming measures as this road segment is anticipated to have higher traffic volumes as residential development continues in this area. - In connection with St. Francis de Sales Catholic School		Smiths Falls Project	$ 210	Phase 2 (6-10 Years)
P1	27	Hershey Drive	Lorne Street	Air Care Drive	Collector	Urban / Suburban	351	50	1,906	- Two-lane, two-way road with a painted centreline - Gravel shoulders - Popular road as the Tweed Visitor Centre is located here - No on-street parking permitted on either side of the road - Presence of commercial and industrial driveways - Off-road asphalt path on the east side of the road - Presence of road drainage ditches	High	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer - In connection with Tweed		Smiths Falls Project	$ 87,750	Phase 1 (0-5 Years)
P1	28	Hershey Drive	Air Care Drive	Queen Street	Local	Urban / Suburban	471	50	1,906	- Two-lane, two-way road with a painted centreline - Gravel shoulders - Popular road as the Tweed Visitor Centre is located here - No on-street parking permitted on either side of the road - Presence of commercial and industrial driveways - Presence of road drainage ditches	High	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer - To be shared between cyclists and pedestrians - In connection with Tweed	- Sightlines to be confirmed due to horizontal road curvature	Smiths Falls Project	$ 117,750	Phase 1 (0-5 Years)
P1	29	Jasper Avenue	Brockville Street / Beckwith Street	Vincent Street	Collector	Urban / Suburban	883	50	4,549-6,394	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on both sides of the road - Presence of residential driveways - Generally no on-street parking permitted for the majority of the road segment	High	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width		Smiths Falls Project	$ 25,607	Phase 1 (0-5 Years)
P1	30	Jasper Avenue	Vincent Street	Old Slys Road	Collector	Urban / Suburban	265	50	4,549-6,394	- Two-lane, two-way road with a painted centreline - Gravel shoulder on the north side of the road and an edgeline on the south side of the road - Vegetation and road drainage ditch on the south side of the road - Presence of utility poles on the north side of the road - In connection with Lower Reach Park (stonedust multi-use path on the north side of the road)	High	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer due to high traffic volume - Road widening of the base may be required to have paved shoulders no less than 1m wide and/or vehicle lane width reduction		Smiths Falls Project	$ 66,250	Phase 1 (0-5 Years)
P3	31	Jasper Avenue	Old Slys Road	Southeastern Town boundary	Collector	Urban / Suburban	253	50	4,123	- Two-lane, two-way road with a painted centreline - Discontinous paved shoulders (less than 1m wide) that transition to gravel shoulders towards Town boundary - Surrounding vegetation and road drainage ditches - In connection with Gleeson Park	Low	Designated Operating Space	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	- Proposed 1.5m paved shoulders - Road widening of the base may be required to have paved shoulders no less than 1m wide		Smiths Falls Project	$ 50,600	Phase 3 (10+ Years)
P3	32	King Street	Rideau Avenue S	Smiths Falls Avenue	Collector	Urban / Suburban	157	50	438	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on both sides of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 188	Phase 3 (10+ Years)
P3	33	Lanark Street	Anne Street	McCann Street	Local	Urban / Suburban	135	50	N/A	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the south side of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways) - Requested route by Town staff		Smiths Falls Project	$ 162	Phase 3 (10+ Years)
P1	34	Lombard Street	Beckwith Street S / Brockville Street	Abbott Street N	Arterial - Provincial Highway	Urban / Suburban	474	50	5,999-20,002	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on both sides of the road, except on the north side between Lavinia St. and Beckwith St. S - Presence of utility poles within the road right-of-way - Presence of residential driveways - No on-street parking permitted on either side of the road - In connection with Victoria Park - Concern with biking on Lombard - very busy, not very wide, and dangerous	High	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes in Conjunction with a New Road or Road Reconstruction Project / Widening Project	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - Possible speed reduction and/or other traffic calming measures for the safety of cyclists due to the surrounding context prohibiting the implementation of physically separated cycling facilities - Road widening may be required to have a sufficient bike lane and vehicle travel lane width		Provincial Project	$ 179,172	Phase 1 (0-5 Years)
P1	35	Lombard Street	Abbott Street N	Valley Custom Cutting (approx. 70m south of Bellamy Drive)	Arterial - Provincial Highway	Urban / Suburban	914	50	5,999-20,002	- Two-lane, two-way road with a painted centreline and a concrete curb (several auxiliary turn lanes and a two-way left-turn lane) - Mix of concrete and aspahlt sidewalks on both sides of the road - Several commercial driveways - Presence of a paved shoulder within the concrete curb south of RONA Smiths Falls - Concern with biking on Lombard - very busy, not very wide, and dangerous	High	Physically Separated Bikeway	Uni-directional Cycle Tracks: Raised and Curb Separated - In Conjunction with Existing Road Reconstruction / Resurfacing Project	- Proposed uni-directional cycle tracks on both sides of the road given the high traffic volume and multi-lane road (i.e. upgrade existing pavement maintenance strip to a shared facility behind a mountable curb) - Further south, consider using the paved shoulders within the concrete curb as an area to implement the uni-directional cycle tracks - In connection with a commercial area		Provincial Project	$ 365,600	Phase 1 (0-5 Years)

Project ID - Project Priority	Project ID - Project Number	Road	From	To	Road Classification	Context	Length (m)	Posted Speed Limit (km/h)	AADT	Context Considerations	Priority Level	Proposed Separation Level	Proposed Facility Type (used for Cost Calculation)	Project Description / Decision Rationale	Risks/Notes	Funding Source	Total Cost	Phasing
P2	36	Lorne Street	Rideau Avenue S	Hershey Drive	Collector	Urban / Suburban	104	40	1,752	- Two-lane, two-way road with no painted centreline - Gravel shoulders - No on-street parking permitted on the south side of the road - Driveway to Lanark County Paramedic Service is located on the north side of the road - Road drainage ditches on both sides of the road	Medium	Designated Operating Space	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	- Proposed 1.5m paved shoulders - To be a shared space between cyclists and pedestrians		Smiths Falls Project	$ 20,800	Phase 2 (6-10 Years)
P3	37	McCann Street	Lanark Street	Cornelia Street E	Local	Urban / Suburban	268	50	247	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the west side of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Road widening of the base may be required to have paved shoulders no less than 1m		Smiths Falls Project	$ 322	Phase 3 (10+ Years)
P1	38	Old Slys Road	Jasper Avenue	Smiths Falls Curling and Squash Club entrance (north)	Collector	Urban / Suburban	285	50	6,251-8,702	- Two-lane, two-way road with a painted centreline (presence of an auxiliary left-turn lane) - Gravel shoulders with varying widths - Horizontal road curvature - Old Slys is a dangerous road - In connection with the ball diamonds - No on-street parking permitted on either side of the road	High	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer due to high traffic volume - PXO to be provided at the Smiths Falls Curling and Squash Club for cyclists travelling on the south-east side of Old Slys Road towards the bridge to cross over to use the proposed multi-use path (i.e. upgrading the existing stonedust path) at Lower Reach Park - Possibly reconfigure island/turn channel at Jasper Ave. (CR 17) / Old Slys Rd and implement crossrides for cyclists to safely cross vehicle lanes to continue along Old Slys Rd		Smiths Falls Project	$ 71,250	Phase 1 (0-5 Years)
P1	39	Old Slys Road	Smiths Falls Curling and Squash Club entrance (north)	Old Slys Bridge	Collector	Urban / Suburban	145	50	6,251-8,702	- Two-lane, two-way road with a painted centreline - Narrow gravel shoulders - Road drainage ditches on both sides of the road - In connection with Lower Reach Park and Smiths Falls Heritage House Museum	High	Physically Separated Bikeway	Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in an Urban Setting (Upgrade Existing Granular Surface)	- Proposed hard surfaced off-road multi-use path (3.0m wide asphalt surface) on the west side of the road that is to be shared between cyclists and pedestrians - Project also documented under "Proposed Pedestrian Projects"		Smiths Falls Project	$ 32,625	Phase 1 (0-5 Years)
P1	40	Old Slys Road	Old Slys Bridge	Old Slys Locks	Collector	Urban / Suburban	157	50	6,251-8,702	- Two-lane, two-way road with a painted centreline - Guard rails on boths sides of the road - Surrounded by vegetation and the Rideau River - Two bridge crossings - Paved shoulder on the west side of the road between the bridges and a designated space for pedestrians when crossing the bridges	High	Physically Separated Bikeway	Two Way Cycle Track - Retrofit Existing Roadway	- Proposed bi-directional cycle track (raised and curb separated)/multi-use path to be located on the west side of the road where the paved shoulder/concrete sidewalk along Old Slys Bridge currently exist - To be a shared area for pedestrians and cyclists due to road width constrictions - Cantilever out the bridge on the west side of the road to provide additional space for the cycle track/multi-use path - Cyclists will be required to dismount their bike to get across the lock bridge	- Higher cost to cantilever out Old Slys Bridge on the west side / offset the existing guard rail - Railing would need to be raised for a multi-use path with a raised curb to accommodate pedestrian and cyclist height - $20K/m for an extension of the bridge - $300/m to raise the railing alone - Old Slys Bridge is approximately 35m in length - Approx. $150/m to remove and reinstall existing guard rail; $250/m to remove and replace guard rail with a new one. This is for a decent quantity (i.e. more than just a single day of work) and as part of a larger project. - The guard rail between the bridge and locks is approximately 126m in length	Smiths Falls Project	$ 844,050	Phase 1 (0-5 Years)
P1	41	Old Slys Road	Old Slys Locks	Queen Street	Collector	Urban / Suburban	80	50	6,251-8,702	- Three-lane, two-way road with a painted centreline (includes auxiliary turning lanes) - Asphalt sidewalk on the west side of the road - Gravel shoulder on the east side of the road - Presence of driveways	High	Physically Separated Bikeway	Two Way Cycle Track - Retrofit Existing Roadway	- Proposed bi-directional cycle track (raised and curb separated)/multi-use path to be located on the west side of the road where the asphalt sidewalk currently exists - To be shared between cyclists and pedestrians		Smiths Falls Project	$ 52,000	Phase 1 (0-5 Years)
P3	42	Pearl Street	Percy Street	Bell Avenue / Vincent Street	Collector	Urban / Suburban	893	50	796-883	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the south-east side of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways) - Provides a connected route to get to and from surrounding schools		Smiths Falls Project	$ 1,072	Phase 3 (10+ Years)

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P1	43	Percy Street	Ross Street	Van Horne Avenue	Collector	Urban / Suburban	601	50	1,023	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the east side of the road - In connection with Chimo Elementary School and Smiths Falls District Collegiate Institute - Surrounding vegetation - Presence of residential, commercial and institutional driveways	High	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space due to the narrow paved road width - Possible speed reduction and/or other traffic calming measures for the safety of cyclists due to the surrounding context prohibiting the implementation of designated cycling facilities - In connection with a commercial area, Chimo Elementary School, and Smiths Falls District Collegiate Institute		Smiths Falls Project	$ 6,972	Phase 1 (0-5 Years)
P1	44	Queen Street	Thurber Street	Hershey Drive	Arterial - County Road	Urban / Suburban	1,170	50	4,850-8,127	- Two-lane, two-way road with a painted centreline and a concrete curb - Sidewalk on both sides of the road for the majority of the road segment - Presence of residential and commercial driveways - No on-street parking permitted on the north side of the road; on-street parking varies on the south side of the road	High	Physically Separated Bikeway	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet Required (Includes pre-cast curbs and flexible bollards in the buffer)	- Proposed buffered bike lane that includes pre-cast curbs and flexible bollards in the buffer to create a physically separated facility due to high traffic volume - No road reconstruction/rehabilitation required given the sufficient paved road width - Identified as a high priority route through consultation with Town staff and stakeholders, especially to connect to Old Slys Rd. and Tweed on Hershey Dr.		Smiths Falls Project	$ 183,690	Phase 1 (0-5 Years)
P3	45	Queen Street	Hershey Drive	The Gallipeau Centre at Rideau Regional Center	Arterial - County Road	Urban / Suburban	610	50	4,850-8,127	- Two-lane, two-way road with a painted centreline - Gravel shoulders with varying widths - Surrounding vegetation and water body (Rideau River) - Road drainage ditches	Low	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer due to high traffic volume - Road widening of the base may be required in certain sections to have paved shoulders no less than 1m wide and/or vehicle lane width reduction - To be shared between cyclists and pedestrians due to limited road right-of-way to work with given the surrounding context (i.e. drainage ditches, water body, etc.) - Potential crossride at The Gallipeau Centre entrance for eastbound cyclists to safely cross the road		Smiths Falls Project	$ 152,500	Phase 3 (10+ Years)
P3	46	Queen Street	The Gallipeau Centre at Rideau Regional Center	South-eastern Town boundary	Arterial - County Road	Urban / Suburban	645	50	4,850-8,127	- Two-lane, two-way road with a painted centreline - Gravel shoulders - Presence of residential driveways on the south side of the road	Low	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer due to high traffic volume - Road widening of the base may be required in certain sections to have paved shoulders no less than 1m wide and/or vehicle lane width reduction		Smiths Falls Project	$ 161,250	Phase 3 (10+ Years)
P1	47	Rideau Avenue N	Cornelia Street E / Roger Stevens Drive	Stephen Street	Collector	Urban / Suburban	310	50	1,391-1,781	- Two-lane, two-way road with a painted centreline and a concrete curb - Presence of residential and industrial driveways	High	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes in Conjunction with a New Road or Road Reconstruction Project / Widening Project	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - Road widening may be required to have a sufficient bike lane and vehicle travel lane width - Popular cycling route - Residents mentioned that this can be a busy road and the road is in poor condition		Smiths Falls Project	$ 117,180	Phase 1 (0-5 Years)
P1	48	Rideau Avenue N	Stephen Street	Chambers Street / Matheson Drive	Collector	Urban / Suburban	760	50	1,391-1,781	- Two-lane, two-way road with a painted centreline - Gravel shoulders - Few residential and commercial driveways - Retaining wall towards Matheson Dr. (south of Dufferin St.)	High	Designated Operating Space	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	- Proposed 1.5m paved shoulders to address traffic and road quality concerns - Road widening of the base may be required in certain sections to have paved shoulders no less than 1m wide - Popular cycling route		Smiths Falls Project	$ 152,000	Phase 1 (0-5 Years)
P2	49	Rideau Avenue S	Thomas Street	King Street	Collector	Urban / Suburban	97	50	882	- Two-lane, two-way road with no painted centreline - Concrete sidewalk on the west side of the road - Presence of residential driveways and utility poles within the road right-of-way	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 116	Phase 2 (6-10 Years)
P2	50	Rideau Avenue S	Lorne Street	Thomas Street	Collector	Urban / Suburban	442	50	882	- Two-lane, two-way road with no painted centreline - Narrow gravel shoulders - Presence of residential and industrial driveways - There is a lot of traffic with regards to Tweeds - Discontinuous sidewalk on the east side of the road	Medium	Designated Operating Space	Signed Bike Route with Paved Shoulder in conjunction with existing road reconstruction / resurfacing	- Proposed 1.5m paved shoulders - Road widening of the base may be required to have paved shoulders no less than 1m wide - Will create a designated space for cyclists provided the increase in traffic leading to Tweeds		Smiths Falls Project	$ 88,400	Phase 2 (6-10 Years)
P1	51	River Street	Jasper Avenue	Oak Street	Local	Urban / Suburban	264	50	154	- Two-lane, two-way road with no painted centreline - Concrete sidewalk on the north side of the road between Jasper Ave. and Elm St. E - Presence of residential driveways and utility poles within the road right-of-way	High	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 317	Phase 1 (0-5 Years)

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P1	52	Riverdale Avenue	Oak Street	Broadview Avenue E	Local	Urban / Suburban	363	50	154	- Two-lane, two-way road with no painted centreline - Scenic route (adjacent to the Rideau River) - Stonedust off-road multi-use trail on the north side of the road - Surrounding green space	High	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume) - Scenic route (adjacent to the Rideau River and stondust multi-use path leading to Lower Reach Park)		Smiths Falls Project	$ 436	Phase 1 (0-5 Years)
P1	53	Ross Street	Harold Street	Percy Street	Local	Urban / Suburban	437	50	579	- Two-lane, two-way road with no painted centreline and a concrete curb - In connection with St. Francis de Sales Catholic School - Concrete sidewalk on the south side of the road between Brockville St. and Percy St. - Concrete sidewalk on the north side of the road between Brockville St. and the school (north side of the road here is a school bus loading zone) - School crossing area - Limited road information between the school and Harold St. due to Google streetsview unavailability	High	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space due to the narrow paved road width/on-street parking for student pick-up/drop-off, etc. - Possible speed reduction and/or other traffic calming measures for the safety of cyclists due to the surrounding context prohibiting the implementation of designated cycling facilities - In connection with St. Francis de Sales Catholic School		Smiths Falls Project	$ 5,069	Phase 1 (0-5 Years)
P3	54	Smiths Falls Avenue	King Street	Chambers Street	Collector	Urban / Suburban	147	50	239	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on both sides of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 176	Phase 3 (10+ Years)
P2	55	Strathcona Street	Abbott Street N	Confederation Drive	Local	Urban / Suburban	288	50	N/A	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on both sides of the road, except on the south side between Abbott St. N and James St. - Presence of residential driveways - No on-street parking permitted on the south side of the road	Medium	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width/on-street parking on north side and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 346	Phase 2 (6-10 Years)
P2	56	Union Street	Cornelia Street E	Northern Town boundary	Arterial - Provincial Highway	Urban / Suburban	422	50	11,444	- Three-lane, two-way road (includes a two-way left-turn lane) between Cornelia St. E and Alexander St. with a concrete curb - Two-lane, two-way road with a painted centreline between Alexander St. and the northern Town boundary (near VIA Rail Station) with a concrete curb - Several commercial driveways - Concrete sidewalk on the east side of the road between Cornelia St. E and Alexander St. - Pavement maintenance strip on both sides of the road between Alexander St. and the northern Town boundary - No on-street parking permitted on both sides of the road - Presence of utility poles on both sides of the road	Medium	Physically Separated Bikeway	Uni-directional Cycle Tracks: Raised and Curb Separated - In Conjunction with Existing Road Reconstruction / Resurfacing Project	- Proposed uni-directional cycle tracks on both sides of the road given the high traffic volume and multi-lane road - Possibly reconfigure two-way left-turn lane - Road reconstruction would be required south of Alexander St. to implement cycle tracks within road right-of-way - Upgrade pavement maintenance strips north of Alexander St. to a shared facility behind a mountable curb - In connection with a commercial area and the VIA Rail Station		Provincial Project	$ 168,800	Phase 2 (6-10 Years)
P1	57	Van Horne Avenue	Percy Street	Brockville Street	Collector	Urban / Suburban	232	50	275	-Two-lane, two-way road with no painted centreline and a concrte curb - Concrete sidewalk on the south side of the road - Presence of commercial and residential driveways	High	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways) - In connection with a commercial area		Smiths Falls Project	$ 278	Phase 1 (0-5 Years)
P2	58	Victoria Avenue	Daniel Street	Robinson Avenue	Local	Urban / Suburban	237	50	875	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the west side of the road - Presence of residential, commerical and industrial driveways - There is a pedestrian tunnel that runs under the train tracks, connecting Robinson Ave. with Lanark St. - In connection with Smiths Falls Community Theatre - Presence of utility poles within the road right-of-way	Medium	Shared Operating Space	Signed Bike Route with Sharrow Lane Markings	- Proposed signed bike route (shared space) with sharrow lane markings to supplement the shared space due to the narrow paved road width - Possible speed reduction and/or other traffic calming measures for the safety of cyclists due to the surrounding context prohibiting the implementation of designated cycling facilities - Requested route by Town staff - In connection with Smiths Falls Community Theatre and pedestrian tunnel		Smiths Falls Project	$ 284	Phase 2 (6-10 Years)
P3	59	Vincent Street	Pearl Street	Jasper Avenue	Collector	Urban / Suburban	174	50	1,890	- Two-lane, two-way road with no painted centreline and a concrete curb - Concrete sidewalk on the north side of the road - Presence of residential driveways	Low	Shared Operating Space	Signed Bike Route in Urban Area	- Proposed signed bike route (shared space) due to narrow paved road width and being a quiet residential area (low traffic volume and several residential driveways)		Smiths Falls Project	$ 209	Phase 3 (10+ Years)
P3	60	William Street W	Cornelia Street W	Railway Museum of Eastern Ontario Entrance	Arterial	Urban / Suburban	640	50	9,658	- Two-lane, two-way road with a painted centreline - Wide gravel shoulders - Road drainage ditch on both sides of the road - Surrounding vegetation - Presence of residential and commercial driveways	Low	Designated Operating Space	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	- Proposed 1.5m paved shoulders with a paved buffer due to high traffic volume and existing wide gravel shoulders		Smiths Falls Project	$ 160,000	Phase 3 (10+ Years)
P2	61	William Street W	Abbott Street N	Beckwith Street N	Collector	Urban / Suburban	474	50	1,889-2,409	- Two-lane, two-way road with a painted centreline and a concrete curb - Concrete sidewalk on both sides of the road - Presence of residential and commercial driveways - Designated on-street parking spaces between George St. N and Beckwith St. N - No on-street parking permitted on the south side of the road	Medium	Designated Operating Space	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	- Proposed conventional bike lanes by adding bike lane markings and signs due to high traffic volume - On-street parking may need to be removed/prohibited to accommodate bike lanes - In connection with the Beckwith Revitalization project		Smiths Falls Project	$ 13,746	Phase 2 (6-10 Years)

Implementation Unit Costs

APPENDIX

F

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS / ASSUMPTIONS
1.0 GENERAL ACTIVE TRANSPORTATION FACILITIES				
Shared Lanes / Paved Shoulders				
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)
1.3	Signed Bike Route with Sharrow Lane Markings *Intended to supplement a signed bike route in specific locations. Not intended to be a stand-alone facility type.*	linear KM	$11,600	Price for both sides of the road, includes route signs every 500 metres and sharrow stencils every 75 metres as per OTM Book 18 guidelines. Price includes: - $300 per sign x 4 signs (2 signs on each side of the road) - $400 per stencil marking x 26 (13 stencils on each 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.
1.6	Signed Bike Route with Buffered Paved Shoulder in conjunction with existing road reconstruction / resurfacing project	linear KM	$200,000 to $250,000	1.5 metre paved shoulder + 0.5-1.0 metre paved buffer on both sides of the road. Assumes cycling project pays for additional granular base, asphalt, painted edge lines and signs (buffer zone framed by white edgelines). Price may vary from $200,000 to $250,000. 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)
1.7	Addition of Rumble Strip to Existing Buffered Paved Shoulder (rural)	linear KM	$12,000	Price for both sides. Buffer $6 / m.
1.8	Granular Shoulder Sealing	linear KM	$18,000	Both sides spray emulsion applied to harden the granular shoulder. This will reduce gravel on the paved portion of the shoulder and significantly reduce shoulder maintenance. Use $9 / m.
1.9	Upgrade Granular Surface Back Road to Chip Seal Surface	linear KM	$56,000	Price includes pulverizing existing surface with double treatment ($6 / m²) or tar and chip ($2 /m²) at 7m wide.
Conventional and Separated Bike Lanes				
1.10	Conventional 1.5m-1.8m Bicycle Lanes by Adding Bike Lane Markings and Signs	linear KM	$29,000	Price for both sides of the road, includes signs, stencils and edge line. The price assumes: - $11,000 for painted lane line ($5.5 per metre multiply 2 for both sides of the road) - $10,400 for painted bike symbols (assumes $250 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - $2,500 for bike lane signs (assumes $350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - $3,900 for 'No Parking' signs (assumes $150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used.
1.11	Conventional 1.5m-1.8m Bicycle Lanes through Lane Conversion from 4 lanes to 3 lanes	linear KM	$53,000	Price for both sides. Includes grinding of existing pavement, markings, signs, painted markings. Assumes road is not be surfacing. The price assumes: - $11,000 for painted lane line ($5.5 per metre multiply 2 for both sides of the road) - $10,400 for painted bike symbols (assumes $400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - $2,500 for bike lane signs (assumes $350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - $3,900 for 'No Parking' signs (assumes $150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used. - $6 to $8 per linear metre for lane line removal (soda blasting). Price varies on markings to be removed on a multi-lane roadway. Remove soda-blasting cost component if the road is being resurfaced. The cost for resurfacing to be part of resurfacing project.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS / ASSUMPTIONS
Conventional and Separated Bike Lanes CONT'D				
1.12	Conventional 1.5m-1.8m Bicycle Lanes in Conjunction with a New Road, or Road Reconstruction / Widening Project	linear KM	$378,000	Price for 1.5m bike lanes on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - $1,980 for catch basin leads ($55/m - assumes 50m catch basin spacing and 1.8m lead) - $360,000 for asphalt and sub-base ($55/m2 = 120 x 1.5m BL x 1000 x 2) - $16,000 for signs, stencils and edge line The roadway project funds all other improvements.
1.13	Conventional 1.5m-1.8m Bicycle Lanes that require a road widening /reconstruction	linear KM	$700,000	Price for both sides of the road, includes the cost for excavation, adjust catch basins, lead extensions, new curbs/driveway ramps, asphalt and sub-base, painted markings and signs. All costs associated with widening or reconstructing the road for the purposes of adding bike facilities is born by the bike project i.e. no economies of scale of adding a bike facility in conjunction with a planned roadway project.
1.14	Buffered Bicycle Lane with Hatched Pavement Markings - No Road Construction / Widening or Road Diet required	linear KM	$41,000	Price for 1.5m bike lanes with 1m hatched buffer. The price assumes: - $22,000 for painted lines ($5.5 x 4000 metres of line paint) - $1,000 for hatching paint (1000 metres) - $10,400 for painted bike symbols (assumes $400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - $2,500 for bike lane signs (assumes $350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - $3,900 for 'No Parking' signs (assumes $150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used
1.15	Buffered Bicycle Lane with Hatched Pavement Markings with Road Diet	linear KM	$65,000	Price for 1.5m bike lanes with 1m hatched buffer. The price assumes: - $22,000 for painted lines ($5.5 x 4000 metres of line paint) - $1,000 for hatching paint ($1000 metres) - $10,400 for painted bike symbols (assumes $400 per symbol, 13 symbols per linear km multiply by 2 for both side of the road) - $2,500 for bike lane signs (assumes $350 per sign and tab, 5 signs per linear km - spaced every 200 metres - multiply by 2 for both sides of the road) - $3,900 for 'No Parking' signs (assumes $150 per sign, 13 signs per linear km multiply by 2). Signs to be mounted on existing and new posts. Price depends on number of stencils and signs used. - $6 to $8 per linear metre for lane line removal (soda blasting). Price varies on markings to be removed on a multi-lane roadway.
1.16	Buffered Bicycle Lane with Hatched Pavement Markings - Assumes New Road or Road Reconstruction/Widening already Planned	linear KM	$381,000	Price for 1.5m bike lanes + 0.5m hatched buffers on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - $1,980 for catch basin leads ($55/m - assumes 50m catch basin spacing and 1.8m lead) - $360,000 for asphalt and sub-base ($55/m2 = 120 x 1.5m BL x 1000 x 2) - $19,000 for signs, stencils and edge line The roadway project funds all other improvements.
1.17	Buffered Bicycle Lane with Flex Bollards - Assumes Road Reconstruction/Widening Already Planned	linear KM	$411,000	Price for 1.5m bike lanes + 0.5m hatched buffers + flexible bollards on both sides of the roadway (1.5m x 2 sides = 3.0m). The price assumes: - $1,980 for catch basin leads ($55/m - assumes 50m catch basin spacing and 1.8m lead) - $360,000 for asphalt and sub-base ($55/m2 = 120 x 1.5m BL x 1000 x 2) - $19,000 for signs, stencils and edge line - $30,000 for flexible bollards ($150 per bollard, spaced every 10m) The roadway project funds all other improvements.
1.18	Buffered Bicycle Lane with Pre-Cast Barrier - Assumes New road or Road Reconstruction/Widening Already Planned	linear KM	$471,000	Price for 1.5m bike lanes + 0.5m hatched buffers + flexible bollards+ pre-cast and anchored curb delineators. The price assumes: - $1,980 for catch basin leads ($55/m - assumes 50m catch basin spacing and 1.8m lead) - $360,000 for asphalt and sub-base ($55/m2 = 120 x 1.5m BL x 1000 x 2) - $19,000 for signs, stencils and edge line - $30,000 for flexible bollards ($150 per bollard, spaced every 10m) - $50,000 - $60,000 pre-case curb delineators ($250 / pre-case unit 2m length + $7.5 / pins and anchoring. Assumes 2m long x 2 = 200-250 per km depending on intersections and driveways) The roadway project funds all other improvements.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS / ASSUMPTIONS
Conventional and Separated Bike Lanes CONT'D				
1.19	Supply and install surface mounted flexible post delineators	each	$100 to $150	Price depends on product, volume and supplier.
1.20	Standard precast concrete curb 178 mm high, 216 mm wide and 1.83 metre long	each	$250	Approximately $95,000 - $100,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 1.83 metres = 382.5 pre-cast concrete curbs - 382.5 x $250 = $95,000
1.21	Standard precast concrete curb 457 mm high, 457 mm wide and 3.05 metre long	each	$1,380	Approximately $315,000 - $320,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 3.05 metres = 229.5 pre-cast concrete curbs - 229.5 x $1,380 = $317,000
1.22	Standard precast concrete bullnose 457 mm high, 457 mm wide and 1.22 metre long	each	$970	Approximately $550,000 - $560,000 per 1 linear kilometre. Assumes 70% of roadway to include physical delineation (700 metres per 1 linear kilometre): - 700 metres / 1.22 metres = 573.8 pre-cast concrete curbs - 573.8 x $970 = $556,557
Cycle Tracks				
1.23	Uni-directional Cycle Tracks: Raised and Curb Separated - In conjunction with existing road reconstruction / resurfacing project	linear KM	$250,000 - $500,000	Both sides. Assumes cycle track will be implemented as part of road construction. Could include minor utility / lighting pole relocations. Other components such as bike signals, bike boxes etc. are project specific and will impact unit price.
1.24	Uni-directional Cycle Tracks: Raised and Curb Separated - Retrofit Existing Roadway	linear KM	$500,000 - $1,200,000	Both sides. Includes construction but excludes design and signal modifications. Form of cycle track and materials as well as related components such as bike signals, upgrade/modification of signal controllers, utility/lighting pole relocations, bike boxes etc. are project specific and will impact unit price
1.25	Two Way Cycle Track - Retrofit Existing Roadway	linear KM	$500,000 - $800,000	One side. Includes construction but excludes design and signal modifications. Form of cycle track and materials as well as related components such as bike signals, upgrade/modification of signal controllers, utility/lighting pole relocations, bike boxes etc. are project specific and will impact unit price
Active Transportation Paths and Multi-Use Trails				
1.26	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).
1.27	Concrete Splash Strip placed within road right-of-way between Active Transportation Multi-Use Path and Roadway	m²	$150	Colour Stamped Concrete
1.28	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.
1.29	Hard Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Urban Setting (Upgrade existing granular surface)	linear KM	$150,000 - $225,000	Includes some new base work (25% approx.), half of the material excavated is removed from site. Price depends of scale / complexity of project.
1.30	Granular Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Urban Setting	linear KM	$150,000 - $165,000	3.0m wide, compacted stone dust surface normal site conditions. Price depends of scale / complexity of project.
1.31	Granular Surfaced Off-Road Multi-Use Trail Outside of Road Right-of-Way in Rural Setting (New)	linear KM	$200,000	3.0m wide, compacted stone dust surface in complex site conditions (includes cost of clearing and grubbing). Price depends of scale / complexity of project.
1.32	Upgrade existing granular surface trail to meet 3.0m wide compacted granular trail standard	linear KM	$75,000 - $125,000	Includes some new base work (25% approx.) and an average of 20 regulatory signs per kilometre. Price depends of scale and existing trail conditions e.g. width, slope, location of trail, etc.
1.33	Off-Road Multi-Use Trail Outside of Road Right-of-Way on Abandoned Rail Bed	linear KM	$80,000 - $125,000	3.0m wide, compacted stone dust surface, includes signage along trail and gates at road crossings. Assumes ballast is still in place. Price depends on scale / complexity of project.
1.34	Granular Surfaced Multi-use Trail in a Woodland Setting	linear KM	$175,000	2.4m wide, compacted stone dust surface. Price depends of scale / complexity of project.
1.35	Major rough grading (for multi-use pathway)	m²	$8.00	Varies depending on a number of factors including site access, disposal location etc.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS / ASSUMPTIONS
		2.0 PEDESTRIAN FACILITIES		
2.1	Sidewalk	linear KM	$200,000	Price for 1.5m concrete sidewalk. Include site prep., select utility relocation, minor drainage modifications / traffic control.
		3.0 STRUCTURES AND CROSSINGS		
3.1	Pedestrian Boardwalk (Light-Duty)	linear m	$1500 - $2500	Structure on footings, 3.0m wide with railings. Price depends of scale / complexity of project.
3.2	Self weathering steel truss pedestrian / cyclist bridge	linear m	$10,000	Price for 4.0m width bridge includes abutments
3.3	Feature Trail Bridge crossing over a valley land / highway	each	$2,500,000 - $4,500,000	Depends on location, length and complexity of crossing as well as architectural detail.
3.4	Metal stairs with hand railing and gutter to roll bicycle	each	$6,500	1.8m wide, galvanized steel (assumes 8ft between each landing).
3.5	Pathway Crossing of Private Entrance	each	$1500 - $2000	Adjustment of existing curb cuts to accommodate 3.0m multi-use pathway
3.6	Median Refuge	each	$20,000	Average price for basic refuge with curbs, no pedestrian signals
3.7	Pedestrian and Cyclist Crossride	each	$80,000	Average price for pedestrian and cyclist crossride
3.8	Mid-block Crossing	each	$150,000 - $180,000	Average price for new mid-block crossing
3.9	Intersection Pedestrian / Bike Signal	each	$80,000	Average price for intersection pedestrian signal. Assumes partial rebuild of intersection for bike signals i.e. realignment of ducts and poles.
3.10	At grade railway crossing	each	$120,000	Flashing lights, motion sensing switch (C.N. estimate)
3.11	At grade railway crossing with gate	each	$300,000	Flashing lights, motion sensing switch and automatic gate (C.N. estimate)
3.12	Below grade railway crossing	each	$500,000 - $750,000	3.0m wide, unlit culvert style approx. 10 m long for single elevated railway track
3.13	Multi use subway under 4 lane road	each	$1,000,000 - $1,200,000	Guideline price only for basic 3.3 m wide, lit.
3.14	Retaining Wall	m²	$1,200	Face metre squared
		4.0 BARRIERS AND ACCESS CONTROL FOR MULTI-USE TRAILS OUTSIDE OF THE ROAD RIGHT-OF-WAY		
4.1	Lockable gate (2 per road crossing)	each	$4,000	Heavy duty gates (e.g. equestrian supported step over gate). Price for one side of road - 2 required per road crossing. Typically only required in rural settings or city boundary areas
4.2	Metal offset gates	each	$2,000	"P"-style park gate
4.3	Removable Bollard	each	$500 - $750	Basic style (e.g. 75mm diameter galvanized), with footing. Increase budget for decorative style bollards
4.4	Berming/boulders at road crossing	each	$1,200	Price for one side of road (2 required per road crossing)
4.5	Granular parking lot at staging area (15 car capacity-gravel)	each	$45,000	Basic granular surfaced parking area (i.e. 300mm granular B sub-base with 150mm granular A surface), with precast bumper curbs. Includes minor landscaping and site furnishings, such as garbage receptacles and bike racks.
4.6	Paige wire fencing	linear M	$60	1.5m height with peeled wood posts
4.7	Chain link fencing	linear M	$90 - $110	Galvanized, 1.5m height
		5.0 SIGNAGE		
5.1	Regulatory and caution Signage (off-road pathway) on new metal post	each	$150 - $250	300mm x 300mm metal signboard c/w metal "u" channel post
5.2	Signboards for interpretive sign	each	$2,400	Does not include graphic design. Based on a 600mm x 900mm typical size and embedded polymer material, up to 40% less for aluminum or aluminum composite panel
5.3	Staging area kiosk	each	$2,000 - $10,000	Wide range provided. Price depends on design and materials selected. Does not include design and supply of signboards
5.4	Signboards for staging area kiosk sign	each	$1,500 - $2,000	Typical production cost, does not include graphic design (based on a 900mm x 1500mm typical size and embedded polymer material). Up to 40% less for aluminum or aluminum composite panel
5.5	Pathway directional sign	each	$350 - $500	Bollard / post (100mm x100mm marker), with graphics on all 4 sides
5.6	Pathway marker sign	each	$250	Bollard / post (100mm x100mm marker), graphics on one side only
5.7	Pathway marker sign	linear KM	$1,000	Price for both sides of the path, assumes one sign on average, per direction of travel every 0.5 km
5.8	Bike sign	each	$200	Price for one side of road.

ITEM	DESCRIPTION	UNIT	UNIT PRICE RANGE	COMMENTS / ASSUMPTIONS
6.0 BICYCLE PARKING INFRASTRUCTURE				
6.1	Bicycle rack (Post and Ring style)	each	$150 - $250	Holds 2 bicycles , price varies depending on manufacturer (includes installation).
6.2	Bicycle rack (U style)	each	$600	Holds 2 bicycles , price varies depending on manufacturer (includes installation).
6.3	Bicycle rack	each	$1,800	Holds 6 bicycles, price varies depending on manufacturer (includes installation).
6.4	Bicycle Locker	each	$3,000	Price varies depending on style and size. Does not include concrete mounting pad.
6.5	Bike Loop	each	$2,500	Price for installation including labour and equipment. Price also includes materials e.g. two channel detector for traffic cabinet, bike loop (wire and sealant), cable to traffic cabinet, handhole and conduit.
6.6	Bicycle Corral (one parking space with bollards)	each	$1,500 - $2,900	Price may vary from $1,500 (galvanized finish with the mad shield corrosion warranty) to $2,900 (stainless finish with the mad shield corrosion warranty) for one parking space.
7.0 LIGHTING AND UTILITIES				
7.1	Pathway Lighting	per 25 m	$5,000	Includes cabling, connection to power supply, transformers and fixtures.
7.2	Relocation of Light / Support Pole	each	$4,000	Adjustment of pole offset (distance between pole and roadway).
7.3	Relocation of Signal Pole / Utility Box	each	$8,000	Adjustment of pole offset (distance between pole and roadway).
8.0 PAVEMENT MARKINGS				
8.1	Sharrow Symbol	each	$400	Price for durable paint. Sharrow symbol with green pavement marking
8.2	Bike Symbol	each	$400	Price depends on volume
8.2	Line Painting	linear M	$6	Price for durable paint.
8.2	Removal of Line Painting	linear M	$3	N/A
9.0 OTHER				
9.1	Bike Box	each	$1,500	Price may vary depending on road cross-section (e.g. two lane roadway, four lane roadway, etc.). Price includes installing a bike box on the approach of an intersection using a bike stencil and durable e.g. green surface treatment ($250 / each). Price also include estimate to move stop-bar back to provide space for bike box.
9.2	Clearing and Grubbing	m^2	$15	
9.3	Bench	each	$1,000 - $2,000	Price varies depending on style and size. Does not include footing/concrete mounting pad
9.4	Safety Railings / Rubrail	linear M	$300	1.4m height basic post and rail style
9.5	Small diameter culvert	each (6 m)	$1,200	Price range applies to 400mm to 600mm diameter PVC or CSP culverts for drainage below trail
9.6	Flexible Bollards	each	$110	Should be placed at 10m intervals where required. Cost depends on product type used.

Notes:

1. Unit Prices are for functional design purposes only, include installation but exclude contingency, design, approvals and CA costs (unless noted) and reflect 2018 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 otherwise noted.
3. Assumes typical environmental conditions and topography.
4. Applicable taxes and permit fees are additional.