

Sustainable Transportation Strategy



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1

Introduction

1.1 Purpose of This Report

This 2018–2022 Active Transportation Implementation Plan (ATIP) provides a roadmap for Active Transportation programming over the next five years, in support of the Region of Peel’s new Sustainable Transportation Strategy (STS).

This implementation plan discusses targets to expand existing programs, such as the Region’s successful school travel planning program and school bike rack program. It describes a variety of new strategies to disseminate the educational and promotional information prepared by the Region of Peel to a variety of audiences, to better achieve a range of programming needs. The ATIP has been written for active transportation practitioners in the Region of Peel. This implementation plan discusses targets to expand existing programs and develop new strategies to encourage and support active transportation across Peel Region. The intent is to provide information which will help active transportation practitioners enact the recommendations in the STS. The STS recommendations were founded upon the STS goal of increasing the sustainable mode share to 50%.

1.2 What’s Inside

Chapter 2 – Active Transportation in the Sustainable Transportation Strategy reviews the STS’s key themes and long-term actions that are related to Active Transportation (AT).

Chapter 3 – Active Transportation Actions for 2018–2022 provides details on 22 actions, recommended to realize twelve of the STS’s key action areas:

- provide comfortable, continuous walking routes,
- improve winter maintenance for walking,
- promote walking across the Region,
- provide comfortable, continuous cycling facilities,
- improve year-round maintenance of cycling facilities,
- expand bicycle parking and end of trip facilities,
- promote cycling across the Region,

- Influence the shape of development,
- Strengthen the multimodal function of Regional roads,
- Make roads safer for vulnerable road users,
- Influence personal travel decisions and
- Strengthen the Region's role.

Chapter 4 – Implementation Framework provides an overview of the recommended AT program activities, including expenditures and staffing considerations for the Sustainable Transportation group. The section also discusses partnerships that may support the Region's AT objectives and sustainable transportation goals.

The implementation framework focuses on the STS actions where strategies can be costed to deliver programs. The implementation framework presented in this Active Transportation Implementation Plan (ATIP) does not discuss every action area recommended by the STS, as some desirable programs require further study before programs may be initiated. The infrastructure and programs described in the implementation plan were discussed throughout the development of the STS. Please refer to the STS consultation summary of a detailed account of consultation meetings and activities that were undertaken.

An example of a program that requires further study before complete detailed program staffing and funding information will be available, is the STS action to provide winter maintenance for cycling facilities. This is because before a priority winter maintenance network may be designed and implemented, additional information gathering through internal consultations with road operations staff will be required. To understand the capacities of existing crews and machines, and correctly gauge potential costs for changes to existing snow management programs, consultations with road operations staff will be needed to identify the existing operations and available equipment. It is anticipated that the pending changes to required Minimum Maintenance Standards will inform the direction of winter clearing recommendations. Consultations with municipalities are also recommended, as certain key destinations may be best served if improvements to winter maintenance were coordinated on regional and municipal roads.

2

Active Transportation in the Sustainable Transportation Strategy

2.1 The Role of Active Transportation in the STS

Increasing the prevalence of walking and cycling as regular transportation choices is fundamental to achieving a sustainable transportation system. Active transportation planning is often designed through three types of initiatives:

- Providing infrastructure that supports active transportation;
- Developing policies that are friendly to active transportation; and
- Building programs to promote and encourage choosing walking or cycling as preferred modes.

The Region's STS includes ambitious mode share targets for transit, walking, cycling, carpooling and telework in 2041, aiming to maximize the role of sustainable travel modes in serving the Region's projected 40% growth in travel demand. Achievement of those targets would represent a doubling the 2011 AM Peak walking trips for walking from 50,000 to 90,000 by 2041, and increase the 2011 number of AM peak cycling trips from 2,000 to approximately 20,000. These targets will require substantial improvements in major transportation infrastructure (notably facilities for rapid transit, walking and cycling) and services (notably regional and local public transit services, and maintenance of walking and cycling facilities). While ambitious, this increase of walking and cycling trips falls within the number of short trips that are being made in Peel Region. Trips being made for short distances of less than five kilometers are the trips which may most practically be shifted from driving to active modes.

Active Transportation programs represent an effective way to maximize the return on investment in major transportation infrastructure and services (e.g. by raising awareness of cycling network facilities). By ensuring that individuals are aware of their travel options, understand how to use them, and are willing try them, AT programs can help maximize the usage of existing or new sidewalks, trails, bike lanes, cycle tracks, light rail and bus rapid transit lines, and commuter rail systems, reducing the overall demand on the road network.

Active Transportation has been given increased priority in Metrolinx's new Draft 2041 Regional Transportation Plan (RTP) for the Greater Toronto and Hamilton Area (GTHA). The RTP references the need to achieve a regional cycling network and enhance rapid transit station design to better support GO patrons walking and cycling. First- and last- mile access to transit stations is a critical consideration from both a station design standpoint and for land-use policies put in place to direct developments near GO stations.

It is important to note that the Region of Peel's STS is accompanied by two supporting plans—namely, an **Active Transportation (AT) Implementation Plan** and a **Transportation Demand Management (TDM) Implementation Plan**, both covering the period 2018–2022.

The development of these plans reflects the operational distinction between staff and budgets allocated to TDM and active transportation within the Region of Peel. Both plans should be read in conjunction with each other, because of the strong support and collaboration between TDM and active transportation. This plan principally represents the actions that will be delivered by the Region's active transportation staff, using the Region's active transportation budget.

2.2 Key Themes and Long-Term Actions in the STS

The infrastructure and programs recommended within this 2018–2022 Active Transportation Implementation Plan are near-term measures that can be built upon to achieve the STS's long-term actions. Exhibit 2.1 identifies the structure used to organize all the recommended long-term actions in the STS: actions are sorted first by travel mode (i.e., multimodal, walking and cycling) and second by key themes within each mode.

Exhibit 2-1: STS Key Themes for Long-Term Action

MODE	KEY THEMES
MULTIMODAL	<ul style="list-style-type: none"> • Influence the shape of development • Strengthen the multimodal function of Regional roads • Make roads safer for vulnerable road users • Influence personal travel decisions • Strengthen the Region's leadership role
WALKING	<ul style="list-style-type: none"> • Provide comfortable, continuous walking routes • Improve winter maintenance of walking facilities • Promote walking across the Region
CYCLING	<ul style="list-style-type: none"> • Provide comfortable, continuous cycling facilities • Improve year-round maintenance of cycling facilities • Expand bicycle parking and end-of-trip facilities • Promote cycling across the Region
TRANSIT	<ul style="list-style-type: none"> • Make regional roads more transit-supportive • Improve connections to transit • Explore new technologies and business models to support transit • Promote transit use across the Region

CARPOOLING	<ul style="list-style-type: none"> • Expand carpool lots • Explore new technologies and business models to support carpooling • Promote carpooling in key markets
TELEWORK	<ul style="list-style-type: none"> • Promote flexible work arrangements as a win-win-win solution • Help workplaces support flexible work arrangements

It is understood that the above Sustainable Transportation Strategy Key themes would increase physical activity opportunities helping Region of Peel residents to achieve the recommended physical activity guidelines necessary to experience health benefits

Within the 21 key themes listed above, the STS recommends 43 actions related to active transportation which are applicable to the planning horizon of the STS (2041). For the 2018–2022 time period, the ATIP discusses the 28 actions shown in Exhibit 2-2: Summary of Actions Explored in the Active Transportation Implementation Plan.

Exhibit 2-2: Summary of Actions Explored in the Active Transportation Implementation Plan

Mode	Multimodal
Key Theme	Make Roads Safer for Vulnerable Users
Action M1	Encourage local municipalities to strengthen zoning by-laws to reduce parking requirements and support sustainable travel modes through infrastructure and context sensitive design
Action M2	Improve development approval process to support sustainable transportation through infrastructure, design and Transportation Demand Management
Action M5	Update Regional road design standards to ensure access, safety and comfort for walking and cycling
Key Theme	Influence personal travel decisions
Action M12	Deliver special events, information and messaging across the Region
Action M13	Deliver TDM social marketing to priority areas
Action M14	Support workplace engagement by Smart Commute to promote walking, cycling, transit, carpooling and teleworking
Action M15	Encourage and support walking and cycling to and from schools
Action M16	Support sustainable travel choices through new mobility technologies and business models

Action M19	Provide learning opportunities for stakeholders
Action M20	Improve sustainable travel options for Regional employees and implement parking pricing at Regional workplaces
Key Theme	Strengthen the Region's leadership role
Action M21	Undertake road safety pilot projects
Mode	Walking
Key Theme	Provide comfortable, continuous walking routes
Action W2	Identify and prioritize solutions to major walking barriers
Action W3	Identify pedestrian improvement areas and implement measures to improve walkability
Action W4	Improve winter maintenance for walking facilities
Action W6	Promote walking for short trips
Mode	Cycling
Key Theme	Provide comfortable, continuous cycling facilities
Action B1	Implement Cycling Network
Action B2	Identify and prioritize solutions to major cycling barriers
Action B3	Identify and remove minor cycling barriers
Action B7	Improve year-round maintenance standards for cycling facilities
Action B8	Develop priority winter maintenance network for regional cycling facilities
Key Theme	Expand bicycle parking and end-of-trip facilities
Action B9	Provide bicycle parking in Regional rights of way
Action B10	Support provision of bicycle parking and end-of-trip facilities at community destinations
Action B11	Promote cycling for short and medium length trips
Key Theme	Promote cycling across the Region
Action B12	Promote winter cycling
Action B13	Provide cycling skills training
Action B14	Build capacity through community-based programs
Action B15	Build cycling culture with a bike friendly businesses program
Mode	Transit
Key Theme	Improve Connections to Transit
Action T3	Improve First and Last-Mile Access to Transit Hubs and Along Corridors

3

Active Transportation Actions for 2018–2022

This chapter provides details on the active transportation-related actions recommended in the STS (as listed in Section 2.2). These actions are discussed as seven sections of this ATIP report:

- Section 3.1 – Schools
- Section 3.2 – Road Safety
- Section 3.3 – Walking Infrastructure
- Section 3.4 – Cycling Network Infrastructure
- Section 3.5 – Bike Friendly Destinations
- Section 3.6 – Making Cycling Mainstream
- Section 3.7 – Community-Based Program Delivery

Each program is accompanied by an initial description, a timeline explaining the distribution of tasks across the five-year timeline (2018–2022) of this plan, an identification of expected roles and responsibilities of the Region and its partners (including the contribution of both in-kind and financial resources), and a year-by-year projection of the Region of Peel **Sustainable Transportation group’s** associated budget requirements for both cash expenses and staff time.

3.1 Schools

3.1.1 SCHOOL TRAVEL PLANNING

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION M15	Encourage and support walking and cycling to and from schools
ACTION W2	Identify and prioritize solutions to major walking barriers
ACTION W6	Promote walking for short trips
ACTION B3	Identify and remove minor cycling barriers
ACTION B11	Promote cycling for short and medium-length trips

School Travel Planning (STP) is a proven, cost-effective way to make the streets around schools safer, and get more kids walking and cycling to school. It’s a community-based model focused on collaboration between all stakeholders that systematically addresses barriers to and incentives for walking and cycling to school. When effectively coordinated and implemented, it results in positive travel behaviour changes with health, safety, environmental and economic benefits.

The Region of Peel has worked on School Travel Planning since 2009 and engaged 54 schools during that time through pilot programs and full program implementation.

Through STP programs, school and community stakeholders (including public health nurses, local police and municipal representatives) collaborate to create and implement school-level action plans that address ongoing transportation and traffic safety problems and measurably increase the number of students using active and sustainable travel modes for all or part of the journey to school.

STP is only successful when embraced by the school community. Experience has demonstrated that schools are most open to the additional engagement required by STP if they have a traffic/congestion problem that can be addressed. Traffic complaints occurring in and around schools are regularly received by the Traffic Operations departments at the Region and in the local municipalities. A process that ensures that each of these schools is offered STP as part of the solution to their complaint would be ideal. [The STS recommends the development of a formal mechanism to ensure that traffic complaints received by the Region of Peel and local municipalities are communicated to Public Health, so that STP may then be offered to the schools.](#)

Active Transportation in Secondary Schools

In 2017, 17 secondary schools participated in Bike to School Week and 22 secondary schools received bike racks from the School Bike Rack program. Secondary school students are more autonomous than elementary school students, and more likely to have destinations they access independently of their parents (school, shopping, visiting friends) in their neighborhoods. They represent a portion of the population that has the potential to cycle regularly and would consequently benefit from cycling education and skill building. There are currently several opportunities for engagement. For example, the Peel Safe & Active Routes to School Committee (PSARTS) rolled out The 10 Step Handbook for High School Bike Projects in 2016, which provides a framework for secondary school bike interventions. Partners are also developing smaller campaigns to be launched at a handful of Peel secondary schools in 2018. Using existing knowledge and experience as the foundation, [the STS recommends that the Region continue supporting existing and future interventions to increase active transportation at secondary schools.](#)

Peel Safe & Active Routes to School (PSARTS) Committee

The successful implementation of School Travel Planning and other school-based active transportation programming is contingent upon stakeholder engagement and their commitment to increasing active transportation rates in Peel schools. The Peel Safe & Active Routes to School Committee (PSARTS) meets regularly to support education and outreach strategies, policies, and programs that encourage students, families, and school staff to choose active, healthy, and sustainable options when traveling to and from school. PSARTS member organizations include the Region of Peel (Public Health & Public Works), Police Services (Peel Regional Police & Ontario Provincial Police), local municipalities, school boards, and interested community groups and non-profit organizations. A collaborative approach to working with the school community will ensure program implementation and sustainability as well as support the actions identified in the STS to increase the reach of School Travel Planning. [The STS recommends that the Region of Peel continue nurturing and supporting PSARTS as the venue for partnership, discussion and combined action on active transportation in schools.](#)

Staffing Support for STP

There are currently 397 public schools in Peel Region operated by two school boards. Information about the number of schools operated by each school board is summarized in Exhibit 3-1 below.

Exhibit 3-1: Summary of Elementary, Middle and Secondary Schools in Peel Region

Peel District School Board				DUFFERIN-PEEL CATHOLIC DISTRICT SCHOOL BOARD			ALL schools
Elementary	Middle	Secondary	Total	Elementary	Secondary	Total	Total
169	43	39	251	120	26	146	397

Effectively running School Travel Planning requires staff support from multiple sources.

Other school boards in Ontario have supported STP by creating STP-specific staff positions within the school board or expanding the mandate of their Student Transportation Services provider to include active transportation.

The Region of Peel’s School Health group currently has 24 Public Health Nurses (PHNs) serving 397 Peel schools. School health PHNs work with school administrators, staff, students and parents to create and sustain supportive environments for healthy eating, physical activity and mental well-being.

As the number of schools implementing School Travel Planning changes, the human resources required may need to be reviewed. [The STS recommends that the Region assess the staffing models and human resources required to support STP.](#)

Neighborhood Walkabouts

Neighbourhood walkabouts are an essential part of STP which entail evaluation of the existing conditions around the school. This is typically completed once the data collection is complete. Once the data collection component of STP is complete, a school walkabout is coordinated in order to assess the existing conditions around a school (the area students have to cover to access the school every day) and propose improvements. Depending on the roads in question, both municipal and regional staff participate in this process and provide their expertise. As the number of STP schools increases, both the Region's Traffic Operations group as well as municipal Traffic departments will experience an increased demand for their attendance at walkabouts and infrastructure improvements requested. [The STS recommends that Transportation staff and staff hour allocation needs be evaluated on an ongoing basis, as STP is expanded to additional schools.](#)

Implementation Notes

- Target: offer STP to all schools with traffic-related complaints
- Create formal mechanism to communicate school related traffic complaints to Public Health, for the purpose of offering STP as a solution
- Support existing and future secondary school interventions
- Monitor STP Programming as required, consistent with traffic complaints received by the Region and local municipalities

Exhibit 3-2: STP Programming Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X							
	• Region of Peel – School Health	X							
	• Region of Peel – Traffic Safety	X							
Support	• Peel District Public School Board	X							
	• Dufferin-Peel Catholic District School Board	X							
	• Municipal Traffic Offices	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	0.2	-	0.25	-	0.25	-	0.25	-	0.25

3.1.2 SCHOOL BIKE RACKS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION M15	Encourage and support walking and cycling to and from schools
ACTION B3	Identify and remove minor cycling barriers
ACTION B10	Support provision of bicycle parking and end-of-trip facilities at community destinations
ACTION B11	Promote cycling for short and medium-length trips

The Region’s School Bike Rack program began as a pilot in 2015. The pilot installed 53 racks at 41 schools. Each rack (an Inverted-U on Rails style) is designed to accommodate 8 bicycles. Based on the success of the pilot, the Region made the School Bike Rack project a permanent program and installed 125 racks at 79 schools in 2017. Selected schools were asked to demonstrate need, qualifying space, and participation in active transportation programs including School Travel Planning and Bike to School Week. The Region pays for both the bike rack and the installation.

On average, less than 1% of school trips are made by bicycle. However, three years of data from the Bike to School Week campaign indicate that during Bike to School week, the percentage of children cycling at participating schools rises as high as 5–7% on average. Most schools don’t have the capacity to safely park these bicycles outside and empty classrooms and teacher lounges are used. [The STS recommends that the Region continue running the School Bike Rack program to accommodate the goal of 5% of the school population, approximately 12,000 students, cycling to school daily.](#)

In addition, since the bike racks are installed on School Board property and become property of the School Boards, it is recommended to work closely with School Boards to encourage their investment in additional bike racks at new and existing schools moving forward. A key component of attaining a higher modal split—meaning that all children living within 5 km of their school either walk or bike—is providing secure parking facilities.

In 2018 the Region’s School Bike Rack program is being modified based on lessons learned, and schools will be eligible for bike rack(s) provided they either:

1. Participate in School Travel Planning including completing the family survey and neighborhood walkabout; or
2. Participate in Bike to School Week.

This approach supports the comprehensive STP framework by encouraging participation in effective Regional programs and strengthening links with schools that can move them towards full STP participation. The project will undergo a yearly review to ensure equitable distribution of the bike racks.

TIMELINE

2018: Aim to install 150 bike racks

2019: Aim to install 150 bike racks

2020: Aim to install 150 bike racks

2021: Aim to install 150 bike racks

2022: Aim to install 150 bike racks

Implementation Notes

- Note that the number of yearly bike rack installations is limited by school boards facility and contractor capacity
- Inverted U bike racks cost approximately \$600 per unit (2017 dollars) and \$250–\$600 for installation (surface dependent); estimate \$1K per unit plus installation

Exhibit 3-3: School Bike Rack Implementation

ROLE		ORGANIZATION				EXPECTED SUPPORT			
						IN-KIND		FINANCIAL	
Lead		• Region of Peel – Sustainable Transportation				X		X	
Support		• Peel District School Board – Facilities				X			
		• Dufferin-Peel Catholic District School Board – Facilities				X			
		• Region of Peel – School Health				X			
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$50K	0.2	\$150K	0.25	\$150K	0.25	\$150K	0.25	\$150K	0.25

3.1.3 BIKE TO SCHOOL WEEK

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION M15	Encourage and support walking and cycling to and from schools
ACTION B3	Identify and remove minor cycling barriers
ACTION B11	Promote cycling for short and medium-length trips
ACTION B13	Provide cycling skills training

Bike to School Week 2017 is a Greater Toronto and Hamilton Area (GTHA) yearly celebration encouraging students to bike to school. The overarching campaign is organized by the Events Subcommittee of the Active and Sustainable School Transportation Regional Hub of Metrolinx. The subcommittee is comprised of staff from Metrolinx, school boards, municipal & regional departments (Public Health, Transportation) and non-governmental organizations.

The Region of Peel Sustainable Transportation group leads the campaign in the Region of Peel in close collaboration with Public Health Nurses working at schools, and community partners including Peel Regional Police, Ontario Provincial Police (Town of Caledon), local municipalities, local cycling advisory committees and community organizations and volunteers.

The campaign began in 2015 and 25 schools were engaged in Peel in year one. In year two, the number of schools involved doubled to 52. In year three, the Region and its partners successfully tripled the number of participating schools, engaging 152 schools and over 15,000 students. Additionally, the level of engagement of Peel schools is clear—more than 80% of participating Peel schools submit the post-event survey versus a 50% average across the GTHA.

In addition to staff time, promotional prizes are one of the key expenses of the campaign. School prizes have proven to be one of the primary incentives that initially draws a school into the campaign. Package contents have included personalized maps, trip trackers, bike bells, bike lights, helmets and water bottles. These are always well-received by the schools as a great marketing tool for students and families.

Bike to School Week is a great opportunity to engage students and parents in cycling skills and safety education programming. The Region is interested in both engaging additional schools and deepening their level of participation. There is a big opportunity for developing digital content that is scalable and can grow with the program.

The STS recommends that the Bike to School Week campaign expand to 200 schools in the Region of Peel and increase activation within participating schools over the next 5 years.



TIMELINE

- 2018: Expand campaign to 160 schools
- 2019: Expand campaign to 170 schools
- 2020: Expand campaign to 180 schools
- 2021: Expand campaign to 190 schools
- 2022: Expand campaign to 200 schools

Implementation Notes

- A Bike to School Week promotional package costs approximately \$250 per school (\$0.34 per student in 2017; assumes 500 students per school on average; assumes an extra 25 school packages that can be reallocated if not used)
- Additional B2SW materials (such as digital content) estimated at \$10K/year
- Staff time beyond 2018 includes the time of two staff to coordinate the campaign
- In 2018, look for partnerships to cover additional costs for school promotional packages

Exhibit 3-4: Bike to School Week Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT	
		IN-KIND	FINANCIAL
Lead	<ul style="list-style-type: none"> Region of Peel – Sustainable Transportation 	X	X
Support	<ul style="list-style-type: none"> Region of Peel – School Health 	X	
	<ul style="list-style-type: none"> Region of Peel – Community Partnerships 	X	
	<ul style="list-style-type: none"> Peel District School Board 	X	
	<ul style="list-style-type: none"> Dufferin-Peel Catholic District School Board 	X	
	<ul style="list-style-type: none"> Municipal Active Transportation Offices 	X	
	<ul style="list-style-type: none"> Municipal Parks and Recreation 	X	
	<ul style="list-style-type: none"> Peel Regional Police 	X	
	<ul style="list-style-type: none"> Ontario Provincial Police 	X	
	<ul style="list-style-type: none"> Community Partners 	X	

ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS

2018		2019		2020		2021		2022	
Expense	Staff time								
\$20K	0.25	\$59K	0.5	\$62K	0.5	\$64K	0.5	\$67K	0.5

3.1.4 BICYCLE EDUCATION FOR CHILDREN AND YOUTH

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M15 Encourage and support walking and cycling to and from schools
- ACTION B3 Identify and remove minor cycling barriers
- ACTION B11 Promote cycling for short and medium-length trips
- ACTION B13 Provide cycling skills training

Cycling is an important life skill which helps teach children self-sufficiency and independence. There are currently several organizations in the Region that deliver bicycle skills training. For example, The Peel Children’s Safety Village offers Bicycle and Helmet Safety to Grade 3 students and the Region of Peel partnered with the City of Brampton Recreation department in 2017 to pilot two-hour cycling courses and “prize safety packs”. Both these programs operated at capacity in 2017. Lack of enough bicycle skills training available for children and youth is an issue that is regularly brought up by the community.

There are a number of ways in which cycling training can be delivered. Possibilities include:

- Delivering cycling courses through Parks and Recreation departments
- “Training the Trainer” – working with school teachers to deliver the courses in-house
- Contracting a third-party to deliver education directly to children and youth in various environments
- Delivering cycling safety content digitally

The STS recommends that the Region of Peel research best practices to deliver cycling skills to children and youth, and launch youth-focused bicycle skills training in the Region. Additionally, organizations that are contracted to provide cycling services through the may also choose to focus on children and youth.

This report suggests a 5 year program, which progressively increases the number of cycling skills courses offered.

TIMELINE

2018: Continue existing programming

2019: Research best practices and develop pilot program

2020–2022: Delivering cycling skills programs, and expand yearly based on lessons learned

Implementation Notes

- Instructors for one 2-hour bike clinic ranges from \$200–\$1K per session (variables include # of instructors, # of participants, clinic location, etc) \$1K used for cost estimates
- Assumes 20 new bicycles purchased for program (to supplement participants’ bikes) at \$600/bike
- Assumes 50 sessions for the pilot program, 75 sessions in year 2, and 100 sessions in year 3 for costing
- Assumes material costs cost \$5K per year including signage, bike maintenance material (bike lube, inner tubes, degreaser), repairing/replacing tools and bicycles
- Assumes \$60K for Best Practices Research and Program Development
- Work with Public Health Active Living group to consider a health equity lens (i.e., improve access to bicycles and active transportation among marginalized groups/populations)

Exhibit 3-5: Bicycle Education for Children and Youth Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Region of Peel – Active Living	X							
Support	• Region of Peel – Community Partnerships	X							
	• Peel District Public School Board Facilities	X							
	• Peel District Catholic School Board Facilities	X							
	• Region of Peel – School Health	X							
	• Municipal Active Transportation Offices	X							
	• Municipal Parks and Recreation	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$1.2K	0.1	\$63K	0.2	\$70K	0.2	\$84K	0.2	\$109K	0.2

3.2 Road Safety

3.2.1 TRAFFIC SAFETY PILOT PROJECTS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M11 Deliver multimodal road safety education to protect vulnerable road users
- ACTION M15 Encourage and support walking and cycling to and from schools
- ACTION M21 Undertake road safety pilot projects

Pilot projects present an opportunity to test ideas at a reduced cost, before considering making permanent changes. Projects could include curb extensions, bike lanes, the deployment of planters or simply placing bike parking stands in on-street parking spots. The purpose of these temporary measures is to physically alter the road environment, with low-cost interventions. Pilots which demonstrate how the walking and cycling environment can be improved, with minimal motor vehicle impacts can help to build support for permanent long-term changes to the geometry of a roadway. Pedestrian improvement corridors, or locations where road reconstructions are planned near the end of the 5 year horizon of this plan would be strong candidate locations. While the projects would primarily be branded as efforts to improve traffic safety for existing road users, it is expected that they may also enhance the quality public realm encouraging more people to make trips by walking or cycling.

The Region of Peel has an important role to play in institutionalizing the regular, periodic installation of these types of road alterations, to demonstrate how safety may be enhanced. The inclusion of a “Pilot Projects Program” recommendation within the STS, will ensure formal council support for initiatives which may otherwise have been seen as outside the scope of the Region’s existing transportation programs.

Where projects that impact both regional and municipal roadways are desirable, collaboration with local municipalities will be necessary. A key role of the Region may be to take the lead in obtaining funding support for the materials necessary to undertake the pilot projects. This may include the purchase of traffic delineation curbs and posts, bike racks or planters.

It is expected that Regional transportation staff who are familiar with requirements for temporary conditions would be consulted as plans for temporary conditions are developed. For example, where motor vehicles approach installed pilot projects, the existing Ontario Traffic Manual Book 7 offers guidance on how to safely narrow lanes. Some of the guidance pertaining to lowering posted speeds and posting signage for all road users may also have relevant applications to the design of the pilot projects. The difference, is that instead of altering motor vehicle travel activities to undertake digging or paving operations, motor vehicle travel activities would be altered to demonstrate positive safety outcomes.

By supporting these projects, the Region would carry out interventions that aim to enhance the quality of life in Peel through temporary changes to the built environment. The presence of the installations may also foster opportunities for greater citizen involvement in traffic safety planning, by providing examples of how roadways primarily engineered for motor vehicle travel may be adapted to better serve all road users.

[It is recommended that the Region support and implement Traffic Safety pilot installations that create a more active transportation-oriented environment in Peel.](#)

In Maine, representatives from different levels of government sit on a committee that awards grants to those proposing temporary projects that focus on either active transportation or community engagement. The Region could seek guidance from those involved on how to best fulfill its goal of supporting active transportation-oriented pilot projects.

TIMELINE

2018: n/a

2019: Start planning the first pilot projects

2020: Implement the first 3 projects

2021: Evaluation and reporting on the 2020 installations

2022: Learning from these first wave projects, implement a further 5 projects

Implementation Notes

- The scale and cost may be adjusted following the initial pilot year. Pilot projects are likely to involve traffic cones or barricades, which forms the basis for the expense assumption of \$10K for each project
- A council endorsement and budgetary allocation to support low-cost, temporary projects could include those led by the Region, as well as those proposed by local municipalities or other relevant organizations
- First pilot project will take place in 2020

Exhibit 3-6: Traffic Safety Pilot Projects Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	<ul style="list-style-type: none"> • Region of Peel – Sustainable Transportation 	X	X						
Support	<ul style="list-style-type: none"> • Region of Peel – Traffic Operations 	X							
	<ul style="list-style-type: none"> • Region of Peel – Road Operations and Maintenance 	X							
	<ul style="list-style-type: none"> • Region of Peel – Roads Design and Construction 	X							
	<ul style="list-style-type: none"> • Region of Peel – Substance Misuse and Injury Prevention 	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	-	-	-	\$30K	0.2	-	-	\$90K	0.2

3.2.2 WALK + ROLL PEEL BOOTHS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M11 Deliver multimodal road safety education to protect vulnerable road users
- ACTION M12 Deliver special events, information and messaging across the Region
- ACTION W6 Promote walking for short trips
- ACTION B11 Promote cycling for short and medium-length trips

Since 2010, the Region of Peel has used the Walk + Roll Peel brand to encourage and support walking and cycling in Peel Region. Walk + Roll Peel runs booths at a wide range of events, emphasizing the values and benefits of active transportation to all users as well as practical how-to information like maps and connecting residents to community rides and skill building opportunities. Walk + Roll Peel messaging covers the how/where/when of walking and cycling in Peel Region as well as the why. The booth focuses on increasing the safety of pedestrians and cyclists by providing

both education on safe road skills for pedestrians and cyclists as well as targeting motorized vehicle drivers and increasing their awareness of vulnerable road users, their understanding of the rights and responsibilities of vulnerable road users and how motorist behaviour can increase the safety of all road users. Walk + Roll Peel attends workshops, trade shows, festivals and public events throughout the year.

The Region of Peel's Road Safety Strategic Plan (RSSP) represents a new cross-promotion opportunity. Peel's RSSP program recommendations were developed in 2017 and include both traffic engineering countermeasures and communications recommendations. The RSSP also includes enforcement measures to help ensure compliance. The emphasis areas identified are described as ranging from engineering to empathy. There are over 100 identified actions in the RSSP. One action addresses creating an enhanced outreach program to disseminate appropriate information and messaging. Another focuses on creating the shift in attitudes and values that will be needed to build a culture surrounding traffic safety that would support the Vision Zero goal of a future with zero traffic fatalities in the Region of Peel.

There are clear synergies between Walk + Roll Peel and the enhanced outreach programs suggested in the RSSP. Encouraging active transportation while emphasizing safety for all road users meets the needs of both the Sustainable Transportation Strategy and the RSSP. From a logistical perspective, the Walk + Roll Peel booths present at many events can also distribute RSSP program information. Similarly, events organized or attended as part of an RSSP outreach program could co-ordinate with Walk + Roll Peel to share messaging.

A partnership would help these programs achieve a consistent approach, communicating walking and cycling within a broader narrative of road user safety and emphasizing the responsibilities of all road users to work as a community to achieve zero traffic fatalities.

Implementation Notes

- Full time employee (FTE) calculation assumes the combined time of multiple staff people, who help to staff and administer Walk + Roll Peel booths; assumes the partnership with the RSSP will help expand the number of booths
- Sustainable Transportation and Traffic Safety will coordinate messages that promote safe walking and cycling
- Estimated budget includes the production of targeted educational and promotional materials

Exhibit 3-7: Walk + Roll Peel Booth Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Region of Peel – Traffic Safety	X							
Support	• Region of Peel – Active Living	X							
	• Region of Peel – Substance Misuse and Injury Prevention	X							
	• Region of Peel – Built Environment	X							
	• Region of Peel – Environmental Education	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$11K	0.3	\$25K	0.5	\$25K	0.5	\$30K	0.5	\$30K	0.5

3.2.3 DRIVER EDUCATION

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M11 Deliver multimodal road safety education to protect vulnerable road users
- ACTION M12 Deliver special events, information and messaging across the Region
- ACTION W6 Promote walking for short trips
- ACTION B11 Promote cycling for short and medium-length trips

Much of the walking and cycling information developed by the Region of Peel emphasizes actions that pedestrians and cyclists can take to stay safe. It is understood that for the road safety goals of the Region to be achieved, these marketing and communications activities will have to be expanded to discuss the roles and responsibilities of people while driving. As many people who walk and cycle also drive, there is a proportion of people who are mindful of these safety considerations while driving. However, there is a proportion of road users in Peel Region who do not regularly walk or cycle for transportation. The adaptation of marketing and messaging to reach this demographic will be an important step forward towards building a narrative of all road user safety.

The Region would, under the Walk + Roll Peel brand, develop new education materials and information that targets drivers as the audience, in addition to the education materials mentioned in 3.2.2. These materials would talk not only about how to make smart decisions so that drivers may avoid collisions with other motorists, but also include information surrounding their responsibility to watch out for vulnerable road users.

Driver education may include the active promotion of new legislation. The province of Ontario recently passed 1.0m passing legislation. This update to the Ontario Highway Traffic Act expands and clarifies on previous guidance that required safe passing, by specifically naming a minimum distance that motorists are required to observe between their vehicle and vulnerable road users when passing. If a motorist received their driver's license in advance of this legislation, they may not be aware of their legal requirement to maintain this passing distance. The promotion of legal obligations may also highlight areas that some motorists may have become apathetic to, such as observing legislated speed limits. Although many motorists are aware of posted speed limits, communications that emphasize the legal expectation that drivers observe these posted signs may help to achieve an improved compliance rate.

Driver education may also suggest recommended driver behaviours, which would help to improve road safety in the region. Being aware of the environment within which a motorist is travelling may help them to foresee potential dangers before they happen. Motorists who are mindful of when they are travelling on designated cycling routes, near schools, or similar areas which may have an increased number of vulnerable road users will be more conscious of their role to drive responsibly and make choices that will help to avoid a collision.

As the way people absorb and consume information is changing, opportunities to explore promoting driver education digitally should be considered. This may include the provision of digital content and online education opportunities in the best practice research. The promotion of an online quiz, or similar challenge could be an innovative way to engage Peel drivers regarding legislation surrounding sharing the road with pedestrians and cyclists.

Implementation Notes

- Development of this messaging may be coordinated with the 2019–2023 Communications Strategy, discussed in section 3.6.3
- Estimated budget includes the production of targeted educational and promotional materials

Exhibit 3-8: Driver Education Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Region of Peel – Traffic Safety	X							
Support	• Region of Peel – Active Living	X							
	• Region of Peel – Built Environment	X							
	• Region of Peel – Substance Misuse and Injury Prevention	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1

3.2.4 UPDATING GUIDELINES/REGULATIONS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M1 Encourage local municipalities to strengthen zoning by-laws to reduce parking requirements and support sustainable travel modes through infrastructure and context sensitive design.
- ACTION M2 Improve development approval process to support sustainable transportation through infrastructure, design and Transportation Demand Management
- ACTION M5 Update Regional road design standards to ensure access, safety and comfort for walking and cycling

Legislation around walking and cycling activities are evolving at every level of government – from amendments to the Ontario Highway Traffic Act, to new emerging best practices for the application of municipal bylaws. The Ontario Traffic Manual for the Design of Cycling Infrastructure (OTM Book 18) will undergo an update, starting in 2018.

The Region of Peel is a significant population centre, and it is important that resources are available for the applicable staff to invest time in the updating of Regional bylaws and standards so that they follow current best practices. In addition, as consultations emerge surrounding the establishment of new standards in Canada, The Region of Peel will need to have the staffing capacity to participate in consultations and conversations at the provincial and national level.

Implementation Notes

- Information from these efforts will inform the production of targeted educational and promotional materials for the Walk + Roll Peel booths in Section 3.2.2

Exhibit 3-9: Updating Guidelines/Regulations Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Region of Peel – Traffic Safety	X							
Support	• Region of Peel – Built Environment	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1

3.3 Walking Infrastructure

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCES:

- ACTION W3 Identify Pedestrian Improvement Areas and implement measures to improve walkability

The STS recommends a program to improve pedestrian infrastructure, primarily focused on providing connected pedestrian facilities and improving the overall quality of the pedestrian experience along identified ‘Pedestrian Improvement Corridors’. The location of Pedestrian Improvement Corridors were informed by the Region’s Road Characterization Study, their proximity to key destinations such as schools and transit hubs (to support first/last mile), and whether the STS mode share target analysis demonstrated the walking mode shift to be more feasible in that area.

A series of upgrades and safety enhancements are planned to be implemented along these pedestrian improvement corridors. The upgrades will be incorporated into planned road capital projects wherever possible, however the program has been design to allow for stand-alone investment because these corridors are recognized as key pedestrian priority areas.

The upgrades will vary by corridor, given the roadway context and property considerations, but may include the following elements:

- Constructing any missing sidewalk links
- Widening of sidewalks in some locations to provide additional clear width in areas of heavy pedestrian demand, or incorporating streetscaping and amenities such as trees, benches, planters or shrubs

Chapter 3: Active Transportation Actions for 2018–2022

- Context specific upgrades to major intersections, which may include narrowing lanes approaching the intersection to slow vehicles, reducing corner radii, investigating the removal of right turn channels, AODA upgrades such as the addition of missing curb ramps or tactile plate, adding audible pedestrian signals, signal timing adjustments to improve, and pedestrian LOS.
- Upgrades to minor intersections which may include AODA upgrades such as adding missing curb ramps and tactile plates, and adding audible pedestrian signals
- Introduction of additional mid-block crossings, potentially with median islands.

In December 2017, Regional Council endorsed the Vision Zero framework, with the ultimate goal of zero fatal and injury collisions. The vision is supported by a Road Safety Strategic Plan (RSSP) which will be finalised by mid-2018. The RSSP identifies 6 emphasis areas for action, including intersection collisions, pedestrian collisions, and cyclist collisions, as well as two awareness areas, including school zones. Recommendations from the RSSP include engineering safety improvements. This may include new standards for pedestrian crossings that would increase the visibility of crosswalks, speed limit reviews, and other measures that will bring extra attention to pedestrians in crossing areas. Measures that reduce crossing distances for pedestrians, and achieve a shorter “walk” time for traffic signals and the deployment of Crossing Guards, Parking and Traffic Control Officers in School Zones to applicable locations are also identified as countermeasures that may improve safety.

Given the clear potential synergies between the STS Pedestrian Improvement Corridors and recommendations of the Road Safety Strategic Plan, the Sustainable Transportation group and Traffic Safety group will take a coordinated approach to implementing improvements to pedestrian facilities, particularly at intersections, recognizing both the need to increase walking mode shares and reduce fatalities and injuries with an emphasis on vulnerable road users.

A summary of the Pedestrian Improvement Corridors identified is provided in Exhibit 2-2: Summary of Actions Explored in the Active Transportation Implementation Plan¹⁰ below, with a duplicate of the map from the STS provided in Exhibit 3-11.

Exhibit 3-10: Summary of Pedestrian Improvement Corridors

STREET	FROM	TO	ROAD CHARACTERIZATION
Airport Rd	Derry Rd	Thamesgate Dr	Urban Main Street
Airport Rd	Thamesgate Dr	Clark Blvd	Suburban / Commercial
Airport Rd	Cranston Dr	Leamster Trail	Rural Main Street
Airport Rd	Highway 9	Mill View Ct	Suburban / Commercial
Bovaird Dr W	Mississauga Rd	Worthington Ave	Suburban / Commercial
Bovaird Dr E	Connestoga Dr	Mountainash Rd	Suburban / Commercial
Britannia Rd W	Winston Churchill Blvd	Queen St	Suburban / Commercial
Britannia Rd W	Terry Fox Way	Avebury Rd	Suburban / Commercial
Britannia Rd E	Avebury Rd	Hurontario St	Urban Main Street
Bush St	Mississauga Rd	Old Main St	Suburban / Commercial

STREET	FROM	TO	ROAD CHARACTERIZATION
Cawthra Rd	Rathburn Rd	Burnhamthorpe Rd	Suburban / Commercial
Charleston Sr	Kevinwood Dr	Kennedy Rd	Rural Main Street
Derry Rd W	Glen Erin Dr	Financial Dr	Suburban / Commercial
Derry Rd W	Vicar Gate	Maritz Dr	Suburban / Commercial
Derry Rd W-E	Maritz Dr	Edwards Bv	Urban Main Street
Derry Rd E	Edwards Bv	Hwy 410	Suburban / Commercial
Derry Rd E	Airport Rd	Hwy 427	Suburban / Commercial
Dixie Rd	Blundell Rd	Golden Orchard Dr	Urban Main Street
Dixie Rd	Golden Orchard Dr	Winding Tl	Suburban / Commercial
Dixie Rd	Winding Tl	Rathburn Rd	Urban Main Street
Dixie Rd	Eglinton Ave	Hwy 401	Suburban / Commercial
Dixie Rd	Derry Rd	Steeles Ave	Suburban / Commercial
Dixie Rd	Bovaird Dr	Sandalwood Pkwy E	Suburban / Commercial
Erin Mills Pkwy	QEW	Lincoln Green Wy	Urban Main Street
Erin Mills Pkwy	Lincoln Green Wy	The Collegeway	Suburban / Commercial
Erin Mills Pkwy	The Collegeway	400m S of Folkway Dr	Urban Main Street
Erin Mills Pkwy	400m S of Folkway Dr	Hwy 403	Suburban / Commercial
Erin Mills Pkwy	HWY 403	Erin Centre Bv	Urban Main Street
Erin Mills Pkwy	Erin Centre Bv	Britannia Rd	Suburban / Commercial
Erin Mills Pkwy	Britannia Rd	Mississauga Rd	Suburban / Commercial
Hwy 50	Columbia Wy	130m S of Bolton Heights Dr	Suburban / Commercial
Hwy 50	Patterson Side Rd	Zimmerman Dr	Rural Main Street
Kennedy Rd S	Vodden St	Clarence St	Suburban / Commercial
King St	Coleraine Dr	Albion Vaughan Rd	Suburban / Commercial
King St	Winston Churchill Blvd	Heritage Rd	Rural Main Street
Main St & Queen St	450m N of Beech Grove Sr	Porterfield Rd	Rural Main Street
Mayfield Rd	McLaughlin Rd	Hwy 410	Suburban / Commercial
Mississauga Rd	Erin Mills Pkwy	Syntex Ct	Urban Main Street
Mississauga Rd	Syntex Ct	Hwy 407	Suburban / Commercial
Old Church Rd	Airport Rd	Innis Lake Rd	Rural Main Street

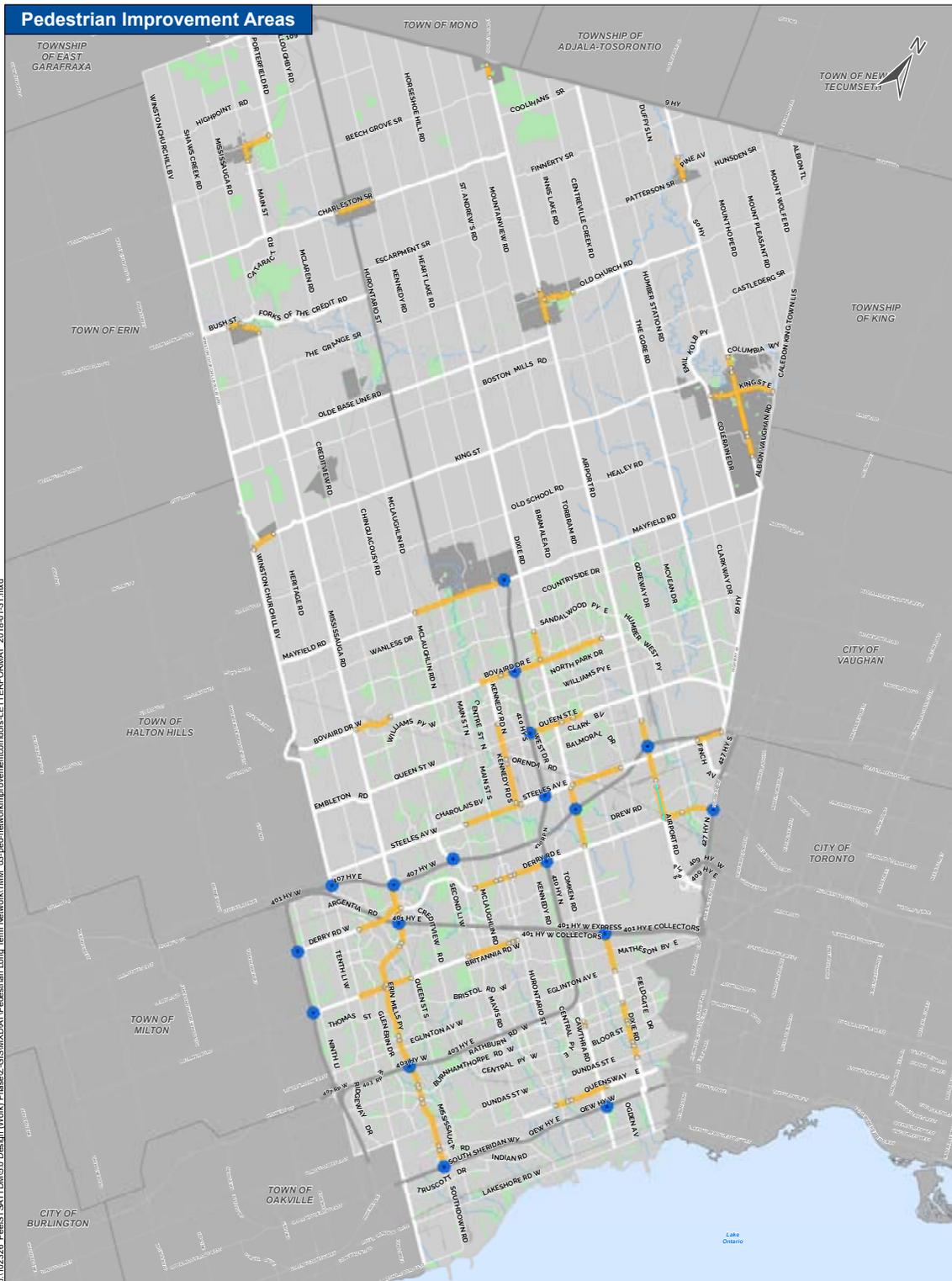
STREET	FROM	TO	ROAD CHARACTERIZATION
Old Main St	Bush St	Caledon Mountain Dr	Suburban / Commercial
Queen St E	HWY 410	Bramalea Rd	Urban Main Street
Queen St S	George Bolton Pkwy	Stella Cr	Urban Main Street
Queen St S	Stella Cr	Industrial Rd	Suburban / Commercial
Queensway E	Camilla Park	Haines Rd	Suburban / Commercial
Queensway W	Confederation Pkwy	Camilla Rd	Urban Main Street
Steeles Ave W	Resolution Dr	McLaughlin Rd	Suburban / Commercial
Steeles Ave E	Dixie Rd	Torbram Rd	Suburban / Commercial
Steeles Ave E	200m W of Finch Ave	HWY 50	Suburban / Commercial

The phasing of the Pedestrian Improvement Corridors within the five year timeline of this implementation will depend in large part on coordination with a number of other groups and initiatives, including the RSSP and the parallel roll out of cycling infrastructure (refer to Section 3.4). The priorities can also be informed by Regional programs that incorporate walking audits. For example, the STP programs include walkabouts as part of their neighbourhood school travel planning safety audits. In addition, the Active Living group in Public Health facilitates the implementation of Walkability Audits in areas of interest to the community. These walking audits are an important source of local knowledge, and can be used on an ongoing basis to inform program priorities.

In addition to the Pedestrian Improvements Corridors, a number of interchanges have been identified as requiring retrofits to improve conditions for both walking and cycling. One of the challenges with implementing improvements to interchanges is that the timing will depend on programmed bridge rehabilitation and/or reconstruction by MTO. In order to ensure that the Region has the required funding to address these changes over time, cost estimates for all of interchanges have been split up into horizons, based on the expected number of interchanges to be rehabilitated within 5-year horizons. Although these costs are not assigned to particular interchanges, the identification of funding for interchange-related improvements will provide the Region with flexibility to implement enhancements when the opportunity arises.

Over time, if it appears that many highway interchanges will not be rehabbed over the projected timeline and therefore funding set aside by the Region would be utilized on a more extended timeline, some of the funds dedicated to highway interchange improvements could then be used to provide grade separation for pedestrians and cyclists at priority highway interchanges. Due to the benefit that highway interchange improvements would provide for both pedestrians and cyclists, the cost estimate of highway interchange improvements have been divided equally between pedestrian and cycling infrastructure.

Exhibit 3-11: Map of Pedestrian Improvement Corridors



J:\102326_PeetST\AT\DM\5.0_Design_Work_Phase2\GIS\MXD\AT\Pedestrian_Leag_Term_Network\TM_03_ped_networkimprovementcorridors_LETTERFORMAT_2018-01-31.mxd



- Pedestrian Improvement Corridors
- Interchange Improvements
- Rural Settlement Area
- Rail Line
- Watercourse
- Park / Green Space
- Waterbody



Coordinate System: NAD 1983 UTM Zone 17N



TIMELINE

2018: Work with stakeholders to build support for the pedestrian improvement corridors; initiate feasibility studies of improvements to select corridors

2019–2022: Continue implementation of pedestrian improvement corridor work; coordinate highway interchange improvement opportunities as they arise

Exhibit 3-12: Pedestrian Improvements Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Region of Peel – Infrastructure Programming & Studies	X							
Support	• Region of Peel – Roads Design & Construction	X	X						
	• Region of Peel – Traffic Signals & Street lighting	X							
	• Region of Peel – Traffic Safety	X							
	• Region of Peel – Traffic Operations	X							
	• Region of Peel – Road Operations & Maintenance	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$6.5M	0.2	\$6.5M	0.5	\$6.5M	0.5	\$6.5M	0.5	\$6.5M	0.5

3.4 Regional Cycling Network Infrastructure

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION B1 Implement Cycling Network

Within the 2018–2022 horizon, the emphasis for cycling infrastructure improvements will be the implementation of the following project types:

- Continuing to implement cycling facilities as part of committed or planned road capital projects, or committed AT projects, in keeping with on-going practices (refer to Section 3.4.1)
- Upgrading existing facilities to meet desired quality, including both linear facilities and spot intersection upgrades (refer to Section 3.4.2). This represents a new initiative of the STS.
- Implementing new infill cycling projects to address gaps (refer to Section 3.4.3). This represents a new initiative of the STS.

- Working in partnership with municipalities on the delivery of Regionally Significant Trails (refer to 3.4.4). This represents a new initiative of the STS (although this type of trail cost sharing has been implemented previously outside of a formalized program).

3.4.1 COMMITTED OR PLANNED CAPITAL PROJECTS

These are road reconstruction or resurfacing projects that have been scheduled through the capital delivery process, and are in various stages of planning and design. The role of the Peel Region Sustainable Transportation group is to ensure that high quality cycling facilities are provided through these projects. This collaboration with capital delivery is on-going and will continue to be an important role for the Sustainable Transportation group – advocating on individual EAs and design projects for high quality facilities. For the projects identified in the short term horizon, most of the projects are far enough into the delivery process that a cycling facility type has already been selected and designed.

TIMELINE

2018–2022: Continue support of implementing active transportation through planned capital projects

Implementation Notes

- \$4.3M in funding from the Ministry of Transportation has been awarded to the Region of Peel, which will be directed towards planned active transportation capital projects

Exhibit 3-13: Committed or Planned Capital Projects Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT	
		IN-KIND	FINANCIAL
Lead	<ul style="list-style-type: none"> • Region of Peel – Sustainable Transportation 	X	X
Support	<ul style="list-style-type: none"> • Region of Peel – Roads Design & Construction 	X	X
	<ul style="list-style-type: none"> • Region of Peel – Infrastructure Programming & Studies 	X	

ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS

2018		2019		2020		2021		2022	
Expense	Staff time								
-	0.2	-	0.2	-	0.2	-	0.2	-	0.2

3.4.2 UPGRADES TO EXISTING FACILITIES (FIX-IT LIST)

A number of upgrades to existing facilities are identified for implementation over the shorter time horizon. The upgrades can generally be grouped into two categories:

- Upgrades to linear facilities
- Spot intersection improvements

These two types of improvements are explored in more detail in the following sections.

Upgrades to linear facilities – This program is designed to increase the visibility and recognition of multi-use trails compared to sidewalks and splash strips, and also help to build momentum for the rest of the planned infrastructure improvements by creating higher quality facilities to connect to.

The upgrades identified through this ‘fix-it list’ are generally pavement marking and signage upgrades along older multi-use trails (including the addition of crossrides at side streets and signalized intersections), but also include widenings of targeted segments of trail which are sub-standard. Note that the costing for linear upgrades does not include extensive intersection upgrades to add crossrides where there will not currently fit within the context of existing medians and/or channelized islands – instead those improvements would be targeted through the intersection improvement program.

Most of the older multi-use trails along Regional roads are included in this list. Where corridors are not identified, they are likely slated for future reconstruction and are already under study through an EA, so upgrading the multi-use trail is not seen as an efficient use of funds, or the trail is newly built to standard. In a few cases, the scope of work needed to upgrade the trail is too large to be completed in the context of an upgrade, and needs to be coupled with a road project.

A summary of the short-term upgrades list is noted below in Exhibit 3-14.

Exhibit 3-14: Summary of Short-Term (2018–2022) Existing Cycling Corridor Upgrades

CORRIDOR	FROM	TO	IMPROVEMENT
Bovaird Drive	Worthington Avenue	Airport Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Castlemore Road	Airport Road	The Gore Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Castlemore Road	The Gore Road	Highway 50	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings

CORRIDOR	FROM	TO	IMPROVEMENT
Derry Road	Financial Drive	McLaughlin Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Derry Road	W of Maritz Drive	Kennedy Drive	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Derry Road	Tomken Road	W of Tobram Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Dixie Road	Burnamthorpe Road East	Eastgate Parkway	Spot intersection improvements / MUT widenings
Dixie Road	Steeles Avenue	Clark Boulevard	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Dixie Road	Rail Corridor	Dundas Street East	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Queen Street	Chinguacousy Road	McLaughlin Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Queensway Trail	Mavis Road	Hurontario Street	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Queensway Trail	Hurontario Street	Cawthra Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Queensway Trail	Cawthra Road	Dixie Road	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings
Queensway Trail	Dixie Road	Greenhurst Avenue Trail Extension	Upgrade MUT - add pavement markings & signage, as well as intersection upgrades including crossrides and driveway markings

Intersection Connectivity Improvements – A number of spot intersection improvements have also been identified to improve crossings of cycling facilities on Regional roads. Generally, these involve the addition of crossrides at specific intersections to facilitate travel where multi-use trails cross roadways, where an off-road trail meets a Regional road, or where new facilities will be added and appropriate transitions are needed. The implementation of cross-rides could require civil/geometric changes and changes to the traffic control signal infrastructure (bike signals). The short-term intersection upgrades identified are summarized in Exhibit 3-15.

Exhibit 3-15: Summary of Short-Term Cycling Intersection Upgrades

STREET	CROSS-STREET	HORIZON	FEASIBILITY NOTES
Bovaird Drive East	Airport Road	2018–2022	Add crossride to connect planned MUT on Airport Rd to existing MUT on Bovaird
Bovaird Drive East	McLaughlin Road	2018–2022	Add crossride (west leg) to connect Fletcher’s Creek Recreational Trail
Bovaird Drive East	Dixie Road	2018–2022	Add crossrides (west and south legs) to connect Chinguacousy Recreational Trail
Bovaird Drive East	Bramalea Road	2018–2022	Intersection upgrade to facilitate access to intersecting multi-use trails
Bovaird Drive East	Heart Lake Road/ Southlake Boulevard	2018–2022	Add crossride(west leg) to connect Esker Lake Recreational Trail
Britannia Rd West	Winston Churchill Boulevard	2018–2022	Add crossride on north leg to connect to planned MUT on east side and existing north-south MUT on Winston Churchill
Britannia Road West	Rail Corridor W of Queen Street	2018–2022	Transition from MUT on north side to south side
Britannia Rd West	Erin Mills Pkwy	2018–2022	Add crossrides to transition from MUT on the north side of west leg to planned MUT on the south side on the east leg
Derry Road West	N of 2nd Line West	2018–2022	Improve transition between MUT on north side and MUT on south side of Derry - evaluate warrants for midblock signal
Dixie Road	Balmoral Drive	2018–2022	Add crossride (north and east legs) to connect Esker Lake Recreational Trail. Extend MUT along the east side of Dixie to intersection.
Dixie Road	Orenda Road / Birchbank Road	2018–2022	Provide access to/from Birchbank Road bike lanes
Erin Mills Parkway	Fowler Drive	2018–2022	Add crossrides to signalized intersection to transition MUT from west to east side
Erin Mills Parkway	Dundas Street West	2018–2022	Crossrides and intersection improvements to transition from MUT on east side (south leg) to west side (north leg)
Queen Street East	Airport Road	2018–2022	Crossride added to connect planned MUT on Airport Rd to existing MUT on Queen

STREET	CROSS-STREET	HORIZON	FEASIBILITY NOTES
Queen Street West	McLaughlin Road South	2018–2022	Intersection upgrade to transition from bi-directional on south side on west leg to uni-directional on-road facilities on east leg
Steeles Avenue West	Albion Road	2018–2022	Upgrade intersection crossing for trail access
The Gore Road	Kelways Circle	2018–2022	Transition from MUT on west side to paved shoulder
The Gore Road	Queen Street East	2018–2022	Transition from cycle track on north leg of intersection to far-side MUT on south side of Queen Street
Winston Churchill Boulevard	Beryl Road	2018–2022	Transition from unidirectional to bi-directional facilities
Winston Churchill Boulevard	Lakeshore Road	2018–2022	Upgrade intersection crossings to provide access to Waterfront Trail from paved shoulders

Note that the implementation timelines and costing for this program are grouped with all the new cycling infrastructure programs and presented in Section 3.4.4.

3.4.3 NEW INFILL CYCLING PROJECTS TO ADDRESS GAPS

Certain sections of the cycling network identified by the STS are not part of existing or planned road capital projects, thus the completion of these network links would require the initiation of new projects. For these projects, the Sustainable Transportation group will need to work closely with the Infrastructure Programming & Studies and Roads Design & Construction groups on scheduling, planning, design and delivery. In some cases, the projects may be led through the sustainable transportation group. Since this is a growing function for the ST group, staffing will need to increase. It is anticipated that 0.5 FTEs may be needed to support this enhanced role.

For the purposes of prioritizing infill links to be completed in the short term, links were selected to connect key pieces of existing or new infrastructure, to serve key destinations and based on input from local municipalities. Links in the short term are also intended to be implementable without significant road reconstruction.

Detailed project sheets for the short term cycling network links (as well as the long term projects) are provided in **Appendix A**.

Note that the implementation timelines and costing for this program are grouped with all the new cycling infrastructure programs and presented in Section Exhibit 3-10: Summary of Pedestrian Improvement Corridors. Costing for infill multi-use trails is based on installation along one side of the road. This is felt to be appropriate in the context of an infill link.

3.4.4 OFF-ROAD TRAILS OF REGIONAL SIGNIFICANCE

Off-road trails of regional significance were identified in collaboration with local municipalities and Conservation Authorities. These are trails that are not within Regional ROW, but are significant as they transverse jurisdictional boundaries and represent significant connections for the cycling network. The Region has previously entered into cost-shared arrangements with local municipalities to design and construct off-road trails in this format. While the timing for many of these trails is not yet established and will require continued coordination between a variety of stakeholders, [the STS recommends a portion of funding be available in the short term to enable the Region to be a participant in these cost-shared trail initiatives.](#)



TIMELINE

2018: Ramp up delivery process to prepare for implementation of standalone links & initiate planning/design of some of the links; commence upgrade program for existing facilities; continue to support capital planned projects

2019: Continue upgrade program for existing facilities; continue to support capital planned projects

2020–2022: Continue to implement the short term horizon cycling network links, upgrade existing facilities, as well as support capital planned projects

Implementation Notes

- Additional staff time will be required to support the delivery of standalone network links and begin to install infill links

Exhibit 3-16: Cycling Network Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	<ul style="list-style-type: none"> Region of Peel – Sustainable Transportation 	X	X						
Support	<ul style="list-style-type: none"> Region of Peel – Roads Design & Construction 	X	X						
	<ul style="list-style-type: none"> Region of Peel – Infrastructure Programming & Studies 	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$7M	0.3	\$8.25M	0.7	\$8.25M	0.7	\$8.25M	0.7	\$8.25M	0.7

3.4.5 DATA COLLECTION

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION B1 Implement Cycling Network
- ACTION B2 Identify and prioritize solutions to major cycling barriers
- ACTION B7 Improve year-round maintenance standards for cycling facilities
- ACTION B11 Promote cycling for short and medium length trips

In 2015, the Region initiated an active transportation monitoring program that is dedicated to collecting information about pedestrians and cyclist volumes. As of 2017, 8 Eco-Counters have been installed at various locations on or near Regional roads. These units have been used to develop before and after usage data of recently installed bike lanes and multi-use trails, tracking the number of cyclists on sidewalks, and also the use of an off-road trail near a crossing of a Regional road.

The Region’s Traffic Operations group operates a turning movement count program that provides data for all intersections on Regional roads including information on pedestrians and cyclists. The gathering of data as part of turning movement counts represents a “complete streets” methodology of data collection, which provides a region-wide source of baseline information. In addition to these turning movement counts, counters specific to pedestrians and cyclists are important to directly measure the impact of a particular piece of AT infrastructure and parts of the road. Walking and cycling movements may not be captured in turning movement counts, where it is possible to reach a destination without crossing through an intersection. Furthermore, counts undertaken on AT infrastructure over longer periods are better able to account for the weather or seasonal uptake. These counters provides valuable data by the hour over a much longer period of time or even indefinitely, providing insight into long term trends or particular events (e.g. bike month) that may impact the volume of pedestrians and cyclists.

Counts collecting data over longer periods may also help to better understand whether infrastructure is being used for recreational or commuter purposes. Facilities being used for commuting will see spikes of users during the AM and PM rush hours in a similar pattern to those observed for other modes of transportation. Conversely, where a facility is being used for recreational purposes counts will be more pronounced on “off-peak” travel times, such as weekends and holidays.

The STS recommends consistent expansion of the active transportation monitoring program, with the budget allocated for monitoring and studies in the Region’s Transportation System Planning group. Establishing bike and pedestrian specific counts at more locations around the Region would provide a point of data for monitoring the Region’s mode share targets.

The Region should explore the potential for the installation of active transportation monitoring infrastructure in coordination with capital project tender agreements. The coordinated installation of counting hardware during the construction of multi-use trails or cycle tracks may yield cost savings in a number of respects. Where it is desirable to lay ground sensors, embedding these without cuts to the asphalt or concrete surface can help to prevent surface degradation. Similarly, above-ground sensors may require an in-ground mount or a connection to utilities as their power source.

Data collected by GPS enabled smartphone apps can provide additional information on existing cycling routes. From a demographic perspective, the marketing of these apps tends to attract users who wish to share their recreational ride routes. While the data gathered by self-selecting users may over-emphasize athletic accomplishments, and underemphasize utilitarian destinations, it nonetheless represents a valuable record of locations with existing cycling demand. Any efforts that improve road safety where existing cycling is taking place may help to prevent collisions and grow the culture of cycling in the Region. The STS recommends that the Region continue to pursue data collected from smartphone apps, as well as monitor the availability of other sources of data and determine their appropriateness to support the active transportation monitoring program.

Finally, as the Region develops its bike counting programs, cycling numbers may be analyzed against other types of data, such business case performance indicators. A list of potential business case indicators, which may be used to evaluate the effectiveness of Active Transportation infrastructure and programs has been provided in Exhibit 4.4 of this report.

Implementation Notes

- Expenses refers to data purchases from GPS enabled smartphone apps; Eco-Counters come from the Transportation System Planning budget

Exhibit 3-17: Data Collection

ROLE	ORGANIZATION	EXPECTED SUPPORT	
		IN-KIND	FINANCIAL
Lead	• Region of Peel – Sustainable Transportation	X	X
	• Region of Peel – Traffic Operations	X	
Support	• Region of Peel – Roads Design & Construction	X	X
	• Region of Peel – Transportation System Planning		X

ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$10K	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1	\$10K	0.1

3.5 Bike Friendly Destinations

3.5.1 BIKE PARKING AND BIKE REPAIR STATIONS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCES:

ACTION B9	Provide bicycle parking in Regional rights of way
ACTION B10	Support provision of bicycle parking and end-of-trip facilities at community destinations
ACTION M1	Encourage local municipalities to strengthen zoning by-laws to reduce parking requirements and support sustainable travel modes through infrastructure and context sensitive design
ACTION M21	Undertake road safety pilot projects

Three types of infrastructure can affect an individual's decision to bike to their destination.

1. Facilities for the Journey

Is the infrastructure available to get to their destination safe, accessible, and convenient? Municipalities can address these concerns through multi-use trails, bike lanes, bike boulevards and crossrides. The Region of Peel is addressing these needs in Section 3.4 Cycling Network Infrastructure.

2. Facilities at the Destination

Is the infrastructure available to safely park my bike in a convenient location near the door of my destination, ensuring that the bike is still there and intact when I come back to it? Municipalities can address this by providing and supporting end-of-trip facilities ranging from bike racks to bike storage rooms.

Bike parking already exists across the Region. Some are provided by the local municipalities on their right-of-way, some by local transit authorities at their transit stops and some by local vendors and property owners. However, since there is no existing standard or requirement for bicycle parking, it is not consistently available and the quality and functionality of the infrastructure can vary widely

Given its on-going success with its School Bike Rack program, [the STS recommends that the Region initiate a Community Bike Rack program to address existing gaps in infrastructure at destinations on both public and private property](#). This will include coordinating with municipalities and transit agencies to align with their existing parking and streamline the process as well as liaising with private property owners. It may prove useful to align the program with the Bicycle Friendly Business designation (3.5.2).

3. Facilities for Unexpected Situations

What infrastructure is available to support me if I'm riding my bike and realize my tires need air, my brake cable is loose or I have another mechanical concern? In dense urban environments, it's not unusual to have a bike shop within walking distance or easy access to transit if the bike needs repairs. In both urban and suburban environments, municipalities can further address this concern by providing public bike repair stands in high density corridors that provide the tools for small repairs.

The provision of public bike repair stations is a growing trend for areas such as trails, plazas, malls or rapid transit stations. Like water fountains, they are a public amenity that enhances the utility of existing public spaces. Examples of locations where bike repair stands have been installed include a number of destinations on Quebec's "Route Verte" network, many of Toronto's downtown TTC subway stops and around the University of Toronto's downtown campus. In addition to shopping destinations, destinations where people access programming (including residential and community services) and around high-density residential development are ideal locations. High-traffic locations should be chosen based on their ability to best serve Peel residents.

The suitability of a given location for a bike rack and a bike repair station may be evaluated simultaneously. As the program develops, specific criteria may be further developed.

[The STS recommends the Region initiate a program to install 5 bike repair stations annually in targeted locations](#). Locations where a community intervention has been programmed or there is an assessed need may be ideal.

TIMELINE

2018: Use base year to scope locations and establish criteria

2019: Target installation of 20 racks and 5 bike repair stations

2020: Target installation of 50 racks and 5 bike repair stations

2021: Target installation of 50 racks and 5 bike repair stations

2022: Target installation of 50 racks and 5 bike repair stations

Implementation Notes

- Inverted U bike racks cost approximately \$600 per unit and \$250–\$600 for installation (surface dependent); estimate \$1K per unit including installation (2019: \$20K; 2020–2022: \$50K)
- Cost for purchase, administration, installation and maintenance of a repair stand is approximately \$4K unit (\$20K)
- Administrative tasks include developing criteria, inviting applications, managing agreements when installations are on private property and arranging for maintenance of assets (0.2FTE)

Exhibit 3-18: Bike Parking and Bike Repair Stations Implementation

ROLE		ORGANIZATION		EXPECTED SUPPORT					
				IN-KIND	FINANCIAL				
Lead		• Region of Peel – Sustainable Transportation		X	X				
		• Region of Peel – Built Environment		X					
Support		• Region of Peel – Active Living		X					
		• Municipal Active Transportation Offices		X					
		• Municipal Transit Agencies		X					
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	0.1	\$40K	0.2	\$70K	0.2	\$70K	0.2	\$70K	0.2

3.5.2 BIKE FRIENDLY BUSINESSES

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCES:

ACTION B9	Provide bicycle parking in Regional rights of way
ACTION B10	Support provision of bicycle parking and end-of-trip facilities at community destinations
ACTION B14	Build capacity through community-based programs
ACTION M16	Support sustainable travel choices through new mobility technologies and business models
ACTION M21	Undertake road safety pilot projects

The Smart Commute program provides a mechanism for organizations to reward and encourage their employees to travel by sustainable travel modes such as walking, cycling and carpooling. Ontario by Bike promotes cycling tourism by recognizing businesses in the tourism industry that encourage tourists to visit by bicycle.

The STS aims to encourage local daily trips by bicycle. Currently no program exists to recognize businesses that residents access regularly that support or reward clients who access their location(s) on foot or by bicycle.

Rewarding businesses who encourage active transportation has been successful in other jurisdictions. The cities of Toronto and Vancouver have had successful programs running for over a decade. Notably, investments made in employee active transportation encouragement programs, events and infrastructure have demonstrated significant payback to those businesses. The League of American Bicyclists runs a similar program in the United States in which over 1,400 businesses participate. A Bike Friendly Business pilot project conducted by the Share the Road Cycling Coalition in Brampton in 2015 (alongside pilots in Thunder Bay and Hamilton) demonstrated local interest in the project with two bronzes and two honorable mentions awarded locally.

[The STS recommends an awards program to celebrate organizations who encourage cycling to their business premises with bike-friendly policies and infrastructure such as providing high quality bike parking in a safe locations where clients can see their bikes.](#)

It is recommended that \$10K–\$15K be provisioned annually to fund event costs, including marketing. A panel of local residents and distinguished guests could offer an impartial approach to selecting the applications who meet the established criteria. All nominated business could receive a window decal to applaud their efforts. The goal is to engage more businesses each year to apply in order to normalize and encourage visiting businesses and organizations in the Region by bicycle.

As the program is developed, the criteria relevant to different business types can be developed on an ongoing basis. The program may represent an opportunity to work with the chambers of commerce and boards of trade, and the successes of different strategies for promotions and partnerships should be evaluated each year.

TIMELINE

2018: Undertake research and planning for future program years

2019: Target 25 nominees in program, 5 awards

2020: Target 45 nominees in program, 6 awards

2021: Target 65 nominees in program, 7 awards

2022: Target 85 nominees in program, 8 awards

Implementation Notes

- Events would rotate between municipalities
- Annual event costs (\$15K)
- High-Quality window decals for participants (nominees and winners) 1\$/unit (\$100)
- Strengths and weaknesses of program would be reviewed each year
- Staff Time Required (0.2FTE)

Exhibit 3-19: Bike Friendly Businesses Implementation

ROLE		ORGANIZATION		EXPECTED SUPPORT					
				IN-KIND	FINANCIAL				
Lead		<ul style="list-style-type: none"> • Region of Peel – Sustainable Transportation • Region of Peel – Active Living 		X	X				
Support		<ul style="list-style-type: none"> • Local Chambers of Commerce and Boards of Trade • Municipal Tourism Offices • Municipal Active Transportation Offices 		X					
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$1.2K	0.17	\$18K	0.22	\$18K	0.22	\$19K	0.22	\$19K	0.22

3.5.3 FIRST/LAST MILE PROGRAMMING

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION W2	Identify and prioritize solutions to major walking barriers
ACTION B2	Identify and prioritize solutions to major cycling barriers
ACTION B7	Improve year-round maintenance standards for cycling facilities
ACTION B11	Promote cycling for short and medium length trips
ACTION M12	Deliver special events information and messaging across the region
ACTION M13	Deliver TDM social marketing to priority areas
ACTION T3	Improve First- and Last- Mile Access to Transit Hubs and Along Corridors

The Region of Peel encourages and promotes walking and cycling to transit as part of its on-going outreach and regularly pursues opportunities to highlight these options in its programs. For example, in 2015, as part of their Community Active Transportation Project and aligning with local Bike Month Celebrations, Metrolinx was invited to run a festival at a GO Station in Brampton. Metrolinx, including the popular GO Bear, celebrated cycling at a well-attended event at the Brampton GO Station.

This Implementation Plan proposes partnering with Metrolinx to deliver programming to encourage biking to/from GO stations in the Region and partnering with local municipalities to deliver programming at Regional transit hubs such as the Bramalea Terminal in Brampton and the City Centre Transit Terminal in Mississauga. Examples may include pairing events at terminals and stations with innovative promotions including organized group rides to/from the stations, bike valet (or similar forms of secure bike parking), and incentives for people who bike to/from the terminal (from safety equipment (bike bells) to subsidizing transit costs (funds on a Presto card)). The quantity of programs would be based on the community needs surrounding each station. For example, Clarkson GO, Streetsville GO, Cooksville GO, Mount Pleasant GO and Brampton GO stations will all boast new secure bike rooms by late 2020 through the Province of Ontario's new Commuter Bike Parking Program, which would be ideal for valet bike parking. Programming at these transit hubs would be delivered by cycling ambassadors.

This First/Last Mile Programming would go hand in hand with Action T3: Improve first- and last- mile access to transit hubs and along corridors in the 2018–2022 Transportation Demand Management Implementation Plan as well as addressing essential infrastructure updates around transit stations (see Section 3.4 Cycling Network Infrastructure) in partnership with local municipalities and working directly with Metrolinx to improve access within GO Stations.

The STS recommends that the Region encourage cycling to and from transit hubs through innovative programming and partner with stakeholders to improve the active transportation infrastructure within each station and connecting the station to the surrounding neighborhoods.

TIMELINE

2018: Planning

2019: 4 events for up to 6 transit hubs = 24 events + outreach material

2020: 8 events for up to 8 transit hubs = 64 events + outreach material

2021: 8 events for up to 10 transit hubs = 80 events + outreach material

2022: 8 events for up to 10 transit hubs = 80 events + outreach material

Implementation Notes

- Assume the Region would hire 4 Cycling Ambassadors, at 5 months (April–August); note that the Cycling Ambassadors may engage in additional programming work in addition to the First Mile/ Last Mile program, including regular outreach events, Bike Month and the Bike Friendly Business Program; additional support from municipalities and Metrolinx will also be pursued
- Staff time (0.5 FTE) required to run program and manage Ambassadors
- Estimated budget includes the production of targeted educational and promotional materials; potential promotional items include bike bells and bike lights; additional support from local municipalities and Metrolinx will also be pursued
- Strengths and weaknesses of program would be reviewed each year and adjusted as necessary; this may include deciding to focus more programming on select stations or vice versa

Exhibit 3-20: First/Last Mile Programming Implementation

ROLE		ORGANIZATION		EXPECTED SUPPORT					
				IN-KIND	FINANCIAL				
Lead		• Region of Peel – Sustainable Transportation		X	X				
		• Region of Peel – Active Living		X					
Support		• Metrolinx		X	X				
		• Local Municipalities		X	X				
		• Municipal Transit Agencies		X					
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$1.2K	0.2	\$17K	0.5	\$17K	0.5	\$18K	0.5	\$18K	0.5

3.6 Making Cycling Mainstream

3.6.1 BIKE MONTH

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION M12	Deliver special events, information and messaging across the Region
ACTION M13	Deliver TDM social marketing to priority areas
ACTION M14	Support workplace engagement by Smart Commute to promote walking, cycling, transit, carpooling and teleworking
ACTION M21	Undertake road safety pilot projects
ACTION B3	Identify and remove minor cycling barriers
ACTION B10	Support provision of bicycle parking and end-of-trip facilities at community destinations
ACTION B11	Promote cycling for short and medium length trips
ACTION B14	Build capacity through community-based programs
ACTION B15	Build cycling culture with a bike friendly business program

Bike Month is a month of region-wide programming in the Region of Peel. The intent of Bike Month is to celebrate and encourage both recreational and utilitarian cycling as well as to raise awareness of the extensive benefits of cycling for transportation.

Bike Month started as Bike to Work Day in the City of Toronto in 1988. By 2008 it had expanded to 4 weeks of City-wide programming. In 2013, the Region of Peel, along with most GTHA municipalities, partnered with Metrolinx to celebrate Bike Month across the region.

Bike Month in the Region of Peel:

- Celebrates existing cyclists by rewarding their behaviour and creating free events they are invited to participate in
- Encourages new cyclists by running free introductory workshops and family-friendly events
- Raises awareness of cycling benefits by running booths at mainstream events which engage all members of the public at their own interest levels

By bringing local partners together and creating a focus on cycling, Bike Month also provides an opportunity for innovative programming and cross-promotion. Bike Month offerings have included:

- The City of Brampton Library runs a yearly Bike Benefits & Mechanics workshop. They also made cycling a featured topic in their Community Spotlight programming in 2015.
- Brampton Day (CeleBrampton) and Caledon Day occur during Bike Month and have offered cycling programming at the event including valet bike parking, basic bike mechanics, bike rodeos and BMX bike acrobatics presentations

- The Mississauga Cycling Advisory Committee and the Brampton Cycling Advisory Committee offer community rides open to cyclists of all abilities that are heavily promoted during Bike Month
- Faith-based organizations and community groups have partnered to provide community bike rides and bike mechanics
- Some Smart Commute employers conduct their Bike to Work events at the work place during Bike Month

The Region of Peel partners with local municipalities to:

- Create, manage, & sponsor Bike Month events
- Attend, run or support programming at Bike Month events
- Promote all Bike Month events widely
- Support local organizations with their own Bike Month programming
- Encourage and work with Regional and municipal departments, local businesses and non-profits in providing more cycling programming during Bike Month

The STS recommends that the Region of Peel continue to grow and expand Bike Month in partnership with local municipalities. It is expected that expanding partnerships with local organizations will support and expand the impact of Bike Month.

TIMELINE

2018: Expand Bike Month offerings by collaborating with libraries

2019: Expand Bike Month offerings by collaborating with tourism offices

2020: Expand Bike Month offerings by collaborating with the Bike Friendly Business program

2021: Expand Bike Month offerings by increasing local organization participation

2022: Evaluate Bike Month best practices and expand accordingly

Implementation Notes

- Staff time includes administering the entire campaign as well as planning, managing and supporting the delivery of specific events (0.33 FTE)
- Booth staffing is not included in staff time, generally involves a minimum of 2 staff supported/ supervising 5–7 volunteers (depending on size of the event)
- Bike Month costs include subsidizing the municipal local supporter costs and bike month specific material (\$15K)

Exhibit 3-21: Bike Month Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT	
		IN-KIND	FINANCIAL
Lead	• Region of Peel – Sustainable Transportation	X	X
	• City of Mississauga – Active Transportation	X	X
	• City of Brampton – Active Transportation	X	X
	• Town of Caledon – Parks and Recreation	X	
Support	• Region of Peel – Volunteer Services	X	
	• Region of Peel – Active Living	X	
	• Region of Peel – Community Partnerships	X	
	• Municipal Parks and Recreation	X	
	• Peel Regional Police	X	
	• Ontario Provincial Police	X	
	• Community Partners	X	

ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS

2018		2019		2020		2021		2022	
Expense	Staff time								
\$1.2K	0.27	\$15K	0.33	\$15K	0.33	\$16K	0.33	\$16K	0.33

3.6.2 WINTER CYCLING

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M5 Update Regional road design standards to ensure access, safety and comfort for walking and cycling
- ACTION M12 Deliver special events, information and messaging across the Region
- ACTION B7 Improve year-round maintenance standards for cycling facilities
- ACTION B8 Develop priority winter maintenance network for Regional cycling facilities
- ACTION B12 Promote winter cycling

Winter maintenance is essential to all-season cycling. Motorized vehicles rely on municipal standards to clear the roads of snow and ice. Bicycles require the same support.

In addition to infrastructure support, year round cycling can specifically benefit from a focus on winter cycling promotion, with the skills and tools to overcome winter-specific challenges.

The STS recommends that winter cycling encouragement be undertaken in partnership with established winter events occurring in the local municipalities. It is anticipated that internal consultations to identify routes that would receive a priority level of year-round maintenance, would be undertaken alongside public-facing outreach. Internal information gathering meetings would identify:

- capacities of existing Region of Peel Road Operations crews and machines
- potential costs for changes to existing snow management programs in compliance with required Minimum Maintenance Standards.
- consultation with municipalities to achieve service coordination on regional and municipal roads.

Programming efforts to promote winter cycling will help build support for maintenance investments that enable year-round cycling. Partnerships with winter events such as the annual Brampton Christmas Market and the Mississauga Tree lighting celebration provide an opportunity to share winter cycling information. Information shared at these events could include:

- how to dress for cycling in the winter
- how to stay visible when cycling in the winter
- how to maintain your bike for winter cycling (potentially including a demo on how to winterize your bike)
- information about municipal or regional programs to provide winter maintenance of roads and cycling infrastructure

Partnering with popular, family-friendly events will not only provide the knowledge cyclists may need to head out in winter but also raise awareness amongst motorized vehicle drivers on the importance of sharing the road with cyclists and being aware of cyclists on the road year-round.

TIMELINE

2018: Undertake research and planning for future program years

2019: Establish partnerships, participate in 2 winter events

2020: Evaluate strengths and weaknesses of 2019 events to inform two 2020 events

2021: Evaluate strengths and weaknesses of 2020 events to inform two 2021 events, and consider options for an event in Caledon

2022: Evaluate strengths and weaknesses of 2021 events to inform three 2022 events

Implementation Notes

- Staff time includes administering the entire campaign as well as planning, managing and supporting the delivery of specific events (0.1 FTE) plus recruitment and management of volunteers
- Assume municipal partners support tabling of cycling materials at events, with minimal permit or administration costs
- Assumes the development of winter-specific literature (\$10K)
- Booths will hand out winter-specific literature (\$2K yearly print) and visibility specific merchandise (lights, reflective wear/reflective tape for bicycle) (\$7K yearly)
- Strengths and weaknesses of program would be reviewed each year

Exhibit 3-22: Winter Cycling Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Municipal Active Transportation Offices	X							
Support	• Municipal Arts, Culture and Tourism Departments	X							
	• Chamber of Commerce and Board of Trade	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$1.2K	0.06	\$19K	0.1	\$9K	0.1	\$10K	0.1	\$10K	0.1

3.6.3 2019–2023 COMMUNICATIONS STRATEGY

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION M12 Deliver special events, information and messaging across the Region
- ACTION M15 Encourage and support walking and cycling to and from schools
- ACTION W6 Promote walking for short trips
- ACTION B11 Promote cycling for short and medium-length trips

In 2009 the Region of Peel recognized that in addition to enhancing infrastructure to make it easier and safer to get around on foot or by bicycle, the Region needed a Communications Strategy to encourage and promote active transportation.

The Region's first Active Transportation Communications Strategy created the *Walk + Roll Peel* branding, and developed the *walkandrollpeel.ca* website. The purpose of *Walk + Roll Peel* has been to promote, encourage and support active transportation. *Walkandrollpeel.ca* exists as a joint effort between the Region of Peel, the City of Mississauga, the City of Brampton and the Town of Caledon. It has evolved into an information hub for active transportation programs, events and common concerns.

The STS recommends that the Region of Peel develop an updated Active Transportation Communications Strategy to support active transportation programs and projects taking place in Peel Region. The Communications Strategy will increase community awareness of and engagement in active transportation programs, by expanding the reach and effectiveness of the Region's active transportation messaging. The 2019–2023 Communications Plan would take into account the expanded portfolio of the Sustainable Transportation group as well as the increased availability of technological tools.

TIMELINE

2018: Initiate and complete 2019–2023 Communication and Marketing Plan

2019–2022: Deliver communications and marketing products in accordance with the plan

Implementation Notes

- Funding for the Plan was accrued in previous budget and is therefore not included in Exhibit 3-23
- Staff time includes project managing the development of the Communications and Marketing Plan from inception to completion

Exhibit 3-23: 2019–2023 Communications Strategy Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	<ul style="list-style-type: none"> Region of Peel – Sustainable Transportation Municipal Active Transportation Offices 	X	X						
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
-	0.2	-	-	-	-	-	-	-	-

3.7 Community Based Program Delivery

3.7.1 DELIVER CYCLING SERVICES

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

- ACTION B11 Promote cycling for short and medium length trips
- ACTION B14 Build capacity through community-based programs
- ACTION M12 Deliver special events, information and messaging across the Region
- ACTION M13 Deliver TDM social marketing to priority areas
- ACTION M15 Encourage and support walking and cycling to and from schools

The Region of Peel proudly upholds its brand positioning statement “Working with You”. The community-based social marketing projects the Region has pursued since 2014 are an example of putting this premise to practice.

Behaviour change requires targeted interventions beyond the provision of information. Direct experience—such as riding a bicycle at a community ride—can overcome barriers no amount of research data or persuasion may address.

The Region has investigated best practices in achieving behavior change and ran a successful Community Cycling Program pilot in 2015 with marked participant behaviour change and capacity building of the organizations and community leaders involved.

In 2017, the Region developed plans to work with local community-based non-profits, who could deliver cycling services (e.g. DIY bike mechanic spaces) and programs (e.g. bike mentorship) to their clients, and post-secondary institutions whose student population demographics and living arrangements make them ideal candidates for accessing campus by bicycle.

The Region plans to work with 3 non-profits and 1 post-secondary institution in 2018. [The STS recommends that funding for Community Cycling Programs be expanded to engage additional organizations in subsequent years and support successful organizations for at least 3 years.](#) The ultimate goal is for all interested residents of Peel to have access to the services provided – bicycle mentorship, bicycle mechanics support, and opportunities to borrow or earn a bicycle.

TIMELINE

2018: 4 long-term service delivery agreements with 3 non-profits and one post-secondary institution

2019: 4 long-term service delivery agreements with 3 non-profits and one post-secondary institution

2020: 6 long-term service delivery agreements with 5 non-profits and one post-secondary institution

2021: 6 long-term service delivery agreements with 5 non-profits and one post-secondary institution

2022: 6 long-term service delivery agreements with 5 non-profits and one post-secondary institution

Implementation Notes

- This collaborative delivery model represents an efficient and cost effective path to program delivery
- Goal is to progressively grow both the programming delivered by each organization and the number of organizations offering Community Cycling Programs
- Following the success of this programming mechanism, an increase is proposed to support 6 organizations at a time for longer-term programming (3 to 5 years)
- Strengths and weaknesses of program will be reviewed each year

Exhibit 3-24: Deliver Cycling Services Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	• Region of Peel – Sustainable Transportation	X	X						
	• Local organizations providing Community Cycling Programs	X	X						
Support	• Municipal Active Transportation Offices	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$120K	0.2	\$175K	0.2	\$255K	0.2	\$255K	0.2	\$255K	0.2

3.7.2 ENABLE LOCAL ACTIONS

SUSTAINABLE TRANSPORTATION STRATEGY REFERENCE:

ACTION B11	Promote cycling for short and medium length trips
ACTION B14	Build capacity through community-based programs
ACTION M12	Deliver special events, information and messaging across the Region
ACTION M15	Encourage and support walking and cycling to and from schools
ACTION M19	Provide learning opportunities for stakeholders

In addition to the programs and services the Region delivers directly and those it delivers through the Community Cycling Programs, the Region seeks to capitalize on opportunities where a relatively small investment can make a dramatic difference on a group's perception of active transportation or their ability to engage in available programming. It also strategically provides support for signature events that encourage local action or broader reaching events that build community capacity and/or knowledge.

This includes supporting events like the Tour de Mississauga and Bike the Creek which encourage cyclists to come out and enjoy their cities by bicycle. It also includes sponsoring conferences like the Complete Streets Summit or ACT Canada Summit that add to our knowledge base of how to build complete communities. Finally, it includes small interventions that enable local leaders or organizations to promote active transportation within their network. In 2017 the Brampton Library promoted active transportation amongst the children participating in their Youth Summer Reading Club. The Region supported the Reading Club by providing one of the prizes.

There are a number of growing opportunities where relatively small amounts of funding may enable community members and community organizations to further engage in Regional programming. For example, several schools in the Region have initiated Bike Swaps where children bring bicycles in good condition they have outgrown and exchange them for one their size. These Bike Swaps have partially emerged in response to the successful Bike to School Week campaigns. In a Bike Swap younger children gain access to an existing pool of bicycles at no cost. Opportunities for the Region to intervene and enhance the effectiveness of the event (and school participation in Bike to School Week) might include the Region partnering to provide a few larger bicycles for the oldest children in attendance.

The STS recommends that the annual budget dedicated to enabling local actions be expanded with a focus on supporting small community projects that impact and embed active transportation into communities/organizations and expand community knowledge and capacity. A streamlined approach to selecting the best opportunities for partnership and investment would benefit all parties.

TIMELINE

2018: Target ~2 projects

2019: Target ~ 5 projects

2020: Target ~ 7 projects

2021: Target ~10 projects

2022: Target ~15 projects

Implementation Notes

- Goal is to provide funding support for smaller community efforts on an ongoing basis
- Strengths and weaknesses of program will be reviewed each year

Exhibit 3-25: Enable Local Actions Implementation

ROLE	ORGANIZATION	EXPECTED SUPPORT							
		IN-KIND	FINANCIAL						
Lead	<ul style="list-style-type: none"> Region of Peel – Sustainable Transportation 	X	X						
Support	<ul style="list-style-type: none"> Municipal Active Transportation Offices 	X							
	<ul style="list-style-type: none"> Region of Peel – Substance Misuse and Injury Prevention 	X							
	<ul style="list-style-type: none"> Region of Peel – Community Partnerships 	X							
ANNUAL EXPENSES (\$) AND STAFF TIME (FTE) REQUIREMENTS									
2018		2019		2020		2021		2022	
Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time	Expense	Staff time
\$22K	0.2	\$30K	0.2	\$40K	0.2	\$50K	0.2	\$60K	0.2

4

Implementation Framework

4.1 Overview of Required Resources

Following are summary tables that compile the resource needs for all actions recommended in this 2018-2022 Active Transportation Implementation Plan. The overview helps us to appreciate the balance between the cost of linear walking and cycling infrastructure projects, as compared to the programs that would promote and encourage the use of the infrastructure.

Much of the increase over existing funding is associated with a growing investment in high quality walking and cycling infrastructure, partnered with a growing investment in support programs, such as:

- An expanded bike parking program
- Cycling Education programs that can support and attract new riders
- Programs to encourage multi-modal transportation, such as cycling to GO stations
- Increasing the number of bike friendly businesses in Peel Region
- Road Safety Pilot Projects
- Growing the number of Community Cycling Programs

To achieve the goals described in this report, additional staff resources would be required.

The overall breakdown by project is summarized in Exhibit 4-1: Summary of Annual Budget Recommended for Active Transportation.

Exhibit 4-1: Summary of Annual Budget Requirements

Program	Annual Budget Requirements (\$ thousands)									
	2018		2019		2020		2021		2022	
	Expenses	FTE	Expenses	FTE	Expenses	FTE	Expenses	FTE	Expenses	FTE
Schools										
School Travel Planning	0	0.2	0	0.25	0	0.25	0	0.25	0	0.25
Schools Bike Racks	50	0.2	150	0.25	150	0.25	150	0.25	150	0.25
Bike to School Week	20	0.25	59	0.5	62	0.5	64	0.5	67	0.5
Bicycle Education	1.2	0.1	63	0.2	70	0.2	84	0.2	109	0.2
Road Safety										
Supporting Traffic Safety Pilot Projects	0	0	0	0	30	0.2	0	0	90	0.2
Walk + Roll Peel Booths	11	0.3	25	0.5	25	0.5	30	0.5	30	0.5
Driver Education	0	0.1	10	0.1	10	0.1	10	0.1	10	0.1
Updating Guidelines/Regulations	0	0.1	10	0.1	10	0.1	10	0.1	10	0.1
Walking Infrastructure										
Administration and Design - Walking Infrastructure	6,500	0.2	6,500	0.5	6,500	0.5	6,500	0.5	6,500	0.5
Cycling Infrastructure										
Administration and Design - Committed or Planned	0	0.2	0	0.2	0	0.2	0	0.2	0	0.2
Administration and Design - New Projects	7,000	0.3	8,250	0.7	8,250	0.7	8,250	0.7	8,250	0.7
Administration - Data Collection	10	0.1	10	0.1	10	0.1	10	0.1	10	0.1
Bike Friendly Destinations										
Bike Repair Stations	0	0.1	40	0.2	70	0.2	70	0.2	70	0.2

Bike Friendly Business Program	1.2	0.17	18	0.22	18	0.22	19	0.22	19	0.22
First/Last Mile Programming	1.2	0.2	17	0.5	17	0.5	18	0.5	18	0.5
Making Cycling Mainstream										
Bike Month	1.2	0.27	15	0.33	15	0.33	16	0.33	16	0.33
Promoting Winter Cycling	1.2	0.06	19	0.1	19	0.1	20	0.1	20	0.1
2019–2023 Marketing Strategy	0	0.2	0	0	0	0	0	0	0	0
Community Based Program Delivery										
Deliver Cycling Services	120	0.2	175	0.2	255	0.2	255	0.2	255	0.2
Enable Local Actions	22	0.2	30	0.2	40	0.2	50	0.2	60	0.2
	13,739	3.45	15,391	5.15	15,541	5.35	15,546	5.15	15,674	5.35
Infrastructure	13,510		14,760		14,760		14,760		14,760	
Programming	229		631		781		786		914	

4.1.1 CYCLING NETWORK INFRASTRUCTURE

Exhibit 4-2: Summary of Cycling Network Budget

Cost Category	Horizon			TOTAL
	2018-2022	2023-2031	Beyond 2031	
Proposed Regional Cycling Network (Current Jurisdiction*)	\$ 21,630,000.00	\$ 21,000,000.00	\$ 22,060,000.00	\$ 64,690,000.00
Trails of Regional Significance**	\$ 5,300,052.08	\$ 9,540,093.75	\$ 10,600,104.17	\$ 25,440,250.00
Cycling Network Upgrades (Current Jurisdiction***)	\$ 4,170,000.00			\$ 4,170,000.00
Intersection Improvements	\$ 4,250,000.00	\$ 1,000,000.00	\$ 2,750,000.00	\$ 8,000,000.00
Interchange Improvements****	\$ 4,615,625.00	\$ 8,077,343.75	\$ 8,077,343.75	\$ 20,770,312.50
TOTAL	\$ 39,965,677.08	\$ 39,617,437.50	\$ 43,487,447.92	\$ 123,070,562.50

*based on future jurisdiction of roadways, total network cost would decrease by \$140,000 (-\$4.72M associated with roads to be downloaded to the municipality, +\$4.58 associated with roads to be uploaded to the Region)

**assumes 50% funding by the Region

***based on future jurisdiction of roadways, cost would increase by \$800K

****costs for interchange improvements split with pedestrian costs

4.1.2 WALKING INFRASTRUCTURE

Exhibit 4-3: Summary Walking Improvements Budget

Cost Category	Horizon			TOTAL
	2018-2022	2023-2031	Beyond 2031	
Pedestrian Improvement Corridors*	\$27,790,000.00	\$ 27,790,000.00		\$ 55,580,000.00
Address Sidewalk Gaps		\$ 3,690,000.00	\$ 5,580,000.00	\$ 9,270,000.00
Interchange Improvements*	\$ 4,615,625.00	\$ 8,077,343.75	\$ 8,077,343.75	\$ 20,770,312.50
TOTAL	\$32,405,625.00	\$ 39,557,343.75	\$ 13,657,343.75	\$ 85,620,312.50

*includes costs for short-term sidewalk gaps

*costs for interchange improvements split with cycling costs

4.1.3 ACTIVE TRANSPORTATION PROGRAM STAFFING

The existing Region of Peel Sustainable Transportation Staff will not be able to support all the programming increases recommended in this 2018-2022 Implementation Plan report. To achieve the programming goals described in this report, additional staff resources would be required.

New staff could balance a number of roles for the AT programs described in this report throughout a given year. In this report program descriptions are provided including “implementation notes” that describe staff time for full time employees (FTEs). It is estimated that in addition to the existing staff people working in the Sustainable Transportation, the hiring of another 2 FTEs will be required for active transportation projects.

[This Active Transportation Implementation Plan report recommends that the existing Sustainable Transportation contract positions be made permanent and that two additional staff be hired for active transportation projects.](#)

In addition, based on the one additional staff recommended by the 2018- 2022 Transportation Demand Management Implementation Plan, a total of 3 additional FTEs are recommended for the Sustainable Transportation group.

By approving the Sustainable Transportation Strategy, Council would be supporting but not approving the recommended staff positions. Following the adoption of the STS, staffing needs would be approved as part of a program implementation process.

4.2 Funding Opportunities

The Region of Peel's AT program budget (which covers both expenses and chargeable staff time costs) is currently sourced 100% from property taxes. This expenditure amounted to an approved budget of \$236,000 in 2018.

One way to minimize the impact of an expanded AT program budget on the property tax base would be to increase the proportion of future AT program funding that is derived from development charges. This strategy is used to fund 50% of TDM programs and could be coordinated as changes are made to the Development Charge By-Law.

The Region plans to have a new Development Charge By-law in place by October 2020 at the latest, and the required background study will be initiated by Corporate Finance in early 2018. The Region's future needs in the areas of active transportation and TDM that need funding through development charges will be provided as input to that background study, based on work to begin in late 2017.

Cost-sharing of specific projects is another possible funding source—as suggested wherever financial support from partners is indicated as “expected” in Chapter 3 of this plan. Note that any such financial support would supplement, rather than replace, the Regional expenses shown in this plan; in some cases, the Regional contribution indicated would be only a small portion of the overall funding required to complete the envisioned tasks.

4.3 Performance Measurement

The two main dimensions of this implementation plan that require monitoring are:

- **Measure Program Operations**—What resources are being applied? What activities are being conducted?
- **Measure Program Outcomes**—What effects are the actions having on travel behaviour, and on the impacts of travel activity (i.e., “downstream” effects on the environment, economy or society)?

The outcomes of AT initiatives are best measured at a localized scale, preferably limited to the initiative's target market. It is very difficult to attribute causality to travel behaviour changes that are measured at a Regional level, which are influenced by many factors in addition to AT initiatives.

In an environment with limited resources, it is essential that monitoring be tackled strategically. Any attempt to accurately measure and document the outputs and outcomes of every AT initiative would consume an inordinate amount of time and energy. Changes in travel behaviour are notoriously challenging to measure efficiently, so “keep it simple” is good guiding principle; unless details are necessary to answer specific questions or refine initiatives at the pilot phase, it is best to avoid the expense and trouble of gathering them.

It is strongly recommended that the collection of performance measurement data be built into various initiatives; as an afterthought it can be much more costly. The large number of recommended AT initiatives that involve partnerships is an advantage for the Region, because in many cases the Region’s partners may be better positioned to efficiently collect the required data, which could be equally valuable to them.

Exhibit 4.4 identifies possible performance measurement indicators for each AT action recommended in Chapter 3.

Exhibit 4-4: Possible Performance Measurement Indicators

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Schools Section 3.1		
School Travel Planning <i>Section 3.1.1</i>	<ul style="list-style-type: none"> • Number of schools offering programming (primary, middle and high school) • Number of students enrolled in programs, (primary, middle and high school) • Number of PSARTS committee members, and the size of the constituencies represented by these individuals. • Number of Public Health nurses supporting STP programming • Number of walkabouts undertaken • Number of people engaged in walkabouts • Number of safety improvement projects programmed • Number of safety improvement programs constructed 	<ul style="list-style-type: none"> • Number of children who walk or cycle to school (schools, neighbourhood) • Reduction in economic cost of transportation borne by individuals and society (neighbourhood) • Mode shares (neighbourhood) • Rate of awareness of school travel options among residents (school-based survey) • Number of injuries and deaths from collisions (neighbourhood walkabout area near school) • Survey responses – comfort rating for persons walking or cycling • Walking and cycling count data (at locations where AT infrastructure counting hardware is near schools.)
School Bike Racks <i>Section 3.1.2</i>	<ul style="list-style-type: none"> • Number of racks installed 	<ul style="list-style-type: none"> • Utilization rates of bike parking at locations installed

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Bike to School Week <i>Section 3.1.3</i>	<ul style="list-style-type: none"> • Number of events organized (recognizing program expansion into new neighbourhoods.) • Number of event participants qualifying for program • Number of interactions on social media • Number of community groups engaged • Number of pieces of literature distributed. • Number of volunteers leveraged • Partner funding leveraged 	<ul style="list-style-type: none"> • Number of cycling stories covered by mainstream media • Mode share increases in proximity to schools • Walking and cycling count data (at locations where AT infrastructure counting hardware is near schools.)
School Bicycle Education <i>Section 3.1.4</i>	<ul style="list-style-type: none"> • Number of courses available • Number of locations available (neighbourhoods engaged) • Number of children engaged • Number of instructors 	<ul style="list-style-type: none"> • Children may be tested to quantify their level of knowledge before and after the program
Road Safety Section 3.2		
Traffic Safety Pilot Projects <i>Section 3.2.1</i>	<ul style="list-style-type: none"> • Number of projects installed • If projects are linear installations – number of km installed 	<ul style="list-style-type: none"> • Number of injuries and deaths from collisions (neighbourhood) • Survey responses – comfort rating for persons walking or cycling. • Walking and cycling count data (at locations where AT infrastructure counting hardware is near pilot project.) • Trends observed from GPS enabled smartphone app data

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Walk + Roll Peel Booths <i>Section 3.2.2</i>	<ul style="list-style-type: none"> • Number of events attended • Size of events attended • Number of pieces of literature handed out • Number of staff and/or volunteers mobilized to run event booths • Number of persons engaged 	<ul style="list-style-type: none"> • Market research survey may ask questions about awareness of issues/information marketed at Walk + Roll Peel Booths.
Driver Education <i>Section 3.2.3</i>	<ul style="list-style-type: none"> • Number of pieces of literature developed • Number of events attended • Size of events attended • Number of pieces of literature handed out 	<ul style="list-style-type: none"> • Increased awareness in traffic laws affecting the safety of persons travelling by active transportation • Levels of compliance with posted speed limits by motorists
Updating Guidelines / Regulations <i>Section 3.2.4</i>	<ul style="list-style-type: none"> • Number of reports published • Number of laws, policies or standards adopted • Number of presentations delivered 	<ul style="list-style-type: none"> • If concerning road safety, number of injuries and deaths from collisions (neighbourhood)
Walking Infrastructure Section 3.3		
Walking Infrastructure <i>Section 3.3.1</i>	<ul style="list-style-type: none"> • Linear kilometers installed • Number of safety improvement locations (e.g. intersections) 	<ul style="list-style-type: none"> • Mode shares (neighbourhood) • Number of injuries and deaths from collisions (neighbourhood) • Walking count data (at locations where AT infrastructure counting hardware is installed)

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Cycling Network Infrastructure Section 3.4		
Cycling Infrastructure Section 3.4.1	<ul style="list-style-type: none"> • Linear kilometers installed • Number of safety improvement locations (e.g. intersections) 	<ul style="list-style-type: none"> • Mode shares (neighbourhood) • Number of injuries and deaths from collisions (neighbourhood) • Cycling count data (at locations where AT infrastructure counting hardware is installed.) • Trends observed from Strava data
Bike Friendly Destinations Section 3.5		
Bike Parking and Bike Repair Stations Section 3.5.1	<ul style="list-style-type: none"> • Number of repair stations installed • Number of bike racks installed 	<ul style="list-style-type: none"> • Observed utilization of bike parking and bike repair stations • Cycling count data (at locations where repair stations are installed in proximity to counting hardware.)
Bike Friendly Businesses Program Section 3.5.2	<ul style="list-style-type: none"> • Number of applicants and/or participants qualifying for program • Number of interactions on social media • Partner funding leveraged 	<ul style="list-style-type: none"> • Number of businesses applying practices recommended by bicycle friendly business program • Market Research Survey may ask attitudinal question about whether employers are supporting of cycling.
First/Last Mile Programming Section 3.5.3	<ul style="list-style-type: none"> • Number of events held • Number of stations where events are programmed • Number of travel ambassadors participating 	<ul style="list-style-type: none"> • Utilization of bike parking at event locations (transit hubs) • Walking and cycling count data (at locations where AT counting hardware is near transit hub) • Trends observed from GPS enabled smartphone app data.

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Making Cycling Mainstream Section 3.6		
Bike Month <i>Section 3.6.1</i>	<ul style="list-style-type: none"> • Number of events organized (recognizing program expansion into new neighbourhoods.) • Number of event participants qualifying for program • Number of sponsors participating • Number of interactions on social media • Number of community groups engaged • Number of pieces of literature distributed. • Number of volunteers leveraged • Partner funding leveraged 	<ul style="list-style-type: none"> • Number of cycling stories covered by mainstream media • Market research survey may ask whether respondent is aware of Bike Month. • Market research survey may ask questions about whether the respondent is aware of any cycling events happening in Peel Region. • Walking and cycling count data collected during Bike Month, or in proximity to large events.
Winter Cycling <i>Section 3.6.2</i>	<ul style="list-style-type: none"> • Number of persons engaged • Number of pieces of literature distributed. 	<ul style="list-style-type: none"> • Market research survey may ask attitudinal questions of perception toward all-season cycling. • Cycling count data collected during winter months (Region-wide aggregate of all locations where AT counting hardware has been installed) • Trends observed from GPS enabled smartphone app data
Communications Strategy <i>Section 3.6.3</i>	<ul style="list-style-type: none"> • Completion of updated plan 	<ul style="list-style-type: none"> • Rate of awareness of travel options among residents (neighbourhood) • Rate of satisfaction with travel options among residents (neighbourhood)

Actions	Possible Output Indicators	Possible Outcome Indicators (and measurement scale where applicable)
Community-Based Program Delivery Section 3.7		
Delivery Cycling Services <i>Section 3.7.1</i>	<ul style="list-style-type: none"> • Number of programs administered • Number of locations or neighbourhoods where programs are offered • Number of people served by programs administered 	<ul style="list-style-type: none"> • Appropriate attitudinal surveys or data dependent on community-based programs being administered.
Enable Local Actions <i>Section 3.7.2</i>	<ul style="list-style-type: none"> • Number of programs administered • Number of locations or neighbourhoods where programs are offered • Number of people served by programs administered 	<ul style="list-style-type: none"> • Appropriate attitudinal surveys or data dependent on community-based programs being administered

4.4 Policy Changes

To be successful, many actions recommended in this plan will require policy support from the Region or its constituent local municipalities. This support could take the form of changes in formal policy documents (Official Plans, zoning-by-laws) or arrangements for staffing and funding.

4.4.1 REGION OF PEEL POLICIES

The following changes are recommended to Region of Peel policies:

Region of Peel—Official Plan

- Highlight the importance of improving first- and last-mile access to transit hubs (e.g. GO stations, local transit centres) through audits, guidelines and capital improvements.

Region of Peel—Capital Project funding

- In the past funding for capital projects has included TDM expenditures. Policies are being reviewed that will allow for AT program initiatives to similarly receive funding support from the budgets for transportation capital projects. The appropriateness of capital funding may be particularly applicable in coordination with major transit projects, or where infrastructure projects or new developments are to include cycling amenities.

4.4.2 LOCAL MUNICIPAL POLICIES

The Region will strongly encourage local municipalities to incorporate the following changes into their own policy frameworks:

Local municipalities—Official Plans and transportation plans

- Enhance policies guiding the development approvals process to support sustainable travel modes through site design and infrastructure, and through post-occupancy TDM programs.

Local municipalities—Zoning by-laws

- Strengthen the support provided to sustainable travel modes through site design and infrastructure.

Local municipalities—AT staffing and funding

- Support an annual program to prioritize and implement needed improvements to first- and last-mile access at transit hubs in the Region.