

# PORT HAWKESBURY

## ACTIVE TRANSPORTATION PLAN



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THE TOWN OF PORT HAWKESBURY



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# EXECUTIVE SUMMARY

Planning for Active Transportation is, in effect, planning for a balanced community. Providing an alternative to travel in private motor vehicles not only helps to relieve pressure on local transportation networks due to volumes; it gives residents who do not drive, either by choice or by circumstance, a safe way to get around the community. Active Transportation is defined as any travel that is human-powered and non-motorized, and can include activities such as walking, hiking, cycling, and roller-blading. Active Transportation is often promoted from a health perspective, because it gets us up and moving, as well as from an environmental perspective, because it doesn't use a vehicle requiring a combustion engine. Active Transportation infrastructure can include sidewalks, pathways, trails, dedicated lanes, benches, bike racks, lighting, signage and shelters.

In the same way that we design our road networks, it makes sense to plan our pedestrian and cycling networks in order to identify any gaps and ensure proper linkages exist. We can identify servicing needs, opportunities to try new materials and designs, and create timelines to prioritize capital investments and maintenance. This Active Transportation Plan outlines further ideas and techniques for non-physical aspects of successful transportation – education and servicing partnerships. By outlining goals and objectives for the plan, success can be gauged and measured when the times comes to review and update the Plan.

Following a year of research, field work, and public consultation, this Plan was developed outlining a number of basic investments and policy updates aimed at improving access throughout town for individuals and groups that choose to travel by means other than a motor vehicle. Both “hard” and “soft” Active Transportation measures are considered. “Hard” infrastructure includes physical elements like sidewalks, crosswalks, pathways, bike racks and signage. “Soft” infrastructure includes education

and incentive programmes, routes maps and marketing. The Active Transportation Plan network is outlined in Chapter Five, and focusses on a hierarchy of on-road routes; primary routes, secondary routes, and local roads. Further, basic trail information is provided, identifying how these resources help to link the on-road resources to create a complete network for pedestrians, cyclists and other AT users. To help with the implementation and evaluation of goals and initiatives, this Plan outlines suggested timelines for phasing and evaluation.

The goal of this version of this Plan is to establish a strong Active Transportation base, focusing on finishing nearly-complete routes and improving maintenance of existing resources. As measures recommended in this version plan are undertaken and realized, it is expected that they will move from the body of this document to a summary of its history and success, opening up opportunities for new recommendations as Active Transportation services are expanded. By no means should this Plan be considered a static document covering all aspects of any future infrastructure and planning; future investment in roadway infrastructure, by-passes and government grants may open up opportunities not outlined in detail in this current document, including on-street bike lanes, additional multi-use pathways, signage strategies, and expansions to much-loved resources such as the boardwalk.



# CHAPTER 1:

## INTRODUCTION

Planning for Active Transportation is, in effect, planning for a balanced community. Providing an alternative to travel in private motor vehicles not only helps to relieve pressure on local transportation networks due to volumes; it gives residents who do not drive, either by choice or by circumstance, a safe way to get around the community. This is particularly important in a small community like Port Hawkesbury, where there is not a regular public transit service and development has traditionally catered to the needs of highways and private automobiles.

Active Transportation also has an important role in the promotion of a healthy and active lifestyle. Safe walking and cycling routes can increase the number of children able to walk to school or a local park. A comprehensive network of hiking and cycling trails can encourage regular and new users to enjoy a weekend stroll through the wilderness. Providing sidewalk and safe crossings can encourage residents and workers to walk to the coffee shop instead of having to drive. With the facilities in place to encourage active living, we can support residents of the community in their efforts to incorporate this type of exercise into their daily routine.

### WHAT IS ACTIVE TRANSPORTATION?

Active Transportation is defined as any travel that is human-powered and non-motorized, and can include activities such as walking, hiking, cycling, and roller-blading. Active Transportation is often promoted from a health perspective, because it gets us up and moving, as well as from an environmental perspective, because it doesn't use a vehicle requiring a combustion engine. Active Transportation infrastructure can include sidewalks, pathways, trails, dedicated lanes, benches, bike racks, lighting, signage and shelters.

Generally, there are four categories of Active Transportation activities<sup>1</sup>:

#### Active Recreation

*Using Active Transportation modes for fitness and recreation, including walking, cycling, jogging and hiking*

#### Active Destination-Oriented Trips

*Using Active Transportation modes for shopping, visiting friends, going to restaurants, and running errands*

#### Active Commuting

*Using Active Transportation to get to and from work or school*

#### Active Workplace-Related Travel

*Using Active Transportation modes during the business day, to attend meetings or run work-related errands*

In this Plan, we are striving to identify how we do, or can, meet the needs for each of these types of users.

## BENEFITS OF ACTIVE TRANSPORTATION

### *AT Leads to Healthier Communities*

Active Transportation requires that participants get up and move, countering trends in today's society towards an extremely sedentary lifestyle. When compared to the physical exertion of driving or sitting as a passenger in a private vehicle, it's not hard to see how making a few trips by Active Transportation methods can have an impact on health and add to daily physical activity targets. Considering that 69% of Canadians adults and 91% of Canadian children and not getting the recommended levels of daily physical activity<sup>2</sup>, there is an even greater need to encourage people to get out and active as commuters or for recreation purposes. Studies of children and adolescents indicate that walking or bicycling to school is

<sup>1</sup> City of Fredericton Active Transportation website:

<http://www.fredericton.ca/en/transportation/activetransportation.asp> Accessed on April 15, 2014.

<sup>2</sup> Health Canada. Planning Healthy Communities Fact Sheet Series, No. 1.



related to higher overall physical activity.<sup>3</sup> By providing the infrastructure and promoting walking, cycling or other non-vehicular travel, the Municipality is supporting activities leading to a healthier community.

### ***AT Leads to More Inclusive Communities***

Owning and operating a private motor vehicle in Nova Scotia is expensive. According the CAA, the estimated annual cost of operating a mid-sized vehicle (i.e. a Nissan Altima), based on driving 20, 000km during that year, is over \$10,000.<sup>4</sup> For families or individuals living on fixed or lower incomes, travel by Active Transportation methods may be more of a necessity than a choice.

Further, individuals may not be able to drive due to age or health reasons. Youth, the elderly, and individuals who may not be able to drive must have options available to allow them access to amenities and services in the community. Not only is the provision of facilities important: the design and function of those facilities must take into account special needs, such as drop-curbs, adequate lighting, and signal speeds. Overall connectivity, year-round and 24-hour a day access must also be considered when striving to meet the needs of individuals for whom Active Transportation is the only method of travel.

### ***AT Leads to Environmentally Friendly Communities***

Not only are Active Transportation methods beneficial to the physical health of users, they are environmentally friendly as well. This can be attributed to the type of resources required; all one really needs to go for a walk is a good pair of shoes, as opposed to requiring a car and gasoline (or diesel). Paths and sidewalks facilitate travel by foot, but this infrastructure consumes fewer resources than traditional vehicular networks, particularly when it comes to realizing the environmental costs of providing and maintaining parking facilities for vehicles.

<sup>3</sup> Active Living Research. Building Evidence to Prevent Childhood Obesity and Support Active Communities. Research Brief, Summer 2009.

<sup>4</sup> CAA Driving Costs Calculator. [http://caa.ca/car\\_costs/](http://caa.ca/car_costs/). Accessed April 22, 2014

Finally, emissions from travel by Active Transportation are significantly lower, and the benefit to this regard is seen in the overall reduction of CO<sub>2</sub> and other greenhouse gases when vehicle travel is displaced by Active Transportation methods. Imagine how many fewer vehicles there could be on the road if more people chose to walk to the post office, coffee shop or even to work each day. If each vehicle emits 0.676 kilograms of tailpipe carbon dioxide (CO<sub>2</sub>) per kilometre<sup>5</sup>, this could result in a substantial decrease in annual emissions from private vehicles.

## **WHY DO WE PLAN FOR AT?**

In the same way that we design our road networks, it makes sense to plan our pedestrian and cycling networks in order to identify any gaps and ensure proper linkages exist. We can identify servicing needs, opportunities to try new materials and designs, and create timelines to prioritize capital investments and maintenance. An Active Transportation Plan can also outline ideas and techniques for non-physical aspects of successful transportation – education and servicing partnerships. By outlining goals and objectives for the plan, success can be gauged and measured when the times comes to review and update the plan.

## **SETTING S.M.A.R.T. OBJECTIVES**

In this Plan, we outline objectives and goals that are S.M.A.R.T.<sup>6</sup>; that is, they are specific, measurable, attainable, relevant, and time-sensitive. These goals and objectives are by no means static. Like this Plan, they are intended to be updated as conditions and general community needs change. As existing goals are achieved, new goals may be established for continued growth. Likewise, goals that are not realized may be re-evaluated with an analysis as to why they did not succeed.

<sup>5</sup> Based on the formula provided by the United States Environmental Protection Agency, Office of Transport and Air Quality. Study EPA-420-F-11-041, dated December 2011

<sup>6</sup> Kassirer, J. & Lagarde, F. (2010). *Changing Transportation Behaviours – A Social Marketing Planning Guide*.

To help with the implementation and evaluation of goals and initiatives, this Plan outlines suggested timelines for phasing and evaluation. Both “hard” and “soft” Active Transportation measures are considered. “Hard” infrastructure includes physical elements like sidewalks, crosswalks, pathways, bike racks and signage. “Soft” infrastructure includes education and incentive programmes, routes maps and marketing.

#### **Objectives of the Port Hawkesbury Active Transportation Plan**

- To create a safe and inclusive network for year-round travel by non-vehicular means within the Town of Port Hawkesbury
- To make the residents of Port Hawkesbury aware of the Active Transportation options available, and facilitate their decision to use those options
- To guide efficient investment in Active Transportation infrastructure by public and private interests

#### **Goals of the Port Hawkesbury Active Transportation Plan**

##### *Short Term (3 to 5 Year) Goals*

1. To establish a basic network of on and off-road facilities for Active Transportation users, providing rudimentary access to key locations in the town
2. To establish a partnerships with local organizations, employers, public institutions and industry, to create a foundation on which to build programming to support Active Transportation initiatives in the community
3. To obtain funding to pursue a pilot targeted marketing strategy to test “hard” and “soft” infrastructure elements considered in this plan, in order to better evaluate their appropriateness for Town-wide application.
4. To incorporate Active Transportation-supportive policies and regulations into the Town of Port Hawkesbury Municipal Planning Strategy and Land Use By-law; and,
5. To address as many of the “barriers” identified by the community during the development of this Plan as possible.

##### *Long Term (5 Years and Beyond) Goals*

1. To establish a network fully connecting all residents within the Town limits, through on or off-road amenities such as trails, lanes or sidewalks, facilitating Active Transportation use
2. To begin creating linkages from Port Hawkesbury to national (TransCanada Trail), provincial (Blue Route) and other municipal Active Transportation networks
3. To increase the percentage of Port Hawkesbury residents reporting the use of Active Transportation methods for commuting to work in 2021, from levels reported in the 2011 National Household Survey.
4. To further develop and implement Active Transportation-supportive programming with community partners, including community participation in national/international activities such as the Commuter Challenge and Walking School Buses.



## WRITING THE PLAN

Planning for Active Transportation involves identifying the needs of the community and ensuring that available infrastructure meets those needs. The process can also involve setting targets to increase the number of residents participating in Active Transportation, and evaluating the best ways to encourage such behaviour. Understanding existing infrastructure, real and perceived barriers to participation, and where facilities to support Active Transportation are required are important when creating a supporting plan document such as this one.

The process used to create this Active Transportation Plan is best summarized as follows:

### Primary and Secondary Research

- Creating an inventory of existing infrastructure that supports Active Transportation, including sidewalks, pathways, bike racks and crosswalks;
- Reviewing community demographics, to better understand who does, and might, use Active Transportation;
- Using surveys, meetings and open houses with the community, clubs and user groups to get a better understanding of what the community needs and wants, and what barriers may be keeping them from using Active Transportation;
- Reviewing existing planning policies and regulations to identify ways to encourage development and re-development that supports Active Transportation and makes Port Hawkesbury more appealing to residents and visitors, through elements such as building design and location, signage and lighting;
- Looking at examples of Active Transportation Plans from other communities in Nova Scotia and across Canada, to see what options

are available, and what methods of implementing Active Transportation Planning have been utilized; and,

- Reviewing existing maintenance methods for sidewalks and pathways, as well as rates and locations for pedestrian/vehicle collisions, in order to identify challenges and opportunities to improve safety and access for users 24 hours a day, year-round.

### Plan Development

- Creating a preliminary network plan noting existing and potential connections, as well as barriers and opportunities for Active Transportation use
- Identifying potential opportunities for local employers, educators and service groups to get involved in creating a program that encourages Active Transportation efforts as part of building an inclusive and healthy community.
- Developing a phasing of development schedule, in order to spread out the expense of infrastructure costs and maintenance while meeting targets outlined in the goals and objectives of the Active Transportation Plan.



# CHAPTER 2:

## UNDERSTANDING PORT HAWKESBURY

### PHYSICAL CONTEXT

The Town of Port Hawkesbury is located on the Eastern Shore of the Strait of Canso on Cape Breton Island, approximately seven (7) kilometres from the Canso Causeway along Highway 4. Port Hawkesbury is immediately adjacent to Port Hastings and Port Tupper, and while the town is within the County of Inverness, its boundary forms part of the border between Inverness County and the adjacent County of Richmond.

The town has a total land area of 8.11 square kilometres, and in 2011 had a population density of 414.8 persons per square kilometre<sup>7</sup>. Initial development in the community centred on its port at the harbour, with Granville Street serving as the major transportation route supporting commercial development along the shore and residential development along grid-patterned streets rising inland from the water. Later, a four (4) lane roadway was built as a highway by-pass (Trunk 4/4A) through the community (Reeves Street), which became the axis for traditional vehicle-oriented commercial development in the form of several strip plazas. A shopping mall and industrial mall developed along the road connecting Reeves Street to Highway 104, and while a residential subdivision with the community elementary school developed adjacent to this area, it otherwise remains fairly isolated to the rest of the community except by means of vehicular travel.

<sup>7</sup> Statistics Canada. 2013. Port Hawkesbury, T, Nova Scotia (Code 1215002) (table). National Household Survey (NHS) Profile. 2011 Census. Statistics Canada Catalogue no. 99-004-XWE. Ottawa. Released June 26, 2013. <http://www12.statcan.gc.ca/nhs-enm/2011/dp-pd/prof/index.cfm?Lang=E> (accessed December, 2013).

Port Hawkesbury serves as a major commercial and government services location for the south-western part of Cape Breton. Major institutional uses in the community include: the Courthouse on Kennedy Street; provincial offices, a regional high school, the Civic Centre housing municipal offices and recreation uses located at the intersection of Reeves Street and MacSween Street; and the Strait Area Campus of the Nova Scotia Community College (NSCC), located on Reeves Street with secondary access from Hillcrest Drive.

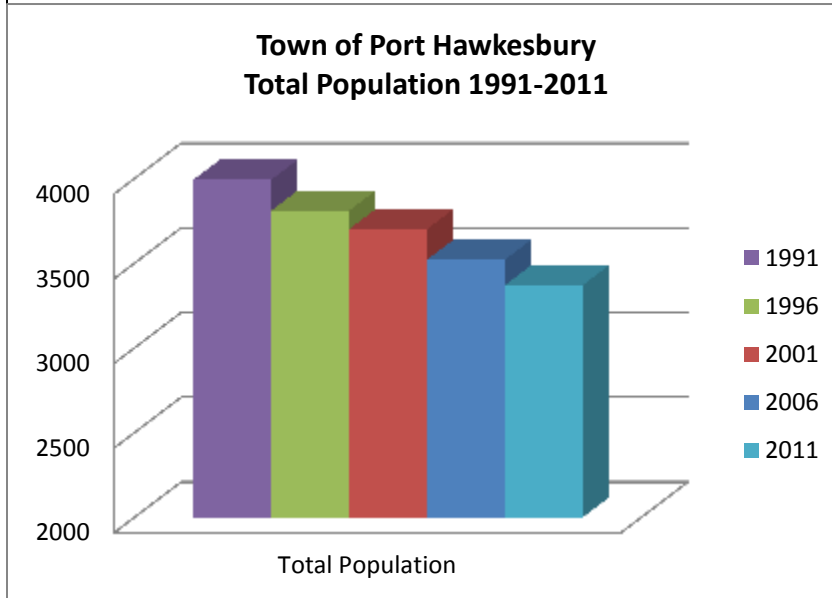
Future transportation network development in the area is likely to see the construction of another highway by-pass, connecting Highway 104 from its current terminus at Trunk 4 to Highway 105. The completion of this highway by-pass was identified in the Port Hawkesbury Municipal Planning Strategy (2010) as the trigger for the creation of this Active Transportation Plan, as it was expected to significantly change the volume of through traffic on local roads and create opportunities to develop infrastructure supportive of Active Transportation uses. However, the project was delayed and, with no timelines for its completion in the immediate future, the community is proceeding with developing an Active Transportation Plan reflecting the current transportation circumstances.

### SOCIO-ECONOMIC CONTEXT

Port Hawkesbury was incorporated as a Town in 1889, which makes it one of the oldest incorporated municipalities in the province. As early as 1833, the area was the terminus for the Strait of Canso Ferry Service. Shipbuilding and fish plants provided the original economic base for the Town. With the completion of the Canso Causeway in 1955, access to Cape Breton Island became safer and more dependable. The Causeway also blocked the cold Gulf of St. Lawrence current, transforming the harbour

into an ice free port. With the combination of its deep water and ice-free status, the harbour became an excellent location for heavy industrial development at Point Tupper, which developed not long after the completion of the Causeway. Development surged in Port Hawkesbury, as it was the closest residential community to this industrial development, with positive population growth rates until the mid-1990s.

**Figure A: Total Population of Port Hawkesbury 1991 to 2011**

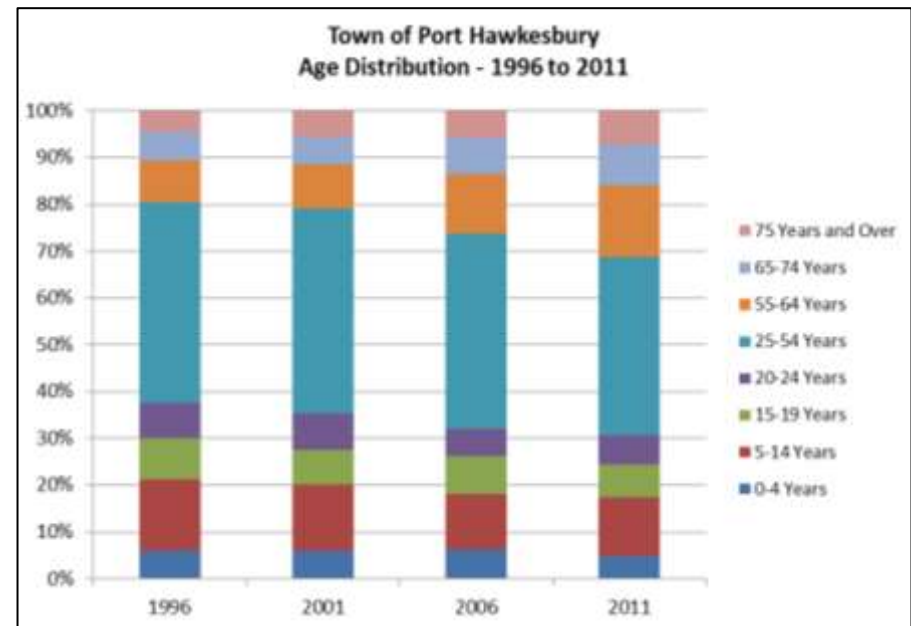


### Population Distribution

Information released from the latest Canadian Census (2011) reveals that Port Hawkesbury has a population of approximately 3,300 people. Between the 2006 and 2011 Census counts, the community experienced a population decline of 4.3 percent, and has been experiencing consistent negative growth since 1991 (Figure A). During the period from 2001 to 2011, the median age of the population rose from 36.2 years to 42.5 years.

This reflects an overall aging of the local population, and Figure B shows the change in the percentages of population based on age category from 1996 to 2011. There is a very clear increase in the proportion of the population aged 55 and over, while the percentage of younger persons has steadily declined.

However, when compared with the demographics for the County of Inverness, Province of Nova Scotia and all of Canada, the 2011 figures for Port Hawkesbury are similar to the provincial and national percentages. Port Hawkesbury's position as a major employment centre in the south-western part of Cape Breton is the most likely reason for the difference between the Town's population distribution and that for the County of Inverness.



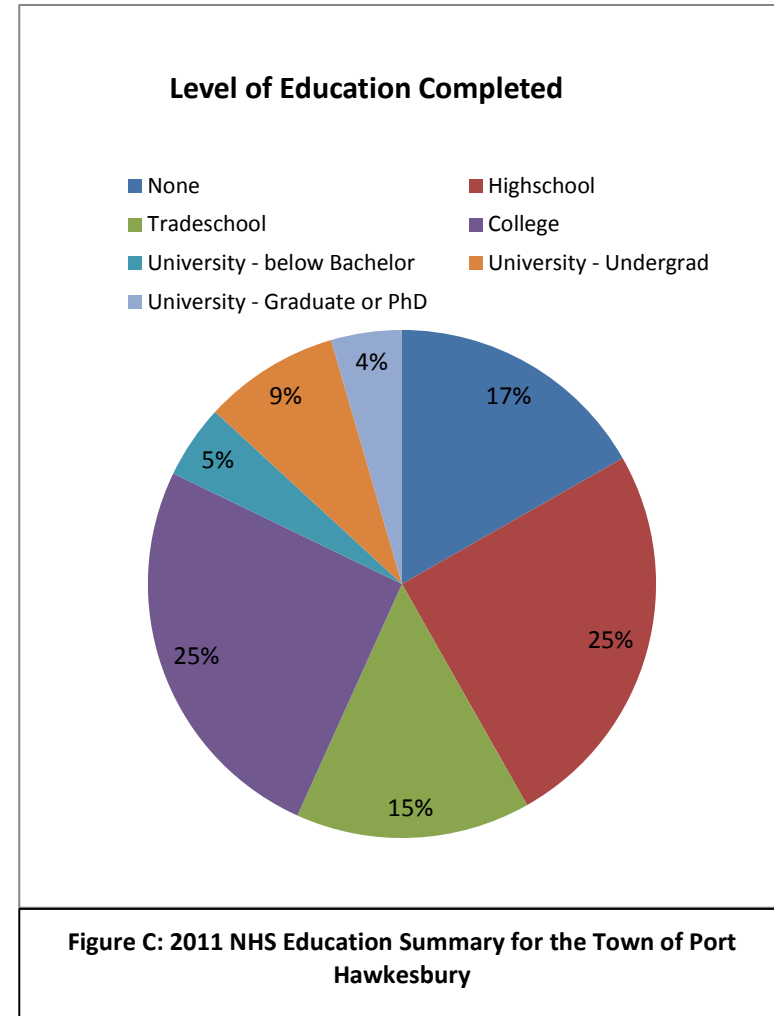
**Figure B: Population Distribution in Port Hawkesbury - 2001 to 2011**

## Education and Employment

The 2011 National Household Survey (NHS), reported by Statistics Canada with the 2011 Census Data, provides a summary of the education and employment information for the community. The summary available from Statistics Canada indicates that 2,780 individuals aged 15 and over replied to this survey, providing us with the following insight for our analysis of this community.

In terms of education, a large proportion of the local population has a high school, trade school or college education (Figure C). Of the 1615 respondents with a post-secondary degree, 1610 of those individuals completed their schooling in Canada, with nearly 82% of those persons studying in Nova Scotia. The most popular major fields of study for Port Hawkesbury respondents were education, business and public administration, engineering, and health.

Labour statistics for individuals aged 15 and over identify a participation rate of 66.5%, meaning that out of the total reporting individuals 15 and older who could work, only 66.5% of them are working and/or seeking employment. The reported unemployment rate for Port Hawkesbury for the 2011 NHS was 12.7%, which can be compared to the rates for Inverness County (15.6%), the Province of Nova Scotia (10%), and all of Canada (7.8%). The average individual employment income in Port Hawkesbury is \$55,228, while the overall community average individual income (calculation includes incomes based on pensions and benefits) is \$39,862.





## Current Commuting Methods

The 2011 NHS also provides some information regarding commuting habits of persons who completed the survey. For individuals aged 15 and older, who reported commuting to a usual place or work or had no fixed workplace (1505 individuals), commuting habits are summarized in Table 1. The NHS summary also notes that the median commuting duration for respondents was 5.9 minutes.

Mention should be given, however, to the fact that this commuting summary only takes into consideration individuals who reside in Port Hawkesbury who are commuting from or within Port Hawkesbury, and does not indicate where they are commuting to. As the town is a major employment centre for a large area of Cape Breton and has commuters from parts of the eastern mainland as well, there may be individuals travelling from greater distances by other means who should be considered in this plan as well.

How does this information compare to other similar-sized communities in Nova Scotia? First, we selected a number of similar-sized towns; generally with populations close or generally within a thousand

Table 1: Port Hawkesbury Resident Commuting Methods - National Household Survey 2011		
Method of Commute	Number of Respondents	Percentage of Respondents*
Private Vehicle (Driver)	1190	79%
Private Vehicle (Passenger)	190	12.6%
Public Transit	N/A	N/A
Walking	95	6.3%
Cycling	0	0
Other	0	0
*Does not add up to 100% - while 1505 individuals are noted to have responded to this question in the NHS, the totals for the summary of transportation modes only add up to 1475.		

of the 2011 count for Port Hawkesbury. Provincial figures were given for comparison as well (Table 2). Overall, Port Hawkesbury had a fairly average population density and had one of the lower median age levels of the communities analyzed. Notably, Port Hawkesbury had the highest average total household income, surpassing even the provincial average. Total income includes income from all sources, including employment, pensions, investments and other sources. Considering the average individual incomes reported on page 15 of \$39,862, this data suggests that a large number of households in the community may have more than one individual receiving some sort of income.

Table 2: Comparison of Port Hawkesbury to Other Towns in Nova Scotia - 2011 Census Figures <sup>8</sup>								
	Nova Scotia	Port Hawkesbury	Berwick	Digby	Windsor	Westville	Trenton	Antigonish
Total Population	921,727	3,366	2,454	2,152	3,785	3,835	2,655	4,524
Land Area (km sq)	52,939.44	8.11	6.66	3.14	9.06	14.39	6.00	5.15
Population Density	17.4	414.8	368.6	686.1	417.8	264.0	435.7	879.2
Median Age	43.7	42.5	50.4	48.9	47.9	40.9	42.9	43.7
Average Household Total Income <sup>9</sup>	\$66,590	\$71,387	\$55,101	\$41,589	\$53,305	\$53,050	\$50,955	\$65,884

<sup>8</sup> Modelled on the Transportation Modal Share Analysis done in the Yarmouth Active Transportation Plan, 2010, p.12

<sup>9</sup> 2011 NHS Table Data Note 151 – total income includes income from all sources, including employment, pensions, investments, and other sources



Then, as was done for the Port Hawkesbury information from the National Household Survey above, the number of persons 15 years of age and older reporting their commuting methods and times was broken down, giving the percentage of the total number of people reporting information for each transportation method (Figure D). With the exception of Westville, Port Hawkesbury had the greatest percentage of respondents commuting to work by private vehicle, when compared to reasonably similar-sized communities.

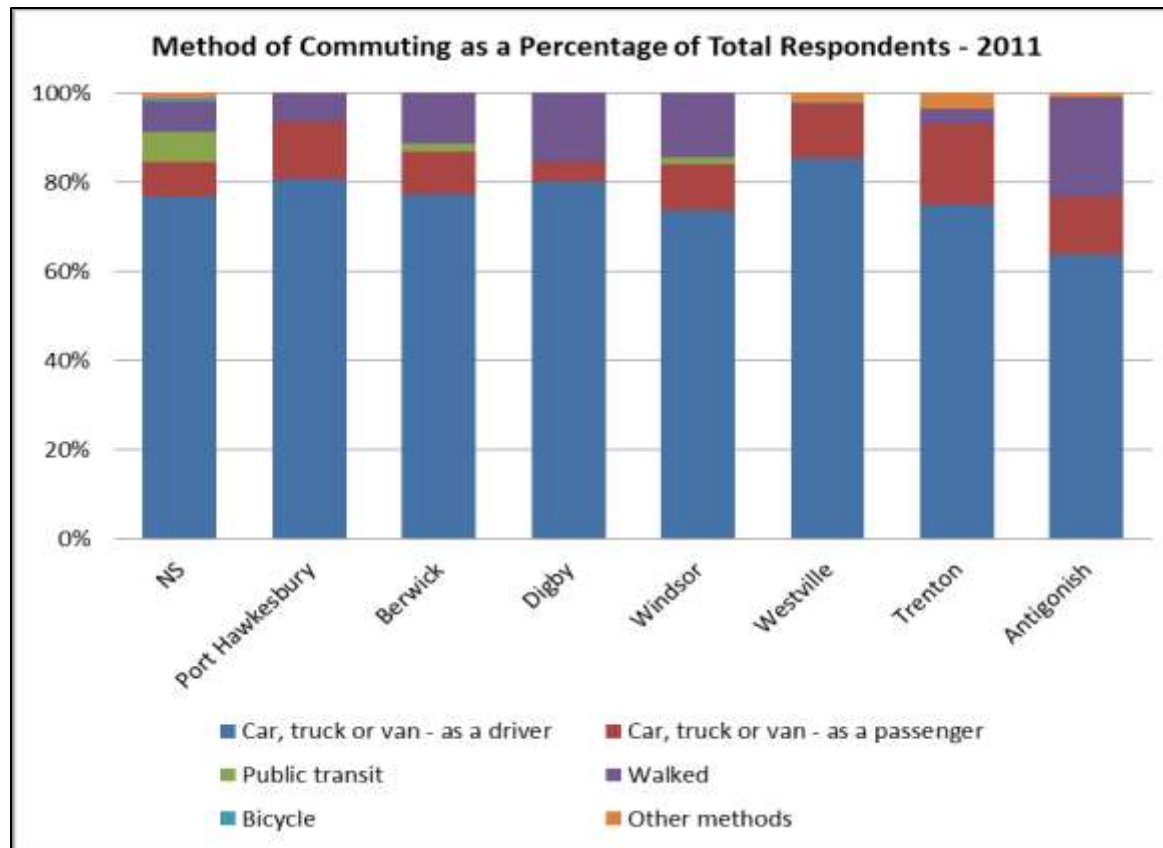
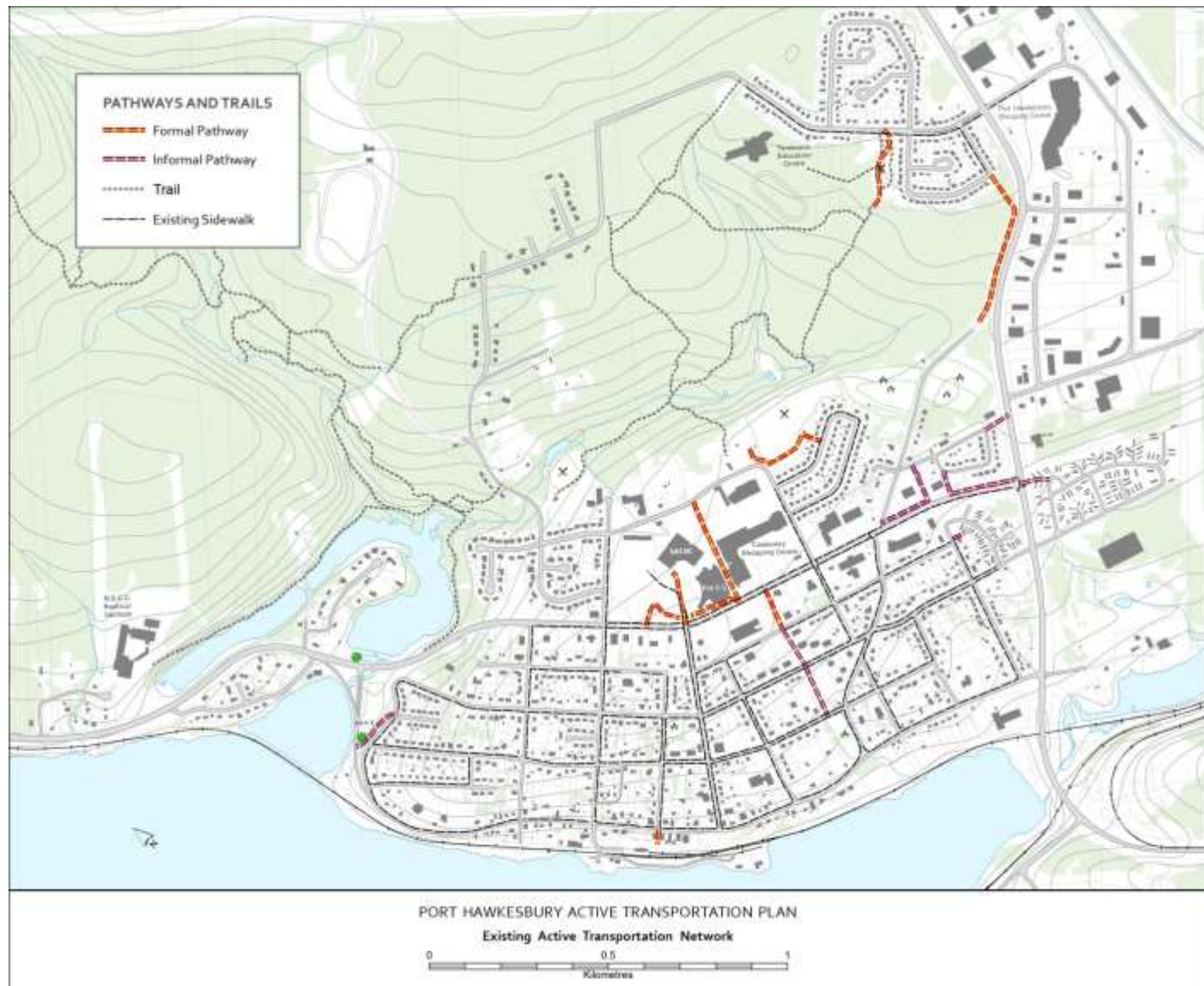


Figure D: Method of Commuting as a Percentage of Total Respondents

## EXISTING ACTIVE TRANSPORTATION NETWORK

In order to gauge what network connections may be required, staff from the Eastern District Planning Commission (EDPC) conducted a visual survey of sidewalks and crosswalks during the year from late 2013 through to fall 2014. The provision of sidewalks, their condition and any maintenance notes, general impressions regarding safety and notes on any informal pathways were all noted during these walking surveys. Trail mapping done by the Town of Port Hawkesbury in conjunction with students at the Nova Scotia Community College (NSCC) was used to chart the off-road facilities available for residents. This map identifies the Active Transportation network available to residents at the time of the writing of this Plan.



## POLICY SUPPORT

### *Provincial Context*

#### *Municipal Government Act (MGA) - 1998, c.18, s.1., as amended*

The Nova Scotia Municipal Government Act outlines the roles and responsibilities of the Province's municipalities. Clause 214(1) outlines how a municipality may, in their Municipal Planning Strategy, outline statements of policy including those regarding matters relating to the physical, social and economic environment of the municipality. Clause 224(1) further outlines that a municipality can identify property for the expansion, development, diversion, or improvement of a roadway or trail, using transportation reserves.

Part XII of the Municipal Government Act provides the regulations regarding streets and highways under the jurisdiction of a municipality. These regulations allow local councils to establish sidewalks along municipal roads; pass by-laws regarding the use, design and maintenance; and provide them with the ability to designate a local traffic authority. One should note, however, that these permissions only apply to municipal roads; many of the primary routes through Port Hawkesbury fall under the jurisdiction of the Province.

#### *Motor Vehicle Act (MVA) - R.S., c 293, s.1., as amended*

The Motor Vehicle Act of Nova Scotia applies to cyclists in the same manner as it does to those operating motor vehicles. Regulations for the use of bicycles, on roadways and sidewalks, with or without bike lanes, are outlined in this document. The requirement for vehicles passing a cyclist, leaving at least one metre (the "one metre rule") is provided for in clause 171(B)(1)(b).

Further, the Motor Vehicle Act indicates that bicycles are not permitted on sidewalks, with the exception of the use of velocipedes or similar machines by children on a sidewalk in a public square, park, city or town (a velocipede is a human-powered land vehicle with one or more wheels,

such as a bicycle or tricycle or scooter). Cyclists are also restricted in locations where the local traffic authority has declared any portion of the sidewalk as a trail.

#### *Trails Act - R.S., c. 476, s.1., as amended*

The provincial Trails Act facilitates the development of trails on Crown land, and, with permission of the owner, over private lands. This legislation also permits the creation of trail development agreements with other levels of government, including municipalities.

### *Municipal Context*

#### *Municipal Planning Strategy / Integrated Community Sustainability Plan*

In 2010, Port Hawkesbury adopted a consolidated Municipal Planning Strategy (MPS) and Integrated Community Sustainability Plan (ICSP). This document outlines the direction for land use in the community, including principles of cultural, economic, environmental and social sustainability. The community vision noted in the plan reads:

*Port Hawkesbury will continue its role as a vibrant regional centre for the entire Strait of Canso area. The Town's excellent commercial, recreational and educational facilities will continue to draw visitors into the community, and make the Town an attractive place to live for residents.*

As a means to satisfy this vision, long-term goals have been established supporting the four pillars of sustainability (cultural, economic, environmental, and social). Several of these goals can be applied to Active Transportation initiatives, including compact development, the reduction of greenhouse gases, and establishing a safe and connective open space network. Specific supportive policies include L-2.1.2, which encourages redevelopment along Granville that will enhance the attractiveness of the area to pedestrian traffic and tourists, and Policy L-4.1.2, which outlines goals and initiatives for trail and pathway development in the community.

Policy CD-1.0.1 is the statement that provides the direction to create this Plan, stating: *It shall be the intention of Council to develop an active transportation study once the proposed by-pass is constructed to determine how to better integrate walking, bicycling and other modes of human powered travel into the Town's transportation network.* Given the importance of providing a safe and complete walking and cycling network in the community, for the health and mobility of its residents, Port Hawkesbury has proceeded to develop this Plan, despite the Highway 104 By-law not reaching having been constructed around the community.

### *Land Use By-law*

The Land Use By-law is the document outlining the regulations and standards for development that help to implement the policies identified in the Municipal Planning Strategy and Integrated Community Sustainability Plan. At this time, the Land Use By-law does not have any regulations specifically regarding Active Transportation. However, this document is the tool that would be used to encourage development and redevelopment in the community to include features that would help to support Active Transportation initiatives. Examples of these features are sidewalks, minimum parking lot design standards (restricting driveway widths and the setback of parking spaces from the road), provision of bike racks or street furniture, signage, lighting, and the setback and orientation of buildings to streets and other public spaces. Suggested additions or amendments to the Land Use By-law are provided in Appendix B.

### *Bicycle By-law*

The Town of Port Hawkesbury has a By-law regarding the licensing and operation of bicycles within the Town limits. Annual licensing, with a two dollar (\$2) fee is required, and bicycles must be maintained in good repair with the license visible. Failure to license a bicycle can result in a fifty dollar (\$50) fine, and should a cyclist be in violation of the Motor Vehicle Act, the Traffic Authority or a Policy Officer can revoke their municipal bicycle license.

There may be opportunity to update this by-law, and include provisions regarding education; rules of the road, etiquette, and safety. Suggested updates are provided in Appendix C.

### *Other Municipal Policies and Initiatives*

Since 1981, a number of studies and strategic plans have analyzed and noted the conditions for pedestrians in Port Hawkesbury, particularly along Reeves Street. In 2002, anticipating the expansion of Highway 104 by means of a by-pass around the town, a pro-active strategic planning exercise was done for the Town of Port Hawkesbury and community of Port Hastings by EDM, Environmental Design and Management Limited. This action report summarized the previous policy initiatives developed for the community, and made several recommendations regarding the enhancement of streetscapes as a means to encourage more pedestrian movement in the community.

In 2004, a Streetscape Study was done for Reeves and Granville Streets by Ekistics Planning and Design with Form: Media, incorporating many of the recommendations made in the 2002 EDM Strategic Plan. This included distinguishing the Granville Street area as "Old Town" or "Downtown", while the commercial strip along Reeves Street could be referenced as "Uptown", with Pitt Street serving as the primary anchor between the two. Throughout the Streetscape Study, emphasis was placed on the promotion and enhancement of pedestrian and cycling opportunities, particularly between the streets subject to the study.

In 2014, an additional study was undertaken by the Town of Port Hawkesbury, using Ekistics Planning and Design, looking specifically at the potential for pedestrian links between the Nova Scotia Community College (NSCC) and the Town, using the Civic Centre as a reference. That 2014 pathway study recommended five (5) potential routes for pedestrians, and those potential routes were considered when developing this Active Transportation Plan.

# CHAPTER 4:

## DEVELOPING A PLAN

This Chapter of the Plan outlines the methodology used to create the Port Hawkesbury Active Transportation Plan document.

### WALKING TOURS

For one year starting in the fall of 2013, walking tours and visual surveys were conducted to gain better insight of existing sidewalk and trail facilities and any non-mapped indicators of travel tendencies, such as informal footpaths. This data was plotted out and used to identify existing and desired infrastructure, and to assist in classifying conditions for maintenance and replacement. Photographs taken during these walking tours are included throughout the plan document, providing visual reinforcement of conditions or context.

### COMMUNITY OPEN HOUSE AND SURVEY

In late January 2014, an Open House was held to give the general public the opportunity to learn about Active Transportation initiatives and ask any questions that they may have. During this open house, a mapping activity took place, where attendees had the chance to place markers on a map to indicate locations or features in the Town that supported Active Transportation, were a hazard or deterrent to non-vehicular travel, places considered to be “destinations” in the community, and locations where

their trips started (home or work), to provide user context. This mapping activity was repeated two other times: during a lecture given for a class at the local campus of the Nova Scotia Community College, and with a local Guiding Unit (Pathfinders and Rangers) at one of their meetings. The information from these maps, representing three different user groups of varying ages, is consolidated and summarized in the map on page 17.

From January through April 2014, an online survey was available to the public, soliciting input on Active Transportation initiatives and requirements from residents of the Town. The survey was advertised in the local paper, through the EDP website, with information tabs distributed through Open House attendees, and via word-of-mouth in the community. In the end, only nine (9) respondents completed the survey. While the survey cannot be considered statistically significant, it still provides some insight regarding what types of Active Transportation activities residents are participating in, and what kinds of barriers or opinions they have about existing infrastructure. The detailed summary of responses can be found in Appendix D of this Plan.

In general, respondents indicated that their most common and regular Active Transportation activity was walking, followed by jogging, with some occasional hiking and cycling and cross country skiing. Most often, respondents were undertaking these activities as part of a recreational or exercise pursuit, although 20% commuting to school or work most often via Active Transportation, over 40% were commuting “sometimes” by walking or cycling, and 75% of those completing the survey noted that they “sometimes” walk or cycle to shop or socialize.

Survey takers were asked what they thought were important reasons for developing an Active Transportation Plan. The four most popular answers were:

- Improving the health of people who live and work in Port Hawkesbury
- Providing connections to schools, shopping and workplaces
- Improving access for residents without cars or who do not drive
- Identifying hazards and barriers to pedestrians, cyclists and motorists

The full list of suggestions provided in the survey can be found in Appendix D. When queried about factors influencing decisions to use Active Transportation, “sidewalks” and “safety education for pedestrians, cyclists, and drivers” ranked the highest in the list of possible responses. The provision of bike lanes, or paved shoulders on roads as an alternative, were also ranked high by respondents. Currently, there are no dedicated bike lanes in Port Hawkesbury, and few, if any, local major roads have paving extending far enough onto the shoulder to provide this as an alternative to travel in traffic lanes for cyclists.

Finally, the survey asked takers to list their top three destinations, as well as what they believe to be the top 3 “barriers” to Active Transportation use in the town. The most common current or desired destinations were schools (SAERC, NSCC and “schools”), the Civic Centre, and places where shopping could take place (including the Mall and Superstore). A list of the barriers listed by respondents is given in Table 3.

Overall, these results aren’t far off of those collected in the National Active Transportation Survey, done in 2004. That survey sampled 1,650 adults (15 and over), and provided representation from across the country. When asked to identify factors that would increase their likelihood for using Active Transportation more often, similar barriers were mentioned to those identified in the Port Hawkesbury survey: safer trails and paths, better maintenance, reduced speeds and volumes of traffic, and well-connected routes.

**Table 3**

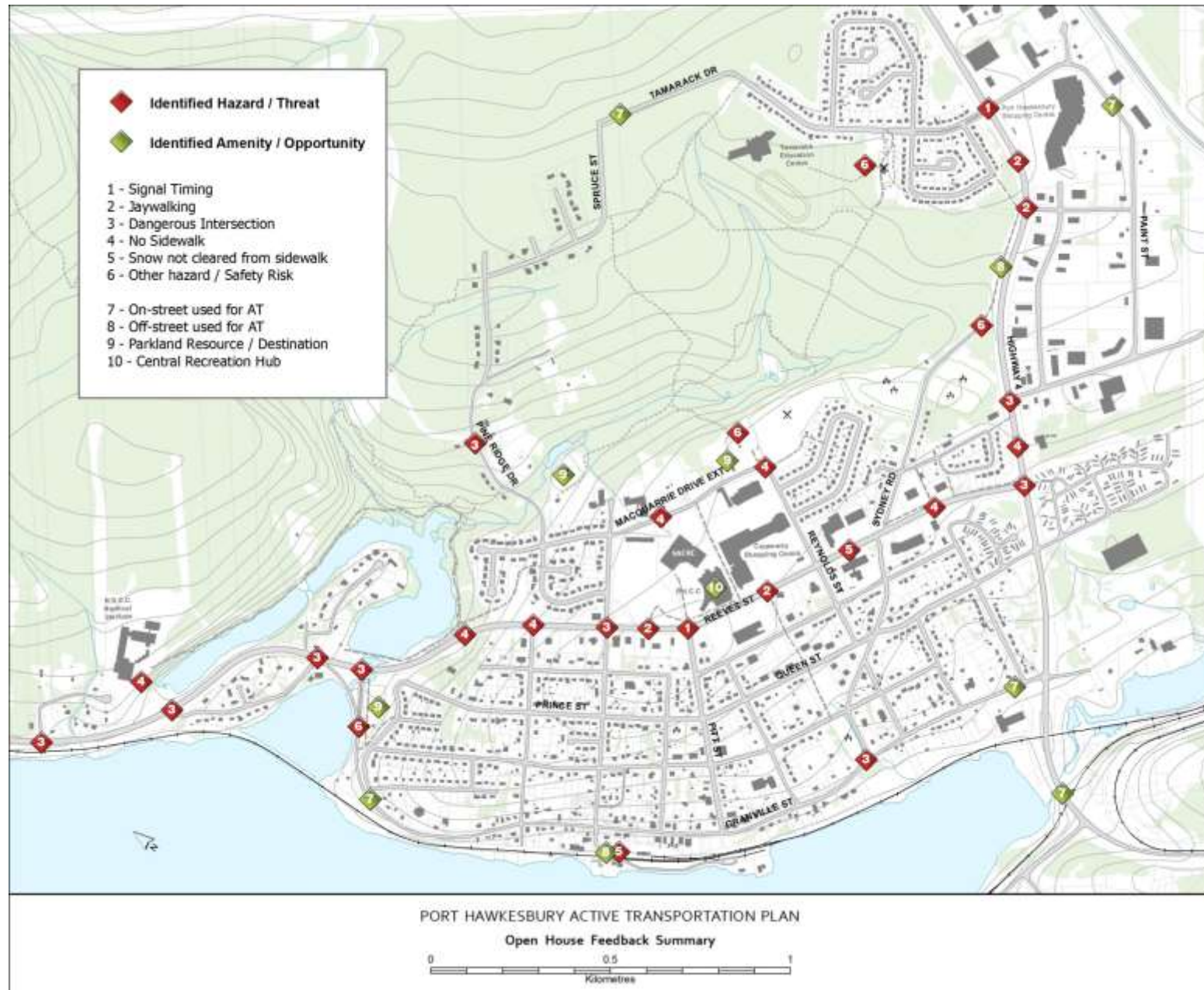
**What Do You Think Are the Biggest Barriers to Active Transportation in Port Hawkesbury?**

- Sidewalks (availability, conditions, maintenance, seasonal access, lighting) – 32% of responses
- Four Lane Highway (Reeves Street) – not enough crossings, existing crossing are “intimidating” and pedestrian signals are too fast – 32% of responses
- J-walking and not enough crosswalks – 11% of responses
- Lack of waterfront trails, existing trails are poorly signed and maintained – 11% of responses
- No pedestrian connectivity with Superstore/Walmart
- Secure bike parking
- Distracted drivers
- Curbs not flush with road (at crossings)

## FEEDBACK AND COMMENTS

Throughout the process of developing the Active Transportation Plan, the Port Hawkesbury Active Transportation Committee provided support, information and suggestions regarding content and methodology. First-hand knowledge of conditions and areas of concerns were a valuable resource when it came to developing recommendations for Plan implementation. A number of residents also contacted EDPC staff directly, providing their opinions and suggestions regarding existing service levels and desired facilities. Those ideas were incorporated directly into the Plan recommendations.





## RESEARCH AND BEST PRACTICES

Active Transportation is a sector that has seen enormous growth in the last five years, with provincial initiatives and funding spurring several municipalities to develop plans for their communities. Plans consulted during the development of the Port Hawkesbury documents include those for Yarmouth (Ekistics, 2010), Cape Breton Regional Municipality (IBI, 2008), Charlottetown et al (IBI/Stantec, 2012), Oakville, Ontario (MMM/Stantec, 2009), and Amherst (2012). In addition to these individual plans, a consolidated resource for information and online links provided by the Ecology Action Centre was a tremendous resource. A full list of the documents reviewed can be found in Appendix E.

Some important considerations take from these readings are as follows:

- Put people before vehicles. The needs of pedestrians and cyclists, of all ages and abilities, are relatively simple but are often prioritized secondary to the efficiency needs of private vehicles and freight transport. The presence or perception of fast and heavy traffic is cited in several readings as a barrier or deterrent to walking or cycling.
- Community form and design can play a major role in residents' decisions regarding Active Transportation participation. While connectivity and infrastructure provision are critical, the physical attractiveness can add interest and further encourage use:
  - Building design and placement, as well as the design and location of Active Transportation amenities, can influence use of alternative transportation methods.
  - For trails, surface treatment and social conditions can add or detract from their use.
- The mere presence of sidewalks (and their condition being good) is associated with adults having higher rates of walking and meeting physical activity recommendations.<sup>10</sup>

<sup>10</sup> Active Living Research. (2009). *Active Transportation – Making the Link from Transportation to Physical Activity and Obesity* (Research Brief).

- Perception and education play an important role in the choice to use Active Transportation methods.

Physical Elements that Influence Travel Behaviour<sup>11</sup> include:

- Development Density: the number of units constructed on each acre;
- Land Use Mix: Mixing development types (e.g. residential and office, commercial and residential), instead of segregating land uses;
- Street Connectivity: How directly one can travel between destinations;
- Street Scale: The ratio of street width to building height, and how it influences to design and amenities found between the curb and the front of buildings along the street; and,
- Aesthetics: Elements that make a space enjoyable. They can be natural (landscaping, trees and views) or constructed (lighting, signage, active windows).

As a general reference, a reasonable walking distance is considered to be 2.5 kilometres (1.5 miles), although a guideline figure for walking to transit stops, parkland and children commuting to schools is between 400 and 500 metres (approximately 0.3 miles)<sup>12</sup>. Cycling figures are slightly further, with the typical leisure trip measuring 4.8 kilometres, and the typical shopping trip being around 2.5 kilometres.<sup>13</sup>

<sup>11</sup> Bergeron, K & Cragg, S. (2009). *Making the Case for Active Transportation: Bulletin #5 – Built Infrastructure*. Canadian Fitness and Lifestyle Research Institute, Ottawa, Ontario.

<sup>12</sup> Cragg, S., Cameron, C., and Craig, C.L. (2006) *2004 National Transportation Survey*. Ottawa, ON: Canadian Fitness and Lifestyle Research Institute.

<sup>13</sup> IBID



# CHAPTER 5:

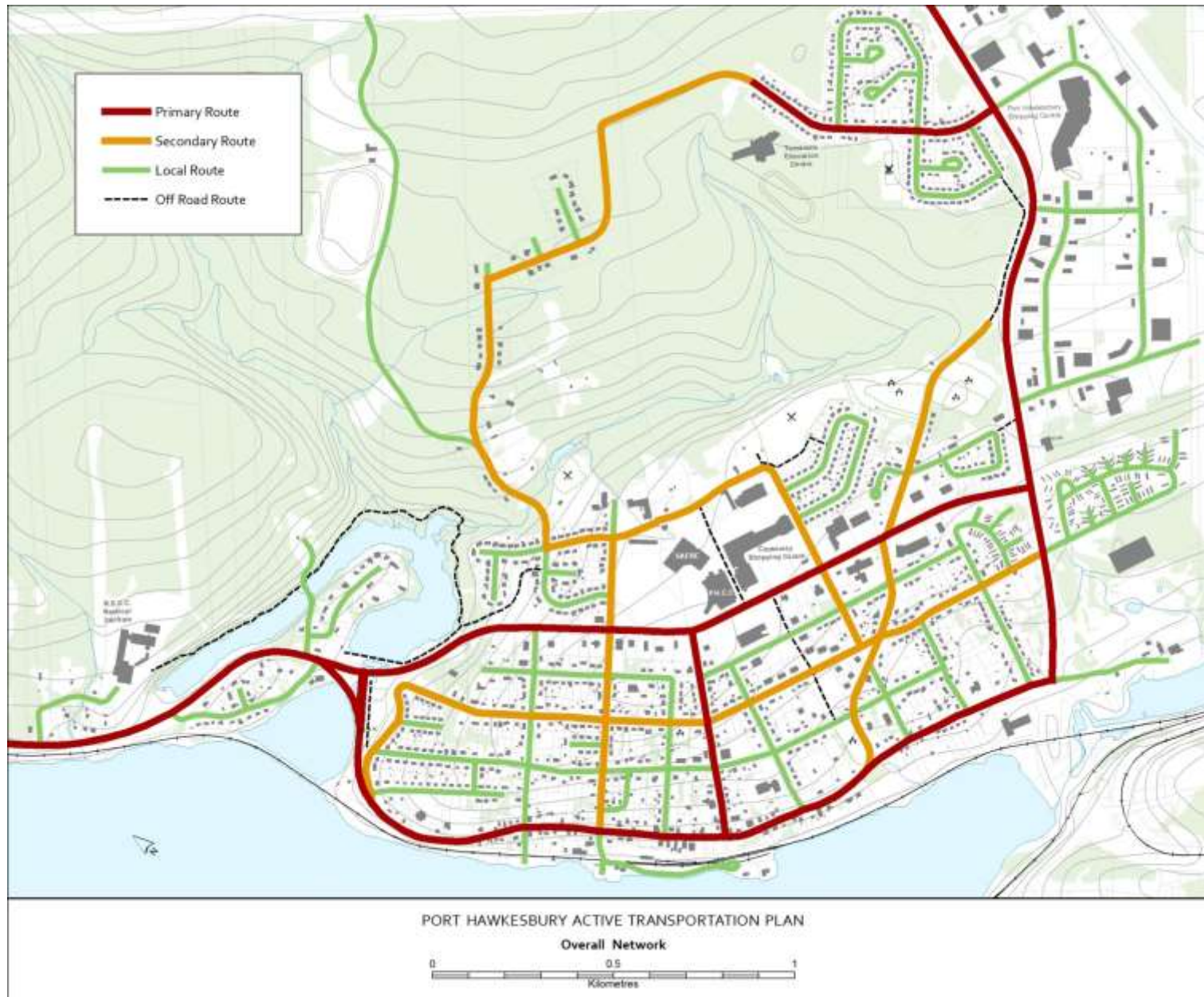
## THE ACTIVE TRANSPORTATION NETWORK

After considering the existing Active Transportation network features, the needs and concerns raised by the community, and the best practices identified in the background readings, EDPC staff has developed a conceptual comprehensive Active Transportation network map. The purpose of the map on page 20 is to identify a hierarchy of routes, with the next chapter of this plan outlining a schedule for construction and upgrades required to complete that network.

### OVERALL NETWORK

The map on the next page details the possible overall Active Transportation network, with both on and off-road options noted.





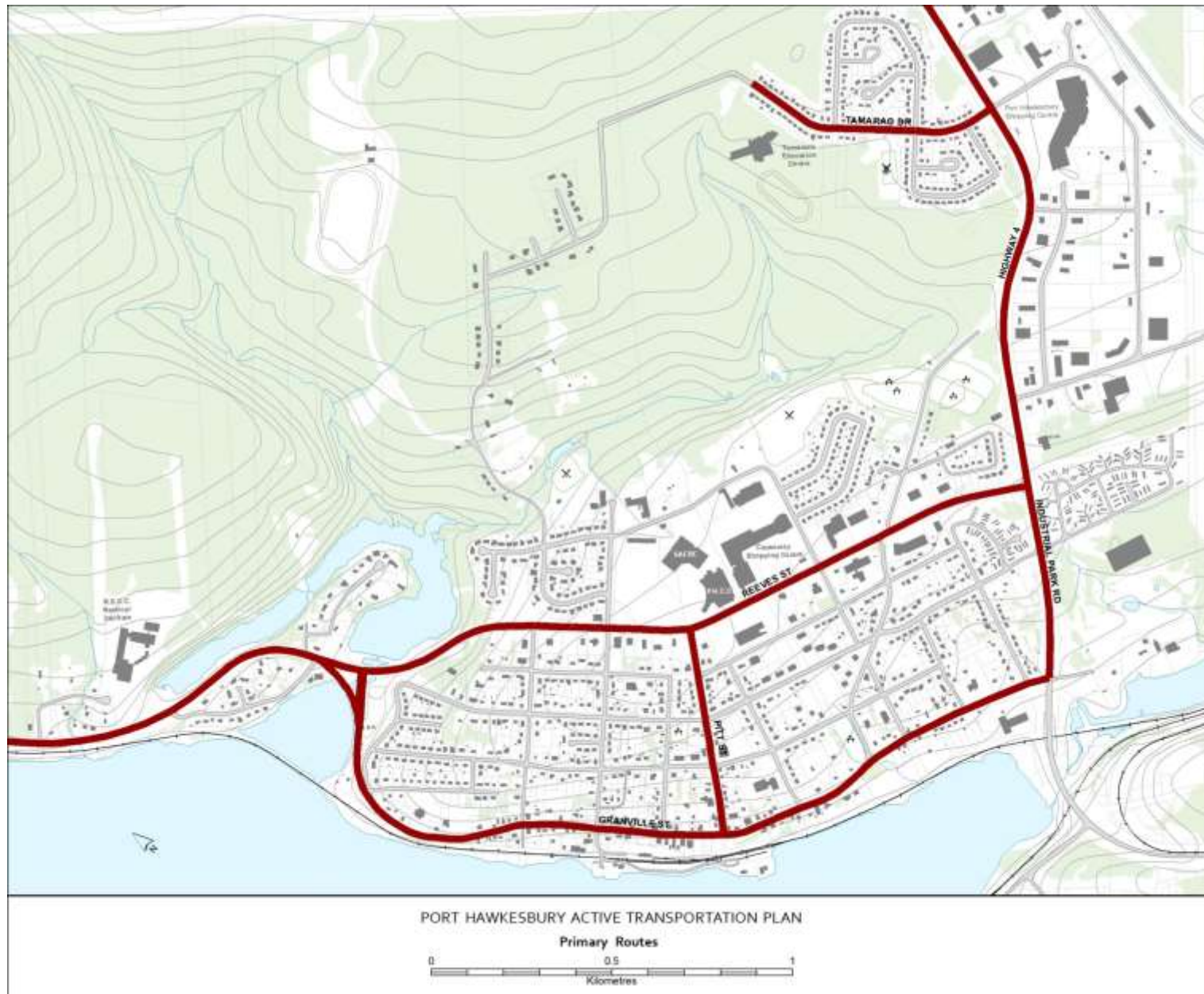
## PRIMARY ROUTES

The primary routes identified in the overall network plan (See map Page 22) are those that serve as key routes in the community, and are often the most direct pathways connecting important destinations. Like a vehicular transportation network, the primary routes are supported by the secondary and local routes that branch off from it. The primary routes are described in the greatest detail in this Plan, as they are the most likely to have the highest impact on pedestrian connectivity in the Town. They are also the most likely routes to require and benefit from financial investment, both in terms of basic infrastructure (sidewalk, bike lanes) and additional streetscape enhancements (lighting, seating, landscaping). Five primary routes are identified in the Active Transportation Network:

1. Reeves Street, from the Town boundary to Trunk 4/4A
2. Granville Street, from Reeves Street to Trunk 4/4A
3. Pitt Street, from Reeves Street to Granville Street
4. Trunk 4/4A, from Granville Street to the Tamarac Street/Paint Street intersection
5. Tamarac Drive, from Trunk 4/4A to the school entrance







## Reeves Street

### *Description and Extent:*

Reeves Street is a four-lane roadway serving as the primary route for traffic to and through the Town from the Canso Causeway and Port Hastings to Eastern Cape Breton and Sydney; the roadway effectively bisects the town. Sidewalks are only available along this road from Philpott Street to Trunk 4/4A, although sections of sidewalk are not available on the north side of the street from Sydney Road to Trunk 4/4A. This stretch includes two (2) signalized crosswalks and three (3) intersections with pedestrian signals. Signed speeds along this stretch range from 50km/hour to 70km/hour.

The section of this roadway from Hillcrest Drive to Phillpott Street includes several blind crests, sharp curves and steep hills, making conditions difficult or dangerous for pedestrians using the road shoulder in lieu of sidewalks. Major amenities along this street include access to the Nova Scotia Community College (NSCC), the Port Hawkesbury Civic Centre, Strait Area Education and Recreation Centre (SAERC), and a number of commercial and office developments.

### *Road Ownership*

The extent of this right-of-way, from curb to curb, falls under the jurisdiction of the Nova Scotia Department of Transportation and Infrastructure Renewal (TIR). Lands within the right-of-way beyond the curb are under the management of the Town of Port Hawkesbury, but any sidewalk development in those rights-of-way must adhere to development standards established by TIR (Appendix F). All development and re-development with access onto the provincial road must obtain an access permit from TIR. At such time as the Highway 104 By-pass is constructed to divert traffic from Reeves Street, the intention is to transfer ownership of this roadway to the local municipality (Town of Port Hawkesbury).

### *Challenges and Opportunities*

Reeves Street serves as the transportation spine for Port Hawkesbury, carrying traffic through the community and serving as the access to several



commercial plazas and office buildings outside. The road also connects two major education resources: the Nova Scotia Community College (NSCC) and the Strait Area Education and Recreation Centre (SAERC), which includes the regional High School, a library, the arena, pool, YMCA and civic offices. The biggest issue for pedestrians and cyclists along Reeves Street is the volume and nature of the vehicular traffic that utilizes this transportation corridor. This challenge is stated consistently in previous plans and studies, and was noted in the public feedback received at the open house, as well as experienced first-hand by the Plan research team. Due to the fact that Reeves Street acts as a primary access corridor through the community, and serves as part of one of two major vehicular routes connecting Sydney to the mainland, the chances of reducing these volumes is unlikely until the Highway 104 by-pass is constructed. Further, since Reeves Street serves as a primary access to industrial operations in Port Tupper via Trunk 4/4A to all point west, the presence of large trucks

on Reeves Street will continue to stay the same and may even increase until such time as the by-pass is constructed. Therefore, options to mitigate the pedestrian and cyclist concerns attributed to the volume and nature of vehicular traffic on Reeves Street must be explored, without actually reducing the number or type of vehicles travelling that route, until such time as an alternative route is provided by means of the Highway 104 by-pass. Due to the nature of the traffic experienced on this route, on-street cyclist lanes are not recommended.

Sidewalks exist for most of the section of Reeves Street between Trunk Four and Philpott Street, although their condition varies. Previous community improvement efforts are evident in the use of stone unit pavers for the sidewalk and pedestrian-scale lighting on the southern side of the street from Pitt Street to Reynolds Street, although wind, frost heave and snow clearing efforts have taken a toll on their condition. Three (3) intersections with pedestrian signals and two (2) signalized crosswalks can be found along the stretch of roadway with sidewalks. Currently, no off-road cyclist facilities are available along this route.

For the purposes of identifying investment needs, this street will be examined in three parts:

#### 1. From Trunk Four to Sydney Road

The sidewalk system on the south side of this stretch is complete, and appears to have been recently upgraded. An opportunity may exist to establish a pathway connection from the sidewalk to the park and sidewalks on MacDonald Street through the closed portion of the McDonald Street right-of-way. Sidewalk is required along the north side of Reeves Street in from Sydney Road to the Kia Dealership (the stretch in front of the power station), and from the Tim Hortons plaza to the intersection with Trunk 4/4A (along the rear of the lots that front Ryans Road). Upgrades should also include the creation of “landing pads” for pedestrians negotiating the intersection with Trunk 4/4A, particularly at the end of the crosswalk on the north side of the intersection on Reeves Street (shoulder drops off steeply at present) and on Trunk 4/4A across from Reeves Street where the stairway accessing Gillis Crescent is located.

#### 2. From Sydney Road to Philpott Street

Sidewalks are available on both sides of the street along this stretch, with two signalized crosswalks providing cross-street connections as well. Due to the worn nature of sidewalks along this section of Reeves Street, replacements should be made to poured concrete pathways, at least 1.5 metres wide and free of obstruction from other infrastructure, with drop-curbs at intersections and driveways. Brick (unit) pavers should be replaced with poured concrete pathways as well, to minimize seasonal maintenance and repair costs due to damage from frost heave and snow clearing efforts. These pavers could be re-used in other locations in Town, such as along Granville Street. In order to better demarcate the pedestrian-realm, sidewalks should carry on through access driveways (see photo).



Jaywalking is common in two specific areas along this stretch of Reeves Street. The first area where this often happens is between the Sobeys plaza and the Canadian Tire plaza, where pedestrians are coming to Reeves Street mid-block via a public right-of-way trail

running along the boundary of the Canadian Tire site down past Church and Queen Streets and ending at Bernard Street, commonly referenced as the Bain Street Walkway. This may be a candidate location for a mid-block, pedestrian-initiated signalized crosswalk, similar to those already in place at the Reeves/McSween and Reeves/Sydney Road intersections, if warrants are met. Such a crossing would have to consider the vehicular entrance to the Sobeys plaza, which is almost directly across Reeves Street from this trail access point. A longer-term consideration may be to develop a signalized vehicular intersection slightly to the north of the Bain Street Walkway, lining up with the driveway to Canadian Tire and a pedestrian walkway through the access driveway between the Civic Centre and the Sobeys building, as identified in the Development Concept Plan in the Streetscape Study prepared by Ekistics (2004).

The second location where jaywalking by pedestrians is common is located at the end of a sidewalk leading from a parking area in front of SAERC to the sidewalk on Reeves Street. Instead of crossing at the intersection with Pitt Street, or continuing down to the crosswalk at McSween, pedestrians cross at the mid-block point in order to gain access to fast food outlets and convenience stores on the opposite side. Given that sufficient sidewalk access for current pedestrian demand exists to the designated crossings (at Pitt and McSween), staff feels that this mid-block crossing would be best addressed through education and enforcement, as opposed to providing an additional crossing or undertaking further sidewalk modification or even removal. At a future date, when the now-vacant lands where the vocational school was are re-developed, consideration should be given to whether pedestrian volumes warrant a designated mid-block crossing here, as identified in the Development Concept Plan in the Streetscape Study prepared by Ekistics (2004).

A majority of this stretch is signed as a school zone, with posted limits of 30km/hour when children are present. The extent of this zone is from an area near Philpott Street to approximately the Bain Street Walkway. Due to the cluttered nature of signage in this commercial strip, the road signs indicating the extent of the school zone may be missed by drivers, based on observation of average speeds along this strip during school hours when students are present on the street

despite regular enforcement efforts. In conjunction with TIR, options should be explored for alternative means to demarcate school safety zones, such as coloured asphalt or special road markings. In conjunction with community safety resources including the RCMP, education materials distributed to Town residents and employers as part of any knowledge campaign associated with Active Transportation use should include information about school safety zones and legislated speed requirements.

### 3. From Philpott Street to the Town boundary

No sidewalks are presently available along this stretch of the road, and pedestrians make use of the gravel shoulders, although some use the strip of paving between the white line (outer boundary of drive lane) and the shoulder instead. Due to the topography of this stretch of roadway, being that it includes a fairly steep grade and several curves, with a limited right-of-way bound by guard rails and a posted limited of 70km/hour, conditions are not necessarily ideal for the inclusion of a pedestrian sidewalk or bike lanes alongside the vehicular lanes.

In order to explore alternative opportunities, the Town of Port Hawkesbury commissioned a study, undertaken by Ekistics Planning & Design, late in 2013 with a final report released in May 2014. This study looked at five (5) options for pedestrian and cyclist access utilizing portions of this stretch of Reeves Street, including off-road facilities or proposing alternative routes using adjacent side streets. Several of these options require consideration of crossings, either at the intersection of Reeves and Granville Streets, or either of the intersections of Reeves and Embree Island Road. Staff notes that one of the intersections of Reeves Street and Embree Island Road lines up with the main vehicular access to the Nova Scotia Community College (NSCC) campus, making it a logical candidate for a signalized four-way intersection or roundabout if warrants are met. A private pedestrian connection from Reeves Street up to the college building would need to be constructed to complete this route, preferably separate from the driveway due to the sharp switch-backs that could hinder a driver's ability to see a pedestrian or cyclist, but still providing barrier-free access to the site.



Beyond the entrance to the NSCC, options for links to the community of Port Hastings and amenities beyond, including the TransCanada / Ceilidh Coastal Trail should be explored. A multi-use off-road trail would be ideal, since this route would most likely be servicing more recreational users, including joggers and cyclists. Once the Highway 104 by-pass is constructed, opportunities may arise where lane widths can be re-evaluated to incorporate a possible trail facility. In the interim, the Town of Port Hawkesbury should work with the Department of Transportation and Infrastructure Renewal (TIR) to ensure that re-paving efforts along this stretch of the Trunk Four/Reeves Street include wider shoulders. Further development of a formal pedestrian/cyclist link, such as an off-road trail, should be undertaken in conjunction with the County of Inverness and the appropriate provincial departments.

### *Short-Term Solutions*

#### 1. Pedestrian Signals

During the public consultations for this plan, several participants noted that the pedestrian signals at the intersections and crosswalks did not provide enough time, leaving pedestrians feeling rushed or threatened by on-coming traffic. Further, access to the signal buttons was noted as being difficult, particularly when snow obstructed this access. In consultation with TIR, pedestrian signal intervals should be examined to ensure that adequate time is afforded to individuals crossing with the signal. Special consideration should be given to the needs of the youngest and oldest citizens and visitors to Port Hawkesbury, who may travel at slower speeds than the average adult. As replacement and upgrades to signals and intersections are made, consideration should be given to incorporating pedestrian crossing lights that include a “countdown” feature, providing pedestrians with a better idea of how long they actually have to complete their crossing. Buttons to activate any pedestrian signals should be located in a location and at a height that is accessible to users of all ages and abilities, year-round.

#### 2. Fill In the Gaps

While nearly all of Reeves Street from Trunk Four to Philpott Street is provided with sidewalks, there are two gaps in this system where

worn “cow paths” indicate strong desire for pedestrian infrastructure. Specifically, the northern side of Reeves Street for a majority of the stretch between Trunk 4/4A and Old Sydney Road should have a concrete sidewalk installed, as there are two noticeable gaps there now. Coordination with TIR to tie the one stretch of sidewalk into landing pads at the intersection of Trunk 4/4A and Sydney Street will be an important part of coordinating this part of the network.

Wherever possible, damaged and obstructed sidewalk sections should also be repaired and replaced, as necessary, to avoid any “gaps” due to physical barriers to certain users. A consistent level pathway of at least 1.2 metres width is particularly important for providing barrier-free access to residents with limited ability, or persons who may be using a stroller or travelling with small children. Ensuring that infrastructure, such as hydro and streetlight poles or guy wires, do not obstruct the sidewalk is important, particularly at intersections where users are attempting to clear vehicular lanes as quickly as possible. Currently, a hydro pole and light standard obstruct the sidewalk at the intersection of Reeves Street with Reynolds (see picture). In locations

like this, sidewalks should be extended to provide a clear path around the obstruction. A number of potential hotspots are identified on the Map on page 17.



Further, implementing a connection from the NSCC campus to the Town will be an important project for network users and fill a large “gap” in the system. Not only will this connection benefit the students and staff at the college; the pathway will support residents living in



this north-west area of town in their use of Active Transportation, and will form part of the greater network connecting Port Hawkesbury and Port Hastings. The report done by Ekistics Planning & Design (May 2014), which focussed on this stretch of Reeves Street and the potential options for pedestrian connectivity, recommended two possible preferred routes. These recommended routes have been taken into consideration in the development of route mapping in this Plan.

### 3. Explore an Off-Road Cyclist Solution

Limited opportunity exists for accommodating cyclists off-road on Reeves Street. A better solution may be to identify an alternative dedicated cycling route, with strong connections via local cross-streets to Reeve Street shops and services and on-site access and secure parking.

## *Long-Term Solutions*

### 1. Streetscape Improvements

Gradual changes to the streetscape along Reeves Street can be made to create a boulevard atmosphere that presents a safer and visually appealing experience for both Active Transportation users and motorists. The addition of street trees, street furniture such as benches and waste receptacles, and pedestrian-oriented way-finding signage can be done on a block-by-block basis, allowing for a trial-run of performance and maintenance needs before further investment is made. Street lighting can be reviewed in conjunction with TIR to determine whether opportunities exist to utilize models or designs that may provide superior luminary coverage while using less energy and complying with general dark-sky practices.

Opportunities for modifications to the width of lanes, the inclusion of a median, the addition of further pedestrian crossings and provisions for on-street cycling lanes should be explored with TIR staff. These enhancements have been mentioned in various studies and reports done for the community since 1981, and could improve the safety and aesthetics of this community “Main Street”, and serve as a tourism and economic driver. While these improvement opportunities may be

limited until the Highway 104 by-pass is constructed, they can be planned for in advance, allowing ample time for funding requirements and opportunities to be explored.

### 2. Active Transportation-Friendly Development

Through modifications to the regulations that guide development, amenities and features that support active transportation initiatives can be incorporated on a site-by-site basis as new buildings are built or older developments are modified or re-purposed. Traditional zoning along Reeves Street, which is primarily Highway Commercial (C-3) zone, provides for minimum yard setback and little restriction on the location of parking or signs. Subtle changes to these zoning regulations, by adding a modest minimum setback for parking spaces or signs, can provide opportunities for a buffer between pedestrians and cars that can double as an area for street-side landscaping and snow storage. More importantly, these setbacks can improve safety for all users, by creating an area where obstructions to site lines are regulated or are not permitted.

Further, by creating maximum yard setbacks, buildings can be encouraged to develop closer to the street, reducing the “sea of asphalt” effect that may deter pedestrians from attempting to walk to a store or office or even to travel from one plaza to another to run an errand. Provisions can also be added to the Land Use By-law to request parking facilities for bicycles, in a similar fashion to existing regulations outlining standards and ratios for vehicular parking. Ultimately the goal of these regulations would be to make areas such as Reeves Street friendlier to Active Transportation users, but they would also to provide opportunities for more residents, employees and visitors in the community to make fewer vehicle trips, reducing the congestion and maintenance burden for the entire Town.

## *Supporting Land Use By-law Regulation Considerations*

### *Amendments to the Site Plan Requirements – Part 5 of the Land Use By-law*

- Consider amendments to require all developments in the Commercial Highway (C-3) zone to require Site Plan Approval, allowing planning staff the opportunity to work with developers to ensure that site development proposals include elements that support Active Transportation Use, including building orientation and relationship to the street, landscaping, and signage.

### *Amendments to Provisions for All Zones, General Provisions– Part 6A of the Land Use By-law*

- Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
- Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).
- Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a “buffer” between parked vehicles and a sidewalk. This “buffer” would provide options for landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.
- Further, consider amending Section 21 to establish a maximum driveway width for commercial uses and shopping centres, and noting a requirement for any sidewalks to be carried continuous through access driveways in order to maintain the distinction between the vehicular realm and the pedestrian pathway.
- Consider an amendment to add a new section requiring barrier-free pedestrian access to be provided to the building entrance from the

public sidewalk, by means of a pathway denoted by a material differing from that used for the parking lot surfacing (e.g. concrete sidewalk or unit pavers as opposed painted lines).

### *Amendments to the Sign Regulations – Part 6B of the Land Use By-law*

- Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, in order to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.

### *Amendments to the Commercial Highway (C-3) Zone – Part 16 of the Land Use By-law*

- Consider adding a “maximum” front yard setback for all development types (Sections 2(a) and 2(b)), in order to encourage buildings to develop closer to the street, facilitating direct pedestrian access from the public sidewalk and facilitating the redevelopment of a streetscape that presents buildings, and not parking lots, first.
- Consider revising Section 3, which currently requires that all access driveways for shopping centres (which include plazas) to be located on an arterial or collector road, to remove this requirement OR consider revising the Transportation Map, Map 1, to reclassify sections of key local roads (Reynolds and Church Streets, the MacQuarrie Drive Extension) to minor collectors, in order to facilitate future development that provides alternative site orientation and access for both pedestrians and vehicles to the Reeves Street corridor, similar to that visualized in the conceptual plan prepared by Ekistics Planning and Design in their 2004 Streetscape Study.

## Policy Support

As part of formulating the list of proposed amendments to the Land Use By-law, EDPC staff looked to the Port Hawkesbury Municipal Planning Strategy (2010) for policies supporting the listed changes.

*Policy L-2.2.4 It shall be the intention of Council to investigate community branding and streetscape improvement initiatives for the community core area, which includes the land bounded by Reeves Street, MacSween Street, Reynolds Street and the MacQuarrie Drive Extension.*

*Policy L-2.2.5 It shall be the intention of Council to permit new development in the Commercial Highway (C-3) Zone to be built closer to the street curbs in line with the new Civic Centre, with parking in the rear as a means of creating a more inviting and aesthetically-pleasing shopping atmosphere, provided the new development meets the criteria listed under General Lot Requirements in Part 16.2(a) of the Land Use By-law.*

*Policy L-4.1.2 It shall be the intention of Council to:*  
...  
*e) develop a walkway along Reeves Street to the Nova Scotia Community College*  
...  
*g) develop bicycle lanes on Reeves Street once the Highway 104 By-pass is constructed...*

*Policy CD-1.1.1 Council shall give priority for street improvements to arterial and collector streets.*

*Policy CD-1.1.2 It shall be the intention of Council to encourage a high standard of pedestrian and vehicular safety on Reeves Street.*

*Policy CD-1.1.4 It shall be the intention of Council to give priority to the construction of new sidewalks and walkways along*

*streets leading to community facilities, schools, the Nova Scotia Community College, recreation areas, and along arterial and collector roads.*

*Policy CD-1.1.5 It shall be the policy of Council to achieve a high level of maintenance of street marking and to monitor the need for stop signs, left turn lanes or other improvements at dangerous or confusing intersections on an ongoing basis.*



## Granville Street

### *Description and Extent:*

Granville Street is a two-lane roadway following the shoreline of the harbour, connecting Reeves Street from the west side of the town to Trunk Four on the east side of town. Prior to the construction and development of Reeves Street in 1961, Granville Street served as the “Main Street” of Port Hawkesbury. Sidewalks are only available along the north side of Granville Street along its full extent, and while previous redevelopment plans have encouraged the development of sidewalks on the south side of the road, utility lines, mature trees, heritage buildings and private parking have all been cited as constraints to this development. This stretch includes several lined crosswalks (not signalized) and one stop signal for vehicles (northbound vehicles must stop at Old Sydney Road). Signed speeds along this stretch are 50km/hour.

While this roadway is relatively flat, nearly all of the side streets branching from it are subject to significantly steep grades. The roadway also has several curves, giving the perception that travelled speeds are faster than they may actually be. Major amenities along this street include the community waterfront, banks and professional offices, specialized retail, secondary access to the post office, and several parks.

### *Road Ownership*

The full extent of this right-of-way falls under the jurisdiction of the Town.

### *Opportunities*

Granville Street was developed back when people walked, cycled or used horse and carriage for transport, and the result is a clustering of uses within close proximity to each other. Routes follow contours and traditional walking paths instead of the wide and disjointed development pattern more common in auto-oriented developments. While commercial growth elsewhere in town has had an effect on this former downtown strip, the opportunity exists to focus development and re-development along Granville to capitalize on its “village” atmosphere, particularly by



strengthening its connections to the residential areas of town by providing options for travel to and through the area by means other than private automobiles. Granville Street also serves as an important connector to the community’s waterfront and the recreational opportunities (boardwalk, parks, play grounds) provided there.

Existing sidewalk connectivity along and onto the street is good, in part due to past streetscape enhancement efforts. Minimal investment to upgrade crosswalks (mainly by providing curb cuts) and repair broken or older sidewalk concrete panels would provide satisfactory basic network function and connectivity for this street as a primary route in the Active Transportation network. Enhancements done along Reeves Street may result in brick unit pavers becoming available for incorporation into Granville Street projects, either to repair damaged walkways, or to enhance potential new connections.

## Challenges

Unfortunately, many of the features that create opportunities for this stretch also present challenges. While the area was developed before autos were used, the right-of-way has been retrofitted to accommodate vehicular traffic and other modern utility requirements, resulting in a wide asphalt carriage-way, utility poles on both sides of the street, and limited space available for sidewalks or pedestrian amenities (benches, lighting, signage) due to the location of mature trees and older buildings (several of which have heritage value to the community). Further, at the intersection with Sydney Street challenges are created due to right-of-way widths and alignments, crosswalk signage and locations, and parking on adjacent properties that can obstruct visibility for motorists and pedestrians.

Parking is also a challenge along Granville Street; both in terms of availability and design. Many businesses have created nose-in parking lots in the front yards of their businesses, or purchase adjacent lots to create off-street parking areas. Visibility of oncoming cars and pedestrians can be an issue when negotiating out of these spaces and lots. On-street parallel parking may help to encourage drivers to travel at lower speeds with more caution, as it creates the perception of a narrower roadway. Using on-street parallel parking, instead of nose-in angled parking, may also create new opportunities for sidewalks and other pedestrian and cyclist amenities within the road right-of-way adjacent to developments.

## Short Term Solutions

### 1. Barrier-Free Crosswalks

Look to ensure that all pedestrian crossings, both mid-block and at intersections, are provided with drop curbs (or benched asphalt) in order to facilitate barrier-free access for pedestrians and young cyclists. Granville Street already provides a continuous sidewalk along the town-side of the street, with connections to nearly every cross-street, creating an excellent foundation for a pedestrian network. Consider adding crosswalks with a drop curb across Granville Street providing access to the Granville Green, ideally where existing pathways meet the right-of-way, including at the intersection with Pitt Street.

### 2. Maintenance

Committing to repair and/or replace concrete sidewalk panels or unit pavers that are broken or are not even, in order to reduce trip hazards for pedestrians and barriers for wheeled users (strollers, wheelchairs), will go a long way in improving accessibility along this route. Any road works or servicing that may have inadvertently obstructed pedestrian crossings at driveways or intersections (see photo) should be addressed.



### 3. Cycling Awareness

“Share the Road” signage should be considered to increase awareness of on-road cycling along this route. On-street paint may be utilized as well, although the benefit of this investment would be limited by snow coverage in the winter months.

## Long Term Solutions

### 1. Making Space for Sidewalks

Look to work with utility partners to seize any future opportunities to consolidate service lines to one side of Granville Street, or preferably, underground. This would make space for sidewalks and light standards, and may also serve as a means to minimize weather-related service disruptions to those utilities (due to mature tree limbs along this route).

## 2. Roadway and Parking Modifications

Explore prospects to reduce vehicle lane widths to create opportunities for on-street parking or bike lanes. Further to this, look to work with local business owners to modify on-site parking configurations in order to reduce front-yard parking and replace it with a public parking lot and on-street parking spaces. Any funds collected through cash-in-lieu of parking provisions already found in the Land Use By-law (Part 15, Section 3) could be used to develop such a lot. These modifications would facilitate the development of sidewalks on the water-side of the street, and would reduce incidents of vehicles backing out on the road and over any sidewalks or into any potential cycling lanes.

An opportunity may also exist to explore opportunities to create an all-way vehicular stop at the intersection with Pitt Street, and to reconfigure and/or signalize the intersections with Reeves Street and Old Sydney Road. The all-way stop at Pitt Street would serve to emphasize this location as the intersection of two major routes, both for vehicles and for pedestrians, and create a distinction of Reeves Street from other cross-streets for motorists who may not be familiar with the community (tourists and other visitors). An all-way stop may also encourage pedestrian use of crosswalks at this location, if there is a perceived sense of increased safety.

Changes to the alignment of the intersections of Granville Street at Reeves Street and Old Sydney Road would serve to reduce the expanse of asphalt that must be negotiated by pedestrians crossing at these locations, and would help to improve visibility of those pedestrians when compared to current conditions. Signalizing these intersections with a pedestrian-triggered mechanism could also reduce the barrier-effect of these intersections and/or roads for Active Transportation users. As well, off-street parking and signage standards should be reviewed, for reasons similar to those given in the Reeves Street analysis. Consideration should be given to interactions between those parking on street, and cyclists travelling along the roadway; particularly in locations where road curves or hills may impede sightlines required for avoiding collisions or other hazards (door swings, sewer grates).

## 3. Streetscape Improvements

The addition of street trees, street furniture such as benches and waste receptacles, and pedestrian-oriented way-finding signage can be done on a block-by-block basis, allowing for a trial-run of performance and maintenance needs before further investment is made. Street lighting can be reviewed to determine whether opportunities exist to utilize models or designs that may provide superior luminary coverage while using less energy and complying with general dark-sky practices. Cost-sharing or incentive programs can be explored to work with local business owners and multi-tenant building owners to encourage the provision of bicycle racks and seating areas.

### *Supporting Land Use By-law Regulation Considerations*

#### *Amendments to the Site Plan Requirements – Part 5 of the Land Use By-law*

- Consider amendments to require all developments in the Granville Waterfront Development (C-2) zone to require Site Plan Approval, allowing planning staff the opportunity to work with developers to ensure that site development and re-development proposals include elements that support Active Transportation Use, including building orientation and relationship to the street, parking configuration landscaping, and signage.

#### *Amendments to Provisions for All Zones, General Provisions – Part 6A of the Land Use By-law*

- Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
- Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).



- Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a “buffer” between parked vehicles and a sidewalk. This “buffer” would provide options for landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.
- Further, consider amending Section 21 to establish a maximum driveway width for commercial uses and shopping centres, and noting a requirement for any sidewalks to be carried continuous through access driveways in order to maintain the distinction between the vehicular realm and the pedestrian pathway.
- Consider an amendment to add a new section requiring barrier-free pedestrian access to be provided to the building entrance from the public sidewalk, by means of a pathway denoted by a material differing from that used for the parking lot surfacing (e.g. concrete sidewalk or unit pavers as opposed painted lines).



*Amendments to the Sign Regulations – Part 6B of the Land Use By-law*

- Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, in order to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.

*Amendments to the Granville Street / Waterfront Development (C-2) Zone – Part 15 of the Land Use By-law*

- Consider adding a “maximum” front yard setback for all development types (section 2) in order to encourage buildings to develop closer to the street, facilitating direct pedestrian access from the public sidewalk and facilitating the redevelopment of a streetscape that presents buildings, and not parking lots, first. Consider existing average building setbacks when determining what this maximum front yard setback should be.



## Policy Support

As part of formulating the list of proposed amendments to the Land Use By-law, EDPC staff looked to the Port Hawkesbury Municipal Planning Strategy (2010) for policies supporting the listed changes.

**Policy L-2.1.2** *It shall be the intention of Council to work with the Eastern District Planning Commission, Enterprise Cape Breton Corp. and other agencies in the Granville Street / Waterfront Development Zone to maintain a suitable appearance and character and to encourage further development, redevelopment and streetscape improvements through the following:*

...

*(d) Maintain public open spaces to enhance the attractiveness of the area to pedestrian traffic and tourists;*

*(e) Investigate the possibility of providing amenities in the area such as pocket green areas, planters, benches, bike racks, new lighting, civic signage and other appropriate street furniture;*

...

*(j) Investigate the possibility of relocating the power poles from the edge of the street to less visually conspicuous locations.*

**Policy L-2.1.5** *Notwithstanding Policy L-2.1.4, Council may, within the Granville Street / Waterfront Development (C-2) zone, accept from the developer, cash-in-lieu of the required off-street parking or a combination of parking spaces and cash for the balance of the required parking spaces. Council shall use this money to acquire, construct and maintain Town-owned parking lots within the Granville Street / Waterfront Development (C-2) zone.*

**Policy L-2.1.6** *It shall be the intention of Council to improve the on-street parking areas along Granville Street by proper*

*demarcation, providing appropriate parking area barriers and other street design improvements.*

**Policy CD-1.1.1** *Council shall give priority for street improvements to arterial and collector streets.*

**Policy CD-1.1.4** *It shall be the intention of Council to give priority to the construction of new sidewalks and walkways along streets leading to community facilities, schools, the Nova Scotia Community College, recreation areas, and along arterial and collector roads.*

**Policy CD-1.1.5** *It shall be the policy of Council to achieve a high level of maintenance of street marking and to monitor the need for stop signs, left turn lanes or other improvements at dangerous or confusing intersections on an ongoing basis.*





## Pitt Street

### Description and Extent

Pitt Street is a two-lane major collector, situated approximately half-way through town and connecting Reeves Street to Granville Street. With the exception of a four-way stop at its intersection with Bernard Street, drivers using Pitt Street have the right-of-way over vehicles coming from connecting side-streets. Pitt Street has sidewalks on both sides of the street, with non-signalized crosswalks across connecting side streets, non-signalized crosswalks across Pitt at Granville Street (north side only), Bernard Street (both sides), and Queen Street (north side only), and a signalized crosswalk at the intersection with Reeves Street. Between Granville Street and Reeves Street, the elevation of Pitt Street climbs twenty (20) metres, or 65.5 feet.

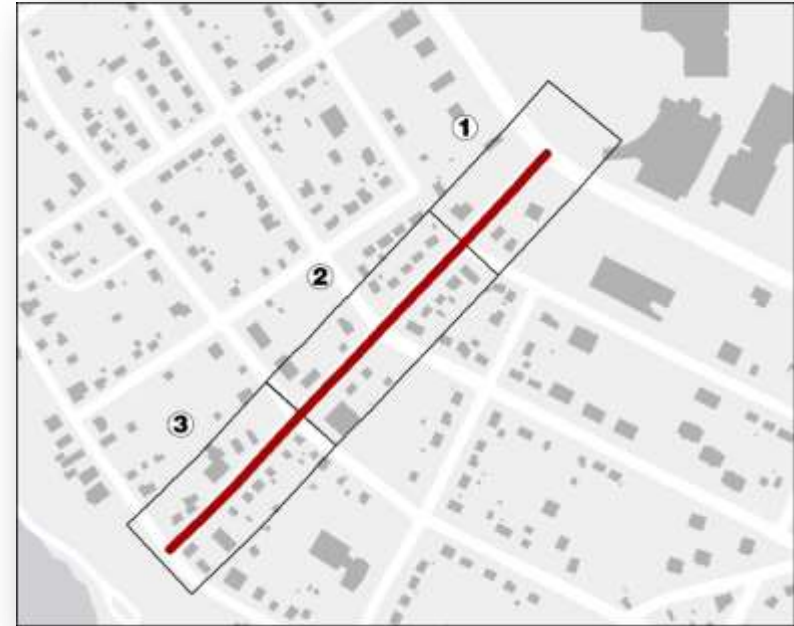
### Road Ownership

The full extent of this right-of-way falls under the jurisdiction of the Town.

### Opportunities

Pitt Street serves as the central connector between Reeves Street and Granville Street. Major community gathering spaces, being Granville Green and the SAERC development, are located at either end of the street. Further to this, other public and private gathering spaces, namely the Post Office, the United Church, and the larger of two local Tim Hortons outlets, sit on this street as well.

The central location, relationship to the old commercial street and new commercial street, as well as the number of community gathering spaces along it make Pitt Street a candidate primary Active Transportation Route. With sidewalks already in place on both sides of the street, very little initial investment is required to provide basic network connectivity beyond improvements to the curb cuts/aprons at intersection crosswalks (particularly at Bernard Street, where a hydro pole and hydrant obstruct the drop curb and sidewalk). Future investment could be directed towards pedestrian/cyclist directed signage and banners, and a drop curb to permit barrier-free access at the main entrance to the Post Office. The installation



of bike parking facilities should also be explored with the key potential cyclist destinations along this street; mainly the Post Office, but also St. Mark's and Tim Horton's.

Further, due to the steepness of street, opportunities to create level rest-stops for pedestrians and wheeled-users (strollers, walkers and wheelchairs) should be explored. These rest areas could be developed in conjunction with other public organizations (the Post Office), institutional uses (St. Mark's United Church), or even private property owners through an access and maintenance easement. Opportunities for pedestrian-scaled lighting, preferably using high-efficiency, full-cut-off fixtures, should be explored as well.

## Challenges

The elevation climb from the intersection with Granville Street to the intersection with Reeves Street is approximately twenty metres (65.5 feet), and could be considered a barrier to those choosing to walk to cycle along this route by people due to their age or ability. Individuals traveling with wheeled devices other than bicycles, such as walkers, wheelchairs or even strollers, may find it challenging to stop along the steeper sections of the street to rest without obstructing the sidewalk, particularly if they must turn perpendicular to the travel route to avoid the risk of rolling back down the hill.



While the four-way stop at Bernard Street serves to slow traffic, particularly vehicles travelling down toward Granville Street, this stop could pose challenges to cyclists attempting to travel up to Reeves Street. Cycling up Pitt Street, with the requirement for a full stop at this intersection, could be a barrier to choosing this Active Transportation mode and route, especially in the winter. A review of the feasibility of making the intersection a three-way stop, with vehicular and cycling traffic heading up to Reeves Street having the right-of-way, may be a something to consider.

Casual observation of road and sidewalk conditions during the winter season identified snow storage capacity, from street clearing and private driveways, as an issue affecting the accessibility of sidewalks along Pitt Street for several months of the year. Snow obstruction was observed particularly along the north-west side of Pitt Street, where there is no

boulevard for snow storage, the sidewalks are relatively old, and retaining walls further restrict snow storage options.

## Short-Term Solutions

### 1. Improving Barrier-Free Access

Improve sidewalk aprons at intersections with Bernard and Queen Street, providing sufficient room for barrier-free access around obstructions such as hydro poles and fire hydrants. Add a drop curb in front of the Post Office main entrance to permit barrier-free access for residents parking on-street or crossing mid-block to access the Post Office.

### 2. Provide Bicycle Parking

Work with destination properties, such as the Post Office, St. Mark's and Tim Horton's to install bike racks on site. Ideally, racks would be located in close proximity to the main building entrance, in a location that offers ample casual surveillance and, if possible, some shelter from the elements. Racks should be situated on concrete pad with a link to an existing sidewalk, and not cause impediment to any existing pedestrian access. Explore opportunities for cost sharing or external funding, particularly if it would result in the use of unique racks or alternative technologies.

### 3. Winter Maintenance Solutions

The absence of a boulevard between the sidewalk and the street curb on the north-west side of Pitt Street raises challenges with snow clearing and storage options. In the short-term, the Town should review current snow clearing requirements, with the possibility of requiring residents to clear snow from sidewalks adjacent to their properties within a certain timeline following a snow storm. Fines collected through the enforcement of this by-law could be re-invested into long-term streetscape improvements, including the replacement of sidewalks with a boulevard for snow-storage where space allows.

## Long-Term Solutions

### 1. Streetscape Improvements

Pedestrian-scale lighting and directional signage targeting pedestrians and cyclists can help to strengthen Pitt Street's function as a major connector between the Reeves Street Corridor and Granville Street. Streetscape improvements can serve to draw tourists down to the waterfront via Granville Green, or up into the SAERC Civic Block and beyond to businesses along Reeves Street.

## 2. Accessible Rest Stations

Seating areas, or level concrete rest areas adjacent to sidewalks, can provide opportunities for Active Transportation users to take a break, particularly if age or ability makes steeper routes like Pitt Street a challenge. These rest landings can be provided in conjunction with public or private land owners. These seating/rest areas could also create opportunities for casual social interactions between Active Transportation users; undesirable loitering and vandalism could be addressed through seating design, visibility (location and lighting), and if required, monitoring by enforcement organizations.

## Supporting Land Use By-law Regulation Considerations

### *Amendments to Provisions for All Zones, General Provisions– Part 6A of the Land Use By-law*

- Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
- Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).
- Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a "buffer" between parked vehicles and a sidewalk. This "buffer" would provide options for

landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.

- Further, consider amending Section 21 to establish a maximum driveway width for commercial uses and shopping centres, and noting a requirement for any sidewalks to be carried continuous through access driveways in order to maintain the distinction between the vehicular realm and the pedestrian pathway.
- Consider an amendment to add a new section requiring barrier-free pedestrian access to be provided to the building entrance from the public sidewalk, by means of a pathway denoted by a material differing from that used for the parking lot surfacing (e.g. concrete sidewalk or unit pavers as opposed painted lines).

### *Amendments to the Sign Regulations – Part 6B of the Land Use By-law*

- Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.

## Policy Support

As part of formulating the list of proposed amendments to the Land Use By-law, EDPC staff looked to the Port Hawkesbury Municipal Planning Strategy (2010) for policies supporting the listed changes.

*Policy CD-1.1.1 Council shall give priority for street improvements to arterial and collector streets.*

*Policy CD-1.1.4 It shall be the intention of Council to give priority to the construction of new sidewalks and walkways along streets leading to community facilities, schools, the Nova Scotia Community College, recreation areas, and along arterial and collector roads.*

*Policy CD-1.1.5 It shall be the policy of Council to achieve a high level of maintenance of street marking and to monitor the need for stop signs, left turn lanes or other improvements at dangerous or confusing intersections on an ongoing basis.*

## Trunk 4/4A

### Description and Extent

Trunk 4 / 4A is a four-lane roadway running from Granville Street to Highway 104, just past the Port Hawkesbury Industrial Park. The roadway has gravel shoulders and no sidewalk or on-street pedestrian trail. Signalized crossings include a crosswalk at Queen Street, and traffic lights at intersections with Reeves Street and Paint Street/Tamarac Drive. The signed speed along this stretch is 60km/h.

### Road Ownership

The full extent of this right-of-way falls under the jurisdiction of the Nova Scotia Department of Transportation and Infrastructure Renewal

### Opportunities

This roadway is one of only two north-south connector roads in the town, and is the only one designed to handle highway volumes and large freight trucks. Trunk 4 also serves as the primary access to the Port Hawkesbury Industrial Park and connects the commercial developments at its intersection with Paint Street to the rest of the town. Further down towards Granville Street, Trunk 4A serves as a connector to two major local employment sites: the Point Tupper industrial park (including the paper mill), and a large commercial site that once housed a regional call centre.

A portion of the road is complemented by an off-road multi-use trail (see Map page 51) branching off of the Old Sydney Road stub and running parallel to Trunk 4 as it comes to meet its grade at the access driveway for the water tower before doubling back through the woods to meet up with the sidewalk on Pinecrest Drive in the Tamarac Heights Subdivision. Pedestrians are often seen along the shoulder of the highway, travelling between Reeves Street and the mall/Superstore plaza. Pedestrians are also often seen attempting to cross this highway where the off-road trail and water tower driveway meet the roadway, either because they do not realize that this is not part of the trail, or because they are seeking a more-direct route to the mall or industrial park.



### Challenges

Trunk 4/4A is, and is expected to remain, a busy four-lane highway handling high volumes of through traffic including large trucks. Once the Highway 104 By-pass is constructed, Trunk 4/4A will be one of the major connections between the Town and the highway. Steeper grades on either side of the roadway restrict the ability to develop paths or sidewalks adjacent to the right-of-way, although limited opportunity may be available. While high volumes of pedestrian and cyclist traffic are unlikely to be realized at first, the significance of the sites that this roadway connects, for employment and shopping (particularly food shopping) makes it a critical route for those pedestrians and cyclists who do not have access to private vehicles.

### *Short-Term Solutions*

#### 1. Improve Existing Conditions

Work with TIR to identify locations where storm water has eroded gravel shoulders and should be repaired in order to assist travel for pedestrians or cyclists who must travel this route.

#### 2. Address An Identified Active Transportation Barrier

Work to TIR to evaluate whether pedestrian indicators at signalized crossings provide enough time for pedestrians to negotiate/clear the intersections. Consider utilizing indicators that “count-down” the amount of time that a pedestrian has left to complete their crossing, particularly at the intersection with Paint Street / Tamarac Drive.

#### 3. Discourage Jay-Walking

Consider using signage and other physical deterrents (bollards or gates) to encourage pedestrians to continue on the adjacent off-road pathway through to Pinecrest Drive instead of jaywalking across the highway at MacInnis Road.

#### 4. Make Improvements to the Alternative Route

Ensure that the alternative to walking along the highway shoulder is more appealing, to encourage users to take the off-road trail unless absolutely necessary to travel along the roadway. This includes: regular cleaning and inspection to remove graffiti that some users may find threatening or perceive to indicate danger; ensuring that the off-road pathway is level and provides a barrier-free surface (current asphalt heave may obstruct accessibility for users who need a level surface due to age or wheeled assistance devices); and, look at adding signage and lighting to encourage as many users as possible to continue on the path to Pinecrest Drive.

### *Long-Term Solutions*

#### 1. Develop an Off-Road Multi-Use Path/Trail

Work with TIR to identify opportunities for a multi-modal pathway running along the west side of the road from Granville Street to Queen Street, and along the east side of the road from Queen Street to Paint Street, giving

access to the Industrial Park, direct passage to the commercial centre, and connecting the residences off of the Queen Street Extension to the rest of the network to the north. Ensure that this pathway is wide enough to accommodate both pedestrians and cyclists, and can be distinguished from the vehicular carriageway either through use of materials or due to a physical separation (barriers or boulevard).

#### 2. Encourage Pedestrian-Friendly Development

Revise regulations in the Land Use By-law, to encourage commercial and industrial developments to provide physical connections to the street for pedestrians and cyclists. Further, encourage commercial development/redevelopment at the intersection of Paint Street and Trunk 4 to orient closer to the street, in order to create an atmosphere that is less hostile to pedestrians.

### *Supporting Land Use By-law Regulation Considerations*

#### *Amendments to the Site Plan Requirements – Part 5 of the Land Use By-law*

- Consider amendments to require all developments in the Commercial Highway (C-3) zone to require Site Plan Approval, allowing planning staff the opportunity to work with developers to ensure that site development proposals include elements that support Active Transportation Use, including building orientation and relationship to the street, landscaping, and signage.

#### *Amendments to Provisions for All Zones, General Provisions– Part 6A of the Land Use By-law*

- Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
- Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).

- Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a “buffer” between parked vehicles and a sidewalk. This “buffer” would provide options for landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.
- Further, consider amending Section 21 to establish a maximum driveway width for commercial uses and shopping centres, and noting a requirement for any sidewalks to be carried continuous through access driveways in order to maintain the distinction between the vehicular realm and the pedestrian pathway.
- Consider an amendment to add a new section requiring barrier-free pedestrian access to be provided to the building entrance from the public sidewalk, by means of a pathway denoted by a material differing from that used for the parking lot surfacing (e.g. concrete sidewalk or unit pavers as opposed painted lines).

#### *Amendments to the Sign Regulations – Part 6B of the Land Use By-law*

- Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, in order to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.

#### *Amendments to the Commercial Highway (C-3) Zone – Part 16 of the Land Use By-law*

- Consider adding a “maximum” front yard setback for all development types (Sections 2(a) and 2(b)), in order to encourage buildings to develop closer to the street, facilitating direct pedestrian access from the public sidewalk and facilitating the redevelopment of a streetscape that presents buildings, and not parking lots, first.
- Consider revising Section 3, which currently requires that all access driveways for shopping centres (which include shopping centres) to be located on an arterial or collector road, to remove this requirement OR consider revising the Transportation Map, Map 1, to reclassify sections of key local roads (Paint Street, MacInnis Road, MacIntosh Avenue) to

minor collectors, in order to facilitate future development that provides alternative site orientation and access for both pedestrians and vehicles to the Trunk 4. Improvements should be made to existing accesses onto these local roads, to provide vehicular alternatives to one entrance/exit, and better circulation/distribution of vehicles in these large shopping centre parking lots.

### *Policy Support*

As part of formulating the list of proposed amendments to the Land Use By-law, EDPC staff looked to the Port Hawkesbury Municipal Planning Strategy (2010) for policies supporting the listed changes.

*Policy L-3.1.1 It shall be the intention of Council to initiate a development concept plan for the Port Hawkesbury Business Park addressing issues such as visual amenities, vehicle and pedestrian access and visibility from other parts of the Town with the objective of attracting new business to the Park.*

*Policy L-3.5.1 It is the intention of Council to lobby for a new Highway 104 interchange to connect the south end of Port Hawkesbury to provide quicker truck access to the Industrial Park from Richmond County and the Cape Breton Regional Municipality in addition to removing truck traffic from Trunk 4 in Port Hawkesbury*

*Policy CD-1.1.1 Council shall give priority for street improvements to arterial and collector streets.*

*Policy CD-1.1.4 It shall be the intention of Council to give priority to the construction of new sidewalks and walkways along streets leading to community facilities, schools, the Nova Scotia Community College, recreation areas, and along arterial and collector roads.*

*Policy CD-1.1.5 It shall be the policy of Council to achieve a high level of maintenance of street marking and to monitor the need for stop signs, left turn lanes or other improvements at dangerous or confusing intersections on an ongoing basis.*



## Tamarac Drive

### Description and Extent

Tamarac Drive is a two-lane roadway with on-street parking. This roadway joins with Trunk 4 and Paint Street at a four-way, signal-controlled intersection, and, for about a block, has a centre landscaped median with cobra-head style light standards. For the purpose of this plan, Tamarac Drive will be considered a primary Active Transportation route from the Trunk 4/Paint Street intersection until the three-way stop at the entrance to the Tamarac Education Centre.

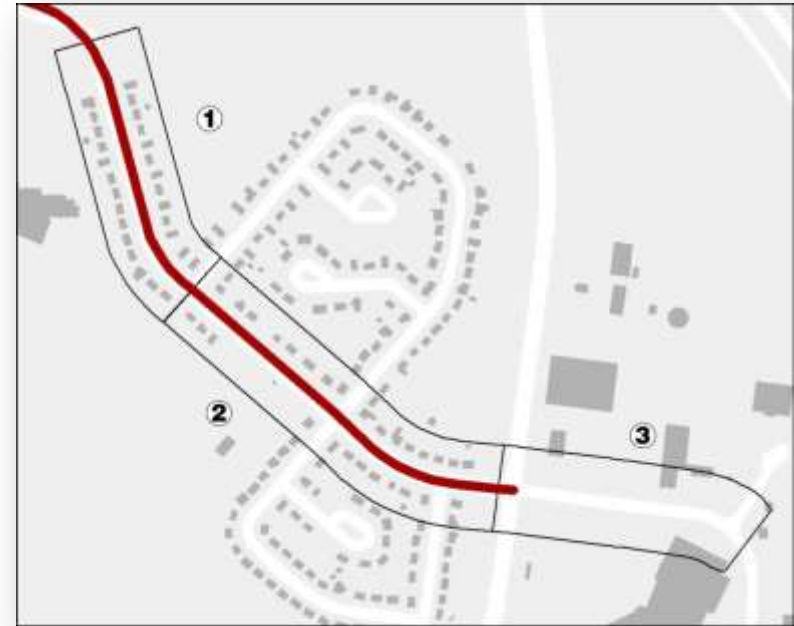
A sidewalk is currently only provided on the south side of the street. From the school entrance to Hemlock Drive, this sidewalk is composed of brick unit-pavers and stamped concrete, while the section between Hemlock Drive and Trunk 4 is poured-in-place concrete. Painted crosswalks across Tamarac Drive are provided at the intersection with Oak Crescent (a three-way stop, using signs), while the intersection with Oak Crescent/Hemlock Drive (a four-way stop, using signs) makes use of a stamping pattern in the asphalt, along with painted lines, to delineate the crosswalk location.

### Road Ownership

The full extent of this right-of-way falls under the jurisdiction of the Town.

### Opportunities

Tamarac Drive provides an excellent direct connection between the school and a shopping area, running central through a residential subdivision, and experiences relatively low rates of vehicular traffic. The road already has controlled intersections with crosswalks, several local trail connections, and a continuous sidewalk along one side. Tamarac Drive gives access to the local elementary school, as well as a major community shopping hub, and could be enhanced with nominal infrastructure to encourage more residents from the subdivision to walk or cycle instead of drive, particularly for short errands or the school run. Tamarac Drive also serves as a prominent “gateway” into a larger residential area of the community, seen from a highly travelled provincial route used by visitors.



The generous right-of-way width may also provide an opportunity to develop on-street bike lanes, or narrow the lanes to create off-street multi-use trails adjacent to the sidewalks. Such lanes/trails would serve to support efforts to encourage more residents in the neighbourhood to walk/ride to school or shopping, and could connect to the larger town trail system linking this neighbourhood to the southern part of town.

### Challenges

The relatively isolated nature of this subdivision may lead to the perception that improvements made within it will be of limited benefit to the community as a whole. Connecting local-level roadways do not have sidewalks, presenting a possible challenge to encouraging pedestrians to travel to the main roadway.

### Short-Term Solutions

#### 1. Use Area as an Active Transportation Pilot Neighbourhood

Consider using the neighbourhood as a pilot area for testing education campaigns or infrastructure improvements. Proximity and existing access to both a school and a commercial node provides ample opportunity to focus on this specific residential cluster. A program similar to that used in Winnipeg, Manitoba (WinSmart Community-Based Travel Marketing) can be explored, allowing for the development of a strategy specifically catering to the needs of Port Hawkesbury. Areas of focus can include:

- a. Development of community-based education materials
- b. Community-specific travel-time maps
- c. Walking school bus support
- d. Sidewalk and trail maintenance programming and enforcement



### Long-Term Solutions

#### 1. Roadway Improvements

The streets within this subdivision appear to be original to its development, and will be requiring upgrades to surfacing and curbs in the next five to ten years. Consider opportunities to review existing services and amenities (sidewalks, lighting, signage, landscaping) and areas where improvement may be possible (waste bins, seating or rest areas, formalized on-street parking, bike lanes). This may include:

##### a. Enhancing Crosswalks

Due to the proximity of desirable destinations for pedestrians (parkland, local shopping opportunities, children walking to school), strong support may be garnered for enhancing crosswalks along this route. The relative isolation of the neighbourhood provides an opportunity to treat the route and community as a case study for technologies or designs before they are incorporated elsewhere in town. Thermal inlay markers, intersection bump-outs, benched crossings that also serve to control vehicle speeds, and differences in lighting and signage can be considered, with three intersections along a 750 metre length to work with (representing a walking time of less than ten minutes).

##### b. Adding North-Side Sidewalks

Consider the addition of sidewalks along the north side of Tamarac Street, to increase options for pedestrians and minimize the requirement for pedestrians to have to cross the road; particularly young children travelling to school or local parks.

#### 2. Active-Transportation Supportive Infill

Vacant or under-developed lots provide opportunity for infill along this stretch and within the adjacent commercial node (Paint Street / Trunk 4 intersection), providing opportunity to increase the local population density and close gaps in the street wall that may otherwise deter a pedestrian. While increases in development may also increase vehicle volumes, ensuring that any new development includes Active Transportation friendly features such as street-level active facades, bike

racks, pedestrian access and landscaping can also increase the likelihood of new and existing community residents choosing to walk or bike instead.

### *Supporting Land Use By-law Regulation Considerations*

#### *Amendments to Provisions for All Zones, General Provisions– Part 6A of the Land Use By-law*

- Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
- Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).
- Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a “buffer” between parked vehicles and a sidewalk. This “buffer” would provide options for landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.

#### *Amendments to the Sign Regulations – Part 6B of the Land Use By-law*

- Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, in order to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.

### *Policy Support*

As part of formulating the list of proposed amendments to the Land Use By-law, EDP staff looked to the Port Hawkesbury Municipal Planning Strategy (2010) for policies supporting the listed changes.

*Policy CD-1.1.1 Council shall give priority for street improvements to arterial and collector streets.*

*Policy CD-1.1.4 It shall be the intention of Council to give priority to the construction of new sidewalks and walkways along streets leading to community facilities, schools, the Nova Scotia Community College, recreation areas, and along arterial and collector roads.*

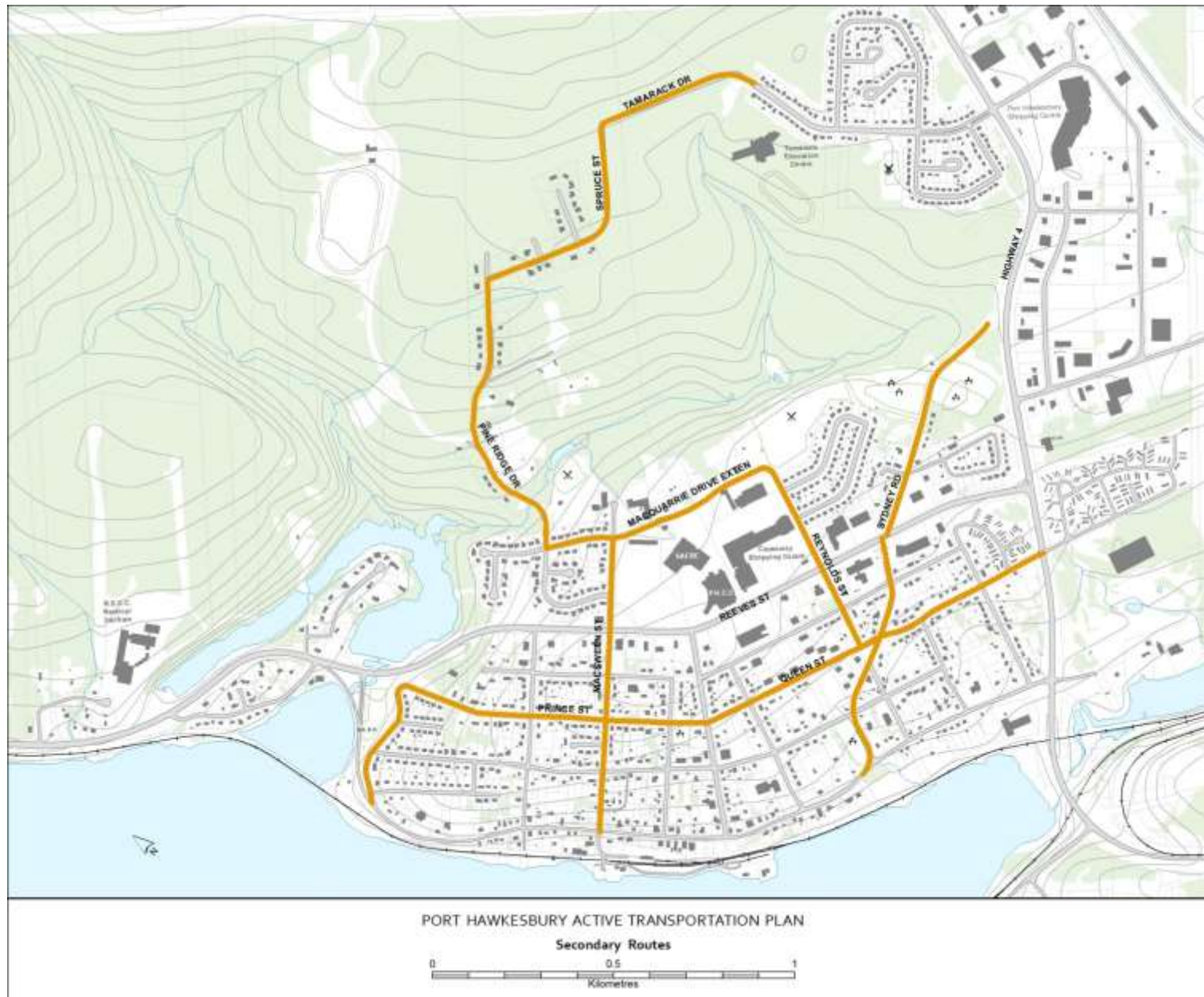
*Policy CD-1.1.5 It shall be the policy of Council to achieve a high level of maintenance of street marking and to monitor the need for stop signs, left turn lanes or other improvements at dangerous or confusing intersections on an ongoing basis.*

## SECONDARY ROUTES

Secondary routes serve as major connectors, either between the primary routes or leading to other high-traffic destinations, and may not otherwise warrant consideration as a primary-level route. These are roadways that may serve as short-cuts for drivers or pedestrians, or would be suitable detour should a primary route be obstructed. The secondary routes identified have, for the most part, a sidewalk available on at least one side of the vehicular roadway. They also have several crossing opportunities supported by signed crosswalks or signalized intersections. Should budgets allow, consideration should be given to providing sidewalk on both sides of the roadway, or additional crossing opportunities, as identified in the route summaries







### ***MacSween Street, from the McQuarrie Drive Extension to the Waterfront***

This route runs parallel to Pitt Street, connecting several residential areas to the civic and government offices, SAERC, Reeves Street, Granville Street and the community waterfront. A pedestrian crosswalk is provided at the intersection with Reeves Street, although this location has been cited as a concern due to its visibility and the frequency of pedestrian/vehicular collisions. Future development of vacant lands in the civic block adjacent to SAERC may provide additional demand and opportunities for pedestrian and Active Transportation infrastructure, particularly along the block between Reeves Street and the McQuarrie Drive Extension.

### ***McQuarrie Drive Extension/Reynolds Street, from MacSween Street to Reeves Street***

Wrapping behind the civic and government offices and SAERC, the MacQuarrie Drive Extension connects a senior's home, several social enterprises, the former arena site, sports fields and facilities and the recently upgraded community playground to the rest of the town. With the exception of the short run along Reynolds Street from Reeves Street to the property boundary of the former arena site, there are no sidewalks available on either side of the road along this secondary route, despite heavy pedestrian travel demand. The stretch of sidewalk that is available was observed to be obstructed by snow cleared from an adjacent plaza and the road for most of the winter during the writing of this plan. This is of particular concern due to the nature of the primary users of facilities along this roadway – the seniors residing in the residential facility, and parents travelling with small/young children to the community park.

Priority should be given to providing a continuous, barrier-free sidewalk along at least one side of the full extent of this secondary route, providing crosswalks where necessary and ensuring that curb cuts are provided to allow safe passage for walkers, wheelchairs and strollers. Due to the frequency of vehicular shortcutting along this route, consideration should be given to the utilization of seasonal speed bumps adjacent to the

community playground, due to its location at the sharp curve in the road and the tendency of park users to cross not far from the sharp curve in the road (due to parking location / extent of existing sidewalk). A crosswalk was installed between the old arena parking lot and the park in the fall of 2014.

Due to the vulnerability of the primary users of this route (seniors, youth), this should be highlighted as a **“hot spot”**: a non-primary route that should be placed in the same priority for improvements as the primary routes identified. Enhancements to this route will not only reinforce community use of recreation facilities; it will provide an alternative route for access between Reeves Street and the residential communities on the north side of the town and will give pedestrian access for local seniors to travel to commercial and recreation facilities safely.

### ***Old Sydney Road, from Granville Street to Reeves Street***

Similar to MacSween Street, Sydney Road serves as a key connector between Granville Street and Reeves Street, with a signalized pedestrian crossing at Reeves Street continuing beyond to become a pathway leading to the commercial node on Trunk 4 at Paint Street / Tamarac Drive. A sidewalk is available on the west side of this roadway for the stretch between Granville and Reeves Street, with a short stretch of sidewalk available on the east side between Queen and Reynolds Street providing access to a local commercial business. Opportunities for improvement include the intersection with Granville Street, visibility and maintenance of pedestrian crosswalks (particularly those mid-block), and ensuring that any redevelopment along the stretch includes Active Transportation-supportive amenities and connections.

### ***Queen Street / Prince Street, from Granville Street to Trunk 4A***

Running parallel to both Granville Street and Reeves Street, Queen/Prince Streets provide a mid-block east/west connection for the dense residential area. With the exception of the small section between MacLeod Avenue



and Trunk 4A, Queen Street (from Pitt Street) provides sidewalks on both sides of the street, although their condition warrants improvements and replacement and winter maintenance issues must be addressed to provide year-round accessibility. A signalized pedestrian crosswalk is provided at the intersection of Queen Street and Trunk 4A, giving access to the former call centre property and future connection to a joint industrial park.

Sidewalks are provided on one side of Prince Street from Pitt eastward to Granville. The opportunity to add a second sidewalk, connecting to a

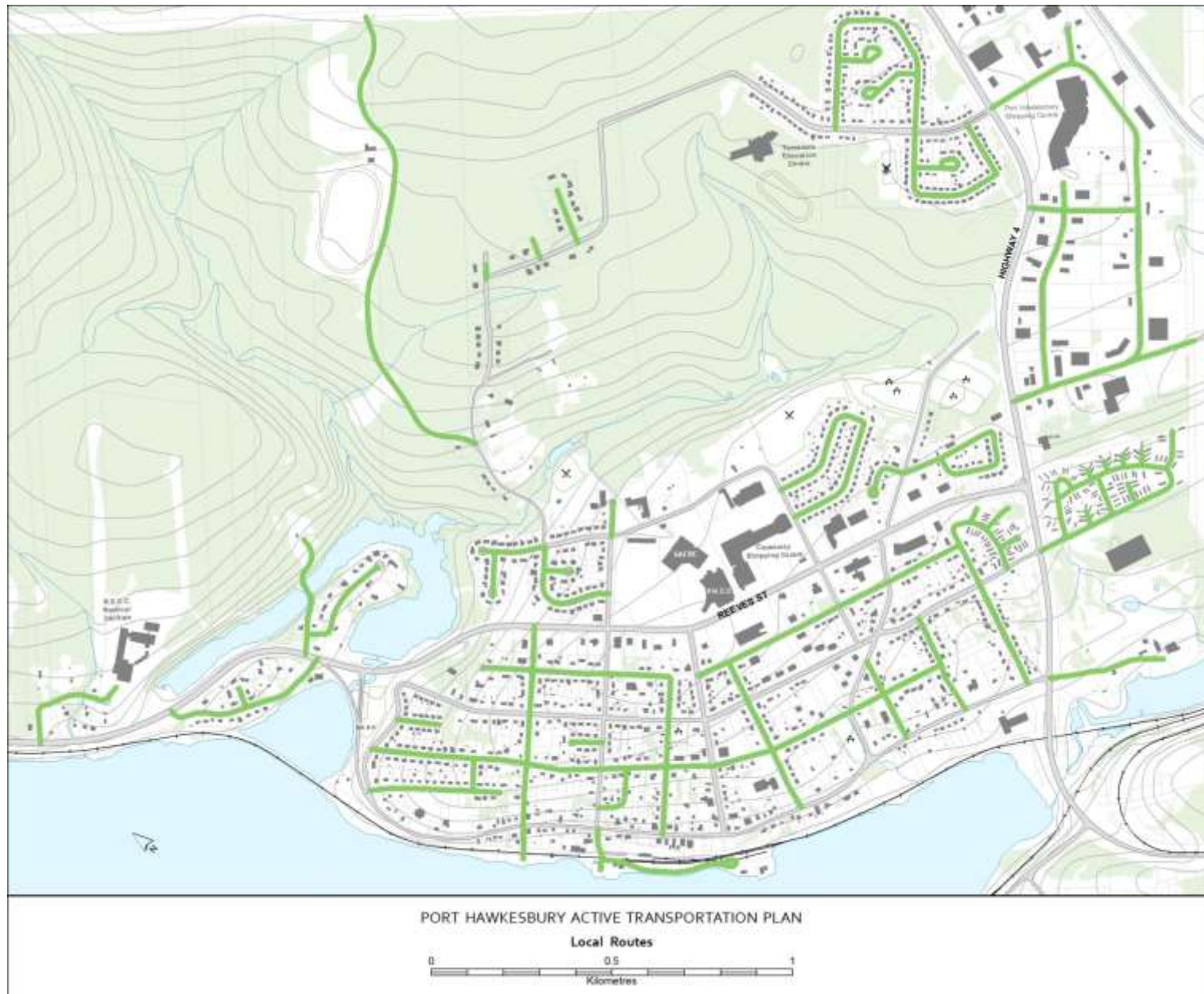
pedestrian trail down the hill to the park across from the intersection with Straitview Street should be explored. This pedestrian connection could be in the form of a ramp system with switch-backs, following the footpath worn into the hillside where pedestrians have followed the grading for the sewer lines. A ramp system would be easier to maintain in the winter, and would allow barrier-free access and also accommodate strollers and children's bicycles.



## LOCAL STREETS

Any streets not specifically mentioned already in this document are considered to be “local” routes. They may or may not provide sidewalks or crosswalks, but in the context of this initial plan, are tertiary-level and provide support to the noted primary and secondary routes. As the suggested improvements to primary and secondary routes are made and the local network foundation is established, future updates to this plan may suggest improvements to these “local” streets as network improvements trickle-down to this level. However, given the desire for maximum impact on a short-term basis with a targeted use of limited financial resources, this plan is not suggesting any improvements to Active Transportation facilities on these local streets beyond town-wide maintenance and seasonal snow clearing initiatives at this time.







## OFF-ROAD TRAILS

### *Existing Facilities*

The pattern of development in Port Hawkesbury has resulted in several trails providing north-south pedestrian connections between pockets of development in otherwise wooded area. In collaboration with local clubs and programs offered at the Strait campus of the NSCC, many of these trails have been geo-referenced to provide for more accurate mapping. Further, students are able to develop and practice skills learned in their studies regarding trail development and maintenance, and previously neglected trails are being upgraded and improved upon.

Further opportunity exists to enhance the local trail network, through improved signage, trail-head facilities, and connectivity to on-street pedestrian and cycling infrastructure. Barrier-free accessibility should be examined, particularly for routes serving as the primary pedestrian connection between communities, such as the trail connecting Sydney Road to the Tamarac Heights Subdivision. Level surfaces free of significant obstructions, such as rocks or broken asphalt, should be provided to reduce trip hazards and allow for safe passage of wheelchairs, scooters or walkers. Access to trails, including the waterfront boardwalk, should be reviewed to ensure that barriers, including level rail crossings, do not prevent universal access to facilities.

### *Future Opportunities*

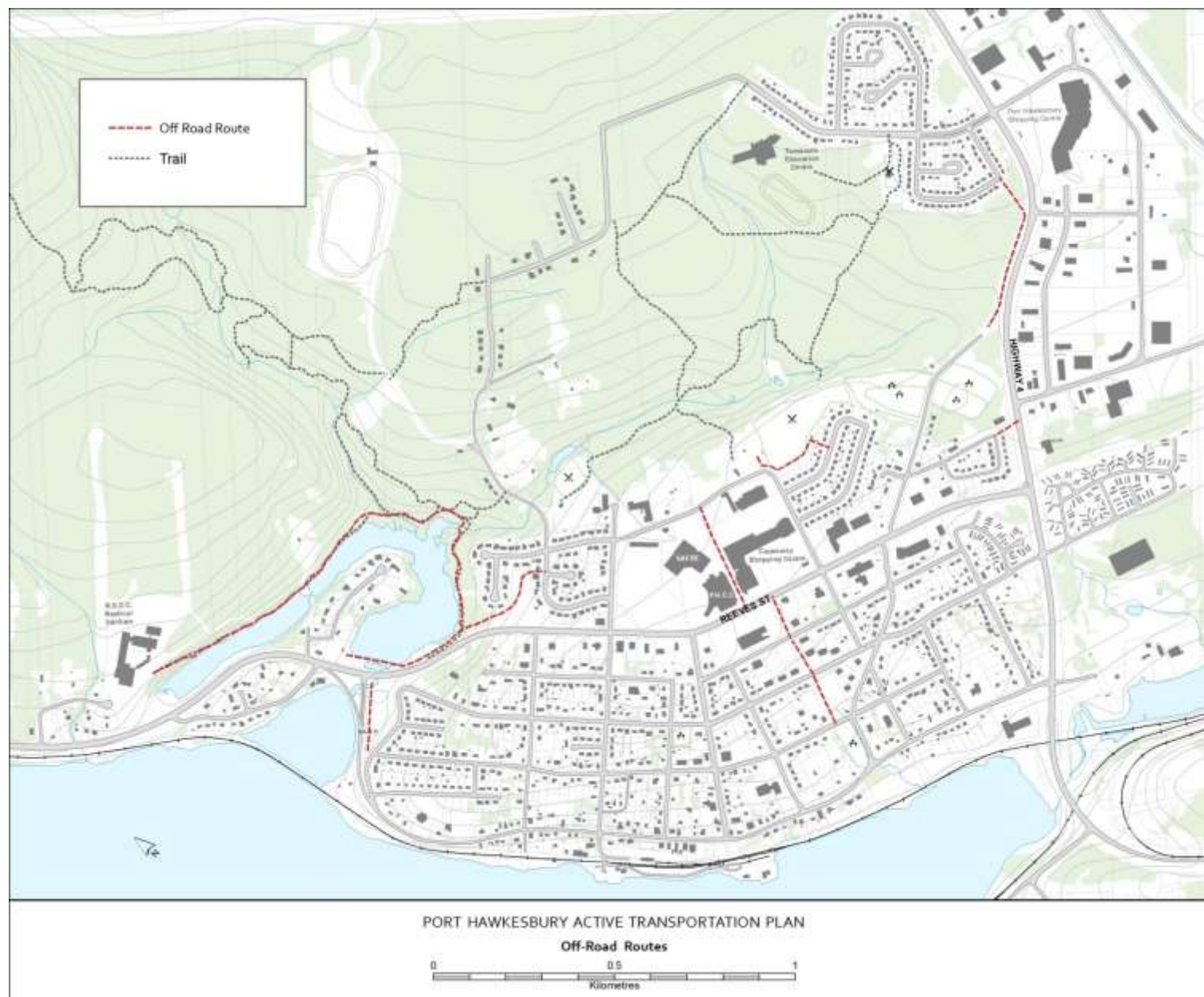
On and off-road trail development opportunities exist in several locations throughout the town, including along some of the routes already identified in this plan. As previously mentioned, a study done by Ekistics (2014), identified a preferred route connecting the NSCC campus to the SAERC site utilizing a combination of on and off-road facilities. Further trail

development opportunities may exist along the western side of Trunk 4, and through the Industrial Park along Paint Street where users have identified a desire for infrastructure but conditions are more suited to an off-road shared pedestrian/bicycle facility than a traditional urban sidewalk.

### *Route Mapping*

The Map on page 51 identifies the existing off-road Active Transportation facilities in the town, as well as opportunities for trailheads or other user amenities, future linkages and locations where improvements are necessary to connect to other transportation systems.





# CHAPTER 6:

## IMPLEMENTATION

### SOFT INFRASTRUCTURE REQUIREMENTS

An effective Active Transportation system not only requires adequate “hard” infrastructure, such as sidewalks, pathways, bike racks and signage; “soft” infrastructure elements, like educational materials, incentive programs, and enforcement can encourage people to consider Active Transportation as an alternative to vehicular transport.

#### *Education*

An Active Transportation-supportive education program can use several different formats, mediums, and partnerships. The easiest education initiative to use can involve the production and distribution of route mapping, which lets people know what facilities are out there, and how easy they are to use. This detailed community map can be supplemented with average estimated walking times, distances between key destinations, and information about where bike racks and similar facilities are available in order to encourage people to use them. Additional information about the benefits of walking or riding to work, school, shopping, and leisure activities can also be included in the community route map, outlining the financial, environmental and health gains.

Creating and providing additional training or information sharing to help educate people, or to help parents educate their children, on how to safely walk and ride in the community is also important. Given the potential severity of vehicle and pedestrian/cyclist collisions, the responsibility for traffic safety should not be left as the responsibility of drivers. These pamphlets could focus on educating pedestrians and cyclists of their rights and responsibilities, and providing a refresher to local drivers about being

safe and aware and when they must surrender the right-of-way to a pedestrian. The local RCMP detachment already offers this kind of literature, and other similar materials may also be available. These can be distributed as part of a bike rodeo, at a community market or festival, or during other community gatherings such as the summer concert series at the Granville Green.

The Active Transportation education initiative can also look to put together an informative colouring booklet for distribution at local schools, targeting students of a certain age or in a certain facility, encouraging walking and cycling while emphasizing safety and traffic rules. This would be an excellent lead-in if looking to coordinate a walking school bus or other initiatives encouraging more students to walk from certain areas of town; particularly where they do not meet bussing criteria and might be driven by parents each day.

#### *Events, Outreach and Marketing*

As the Active Transportation movement continues to grow, a number of national and international events and activities celebrating walking or cycling are being established or becoming more popular. Examples of these national events include the Commuter Challenge (early June), walk to school day/month (early October), and the walking school bus movement. This is not to say that Port Hawkesbury can’t start their own celebration of Active Transportation in conjunction with other local festivals and events.

Informing the general public about these events is often the biggest barrier to participating. Coordinating initiatives with radio and newspaper mediums is important. Having a staff, volunteer or student-run information kiosk at the Civic Centre, Nova Scotia Community College (NSCC) or community market may also help to increase awareness of Active Transportation options and special events. Coordinating with the NSCC during their student orientation program, by either providing mapping and information handouts in student packages, or by having an on-campus presence during that orientation day or period, may be the best way to reach that key demographic.

Consideration should also be given to developing a logo, to be used with a website linked to the general municipal site. Social media and mobile



application opportunities should also be explored. The logo will help to brand materials or advertising, as well as infrastructure, giving an overall impression of a coordinated Active Transportation effort. Web presence, though a dedicated site, social media and mobile application, are a necessity to effectively relay information and serve as a central reference for residents and visitors.

### ***Active Transportation Pilots***

Similar to the WinSmart Community-Based Travel Marketing Pilot Project undertaken by Resource Conservation Manitoba (now the Green Action Centre) for the City of Winnipeg, the Town of Port Hawkesbury could look at undertaking a pilot project for the focussed marketing of Active Transportation opportunities (facilities, proximities and travel times via detailed mapping) for a particular neighbourhood. This pilot project would allow a small-scaled application of best practises, to see what works, what people are looking for, and what kind of return on investment is provided with particular “hard” infrastructure investments on a neighbourhood scale. Given the proximity of key destinations, such as schools and shopping, and the relative closed-system nature of existing development, the Tamarac Heights subdivision would provide for a perfect sample population for this project.

### ***Data Collection***

Working with the RCMP and Department of Transportation (TIR), effort should be made to track and map the occurrences of vehicle/pedestrian collisions and reported incidents, including their locations and time of day, in order to allow a review on an annual basis to see if there are infrastructure or education elements that could help to prevent such an incident from reoccurring or to measure success of Active Transportation efforts. Implementation measurements could relate to signal timing, the provision or removal of a crosswalk, the visibility of pedestrians or signage, and landscaping, lighting, or other physical elements. This data should be included for reference in the community information section when this plan is next revised and updated.

### ***Active Transportation Ambassadors***

An opportunity may also be available to hire local students for summer terms to serve as Active Transportation ambassadors – doing basic maintenance (removal of grass on overgrown sidewalks, litter pickup, flagging areas needing repair or extensive cleaning), trail patrol, being available to answer any questions from tourists or residents (directions, information about festivals or events), or being part of promotion team for on or off-site campaigns. Funding support for these positions can come from programs for hiring youth or other Active Transportation funding (NS Moves), and these positions can support initiatives in several different municipal departments (engineering, public works, recreation), providing employment to local youth. Implementation of this option would require further coordination to determine what department would manage and monitor these students and their work.

### ***Incentives***

As part of the community-wide promotion of Active Transportation use, incentives could be utilized to increase interest and buy-in. These incentives could include branded “swag”, such as the t-shirts, lanyards, re-usable grocery bags, umbrellas, and flashlights utilized by other communities, to give away either as part of the neighbourhood pilot project, or at community functions where Active Transportation is being promoted. Relationships with community business partners could result in vouchers for students if they participate in bicycle rodeos and walking school bus programs, and prizes for local residents if they participate in the Commuter Challenge or who walk/ride to municipal activities (market, Granville Green concerts, etc).

Further, the creation of “bonusing” provisions in the Land Use By-law could be used to encourage and reward developers and business owners who go beyond the minimum requirements when incorporating Active Transportation friendly design elements into their buildings or sites. This could include additional bike parking, public seating areas, pedestrian-scale signage and lighting, and additional access walkways onto and through a site.

Finally, the creation of a cost-sharing program as a municipal unit, in conjunction with the Chamber of Commerce or other community groups, could be used to buy bike racks, planters, waste bins, signage, or enhance landscaping along a particular route or in key locations supporting Active Transportation routes. This could include holding a contest and/or promotion for unique bike rack designs in the community, and use access to funding programs (Nova Scotia Moves) to help defray costs for businesses or land owners who participate.

## ***Enforcement***

In contrast to utilizing incentives to encourage desired behaviours, enforcement could be used to discourage undesired behaviours that inhibit Active Transportation efforts. A key barrier identified through the survey and during public consultation was the maintenance of sidewalks in the winter. The Town could look at passing a by-law requiring that land owners remove snow from sidewalks adjacent to their properties within 24 hours of a snowfall. Enforcement of this by-law would be done on a complaint basis. Should this option be pursued, it would also be important for the Town to look at their snow removal process on roads that they are responsible to maintain to set an example and ensure overall buy-in. A prudent suggestion would be to look at making arrangements for a volunteer pool of individuals or groups that can be called upon to help those who are older, sick, or otherwise unable to shovel their own sidewalk. This pool of potential volunteers could include those volunteering with local service chapters or students.

The implementation of a snow clearing by-law and its enforcement would result in the Town needing to look at using or creating a By-law Control Officer position. This individual could also be used to enforce bans on parking in fire lanes at local commercial sites, which could be seen to also be a pedestrian and cyclist hazard (cars parked in drive lanes obstructing a clear view of pedestrians entering/existing building and/or obstructing barrier-free access points or ramps). Further research would be needed to determine the ultimate wage cost of such a position, but as a general reference the occupation guidelines provided by the Government of Nova Scotia outline that a By-law Officer in the province made, on average, an hourly wage of \$20.50/hour in 2009, with 10% of the people in that field

employed on a part-time basis that year. As a general figure, an active By-law Officer job advertisement in a rural municipality in Nova Scotia provides a wage range of \$42,525 to \$51,690 per annum. Fines collected through enforcement of snow removal and parking by-laws could be used to offset this staffing expense.

## **PHASING OF DEVELOPMENT**

Throughout the plan, suggestions or direction have been provided and identified with either short-term or long-term timelines. This has been done in order to allow the distribution of expenses associated with the implementation of this plan over a broader timeframe, while still allowing for improvement to the current system to increase function. For the most part, solutions suggested in this plan focus on improvement to the primary routes in the network, on the basis that they form a foundation for the rest of the system to be built upon. The only exception would be the secondary route identified for the McQuarrie Drive Extension/Reynolds Street, which passes by a senior's home, the public sports fields and the newly expanded community playground. Due to the lack of pedestrian infrastructure (sidewalks and crossings), tendency for vehicular short-cutting, and feedback received during the consultation, this area has been labelled as a "hot spot" and improvements to this secondary route are included in recommended "short term" solutions/upgrades provided in this plan.

With the exception of the suggestion for implementing a snow removal by-law and hiring a By-law Enforcement Officer, which will require further evaluation and public consultation, many of the suggested "soft infrastructure" options can be explored for implementation in the immediate horizon, given their limited expense compared to their potential impact on the success of increasing Active Transportation buy-in. Summer students can prepare, compile, and distribute education materials and serve as Active Transportation ambassadors. Some events, such as participating in the Commuter Challenge or Walk to School Day, could be implemented with very little required preparation for 2015 event dates.

## ***Funding Opportunities***

A number of funding programs are available to help with the creation and implementation of Active Transportation programs in the Province of Nova Scotia. The Ecology Action Centre (EAC) has provided an extensive list of potential sources of funding, including the Community Infrastructure Improvement Fund and the Heart and Stroke Walkabout Walkability Grants. A copy of the list provided by the EAC is attached as Appendix G to this plan for further reference.

Nova Scotia Moves may also be a funding option for assisting with Active Transportation initiatives other than sidewalk construction. Utilizing this program involves planning nearly a year in advance, as the application window is brief and does not open until after municipal budgets are set, but requires a financial commitment from program applicants due to its cost-sharing arrangement. The following suggested projects, found within this plan, could be candidates for future funding from this program:

- Signage, temporary speed humps, and pedestrian-scale lighting along the McQuarrie Drive Extension “hot spot”;
- General directional signage for on and off-road Active Transportation facilities;
- The purchase and installation of Active Transportation-supportive infrastructure, such as benches, bike racks, and barriers;
- Pilot project advertising, incentive and monitoring expenses; and,
- Wages for special positions that help to implement Active Transportation initiatives (suggested ambassador position).

Any projects or improvements anticipated to occur during the summer of 2015 should be proposed for the cost-sharing funding offered by Nova Scotia moves, in order to off-set some of the expense to the Town. This would require project design and costing to take place early in 2015, in order to have the full cost of the project known when the proposal window opens in May, and in order to ensure that the project can be completed by the end of the 2015/2016 fiscal period as per the funding parameters.

## **MEASURING SUCCESS**

One of the challenges in creating this Active Transportation Plan was the availability of data, specifically numerical data for matters including collision rates, user numbers, and traffic counts, early in the plan development process. Fortunately, over the course of the writing of this plan, two related projects were undertaken and could be consulted for supplementary information. The Port Hawkesbury Pathways Study (Ekistics, 2014) was commissioned to look specifically at the demand and options for establishing a pedestrian connection between the commercial centre on Reeves Street and the Nova Scotia Community College (NSCC) campus on the edge of town. The Reeves Street Safety Study (WSP, October 2014) provided detailed traffic volume counts and projections, and made a number of suggestions to improve safety and access along the Town’s vehicular spine. Both of these documents provide valuable information that can be used as baseline data when the suggested actions from this Active Transportation Plan are implemented and reviewed to evaluate their success.

### ***Determining What Has Been Accomplished***

Appendix “A” outlines the goals of this plan, which should be the guiding force as any suggested investments and actions are taken. Appendices “B” and “C” provide a summary of the recommended amendments to by-laws to support many of the Active-Transportation recommendations made throughout this plan. Finally, Appendix “H” provides a summary of all of the other short and long-term suggestions made through the body of this document. Every two years following the adoption of this plan, the summaries found in these appendices should be reviewed in order to gauge how successful implementation of the plan has been to date.

### ***Gauging Public Buy-In***

On a timetable coinciding with the review of the summaries noted above, efforts should be made to take a sample of public opinion on Active Transportation matters, as a means to measure the impact of physical infrastructure improvements and determine whether “soft” infrastructure investments are paying off. There are several options to do this; a blend of

several different mediums is suggested in order to obtain the broadest range of feedback. A survey can be held, although this should be done in both online and paper formats, due to the poor response received during the online-only survey held during the writing of this plan. In addition to a public open house, information sessions tacked on to other community events, such as farmers' markets, Ceilidh nights, Granville Green events, or Strait Pirates games.

## **UPDATING AND REVISING THIS PLAN**

Following the adoption of this plan, the document should be reviewed in its entirety no less than every five (5) years, in order to ensure that this document reflects current infrastructure, attitudes, and funding information. As measures recommended in this version plan are undertaken and realized, it is expected that they will move from the body of this document to a summary of its history and success, opening up

opportunities for new recommendations as Active Transportation services are expanded. By no means should this Plan be considered a static document covering all aspects of any future infrastructure and planning; future investment in roadway infrastructure, by-passes and government grants may open up opportunities not outlined in detail in this current document, including on-street bike lanes, additional multi-use pathways, signage strategies, and expansions to much-loved resources such as the boardwalk.

Care should be taken, however, to maintain a realistic outlook regarding the level of service demanded by the community, and the resources available for investment. Focussing on providing a well-connected, effective and properly maintained basic level of service should be a priority over expensive and flashy options. Ultimately, the focus of the plan should be to provide as inclusive of a level of accessibility as possible for the residents and visitors of Port Hawkesbury.

# CHAPTER 7:

## GLOSSARY

**Active Transportation** – means modes of non-motorized transportation, such as walking, cycling, in line skating that involve active movement by the individual, are environmentally friendly, contribute to the physical and social health of users, and are accessible to a wide range of age groups and user abilities within the community.

**Adjacent** - means lands, buildings and/or structures that are contiguous or that are directly opposite to other lands, buildings and/or structures, separated only by a laneway, municipal road or other right-of-way.

**Barrier-Free** - means that a building and its facilities can be approached, entered and used by people with physical and sensory disabilities.

**Building Design** - closely interrelated with built form and is a function of scale, proportion, rhythm, architectural elements and materials, often regulated through urban design policies and guidelines.

**Built Form** - built form is a function of building placement, mass, height and floor area and is typically regulated in the Land Use By-law in terms of building mass, lot coverage, building setbacks, height and floor area regulations as well as through urban design policies and guidelines.

**Built Heritage Resource** - means one or more significant building, structure, monument, installation or remains associated with architectural, cultural, social, political, economic, or military history and identified as being important to a community. These resources may be identified through designation under the Heritage Property Act, or listed by a local, provincial or Federal jurisdiction.

**Community Garden** - means a portion of public or private land, no larger than the lesser of 2,000 square metres or 10 percent of the total lot area, tended by a group of people, as individuals or as part of a club or association for the purpose of producing plants and/or food for personal and local consumption not for profit. A community garden does not include garden plots on private land rented or leased to individuals for a fee.

**Community Character** - refers to identifiable pockets of the urban fabric with distinctive physical attributes. These attributes include but are not limited to development patterns, scale of the built environment, architectural vernacular of existing buildings and structures, cultural heritage resources and community infrastructure. Community character is a reflection of community image, identity and sense of place and may also reflect cultural and social values. Cultivating community character is intended to foster community pride.

**Compatibility/Compatible** - means land uses and building forms that are mutually tolerant and capable of existing together in harmony within an area without causing unacceptable adverse effects or impacts. Compatibility or compatible should not be narrowly interpreted to mean “the same as” or even as “being similar to”.

**Complete Community** - a complete community meets people's needs for daily living throughout at entire lifetime by providing convenient access to an appropriate mix of jobs, local services, a full range of housing, and community infrastructure including affordable housing, schools, recreation and open space for their residents. Convenient access to public transportation and options for safe, non-motorized travel is also provided.

**Conversion** - means the change of use of lands or the alteration or change of use of an existing building or structure to some other use.

**Crime Prevention through Environmental Design (CPTED)** - the design and effective use of the built environment to reduce crime and the fear associated with crime, and an improvement in the quality of life. CPTED includes the specific design of physical space in the context of the needs of the users of that space, the expected/intended use of the space and the anticipated behavior of both legitimate users and potential offenders.

**Cultural Heritage Landscape** - means a defined geographical area of heritage significance that has been modified by human activities and is valued by a community. Such a landscape involves a grouping(s) of individual heritage features such as structures, spaces, archaeological sites and natural elements, which together form a significant type of heritage form, distinctive from that of its constituent elements or parts. Examples may include, but are not limited to, heritage conservation districts designated under the Heritage Property Act; and parks, gardens, battlefields, main streets and neighbourhoods, cemeteries, trails and industrial complexes of cultural heritage value.

**Cultural Heritage Resources** - includes buildings, structures and properties designated under the Heritage Property Act or listed on the Municipal Heritage Register, built heritage resources and cultural heritage landscapes.

**Existing** - when used in reference to a use, lot, building or structure, means any use, lot, building or structure legally established or created prior to the day of approval of this Official Plan.

**Heritage Attributes** - means the principle features, characteristics, context and appearance that contribute to the cultural heritage significance of a cultural heritage resource.

**Land Use By-law** - means a document dividing the Plan Area into smaller areas called zones, employed by the municipality to regulate the use of land. The by-law states exactly what land uses are currently permitted in the various zones and provides regulations, regarding matters including but not limited to: permitted locations for buildings; standards for lot size; parking requirements; building height; setbacks; densities; etc.

**Mixed Use** - a development or area that collectively achieves a mix of compatible land uses either in the same or separate buildings. The mix of land uses may include various non-residential land uses but must include residential dwellings. Mixed-use facilitates the provision of a wide range of residential types within close proximity to employment, institutional, social and recreational opportunities.

**Priority location** – means a special location in prominent view from the public realm that contributes to community or neighbourhood identity, character and image. These may include: corner properties, park spaces, terminating vistas, window streets or heritage buildings/properties.

**Province** - refers to the Province of Nova Scotia or one or more of its departments or other agencies that exercise delegated authority on behalf of one or more departments.

**province** - refers to the geographical area of Nova Scotia.

**Public Art** - means original art works, permanent or temporary, in any medium or discipline, placed, incorporated or performed in publicly accessible indoor or outdoor locations in response to the site and for the benefit of the public.



**Public Realm** - includes roadways, pedestrian linkages, parks and open spaces, semi-public spaces and accessible parts of public buildings. A significant component of the public realm is the streetscape, which includes all elements of the street as well as the building facades facing the street.

**Sense of Place** – refers to characteristics that make a place special or unique, often fostering a sense of authentic human attachment and belonging.

**Site Alteration** - means activities, such as grading, excavation and the placement of fill that would change the landform and natural vegetative characteristics of a site.

**Universal Accessibility/Universal Design** – refers to the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. Universal design seeks to create products and environments that are usable by the broadest spectrum of the population, regardless of age or physical differences.

**Utilities** - means an essential public service such as electricity, gas, television or communications/telecommunications that is provided by a regulated company or government agency.

**Views and Vistas** - means significant visual compositions of the built and natural environment that enliven the overall physical character of an area. Views are generally panoramic in nature while vistas are typically a strong individual feature framed by its surroundings.

**Walkability/Walkable** - a term describing the quality of the pedestrian experience; may encapsulate such concepts as connectivity and pedestrian linkages, streetscapes, safety and security, pedestrian comfort, and reasonable walking distances.

# APPENDIX “A”

## OBJECTIVES AND GOALS

### **Objectives of the Port Hawkesbury Active Transportation Plan**

- To create a safe and inclusive network for year-round travel by non-vehicular means within the Town of Port Hawkesbury
- To make the residents of Port Hawkesbury aware of the Active Transportation options available, and facilitate their decision to use those options
- To guide efficient investment in Active Transportation infrastructure by public and private interests

## **Goals of the Port Hawkesbury Active Transportation Plan**

### *Short Term (3 to 5 Year) Goals*

1. To establish a basic network of on and off-road facilities for Active Transportation users, providing rudimentary access to key locations in the town
2. To establish a partnerships with local organizations, employers, public institutions and industry, to create a foundation on which to build programming to support Active Transportation initiatives in the community
3. To obtain funding to pursue a pilot targeted marketing strategy to test "hard" and "soft" infrastructure elements considered in this plan, in order to better evaluate their appropriateness for Town-wide application.
4. To incorporate Active Transportation-supportive policies and regulations into the Town of Port Hawkesbury Municipal Planning Strategy and Land Use By-law; and,
5. To address as many of the "barriers" identified by the community during the development of this Plan as possible.

### *Long Term (5 Years and Beyond) Goals*

1. To establish a network fully connecting all residents within the Town limits, through on or off-road amenities such as trails, lanes or sidewalks, facilitating Active Transportation use
2. To begin creating linkages from Port Hawkesbury to national (TransCanada Trail), provincial (Blue Route) and other municipal Active Transportation networks
3. To increase the percentage of Port Hawkesbury residents reporting the use of Active Transportation methods for commuting to work in 2021, from levels reported in the 2011 National Household Survey.
4. To further develop and implement Active Transportation-supportive programming with community partners, including community participation in national/international activities such as the Commuter Challenge and Walking School Buses.

# APPENDIX "B"

## SUGGESTED UPDATES TO THE LAND USE BY-LAW

BY-LAW PART	SECTION	TITLE	CHANGE SUGGESTED
5		Site Plan Requirements	Consider amendments to require all developments in the Commercial Highway (C-3) zone to require Site Plan Approval, allowing planning staff the opportunity to work with developers to ensure that site development proposals include elements that support Active Transportation Use, including building orientation and relationship to the street, landscaping, and signage.
5		Site Plan Requirements	Consider amendments to require all developments in the Granville Waterfront Development (C-2) zone to require Site Plan Approval, allowing planning staff the opportunity to work with developers to ensure that site development and re-development proposals include elements that support Active Transportation Use, including building orientation and relationship to the street, parking configuration landscaping, and signage.
6A	6	Provisions for All Zones, General Provisions	Consider amending Section 6 (Corner Vision Triangle) or adding a new section to address Driveway Visibility Triangles, restricting structure, signage and vegetation heights within a prescribed distance of a driveway intersection with a public street, in the interest of pedestrian, cyclist and motorist safety.
6A	20	Provisions for All Zones, General Provisions	Consider amending Section 20 (Parking Requirements) to include a requirement for the provision of bicycle parking facilities, calculated as a percentage of the total number of required vehicular parking spaces, based on anticipated demand based on use (i.e. a school would create more cycle parking demand than a funeral home).
6A	21	Provisions for All Zones, General Provisions	Consider amending Section 21, to include a requirement for parking spaces and drive aisle to be located at least three (3) metres back from a property line adjacent to a public street, resulting in a "buffer" between parked

			vehicles and a sidewalk. This "buffer" would provide options for landscaping (street trees or other enhancements), and allow for some snow storage from both the parking lot and the sidewalk.
6A	21	Provisions for All Zones, General Provisions	Consider amending Section 21 to establish a maximum driveway width for commercial uses and shopping centres, and noting a requirement for any sidewalks to be carried continuous through access driveways in order to maintain the distinction between the vehicular realm and the pedestrian pathway.
6A		Provisions for All Zones, General Provisions	Consider an amendment to add a new section requiring barrier-free pedestrian access to be provided to the building entrance from the public sidewalk, by means of a pathway denoted by a material differing from that used for the parking lot surfacing (e.g. concrete sidewalk or unit pavers as opposed painted lines).
6B	6 & 9	Sign Regulations	Consider amendments to Sections 6 and 9 to include setback provisions for permanent and temporary signage, from property lines adjacent to streets and from driveways, in order to support driveway and corner visibility provisions in the interest of pedestrian, cyclist, and motorist safety.
16	2(a) & 2(b)	Commercial Highway (C-3) Zone	Consider adding a "maximum" front yard setback for all development types in order to encourage buildings to develop closer to the street, facilitating direct pedestrian access from the public sidewalk and facilitating the redevelopment of a streetscape that presents buildings, and not parking lots, first.
16	3	Commercial Highway (C-3) Zone	Consider revising Section 3, which currently requires that all access driveways for shopping centres (which include plazas) to be located on an arterial or collector road, to remove this requirement <u>OR</u> consider revising the Transportation Map, Map 1, to reclassify sections of key local roads (Reynolds and Church Streets, the MacQuarrie Drive Extension) to minor collectors, in order to facilitate future development that provides alternative site orientation and access for both pedestrians and vehicles to the Reeves Street corridor, similar to that visualized in the conceptual plan prepared by Ekistics Planning and Design in their 2004 Streetscape Study.
16	3	Commercial Highway (C-3) Zone	Consider revising Section 3, which currently requires that all access driveways for shopping centres (which include shopping centres) to be located on an arterial or collector road, to remove this requirement <u>OR</u> consider revising the Transportation Map, Map 1, to reclassify sections of

			key local roads (Paint Street, MacInnis Road, MacIntosh Avenue) to minor collectors, in order to facilitate future development that provides alternative site orientation and access for both pedestrians and vehicles to the Trunk 4. Improvements should be made to existing accesses onto these local roads, to provide vehicular alternatives to one entrance/exit, and better circulation/distribution of vehicles in these large shopping centre parking lots.
15	2	Granville Street / Waterfront Development (C-2) Zone	Consider adding a "maximum" front yard setback for all development types in order to encourage buildings to develop closer to the street, facilitating direct pedestrian access from the public sidewalk and facilitating the redevelopment of a streetscape that presents buildings, and not parking lots, first. Consider existing average building setbacks when determining what this maximum front yard setback should be.



# APPENDIX "C"

## UPDATES TO THE BICYCLE BY-LAW

The following changes are recommended to be made to the Port Hawkesbury Bicycle By-law:

1. Consider rescinding this by-law completely, as it is likely rarely followed (licensing), not widely known, and there is no designed by-law officer to enforce it.
2. If the bicycle by-law remains, consider amending the by-law to change the focus from being punitive (focusing on fines and enforcement) to a by-law supporting cycling, by noting how funds collected through the licenses will act more as a levy, with the monies collected go towards cycling-supportive measures including:
  - a. Bike racks and other cycling infrastructure, such as signage or lane painting; or,
  - b. Education and safety campaigns for adult and young riders.

# APPENDIX "D"

## SURVEY SUMMARY

A nine-question survey was created and available to residents online through the Survey Monkey website. This method of survey creation and distribution was utilized because it was available at no cost and could easily be distributed. Public uptake, however, did not meet expectations and only nine (9) responses were received, despite the survey being available for three months, with promotion via handouts, the local paper, and word-of-mouth presentations.

### Question 1: How Often Do You Participate in the Following Active Transportation Activities?

Answered: 8

Skipped: 1

Activity	Frequency				
	Daily	Several Times Each Week	Several Times Each Month	Several Times Each Year	Never
Hiking	0	0	3	1	4
Cycling	0	0	2	2	3
Walking	4	2	1	0	1
Jogging/Running	0	1	1	2	3
Cross-Country Skiing	0	0	0	3	4
Rollerblading/ Skateboarding	0	0	0	0	6
Other	1	0	0	0	4

## Question 2: When You Participate in Active Transportation Activities, Are You?

Answered: 9

Skipped: 0

Reason	Frequency			
	Most Often	Sometimes	Never	Not Applicable
Commuting to and from Work or School	2	4	2	1
Going to Meetings or Making Deliveries Related to Work or School	0	5	3	0
Travelling to Shop, Eat or Socialize	0	6	2	0
Doing it for Recreation or Exercise Reasons	5	3	1	0

**Question 3: What is the Average Distance that you would Travel for each of the Following?**

Answered: 9

Skipped: 0

	Less than 1km	1km - 3km	3km - 10km	10km - 20km	More than 20km	Not applicable	Total
Commuting to and from work or school	3	2	4	0	0	0	9
Making deliveries or traveling to meetings related to school or work	4	1	2	0	0	1	8
Trips for shopping, eating or socializing	3	2	2	1	0	0	8
Trips for recreation and exercise	1	3	2	1	1	0	8

**Question 4: Do you feel that the town should invest in improvements and activities that support and encourage Active Transportation?**

Answered: 9

Skipped: 0

Strongly Agree	8
Agree	0
Disagree	0
Strongly Disagree	1

**Question 5: How important do you feel each of the following reasons are for developing an Active Transportation strategy and plan?**

Answered: 9

Skipped: 0

	Very Important	Important	Neutral	Not Important	Not At All Important	Total
Improving the health of people who live and work in Port Hawkesbury	7	1	0	0	1	9
Providing connections to adjacent natural areas	6	2	0	0	1	9
Providing connections to schools, shopping and workplaces	7	1	0	0	1	9
Cutting Greenhouse Gas emissions	3	4	1	0	1	9
Improving access for residents without cars or who do not drive	7	1	0	0	1	9
Identifying hazards and barriers to pedestrians, cyclists and motorists	7	1	0	0	1	9
Providing access to historical or cultural amenities	1	6	1	0	1	9
Setting a local standard for non-vehicular access to sites	3	4	0	0	1	8

**Question 6: How much of an influence would each of the following have on your decision on whether or not to use Active Transportation?**

Answered: 8  
Skipped: 1

	Strong Influence	Moderate Influence	Neutral	Little Influence	No Influence
More hiking and cycling trails	4	1	1	1	1
Bike lanes or paved shoulders on roads	6	0	0	0	2
Sidewalks	6	1	0	0	1
More / better crosswalks	4	3	0	0	1
Curbs flush with the road at intersections with crossings	4	2	1	0	1
Safety education for pedestrians, cyclists and drivers	5	2	0	0	1
Trail and route maps	4	3	0	0	1
Shower / change facilities at destination	1	1	4	1	1
Secure bike parking at destinations	3	1	2	1	1
Weather (heat, rain, snow, ice)	3	3	1	0	1

Other: Not new hiking trails needed, but better maintenance of existing ones



**Question 7: What are the top three locations that you do, or would like to, travel to using Active Transportation?**

Answered: 6

Skipped: 3

SAERC	2
Civic Centre	1
Waterfront Boardwalk	1
Shopping Centre	1
Walking Trails	1
Parallel to Hwy 4 from Reeves St to Superstore	1
Mall	1
To Schools	3
To Catholic Church	1
Shopping	1
Home	1
Springhurst Apartments	1
Granville to Superstore	1
Civic Centre to Granville Street	1
Civic Centre to NSCC	1

**Question 8: What do you think are the 3 biggest barriers to walking or cycling in Port Hawkesbury?**

Answered: 7

Skipped: 2

Lights too fast	1
J-walking	1
Condition of sidewalks - not accessible or not available	4
4 lane highway	1
4 lanes on Reeves St	1
ice	1
winter maintenance of sidewalks	1
lack of well maintained, well lit sidewalks	1
curbs not flush with road	1
no pedestrian connectivity of Reeve with Superstore/Walmart	1
no crosswalks where there should be	1
Distracted drivers	1
poorly maintained and signed walking trails	1
lack of waterfront trails	1
secure bike parking	1
few intersections across Reeves St and Hwy 4 and they are intimidating	1

**Question 9: What age category do you fit into?**

Answered: 8

Skipped: 1

18 and younger 3

19-24 0

25-34 0

35-44 2

45-54 0

55-64 3

65-74 0

75 and older 0

# APPENDIX "E"

## CONSULTED PLANS AND POLICIES

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# APPENDIX "F"

## TRANSPORTATION AND INFRASTRUCTURE RENEWAL SIDEWALK STANDARDS

*Division: Highway Programs*

*Section: Construction*

*Function: Operations (HP 2.21.4)*

*Policy Number: PO1001*

### **Sidewalk Construction and Maintenance Policy Statement**

The Department of Transportation and Infrastructure Renewal (the Department) will not construct or maintain any sidewalks. Sidewalk construction and maintenance is the responsibility of Municipal Units. Municipal Units will be permitted to construct sidewalks within the Departments right-of-way where the Department determines operational requirements permit such construction.

### **Rationale**

The Province and Municipal Units negotiated the terms and conditions for a Provincial-Municipal Service Exchange which detailed the roles and responsibilities of both parties. The Provincial-Municipal Service Exchange stated that all sidewalk construction and maintenance would be the responsibility of the Municipal Unit in which the sidewalk was constructed. The Provincial-Municipal Service Exchange applies to all sidewalks, both those existing prior to April 1, 1995 and any sidewalks constructed after April 1, 1995.

### **Policy Objectives**

- To clarify responsibilities regarding the construction and maintenance of sidewalks.
- To provide direction for situations where the Department permits a Municipal Unit to construct a sidewalk within the Department's right-of-way.

### **Application**

This policy applies directly to staff of the Department and indirectly to staff of the Municipal Units. The authority for this policy is derived from the *Public Highways Act* and the Provincial-Municipal Service Exchange.

### **Accountability**

Area Managers will be responsible, and accountable, for the administration of this policy as it applies to Municipal Units within their specific area.

### **Monitoring**

The District Directors will monitor the policy's implementation, performance and effectiveness with regards to maintenance services on local roads.



### **Directives**

The Area Manager will issue a permit for all sidewalk construction projects and will ensure the sidewalk conforms to the Department's Design Standards for such construction. Upon completion of the project the Area Manager will approve the sidewalk construction verifying its compliance with the Department's Standards.

### **Guidelines**

1. Construction of Sidewalks within the Department's Right-of-Way Sidewalks are the responsibility of the Municipal Unit in which the sidewalk is constructed and are not cost-shared by the Department. Municipal Units will be permitted to construct sidewalks within the right-of-way of provincial roads; however, construction of sidewalks will be required to comply with the Department's design standards (refer to drawing HS501 and HS502 of the Department's Standard Specifications). The only allowable exceptions to the Department's Standard Specifications are described in Appendix A (Urban Type Sidewalks) and Appendix B (Rural Type III Sidewalks), and must have the approval of the District Director. Sub-standard sidewalk designs are not permitted. Sidewalk installation requires a Work Within Highway Right-of-Way Permit issued by the Area Manager. A refundable security deposit will be required. This deposit will be refunded upon satisfactory completion of the work, as determined by the Area Manager.

All costs associated with the sidewalk construction are the responsibility of the Municipal Unit. Costs, such as installation of curbs and gutters, as well as any associated street widening, retaining walls, storm drainage and land acquisition are the responsibility of the Municipal Unit. Any associated works (designs, new construction) in addition to the actual sidewalk, must be approved by the Area Manager. The Area Manager may impose a non-refundable deposit to cover such activities such as design reviews and having a Department inspector on site.

2. Maintenance of Sidewalks/Travelled Way

The Department will not, under any circumstances, maintain a municipal sidewalk. On existing sidewalks and on newly constructed sidewalks, once construction is completed the Department will maintain the travelled way up to and including the curbs and storm drainage system (if applicable).

### **References**

- The Provincial-Municipal Service Exchange
- The Public Highways Act
- The Nova Scotia Department of Transportation & Infrastructure Renewal
- Standard Specification, Highway Construction and Maintenance
- Geometric Design Guide for Canadian Roads
- Work Within Highway Right-of-Way Permit and Brochure

### **Enquiries**

- District Director
- Manager of Highway Planning & Design
- Program Management Engineer

### **Appendices**

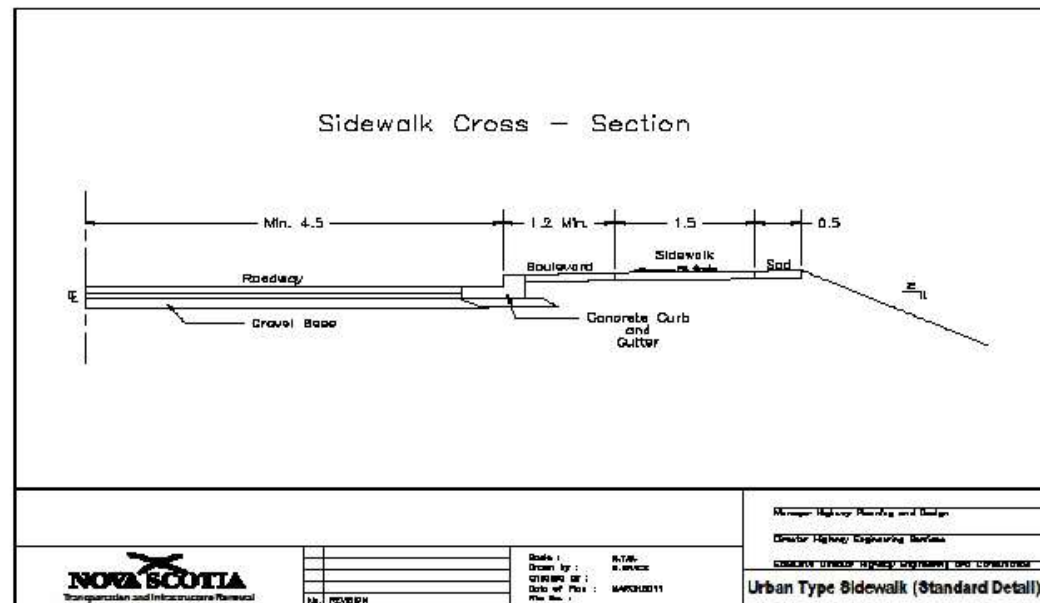
- Appendix A: Urban Type Sidewalks
- Appendix B: Rural Type III Sidewalks

## APPENDIX A

### Urban Type Sidewalks

#### Urban Type Sidewalk (see diagram below)

- I. Circumstances may dictate the need to decrease the width of the park lane as recommended in the Geometric Design Guide for Canadian Roads. However, to allow for efficient snow and ice control operations, in no case shall the distance from the centreline of the roadway to the face of the curb be less than 4.5 metres.
- II. To allow for an adequate storage of snow, the standard boulevard shall be 1.2 metres measured from face of curb to the start of the sidewalk.
- III. The minimum width of the sidewalk shall be 1.5 metres.
- IV. For pedestrian safety, a 0.5 metre grassed shoulder must be provided adjacent to the sidewalk. In addition, a minimum 2:1 side slope shall be provided. It may be possible to increase the gradient of the slope, however, in these instances a hand rail must be provided and the material used to stabilize the slope must be approved by the Area Manager.

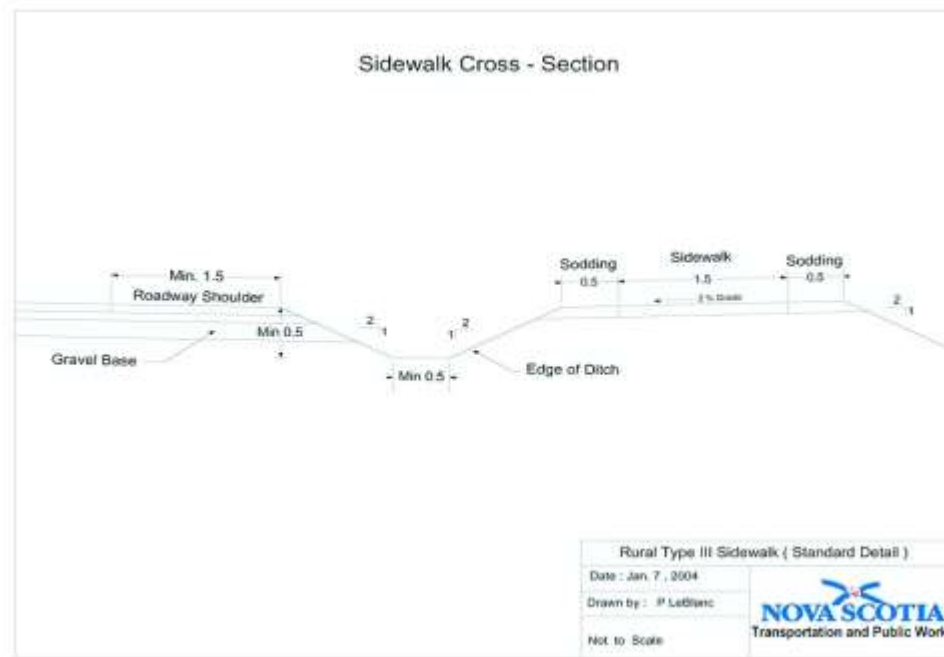


## APPENDIX B

### Rural Type III Sidewalk

#### Rural Type III Sidewalk (see diagram below)

- I. The roadway shoulder width shall be a minimum of 1.5 metres.
- II. The bottom of the ditch must be a minimum of 0.5 metres in width and the side slopes must not exceed 2:1.
- III. For pedestrian safety, a 0.5 metre grassed shoulder must be provided on each side of the sidewalk. In addition, a minimum 2:1 slope shall be provided.
- IV. If may be possible to increase the gradient of the slope or back slope, however, in these instances a hand rail must be provided and the material used to stabilize the slope must be approved by the Area Manager.
- V. The open ditch must be located between the roadway and the sidewalk. For maintenance considerations, it will not be permissible to construct the ditch between the sidewalk and right-of-way boundary.



# APPENDIX "G"

## ECOLOGY ACTION CENTRE FUNDING LIST

### **Federal Government**

- EcoAction (Environment Canada): <http://www.ec.gc.ca/ecoaction/>
- Community Infrastructure Improvement Fund:  
<http://www.acoaapec.gc.ca/eng/ImLookingFor/ProgramInformation/Pages/CommunityInfrastructureImprovementFund.aspx>
- Transport Canada: <http://www.tc.gc.ca/eng/programs/surface-highways-funding-912.htm>

### **Other Federal**

- Federation of Canadian Municipalities <http://www.fcm.ca/home.htm>
- TD Friends of the Environment Foundation <http://www.fef.td.com/>
- Aviva Community Fund <http://www.avivacommunityfund.org/search/grid>
- CN EcoConnexions From the Ground <http://www.tcf-fca.ca/cnfromthegroundup/>
- MEC <http://www.mec.ca/AST/ContentPrimary/Sustainability/CommunityContributions.jsp>
- Evergreen Foundation <http://www.evergreen.ca/en/funding/overview.sn>
- Greenshield Canada Community Giving Program <http://www.greenshield.ca/sites/corporate/en/whowe-are/giving/Pages/COMMUNITY-GIVING-PROGRAM.aspx>

### **Provincial Government**

- NS Department of Health and Wellness Grants <http://www.gov.ns.ca/hpp/pasr/grants-andincentives.asp>
- NS Department of Energy NS Moves <http://www.gov.ns.ca/energy/nsmoves/>
- Trail Maintenance Program Grant <http://www.gov.ns.ca/hpp/pasr/grants.asp>
- Portage and Hiking Trail Fund <http://novascotia.ca/news/release/?id=20130802005>
- Tourism Development Investment Fund <http://novascotiaturismagency.ca/tourism-developmentinvestment-fund>
- Nova Scotia Tourism Agency First Impressions Program <http://novascotiaturismagency.ca/tourismdevelopment-investment-fund>

- Resource Recovery Fund Board (for projects that reuse materials – like reusing bikes or reusing materials to create bike racks, etc.) <http://www.rrfb.com/funding.asp>
- Road Safety Advisory Committee, Nova Scotia Department of Transportation <http://novascotia.ca/tran/roadsafety/rsac.asp>

#### **Other Provincial**

- Community Health Boards <http://www.communityhealthboards.ns.ca/>
- Active Halifax Communities Good Ideas Funding Program <http://www.halifax.ca/activehalifax/>
- IWK Community Grants <http://www.iwk.nshealth.ca/index.cfm?objectID=B62F519F-FA6E-3CCB-51ADA28C6514E6A0>
- Sage Environmental Program <http://www.sagegreen.ca/>
- Doctors NS Strive Award <http://www.doctorsns.com/en/home/aboutdoctorsnovascotia/StriveAward/default.aspx>
- Heart & Stroke Walkabout Walkability Grants <http://walkaboutns.ca/walkabout-info/walkaboutprograms/community/walkability-grants/>
- Rural Leadership Grant [http://rural.justhosting.ca/?page\\_id=34](http://rural.justhosting.ca/?page_id=34)
- Other ideas to research: Business improvement districts/associations, local businesses, Municipal grants, municipal Councillor discretionary funds, local banks, local developers, hospitals, universities, crowd-sourcing

#### **For Children/Youth AT Initiatives**

- GoodLife Kids Foundation Grants (deadlines March 1, 2013 and April 30, 2013) <http://www.goodlifekids.com/>
- Participaction Teen Challenge (formerly known as SOGO Active) <http://www.recreationns.ns.ca/programs-initiatives/sogo-active/>
- WWF Green Community Grants <http://c.studentawards.com/greencommunityprogram/>
- The Explore Fund <http://explorefund.ca/>
- PHE Canada Health Promoting School Funding <http://www.phecanada.ca/awards/grants/healthpromoting-schools>

#### **General**

- Green Source Funding Database (compiled by Environment Canada) <http://www.ec.gc.ca/financementfunding/default.asp?lang=En&n=768DAFB1-1>
- Consider asking for vendor samples or demos of products/materials for your project (many will consider free or discounted products/materials)

# APPENDIX "H"

## SUMMARY OF SUGGESTED SHORT AND LONG-TERM ACTIONS

"Hard" Infrastructure Items		
REEVES STREET	Short-Term Solutions	
	Pedestrian Signals	<ul style="list-style-type: none"> <li>In consultation with TIR, pedestrian signal intervals should be examined to ensure that adequate time is afforded to individuals crossing with the signal.</li> <li>Consideration should be given to incorporating pedestrian crossing lights that include a "countdown" feature, providing pedestrians with a better idea of how long they actually have to complete their crossing.</li> <li>Buttons to activate any pedestrian signals should be located in a location and at a height that is accessible to users of all ages and abilities, year-round.</li> </ul>
	Sidewalk Gaps	<ul style="list-style-type: none"> <li>The northern side of Reeves Street for a majority of the stretch between Trunk 4/4A and Old Sydney Road should have a concrete sidewalk installed, as there are two noticeable gaps there now.</li> <li>Coordination with TIR to tie the one stretch of sidewalk into landing pads at the intersection of Trunk 4/4A and Sydney Street will be an important part of coordinating this part of the network</li> <li>Damaged and obstructed sidewalk sections should be repaired and replaced, as necessary, to avoid any "gaps" due to physical barriers to certain users. Currently, a hydro pole and light standard obstruct the sidewalk at the intersection of Reeves Street with Reynolds</li> <li>Implementing a connection from the NSCC campus to the Town will be an important project for network users and fill a large "gap" in the system.</li> </ul>
	Explore an Off-Road Cyclist Solution	<ul style="list-style-type: none"> <li>Limited opportunity exists for accommodating cyclists off-road on Reeves Street. A better solution may be to identify an alternative dedicated cycling route, with strong connections via local cross-streets to Reeve Street shops and services and on-site access and secure</li> </ul>



		parking.
REEVES STREET	Long-Term Solutions	
	Streetscape Improvements	<ul style="list-style-type: none"> <li>The addition of street trees, street furniture such as benches and waste receptacles, and pedestrian-oriented way-finding signage can be done on a block-by-block basis, allowing for a trial-run of performance and maintenance needs before further investment is made.</li> <li>Street lighting can be reviewed in conjunction with TIR to determine whether opportunities exist to utilize models or designs that may provide superior luminary coverage while using less energy and complying with general dark-sky practices.</li> <li>Opportunities for modifications to the width of lanes, the inclusion of a median, the addition of further pedestrian crossings and provisions for on-street cycling lanes should be explored with TIR staff.</li> </ul>
	Active Transportation-Friendly Development	<ul style="list-style-type: none"> <li>Through modifications to the regulations that guide development, amenities and features that support active transportation initiatives can be incorporated on a site-by-site basis as new buildings are built or older developments are modified or re-purposed.</li> </ul>
GRANVILLE STREET	Short-Term Solutions	
	Barrier-Free Crosswalks	<ul style="list-style-type: none"> <li>Ensure that all pedestrian crossings, both mid-block and at intersections, are provided with drop curbs (or benched asphalt) in order to facilitate barrier-free access for pedestrians and young cyclists.</li> <li>Consider adding crosswalks with a drop curb across Granville Street providing access to the Granville Green, ideally where existing pathways meet the right-of-way, including at the intersection with Pitt Street.</li> </ul>
	Maintenance	<ul style="list-style-type: none"> <li>Repair and/or replace concrete sidewalk panels or unit pavers that are broken or are not even, in order to reduce trip hazards for pedestrians and barriers for wheeled users (strollers, wheelchairs)</li> <li>Any road works or servicing that may have inadvertently obstructed pedestrian crossings at driveways or intersections should be addressed.</li> </ul>
	Cycling Awareness	<ul style="list-style-type: none"> <li>"Share the Road" signage should be considered to increase awareness of on-road cycling along this route.</li> <li>On-street paint may be utilized as well, although the benefit of this investment would be limited by snow coverage in the winter months.</li> </ul>
GRANVILLE STREET	Long-Term Solutions	
	Making Space for Sidewalks	<ul style="list-style-type: none"> <li>Look to work with utility partners to seize any future opportunities to consolidate service lines to one side of Granville Street, or preferably, underground.</li> </ul>

	Roadway and Parking Modifications	<ul style="list-style-type: none"> <li>Explore prospects to reduce vehicle lane widths to create opportunities for on-street parking or bike lanes.</li> <li>Look to work with local business owners to modify on-site parking configurations in order to reduce front-yard parking and replace it with a public parking lot and on-street parking spaces.</li> <li>Explore opportunities to create an all-way vehicular stop at the intersection with Pitt Street</li> <li>Explore opportunities to reconfigure and/or signalize the intersection of Reeves Street and Old Sydney Road</li> </ul>
	Streetscape Improvements	<ul style="list-style-type: none"> <li>The addition of street trees, street furniture such as benches and waste receptacles, and pedestrian-oriented way-finding signage can be done on a block-by-block basis, allowing for a trial-run of performance and maintenance needs before further investment is made.</li> <li>Street lighting can be reviewed to determine whether opportunities exist to utilize models or designs that may provide superior luminary coverage while using less energy and complying with general dark-sky practices.</li> <li>Cost-sharing or incentive programs can be explored to work with local business owners and multi-tenant building owners to encourage the provision of bicycle racks and seating areas.</li> </ul>
PITT STREET	Short-Term Solutions	
	Improving Barrier-Free Access	<ul style="list-style-type: none"> <li>Improve sidewalk aprons at intersections with Bernard and Queen Street, providing sufficient room for barrier-free access around obstructions such as hydro poles and fire hydrants.</li> <li>Add a drop curb in front of the Post Office main entrance to permit barrier-free access for residents parking on-street or crossing mid-block to access the Post Office.</li> </ul>
	Provide Bicycle Parking	<ul style="list-style-type: none"> <li>Work with destination properties, such as the Post Office, St. Mark's and Tim Horton's, to install bike racks on site</li> <li>Explore opportunities for cost sharing or external funding, particularly if it would result in the use of unique racks or alternative technologies</li> </ul>
	Winter Maintenance Solutions	<ul style="list-style-type: none"> <li>Review current snow clearing requirements, with the possibility of requiring residents to clear snow from sidewalks adjacent to their properties within a certain timeline following a snow storm.</li> </ul>
PITT STREET	Long-Term Solutions	
	Streetscape Improvements	<ul style="list-style-type: none"> <li>Look at installing pedestrian-scale lighting and directional signage targeting pedestrians and cyclists</li> </ul>

	Accessible Rest Stations	<ul style="list-style-type: none"> <li>Look at developing seating areas, or level concrete rest areas adjacent to sidewalks, to provide opportunities for Active Transportation users to take a break, particularly if age or ability makes steeper routes like Pitt Street a challenge.</li> </ul>
TRUNK 4/4A	Short-Term Solutions	
	Improve Existing Conditions	<ul style="list-style-type: none"> <li>Work with TIR to identify locations where storm water has eroded gravel shoulders, and should be repaired in order to assist travel for pedestrians or cyclists who must travel this route.</li> </ul>
	Address An Identified Active Transportation Barrier	<ul style="list-style-type: none"> <li>Work to TIR to evaluate whether pedestrian indicators at signalized crossings provide enough time for pedestrians to negotiate/clear the intersections.</li> </ul>
	Discourage Jay-Walking	<ul style="list-style-type: none"> <li>Consider using signage and other physical deterrents (bollards or gates) to encourage pedestrians to continue on the adjacent off-road pathway through to Pinecrest Drive instead of jaywalking across the highway at MacInnis Road.</li> </ul>
	Make Improvements to the Alternative Route	<ul style="list-style-type: none"> <li>Ensure that the alternative to walking along the highway shoulder is more appealing, to encourage users to take the off-road trail unless absolutely necessary to travel along the roadway.</li> <li>This includes: regular cleaning and inspection to remove graffiti that some users may find threatening or perceive to indicate danger; ensuring that the off-road pathway is level and provides a barrier-free surface (current asphalt heave may obstruct accessibility for users who need a level surface due to age or wheeled assistance devices); and, look at adding signage and lighting to encourage as many users as possible to continue on the path to Pinecrest Drive.</li> </ul>
TRUNK 4/4A	Long-Term Solutions	
	Develop an Off-Road Multi-Use Path/Trail	<ul style="list-style-type: none"> <li>Work with TIR to identify opportunities for a multi-modal pathway running along the west side of the road from Granville Street to Queen Street, and along the east side of the road from Queen Street to Paint Street, giving access to the Industrial Park, direct passage to the commercial centre, and connecting the residences off of the Queen Street Extension to the rest of the network to the north.</li> </ul>
	Encourage Pedestrian-Friendly Development	<ul style="list-style-type: none"> <li>Revise regulations in the Land Use By-law, to encourage commercial and industrial developments to provide physical connections to the street for pedestrians and cyclists.</li> <li>Encourage commercial development/redevelopment at the intersection of Paint Street and Trunk 4 to orient closer to the street, in order to create an atmosphere that is less hostile to pedestrians</li> </ul>

TAMARAC DRIVE	Short-Term Solutions	
	Use Area as an Active Transportation Pilot Neighbourhood	<ul style="list-style-type: none"> <li>Use the neighbourhood as a pilot area for testing education campaigns or infrastructure improvements</li> <li>Areas of focus can include: <ul style="list-style-type: none"> <li>a. Development of community-based education materials</li> <li>b. Community-specific travel-time maps</li> <li>c. Walking school bus support</li> <li>d. Sidewalk and trail maintenance programming and enforcement</li> </ul> </li> </ul>
TAMARAC DRIVE	Long-Term Solutions	
	Roadway Improvements	<p>Consider opportunities to review existing services and amenities (sidewalks, lighting, signage, landscaping) and areas where improvement may be possible (waste bins, seating or rest areas, formalized on-street parking, bike lanes). This may include:</p> <ul style="list-style-type: none"> <li>a. Enhancing Crosswalks</li> <li>b. Adding North-Side Sidewalks</li> </ul>
	Active-Transportation Supportive Infill	<ul style="list-style-type: none"> <li>Vacant or under-developed lots provide opportunity for infill along this stretch and within the adjacent commercial node.</li> <li>Ensure that any new development includes Active Transportation friendly features such as street-level active facades, bike racks, pedestrian access and landscaping</li> </ul>
MACQUARRIE DRIVE EXTENSION / REYNOLDS STREET	Construct a Sidewalk	<ul style="list-style-type: none"> <li>Provide a continuous, barrier-free sidewalk along at least one side of the full extent of this secondary route</li> <li>Provide crosswalks where necessary</li> <li>Ensure that curb cuts are provided to allow safe passage for walkers, wheelchairs and strollers</li> </ul>
	Moderate Traffic Speeds	<ul style="list-style-type: none"> <li>Consider utilizing seasonal speed bumps adjacent to the community playground to discourage vehicles shortcutting at high rates of speed</li> </ul>
<b>"Soft" Infrastructure Items</b>		
EDUCATION	Route Mapping	<ul style="list-style-type: none"> <li>Have a summer student prepare maps identifying AT routes, providing estimated travel times and identifying bike rack locations</li> </ul>
	Safety Information	<ul style="list-style-type: none"> <li>In conjunction with the RCMP, distribute information pamphlets about safe walking/biking to local schools or at community events</li> </ul>
	Youth Outreach	<ul style="list-style-type: none"> <li>Have a summer student create an informative colouring book for distribution at local schools</li> </ul>

		<p>(age appropriate – K-4 target likely).</p> <ul style="list-style-type: none"> <li>• Tie this booklet in with cycling to school or walking school bus activities</li> </ul>
<b>EVENTS, OUTREACH AND MARKETING</b>	Join National Movements	<ul style="list-style-type: none"> <li>• Encourage community participation in national movements such as the Commuter Challenge (June) and Walk to School Day (October)</li> </ul>
	Branding	<ul style="list-style-type: none"> <li>• Create a logo to brand Port Hawkesbury's Active Transportation initiative, for use online, for mobile apps, and on AT infrastructure (signs), to give the impression of a coordinated AT effort</li> </ul>
<b>DATA COLLECTION</b>	Collision Statistics	<ul style="list-style-type: none"> <li>• Continue to work with the RCMP to collect data about pedestrian/vehicle collisions, including location, season, and time of day</li> <li>• Map this data to identify locations where environmental factors could be improved to reduce these events, or to highlight areas that should be targeted in future versions of this plan.</li> </ul>
<b>AT AMBASSADORS</b>	AT Ambassadors	<ul style="list-style-type: none"> <li>• Hire local youth over the summer to serve at AT Ambassadors, doing basic maintenance, trail patrol, and to undertake other initiatives already identified in this table</li> </ul>
<b>INCENTIVES</b>	Swag	<ul style="list-style-type: none"> <li>• Buy "prizes" to give out to residents while promoting AT initiatives, such as umbrellas, shopping bags, and key-lights</li> <li>• Work with community businesses to secure vouchers to give to individuals who participate in AT events, like bike rodeos or the Commuter Challenge</li> </ul>
	Land Use By-law "Bonusing"	<ul style="list-style-type: none"> <li>• Create bonusing provisions in the Land Use By-law to reward developers who go beyond the minimum of providing AT infrastructure on their site.</li> </ul>
	Cost-Sharing	<ul style="list-style-type: none"> <li>• Create a cost-sharing program with local groups or businesses to help fund the acquisition and installation of AT infrastructure</li> <li>• Hold a design contest for AT infrastructure</li> <li>• Use municipal access to funding programs to help with this initiative</li> </ul>
<b>ENFORCEMENT</b>	Sidewalk Snow Clearing	<ul style="list-style-type: none"> <li>• Pass a municipal by-law requiring that property owners remove snow and ice on sidewalks adjacent to their property within 24 hours of a snowfall</li> <li>• Ensure that municipal sidewalk snow removal efforts follow this timeline as well</li> </ul>
	By-law Enforcement Officer	<ul style="list-style-type: none"> <li>• Create a By-law Control/Enforcement Officer position with the Town</li> <li>• Use this position to enforce the snow clearing by-law, as well as parking enforcement, including vehicles illegally parked in fire lanes</li> </ul>