



OROMOCTO

Active Transportation Plan


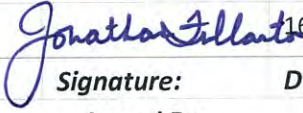


FINAL REPORT

Prepared for Town of Oromocto
Prepared by CBCL Limited

November 13, 2012
Project # 121232.00



Final Report	G. Smith		16 Nov. 12	J. Fullarton	 16 Nov. 12
Issue or Revision:	Name:	Signature:	Date:	Name:	Signature: Date:
		Reviewed By:			Issued By:



CBCL LIMITED

Consulting Engineers

ISO 9001

Registered Company

This document was prepared for the party indicated herein. The material and information in the document reflects CBCL Limited's opinion and best judgment based on the information available at the time of preparation. Any use of this document or reliance on its content by third parties is the responsibility of the third party. CBCL Limited accepts no responsibility for any damages suffered as a result of third party use of this document.



16 November 2012

Mr. Bill Jarratt
Recreation and Tourism Director
Town of Oromocto
4 Doyle Drive
Oromocto NB
E2V 2V3

Dear Mr. Jarratt:

RE: Oromocto Active Transportation Plan

CBCL Limited and Michael Haynes are pleased to submit this final report for the Oromocto Active Transportation Plan.

77 Westmorland Street, #110

PO Box 451

Fredericton, NB

Canada E3B 4Z9

Thank you for the opportunity to work on this interesting project. Our team has enjoyed working with you and your colleagues. We particularly found the week that we spent in Oromocto working closely with Fred and you to be very enjoyable as well as informative. Thanks also for your careful review of the document.

Telephone: 506 450 9441

Fax: 506 450 4199

E-mail: info@cbcl.ca

www.cbcl.ca

We trust the information provided in the report meets your needs. If you have any questions, please do not hesitate to contact me.

Yours very truly,

CBCL Limited

Gordon Smith, CSLA, MCIP
Principal and Group Leader – Planning and Landscape Architecture
Direct: (902) 421-7241 x2488
E-Mail: gordons@cbcl.ca

**Solving
today's
problems
with
tomorrow
in mind**

ISO 9001
Registered Company

/encl.

Project No: 121232.00

Contents

- CHAPTER 1 Introduction 1**
- CHAPTER 2 Potential Impacts and Benefits 2**
- CHAPTER 3 Existing Conditions 4**
 - 3.1 Active Transportation System..... 4
 - 3.1.1 Rail to Trail (Trans Canada Trail) 4
 - 3.1.2 Sidewalks and Pedestrian Walkways 4
 - 3.1.3 Designated Cycling Routes..... 5
 - 3.1.4 Paved Shoulders / Striping..... 6
 - 3.1.5 Designated On-Road Bike lanes 6
 - 3.2 Public Lands 7
 - 3.3 Destinations 7
 - 3.4 Barriers..... 8
- CHAPTER 4 Active Transportation Planning Principles..... 9**
 - 4.1 Consultation..... 9
 - 4.1.1 Public Consultation Meetings 9
 - 4.1.2 Stakeholder Meeting 9
 - 4.2 Goals and Guiding Principles 9
- CHAPTER 5 Recommendations 14**
 - 5.1 Network, Priority Areas and Opinion of Probable Costs 14
 - 5.1.1 High Priorities 14
 - 5.1.2 Medium Priorities 18
 - 5.1.3 Low Priorities 18
 - 5.2 General Design Guidelines..... 19
 - 5.2.1 Shared Use Facilities 20
 - 5.2.2 Designated Shared Roadways..... 20
 - 5.2.3 Sidewalk Walkways..... 21

5.2.4	Signage	21
5.2.5	Public Realm Design.....	23
5.3	Education, Promotion and Advocacy.....	23
5.3.1	Education and Promotion	23
5.3.2	Advocacy	27
5.4	Maintenance	28
5.5	Additional Municipal Policies to Encourage Active Transportation	28

Appendices

- A The Case for Active Transportation
- B Notes from Public Meeting
- C Notes from Stakeholder Meeting
- D Bibliography

CHAPTER 1 **INTRODUCTION**

By creating a well-connected, safe and functional Active Transportation Plan, the Town of Oromocto can encourage a more active, healthy lifestyle. Active transportation enhances quality of life, attracts business and knowledge workers to a community and contributes to economic development. Active transportation includes walking and biking, but also in-line skating, jogging, skateboarding and the use of motorized personal mobility devices such as powered wheelchairs or medical scooters.

The Active Transportation Plan for the Town of Oromocto provides:

- the planning principles that were applied in the development of the plan;
- a plan showing the overall network and hierarchy of routes;
- an inventory of existing active transportation infrastructure;
- opportunities and design guidelines for future active transportation infrastructure;
- an opinion of probable costs (to be completed and sent under separate cover); and
- a phasing plan.

The plan is based on an analysis of local conditions, a review of existing policies and by-laws, best case active transportation practices, and community consultation.

CHAPTER 2 POTENTIAL IMPACTS AND BENEFITS

According to the Government of New Brunswick¹, rates of obesity have tripled in the province in the last 25 years and at 33.8%, the province has one of the highest obesity rates in Canada. In its Wellness Strategy, the province states that most New Brunswickers are not active enough for optimal health benefits.² In 2001, it was estimated that obesity costs the New Brunswick economy an estimated \$200M a year or 1.4% of GDP³.

Health Canada recommends that adults accumulate 150 minutes of moderate physical activity per week while children obtain at least 60 minutes per day. By making physical activity a key component of their transportation habits, individuals can easily achieve this target while carrying out their daily tasks.⁴ Statistics Canada ranked New Brunswick as the province with the highest rate of physical inactivity amongst adults more than 20 years old⁵.

Over the last 10 years, the concept of Active Transportation has been gaining popularity because the health, social, environmental, economic and tourism benefits are so substantial. There is clear evidence of the benefits associated with designing cycling and pedestrian friendly communities and encouraging people to be more active by walking and biking more often, for both recreation and utilitarian purposes.

Promoting active transportation, especially through the development of an integrated on and off-road system that provides transportation and recreation options, is a simple and obvious strategy that can encourage people to reduce their use of the personal automobile and create sustainable, more liveable, safe and active communities.

These benefits include improved health, fitness, quality of life, and social interaction for citizens, a

¹ *Get Wellness Soon: The Facts are In*. <http://www.getwellnesssoon.ca/EN/facts.cfm>, reviewed on 23 March 2011.

² Canadian Community Health Survey 2005; Shields, M & Tremblay, M. 2008; Canadian Fitness and Lifestyle Research Institute 2007 quoted in *Live well, be well - New Brunswick's Wellness Strategy 2009-2013*, page 6. <http://www.gnb.ca/0131/pdf/w/Live%20well,%20be%20well.%20New%20Brunswick's%20Wellness%20Strategy%202009-2013.pdf>, reviewed on 23 March 2011.

³ GPI Atlantic - Colman, R. 2001, quoted in *Live well, be well - New Brunswick's Wellness Strategy 2009-2013*, page 6.

⁴ http://kn.fcm.ca/ev.php?URL_ID=2175&URL_DO=DO_TOPIC&URL_SECTION=201&URL_PAGINATION=20&reload=1107286064, reviewed on 1 February 2005.

⁵ Cited in *Get Wellness Soon: The Facts are In*. <http://www.getwellnesssoon.ca/EN/facts.cfm>, reviewed on 23 March 2011.

cleaner environment resulting from more sustainable means of transportation, and economic benefits related to new tourism opportunities and diversified transportation options to shops and services for workers and patrons.

The Canadian GoforGreen program (http://www.goforgreen.ca/home_e.html) identifies health, the environment, safety, the built environment, barriers to active transportation, and economic benefits as the key areas to be addressed in a sound active transportation plan. Creating an active transportation network requires government leadership to establish a range of policies and programs that support opportunities for people of all ages and abilities to engage in routine daily physical activity; these policies might address:

- Bicycle and pedestrian oriented design;
- Mixed-use development;
- Ample recreational facilities;
- Locating schools in walkable neighborhoods; and
- Funding and promoting active living programs.⁶

Further information on the case for active transportation can be found in Appendix A.

⁶ <http://www.activelivingleadership.org/aboutal.htm>, reviewed on 1 February 2005

CHAPTER 3 **EXISTING CONDITIONS**

3.1 Active Transportation System

The community already has many very good pieces of infrastructure that meet the needs of an active transportation system. The key issue with the system is a number of gaps where connections have not been made. The sections below describe existing conditions.

3.1.1 Rail to Trail (Trans Canada Trail)

The Trans Canada Trail has been developed to a high standard from the bridge crossing the Oromocto River to the intersection with Onondaga Street. This section is surfaced with crusher dust, to a width of three meters. There are numerous access points throughout its length, and there is a considerable amount of furniture installed adjacent, particularly at Deer Park and Sir Douglas Hazen Park. From Onondaga to the intersection with Waasis Road/Highway 102, the trail is unimproved.



3.1.2 Sidewalks and Pedestrian Walkways

Oromocto is generally well-serviced with sidewalks alongside main arterial roads. Its secondary streets usually have no sidewalks at all. However, posted signs recommend a 30 kph speed by motorists when children are present, and no on-street parking is permitted, effectively providing more room for walking near the curb and better view-planes. A substantial amount of the sidewalks in the PMQ district are in urgent need of repair.

There are significant gaps in the sidewalk system along arterial roads:

- Connection between Pioneer Avenue and Restigouche Road on Waasis Road;
- Both sides of Restigouche Road; and
- Pioneer Avenue from Carpenter to Gateway.



In addition to the on-road sidewalks, there exists an extensive network of short connecting paths within neighbourhoods linking adjacent streets. This tertiary network varies in aspect, ranging from the recently-paved to well-defined footpaths across private property. As the streets in Oromocto do not use the grid system of design, these tertiary routes are essential in providing AT connectivity.

The off-road path and tunnel connecting Pioneer Avenue to D'Amours is an important link. Its surface currently is a temporary poorer-grade pulverized reclaimed asphalt surface, and the route is bordered by thick forest. In addition, there are significant security concerns associated with the tunnel that limit its use.

3.1.3 Designated Cycling Routes

As there is a significant separation between them, the routes on Waasis Road and Waasis West Road must be considered as two distinct paths. The section along Waasis West runs between Pioneer Avenue and McFadzen Court. Although in excellent physical shape, surfaced in asphalt and of adequate width, there is no signage of any type indicating that it is usable by bicycles. In addition, without a connection either to Finnamore Street or over the bridge across the Trans Canada Highway, and with few residences on the same side of Waasis West, the track is isolated and under-used.

The section on Waasis Road is more heavily used, but also suffers from lack of connectivity. On one end it does not quite reach the High School; on the other it stops short of the Waasis/Restigouche intersection. As a result, although it is mostly in excellent physical condition: asphalt-surfaced and standard width, it is primarily used only for local traffic. This section, which also has no posted

directional, regulatory, informational, or interpretive signage, is also designated for pedestrian and cycling use in a non-standard format, with a painted solid centre-line and cyclists directed into one lane and pedestrians the other. A number of the street crossings require improvements such as curb removal and crossing designation.



3.1.4 Paved Shoulders / Striping

There are a number of streets in Oromocto where a small amount of striping has been placed. However, these are usually only for short distances, the widths vary from a reasonable one metre to narrower, and there is little or no connectivity. They do not currently represent a significant addition to the active transportation flow, except on Waasis Road between Onondaga Street and MacDonald Avenue.



3.1.5 Designated On-Road Bike lanes

The Town of Oromocto currently has no designated on-road bicycle facilities.

3.2 Public Lands

Much of the undeveloped land within the Town is owned by Municipality. This enables the majority of the secondary active transportation network in Oromocto West to be easily routed, and for a rich and multifaceted web of tertiary AT linkages to develop in all neighbourhoods.

In addition, the majority of the arterial roads: St. Lawrence Avenue, Waasis Road, Broad Road, Restigouche North, and others, possess wide, grassy verges that provide ample room for a segregated shared-use pathway, the AT infrastructure most preferred by potential walkers/cyclists.

Because of its ownership of undeveloped land, the Town can establish, as a condition of development, requirements for creating tertiary active transportation linkages with the development, and planned connections to adjacent primary and/or secondary network infrastructure.

3.3 Destinations

Active transportation for utilitarian purposes is inherently destination-oriented travel. The identification of destinations in the Town that might attract frequent active transportation usage provides a good indication on where infrastructure improvements may be most effective. The likelihood of people walking to school or work is heavily influenced by travel distance to these destinations.



The key destinations identified were:

- Oromocto from Oromocto West;
- CFB Gagetown;
- The school/sports field district;
- Oromocto Mall;
- The Gateway shopping complex;
- The Trans Canada Trail; and
- Parks/Natural Spaces.

3.4 Barriers

Generally, there are both natural and man-made obstacles to walking and cycling. Among others, natural barriers include bodies of water and topographic features; man-made barriers include highways, rail lines, high traffic streets and traditional large-lot or big box developments.

The major physical barriers to Active Transportation in Oromocto include:

- The TransCanada Highway;
- The inadequate infrastructure in the Gateway shopping complex;
- Restigouche Road;
- Disconnected AT infrastructure; and
- Waasis Road between Broad Road and MacDonald Avenue.



CHAPTER 4 **ACTIVE TRANSPORTATION PLANNING PRINCIPLES**

4.1 Consultation

4.1.1 Public Consultation Meetings

Notes from this meeting are provided in Appendix B.

4.1.2 Stakeholder Meeting

Notes from this meeting are provided in Appendix C.

4.2 Goals and Guiding Principles

Goal 1: Raise Awareness

Raising awareness is a critical component in increasing active transportation participation levels and greater walker/cyclist safety through motorist awareness.

Guiding principles:

GP 1.1 Improve signage

Provide adequate municipality-wide signage and identification of the active transportation network. All crossings should be provided with signs identifying the road crossed and the trail/route name. Provide signs along routes, where appropriate, that indicate distances to destinations and directions to local services of interest to Active Transportation users. Provide signs at parking areas with access to trails and other active transportation infrastructure.

GP 1.2 Develop itineraries and mapping

Itineraries and maps should be widely disseminated amongst residents and visitors. Different pamphlets and maps can be created around different themes. Distribute the materials widely, especially to tourist information centres and local businesses that can benefit from having such information available, such as bike shops, B&B's, hotels, etc. There should be an Active Transportation page on the Municipal Website

GP 1.3 Create / coordinate partnerships

The Town should meet regularly with people and organizations involved in active transportation to coordinate and create opportunities to improve AT infrastructure. New projects such as trail creation and improvements or the development of a program should be used to foster partnerships among individuals, NGOs, and departments of government, the Department of National Defence, the Family Resource Centre, the RCMP, local businesses and other interest groups.

GP 1.4 Participate in and organize local events

Use these venues as an opportunity to promote active transportation by handing out maps, pamphlets and itineraries, as well as by teaching AT etiquette. Organize group AT activities, such as trail walking for fitness or walking school buses. Create an active transportation component to existing municipal activities (i.e., Pioneer Days). This can be done in conjunction with GP3.6 and 5.3.

Goal 2: Educate

Programs to encourage active transportation are as important as infrastructure investments for safety.

Guiding principles:

GP 2.1 Promote a shift in public attitudes

Education is one of the most important components of this plan. Through publications, events, training programs, and other activities, tolerance and safe interaction between all transportation modes should be promoted. Individuals and decision makers should be made aware of the costs and benefits of transportation and land use choices. Residents should be enabled to learn how they can reduce their transportation footprint through AT use for short trips.

GP 2.2 Raise a new generation of active transportation users

Child and youth-based education programs and activities should present active transportation as an easy and potentially safe option for young people. Give priority to the development of infrastructure networks in neighbourhoods where there is a concentration of youth. Develop activities and education programs that will encourage young people to view active transportation as a viable alternative to driving.

Goal 3: Improve Infrastructure

Improved active transportation infrastructure will encourage increased active transportation usage.

Guiding principles:

GP 3.1 Adequately maintain existing on and off-road facilities

Existing facilities must be maintained to a mandated standard, and new facilities should be added to the existing system only when it is assured that they can be properly maintained.

GP 3.2 Improve both on-road and off-road facilities

Infrastructure improvements should be a combination of on and off-road facilities, with priority given to creating a connected and fully integrated AT network.

GP 3.3 Accept incremental improvements

Given that much of the work to improve active transportation infrastructure involves retrofitting existing situations, the Town should accept that it may only be able to initially implement partial solutions, such as the installation of a crusher dust surface where ultimately a paved surface is desired or the development of only a partial or incomplete route. By eventually stringing together the pieces, the ultimate goal of developing a fully connected AT network solution may be achieved. In addition, the creation of partial solutions can encourage use that will develop impetus for further expansion of the network.

GP 3.4 Encourage active transportation friendly built environments

There is a strong connection between the spatial distribution of the built environment and the overall physical activity of residents. New developments should be required to create walkable and bikeable areas by considering origin and destination patterns of users and providing suitable infrastructure connecting important locations. Existing developments should be retrofitted for active transportation usage and new developments should be designed to suit self-propelled modes of transportation. Active transportation routes and land use should continue to be better integrated.

GP 3.5 Provide year-round safety

Walking and biking should be safe for all ages and abilities in all seasons. Surface repair and patching, snowplowing, clearing of ice, flood-proofing, and the filling of low spots and potholes are important maintenance considerations.

GP 3.6 Liaise with New Brunswick Department of Transportation and Infrastructure

The Municipality should meet with Department of Transportation staff at least once a year to ensure that the Department and the Municipality are aware each others' plans. Subsequently, each can build off the other proposed future plans, as they relate to improving and maintaining AT infrastructure.

Goal 4: Create Interconnectivity

Active transportation networks are effective only if they are interconnected. If there are gaps between origins and destinations, the network will only be marginally utilized.

Guiding principles:

GP 4.1 Create linkages and extensions between existing and proposed AT infrastructure

The Town already contains many good facilities that can be built upon to create an overall active transportation network, but there are some important gaps. For example, there are numerous situations where sidewalks / multi-use paths end suddenly, neither connecting with another route nor ending at a logical destination. Extending some facilities, such as the Waasis Road multi-use path toward and past Broad Street, or connecting separated facilities, such as the Waasis Road West bike path over the Trans Canada Highway bridge to connect with the Waasis Road multi-use path, will exponentially increase their value.

GP 4.2 Create opportunities for utilitarian trips through the development of improved recreational routes

Active transportation improvements in the Town should be closely connected to recreational facilities. This will allow investments to meet immediate perceived needs while allowing the evolution of an overall network that will support utilitarian trips. Linking these activities will provide a better return on investment and will allow different sources of funding to be tapped. In addition, people will be able to use the active transportation facilities not only in their daily life running errands, but also for recreational activities.

GP 4.3 Synchronize new infrastructure with surrounding municipalities

The rails to trails network serves as a good example for inter-municipal connections beyond the borders of the Town. The Town should always be alert to developments in the surrounding area and look for opportunities to create or allow for future connections into region-wide active transportation infrastructure. The Town should meet regularly with other municipal units in the area and the NB Department of Transportation and Infrastructure to compare notes on active transportation initiatives and to try to coordinate actions.

Goal 5: Implement the Plan

Implementation will move this plan from concept to physical realization.

Guiding principles:

GP 5.1 Get the best return on investment

Concentrate efforts in areas where investment will have the biggest impact.

GP 5.2 Focus on low cost-high impact items first

There are some easily implemented and relatively low cost items such as improved signage that could have an immediate impact.

GP 5.3 Look for correspondence with potential partners' interests

Various departments of government and non-governmental organizations have different areas of focus like health, recreation, economic development, etc. When seeking funding for a particular piece of infrastructure or program, review potential partners and tailor the request for funding to match their particular areas of interest. Different organizations may support the same initiative for vastly different reasons.

GP 5.4 Be opportunistic

While this plan provides suggestions for priorities for implementation take advantage of making improvements to existing related facilities like rails to trails. Take advantage of opportunities that come up such as the development of new subdivisions or commercial areas, the resurfacing of roads, or new funding opportunities to create infrastructure, even if it is not in the priority list. However, recognizing Guiding Principle 5.1, it is important to balance efforts to make sure that low-impact items are not siphoning energy and effort from higher impact items.

GP 5.5 Implement controversial changes gradually

Some Active Transportation improvements will generate resistance, due to concerns about the cost, the perception that automobile traffic flow will be impaired, or the disagreement of adjacent landowners. If possible, adopt a gradual approach to new infrastructure, such as by using temporary, low-cost infrastructure (i.e., bollards and posts instead of curbs) or through the introduction of the changes as pilot projects.

GP 5.6 Plan for incremental improvements

This will be a 20 year plan, so incremental improvements will be the norm. Recognizing Guiding Principle 3.3, accept partial improvements with the intention of achieving the full solution later, but ensure that initial improvements will not make later full development of solutions more difficult or costly.

GP 5.7 Define success

Communities need to establish both baselines and goals, and then make their plans work toward achieving those goals. This will allow communities to evaluate progress as per Guiding Principle 5.8 in a meaningful way.

GP 5.8 Evaluate regularly

Review investments made in active transportation infrastructure and programs to determine what is working, what is failing, and the reasons for their success or failure. Determine how to build on the successes and improve on less-successful activities.

CHAPTER 5 **RECOMMENDATIONS**

The following recommendations lay out a plan for the ultimate development of an active transportation network and activities for the Town of Oromocto. While the plan may take up to 15 to 20 years to complete, it denotes areas where immediate actions could have a significant impact on improving active transportation conditions in the Town. It is important to show the ultimate plan, to allow opportunities for improvements in lower priority areas to be recognized and exploited if and when they become available.

It is also recognized that some of the on road improvements require cooperation and investment by the New Brunswick Department of Transportation and Infrastructure who control the numbered highways and the crossings over the Trans Canada Highway that occur within the Town.

In addition, the Town could work with the New Brunswick Department of Transportation and the Department of National Defence, whereby the Town could partner with the Department on obtaining funding and building the proposed improvements.

5.1 Network, Priority Areas and Opinion of Probable Costs

The figure entitled Route Map on the following page outlines a network of Primary and Secondary Routes. As smaller connections that provide local linkages within neighbourhoods, Tertiary Routes should be provided as a matter of course with all developments and therefore have not been shown.

Priorities are shown on the figure entitled Priorities Map which designates High, Medium and Low Priorities. The numbers on the map link to the descriptions provided below.

Opinions of probable costs for each recommendation are provided in Figure 5.1 on the following page.

5.1.1 High Priorities

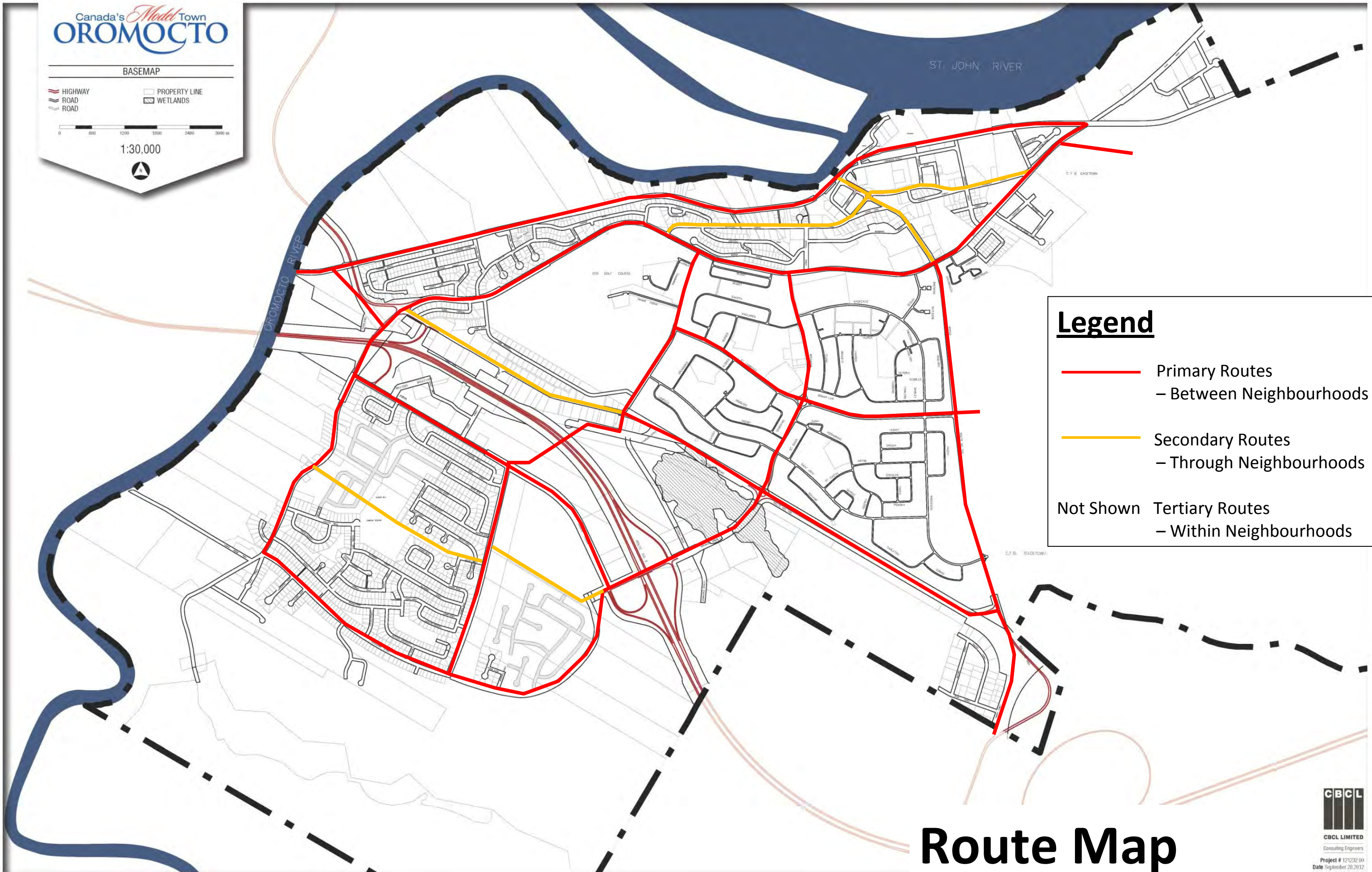
2. Eastern Portion of the Trans Canada Trail to complete the Trail and provide access to an under-served community:
 - Upgrades to the surfacing of the trail; and

BASEMAP

- HIGHWAY
- ROAD
- ROAD
- PROPERTY LINE
- WETLANDS



1:30,000



Legend

- Primary Routes
– Between Neighbourhoods
- Secondary Routes
– Through Neighbourhoods
- Not Shown Tertiary Routes
– Within Neighbourhoods

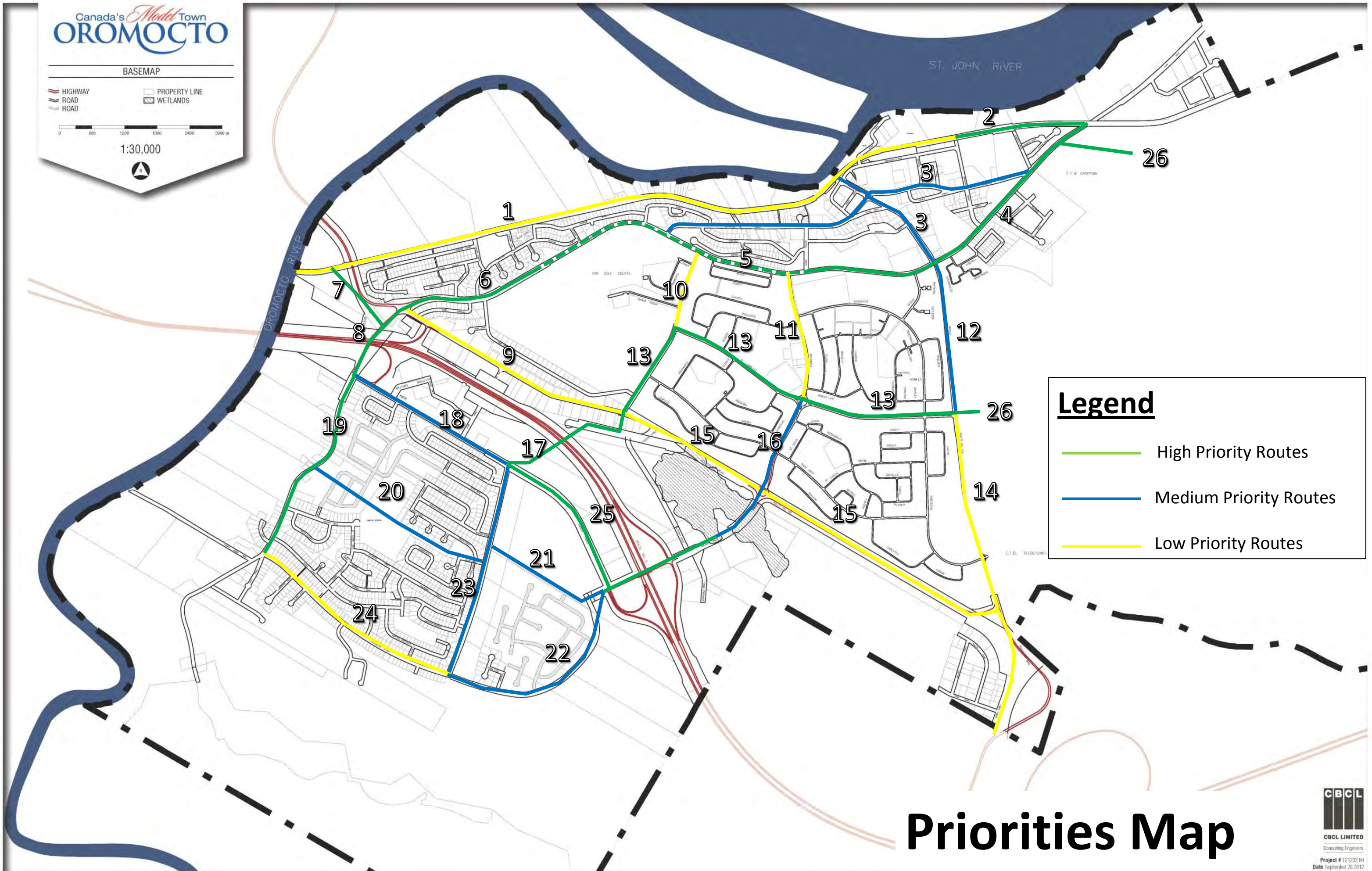
Route Map



CBCL LIMITED
Consulting Engineers

Project # 121232 00
Date September 28, 2012

BASEMAP



Legend

- High Priority Routes
- Medium Priority Routes
- Low Priority Routes

Priorities Map

Oromocto Active Transportation Plan

Figure 5.1: Opinion of Probable Capital Costs

Date: 19 October 2012
CBCL Project No.: 121237

This opinion of probable costs is presented on the basis of experience, qualifications, and best judgement. It has been prepared in accordance with acceptable principles and practices. Sudden market trend changes, non-competitive bidding situations, unforeseen labour and material adjustments and the like are beyond the control of CBCL Limited. We cannot warrant or guarantee that actual costs will not vary significantly from the opinion provided.

These costs are in 2012 dollars. They are for capital construction only and do not allow for contingencies (typically 25% at this stage) and engineering fees (typically 10%).

High Priorities					
No.	Item	Quantity	Units	Unit Cost	Cost
2	Eastern Portion of the Trans Canada Trail				
	Upgrades to the surfacing of the trail	745	metres	\$100	\$74,500
	Signage	6	each	\$750	\$4,500
4	Waasis Road from Oromocto High School to CFB Gagetown North Gate				
	Segregated multi-use path along southern side of Waasis	850	metres	\$135	\$114,750
	Upgrading of sidewalk on south side of Waasis	1,200	metres	\$50	\$60,000
	Addition of signs	28	each	\$750	\$21,000
	Upgrade of intersection of MacDonald and Highway 102	1	lump sum	\$50,000	\$50,000
5	Signage on Waasis Road Multi-Use Path from Oromocto HS to Bicentennial Park	15	each	\$750	\$11,250
6	Waasis Road Multi-Use Path from Bicentennial Family Park to Restigouche				
	Upgrading of the existing on road multi-use path to a segregated multi-use trail	875	metres	\$135	\$118,125
	Installation of signage	18	each	\$750	\$13,500
7	Multi-use trail connection from Waasis Rd. bridge to Trans Canada Trail				
	Trail installation	470	metres	\$80	\$37,600
	Installation of signage	8	each	\$750	\$6,000
8	Restriping of the road surface on the Waasis Rd. bridge over the Trans Canada Highway	1	lump sum	\$3,000	\$3,000
13	Creation of a primary route connecting Oromocto West through the PMQs to CFB Gagetown				
	Improvement of the crossing at Restigouche and Restigouche North	1	lump sum	\$1,600	\$1,600
	Segregated multi-use trail along western side of Restigouche North	275	metres	\$80	\$22,000
	Upgrading of sidewalk along northern side of St. Lawrence to a segregated multi-use trail	1,700	metres	\$50	\$85,000
	Install a designated blue bike box on eastbound St. Lawrence at Broad	1	lump sum	\$1,200	\$1,200
	Install pedestrian crossing on St. Lawrence with path improvements to neighbourhoods	1	lump sum	\$9,300	\$9,300
17	Upgrades to the trail through the underpass under the Trans Canada Highway				
	Asphalt surfacing of the trail connection to the underpass	575	metres	\$80	\$46,000
	Installation of signage	8	each	\$750	\$6,000
	Improved trail lighting	10	lump sum	\$5,500	\$55,000
	Development of an outdoor facility that will create "eyes on the underpass"	1	lump sum	\$150,000	\$150,000
	Development of a citizens patrol		staff time		n/a
19	Addition of signs to Waasis West Multi-Use Trail	18	each	\$750	\$13,500
25	Provide a new multi-use trail along the northern side of Pioneer	935	metres	\$80	\$74,800
	Continue to develop Tertiary Paths along with new development		by developers		no cost
	Review all Tertiary Paths and make plans to upgrade incomplete connections		lump sum		\$100,000 per year
	Install bike Racks on an annual basis over a ten year period	10	each	\$1,000	\$10,000 per year
	Annual signage program	40	each	\$750	\$30,000 per year
	Repairs to sidewalks in PMQs		by DND		no cost
	Annual maintenance (4% of capital costs plus allowance for existing infrastructure)				\$100,000 per year
	Estimates for striping at existing street crossings have not been included as this assumed to be done as a matter of course				

Medium Priorities					
No.	Item	Quantity	Units	Unit Cost	Cost
3	Signage and "sharrows" on MacDonald Street and Broad Street north	1,800	metres	\$11	\$18,900
12	Segregated multi-use trail along western side of Broad	865	metres	\$80	\$69,200
16	In Gateway area				
	Upgrading to segregated multi-use trail along western side of Broad	885	metres	\$50	\$44,250
	Sidewalk along eastern side of Broad	885	metres	\$50	\$44,250
18	Upgrading to segregated multi-use trail along southern side of Pioneer	1,015	metres	\$50	\$50,750
20	Linked secondary route through existing portions of Oromocto West	1,120	metres	\$80	\$89,600
21	Off-road secondary route connecting east-west across the new portions of the Oromocto West	690	metres	\$80	\$55,200
22	New segregated multi-use trail along the western side of Fennimore	1,245	metres	\$80	\$99,600
23	Upgrading to segregated multi-use trail along eastern side of Carpenter	1,240	metres	\$50	\$62,000
	Annual maintenance (4% of capital costs)			add	\$20,000 per year

Low Priorities

No.	Item	Quantity	Units	Unit Cost	Cost
1	Central and Western Portions of the Trans Canada Trail				
	addition of signs at access points	30	each	\$750	\$22,500
	improvements to directional signage for the Deer Park paths	10	each	\$750	\$7,500
	addition of new access point at 416 Gardiner	65	metres	\$80	\$5,200
	addition of new access point at western end of Gardiner	65	metres	\$80	\$5,200
	addition of new access point at the northern end of Broad	1	lump sum	\$5,000	\$5,000
	retrofits of the bridges on the access paths off Lansdown	2	each	\$2,000	\$4,000
	access points to the river at the bridge over the Oromocto River;	1	lump sum	\$5,000	\$5,000
	asphalting of the trail surface (5.0 metre wide)	3,890	metres	\$120	\$466,800
9	Construction of sidewalk along both sides of Restigouche Road	900	metres	\$75	\$67,519
10	Continuation of segregated multi-use trail along northern end of Restigouche North	325	metres	\$80	\$26,000
11	Continuation of segregated multi-use trail along western side of Miramachi	750	metres	\$80	\$60,000
14	Segregated multi-use trail along western side of Broad and Highway 660	1,870	metres	\$80	\$149,600
15	Segregated multi-use trail along Restigouche from Restigouche North to Broad	2,415	metres	\$80	\$193,200
24	Upgrades to Finimore to create a multi-use trail	1,265	metres	\$135	\$170,775
	Annual maintenance (4% of capital costs)			add	\$45,000 per year

- The addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest.

4. Waasis Road from Oromocto High School to CFB Gagetown North Gate to complete a primary path, improve conditions in an unsafe area and provide access to an under-served community:
 - Development of segregated multi-use path along southern side of Waasis from Onondaga to the North Gate entrance to CFB Gagetown. The Town is already working on this and the development of the section from Onondaga to MacDonald is expected to occur in 2013 (see figure below);

- Upgrading of sidewalk on south side of Waasis from high school to Onondaga to a multi-use path;
- The addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest; and
- MacDonald at Highway 102: The Town should consider a re-design of this

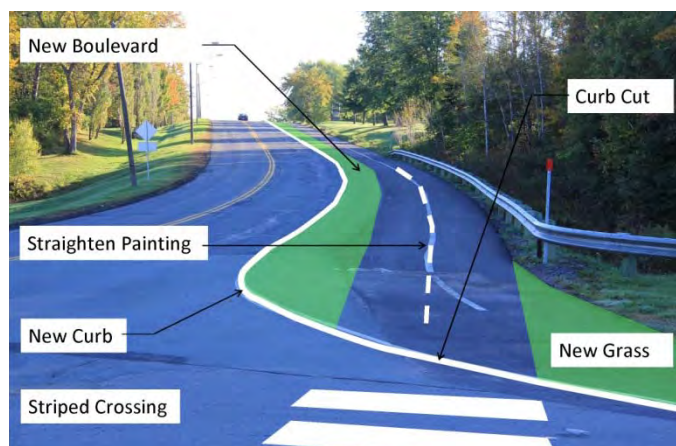


intersection to improve pedestrian and cyclist safety. The preferred improvement would be a roundabout that would deal with the acute angle of the MacDonald / Highway 102 intersection in extremely close proximity to the Hiawatha intersection. If this is not possible, consideration should be given to narrowing the slip lane to MacDonald to slow traffic and create space for the completion of the sidewalk on the northern side of MacDonald. Designated markings and perhaps pedestrian activated lights should be provided where people are crossing;

5. Waasis Road Multi-Use Path from Oromocto High School to Bicentennial Family Park to provide consistency along a primary route: the addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest;

6. Waasis Road Multi-Use Path from Bicentennial Family Park to Restigouche to improve safety conditions and provide consistency along a primary route:

- The upgrading of the existing on road multi-use path to a segregated multi-use trail. The Town is already working on this and it is expected to occur in the Fall of 2012 (see figure to right); and



- the addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest;
7. Development of a multi-use trail connection from the approach to the Waasis Rd. bridge over the TransCanada Highway to the Trans Canada Trail to provide a linkage between existing sections of the primary route to Oromocto West (see following page);
 8. Restriping of the road surface on the Waasis Rd. bridge over the TransCanada Highway (see following page) to create a multi-use path on the western side to improve safety and fill in a gap between 2 sections of a primary route. The addition of separation posts is strongly recommended on both the multi-use trail and the sidewalk on the eastern side of the bridge;
 13. Creation of a primary route connecting Oromocto West through the PMQs to CFB Gagetown. This is probably of prime importance.

Improvements consist of:

- Improvement of the crossing at Restigouche and Restigouche North (see figure to right);
- Development of segregated multi-use trail along western side of Restigouche North;
- Upgrading of sidewalk along northern side of St. Lawrence to a segregated multi-use trail; and
- St. Lawrence at Broad: A designated



blue bike box across the whole western throat of the intersection and advance lights for bicycle traffic travelling east along St. Lawrence should be provided at the Broad Road intersection. Given that the segregated multi-use trail is located on the north side of St. Lawrence, there is no need for a bike box on the eastern throat, but easy access from the road to the trail should be provided on the northwest corner;

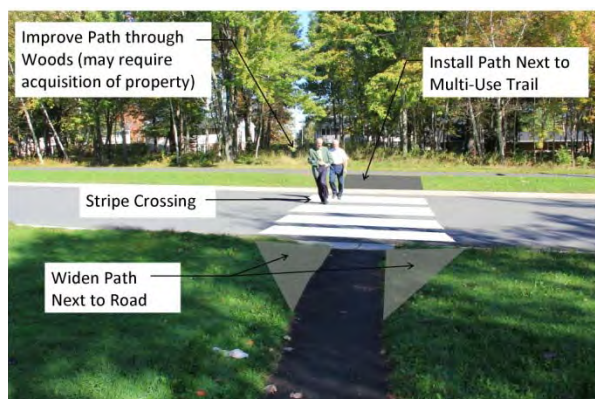
17. Upgrades to the trail through the underpass under the TransCanada Highway to improve safety and enable this to become a primary connection. Improvements consist of:
 - Asphalt surfacing of the trail connection to the underpass under the TransCanada Highway;
 - Improved trail lighting;
 - Development of an outdoor facility that will create “eyes on the underpass”;
 - Consideration of the development of a citizens patrol to periodically walk through the underpass in the evening; and
 - Striping of a bike lane along D’Amours to the trail connection that connects to the Restigouche/Restigouche North intersection;
19. Waasis West Multi-Use Trail to provide consistency along a primary route: the addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest;



Upgrades on Waasis West Bridge over the Trans Canada Highway

25. Provide a new multi-use trail along the northern side of Pioneer to provide a safe route in an area that is already experiencing pedestrian traffic (see figure on following page). It can go behind the barrier until it intersects with Miramachi. A new sidewalk can be provided on the south side of the road when houses begin to be built in the area. Tertiary access points should be provided into the new neighbourhood at regular distances; and
26. The Town should work with DND to improve on-base connections into the wider active transportation network.

Tertiary Paths: While not shown on the overall route map, these paths are important connections. As noted above they need to continue to be developed along with new development, but there also needs to be a review of all paths and plans made to upgrade incomplete connections. The Town could hire a summer student to complete the inventory and then make a timeline to upgrade connections as required. The figures below provide an example of connections that need to be completed or improved.



New pedestrian crossing on St. Lawrence just east of Miramachi with path improvements to neighbourhoods to recognize an existing desire line. This may require the cooperation of DND to enable a pathway connection north from St. Lawrence to connect to the intersection of Bonar Law Ave. and Clark St.



Completion of link between two existing paths in Oromocto West

The Town should develop a program for the installation of bike racks at civic buildings, schools, parks and other civic facilities as well as other destinations such as Oromocto Mall and the Gateway. The bike racks should be located in highly visible and easily accessed locations.

The Town should work with DND to identify and implement improvements to major sidewalk routes within the PMQ area that need to be refurbished.



Gateway and Pioneer

5.1.2 Medium Priorities

3. MacDonald Street and Broad Street north: Addition of bicycle route signs and painting of “sharrows”⁷ on the road to improve safety;
12. Development of segregated multi-use trail along western side of Broad to provide direct access from the PMQs and the entrance to CFB Gagetown towards the downtown mall and Hazen Park;
16. Upgrading of infrastructure in Gateway area to create a segregated multi-use trail along the western side of Miramichi Road and a sidewalk along the eastern side from the Trans-Canada Highway ramp to Restigouche Road with the segregated multi-use trail on the western side Miramichi Road extending to Saint Lawrence. This will improve safety in the area and ultimately create a primary route connecting the area to other parts of Town;
18. Upgrades to the sidewalk on the southern side of Pioneer to create a segregated multi-use trail to create a primary linkage along the northern side of this neighbourhood;
20. Development of a linked secondary route (off and on-road) connecting east-west across the existing portions of the Oromocto West neighbourhood to provide connectivity through the neighbourhood linking to primary routes that will allow people to access other parts of town and complete recreation loops of various lengths;
21. Development of an off-road secondary route connecting east-west across the new portions of the Oromocto West neighbourhood to provide connectivity through the neighbourhood linking to primary routes that will allow people to access other parts of town and complete recreation loops of various lengths;
22. Development of a new segregated multi-use trail along the western side of Fennimore as it extends to meet with the bridge over the TransCanada Highway to provide primary access from this area to other parts of Town; and
23. Upgrades to the sidewalk on the eastern side of Carpenter to create a segregated multi-use trail to provide primary access from the centre of Oromocto West to other parts of Town.

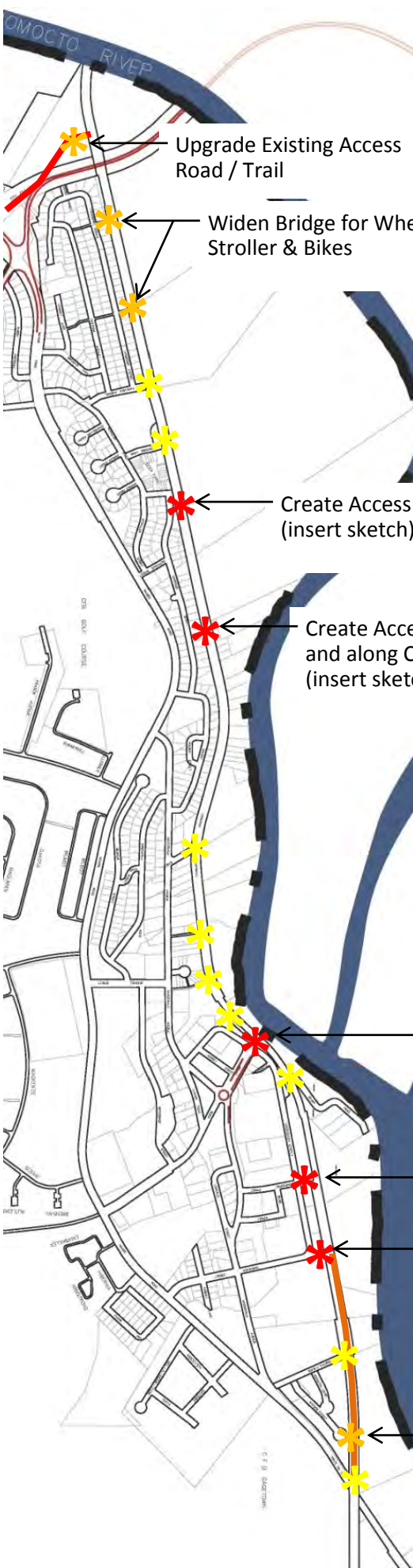


Example of a sharrow

5.1.3 Low Priorities

1. Central and Western Portions of the Trans Canada Trail⁷
 - the addition of signs at access points to and from the trail denoting the trail, distances, and access to other points of interest;
 - improvements to directional signage for the Deer Park paths;

⁷ Image Source: <http://www.needhambikes.org/WebsterStreetSharrows>



Legend

- * Existing Connection – Needs Physical Improvement
- * Existing Connection – Needs Sign
- * New Connection – Needs to be Built

Upgrade Existing Access Road / Trail

Widen Bridge for Wheelchairs, Stroller & Bikes

Create Access along Cross Slope (insert sketch)

Create Access through Empty lot and along Cross Slope (insert sketch)

Create Stair Access as Many Path Connections are Nearby

Create Access across Open Area

Improve Access alongside Road

Formalize Path

Upgrades on the Trans Canada Trail

- the addition of new access points at 416 Gardiner, at the western end of Gardiner and at the northern end of Broad;
- retrofits of the bridges on the access paths off Lansdown;
- the development of access points to the river at the bridge over the Oromocto River; and
- asphaltting of the trail surface.

This is a lower priority as the active transportation infrastructure in this area is already of quite good quality and initial funding can be better used to make major improvements in other under-services areas;

9. The construction of sidewalk along both sides of Restigouche Road. This is a lower priority as destinations for active transportation users are limited in the area and a sidewalk already exists along one side of the road;
10. Continuation of the segregated multi-use trail along the western side at the northern end of Restigouche North. This is a lower priority as there are many existing tertiary connections in the area which provide access and linkages to paths leading to important destinations;
11. Continuation of a segregated multi-use trail along the western side of Miramachi. This is a lower priority there are already many existing tertiary connections in the area which provide access and linkages to paths leading to important destinations;
14. Development of a segregated multi-use trail along the western side of Broad and Highway 660 to the limit of the Town boundary and Smith subdivision. This is lower priority as there few destinations in this area and most traffic in the area would tend to move in a northerly direction away from this new infrastructure. It is appropriate to develop this infrastructure as traffic warrants in the future;
15. Development of a segregated multi-use trail along Restigouche from Restigouche North to Broad. This is lower priority as there few destinations in this area and most traffic in the area would tend to move in a northerly direction away from this new infrastructure. It is appropriate to develop this infrastructure as traffic warrants in the future; and
24. Upgrades to Fynamore to create a multi-use trail. As this road is currently being rebuilt with the development of a sidewalk (Fall 2012), these upgrades may have to wait until the next redevelopment of the road.

5.2 General Design Guidelines

In order to complete the primary and secondary active transportation networks, a considerable amount of infrastructure will need to be constructed within the street right-of-ways and at intersections. Although specific situations may require distinct - or even unique - solutions, the general design of active transportation infrastructure follows recognized standards.

Fortunately, in the majority of routes identified in the network plan, an adequate amount of space exists without substantive physical constraints. In the few instances where there is an issue that is related to a lack of right of way width and physical constraints, the Town ought to identify opportunities to purchase additional land to ensure an adequate right of way.

5.2.1 Shared Use Facilities

For the majority of the primary active transportation network in Oromocto, segregated shared-use pathways should be used. These routes will accommodate a variety of users simultaneously. During the summer months and shoulder seasons, shared-use facilities are primarily used by cyclists and pedestrians, but will also include inline skaters, skateboarding, and wheelchairs. Should traffic on the pathway increase significantly, pedestrians and cyclists can be provided with separate lanes.



The design requirements for segregated shared-use pathways are: two-way should be at least 3.0 m wide, with a dashed painted centre-line. Bike and pedestrian symbols, as well as directional arrows in both directions, should be painted on the asphalt at every intersection, and at frequent intervals (~200 m) on longer, uninterrupted segments.

Typical trail surfaces include crusher dust, concrete or asphalt. Although crusher dust is acceptable as a temporary expedient, our recommendation is that the long-term goal be to have the entire primary network surfaced in asphalt, including the Trans Canada Trail.

5.2.2 Designated Shared Roadways

On portions of the secondary active transportation network, designated shared roadways are an acceptable and cost-effective alternative to other infrastructure solutions. These roads must be officially recognized as bike routes where the roads are used by both cyclists and motorists. Large painted markings on the road (see Figure to the right) indicate a greater presence of cyclists on the road. These must be placed in at all intersections and in short intervals (~200 m) along the entire length of the designated shared roadway.



Typical Pavement Marking on Designated Shared Road

Street signage must also be installed that clearly indicates that this road is a designated cycling route. Signage must be located at the start of the route, and as required at connecting intersections.

Vehicle traffic on these designated shared roads: MacDonald Avenue, Broad Road between St. Lawrence and Oromocto Mall, should be light, typically fewer than 3,000 cars daily in urban areas. It is not recommended to introduce shared roads where truck traffic is greater than 250 vehicles a day.

5.2.3 Sidewalk Walkways

In urban or suburban situations, particularly in new commercial developments or residential subdivisions, the installation of curbed sidewalks should be considered where densities and traffic volumes justify such expenses. Sidewalks are the safest and most convenient way for pedestrians to move around. They also play an important role in community building and social cohesion, as they can double as gathering spaces for children and neighbours and can accommodate street furniture such as benches, trash cans or bus shelters. The recommended sidewalk width ranges from 1.5 m to 1.8 m. Near schools, where large numbers of students flock to the sidewalks at school dismissal time, sidewalks should be wider. To accommodate three youths walking side-by-side, a minimum width of 2.25 m is required.

5.2.4 Signage

In order to promote awareness of the existence of a safe, connected active transportation network, a wide range of signage is essential. Signage falls into four broad categories: directional, regulatory, informational, and interpretive.

Directional signs are those that indicate the location of and distance to destinations that may be reached along, or accessed from, the AT network. The greater the number of directional signs, the more easily new users of the network will be able to make decisions about whether they can and will use it in a utilitarian sense and these will improve their ability to navigate through the system comfortably and safely.



Example of Directional Signage

Regulatory signs provide potential users of the AT network with the information that they require in order to understand what uses are permitted, and which are not. These signs can be even more important on the AT network than on roadways, because there are just as many competing uses for the active transportation network as for the roads, and less awareness as to which are acceptable.

Information signage provides context and location data to the AT system user. At intersections with roads, a sign providing the street name should be positioned. At key junctions, maps that illustrate the entire system, and providing the current location, are extremely valuable, particularly to visitors and new residents. With its regular high turnover rate of residents because of military rotations, the Town of Oromocto particularly requires and will benefit from a thorough informational signage program.



Interpretive signs perform an educational function by providing details on natural, historical, and cultural features found along the AT network. Although not as essential to the effective promotion and use of the network as the other varieties of signage, interpretive signage contributes a high “value-added” component to the user experience. A variation of interpretive signage used to good effect is the installation of public art adjacent to AT routes to create open-air galleries.

5.2.5 Public Realm Design

Design refers to a number of features that influence how the public realm is perceived by people walking or biking. It includes such concepts as the size and shape of street blocks, street connectivity, the type and orientation of buildings and the existence of sidewalks, public squares, landscape architecture, pedestrian facilities, light fixtures and other elements. In particular the connectivity of the street system is an important characteristic influencing transportation choices. Specifically, spread-out networks with closed loops and dead-ends create long distances that make traveling by bike or on foot inconvenient.

The Town of Oromocto should create and implement community design standards that foster walkable and bikeable neighbourhoods. This would include the continuous development of an extensive and robust tertiary pathway system within each new development, one that provides frequent opportunities to connect between streets inside the neighbourhood, and to all proximate primary or secondary network routes.

5.3 Education, Promotion and Advocacy

5.3.1 Education and Promotion

Education is one of the most important components of this plan. The barriers to Active Transportation are often explained as being the result of inadequate infrastructure. In reality, and more importantly, the barriers exist in the culture of a community and the attitudes of its population. Changing these attitudes will challenge municipal staff and politicians with the need to engage the population in a continuous and effective program of education and promotion. The public needs to be informed about the many health benefits of participating in active transportation. Active transportation users need to be instructed in on and off-road operating procedures and etiquette in order to support a safe and inviting environment. Motorists must be made aware of the need to share the road and the trails with walkers and cyclists and – most important of all – to operate their vehicles more safely and appropriately. Parents must be convinced of the value of increasing the amount of walking and cycling undertaken by their children and that their children’s safety will be assured while doing so.

Given the plethora of educational opportunities, it is important to remember that the Municipality does not have to shoulder educational initiatives on its own.



“Municipalities shouldn’t try to do it all by themselves, when partners offer much-needed energy, knowledge and skills. Non-profit organizations can run education programs and special events, employers can offer incentives for active transportation commuters, and associations can educate professionals about active transportation planning and implementation.”

Communities in Motion: Bring Active Transportation to Life - FCM

Listed below are a number of education and promotion programs that could be implemented in the Town of Oromocto:

- Active and Safe Routes to School** is a school-based initiative that strives to create an environment that is conducive and supportive of safe walkable communities. It is a world-wide program that encourages children of all ages to utilize Active Transportation to travel to and from school, with a primary focus on walking. The program is comprised of several activities and initiatives that can be utilized by schools including the Walking School Bus, Walking Wednesdays, iWalk (International Walk to School Week/Day), Walk a Block, Neighbourhood Walkabout, Walking Buddies, No Idling at School, and Classroom Mapping. By encouraging adoption of the existing school travel program available to New Brunswick schools through the public health department, Oromocto’s schools can conduct safety audits of their neighbourhoods. Parent associations could work with parents, students and teachers, organizing public meetings to review the walkability/bikeability situation around all of their schools. These meetings can determine what are the safest routes currently, and more importantly areas where improvements to the infrastructure network are required. Students should be asked to identify destinations that they currently access from their schools so that these may also be audited for walkable/bikeable safety;



- “Share the Road”** program is an important, low cost infrastructure education tool for all road and trail users including motorists, pedestrians and cyclists. *“Share the Road”* is an initiative that makes roadways safer and more efficient for both motorists and cyclists by reminding everyone that cyclists are a legitimate road use and one likely to be encountered on roads in the community. *Share the Road* signs should be positioned on all roads near the entrances to Town, and at frequent intervals on other streets, including those not designated as part of the primary or secondary AT network. One interesting adoption of the program occurs in Annapolis County, where bright yellow T-shirts with the “Share the Road”



symbol are regularly given as draw prizes during municipal events. *Share the Road* often becomes a shorthand for 'bike friendly';

- **Crosswalk Education Signs** erected at all crosswalks in the community. These provide information, in English and French, on how to behave in crosswalks and to safely cross busy streets. These should be positioned at a level where they can be easily read by children. Priority can be given to crosswalks on busier streets frequently used by school children (Waasis Road, St. Lawrence Avenue), but eventually these should be positioned on both sides of every crosswalk;
- **Safe Cycling Training** – The Municipality should offer programs that provide education on bicycle safety, including the value of wearing helmets, and etiquette for sharing trail and road space. There are a number of acceptable possible programs that could be adopted, including the bike rodeos currently provided by the RCMP or the CAN-BIKE program operated by the Canadian Cycling Association. The town should investigate the possibility of supplementing the efforts of the RCMP by assisting people to become qualified instructors of one, or both, of these programs. The first priority of these training courses should be for children, but consideration should be given for eventually providing safe-biking courses for seniors as well;
- **Public Events** - should be developed that are specific to Active Transportation (e.g., bicycle safety day or festival) or this aspect could be built into other community events (e.g., bicycle derby). Existing programs, such as International Trails Day, Walk to School Week, etc., should be adopted to develop partnerships and utilize existing resources;
- **Maps** inform the community of the existence of off-road routes and how to design their own safe and attractive walking/cycling route.
 - The primary and secondary walking and cycling network should be identified on the Oromocto Visitor's Map;
 - This map should be available not only as a paper copy, but on the town's Website, and as a downloadable PDF; and
 - A series of recommended walking and cycling loops should be designed based upon the primary and secondary walking/cycling network. Using tertiary connections where practicable, loops should be identified in each neighbourhood and a map created on the municipal Website;





- **Create a mall/school display** to promote AT and educate in safety. The display should repeat information provided in the education flyers: maps showing both the currently existing and proposed future primary and secondary networks, walking/cycling/motorist etiquette and safety protocols, and details on the benefits of using Active Transportation;
- **Education Flyers** should be sent to households along with utility bills or recycling information, at least twice every year: in the spring, when the weather begins to improve, and in the fall, when children return to school. The flyers can be designed to provide safety tips for AT users - and motorists - addressing the common causes of conflicts and how to avoid them. In addition, education flyers provide a venue for regularly updating residents on additions to the developing primary and secondary systems;
- **Brand the Primary Network** – Develop a name for the primary walking/cycling network (i.e., the Pioneer Trails, the Oromocto Loop, the Community Connections) and create distinctive signage to identify the network for motorists and walkers/cyclists. Consider holding a contest in order to develop the brand name;
- **Create a permanent Active Transportation Webpage** on the Town’s Website. This should include all the information available about the community benefits of using AT, the most up-to-date information about the condition of the paths and sidewalks, maps of the currently existing and planned primary and secondary walking/cycling networks, educational information about etiquette and safety, and links to provincial, national, and neighbouring community’s AT Website.



This should be updated regularly, paying particular attention to seasonally unique issues;

- **Support the development of a walking club, cycling club, and cross-country ski club;**
- **Organize introductory bike rides and walks** on new portions of the primary and secondary networks as they are completed;
- **Provide bike parking** at Municipal facilities including offices and other buildings, community centres, sports facilities, parks, etc., to make biking a convenient choice;
- **Support the development of a volunteer trail development group** that will maintain the Trans Canada Trail between Oromocto and Fredericton; and
- **Partner with the CFB Gagetown Family Resource Centre** to deliver AT education and promotion material to personnel at the base.

5.3.2 Advocacy

The Town of Oromocto should also play a role in advocating for active transportation investments within the province, such as through the Union of Municipalities of New Brunswick. Activities in this area are a “two-way street” that will cement Oromocto’s role as a leading community in AT and will ensure that the Municipality is aware of funding and other opportunities. Sharing of ideas will provide access to information that could improve the Municipality’s response to newly-arising active transportation issues. Potential activities include:

- **Create an Active Transportation Steering Committee** comprised of municipal staff and Council, representatives from CFB Gagetown, related provincial government agencies such as the Department of Transportation of Infrastructure renewal and the Department of Culture, Tourism and Healthy Living, and interested stakeholders and public representatives. Have the group meet quarterly to review activities and compare notes;
- **Meet every 6 months with active transportation coordinators** in adjacent municipalities to compare notes, coordinate projects and seek mutually supportive activities;
- **Host an annual active transportation evening**, where groups interested in cycling, walking and other active transportation activities can get together with the Town, neighbouring municipalities departments and the New Brunswick Department of Transportation and Infrastructure to talk about accomplishments over the last year, look at possible improvements that can be made to infrastructure and programs in the coming year, discuss sharing of resources, exchange other information, and forge partnerships. Keeping / publishing a report card will assist in measuring progress.
- **Work with groups such as the New Brunswick Department of Culture, Tourism and Healthy Living, the Atlantic Health Promotion Research Centre**, and other health services and promotion agencies to promote the health benefits of active transportation;

- **Liaise with RCMP** and conduct an annual review of bicycle and pedestrian accidents to determine if there are hot spots where improvements need to be made;
- **Identify priority locations for improvements** (i.e., paved shoulders and improved bridge crossings) on roads and highways under provincial control and obtain **commitments from NB Department of Transportation and Infrastructure** for implementation; and
- Pass a community **Active Transportation/Policy**.

5.4 Maintenance

Maintenance is key in providing an appropriate level of service and user-friendly, safe and efficient transportation solutions. **Preventative maintenance** includes road, sidewalk and shoulder sweeping and preventative tree pruning. **Corrective maintenance** includes sealing pavement cracks and potholes, repairing markings, pruning trees after a storm and grading crusher dust surfaces. **Replacement** is necessary when something has reached the end of its lifetime. **Winter maintenance** includes snow clearing from sidewalks and paths.

The level of required maintenance depends on the specific facility. Appropriate maintenance cycles should be put in place by the Municipality to ensure a minimum upkeep.

5.5 Additional Municipal Policies to Encourage Active Transportation

The implementation of the Active Transportation Plan will be an incremental process over a twenty year period. Even though the plan has a built-in degree of flexibility, which allows the Municipality to adapt to changes, it will be paramount for the success of this plan, that municipal policy is adopted to ensure that the long-term goal of providing alternatives to vehicular based transportation becomes a clear objective for future development of the Municipality.

The Case for Active Transportation

The Canadian Context

Active Transportation activities provide significant health and fitness, transportation, environmental, economic and tourism benefits. Municipalities in New Brunswick, Canada, and throughout North America are implementing initiatives to promote and encourage active transportation activities as a preferred option to the private automobile for short-distance trips and as a method of promoting a more active and healthy lifestyle.

Over the last 10 years, the concept of Active Transportation has been gaining popularity because the health, social, environmental, economic and tourism benefits are so substantial. There is clear evidence of the benefits associated with designing cycling and pedestrian friendly communities and encouraging people to be more active by walking and biking more often, for both recreation and utilitarian purposes.

Promoting active transportation, especially through the development of an integrated on and off-road system that provides transportation and recreation options, is a simple and obvious strategy that can encourage people to reduce their use of the personal automobile and create sustainable, more liveable, safe and active communities.

These benefits include improved health, fitness, quality of life, and social interaction for citizens, a cleaner environment resulting from more sustainable means of transportation, and economic benefits related to new tourism opportunities and diversified transportation options to shops and services for workers and patrons.

The Canadian GoforGreen program (http://www.goforgreen.ca/home_e.html) identifies health, the environment, safety, the built environment, barriers to active transportation, and economic benefits as the key areas to be addressed in a sound active transportation plan. Creating an active transportation network requires government leadership to establish a range of policies and programs that support opportunities for people of all ages and abilities to engage in routine daily physical activity; these policies might address:

- Bicycle and pedestrian oriented design;
- Mixed-use development;
- Ample recreational facilities;
- Locating schools in walkable neighborhoods; and
- Funding and promoting active living programs.⁸

New Brunswick

According to the Government of New Brunswick⁹, rates of obesity have tripled in the province in the last 25 years and at 33.8%, the province has one of the highest obesity rates in Canada. In its Wellness Strategy, the province states that most New Brunswickers are not active enough for

⁸ <http://www.activelivingleadership.org/aboutal.htm>, reviewed on 1 February 2005

⁹ *Get Wellness Soon: The Facts are In*. <http://www.getwellnesssoon.ca/EN/facts.cfm>, reviewed on 23 March 2011.

optimal health benefits.¹⁰ In 2001, it was estimated that obesity costs the New Brunswick economy an estimated \$200M a year or 1.4% of GDP¹¹.

Health Canada recommends that adults accumulate 150 minutes of moderate physical activity per week while children obtain at least 60 minutes per day. By making physical activity a key component of their transportation habits, individuals can easily achieve this target while carrying out their daily tasks.¹² Statistics Canada ranked New Brunswick as the province with the highest rate of physical inactivity amongst adults more than 20 years old¹³.

Health and Fitness

Walking and cycling, as well as skateboarding and inline skating, provide enjoyable, convenient and affordable means of exercise and recreation. Research suggests that the most effective fitness routines are moderate in intensity, individualized, and incorporated into our daily activities. In addition, studies have shown that people who use active transportation are, on average, more physically fit, less obese and have a reduced risk of cardiovascular disease.

Current estimates place the cost of physical inactivity in Canada at \$5.3 billion (\$1.6 billion of direct costs and \$3.7 billion in indirect costs) and the cost of obesity in Canada at \$4.3 billion (\$1.6 billion of direct costs and \$2.7 billion of indirect costs) in health care expenditures¹⁴. Our health system is attempting to shift from simply protecting people from hazards in the environment to developing healthy environments in which people can live.

Increased physical activity such as walking, cycling and other active transportation related activities can help reduce the risk of coronary heart disease, premature death, high blood pressure, obesity, adult-onset diabetes, depression and various types of cancer. A more active population can in turn reduce the cost of medical care, decrease workplace absenteeism, and maintain the independence of older adults and younger children exploring potential new active transportation options. If Canadians were to become more active, there would be:

- 26% fewer deaths from type II diabetes;
- 20% fewer deaths from colon cancer; and
- 22% fewer deaths from cardiovascular disease¹⁵.

Sedentary lifestyles have serious consequences for public health. The most visible is the sharp rise in obesity across Canada in recent years. Almost half of Canadians ages 12 and over report being physically inactive and 26% of youth between the ages of two and 17 years old are overweight or obese (Statistics Canada, 2006). In Canada, the prevalence of obesity has more than doubled in the last 20 years (Katzmarzyk & Mason, 2006). Comparatively, the proportion of overweight and obese

¹⁰ Canadian Community Health Survey 2005; Shields, M & Tremblay, M. 2008; Canadian Fitness and Lifestyle Research Institute 2007 quoted in *Live well, be well - New Brunswick's Wellness Strategy 2009-2013*, page 6. <http://www.gnb.ca/0131/pdf/w/Live%20well,%20be%20well.%20New%20Brunswick's%20Wellness%20Strategy%202009-2013.pdf>, reviewed on 23 March 2011.

¹¹ GPI Atlantic - Colman, R. 2001, quoted in *Live well, be well - New Brunswick's Wellness Strategy 2009-2013*, page 6.

¹² http://kn.fcm.ca/ev.php?URL_ID=2175&URL_DO=DO_TOPIC&URL_SECTION=201&URL_PAGINATION=20&reload=1107286064, reviewed on 1 February 2005.

¹³ Cited in *Get Wellness Soon: The Facts are In*. <http://www.getwellnesssoon.ca/EN/facts.cfm>, reviewed on 23 March 2011.

¹⁴ Canadian Fitness and Lifestyle Research Institute. 2010. *Cost of Physical Inactivity*. http://www.cflri.ca/eng/provincial_data/information/cost_inactivity.php, accessed on 31 March 2011.

¹⁵ Ibid.

adolescents aged 12-17 doubled from 14% to 29% between 1979 and 2004, and today only 12% of children and youth get adequate levels of physical activity.

There is strong evidence that people who commute to work using Active Transportation are more likely to be fit and less likely to be overweight or obese than those who use exclusively motorized modes. In addition, there are other health benefits to the physical fitness gains. Active Transportation can enhance one's mental outlook and well-being, improve self-image, social relationships and increase self-reliance by instilling a sense of independence and freedom. These can contribute to healthier and happier personal relationships, and improve work and school productivity.

Improving active transportation methods such as walking and cycling can help make communities more liveable by creating an environment that is pleasant and safe with reduced noise and pollution. This can encourage more social interaction within a neighbourhood and create a stronger sense of community.

Transportation

Walking and cycling are means of transportation that are efficient, affordable and accessible. They are the most energy efficient, and generate no pollution. The transportation benefits of walking, cycling and other Active Transportation modes include reduced road congestion and maintenance costs, less costly infrastructure, increased road safety and decreased user costs.

In general, active transportation modes provide no emissions during use and have low lifecycle greenhouse gas emissions. In many cases, for distances up to 8 km in urban areas, cycling can be the fastest of all modes from door to door.

Canadians make an average of 2,000 trips per year of distances less than 3 km, using their automobile in more than 90% of the time. Surveys show that 66% of Canadians would like to cycle more than they presently do. Seven in 10 Canadians say they would cycle to work if there "were a dedicated lane which would take me to my workplace in less than 30 minutes at a comfortable pace" (National Active Transportation Survey, *Go for Green*, 2005). These facts clearly demonstrate the potential for increasing the number of trips by bicycle, especially in the more developed areas of the Municipality.

It has been estimated that due to rising gasoline prices, more than 10 million cars – mostly belonging to low income families – will disappear in the US in the next five years, and a similar trend is expected in Canada (CIBC World Markets, 2008). This issue will be even more relevant in rural communities, where income levels are typically lower. Providing safe options for bicycle and pedestrian travel is going to become increasingly important.

Road improvements to increase the safety of pedestrians and cyclists can and will also enhance the safety of other road users. The U.S. Federal Highway Administration reports that paved shoulders on two-lane, rural roads have been shown to reduce run-off-the-road, head-on and sideswipe collisions by 30% to 40%. In addition, many municipalities have found that paved shoulders reduce maintenance costs related to shoulder deterioration, grading and snow removal.

Environment

Active Transportation activities are energy-efficient, non-polluting modes of travel, whereas short-distance automobile trips are the least fuel efficient and generate the most pollution per kilometre. Reducing the number of motor vehicles on the road decreases the number of pollutants released into the atmosphere by motor vehicles. Short-distance trips have the greatest potential of being undertaken by Active Transportation.

The effects of climate change can be reduced by encouraging drivers to use other modes of transportation, especially for travel outside rush hours. Motor vehicles, roads and parking facilities are major sources of water pollution and hydrologic disruptions due to such factors as road de-icing, air pollution settlement, and roadside herbicides.

Motor vehicles generate various types of unwanted noise that cause disturbance and discomfort to residents: engine acceleration, tire/road contact, braking, horns and vehicle theft alarms. Cyclists and walkers are not disruptive to communities from a noise perspective.

Making communities less auto-dependant by providing infrastructure for Active Transportation modes, such as walking and cycling, can reduce the amount of land required to construct new communities, thus creating more compact subdivisions that make more efficient use of available land.

Economic

The average cost of driving 1 km in a Dodge Grand Caravan costs the owner between \$0.449 and \$0.882¹⁶. Walking or biking 1 km costs nothing.

In 2004, *Go for Green* published what remains the principle Canadian document examining the economic benefits of Active Transportation: “The Business Case for Active Transportation: The Economic Benefits of Walking and Cycling¹⁷”.

This report specified that savings could be obtained by shifting mode share from driving to walking and cycling. These savings include a reduction in the following costs:

- Road construction, repair and maintenance costs, which will be reduced because of lower demand as mode share shifts to walking and cycling;
- Health costs of treatment for those affected by air pollutants and greenhouse gas emissions;
- Health care costs due to increased physical activity and reduced respiratory and cardiac disease;
- Fuel, repair and maintenance costs of personal vehicles for individuals who substitute some of their driving for walking and cycling;
- External costs due to traffic congestion; and
- Parking subsidies.

¹⁶ Canadian Automobile Association. 2011. *Driving Costs: Beyond the Price Tag – Understanding Your Vehicles Operating Costs*.

¹⁷ Richard Campbell and Margaret Wittgens. 2004. *Business Case for Active Transportation: The Economic Benefits of Walking and Cycling*.

Positive benefits to the community, in economic terms, will also include:

- The economic impact of bicycle tourism;
- The economic impact of bicycle sales and manufacturing;
- Increased property values along greenways and trails and in pedestrian and cycling friendly neighbourhoods; and
- Increased productivity and a reduction of sick days and injuries in the workplace.

Considerable examples exist that show on and off-road trails provide significant economic benefits for both local businesses and even adjacent landowners. Benefits are provided to the local economy during both construction and operation.

Trail construction results in direct benefits such as jobs, including the supply and installation of materials.

Following construction, benefits emerge in the form of expenditures by trail users. A few examples include¹⁸:

- Trails in New Brunswick employ around 1,500 people for an average of six months per year;
- 70% of Bruce Trail (Ontario) users cite the trail as the main reason for visiting the area in which they are walking. They spend an average of nearly \$20/person per visit within a 10 km corridor on either side of the trail;
- Quebec's La Route Verte produced annual expenditures of \$95.4 million in 2000, representing 2,000 jobs, or \$15.1 million in tax revenue for the government of Quebec and \$11.9 million for the government of Canada;
- In 2002, Quebec hosted no fewer than 190,000 bicycle tourists. These spent an average of \$112 per day and an average of 6.5 nights during their visit. This compared to \$52 per day and an average of 3.1 nights spent by other tourists;
- The Eastern Ontario Trails Alliance estimated that at the end of a ten year build-out period, 320 km of their system, constructed at a cost of \$5.4 million, will generate approximately \$36 million in annual economic benefits in the communities through which it passes, and create/sustain over 1,100 jobs. Their trails system in shared-use, including motorized; and
- A 2009 study of Bloor Street, a commercial street in Toronto, Ontario showed that encouraging bicycling is good for business: people who had biked and walked to the area reported that they spent more money in the area per month than those who drove there. The study concluded that the addition of bike lanes would be unlikely to harm local business and predicted that commercial activity on the street would likely increase. Three-quarters of merchants surveyed on the street believed that business activity would improve or stay the same if a bike lane replaced half of the on-street parking¹⁹.



Figure 2.1: Potential Benefits to Land Owners

On and off-road trails systems can have varied levels of attraction for tourists. They can be travel destinations in themselves, encouraging visitors to extend their stay in the area or enhancing business and pleasure visits. By increasing the level of tourist draw, travelers can be expected to stay

¹⁸ Jennifer Dill. 2009. *Bicycling for Transportation and Health: The Role of Infrastructure*.

¹⁹ Nancy Smith Lea. 2010. *Converting On-Street Parking to Active Transportation in Toronto: Two Studies of Merchant and Patron Preferences*.

longer, resulting in an additional night's lodging and meals, a major direct new benefit to local businesses. A local hotel is already taking steps to connect to the neighbouring rail-trail along the La Have River.

- A 2007 survey of Canadian tourists active in the outdoors showed that more than 30% cycled on at least one occasion while on vacation;
- The Ontario Ministry of Transportation reported that touring cyclists spend an average of \$130 per day in Ontario, and bicycle retail and tourist industry contributes to a minimum of \$150 million a year to the Ontario economy; and
- Bed and breakfast operators between Ottawa and Kingston report that the majority of their business is from touring cyclists.

Although not a Canadian example, the following statistic from the United States is worth quoting:

- Cyclists in Vermont spend an average of \$180 U.S. per day, the same amount as someone traveling by car.

Tourism

There is a growing demand for cycling and ecotourism throughout North America, stemming from an increasing desire to explore new areas through an active mode of transportation and experience one's natural surroundings. In all cases the increase in cycling and active tourism has a direct impact on the economic standing of the City, Town, County or Region in which it is implemented.

A study done by the Victoria Transport Policy Institute shows that walking and cycling facility improvements and promotion programs have a direct impact on economic development by increasing shopping opportunities and tourism activities. More specifically, "one study estimates that rail trails in Australia provide an average of \$51 to the regional economy per cycle tourist per day (Beeton, 2003)". A number of studies show a direct correlation between the implementation of well-planned, non-motorized transportation improvements and an increase in local tourism economies.

In the United States, studies have shown that trails and greenways have been able to stimulate tourism and recreation-related spending and that trail and greenway systems have become the central focus of tourist activities in some communities. In these communities, this push in active tourism can be a key means of "kick-starting" the economy.

Though tourism benefits from AT and Trail facilities prove to provide an injection into the local economy there are also a wide range of social, environmental and health benefits associated with AT and trail tourism. As people become increasingly more aware of the benefits to trail use and pedestrian and cycling activities there tends to be a continuous increase in the number of cycling tourists who will provide further benefits to their communities and the communities to which they visit.

Notes from Public Meeting

Monday, October 1, 2012

Attendance List

<u>Name</u>	<u>Ward</u>
Sam Sheridan	1
Marilyn Sood	3
Mary Hurdles	2
Debbie Darling	3
Anne Dore	1
DARIN MOONEY. DM	2
Annette Burgess	2
MAYOR Bob Powell	
Teresa Drabick	3
Louise Flight	1
Jackie Duns	3
Sheridan Mawhinney, Councillor	3
Don Kelly	3
Gary Foley	1
Stephen Henry Landy	1
Mary Ann Garagan	1

Sixteen individuals from the community, including the Mayor, Deputy Mayor, and one other Councillor, attended the public information session at the Hazan Park Centre.

After an introduction to and explanation of the scope of the project, participants were invited to work in groups and provide their views on:

1. Dangerous or unsafe roadways and/or paths
2. Currently existing safe roadways and/or paths
3. Active Transportation destinations within the community
4. Desired safe routes

Three working groups were established, and after a discussion session the results from each group were shared with and reviewed by the entire meeting. As commonly occurs, while there were unique concerns for each group there were a number of broad elements that were common to all.

Dangerous or unsafe roadways and/or paths:

- All groups considered Pioneer Avenue to be particularly dangerous for both walking and cycling, and in immediate need of improvement
- Each group considered all three crossing points of the Trans Canada Highway, connecting Oromocto West to the services in the other half of the community to be in need of improvement.

- The majority of the participants considered the tunnel connecting Pioneer Avenue to D'Amours Street to be unsafe after dark and poorly maintained.
- The majority of participants considered Restigouche Street to be unsafe for cycling – although experienced cyclists were comfortable using it.
- Every participant wished for immediate improvement of the connections of pedestrian and cycling infrastructure on Waasis Road between Pioneer Avenue and Restigouche Road.
- There was general, but mixed opinion on whether the roundabouts were safe for pedestrians. Many thought the roundabout at Miramichi and St. Lambert was acceptable, while most considered the roundabout at Miramichi and Route 102 very poor for pedestrians. All but experienced cyclists thought the roundabouts difficult for cyclists.
- Waasis Road from the town boundary to MacDonald Avenue was considered unsafe for pedestrians by the majority.
- The lack of lighting on the Trans Canada Trail and the poor water drainage of its underpass at Route 102 were considered safety issues by some.
- School crosswalks on Waasis Road between Broad Road and Restigouche Road were considered inadequate.
- Speeding on connecting streets between Waasis Road and the Oromocto River between Broad Road and Geren Street was mentioned.
- Safety for cyclists on Finimore Street and Hallihan Drive was mentioned.
- Regular and ongoing ATV traffic at night on the Trans Canada Trail after dark was mentioned.

Summary: Connections between Oromocto West and the remainder of the community are poor, and need improvement, particularly as there is a strong desire for people to make this trip. Very few participants were comfortable with cycling on main roads in the community, particularly Restigouche Road and the roundabouts.

Currently existing safe roadways and/or paths:

- With the exceptions noted, the Trans Canada Trail was recognized as completely safe for walking and cycling.
- The Pioneer/Waasis West/Finimore/Carpenter loop was mentioned as a safe walking route.
- The Broad/St. Lawrence/Miramichi/Waasis loop was mentioned as a safe walking route.
- Experienced cyclists considered Oromocto as generally safe to ride.
- The majority of participants expressed satisfaction with the network of short connecting paths between streets, particularly in the Waasis/Broad/Restigouche/Restigouche North district.

Summary: Everyone liked the Trans Canada Trail, and both experienced walkers and cyclists were comfortable using the community's roads, excepting certain problem areas.

Active Transportation destinations within the community:

- All the participants considered the principal commercial areas of Restigouche Road, Oromocto Mall, and Gateway/Miramichi to be important destinations.
- The majority thought that the schools and services within the Waasis/Broad/Restigouche/Restigouche North district as significant destinations.
- A number of participants considered the Track and Field area on Waasis Road, the Gagetown Fitness Centre with its Figure 8 track, and the Lindsay Valley Trails to be destinations.
- The Trans Canada Trail was mentioned as a destination, as were the Deer Park trails.

- Participants associated with the military considered the Main Gate of CFB Gagetown to be an important destination.

Summary: It was noted that although nearly half the population lives in Oromocto West, almost all the destinations are on the easterly side of Trans Canada Highway. Further, the majority of the destinations were not equally accessible by Active Transportation from every direction, although well-connected from some.

Desired safe routes:

- There was unanimous agreement that safe, connected cycling and pedestrian routes are urgently required from Oromocto West to various destinations in the other half of the community, and are not currently available.
- A bicycle path along Restigouche North connecting the bike path on Waasis Road to St. Lawrence Avenue and the tunnel on D'Amours Street was requested.
- An extension of the Waasis Road bike path to the North Gate entrance of CFB Gagetown was recommended.
- A walking path circling Gateway Marsh was suggested by several participants.
- A designated walking and cycling path/route from Waasis West to Anniversary Park was advocated.
- One or more developed and maintained connections to the Trans Canada Trail from Gardiner/Covert streets were requested.
- A pedestrian/cycling connection between the D'Amours Street Tunnel along Gateway to the Gateway/Miramichi roundabout.
- Safer crossings of Waasis Road, from the residential neighbourhoods to the north to the schools on the south side, was highly urged.

Summary: Participants wanted safer routes both between the various parts of the community and to specific destinations such as CFB Gagetown, schools, and the Trans Canada Trail. A more connected network, expanding and integrating current resources, such as the Waasis Street bike path, was strongly recommended.

APPENDIX C

Notes from Stakeholder Meeting

Monday, October 1, 2012

Attendance List

<u>NAMES</u>	<u>ORGANIZATION</u>
Mika MacLeod	Gagetown MFRC
Susan Allen	Public Health / Oromocto Ed Centre
Lara Delaney	UNB Nursing Student with Public Health
Muriel Morton	Oromocto Public Library
ELLEN POWELL	INDIVIDUAL
BRIAN POWELL	INDIVIDUAL (handicap) (C.H.'S)
Gerry Lawless	RCMP District #2 Oromocto
Don Kelly	Oromocto Walking Club - B.S. Ingham Track
Alison McKay	3 ASG - Engineer Branch
Steve Gynestrik	CHS GAGETOWN RECREATION
John Tophal	Retired Invidio Individuals
Tyone Purns	NS DTI
ED HOGAN	ANGLOPHONE WEST SCHOOL DISTRICT
Frederick Hackett	Municipal Planner
Beth Carey	Gagetown Military Family Resource Centre
Bill JARRAT	Town of Oromocto Rec-Tourism
DARYLL MOONEY	Deputy Mayor Town of Oromocto

Seventeen representatives from a variety of organizations attended the stakeholder session, held at the conference centre in the Town of Oromocto's offices. [See attached list]

After self-introductions were made by all those attending the session, an explanation of Active Transportation was provided, followed by an overview of the scope of the project. Following this, comments received at the public information session were shared and the stakeholders were invited to outline what their organization did to promote AT and give their opinion on what might improve AT in Oromocto.

Among the comments made were:

- From the school transportation officer, it was explained that, although the provincial standard for providing busing is 2.4 km, in Oromocto a distance of 1.5 km is used, in recognition of the community's exceptionally busy roads.

- Public education is required for walkers, particularly youth, because a large number appear to be unaware of the rules of the road - such as walking facing traffic when there are no sidewalks.
- People also appear to be unaware of the rules of cycling, such as not cycling on sidewalks.
- Signage needs to be improved on walking/cycling tracks. Many people do not even know that they exist even when they are using them. The Waasis West Road path was provided as an example; walkers regularly complain to cyclists they see using what is a designated – but unsigned – cycle path.
- The RCMP representative made several comments about Bike Rodeos:
 - Their detachment provided them regularly, and the bike rodeos were frequently requested by schools in the town.
 - They are limited in their ability to provide them because of manpower considerations
 - They recently declined a request to undertake one.
 - The RCMP was willing to permit other agencies to use their equipment to put on bike rodeos, and possibly even to train people to do so.
 - The RCMP prefers to offer bike rodeos in the spring.
- A number of people advocated the idea of the town constructing a training track/facility to provide safe cycling training to young people. (i.e. The German/Dutch/Danish model.)
- The representative from Public Health mentioned that there is a school travel program available for any school to use that promotes Active Transportation, but its use is at the discretion of each individual school.
- A community representative, who is a wheelchair user, provided a number of comments about restricted accessibility:
 - Grades on ramps often too steep (i.e. more than 10%)
 - Sidewalks and paths too often too poorly maintained for wheelchair use.
 - Building access difficult because doors too narrow, turning spaces in entrances often too small, and buttons for automatic doors often placed on wrong side (i.e. door opens toward, instead of away from, button)
 - A community access-a-bus is either required now, or will be as the number of seniors increases.
 - Many of the curb cuts are obstacles because of their “double bumps”.
- A number of stakeholders commented that there is a desperate need for better publicity about both existing resources and programs. For example, one resident who had lived in the community for three years was unaware that the Trans Canada Trail passed through Oromocto, or that it was usable by wheelchairs. The information that needs publicity is:
 - Where are the facilities/infrastructure?
 - Where do people park to access the facilities/infrastructure?
 - What are the rules/regulations?
- A number of people commented that improved lighting was required on well-used portions of the trails.
- A suggestion was made that there should be a BMX and/or mountain bike circuit park.
- There were a number of comments made about crosswalks:
 - Overhead and/or flashing lights should be installed at the most highly-used crosswalks, particularly those used by school-children on Waasis Road.
 - Thought should be given to moving less-used crosswalks.

- St. Lawrence Avenue is a dangerous place to cross, particularly during morning/afternoon rush hours.
 - Infrastructure for blind pedestrians should be added where required.
- The RCMP representative mentioned that the 30kph speed limit signs in Oromocto neighbourhoods are not DTI approved, and as such are not enforceable.
- The Public Health representatives stressed the need to improve the number and placement of bike racks at all destinations, and that the possibility of bike lockers be investigated.
- It was commented that in some communities public bicycle racks were designed as public art.
- A suggestion was made that the safety on St. Lawrence Avenue would be improved by making it one way, or to restricting access to school buses only.
- It was recommended that the town work with CFB Gagetown to have biking/walking designated as a recognized P/T activity, and that a safe route from the town into the base be selected.
- The CFB Gagetown representative pointed out that approximately 5000 cars/day pass through the main gate of the base.
- She also stated that bike lanes will be added to the roads on the base from both the Main and the South gates when these roads are rebuilt.
- Promotion was highlighted as a major requirement:
 - Put maps on the town Website
 - Use Facebook/Twitter
 - Tie into Geocaching
 - Include in monthly leisure guide
 - Associate with Pioneer Days activities with AT specific events.
 - Do AT activities for Winterfest.
- Other specific suggestions included:
 - Tie AT promotion/education into the Wellness Network.
 - Connect the Trans Canada Trail to the Lindsay Valley ski trails.
 - There is a need to make walking/cycling more attractive during the winter.
 - A connecting walking path needs to be developed between the new and the original Pioneer cemeteries.
 - Consideration should be given to installing emergency phones at intervals along the Trans Canada Trail.
 - In winter, the road shoulders should be cleared of snow as well as the paved car lanes.
 - More developed residential/commercial streets need to have sidewalks on both sides of the road (i.e. Miramichi at the Sobeys store.)
 - More frequent sidewalk clearing needs to be done in winter on streets exposed to high winds and drifting (i.e. from High School to Broad Street.)
 - Between 416 and 418 Gardiner Street there is an empty lot that should be developed as an access to the Trans Canada Trail.
 - It is critical to connect the bike path on Waasis Road across the overpass.

Bibliography

Active Living By Design. 2008. *Camden County Fit Together Partnership Increases Access to Physical Activity in Rural North Carolina*. Online: <http://www.activelivingbydesign.org>

Association of Pedestrian and Bicycle Professionals. 2002. *Bicycle Parking Guidelines*.

Bergeron, K. & S. Cragg. 2009. *Making the Case for Active Transportation: Bulletin #2 – Barriers*. Canadian Fitness and Lifestyle Research Institute, Ottawa, Ontario.

BicyclingInfo.org. 2011. *Creating Active Rural Communities: Haliburton County, Ontario*. Pedestrian and bicycle information centre. Online: <http://www.bicyclinginfo.org/library/details.cfm?id=4279>

Canadian Fitness and Lifestyle Research Institute (CFLRI). 2005. *Making the Case for Active Transportation*. Online: http://www.cflri.ca/eng/active_transportation/index.php

Canadian Fitness and Lifestyle Research Institute (CFLRI). 2004. *Physical Activity and Sport Monitor: Local Opportunities for Physical Activity and Sport: Trends from 1999-2004*.

Canadian Institute of Transportation Engineers. 2004. *Promoting Sustainable Transportation Through Site Design: An ITE Recommended Practice*. www.cite7.org/resources/documents/ITERPPromotingSustainableTransportationThroughSiteDesign.pdf.

City of Toronto. 2008. *Guidelines for the Design and Management of Bicycle Parking Facilities*. www.toronto.ca/planning/pdf/bicycle_parking_guidelines_final_may08.pdf.

City of Vancouver. nd. *Backgrounder: Active Transportation in the Canadian Context*.

Dakota County, Minnesota. 2011. *Active Living Community Vision*. And Kraft, K., H. Mahan, and M. Dessauer. 2006. *You are Where You Live: Active Living Community Vision Presentation*. Online: <http://activelivingcommunityvision.org/communities/dakota-region/>

Designing Walkable Urban Thoroughfares: A Context Sensitive Approach: www.ite.org/emodules/scriptcontent/orders/ProductDetail.cfm?pc=RP-036A-E.

FCM. *District of Saanich, BC: Municipality Changing Staff Commuting Habits*.

ICLEI. 2011. *Active Transportation Quantification Tool*. Online: <http://att.ccp.iclei.org/more/about>

Katzmarzyk P.T. and C. Mason. *Prevalence of class I, II and III obesity in Canada*. Canadian Medical Association Journal 2006; 174:156-157.

MMM Group, Stantec and Transactive Solutions. 2009. *Town of Oakville Active Transportation Master Plan (Cycling and Walking Master Plan)*.

- MMM Group, ESG. 2003. *Regional Niagra Bikeways Master Plan*.
- National Association of City Transportation Officials. 2011: nacto.org/cities-for-cycling/designguide/.
- Northwest Vermont Project. 2007. *A Guide to Transportation and Land Use Connections - Experiences from Northwest Vermont*.
- Ontario Professional Planners Institute. 2009. Planning by Design: A Healthy Communities Handbook. www.ontarioplanners.on.ca/content/Publications/innovativepolicypapers.aspx.
- Rubin J. *Heading for the Exit Lane*. CIBC World Markets StrategEcon Report, June 2006: 1.
- Schasberber, M.G., et al. 2009. Promoting and Developing a Trail Network Across Suburban, Rural, and Urban Communities. *American Journal of Preventative Medicine*. 37(6S2):S336-S344.
- SGE Acres Ltd & Marshall Macklin Monaghan Go For Green. 2006. *Halifax Regional Municipality Active Transportation Plan*.
- Smart Growth BC. 2009. *Creating Healthy Communities: Tools and Actions to Foster Environments for Healthy Living*.
- Toronto Centre for Active Transportation. 2012. Complete Streets by Design: Toronto streets redesigned for all ages and abilities: tcat.ca/completestreetsbydesign.
- Transportation Association of Canada. Active Transportation: Making it Work in Canadian Communities
- Transport Canada. 2011. Active Transportation in Canada: A Resource and Planning Guide: www.tc.gc.ca/eng/programs/environment-urban-guidelines-practitioners-atg-2671.htm.
- Transport Canada. 2010. *The Links between Public Health and Sustainable and Active Transportation*.
- Transport Canada. The Links between Public Health and Sustainable and Active Transportation. www.tc.gc.ca/eng/programs/environment-utsp-publichealth-995.htm.
- Vélo Québec. 2010. *Planning and design for pedestrians and cyclists. A Technical Guide*.
- Young, P. 2008. *An Active Transportation Plan for Minden*. Prepared for the Communities in Action Committee.