

## **2.0 DEVELOPING THE TRANSPORTATION DEMAND MANAGEMENT (TDM) PLAN FOR HURON COUNTY**

This chapter describes the proposed Transportation Demand Management (TDM) strategy for the County of Huron. The intent of the Huron County TDM Plan is to build upon the work that has already been completed in the County. The following sections describe the methodology for the development of the plan, the consultation process, the vision and goals for the study as well as the overall strategy for Transportation Demand Management in the County. The TDM Plan includes recommendations for TDM initiatives and a proposed Active Transportation network, which was developed based on a set of Route Selection Principles, and a network development approach.


The methodology established to develop the TDM Study for Huron County was designed to achieve the specific objectives established in the Terms of Reference, and reflect the TDM related planning initiatives within the County.

### **2.1 Methodology for Developing the Plan**

The approach used to develop the Plan was based on the need to integrate existing programs and initiatives, as well as the existing trail and cycling network. Existing conditions were built upon to develop a set of recommended strategies, pilot projects and an active transportation candidate route network. Throughout the study process, the Study Team met with a Steering Committee, which included members of the County's Transportation Task Force, on a regular basis to receive input on the study direction, findings and recommendations. Further elements of consultation will be explored in section 2.2 of the report. The study followed a three-phased approach described in further detail below.

**Phase 1** included the development of the communication strategy, as well as the vision, goals and route selection principles for the proposed active transportation network. Early action items in the consultation strategy included consultation with the steering committee, and the development of an online questionnaire. The online questionnaire was developed using [www.surveymonkey.com](http://www.surveymonkey.com) and provided respondents with the opportunity to identify the TDM needs for the County and its communities. County demographics, geography, policies, initiatives and plans as well as transportation opportunities and TDM best practices were explored and documented in the Background Report.

**Phase 2** features a number of consultation activities including the first Public Information Centre (held at the Rural Energy Expo) and the development of a mobile display board, which presented the study's vision, objectives and upcoming consultation events. A second steering committee meeting occurred in Phase 2 as well as the development of the public awareness campaign to be implemented by the County. In addition, the study team also identified



opportunities for TDM throughout the County and developed recommendations and initiatives for each. These recommendations were reviewed and refined by the study team as well as the Transportation Task Force.

A component of Phase 2 of the study approach and methodology was the development of an active transportation network supporting both walking and cycling as well as other non-motorized transportation modes. The network approach and process involved a set of iterative steps which were used to establish a recommended active transportation network, these included:


1. **An inventory of existing conditions:** which compiled and digitally mapped existing or previously planned transportation and active transportation facilities (pedestrian and cycling) in the County of Huron, including both on and off-road facilities, in order to establish a base condition.
2. **A route selection process:** which included a set of principles and supporting criteria for determining the preferred route and facility types; and
3. **Selecting Candidate Routes for the Active Transportation Network:** which involved identifying missing links and key barriers in the County's active transportation system, selecting a number of active transportation (pedestrian and cycling) on and off-road routes and evaluating each for feasibility and for inclusion as part of an improved County-wide AT system.

**Phase 3** included the final steps in developing the Transportation Demand Management Plan for the County. This included the preparation and submission of the TDM Plan for review with the steering committee and Transportation Task Force, a final project steering committee meeting and Public Information Centre to provide the public and local stakeholders with the proposed network and recommendations for the TDM study. When completed, the final report was presented to the Committee of the Whole as well as Council for adoption.

The proposed Active Transportation network consists of primarily on-road pedestrian and cycling facilities. Specific facilities should be explored at a later date but may include, multi-use trails, bike lanes, signed bike routes, paved shoulders with edgelines where necessary to connect missing links. The network as well as the potential active transportation facilities and initiatives are explored in more detail in section 2.4.2 of this report.

## **2.2 Consulting with the Public**

Public consultation was a key component in the development of the Transportation Demand Management Plan for Huron County. The consultation strategy was developed to draw upon the knowledge of the people who live, work, visit and play in Huron County, and hear from the various partners who will have a role in implementing the



strategy, recommendations and pilot projects. A comprehensive consultation strategy was developed at the outset of the study and confirmed by the Steering Committee. The consultation strategy was designed to:

- Engage County Staff, Councillors, residents and stakeholders about the purpose, approach and findings of the Huron County Transportation Demand Management Plan;
- Encourage stakeholders and the Transportation Task Force to participate in the study process;
- Promote TDM and active transportation for residents of all ages and abilities; and
- Provide information related to the benefits of TDM and active transportation and encourage behaviours that help to reduce unnecessary single occupant motor vehicle use.

The primary consultation techniques that were undertaken throughout the study process included:

**Steering Committee Meetings** – The Steering Committee meetings were attended by representatives from the County as well as the Transportation Task Force, and members of the consulting team. The Transportation Task Force is made up of representatives from the community, stakeholders, and social services. This committee reviewed study materials through the course of the project and provided direct input to the study through regularly scheduled meetings.

**Public Awareness Campaign (including notices, County website, mobile display board)** – The public awareness campaign developed for this study included the development and distribution of notices for the study's commencement and public information centres.

The study team also developed a mobile display board, which illustrated the study's goals and objectives and provided contact information. In addition, the study's business cards as well as a comment form were included on the mobile display boards which were distributed throughout the County at key destinations such as libraries and municipal offices. All results and materials developed were posted on the County's website (<http://www.huroncounty.ca/sustainablehuron/transportation-network.php>) for public access.

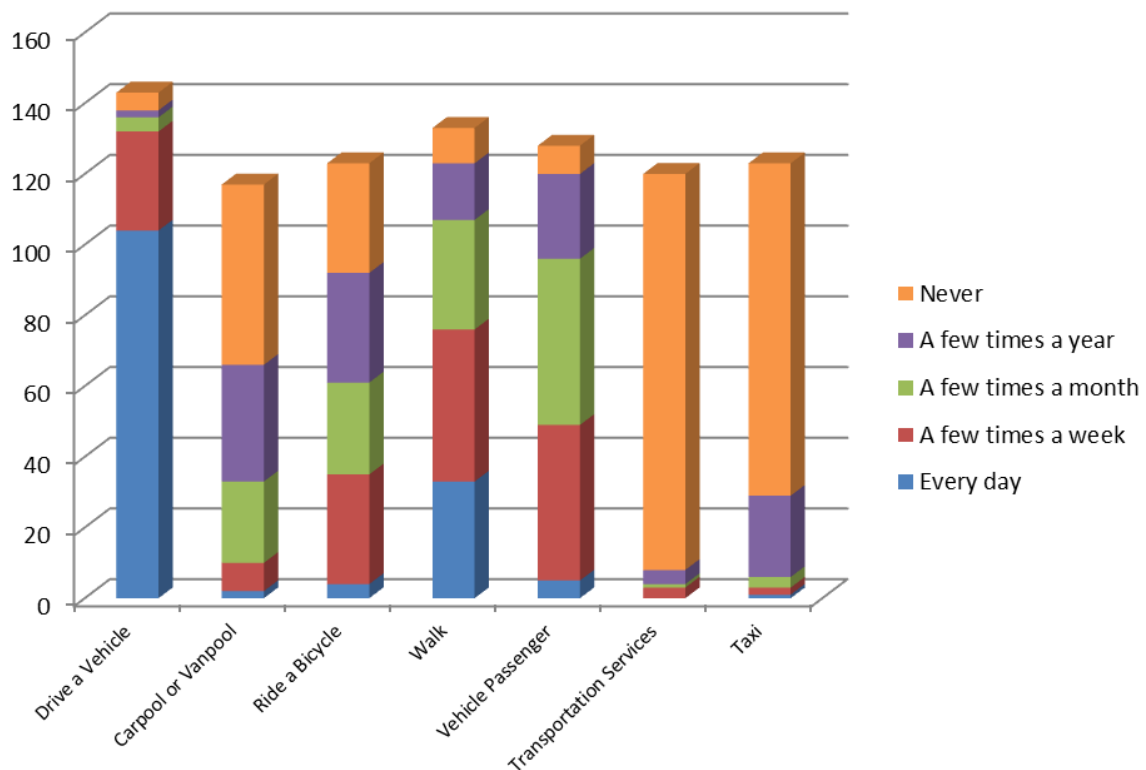
**Online Questionnaire** – As part of the TDM Plan, a web-based questionnaire was developed and hosted using an online service called SurveyMonkey ([http://surveymonkey.com/HC\\_TDM\\_Questionnaire](http://surveymonkey.com/HC_TDM_Questionnaire)). The questionnaire was issued early in the study and was available for respondents until the final stage of the study in May 2011. It was accessible from the County's TDM study's website. In addition, hard copies of the questionnaire were provided at the public information centres. The final results of the online questionnaire can be found in **Appendix C** of the report.

Although not statistically valid, the questionnaire results provided the study team with important information that helped guide the study, including:

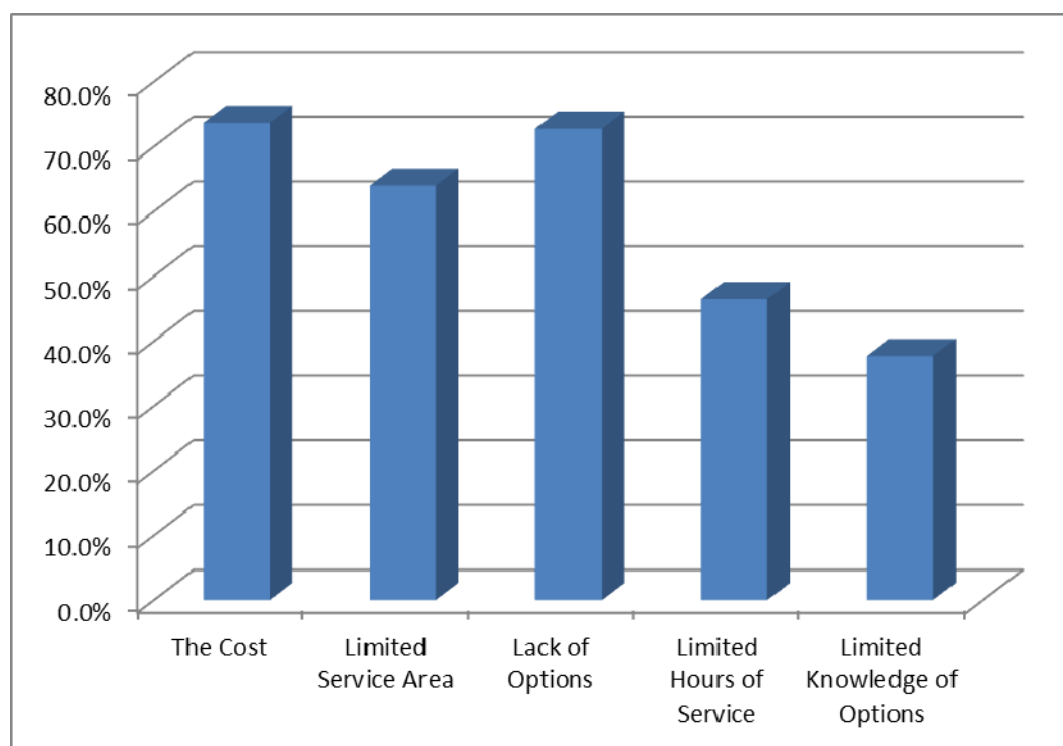
- Where Huron County residents tend to travel and how often;
- The transportation options used to reach their destination;
- The barriers to available transportation throughout Huron County; and
- The types of transportation improvements and strategies that would encourage a switch of mode.

The final questionnaire results are based on 149 respondents, of which 104 completed the entire questionnaire. The following is a summary of key findings from the questionnaire. They include:

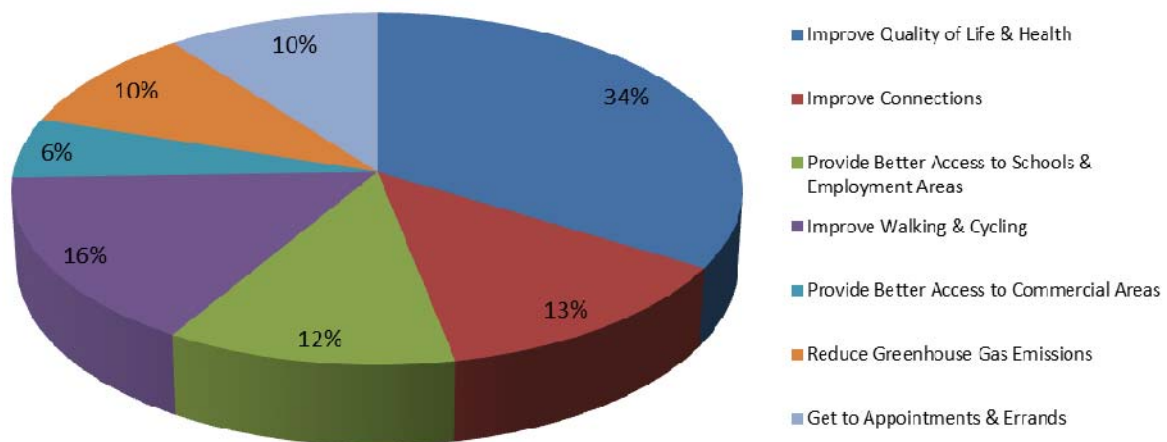
- Over 70% of respondents noted that they drive a vehicle every day followed by 25% - 35% of respondents identifying riding a bike or walking as modes of transportation used a few times a week. Though considerably lower, the responses indicate an existing demand for cycling and walking facilities throughout the community. These results are illustrated in **Figure 2.1**.



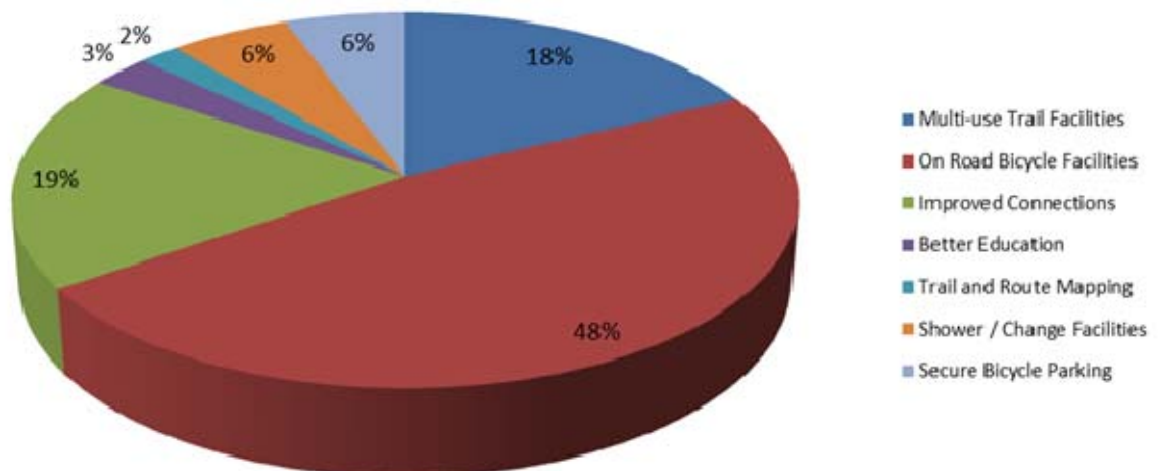
- The primary barriers to available transportation options in Huron County were also identified predominantly as the cost (74%) in addition to the lack of options / services available (73%) following these two strong barriers, the limited service area / distance between homes and destinations (64%) proves to be a common point of frustration for residents with regards to the available transportation options. These results are illustrated in **Figure 2.2**.




- Respondents were able to assess a number of possible improvements which may encourage an individual to use alternative modes of transportation to the automobile. Of these options respondents identified that bike lanes or paved shoulder on roads would be the ideal alternative (56%) for automobile use throughout the County. This response was followed by an increase in multi-use hiking and cycling trails (23%) and the development of improved connections to key destinations (23%). The latter could be achieved through a number of alternative transportation initiatives, programming and education. These results are illustrated in **Figure 2.3**.



- In addition to the assessment of potential improvements, respondents were also asked to provide their input on potential strategies for the development of the propose Transportation Demand Management Strategy. Respondents were asked to assess those strategies considered “most important” for the promotion of transportation demand management throughout the County. Of the list of strategies, an improvement to the quality of life and health of Huron County residents proved to be the most important with 45% of respondents identifying it as most important. Results from this question and an assessment of which strategies are considered “most important” are found below in [Figure 2.4](#).






In addition to those results outlined above, the respondents were provided the opportunity to present their input on more specific transportation improvements suggested for the County. Some key highlights from these results included:

- Implement Paved Shoulders on Roads i.e. bike lanes for cycling;
- Implement Cycling Lanes on County Roads and on major streets in Towns;
- Develop Public Transportation between Towns and Cities;
- Develop a transportation hub system;
- Decrease the speed limits on roads that have cycling routes;
- Bike Lanes and Paved Shoulders should be implemented between and within communities;
- Carpooling options should be implemented for some of the larger factories such as Sifto; and
- A passenger train should be implemented connecting major destinations such as the Goderich – Stratford Corridor.

**Public Information Centres** – Two public information centres (PICs) were held during the course of the study. The first PIC was held at the Rural Energy Expo on November 6, 2010 and focused on the study’s vision, background, goals and an inventory of existing TDM initiatives. In addition, a draft candidate route network of active transportation facilities and the route selection principles which were used to guide their development was presented.

A number of comments were provided to the study team prior to the PIC and additional comments were documented on the maps displayed at the Rural Energy Expo. Many of these comments provided specific reference to potential locations for the active transportation routes as well as potential TDM initiatives. Attendees were invited to comment on the active transportation candidate routes. In general, public comments from the first PIC were supportive of the County’s decision to undertake the study, and also noted the need to improve transportation options and trails between the municipalities and key destinations throughout the County.





Some specific comments included the need for:

- Transit connections to surrounding municipalities;
- Trail and cycling connections to local municipalities along the lakeshore;
- Increased safety along existing and proposed trails; and
- A better connected shuttle service for those with mobility issues.

The second public information centre was held on Friday March 25, 2011 at the Contactor's Expo in the Knights of Columbus Community Hall. The PIC focused on presenting the proposed Active Transportation concept network as well as the proposed TDM recommendations and pilot programs, partnership, marketing and funding strategies provided in the master plan. In total, there were approximately 32 attendees of which a number had the opportunity to discuss details of the study with members of the study team.

Attendees of the second public information centre were invited to comment on the active transportation concept plan as well as some key highlights of the proposed recommendations and pilot projects. In general, public comments from the second PIC were supportive of the initiatives and programs proposed, however, there were some additional comments and suggestions for further development. A summary of responses includes:

- A large amount of support for the active transportation initiatives and pilot projects was documented. More specifically, attendees were supportive of the demonstration project proposed for downtown Clinton.
- Some respondents noted that more should be done to explore opportunities with rail as a transportation alternative.
- Respondents were very supportive of the ideal of a shuttle service / program. The emphasis on increased connectivity was clear to both local municipalities as well as external urban centres.

Over the course of the study, a Consultation Record was maintained which documents all of the input received from various stakeholders and the public. The Consultation Report is provided as a separately bound appendix to the TDM Strategy for Huron County.



### 2.3 Mission, Vision & Goal of the Study

Transportation Demand Management for the County of Huron is guided by a mission, vision and goal that establishes a target and facilitates the successful implementation of the Strategy. The following mission, vision and goals for the County of Huron TDM Strategy have been prepared based on consultation with County Staff as well as the Steering Committee.

The **Mission** for TDM in Huron County is “to improve the efficiency and affordability of the existing transportation system by offering residents, visitors as well as employees, cost effective travel options and services to support the reduction of single occupant vehicle (SOV) use and increase accessibility throughout the County.”

The **Vision** for TDM in Huron County is “a community that provides its residents, visitors and members of the business community with numerous mobility options allowing them to access their destinations, community services, and goods in an efficient, affordable and equitable manner.”


The overall **Goal** of the TDM Strategy is “to review the travel needs of residents as well as visitors and employees, with the objective of identifying a suite of services, programs and delivery models”.

### 2.4 A TDM Strategy for Huron County

As identified in the Transportation Task Force Background Working Paper published in 2008 and through a detailed assessment and analysis of the transportation system a number of barriers and gaps to transportation modes available to residents and visitors of Huron County have been identified. These barriers and gaps can be summarized in the following categories with the primary issues and transportation deficiencies identified as well as their impacts on the community.

#### Time and Price Gaps

Throughout the County there are some transportation services which provide service with limited availability throughout the week. An example of this is the shuttle service which limits its service, to Mondays, Tuesdays, Thursday and Fridays. It is clear that there is not only service missing on three out of the seven days of the week but that two of these days are Saturday and Sunday. The lack of service on these days could prove to be an issue as this is the time when people may require additional help getting to and from social engagements, errands or appointments. In some cases these events may be time sensitive limiting the number of possible transportation options for people. In addition, the time frame of service is limited for those who may require subsidization as the only free program available runs two days out of the week for two and a half hours each day.



Though the 2008 pilot program for the Midwestern Adult Day Centre provides additional shuttle service, there is still a price associated with the service available which may be an issue for some user groups. Both services also require advanced warning for the provision of the service which makes it difficult for users to utilize the service when last minute appointments or errands arise. In addition to these deficiencies there are also a number of other gaps in the system which include:

- Few scheduled routes;
- Limited night service and early morning service; and
- Lack of coordination with other modes / methods of transportation.


### **Geographic Gaps**

Geographic gaps in the transportation system tend to occur when services are limited or non-existent within the County or the local municipalities. As there is frequently less demand in many of the rural areas for multiple modes of transportation, the provision and availability of services is significantly less. Because of this, the ability to provide transportation services to large populations is not possible or feasible, resulting in a large gap in service for residents in rural areas. These groups can be identified as people who may typically require the most support when it comes to exploring alternate transportation options. At this point in time, public transit options are very limited, and the Aboutown Charter Bus Service available is located exclusively in Goderich with limited connection to alternate modes of transportation. This option is also only accessible by car or planned shuttle service which can be isolating for those groups who require transportation assistance.

There are a number of other gaps in the services such a lack of designated routes which serve specific communities. As was mentioned in the previous section, this also creates significant gaps in the time availability for the services as well as the days of the week that these services are provided on. There are also no designated routes to other municipalities and / or other neighbouring towns and villages. This is proving to be an issue for those who require access and transportation to services and treatment facilities outside of the County. If not accessible, this deficiency in service may result in serious health issues for the residents of the County and throughout each of the communities.

### **Age Gaps**

At this point in time, a majority of the well-publicized services that are currently being provided are geared towards the elderly with only a few transportation services geared to low income populations (e.g. Salvation Army Wingham



Food Bank Shuttle Service). However, this does provide a demand in service for those young mothers, single parents, young adults and teens that need or would like to move around and outside of the County. There are some services that provide alternate transportation options for people of all ages but in many cases they are not promoted and they are typically used for emergency circumstances or vulnerable groups. The timeframes for these trips vary widely and with a lack of service there are social, employment and geographic limitations imposed on these groups of people. There are also very few connections available for day to day trips to key destinations throughout the County such as local arenas, community centres, after school programs or external transportation options (i.e. VIA rail and Greyhound services). By limiting alternative transportation opportunities for these groups of people the level of mobility and safety can begin to decrease.

Affordable transit and transportation options which connect the local municipalities and major urban centres are not an option which can result in a decrease in the number of young professionals living and working within Huron County. Currently, the services provided by the Aboutown are the only transportation opportunities to connect passengers to destinations outside of Huron County. However, their prices range from \$11.50 - \$51.00 depending on the starting and destination point. This price point may not be feasible for students and young adults and low income families which can limit the desirability of the County as a place of residence or employment in the future.

### **Accessibility Gaps**

Though there has been significant improvement made with regards to addressing accessibility and the AODA requirements, there are still key transportation and movement barriers for those with mobility issues throughout the County. As identified above, there are some services throughout the community which do not provide an accessible service for individuals with mobility issues. Within the County, there are many geographic destinations or connections which are not accessible or manoeuvrable by people in wheelchairs, using walkers, or crutches. The newly developed local Aboutown transit service is currently only available in Goderich limiting the ability of those individuals with accessibility issues to utilize alternative modes of transportation.

### **Program Gaps**

By definition programming gaps in the community or for the community include “Glitches in the program or agency which prevents it from operating to its fullest potential” (Transportation Task Force Report, 2008). Many of these glitches can be mitigated or explored through the development and implementation and adoption of the proposed recommendations as outlined in the TDM Strategy for Huron County, as is the case for the other gaps identified in the transportation system above. The glitches identified by the County and its transportation task force include:

- Increasing gas price;
- Expensive services not affordable for all community members;
- Increasing cost of repairs for vehicles as they age;
- Limited number of volunteers and resources to operate services at a broader scale;
- Increased demand for collaboration between local and non-local agencies providing the services as well as County and municipal staff; and
- Increasing number of single occupant vehicles on the road.


In addition to these glitches, based on further investigations, other issues were identified for consideration when the proposed TDM alternatives and recommendations were assessed and developed. These include but are not limited to:

- A lack of education directed towards the residents of Huron County regarding alternative transportation options and active transportation opportunities in the community; and
- A lack of communication and collaboration among operators of other modes of transportation in key urban centres and destinations (i.e. London, Waterloo and Stratford).

In order to respond to the gaps and barriers related to transportation opportunities within the County a number of general TDM recommendations are proposed. The following sections outline and describe these general TDM recommendations for the County as well as specific recommendations for the modes of transportation available currently throughout the County as identified in Chapter 1 of the report.

#### **2.4.1 General TDM Initiatives and Recommendations for Huron County and Local Municipalities**


The following proposed strategy is meant as a starting point from which to increase TDM related efforts both at the County and local level. Within the strategy there are “general” policies which should be implemented. These are not specific to one mode of transportation and they will need to be coordinated by the County with input from the local municipalities. In addition to these recommendations, specific recommendations pertaining to the development of an active transportation network, taxi service, transit service, shuttle bus service and vanpool / carpool service have been identified. The following are some “general TDM recommendations” which are to be used to help facilitate TDM and the implementation of transportation mode specific recommendations over the next 10+ years. It is



important to note that not all of these initiatives are to be County led and that other partners, including government agencies and organizations may assume the lead of some recommended initiatives. These could include local school boards, local interest groups, the County's health Unit as well as individual community organizations.

**Recommendations:**

1. **Assign the responsibility of a “TDM Coordinator” in the County to existing staff. The individual(s) should assume responsibility for the development and execution of TDM initiatives and programs and address these TDM issues as they arise.** The coordinator could be a representative or current employee of the County who would be able to dedicate the time to exploring TDM options and coordinating TDM initiatives year-round. The coordinator would also be responsible for attending and consulting with the Transportation Task Force and Council as necessary. In the future, if funding is available the County may explore the hiring of a student to help with the responsibilities and roles of the TDM Coordinator.
2. **Identify TDM “Champions” for each municipality within Huron County who will make up a TDM Committee to Council led by the TDM Coordinator for the County.** These “Champions” will be existing members from a municipal department which would have appropriate experience and interest in TDM for the County (i.e. transportation or public works). The TDM Committee would deal with issues regarding Transportation Demand Management in Huron County and would also include members of the Transportation Task Force.
3. **Develop and distribute (by mail or electronically) a quarterly TDM newsletter within Huron County.** This report, generated by the TDM coordinator and committee will provide updates on successes, program opportunities, events and festivals, volunteer opportunities and promote the online database (see section 2.4.6 – Shuttle Service recommendations). These newsletters could be issued on a quarterly basis as determined by the TDM Committee and Coordinator.
4. **Develop and distribute an Annual Report on the progress and state of TDM in Huron County.** The report developed by the TDM Coordinator and Committee will be provided to Council as well as County and Municipal Staff Members. The annual report will also propose budgeting and more technical recommendations for the future of TDM in the County.
5. **Hold TDM Committee Meetings every three months to share ideas and information and report on progress within Huron County.** These meetings would be used to update the ongoing programs / initiatives within local municipalities, brainstorm ideas for future programs / initiatives, as well as create




the TDM newsletters and Annual Reports. In some cases, committee members may choose to invite individuals or groups that they believe would provide beneficial input to the discussion. These individuals could also be potential partners or investors for future TDM programming and initiatives.

6. **Hold information / promotional sessions at elementary and secondary schools around the County.** The TDM Coordinator and / or representatives from the TDM committee should visit schools to inform students what TDM is about, and the opportunities for programming and initiatives throughout the County.

In addition, the TDM Coordinator and committee representatives should work with students and encourage schools to choose a Student TDM Representative for each school every year. This will help children and young adults learn about and explore alternative transportation options in the County or in the individual municipalities.

7. **Hold TDM workshops throughout the year with stakeholders throughout the community.** These workshops will be used to discuss TDM opportunities and initiatives to be explored in the future by the TDM Coordinator and Committee. The workshop should be held prior to the annual report so the future TDM initiatives are outlined and explored in the coming year. The event can be promoted in the newsletter and on the website / database.
8. **Create internship / co-op opportunities for students to work with the TDM Coordinator.** The primary role for the intern / student would be to help maintain the online database, and support TDM program implementation etc. The County should coordinate with area Colleges and Universities to develop a program / opportunity for the ongoing employment of a co-op student or intern.
9. **Undertake a School Travel Plan for elementary and secondary schools throughout the County.** The travel plan could include multiple transportation related initiatives implemented by or for students at each of the educational facilities. The TDM coordinator and committee members should work with the school boards as well as representatives from the educational facilities to explore the options available for TDM initiatives in schools. School representatives should attend TDM committee meetings where these initiatives are being discussed.
10. **Adopt an Active and Safe Routes to School (ASRTS) program.** The program would be a joint project between the TDM coordinator and committee members, the Transportation Task Force, the County's Board of Health, the EasyRide Organization, the Accessibility Advisory Committee, the County's Planning and Transportation Departments, and the County's Policy Departments. In addition, the program would require extensive promotion and education through awareness campaigns and initiatives. Green Communities



Canada is currently rolling out a School Travel Planning Approach in different communities, the TDM coordinator and committee should meet with or discuss with representatives from Green Communities Canada about any suggestions on how to develop, implement and further explore the ASRTS program. It would also be beneficial for the TDM coordinator and committee to organize an event with the ASRTS partner organizations as well as the schools and parent associations to determine the level of interest in Active Transportation and alternative trips to school programs beyond what is currently offered.

**11. Explore the use of School Buses outside of school hours as additional public transportation vehicles.**

Work with school bus operators, local school boards as well as the TDM Coordinator to explore opportunities for the use of school buses outside of school hours. This might include the use of buses for additional public shuttle services throughout the community.

## **2.4.2 Active Transportation**

This section presents a framework for an Active Transportation (AT) master plan for Huron County. It highlights existing Active Transportation and trail infrastructure, discusses the need for an AT Master Plan, presents suggested route selection principles, proposes a preliminary candidate AT route network, identifies a range of AT facility types that could be considered and provides a number of recommendations.

### **2.4.2.1 What is Active Transportation (AT)?**

Active Transportation, as defined in the context of the TDM plan for Huron County, is considered “Human-powered transport” by way of non-motorized forms of travel such as walking, cycling, running as well as cross-country skiing, inline skating and skateboarding.

Active Transportation consists of:

- “Active Commuting” which involves journeys to and from work;
- “Active Workplace Travel” which includes trips during working hours such as the delivery of materials or attending meetings;
- “Active Destination Oriented Trips” which includes trips to and from school, shops, visiting friends and running errands; and
- “Active Recreation” which involves the use of an active transportation mode for fitness or recreational pursuits, such as hiking, cycling and cross-country skiing.



#### 2.4.2.2 Benefits of AT

Active Transportation activities provide significant health and fitness, transportation, environmental, economic and tourism benefits. Municipalities in southern Ontario and throughout North America are implementing initiatives to promote and encourage active transportation activities as a feasible alternative to the private automobile for short-distance trips and as a method of promoting a more active and healthy lifestyle. Given federal and provincial policies and legislation in Ontario support and or call for compact pedestrian, cycling and transit friendly development, many regional, county and local municipalities have developed or plan to develop active transportation master plans and transportation demand management (TDM) strategies. The following sections outline some of the benefits of active transportation and demonstrate why investing in active transportation should be a local and regional/county priority.

#### Health and Fitness

Walking and cycling provide an 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<sup>1</sup>.

In 2001, approximately \$2.8 billion was spent on health care due to physical inactivity in Canada, which could be reduced by \$280 million if physical activity was increased by 10%<sup>2</sup>. Our health system is shifting from protecting people from hazards in the environment to developing healthy environments in which people can live. Evidence suggests that improved cycling facilities lead to increased bicycle use<sup>3</sup>. Increased physical activity such as walking, cycling and other trail 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.


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

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<sup>1</sup> Reynolds, Conor C.O., Meghan Winters, Francis J. Ries, and Brian Gouge. "Active Transportation in Urban Areas: Exploring Health Benefits and Risks." Editorial. *National Collaborating Centre for Environmental Health* June 2010: 1-15. *National Collaborating Centre for Environmental Health*. National Collaborating Centre for Environmental Health, June 2010. Web. June 2010. <[www.ncceh.ca](http://www.ncceh.ca)>.

<sup>2</sup> The Business Case for Active Transportation, The Economic Benefits of Walking and Cycling; Section 4.7.2; Go for Green, March 2004

<sup>3</sup> Bridging the Gaps: How the Quality of a Connected Bikeway Network Correlation with Increasing Bicycle Use, July 27, 2005, Mia Burke and Roger Geller



youth between the ages of 2 and 17 years old are overweight or obese (Statistics Canada 2005). 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 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 to suggest that people who walk or cycle to work / school are likely to be fit and less likely to be overweight or obese than those who use motorized modes<sup>4</sup>. It is important to educate and inform adolescents at an early age about the importance of living active and healthy lifestyles.

There are other health benefits in addition to the physical fitness gains. Exploring different modes of 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 and reducing automobile traffic can help make communities more liveable by creating an environment that is pleasant and safe with reduced noise and pollution. This can help to encourage more social interaction within a neighbourhood and create a stronger sense of community. Active transportation modes can provide a form of mobility for people who do not have regular access to an automobile and live in communities with limited transportation choices.

Making strategic investments in both infrastructure and outreach to support active transportation in daily commuting habits, fitness and active recreation can help to promote a healthy and active lifestyle for Huron County residents and can have other valuable benefits. These should be explored through partnerships with local stakeholders, businesses, social services when feasible.

## Transportation

Walking and cycling are both popular recreational activities and a means of transportation that is efficient, affordable and accessible. They are the most energy efficient modes of transportation that 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

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<sup>4</sup> Reynolds, Conor C.O., Meghan Winters, Francis J. Ries, and Brian Gouge. "Active Transportation in Urban Areas: Exploring Health Benefits and Risks." Editorial. National Collaborating Centre for Environmental Health June 2010: 1-15. National Collaborating Centre for Environmental Health. National Collaborating Centre for Environmental Health, June 2010. Web. June 2010. <[www.nccceh.ca](http://www.nccceh.ca)>.

emissions<sup>5</sup>. In many cases, for distances up to 10 km in urban areas, cycling can be the fastest of all modes from door to door.

Canadians make an average of 2,000 car trips per year over distances less than 3 km. Surveys show that 66% of Canadians would like to cycle more than they presently do. Seven in ten 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”.<sup>6</sup> These facts clearly demonstrate the potential for increasing the number of trips by bicycle, especially in the more urban areas of the County.

There is strong evidence that given complete networks of high-quality cycling routes, a significant number of people will cycle. The value of such complete networks is demonstrated in many urban communities such as Portland, Oregon; Davis, California; and Boulder, Colorado. With between 10% and 20% of trips by bicycle, these communities have the highest levels of bicycle usage in North America. This high level of cycling is facilitated by mature networks, which include bike lanes on almost all of their arterial roads and extensive off-road commuter bicycle paths. Residents can simply get on their bicycles with confidence knowing there will always be a safe route to their destination (British Columbia Cycling Coalition Budget Submission, 2007).

The addition of even a small volume of traffic to a congested road can create enormous delays for all users. In fact, at capacity conditions, increasing traffic by 5% can reduce speeds by up to 25%. In 2003, congestion costs in Ontario were estimated to be \$6.4 billion annually and could grow by an additional \$7 billion annually by 2021 without increased investment in alternative modes of transportation.<sup>7</sup> Shifting a little traffic off busy roads can create substantial time savings for individuals as well as time-sensitive commercial vehicles<sup>8</sup>.

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). Providing safe options for bicycle and pedestrian travel is going to become increasingly important.

Typical roadway funding requirements include maintenance costs, safety and enhancement costs plus the addition of roadway capacity through lane widening or additions. Furthermore, the costs for road construction, reconstruction


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<sup>5</sup> Reynolds, Conor C.O., Meghan Winters, Francis J. Ries, and Brian Gouge. "Active Transportation in Urban Areas: Exploring Health Benefits and Risks." Editorial. National Collaborating Centre for Environmental Health June 2010: 1-15. National Collaborating Centre for Environmental Health. National Collaborating Centre for Environmental Health, June 2010. Web. June 2010. <www.nccceh.ca>.

<sup>6</sup> Ontario Trails Strategy, Ministry of Health Promotion, 2005, Province of Ontario.

<sup>7</sup> Transportation Demand Management Strategy, City of Ottawa - TravelWise (Transportation, Utilities and Public Works), April 2003.

<sup>8</sup> Transportation Demand Management Strategy, City of Ottawa - TravelWise (Transportation, Utilities and Public Works), April 2003.



and maintenance are usually paid for by road users through property and gas taxes. An emphasis on walking, cycling and other active transportation modes can result in a reduction in roadway costs. Bicycles are lightweight vehicles that take up little space and cause little wear and tear on a road surface.

Road improvements to increase the safety of pedestrians and cyclists could 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.

A roadway can carry 7 to 12 times as many people per lane per hour by bicycle compared to that of motor vehicles in urban areas operating at similar speeds. It is also much cheaper to provide paved shoulders on a road for cyclists than to provide two additional motor vehicle travel lanes. A small portion of a municipality's transportation budget can be used to facilitate high levels of bicycle use.

Another benefit of reduced car use is a decrease in the number of parking spaces required. For example, encouraging more people to walk and cycle to work could lead to a reduction in the number of parking spaces required at a place of employment. Bicycle parking facilities could be provided in an existing surface or underground parking lot with no additional parking lot expansion required.


## **Environment**

Active transportation activities are energy-efficient, non-polluting modes of travel. Short distance motor vehicle trips are the least fuel efficient and generate the most pollution per kilometre. These trips have the greatest potential of being replaced by walking or cycling trips and integrated walking-transit and cycling-transit trips.

Reducing the number of motor vehicles on the road decreases the number of pollutants released into the atmosphere by motor vehicles. The effects of climate change can be reduced by encouraging drivers to use other modes, or to 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, roadside herbicides, road construction along shorelines, and increased impervious surfaces.

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

Automobile dependent communities require more land for road rights-of-way and parking than communities that are not as reliant on the automobile. Making urban and rural communities less auto-dependant by providing



infrastructure for alternative transportation modes, such as walking, cycling and public transit, can reduce the amount of land required to construct new communities, thus creating more compact subdivisions that make more efficient use of available land.

Given the important role that cycling plays in reducing emissions of air pollutants and greenhouse gases, and fostering good health directly, it is important to create bicycle connectivity that has the potential to create a desirable cycling environment. A literature and best practices review suggests that the number of beginner or infrequent cyclists increases when:

- Neighbourhoods and communities accommodate a cycling network that includes bike lanes and off-road cycling or multi-use trails;
- Roads with speeds over 60km/h have separated lanes or wider paved shoulders that are part of the road, not sidewalk, infrastructure;
- Roads with speeds between 50-60 km/h have marked bicycle lanes;
- Roads with speeds under 40 km/h are shared;
- Priority is given to cyclists in intersections;
- Residents have access to trip end facilities such as secure long-term bicycle parking (e.g. lockers), secure short-term bicycle parking (e.g. bicycle racks), and showers in commercial buildings; and
- All streets, roadways, and designated bike routes are maintained to be free of deterrents to bicycling (such as potholes, debris, and overgrown landscaping).

In order to support the inclusion of these community design elements in future development in Huron County, it would be helpful if local municipalities incorporated in their planning policy an active transportation review for cycling and pedestrian connectivity and safety for planning applications<sup>9</sup>.

### **Economic**

A study published by Go for Green in March of 2004 establishes a convincing Business Case for Active Transportation in the report entitled “The Economic Benefits of Walking and Cycling”<sup>10</sup>. These benefits include:

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<sup>9</sup> Creating Walkable and Transit-Supportive Communities in Halton, Halton Region, February 2009

<sup>10</sup> The Business Case for Active Transportation, Go for Green, Better Environmentally Sound Transportation – BEST, March 2004.

- Reduction in road construction, repair and maintenance costs;
- Reduction in costs due to reduced air pollutants and greenhouse gas emissions;
- Reduction in health care costs due to increased physical activity and reduced respiratory and cardiac disease;
- Reduction in fuel, repair and maintenance costs to users;
- Reduction of costs due to increased road safety;
- Reduction in external costs due to traffic congestion;
- Reduction in parking subsidies;
- Reduction of costs related to mitigating water pollution;
- The positive economic impact of bicycle tourism;
- The positive economic impact of bicycle sales and manufacturing;
- Increased property values along greenways and trails; and
- Increased productivity and reduction of sick days and injuries in the workplace.

There is ample evidence that on and off-road active transportation facilities provide significant economic benefits for adjacent landowners and local businesses. Active transportation provides benefits to the local economy during both construction and operation. The construction of these active transportation facilities results in direct benefits such as jobs, including the supply and installation of materials. Following construction, benefits emerge in the form of expenditures by active transportation facility users. A few examples include:

- The Adanac Bikeway in Vancouver was completed in 1993 and bicycle volumes increased 225% during the period from 1992 to 1996;
- Trails in New Brunswick employ around 1500 people for an average of six months per year;
- 70% of Bruce Trail users cite the trail as the main reason for visiting the area, and they spend an average of about \$20.00 per user per visit within a 10 km corridor on either side of the trail;
- Annual expenditures linked to La Route Verte rose to \$95.4 million in 2000, representing 2,000 jobs and \$15.1 million and \$11.9 million for the governments of Quebec and Canada, respectively;

- In 2002, Quebec hosted 190,000 bicycle tourists who spend an average of \$112 per day and an average of 6.5 nights compared to \$52 per day and an average of 3.1 nights spent by other tourists; and
- In Ontario, 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.

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 longer, resulting in additional night's lodging and meals, a major benefit to local businesses.

Bicycle manufacture, sales and repairs, as well as bicycle tourism, recreation and delivery services contribute to the economy with little to no public investment or subsidy. In 2002, Canadian households spent an average of \$42 on bicycles, parts and accessories for a total of approximately \$500 million<sup>11</sup>.

## Tourism

It has been shown that there is a growing demand for cycling and eco-tourism throughout Southern Ontario and North America. The demand stems 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 it is emphasized or implemented in.

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<sup>12</sup>.


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

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<sup>11</sup> The Business Case for Active Transportation, Better Environmentally Sound Transportation - BEST, Go for Green, March 2004. Section 4.5.4, pg. 24

<sup>12</sup> Litman, T. Quantifying the Benefits of Non-motorized Travel, Civtoris Transport Policy Institute (2010).





some communities. In these communities, this push in active tourism can be a key means of “kick-starting” the economy.

When examining at pedestrian, cycling and trail related tourism one must also look at the other expenditures associated with the trips. These include the food and beverage, maintenance, and lodging related costs which can be accrued over time. In one study undertaken throughout the United States, the expenditures on three multi-purpose trails were compared. On two rural multi-purpose trails in Iowa and Florida, the expenditures by cyclists and pedestrians when using the trail system were US \$9.31 and US \$11.02 respectively. For an Urban multi-purpose trail in California, the expenditure was US \$3.97. Though lower for the urban trail, with higher visitation levels the expenditures can provide significant monetary benefit for the region<sup>13</sup>.

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 of 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.


Over the last ten years, the concept of active transportation and pedestrian and cycling network development has been gaining popularity due to substantial health, social, environmental, economic and tourism benefits. There is clear evidence of benefits associated with designing active transportation, 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 TDM strategy that can encourage people to reduce their use of the personal automobile, and create sustainable, more liveable, safe and active communities.

#### **2.4.2.3 Need for a Network**

There is a growing demand for active transportation (pedestrian and cycling) facilities throughout Ontario and across North America for both utilitarian and recreational purposes. Initiatives addressing this growing demand are supported on a federal, provincial, regional, county and municipal level through the development and implementation of policies and strategies. With a growing awareness of the negative impacts that a lack of physical activity has on all age groups, as well as the benefits of reducing motor-vehicle use and increasing multi-modal

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<sup>13</sup> Litman, T. Quantifying the Benefits of Non-motorized Travel, Civtoris Transport Policy Institute (2010).



transportation choices, there is a growing need and demand for active transportation options. Huron County and its local municipalities acknowledge the importance of future investment in active transportation facilities and opportunities as shown in many of the policies and strategies currently in place as well as the recently completed Transportation Task Force Report (2008).

Huron County and the local municipalities established policies and initiatives which speak to the provision of active transportation facilities as part of the multi-modal transportation network for the County. These include the Official Plans, Community Improvement Plans, as well as Huron County's 2007-2008 Accessibility Plan which reemphasizes the importance of providing transportation opportunities for people of all levels of ability.

The "Take Action for a Sustainable Huron Report" developed for Huron County provided a vision for the County with regards to transportation which included specific reference to the integration of a wide range of transportation opportunities.


*"In 2031... Huron County will have a transportation network providing multi-modal options, such as walking, cycling, roads, rail, water and air transit that meet the needs of the entire community" (Sustainable Huron, 2010).*

In addition, the Transportation Task Force's report on the state of transportation in Huron County identifies the increasing need for alternative transportation options throughout and between each of the municipalities as a key issue. Simple errands such as grocery shopping and getting to school are difficult for those people who do not have a motor vehicle at their disposal. The demand for affordable transportation is growing and this demand is supported and illustrated through the survey results and research undertaken for the Transportation Task Force Study / Report as well as for the County's TDM Strategy Study. This implies prioritizing improvements or creating visible routes, connections and facilities in and around urban areas in the County.

Existing policies at all levels of government support land development and infrastructure improvements that integrate active transportation strategies. Huron County and the local municipalities have already begun to establish through policy recognition of the value and importance of planning for all travel modes. The time is right for the County of Huron, in partnership with local municipalities, to build upon existing policies and the proposed County TDM Strategy, and develop a long term active transportation master plan that is fiscally responsible and implementable.

#### **2.4.2.4 Route Selection Criteria**

As part of the TDM Strategy a preliminary active transportation network concept was developed. The following is a list of the guiding principles that were used to develop the active transportation network component of the



Transportation Demand Management Strategy for Huron County. These principles were reviewed with the public at the first Public Information Centre as well as with the Transportation Task Force. The principles were then refined and confirmed by the study team. The route development and selection principles were based on a desktop analysis, limited field observations of existing conditions and potential opportunities as well as input from the Steering Committee, Transportation Task Force and the public.

*Safety:* Reducing risks to users and providing facilities that support active transportation and trail use will be key considerations when selecting routes for the network.

*Visible:* The routes should be a visible component of the transportation and trail system. They should be well marked so that they can be easily recognizable and visible by active transportation users and motorists.

*Direct / Connected:* All routes should be connected to form an overall network that supports connections between existing and planned neighbourhoods, between different land uses, between Huron County's urban communities and beyond municipal boundaries to Huron County's neighbours.


*Destination Oriented:* Active transportation routes should provide access to major destinations in Huron County including but not limited to communities in the County, schools, community support services, hospitals, community and neighbourhood parks and recreation areas, shopping facilities, employment areas, and natural and cultural points of interest.

*Attractive and Scenic:* Active transportation routes should take advantage of attractive and scenic areas, views and vistas.

*Diverse:* The active transportation network should support a diverse on and off-road active transportation experience, which recognizes both utilitarian and recreational uses where feasible.

*Easily Accessible:* Active transportation routes should be easily accessible from local neighbourhoods within each community, to facilitate travel within the urban centres, and should also connect to inter-community routes. Every effort should be made to integrate these routes with adjacent municipal cycling and linear multi-use trail networks.

*Flexible and Integrated:* Route selection will consider future opportunities within the municipality (i.e. new development areas). In areas of new development, planning for active transportation and trail routes will be an integral part of the land use planning process and should be coordinated between Huron County and the local municipalities.



*Density Driven:* The density of routes in the active transportation network should be driven at least in part by population density. With this principle in mind a higher density of routes is anticipated in urban areas.

*Linked to Natural Heritage Areas:* Where possible and feasible, the active transportation and trails network should provide access to natural heritage areas within the County of Huron, however the provision of, and location of routes should be based on the objective to create a balance between the need to provide active transportation opportunities and the need to preserve natural heritage resources. In some locations preservation will take precedence over recreation, and access for some uses will be limited or restricted. Specific considerations include minimizing intrusion into core natural areas, avoiding steep topography and saturated soils, providing environmental buffers between sensitive areas and major active transportation routes, and coordinating route alignments with existing disturbances such as utility corridors (i.e. sanitary sewer, natural gas and oil pipelines, hydro).

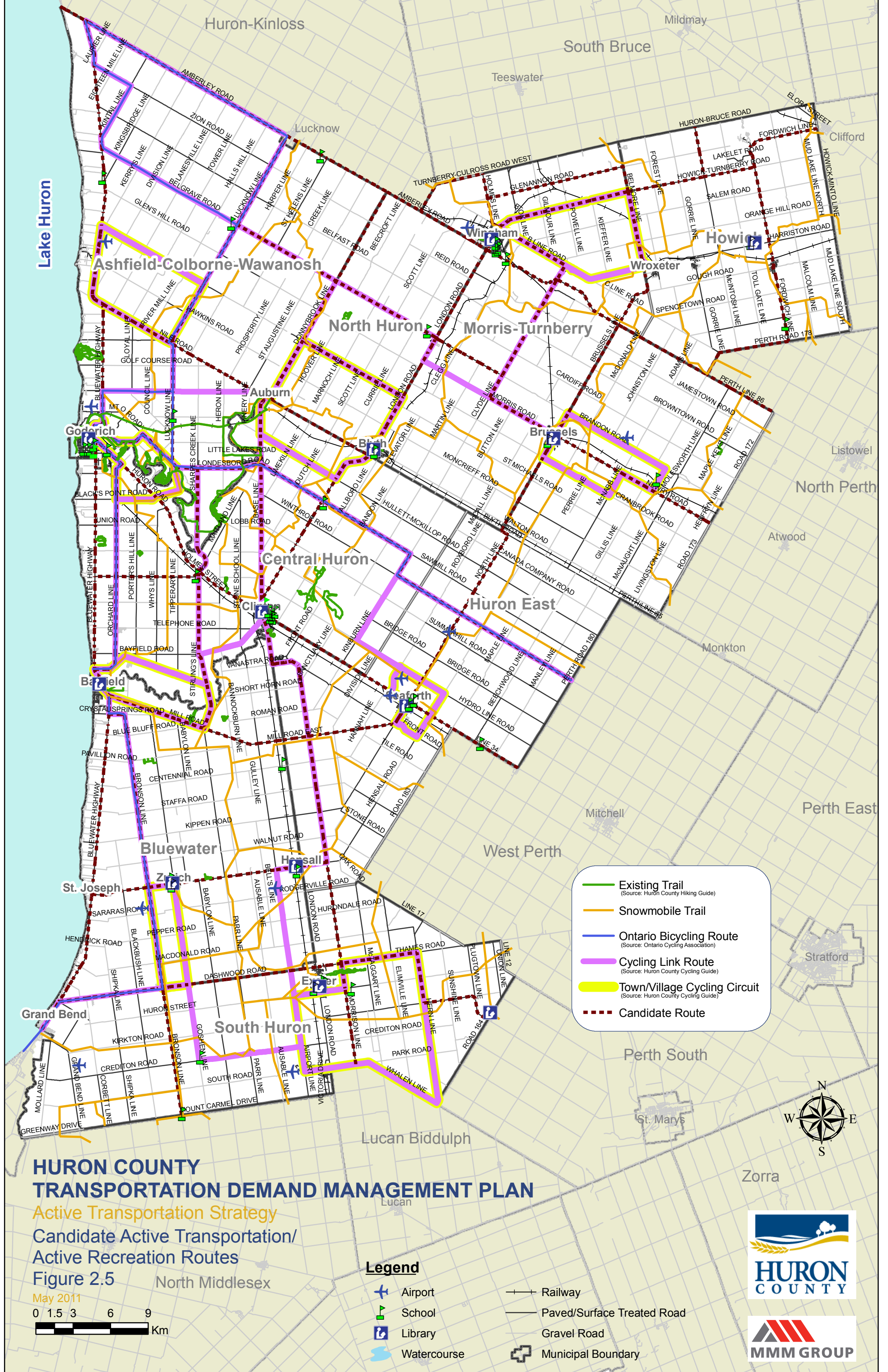
#### **2.4.2.5 An AT Network Concept for Huron County**

The following approach was used in developing the Active Transportation network concept illustrated in Figure 2.6:

- **Undertaking a desktop inventory of existing conditions:** which included compiling and digitally mapping existing or previously planned transportation and active transportation facilities (pedestrian and cycling) in the County of Huron, made up of both on and off-road facilities, in order to establish a base condition.
- **Identifying candidate routes:** which involved identifying missing links and key barriers in the County's transportation and active transportation system, identifying potential (candidate) active transportation (pedestrian and cycling) on and off-road routes and evaluating each for feasibility and for inclusion as part of a preliminary AT network for Huron County.
- **Applying a route selection process:** which included consideration of a set of route selection criteria
- **Confirming the preliminary AT network concept with input from County staff,** the Transportation Task Force and the public through a second Public Information Centre and subsequent comments received while the draft TDM Strategic Plan was posted on the County's web site for comment and review.

**Figure 2.5** illustrates the candidate routes considered and **Figure 2.6** presents the preliminary AT network concept. It is important to note that the preliminary AT network concept presented in this TDM Strategy is not a Master Plan. Candidate routes and suggested network routes were not field investigated to confirm route alignment, feasibility and therefore facility types by segment of the on and off-road components of the network concept could not be identified, the cost of the network estimated, nor could a phasing strategy be proposed. All of these elements would be part of a comprehensive Active Transportation Master Plan study. The work completed to develop the





# HURON COUNTY TRANSPORTATION DEMAND MANAGEMENT PLAN

## Active Transportation Strategy

### Candidate Active Transportation/ Active Recreation Routes

Figure 2.5

May 2011

0 1.5 3 6 9  
Km

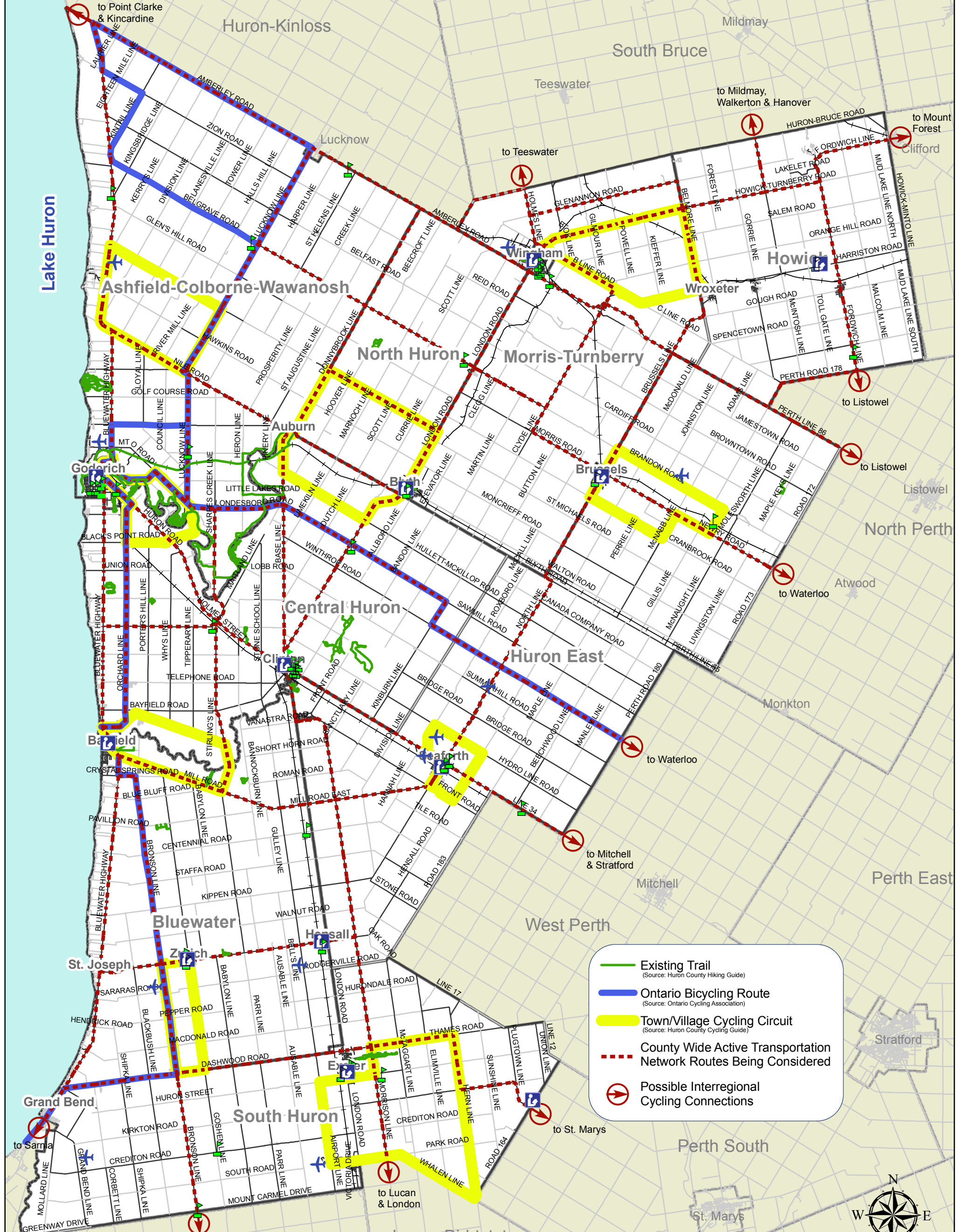
#### Legend

- Airport
- School
- Library
- Watercourse
- Railway
- Paved/Surface Treated Road
- Gravel Road
- Municipal Boundary





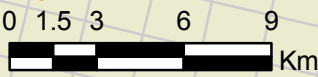




**HURON COUNTY  
TRANSPORTATION DEMAND MANAGEMENT PLAN**

Active Transportation Strategy  
Draft Active Transportation/  
Active Recreation Concept Plan  
Figure 2.6

May 2011



**Legend**

- Airport
- School
- Library
- Watercourse
- Railway
- Paved/Surface Treated Road
- Gravel Road
- Municipal Boundary







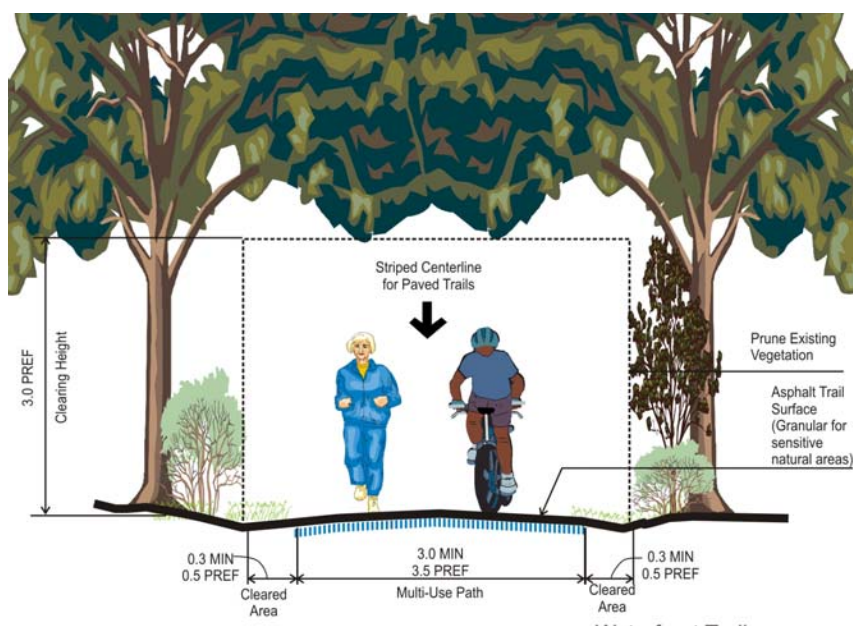
preliminary AT network concept presented in this TDM Strategy will provide a solid foundation to move forward should the County and its local municipal partners select to build upon this work and undertake an AT Master Plan study in the future.

#### 2.4.2.6 What Might the AT Network Look Like?

Although the preliminary network concept presented for Huron County does not identify facility types, the following sections provide a summary of some of the typical types of AT facilities that may be considered in a more comprehensive AT Master Plan.

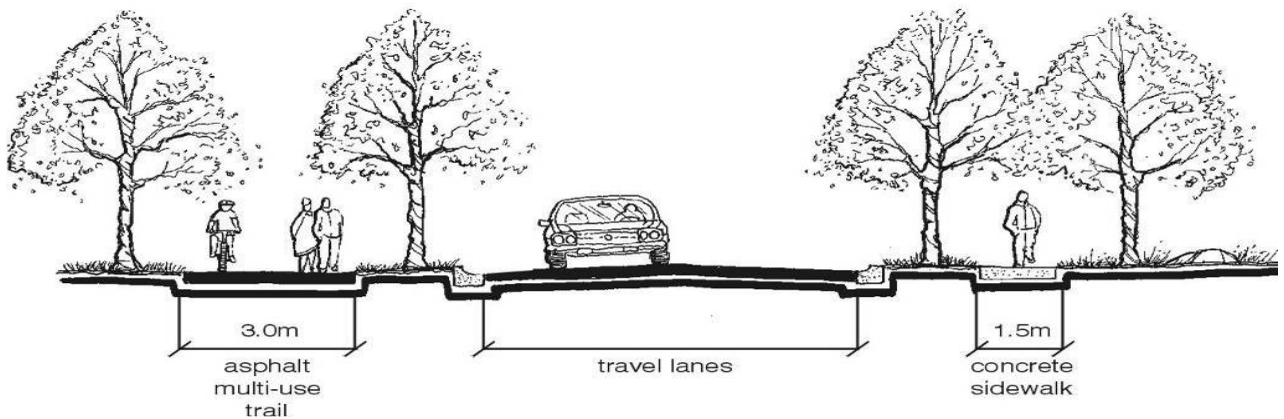
##### Multi-use Trails & Hiking Trails

A multi-use trail is a facility that is separate from the travelled portion of a roadway, and may take the form of an in-boulevard trail in a public road right-of-way or an off-road multi-use trail within a greenway, active or abandoned rail corridors, utility/hydro corridors, trails in valley lands along rivers, water front, and canals. These types of trails are typically designed to support the widest range of users including pedestrians, cyclists, in-line skaters and skateboarders where trail surfaces permit. Multi-use trails located in parks primarily serve recreational users but may also serve active commuting, active workplace travel and active destination oriented trips.



*Typical Off-Road Multi-Use Trail*

Like cyclists using the road, trail users on boulevard multi-use trails or pedestrians on sidewalks have the right-of-way as they intersect private driveways. That said, every intersection, including driveways and intersecting roadways are a potential conflict point. Intersecting roadways are a particular concern as motor vehicles making right hand turns may not be anticipating the speed at which some users of the boulevard multi-use trail may be traveling (i.e. cyclists and in-line skaters). Typical multi-use trails for cycling purposes should have a minimum 3.0m width to facilitate two-way travel. The width of the trail may be widened to accommodate a higher volume of users.



*Typical In Boulevard Multi-use Trail*

### **On-road Routes**

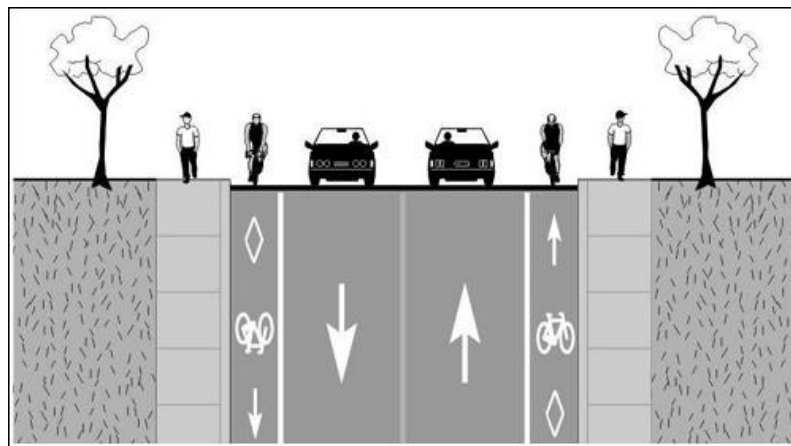
Bicycles are designated as a vehicle under the Highway Traffic Act (HTA) and as such, cyclists are required to obey all of the same rules and regulations as automobiles when operating on a public roadway. The Ministry of Transportation (MTO) and the Transportation Association of Canada (TAC) have developed standards for the design of on-road facilities and signing for on-road-bicycle systems. In addition to the commonly encountered situations to which relatively simple guidelines can be applied, there are often situations where the proper design requires a bicycle system design specialist who is familiar with both the common guidelines, and innovative technique, successfully applied elsewhere.

#### *Conventional and Buffered Bike Lanes*

Bike lanes are typically located on urban cross-section roads (with curb). The diamond symbol and bicycle symbol painted on the pavement, in addition to roadside signs should be used, particularly on roads with higher traffic

volumes, operating speeds and higher commercial vehicle percentages. In areas where on-street parking is permitted, continuing the bike lane is the ideal method where space permits.

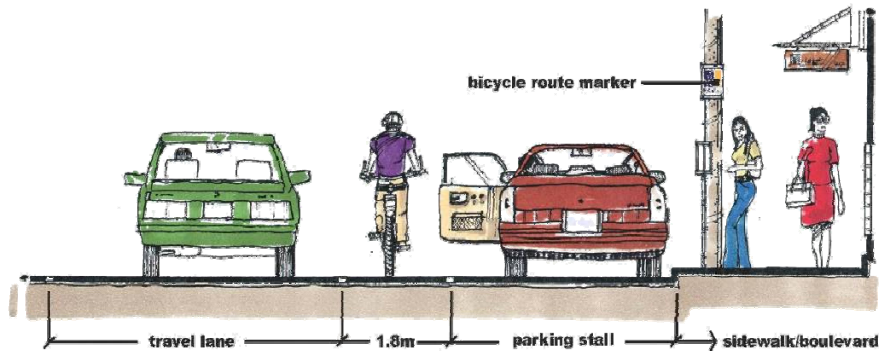
Bike lanes on higher volume or higher speed major roadways may also take the form of buffered bike lanes. A buffered bike lane includes an additional 0.5 m to 1.0 m marked pavement space between the 1.5 m bike lane and adjacent motor vehicle lane.



*Typical Bike Lanes*

#### ***Bike Lanes with On-Street Parking***

In some urban locations it is desirable to provide a bike lane adjacent to on-street parking. Bike lanes on roads with on-street parking are located to the left of and adjacent to vehicles parked along the curb. Designing this type of cycling facility must take into consideration the potential hazard to cyclists of car doors opening into the traveled portion of the bike lane. In order to allow clearance for vehicle doors, and to minimize collisions with cyclists, the combined bicycle/parking lane should be a minimum of 4.0 m wide. This width allows for a 1.8 m bike lane and a 2.2 m wide curb side-parking stall. The extra distance added to the typical 2.0 m wide parking stall provides space for the opening of car doors, and encourages cyclists to travel a safe distance from the parked vehicles. Bike lanes on roads with on-street parking should be considered in commercial and residential areas where the demand for, and turnover of parking is high, and where commercial and residential property owners may not accept the reduction or prohibition of on-street parking. The following illustrates a typical bike lane with on street parking.

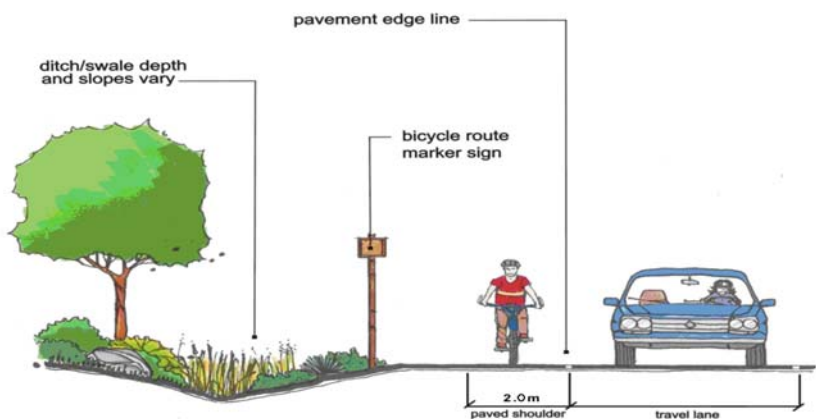


*Typical Bike Lane with On Street Parking*

#### *Paved Shoulders and Signed Bike Routes*

Paved shoulders provide a space for cyclists on rural cross-section roads (with shoulders, no curb and gutter). Pedestrians can use partially paved or granular shoulders where necessary (pedestrians should travel in a direction facing traffic / cyclists travel in the same direction as traffic). Partially paved shoulders (1.5m to 2.0m of the existing granular shoulder is paved or all of the shoulder if it is narrow) are typically recommended on rural cross section roads where traffic volume and speed are moderate to high. Poor sight lines and high truck volume are additional situations where paved shoulders should be considered.

Signed Routes with paved shoulders are an important part of the Active Transportation network in rural areas. Where funding is limited, adding or improving shoulders on uphill sections will give slow moving cyclists needed manoeuvring space and may decrease potential conflicts with faster moving motor vehicle traffic. On rural roads, a marked edge line is typically used to designate a paved shoulder. Signs are used to designate the route and indicate the presence of cyclists.

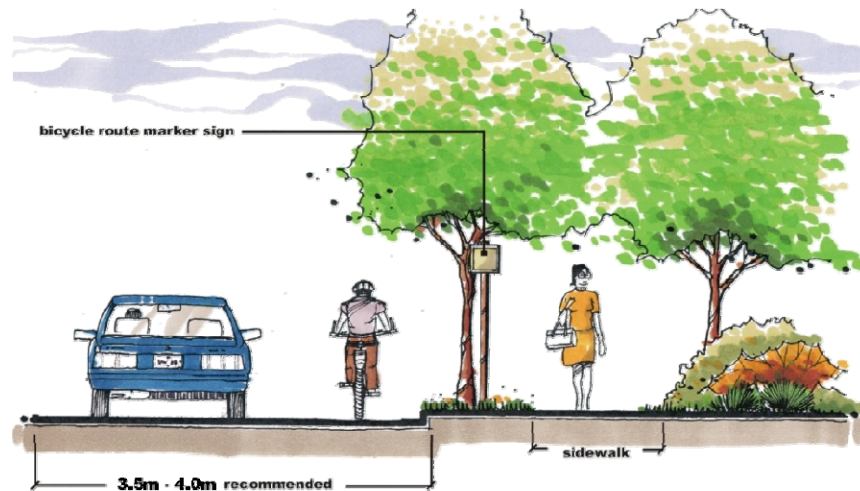


*Typical Paved Shoulder*



### *Signed Routes*


Signed routes are typically found along roads where traffic volumes and/or vehicle operating speeds are low. Typical of quieter residential streets (low volume and low speed), core urban areas (higher volume and low speed) and lower order rural roads (low volume and moderate speed), cyclists can share the road with motor vehicles and there is no need to create a designated space for cyclists. Signs located at intersections and at regular intervals in rural areas help users navigate through the system. In areas where the pavement width is narrow, “share the road” signs can also be erected along the road side to encourage cooperative behaviour between cyclists and motorists.



*Typical Signed Only Bike Route with Wide Curb Lanes*

### **Recommendation:**

1. **Plan and host an Active Transportation and Health Promotion Workshop.** The workshop could be held and attended by local stakeholders, Councillors and community members interested in obtaining more information on Active Transportation and the public health and other benefits associated with Active Transportation. The proposed workshop could engage the “Share the Road Coalition” as well as the District Health Unit as key participants and speakers. The workshop could be a one day information session with presentations from a number of leading professionals in the field of active transportation and trail development as well as knowledgeable members of the community of health needs and opportunities.
2. **Undertake, in partnership with local municipalities, an Active Transportation and Trails Master Plan.** This comprehensive master plan should be undertaken in consultation with the Transportation Task




Force and other local municipal and agency representatives. The AT Plan should outline the benefits of active transportation, consult with stakeholders and the public, establish a recommended AT and Trail network for the County, identify an outreach program (education and promotion opportunities and partnerships), reference appropriate design guidelines, suggest a phased implementation strategy (e.g. 25 years) and demonstrate how this AT plan can be integrated with the County's TDM Strategy.

### **Bicycle Friendly Communities**

The Bicycle Friendly Community designation program identifies municipalities that have the conditions that support cycling. If a community has applied for a designation, a panel of cycling experts in partnership with local cyclists, would analyze five factors of cycling activity in the community including engineering, education, encouragement, enforcement and evaluation. Initiatives and actions recommended in this master plan are also considered within a Bicycle Friendly Community. This program is currently offered in the United States by the League of American Bicyclists. There are plans to initiate a similar program in Ontario starting in 2011 through a partnership between the League of American Bicyclists and the Share the Road Cycling Coalition, an Ontario based cycling advocacy organization. As elements of the TDM Plan are implemented, the County of Huron should consider applying in order to be recognized as a Bicycle Friendly Community. If the County is recognized, the designation can be used as a promotional tool to encourage residents and visitors to cycle. As well, becoming a Bicycle Friendly Community would continue to inspire Huron County to make improvements to its overall cycling infrastructure and outreach programs. The Bicycle Friendly Community Scorecard has been provided below.





## Is Your Community Bicycle Friendly?

This scorecard will help you assess if your community is ready to apply for the Bicycle Friendly Community designation.

### ENGINEERING

☐ Yes ☐ No Does your community have a comprehensive, connected and well-maintained bicycling network?

☐ Yes ☐ No Is bike parking readily available throughout the community?

☐ Yes ☐ No Is there a Complete Streets ordinance or another policy that mandates the accommodation of cyclists on all road projects?

### EDUCATION

☐ Yes ☐ No Is there a community-wide Safe Routes to School program that includes bicycling education?

☐ Yes ☐ No Are there bicycling education courses available for adults in the community?

☐ Yes ☐ No Does your community educate motorists and cyclists on their rights and responsibilities as road users?

### ENCOURAGEMENT

☐ Yes ☐ No Does your community have an up-to-date bicycle map?

☐ Yes ☐ No Does the community celebrate bicycling during national Bike Month with community rides, Bike to Work Day or media outreach?

☐ Yes ☐ No Does the community host any major community cycling events or rides?

☐ Yes ☐ No Is there an active bicycle advocacy group in the community?

### ENFORCEMENT

☐ Yes ☐ No Do law enforcement officers receive training on the rights and responsibilities of all road users?

☐ Yes ☐ No Does your community have law enforcement or other public safety officers on bikes?

☐ Yes ☐ No Do local ordinances treat bicyclists equitably?

### EVALUATION

☐ Yes ☐ No Is there a specific plan or program to reduce cyclist/motor vehicle crashes?

☐ Yes ☐ No Does your community have a current comprehensive bicycle plan?

☐ Yes ☐ No Is there a Bicycle Advisory Committee that meets regularly?

☐ Yes ☐ No Does your community have a bicycle program manager?

### Scoring

If you need any help filling this out please call the League of American Bicyclists at 202-822-1333 or email [bikeleague@bikeleague.org](mailto:bikeleague@bikeleague.org).

**GIVE YOURSELF ONE POINT FOR EVERY YES**

**Score 0-8:** Your community probably has some improvements to make before becoming a Bicycle Friendly Community – but keep the momentum going! Call us and we'll tell you more about the strengths (and weaknesses) your scorecard reveals. Download the BFC application and let us help you start implementing an action plan.



**Score 9-17:** Your community is ready to apply for Bicycle Friendly Community status! You've already got a good start – we'll tell you what you've done well and how you can improve. Start working with local officials to fill out the Bicycle Friendly Community application and call us to help you through the process.

### The Bicycle Friendly Community Program

The Bicycle Friendly Community Program provides incentives, hands-on assistance, and award recognition for communities that actively support bicycling. The Bicycle Friendly Community application is an overview of what communities can and should be doing to accommodate and promote bicycling. Like this scorecard, the application is divided into five categories: engineering, education, encouragement, enforcement, and evaluation. All Bicycle Friendly Communities excel in at least one or two of them and the best ones excel in them all.

Contact us for information on how to make your community more bike-friendly and apply for the designation: [www.bicyclefriendlycommunity.org](http://www.bicyclefriendlycommunity.org). 202-822-1333

BFC program Partners:





## Pedestrian Sidewalk Facilities

In urban areas, sidewalks are critical components of a connected AT network. A sidewalk is located within the road right-of-way but separate from the travelled portion of the roadway. Sidewalks are typically concrete, 1.5 m (the typical minimum width for new sidewalks) and are designed primarily for pedestrians. Existing and future sidewalks should be incorporated into the Active Transportation network in urban areas for all system segments proposed within road rights-of-way. Sidewalks are preferred on both sides of all streets in the urban areas that are designated Active Transportation routes (for both new street construction and retrofitting of existing streets).

Where this cannot be achieved a sidewalk should be provided on at least one side for all streets other than laneways. On laneways where traffic volume is extremely low, pedestrians can safely share the street with motor vehicles. In older and more established neighbourhoods, the cost of installing sidewalks and opposition by residents may be significant challenges encountered when deciding whether to add sidewalks or not in these neighbourhoods.

Once sidewalks are constructed within the public right-of-way (either local municipal or County right-of-way), the local municipality typically assumes responsibility for all future repair, reconstruction, maintenance, and operation during the life of the asset. Therefore, it is important that long-term financial liability be recognized when the local



municipality decides when and where sidewalks are required. A “buffer” zone or separation / setback should also be provided between the sidewalk and roadway where possible to separate pedestrians from the road. The width and character of the buffer zone will vary depending on the location.

### **Recommendations:**

1. **The local municipalities should consider undertaking, if they have not already done so, a review of current sidewalk policies, and update their current sidewalk inventory database.** In urban areas sidewalks are a critical component of a multi-modal transportation network. The location and condition of sidewalks is key to supporting a strategy to encouraging people to walk more often. New emerging policies from the province regarding the built environment and accessibility (Ontarians for Disabilities Act) should also be assessed.
2. **Explore and Develop Pedestrian and Cycling Charters for the County of Huron in partnership with the local municipalities.** The TDM Coordinator and Committee should explore the implementation of pedestrian and cycling charters for the County of Huron. A pedestrian charter is used to guide the development and promotion of a more pedestrian friendly community and environment while a cycling charter aims to develop more bicycle friendly communities and environments. Draft pedestrian and cycling charters has been developed for the County of Huron based on examples from municipalities and regions throughout Ontario such as the Regional Municipality of Waterloo, the City of Toronto and the Town of Halton Hills. The draft charter (see **Appendix D**) is meant to be a basis from which the TDM Coordinator and Committee can refine into a form that can be adopted by Council.

### **Pilot / Demonstration Project: Active Transportation Connection (Clinton, ON)**

An Active Transportation connection could be considered for implementation along the London Road / Highway 4 South corridor in Clinton, ON. More specifically, the facility is proposed to be implemented between the Downtown centre of Clinton and the Health and Library Complex. The facility could be either an on-road bikeway or a shoulder pedestrian and bike trail creating a key connection for commuters and recreational pedestrian and cyclists throughout Clinton. The project could be led by the County’s Economic Development Department, more specifically by the County’s Transportation staff. In addition, local cycling groups and advocates could be included in the consultation process for further engagement and input throughout the study.

### 2.4.3 Shuttle Bus Service


The shuttle bus services provided throughout Huron County is currently provided by two programs / organizations, Aboutown and EasyRide as outlined in Chapter 1 of the report. These initiatives, though widely used by a number of members of the community, have some identifiable gaps in their services. These gaps and barriers include the age, accessibility, time and geographical gaps as previously outlined. By identifying the gaps in the service such as the lack of service for groups other than the elderly, a limited timeframe for service provision and very few accessible vehicles, to name a few, refinements to programs can be recommended. These can also be considered opportunities and include the following elements:

#### **Recommendations:**

1. **Initiate discussions and work with the EasyRide organization to explore opportunities to expand shuttle services throughout Huron County.** In addition, they will also work together to explore potential funding opportunities and partnerships with local organizations. The exploration of government funding and grants options will also be discussed.
2. **Coordinate and work with EasyRide to maximize facility / vehicle use.** These facilities would be used for EasyRide services as well as future TDM initiatives and opportunities in coordination with other agencies such as Aboutown transit service.
3. **Work with others to create a shuttle service (coordinate with EasyRide if possible) for schools to provide transportation to and from after school activities.** The shuttle could provide communal transportation opportunities to key destinations throughout the County (i.e. community centres or arenas etc.). School buses currently not in use could be used to facilitate these shuttle services and would be driven by local school bus drivers or a volunteer base. The County should consider exploring the opportunity for additional funding from the Provincial Gas Tax when implementing this program.
4. **Promote and include detailed information on the current shuttle services available.** Information would be provided on the online database regarding the existing shuttle service for vulnerable groups. Information such as hours of operation, cost, contact information, availability and the specific group it accommodates will be accessible to all.

#### **Pilot Project: Summer Shuttle Services (June – September)**

The shuttle would be a hop-on-hop-off service linking key destinations throughout Huron County (i.e. downtown centres, local community health services, grocery stores etc.). As a means of increasing affordability, the price for



the shuttle could be included in as part of the shuttle bus service ticket provided by Aboutown into Goderich in order to accommodate other users and visitors to Huron County. The County should consider partnering with a private service provider to explore opportunities for both the hard and soft infrastructure required for the service. The money budgeted for this initiative could be seed money or additional subsidization for the program. In addition, the County could explore additional funding opportunities such as the Provincial Gas Tax Transfer.

#### **2.4.4 Taxi Service**


The Taxi service throughout Huron County is provided by nine companies which are each privately owned. This proves to be a barrier and gap in the system and services for Huron County residents as the areas in which service is provided is not controlled or organized. In addition, the taxi companies can become costly for users and prove to be difficult for young adults, students, low income families or the elderly population. Based on the “gap” areas identified above, further information and data regarding the demand and need for taxi service throughout the County should be explored in addition to potential programming and coordination. Recommendations and potential pilot programs are identified below in further detail.

#### **Recommendations:**

1. **Organize and coordinate Taxi services within Huron County.** The TDM Coordinator and Committee members will work with the local Taxi companies to assess the effectiveness and efficiency of the services in place. This will be achieved through meetings with the Taxi companies including individual meetings with each service provider as well as inviting the companies to TDM Committee meetings.
2. **Complete a map of the boundaries, routes and areas of deficiency of taxi services.** Information from the survey will be used to identify these areas to better inform the TDM committee and the County of areas for improvement. The map is to be completed as a collaborative approach between the taxi companies and the TDM coordinator as well as with help from an individual with GIS capabilities.

#### **Pilot Project: Taxi Survey of Huron County Residents**

A detailed survey of County residents regarding their opinions of the taxi services throughout the County should be undertaken. In addition, a survey of the taxi companies and the service that they provide will be developed to complement the results for the survey of the residents / taxi users. The survey could either be generated internally by the TDM Coordinator and Committee members using a survey tool such as SurveyMonkey or by using an external agency who will undertake the survey for the County. It is proposed that the surveys be generated and made available for completion online. In addition to the survey, the TDM coordinator in conjunction with the taxi



companies could create a “business card” promoting the survey to users of the taxi service and local residents. The business card would include a link to the survey for completion as well as contact information for the TDM coordinator, where necessary. The survey results will be used to assess and gain a better understanding of the issues, barriers and opportunities for taxi services. In addition, they could also be used to better coordinate the services and integrate taxi companies as a viable mode of transportation for visitors and residents.

#### **2.4.5 Transit**

At this time, transit service is only now beginning to expand throughout the County. Prior to the implementation of the Aboutown bus service there were no public transportation options, however, the time, geography, price and accessibility gaps of the service must be mitigated to make this a viable option for County residents.

#### **Recommendations:**

1. **Expand the existing privately operated bus services to other Urban Centres throughout the County.**

The TDM Coordinator and Committee will work to explore opportunities with a privately operated company to discuss the potential expansion of services. The development of new bus routes will facilitate movement by transit between municipalities and will provide residents and visitors with an alternate mode of transportation.

When extended, the service information including stop locations, price and time will be updated on the TDM database. Further discussion will be facilitated and enhanced by the results from the transit survey undertaken.

2. **Explore additional funding opportunities to enhance the existing bus service provided by a privately operated company.** The TDM Coordinator and Committee should work to explore future funding and partnership opportunities such as the Provincial Gas Tax Transfer. Other privately operated companies could also be invited to the TDM committee meetings to provide their input and update to potential bus services throughout the County.

3. **Work with the TDM Coordinator to expand and refine the Aboutown service schedule.** The refined schedule should coordinate services provided by Via Rail and GO Transit in London, Kitchener, Waterloo and Guelph or other key destinations for those residents of Huron County or those visiting.



#### **Pilot Project: Undertake a Transit Service Survey of the County**

A detailed survey of County residents regarding their opinions of the transit services throughout the County should be undertaken. The survey could either be generated internally by the TDM coordinator and committee members using a survey tool such as SurveyMonkey or by using an external agency who will undertake the survey for the County. The survey results will be used to assess and gain a better understanding of the issues, barriers and opportunities for transit services. It is proposed that the surveys be undertaken and made available for completion online. In addition to the survey, the TDM coordinator, in conjunction with Aboutown create a “business card” promoting the survey to users of the transit service and local residents. The business card would include a link to the survey for completion as well as contact information for the TDM coordinator, where necessary. As noted above, the results from the survey could also be used to determine potential bus routes throughout the County in the future.

#### **2.4.6 Vanpool / Carpool**

When assessing vanpool and carpooling options for the County, outside of the Shuttle service already in place there are not many options available for residents. Vanpool and carpool initiatives can be effective means of transporting people or groups to their destinations of choice. The following are recommendations with regards to these types of programs which should be considered for implementation by the County in collaboration with its local municipalities.

#### **Recommendations:**

1. **Identify major employers and members of the community to work with to investment in and implement potential vanpool and carpooling opportunities.** The TDM committee will meet and discuss opportunities for vanpooling and carpooling within Huron County. They may want to invite a speaker / presenter who is aware of the process of implementing such a service as well as potential partners.
2. **Develop and implement vanpool or carpool lots at key locations throughout the County,** i.e. near major highway interchanges or in the downtown centres. The locations and building of these lots will be determined by County and municipal planners in collaboration with the TDM coordinator and committee. These opportunities will also be explored based on funding commitments and partnerships explored by the committee and Council. It is important to note that these locations will be determined based on further investigation by the TDM coordinator and committee to determine commuter travel patterns and specific locations for the lots. These could also be determined as a collaborative effort between local and external employers and service providers.

3. **Implement carpool parking at each office or educational facilities through additional signage or pavement markings.** The TDM coordinator work with Municipal and County Staff as well as local education facilities to explore the necessary steps to designating parking facilities for carpool only trips. The coordinator and committee should invite representatives from education facilities to the TDM committee meeting to gauge interest and commitment.
4. **Integrate vanpool / carpool facilities / parking at “rural mobility hubs” throughout the County.** These “hubs” could include parking facilities for bikes and cars, as well as signage for key destinations, transit stops, connections to local trail systems, taxi company numbers etc.
5. **Develop a carpool to work day twice a year at both Municipal and County Offices.** The TDM coordinator and committee members would work together to develop, designate and promote these events. Incentive programs such as free coffees or a breakfast for those who get involved in this initiative could be provided.

**Pilot Project: Create and maintain an online TDM database to coordinate transportation options throughout Huron County for both residents and visitors.**

For this pilot project, it is suggested that an electronic and accessible database be created where people will be able to obtain information about all transportation services available in Huron County. The database will remain current with information about expansions in the services, changes or closures. The “TDM Coordinator” as well as the committee and potential co-op students should work together to update the database on a daily, bi-weekly or weekly basis (or whatever frequency is necessary) to ensure that information is current and the database is an effective resource for County residents as well as visitors. The goal of this project is to facilitate the launch of an integrated commuter management system that is technically advanced, with an advanced means of ensuring data security and integrity while maximizing usability and functionality.

In addition, it will also be used as a Ridematching program for residents within the County. A ridematching service assists commuters with identifying other individuals who commute along the same routes that would be willing to arrange a carpool to work or to their desired destination. These systems are generally operated online, as would be the case with the database created for Huron County. This database allows users to sign in to a website and enter their commute origin and destination, which will then be used to generate a list of potential carpool partners and facilitate contacting them to make arrangements. The ridematching website can be developed and operated either by the County internally, or commercial service, such as RideShark ([www.rideshark.com](http://www.rideshark.com)) and EnRoute (<http://pathwayintelligence.com/>) are also available. A detailed overview and costing strategy for a proposed RideShark program specifically designed for Huron County has been developed and can be found in **Appendix E**



of the report. In addition, the appendix also contains examples and brochures of the RideShark program and what it would have to offer to Huron County.

If a program such as this were to be implemented for Huron County, the Ministry of Transportation of Ontario (MTO) should be investigated as a potential funding partner for the membership or development of the ridematching service. This type of initiative would appeal to such a government body as it can be explained that the initiative will reduce vehicle traffic on the local and County road network, which can in turn reduce road wear and associated maintenance costs.

It should be noted that a ridematching service could be paired with the provision of preferential parking spaces for carpool vehicles. If undertaken, this could act as a visible benefit and effective promotion of the service. However, the success of this feature hinges on the effective cataloguing and identification of carpool vehicles and the enforcement of the designated parking spaces and as a result can be resource intensive. As is provided in the recommendation above, the County should explore these opportunities in further detail.

#### **2.4.7 Air and Rail**

Though not considered traditional TDM modes of transportation, it is important to note the current availability of private air and rail travel through Huron County. At this time, services are not provided to the public with no plans to expand upon the service in the near future. However, if this does become a potential alternative, the TDM committee and coordinator should consider exploring the availability for public usage. If undertaken, these would become very viable and useful modes of transportation creating linkages to internal as well as external transportation services and will increase the multi-modal system for Huron County. The following is a recommendation for air and rail movement throughout the County.

##### **Recommendation:**

1. **The TDM Committee should continue to investigate opportunities for future air and rail transportation within and through the County.** The committee as well as the coordinator should work with local, provincial and federal agencies and organizations to investigate future opportunities for air and rail transportation throughout the County. These representatives could be invited to the TDM committee meetings and provide updates on potential expansion to the system (e.g. the GEXR – Goderich Exeter Railway), opportunities for partnership, funding possibilities and the integration of air and rail service with other modes of transportation throughout the County.