



9.0 GUIDELINES, RECOMMENDATIONS AND POLICIES

The guidelines and recommendations contained in the Plan are provided in the following section for reference purposes. Readers are directed to the preceding chapters for a complete discussion and rationale for each recommendation.

This chapter also includes recommended policy modifications to the existing wording of the Region's Policy Plan.

9.1 GUIDELINES

The term guideline, as defined for the Regional Niagara Bikeways Master Plan, is a reference or *preferred standard* or a minimum threshold that should be considered by planning and engineering professionals as they make decisions affecting the planning, design and construction of bikeway facilities. Therefore, the guidelines set out in the report are not prescriptions for change or action, rather they are tools to guide decision makers in Niagara Region.

The Transportation Association of Canada (TAC), a recognized author and publisher of national transportation guidelines in Canada defines a *standard* as follows:

A standard is a value for a specific feature, which practice or theory has shown to be appropriate, where the prevailing circumstances are normal and general, and where no unusual constraints influence the design. The lowest value that would normally be applied in these circumstances is the minimum standard.

Where constraints are severe and the requirement to meet the minimum standard

would impose significant property or environmental damage, or would incur excessive cost, values below minimum standard may be acceptable. The degree of deviation below the minimum value that is acceptable is a matter of judgement, and depends on the nature of the standard and the severity of the constraints. Certain standards are not to be compromised while others have latitude, and are applied with discretion. Financial consideration is usually a constraint that needs to be addressed in the design process.¹

The guidelines and implied standards that follow are advisory only, unless regulated by the Province of Ontario or the Canadian Highway Bridge Design Code. Agencies and individuals that choose to apply these guidelines must always base their decisions on sound engineering judgement and principles. It is recommended that the reader refer to Chapter 6 of this Plan to better understand the details and context for the following guidelines.

- On roads where sight lines are also an issue because of the horizontal or vertical curvature of the road, additional cautionary signs may be warranted to restrict passing manoeuvres.
- When conditions permit, an additional 0.5 m should be included where possible in the

¹ Transportation Association of Canada, Urban Supplement to the Geometric Design Guide for Canadian Roads, 1995.



REGIONAL NIAGARA Bikeways Master Plan

width of the paved shoulder or bike lane for on-road facilities where the grade of the road approaches or exceeds 8%.

- When grades exceed 8% and/or are in constrained situations, a combination of edge lines and motor vehicle passing prohibitions (descent) and Share the Road (ascent) signs should be considered.
- On steep road segments where motor vehicle volumes or the percent of commercial traffic exceeds a desirable threshold for a bikeway facility type, consideration should also be given to reducing the posted speed limit.
- Off-road multi-use bikeway facilities that are part of the RBNP should not be designed with grades in excess of 10%.
- When designing off-road bikeway facilities, consideration should be given to the design speed for cyclists.
- Although new or improved Regional Roads will typically be designed to the Regional roadway standard and thus exceed the minimum design parameters related to speed for bikeway facilities, some existing roads may not. In these cases, additional signing to caution motorists and cyclists should be considered when implementing bikeway facilities.
- The design of both on and off-road bikeways should take into consideration minimum stopping sight distance for both motor vehicles and bicycles. In constrained conditions, additional signing to caution both motorists and cyclists should be considered.
- Horizontal curves of roads proposed for on-road bikeway facilities should conform to roadway design standards set out in the Geometric Design Standards for Ontario Highways and/or the TAC Geometric Design Guide for Canadian Roads. When this condition cannot be met, additional cautionary signing should be introduced.
- Consideration should be given to providing additional width on off-road bikeway segments at curves with less than a 32 m radius.
- Class 1 multi-use trails in Niagara Region should be constructed to a minimum width of 3.0 m to accommodate two-way travel. On trails that may experience high demand or a significant percentage of pedestrian and/or in-line skating traffic, a width of 3.5 to 4.0 m is recommended.
- Trail Surface type is dependent on the requirements of planned trail users (e.g. accommodating in-line skaters) and can vary from asphalt to granular surfaces (stone-dust).
- Class 2 paved shoulders/bike lanes should be constructed to a preferred design width of 1.5 m. Under constrained conditions, a minimum width of 1.2 m may be acceptable. In the case of paved shoulder bikeways on rural roads, edge lines should be considered to delineate the travel lane from the paved shoulder.
- On major arterial roads that experience significant automobile and truck volumes, an additional shoulder width of 0.5 m to 1.0 m should be provided within the paved shoulder width, where feasible.
- Class 2 facilities should always be separated from the motor vehicle travel portion of the road by an edge line (pavement marking), and should be clearly identified through bikeway route signage and, in the case of bike lanes in urban areas, bicycle symbol pavement markings and bike lane signs.



REGIONAL NIAGARA Bikeways Master Plan

- On existing or proposed bikeway routes in Niagara Region where on-street curb parking exists, an assessment should be undertaken to determine whether the parking can be removed or relocated. In the event that on-street parking is seen as a priority, parking bays should first be considered as a preferred design.
- Where the road right-of-way or other factors limit the opportunity to provide parking bays, standard on-street curb parking should be assumed. For both applications, the desired width of the parking lane should be a minimum of 2.2 m, with the adjacent bike lane at 1.8 m.
- Class 3 signed routes in rural areas should consist of a travel lane width of 3.5 m, an edge line and a paved shoulder of 0.5 m to 1.5 m. When the minimum standard for paved shoulders cannot be implemented on a rural road cross section, an edge line should still be marked to provide some separation from motor vehicles for cyclists.
- On very low volume rural roads with limited truck traffic, good sight lines and sometimes physically constrained ROW's, the existing travel lane may be designated as the bikeway route, with cyclists and motorists expected to share the same lane. In these cases "Share the Road" signs should be erected at strategic locations to communicate this message to all road users.
- In urban areas, Class 3 signed routes should typically consist of wide curb lanes (4.25 m) and bikeway route signs. On some very low volume urban roads that experience little if any truck traffic, a reduced travel lane width between 3.35 m and 4.0 m can be considered as a minimum Class 3 facility, with the addition of "Share the Road" signs as an interim measure until these roads are upgraded to the Region's current road standards.
- All off-road routes should include a minimum trail width of 3.0 m. Where minimum design standards cannot be achieved, consideration may be given to alternative designs for specific segments as long as the safety of trail users is not compromised.
- All Regional Roads that are designated as both a Commercial Vehicle Truck route and Bikeway Facility should have standard travel lane widths of 3.5 m and paved shoulders of 1.5 m.
- All Regional Roads, regardless of whether they are designated for a bikeway facility or not, should be made more bicycle friendly in the long term through the addition of 0.5 to 1.5 m paved shoulders, or as much paved shoulder as can be provided.
- The Region of Niagara should adopt and where possible implement the preferred bikeway design criteria set out in this chapter for all existing and proposed roadways having sufficient right-of-way width and that are designated for bikeway facilities.
- Unless identified as a priority, implementation should occur at the same time the designated road is improved through a pavement marking update, resurfacing or reconstruction, and be included as part of the Region's Annual Asset Management regime or as part of a municipal servicing capital works project.
- The Region of Niagara should adopt the retrofitting guidelines recommended in Tables 6.10 and 6.11 of the Planning and Design Guidelines in Section 6.5 of the RNBP.



REGIONAL NIAGARA Bikeways Master Plan

- Boulevard Bikeways or multi-use trails within a road right-of-way may be considered as part of the Regional Bikeway Network.
- In locations where a boulevard trail may intersect with more than four vehicle crossings per kilometre (intersections / driveways), consideration may be given to implementing an on-road bikeway facility type. For road segments where ten or more crossings of a boulevard trail would occur, the preferred bikeway facility for the Regional Network should be a Class 2 or 3 on-road bikeway facility.
- Bikeways should be designed and signed to encourage cyclists to reduce speed and stop prior to crossing a road via a mid-block crossing. Mid-block crossing design should consider grade changes on trails in advance of the crossing as well as sight distances, signing, textural surface contrast and bollards.
- When recommended mid-block threshold warrants are met, consideration should be given to implementing a formal traffic signal or a pedestrian crossover.
- Raised crosswalks should be considered at multi-use trail mid-block crossings where there are high crossing volumes or as part of a traffic calming solution for a particular road segment.
- Bikeway crossings of rail corridors and associated traffic control devices should be designed and installed in accordance with the Bikeway Traffic Control Guidelines (TAC 1998).
- Barriers should be considered at off-road bikeway / trail entrances to prevent access by unauthorized users such as motor vehicles and to caution trail users that they are exiting a trail environment.
- The design of on-road bikeways on bridge structures should conform with the Canadian Highway Bridge Design Code, the Geometric Design Standards for Ontario Highways (revised as of 2002), and the Ontario Bikeways Planning and Design Guidelines.
- When Class 2 or 3 bikeway facilities are proposed to cross an existing bridge structure that may be constrained in width or does not meet current Code, consideration may be given to adopting the widths set out in the Region's Retrofitting Guidelines for Regional Roads, until such time as the bridge structure is reconstructed.
- Multi-use trail bridges should be designed with non-slip surfaces, have vertical railings attached to the outside of the structure and include cover plates over expansion joints.
- The TAC standard for accommodating on-road bikeways over freeway overpasses should be assumed as the guideline for the Region of Niagara.
- To reduce risks to cyclists, motorists and pedestrians, the Region should encourage and direct cyclists, by way of appropriate signing, to dismount and walk their bikes though all Welland Canal tunnel crossings using the pedestrian sidewalk.
- When these tunnels are upgraded in the future, every effort should be made to provide dedicated bikeway and pedestrian facilities through the tunnels.
- As part of the Region of Niagara's annual road improvement program, roads designated in the RBNP for on-road bikeway facilities and having catchbasins, should be prioritized for implementing the



REGIONAL NIAGARA Bikeways Master Plan

Region's new standard bicycle friendly catchbasin cover.

- The Region should ensure the accommodation of cyclist safety and access during all road construction activities. This should include, but not be limited to:

- *construction notices posted on the Region's website;*
- *advance signing for construction activities;*
- *temporary conditions that are compatible with bicycles such as non-slip surfaces, ramped utility cuts and timber decking placed at right angles to the direction of travel; and*
- *bicycle specific detours where appropriate.*

- As a minimum, medium-security bicycle parking facilities should be provided at all Regional Niagara facilities to serve as a model to other jurisdictions and the private sector.
- The Region of Niagara, through the RNBC, should encourage the Region's partners and the private sector to provide secure bicycle parking at key destinations, including public buildings.
- Rest and staging areas should be provided at strategic locations along the bikeway system.
- Pavement markings and associated signing for on-road bike lanes in Niagara Region should be consistent with the Ontario Traffic manual and/or TAC's Bikeway Traffic Control Guidelines for Canada.
- Paved shoulder bikeways or signed routes in Niagara Region should be delineated by way

of standard edge lines and complemented by bikeway route signing.

- In designing bikeway facilities in the Region of Niagara, consideration should be given to Provincial or National guidelines from the following sources:

- *Ministry of Transportation of Ontario's (MTO) Geometric Design Standards for Ontario Highways (GDSOH, 1994);*
- *Ministry of Transportation of Ontario's (MTO), Ontario Traffic Manual (currently being completed);*
- *Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads (1999);*
- *Transportation Association of Canada (TAC), Bikeway Traffic Control Guidelines (1998); and*
- *Canadian Highway Bridge Code (2002).*

9.2 RECOMMENDATIONS

The recommendations that are documented in the Regional Niagara Bikeways Master Plan are courses of action that have been formulated from the comprehensive study and consultation completed as part of the Regional Niagara Bikeways Master Plan Study. By adopting this Plan in principle, Regional Niagara accepts the concept of supporting a regional bikeways network plan and participating in programming to support cycling in the Region.

The timing and details related to the actions should evolve through community consultation and detailed technical studies as appropriate. Similarly, monitoring mechanisms and detailed technical studies must also be used in order for the Region to measure success and make adjustments to the Plan. At the same time, however, the extensive community and



REGIONAL NIAGARA Bikeways Master Plan

stakeholder effort that established the overall direction for this plan must be respected. Therefore, specific changes to the alignments, facility types, awareness initiatives and implementation priorities should be evaluated in the context of such a decision's impact upon the community desire to achieve the goals of this Plan.

The following is a summary of the recommendations contained in the preceding chapters of this Plan. Readers are directed to these chapters for a detailed discussion and rationale for each recommendation.

Chapter 4.0 – Cycling in Niagara Region

- Regional Public Works should review its winter snow removal and maintenance program, particularly for roads where cycling is known to occur, in order to ensure paved and gravel shoulders are also adequately cleared during winter months.
- The RNBC should continue to promote cycling in Niagara Region by having a booth at the Toronto Bike Show and that a bicycle tourism survey be conducted every two years.
- The Regional Niagara should work with local municipalities and the Niagara Economic and Development Corporation (NETC) to promote cycling and bicycle tourism in Niagara.
- The Regional Niagara should complete a new statistically valid public attitude survey at least every five years to collect information on cycling in the Region, and the results should be compared with data from previous surveys to identify trends and assist in making informed decisions on Regional bicycle policy updates.

- The Region and its partners, in their efforts to promote cycling in the Region, should use these surveys as a tool to assess the impact of their investments.
- Existing programs for risk management and mitigation at the Regional and local levels should be expanded or adapted to address cycling in Niagara Region.

Chapter 5.0 – Network

- The Regional Niagara and its partners should adopt in principle the proposed on and off-road bikeways network plan illustrated in Figure 5-8 and the corresponding plan of facility types proposed in Figure 5-9;
- The proposed Regional Niagara Bikeways Network Plan should be included in the Regional Niagara Policy Plan, and it should guide the development of bikeways in Niagara Region; and
- The bikeways network plan should be reviewed and updated at least every five years, and between formal review periods, individual network route-changes, additions or deletions should be considered when opportunities arise.

Chapter 6.0 – Planning and Design Guidelines

- Decisions regarding implementation of the proposed Bikeways Network should not be based on a minimum threshold of existing cycling demand, but rather on achieving goals related to improving the quality of life of Niagara Region residents and visitors.
- The Region of Niagara should adopt the retrofitting guidelines recommended in Tables 6.10 and 6.11 of the Planning and



REGIONAL NIAGARA Bikeways Master Plan

Design Guidelines in Section 6.6 of the RNBP.

- Regional Niagara, the RNBC and other partners will need to accept some flexibility in their interpretation and application of the recommended bikeway facility design guidelines in order to achieve a connected network. However, any decision to implement a bikeway solution that assumes a route or facility type that may not exactly meet the minimum recommended guidelines must still be supported by good engineering judgement.
- The Region of Niagara should continue discussions with the City of Thorold and the St. Lawrence Seaway Management Corporation to extend the hours of operation of the Port Robinson Ferry Service.
- Regional Niagara and its partners should provide end-of-trip facilities for employees and visitors at all public buildings where feasible, and the private sector should be encouraged to do the same.
- The Region of Niagara should develop, in association with the Regional Niagara Bicycling Committee, Niagara Economic and Tourism Corporation (NETC), the Niagara Parks Commission, local municipalities and other partners a formal logo for the Regional Bikeways Network.
- The Region should develop and implement a formal on and off-road Bikeways Network signing plan to complement the proposed Regional Niagara Bikeways Network.
- The Region in consultation with the RNBC, should develop a Way-Finding signing strategy for the bikeway network. This strategy should include directional arrows and distances in kilometres to major attractions and settlement areas.
- The Regional Niagara should formally request that the Transportation Association of Canada (TAC) and or the Ontario Ministry of Transportation investigate and provide a guideline addressing the type and use of shared lane bikeway pavement markings in standard vehicle travel lanes.
- Lane lines for bikeway facilities in Niagara Region should conform to the requirements of the Ontario Traffic Manual or the TAC Bikeway Traffic Control Guidelines for Canada.
- The maintenance of on-road bikeway facilities should be based on Regional Road Service Standards.
- In the winter months, on and off-road bikeways that serve as part of the “spine” of the bikeways network should receive priority for snow clearing and removal.
- In the spring, summer and fall months a program of litter, debris and leaf removal for paved shoulder bikeways and bike lanes should be considered.
- The guidelines set out in this report should be assumed as the basis for a maintenance regime for off-road trail maintenance in Niagara Region.

Chapter 7.0 – Outreach

- Regional Niagara, in association with the Niagara Police Service, NETC and School Boards should develop and implement a comprehensive strategy for the development and distribution of cycling related literature.
- Regional Niagara and its partners should expand the delivery of cycling safety messages through the use of a wide variety of mediums, including publications, the internet, local media and transit shelters.



REGIONAL NIAGARA Bikeways Master Plan

- The Region should develop and deliver CAN-BIKE courses.
- The Region should actively encourage the Ministry of Transportation to address cycling safety issues in its driver training manuals.
- The Region should establish a broad-based Niagara Bicycle Safety Partnership to develop and implement bicycle safety programming.
- The Region should maintain its commitment to bicycle safety programs by:
 - *providing a stable level of core funding in the annual operating budget;*
 - *supporting an entrepreneurial approach to generating revenue for the expansion and sustainability of programs; and*
 - *investigating new, innovative programs to make bicycle safety information and training more accessible to specific target audiences.*
- The Regional Niagara, in association with the RNBC and the NETC should develop and publish a region-wide bikeway network map. This map should, among other things:
 - *Identify all existing on and off-road (i.e. multi-use trail) bikeway facilities in Niagara Region;*
 - *Identify the distance of existing bikeway segments and the level of difficulty of the route (e.g. Ascents and descents of the Niagara Escarpment);*
 - *Develop a way-finding sign plan that will also identify key destinations and attractions as well as rest stations and bike shops and tour operators where bikes can be rented and/or serviced; and*
 - *provide information on safe cycling techniques, including bikeway etiquette as well as contacts for additional information.*
- The Region should establish a Regional webpage dedicated to cycling and the Bikeways Plan, which is also accessible to the educational and promotional activities associated with www.cycleniagara.com.
- The Region and its partners should continue to support cycling events.
- The Regional Niagara and the Regional Niagara Police Service should work with School Boards and other agencies to develop a bike-to-school program, which will identify safer routes to schools, and provide secure bicycle parking, CAN-BIKE training and incentive programs for students and their parents.
- The Region should take a leadership role in encouraging and supporting cycling as a mode of transportation for Regional staff, including:
 - *developing a plan for providing high quality bicycle parking and shower/change facilities at all civic work places;*
 - *offering CAN-BIKE training to all Regional employees through the regular employee training and development programs;*
 - *establishing a Regional Niagara Bicycle User Group (BUG) and providing incentives for Regional employees to cycle to work; and*
 - *compensating Regional employees (through kilometre disbursement) for*



REGIONAL NIAGARA Bikeways Master Plan

using their own bicycle to conduct Regional business.

- The Region should encourage other employers in Niagara to promote and support bicycle commuting, including:
 - *providing information and technical advice on the provision of bicycle parking facilities;*
 - *developing a plan for establishing Bicycle User Groups; and*
 - *continuing the annual Bicycle Friendly Awards program.*
- The Regional Niagara works with the Niagara Regional Police, NETC and School Boards should develop materials to assist cyclists involved in collisions, as well as other agencies that have, or could share, responsibilities related to bicycle collisions.
- The Niagara Regional Police Service should provide additional resources, including officers and support, to assume a more active and direct role in assessing and reporting on collisions and fatalities that involve cyclists in Niagara Region.
- Regional Niagara Police Officers should receive training on cyclists' rights and the operating characteristics of a bicycle so that when they investigate collisions involving cyclists that they can better identify contributing factors.
- The Regional Niagara Public Works, with input from the Niagara Police Service, should develop and implement a program to record and report on actions taken to address conditions that impact cycling including potholes, poor shoulder pavement conditions, lack of signing or other

deficiencies. This should include a 24hr Bike telephone number where cyclists can report network problems and offer improvement suggestions as well as get up to date information on bikeway routes and construction activities.

Chapter 8.0 – Implementation

- Regional Council should adopt the Regional Niagara Bikeways Master Plan, thereby establishing the RNBK as policy.
- The Bikeway Network should be implemented in two phases over 20 years.
- The Bikeway Network priorities, illustrated in Figures 8-1, 8-2 and 8-3 should be assumed as a guide for implementation.
- Regional Niagara should adopt a policy of making all Regional roads more bicycle friendly by providing 3.5 m travel lanes and 0.5 m to 1.5 m paved shoulders on all new or reconstructed Regional Roads when the opportunity arises.
- Bikeway facility planning, design and implementation in Niagara Region should continue to be led by Regional Niagara Public Works – Transportation Services supported by other Regional departments, including Regional Planning, Health and the Niagara Regional Police Service.
- The RNBC should be consulted and participate as a partner in implementing the Regional Niagara Bikeways Master Plan.
- Following adoption of the Bikeway Planning and Design Guidelines by the Region, the RNBC's Engineering Task force should be renamed the Network Task Force. It should focus its efforts on issues associated with implementing and promoting the Bikeway Network. The



REGIONAL NIAGARA Bikeways Master Plan

existing Encouragement, Education and Policy Task Forces should continue.

- The RNBC should consist of a minimum 30 members, and that at least 16 members be in attendance to form a quorum
- The RNBC's Mandate, Terms of Reference, reporting and funding mechanisms are revised as proposed in Section 8.4 and Sub-Sections 8.4.1 through 8.4.4 of the RBNP.
- The Sustainable Transportation Co-ordinator (STC), with input from the RNBC Taskforce Chairs, should prepare an annual report to identify and comment on bikeway route implementation priorities and alternatives for consideration by Regional Staff.
- The Region should establish the full-time position of Sustainable Transportation Co-ordinator (STC) in Public Works – Transportation Services.
- The roles and responsibilities of the STC should be based on the description set out in Section 8.7.1 of the RBNP.
- Public Works – Transportation Services should establish and chair an inter-departmental staff working committee to co-ordinate sustainable transportation initiatives in Niagara Region, including the implementation of the RBNP. That this Committee:
 - be named the Sustainable Transportation Co-ordinating Committee (STCC).
 - meet monthly or as deemed necessary by the Director of Transportation Services.
 - manage the budget of the RNBC and all funding for the implementation of the Bikeways Plan.
- The STC, with direction from the STCC, should prepare and submit an annual report to the Public Works and Utilities Committee and Planning Committee. This report should accompany and comment on the RNBC's annual report and should review the progress of implementing the RBNP and set out the objectives for the coming year.
- The Region of Niagara should establish a Bikeway Inter-municipal Working Group;
 - this group should meet a minimum of four times a year;
 - this forum should be used to share information and to discuss bikeway route planning, implementation, design standards and project-specific applications of these design standards; and
 - the group should have rotating Chairs to encourage participation and involvement.
- The RBNP should be reviewed and given consideration by Regional Staff when Regional Road or other infrastructure projects are identified and/or scheduled.
- Implementation of the RBNP should be guided and given direction by a reporting structure similar to that illustrated in Figure 8-4.
- The Region of Niagara should adopt a bikeway network implementation process similar to that outlined in Figure 8-5.
- Regional Council should commit to funding the implementation of the Bikeways Master Plan, both infrastructure and programming, on an annual basis.
- Public Works – Transportation Services and Planning should identify in their respective



REGIONAL NIAGARA Bikeways Master Plan

annual budgets as a line item, funding associated with implementing the RBNBP.

- The Region, led by the proposed Sustainable Transportation Co-ordinator, should secure alternative funding sources to assist in implementing components or specific projects related to the RBNBP.
- The Region, through Public Works – Transportation Services, should include cycling and bikeway data collection in the department’s current traffic data collection program.
- The Sustainable Transportation Co-ordinator, with assistance from the RNBC, should conduct Bikeway User Surveys every two years and a statistically valid Public Attitude Survey at least every five years.

9.3 POLICIES

The Regional Niagara Policy Plan contains statements, in the form of objectives and policies, which communicate the Region’s commitment to and direction for cycling. These statements are included in **Appendix C**.

Through the development of this Plan and as a result of the new directions proposed by the recommendations, amendments to the existing Policy Plan wording are appropriate.

Through the process to develop this Plan, the RNBC developed suggested policy amendments. The following builds upon these suggestions where appropriate and where in keeping with the recommendations of this Plan. While the exact wording of these provisions may be refined through the Policy Plan review process, the intent of the suggested provisions should be maintained.

The amendment will be comprised of text and a schedule. The text is provided in the following section. The schedule should reflect **Figure 5-9**.

The following text is intended to replace the existing preamble, objectives and cycling trails policies provided in section 9F of the Policy Plan.

9.3.1 AMENDMENT TEXT

Regional Niagara is committed to meeting the needs of cyclists as part of Region’s overall transportation strategy. Regional Niagara has demonstrated this commitment by:

- Preparing and adopting the Regional Niagara Bikeways Master Plan (2002) and its predecessor, the Regional Niagara Bicycling Study (1995);
- Forming the Regional Niagara Bicycling Committee to advise Regional Council on matters related to cycling;
- Developing and maintaining over 219.2 kilometres of cycling facilities as of 2002;
- Promoting Niagara as a cycling destination for tourists; and
- Promoting and educating Regional residents about the benefits and safe practices of cycling.

Developing and maintaining a visible and connected cycling network in Niagara Region that is easily accessible and actively used by all types of cyclists is an important component of this strategy. This planned on and off-road network of multi-use trails, bike lanes and signed routes shown on Schedule _ will provide a means to connect, integrate, enhance and expand the existing cycling network as a means



REGIONAL NIAGARA Bikeways Master Plan

of facilitating the use of bicycles for leisure, tourism and utilitarian (e.g. commuting) purposes.

The following objectives and policies reflect the community's aspirations and priorities as well as the Regional commitment to ensure cycling is maintained as a legitimate and viable form of transportation.

Objectives for Cycling

- To establish and maintain a region-wide on and off-road cycling network and related infrastructure for a broad range of users and interests.
- To encourage cycling in Niagara for community health and to enhance the overall quality of life.
- To promote safety through cycling education and enforcement initiatives.
- To recognize and support cycling as a legitimate and an environmentally sustainable form of transportation for utilitarian and recreational purposes.
- To promote cycling as part of Niagara's tourism experience in partnership with the Niagara Economic and Tourism Corporation, the private sector and other agencies.
- To ensure the region-wide on and off-road cycling network is planned, designed, constructed, and maintained according to recognized standards and/or guidelines.
- To incorporate cycling considerations in the Region's land use and transportation planning activities.
- To encourage and assist local municipalities to adopt and support bicycle-friendly initiatives and to develop bicycle facilities

which connect with the region-wide on and off-road cycling network.

- To encourage and help ensure the integration of other cycling facilities with the region-wide on and off-road cycling network such as the Waterfront Trail, the Welland Canals Parkway Multi-Use Trail, the Trans Canada Link Trail and other networks outside of Niagara.
- To maximize the annual improvements for cycling with the aim of completing the region-wide cycling network in 20 years.

Policies

The Regional Municipality of Niagara of Niagara will:

- require all proposed developments and infrastructure undertakings to provide facilities for cycling, including extensions and improvements to the bikeway network as part of the up-front stages of construction, in keeping with the provisions of this plan and the Regional Niagara Bikeways Master Plan.
- provide for the development of the cycling network by:
 - (i) designating desired cycling connections on Map _ and in local municipal official plans;
 - (ii) implementing, monitoring and updating the Regional Niagara Bikeways Master Plan;
 - (iii) funding the development, signage and maintenance of Regional bikeway facilities under Regional jurisdiction,
 - (iv) funding, in part or wholly, the development, signage and maintenance



REGIONAL NIAGARA *Bikeways Master Plan*

of proposed Regional bikeway facilities on local roads, with the approval of Regional Council;

- recognize that cycling facilities located on private property will only remain open with the approval of the property owner.
- provide a forum for public and agency input into Regional cycling decisions in areas such as bikeway network development, cycling education, promotion, encouragement, enforcement and policy development, through the Sustainable Transportation Coordinating Committee and the Regional Niagara Bicycling Committee.
- When Regional Roads are constructed or reconstructed give consideration to accommodating cyclists, whether or not the road is a designated a bikeway route.
- co-ordinate the development and expansion of the Regional bikeways network with local and adjacent municipalities and other agencies and request these jurisdictions to implement their own supportive bicycle planning and infrastructure.
- minimize the risk to pedestrians, cyclists and motorists through the appropriate design of cycling facilities in keeping with national and provincial guidelines and standards.
- support the delivery of educational activities and programs designed to improve cyclists' and motorists' skills and safety.
- support the promotion of cycling tourism in the region.
- request minimum provisions for safe and secure bicycle parking and end-of-trip change facilities in high activity areas, such as work places and public buildings, in Regional and local policies and regulations.