York Region Pedestrian and Cycling Master Plan – Towards a More Sustainable Region

Robert Grimwood, P.Eng. – Project Engineer, MMM Group Ltd.*
Dave McLaughlin, MCIP, RPP – Senior Project Manager, MMM Group Ltd.
Loy Cheah, P.Eng. – Manager of Transportation Planning, York Region
Richard Hui, P.Eng., PTOE – Program Manager, York Region

Paper prepared for presentation

at the Urban Transportation Management Session

of the 2008 Annual Conference of the
Transportation Association of Canada
Toronto, Ontario

*Presenter at the 2008 TAC Conference
Abstract

This paper focuses on the Pedestrian and Cycling Master Plan (PCMP) developed for York Region, a rapidly growing regional municipality located immediately north of Toronto. York Region is comprised of nine local municipalities with a population approaching 1 million at the end of 2007. The Regional government has recently embraced a number of growth management and planning initiatives with the goal of becoming more sustainable and reducing the Region’s carbon footprint. This is being achieved through improved Regional transit services, aggressive transportation demand management and the development of a regional scale pedestrian system and cycling network.

York Region Council formally adopted the PCMP in April 2008. The Plan is intended to guide the Region as it works with local municipalities over the next 25 years to implement a comprehensive pedestrian system and region-wide cycling network. The PCMP also includes facility design guidelines as well as supporting policies and programs to encourage walking and cycling in the Region.

Developing a pedestrian and cycling plan for the Region involved several unique challenges, such as the need to develop a regional scale network that can connect to existing and previously proposed local municipal networks. Opportunities were identified and capitalized upon to integrate pedestrian and cycling facilities with Regional transit, leveraging synergies with local municipalities and other stakeholders, and coordinating pedestrian and cycling infrastructure projects with Regional road construction projects.

The PCMP concludes with a series of recommendations that address the opportunities and challenges identified through the study. Some of the key recommendations include:

- Implementing a comprehensive outreach program and other initiatives aimed at educating the public and promoting active transportation;
- Establishing an inter-municipal working group to coordinate between the Region, local municipalities and other stakeholders;
- Establishing a Pedestrian/Cycling Coordinator staff position at the Region to manage and guide the implementation of the PCMP;
- Adopting a 10-year Implementation Plan, which coincides with the Region’s 10-year Capital Roads Program to pursue opportunities to incorporate pedestrian and cycling infrastructure with scheduled road projects;
- Adopting the Municipal Partnership Program, an unprecedented initiative whereby York Region shares up to 50% of construction costs for qualifying local municipal pedestrian and cycling infrastructure projects that are consistent with the Region’s PCMP;
- Establishing the “Lake-to-Lake Route” through York Region, a major cycling destination linking Lake Simcoe at the north end of York Region to Lake Ontario at the south end via cycling routes through the City of Toronto; and
- Applying detailed Planning and Design Guidelines, developed as part of the PCMP.

Implementation of several elements of the Plan has already begun, and this paper includes a discussion of the preliminary evaluation of these initiatives and how they may be improved in the future.
Why Does York Region Need a Pedestrian and Cycling Master Plan?

York Region is a rapidly growing regional municipality located immediately north of the City of Toronto. The Region is comprised of nine local municipalities with a population of approximately 983,000 at the end of 2007. Currently, York Region is growing at a rate of 30,000 to 35,000 new residents per year, and is expected to reach a population of 1.5 million by 2031. The Region is creating new jobs at an even faster pace. With more than 485,000 people currently working in the Region, this number is expected to reach about 800,000 by 2031. With this growth, the safe, efficient and reliable movement of people and goods will become increasingly more important and challenging.

York Region is committed to implementing Vision 2026, a Regional Strategic Plan adopted by Regional Council that embodies a comprehensive strategy built upon accepted sustainable development principles to achieve a more sustainable Region. Building upon the Province’s Place to Grow legislation and the Region’s Vision 2026, Regional Council adopted in November 2007 York Region’s Sustainability Strategy which is a framework for making smarter decisions about growth management and all municipal responsibilities that better integrate the economy, environment and community. Sustainability is about achieving a state of well-being. One of the key action areas of the Sustainability Strategy is preparing and adopting a York Region Pedestrian and Cycling Master Plan (PMCP) to promote an active transportation system and lifestyle.

The Region’s goal is to improve the quality of life and health of residents and employees and support overall independence and personal development by planning and developing healthy and strong communities. With regard to moving people, sustainability means assigning more priority to walking, cycling, public transit and carpooling. This provides a more balanced transportation system that places less emphasis on single occupant motor vehicle trips while reducing emissions of air pollutants and greenhouse gases. It means leaving the Region’s communities in a healthy state for future generations.

Figure 1 – Pedestrians on a Regional Road in York Region (MMM Group Ltd.)
In June 2006, York Region retained the MMM Group, in association with Go For Green and Decima Research, to conduct the PCMP Study and develop a Regional Master Plan. The Plan was completed in April 2008 and is designed to guide the Region as it works with local municipalities over the next 25 years and beyond to implement a comprehensive pedestrian system and on and off-road region-wide cycling network. The PCMP also includes a set of supporting policies and programs to promote walking and cycling in the Region.

A Vision for Walking and Cycling in York Region

The vision for the PCMP was to create a pedestrian and cycling supportive environment that encourages both utilitarian and recreational travel by walking, cycling and using public transit through:

- Established promotional and educational policies and programs including a marketing strategy;
- A continuous system of sidewalks on Regional and local roads as well as a designated regional-scale network of cycling facilities; and
- A regional-scale network integrated with local municipal pedestrian and cycling infrastructure and public transit service that connects communities and people of all ages with where they live, work and want to go.

![Figure 2 – A Vision for Walking and Cycling in York Region (York Region)](image)

This vision provided an overall direction for the Study and articulated the ultimate aspirations for the Plan.

Challenges and Opportunities for the PCMP

Developing a pedestrian and cycling plan for York Region involved several unique challenges. In addition, numerous opportunities were identified through the course of the study. The final PCMP Study Report presents a Plan that addresses key challenges and capitalizes on major opportunities, while incorporating an implementation process that is dynamic and flexible in anticipation of future challenges and opportunities.

Working with Local Municipalities and Other Stakeholders

Involving stakeholders and the public can be the most challenging aspect of developing a Master Plan. However these potential partners also offer what is potentially the greatest opportunity: to capitalize on the input and support from others. In order to more effectively
leverage synergies with local municipalities and other stakeholders, a Public Consultation Strategy was developed at the outset of the Study and confirmed with Regional staff. Actively and productively involving key Regional staff, representatives of local municipalities and relevant agencies and the public was an absolutely essential part of the Study process. Key elements of the consultation strategy included:

- Project Steering Committee – Comprised of key Regional staff, the Steering Committee provided direction on significant issues, options considered and solutions adopted, and ensured direct and ongoing communication between the project team and Regional management.
- Technical Advisory Committee (TAC) – TAC consisted of members of Regional and local municipal staff, as well as relevant stakeholder groups such as transit agencies, conservation authorities, school boards and walking and cycling groups. This committee provided invaluable input through the course of the study, including advance review of draft documents and plans, as well as updates on pedestrian and cycling related initiatives by others.
- Public Advisory Committee (PAC) – In addition to the Public Open Houses (see below), public input to the Study was gathered through a formal committee of interested York Region residents. The PAC allowed for targeted public consultation and a continuity of participants that is not always achievable through Public Open Houses. Members of PAC provided input to the Study process, contributed suggestions on network development, and reviewed the draft Study Report. In March 2008, PAC formally endorsed the PCMP.
- Public Open Houses – As part of the PCMP Study, the Region hosted a series of three Public Open Houses in May 2006, October 2006 and October 2007. These public meetings, scheduled at key points in the Study, provided the opportunity for input from the general public on the development, refinement and finalization of the Plan. Mapping, illustrations and an interactive “drop-in” format allowed York Region residents to provide their unique and valuable insights to the PCMP Study team.
- Active Transportation (AT) Workshop – The AT Workshop was held in June 2006, with the purpose of seeking input from key stakeholders on how conditions could be improved for walking, cycling and other active transportation modes. Participants included Regional and local municipal staff, agency representatives (transit, school boards, transportation management associations, etc.) and members of the public. A summary of the comments received at the workshop was prepared and considered as an input to the development of the PCMP.

Figure 3 – The Active Transportation Workshop (Michael Haynes)
• Project website – Early in the Study, York Region established a dedicated PCMP project web page on its Regional website. As the Study progressed, this web page was regularly updated and served as a comprehensive source of information for anyone interested in the Study. Ultimately, it presented a chronological record of key steps in the development of the PCMP, from the initial Phase 1 Background Report through to the Draft Study Report itself. At the time of printing, the web page was available at:

http://www.york.ca/Departments/Planning+and+Development/Pedestrian+and+Cycling+Master+Plan.htm

• Newsletters – Over the course of the study, a series of newsletters were issued to keep the public informed about the status of the PCMP. Each newsletter also included contact information for providing comments, and a feedback form for residents to complete and submit. These newsletters were made available during public consultation activities and posted on York Region’s PCMP project web page.

Coordinating with Road Construction Projects

The Regional pedestrian system and cycling network has been integrated with the Region’s 10-year Capital Roads Program, and complements the work already scheduled. By coordinating cycling and pedestrian network implementation with the Region’s 10-year road capital budget and forecast, efficiencies are gained in terms of scheduling, design and construction of pedestrian and cycling infrastructure. Such economies of scale are lost when plans for road construction and plans for pedestrian/cycling infrastructure construction do not “talk to one
another”, so coordinating the two was a priority. This also mitigates the potential for conflicting priorities between constructing road infrastructure and constructing pedestrian or cycling infrastructure by linking the projects to one another so that both concerns are satisfied. As Regional road or other capital infrastructure projects are identified or scheduled, the PCMP will be reviewed for new opportunities.

Connecting to Local Municipal Networks

York Region operates in a three-tiered governmental system, and is a Regional Municipality under the Province of Ontario. There are nine local municipalities (Towns, Cities, etc.) within York Region's jurisdiction, each with their own road, sidewalk and trail systems. The nine local municipalities in York Region are at different stages of development in terms of pedestrian and cycling infrastructure. Developing a Regional plan that connected with existing and previously proposed local municipal networks required coordination with local staff in the early stages of the project. One of the first steps in creating the draft Regional network was the compilation of an inventory of local municipal pedestrian and cycling plans. These plans provided a framework upon which the Regional network was built.

The Regional pedestrian system consists primarily of sidewalks on Regional roads and linear off-road multi-use trails. The pedestrian component of the PCMP focused on identifying missing sidewalk links on Regional roads in urban areas as well as identifying pedestrian “zones” where enhanced pedestrian infrastructure should be provided. These initiatives are consistent with policies in the Region’s Official Plan, Transportation Master Plan and Transit Oriented Development Guidelines. The recommended pedestrian infrastructure will vary depending on the location, density and range of land uses within each zone and implementation will be done cooperatively with local municipalities, as they have jurisdiction.

Figure 5 – Missing Links in the Existing Sidewalk System Were Identified (MMM Group Ltd.)
Improving conditions for walking is more than just creating a network of connecting pedestrian facilities such as sidewalks and pathways. Although these facilities are important, the essential element is to create a system that “engages” pedestrians and makes them feel comfortable when using it, rather than a system that treats pedestrians as an after-thought. The concept of “every street should be viewed as a pedestrian street” is a notion that was recommended as part of the PCMP, with the goal of improving the environment for pedestrians of all age levels, creating a system that is accessible for all types of users and encouraging people to walk more often.

The cycling network component of the Plan consists of on-road bike lanes and paved shoulders, signed-only cycling routes and multi-use trails in the boulevard of road rights-of-way or through linear green space. Each of these facilities has its own set of minimum design parameters that will guide implementation. All designated cycling routes in the PCMP consist of one or more of these cycling facilities. The regional cycling network builds upon and connects local municipal cycling networks and major trail systems, links urban and rural centres as well as key attractions in the Region and creates a regional spine that will facilitate transportation by bicycle for both utilitarian and recreational purposes and support the use of public transit.

In addition, parts of the network are destinations for cyclists and pedestrians, such as the “Lake to Lake Route”. Early in the network development process, the opportunity to provide a major recreational cycling trail through York Region between Lake Simcoe and Lake Ontario was identified. In the final Plan, the Region has committed to completing the connection from Lake Simcoe at the north end of the Region to a gateway into the City of Toronto trail network at the south end of the Region, which ultimately leads down to Lake Ontario. Many segments of the Route within Toronto and York Region are already in place in the form of existing trails and cycling routes. Once completed, the Lake-to-Lake Route will be a major cycling destination and a unique highlight of the Regional cycling network. Once completed, this Route will be longer than 100 kilometres.

The ultimate pedestrian system and cycling network are illustrated below in Figures 6 and 7 respectively. The Lake-to-Lake Route is highlighted on Figure 7.
Figure 6 – Long-term Pedestrian System (York Region)
Figure 7 – Long-term Cycling Network (York Region)
Early Wins for Reconstruction Projects

Early in the Study, it was noted that ongoing Regional road reconstruction projects presented an opportunity to proactively provide connections for cyclists. By establishing the Regional guideline for paved shoulders on all reconstructed Regional roads at a minimum 1.5 metres, sufficient pavement width for paved shoulder bikeways was ensured for all road segments undergoing reconstruction. Where a sufficient roadway platform exists, Regional road resurfacing projects present the same opportunity and the minimum 1.5 metre paved shoulder has been incorporated. This new guideline for Regional road paved shoulders is one example of how elements of the PCMP were being integrated into Regional road construction projects even before the Plan was officially adopted. By applying this new guideline on all future road construction projects, York Region is “a step ahead” in accommodating cyclists with the provision of paved shoulder bikeway facilities all across the Region.

Figure 8 – Example of a Paved Shoulder Bikeway in York Region (MMM Group Ltd.)

Key Components of the Plan

Integrating Pedestrian and Cycling Modes with Transit

A comprehensive and connected sidewalk system is critical to supporting public transit ridership. Since almost every transit trip begins and ends with some form of a pedestrian trip, these two travel modes were viewed as being mutually dependant upon one another. As the jurisdiction responsible for public transit, York Region has a vested interest in encouraging local municipalities to complete and expand the sidewalk system wherever possible. As part of the Master Plan Study, York Region’s inventory of sidewalks on Regional roads was reviewed, and missing links were identified. In some locations sidewalks were only located on one side of a road, while in other locations there were no sidewalks. Locations where transit stop hubs had no connecting sidewalks were given careful attention as part of this review.

After completion of the Plan, and even as it was being finalized, there were significant developments in integrating walking and cycling with transit. In addition to their ongoing efforts to provide more concrete bus pads and bus shelters, York Region Transit (YRT) and Viva Rapid Transit have pursued an ambitious program of installing bicycle racks at bus stops. As of April 2008, YRT and Viva had installed over 150 bicycle racks at more than 65 transit stops.
throughout the Region, providing secure bicycle parking for over 300 bicycles. In addition, YRT will be initiating a pilot project for installing bike racks on buses, with committed funding for full deployment over the next few years.

Similarly, GO Transit has initiated a concerted effort to better serve cyclists by announcing plans to install bike racks on all GO buses. In addition, GO Transit has approved a plan to spend $2.5 million to create covered bike storage areas at all train stations.

These programs represent important steps in working to integrate cycling with transit, and lay the groundwork for future improvements in modal integration.

Planning and Design Guidelines

The PCMP includes Planning and Design Guidelines, provided under separate cover in a Technical Appendix, that are intended to guide the Region, local municipalities and other partners in the development of a regional pedestrian system and cycling network. The guidelines contain detailed information and recommendations regarding typical planning and design guidelines as well as pedestrian system and cycling network solutions. They are intended as a general reference for cycling network planners and designers. These guidelines offer a variety of solutions to balancing the sometimes conflicting interests of pedestrians and cyclists with other sidewalk, road and trail users including motorists, transit vehicles and trucks. They also provide a basis for uniformity in pedestrian and cycling facilities across jurisdictions throughout York Region, a benefit to users and facility owners alike.

Roles and Responsibilities

The PCMP is not intended to be a static document. The timing and details related to implementation, particularly the location of recommended routes and pedestrian and cycling facility types, should evolve through community consultation and technical review when appropriate. At the same time, however, the extensive community and stakeholder effort that established the overall direction for the PCMP should be respected.
Building upon this central recommendation, the Plan outlines a proposed process tool for guiding the implementation of pedestrian and cycling network facilities in York Region. It was recommended that Regional staff review this tool and adapt it as necessary to suit their needs. The tool recognizes that while the Plan provides a blueprint for the future Regional pedestrian system and cycling network, unforeseen challenges and unanticipated opportunities will occur. In such cases, the timing for implementation, type of facility, or other project characteristics may need to be revisited. Steps such as confirming route feasibility, conducting field surveys, collecting and reviewing roadway data, and confirming partners and funding are examples of steps in the implementation process that provide the opportunity for such revisions. The Implementation Process Tool provides the flexibility to allow this to happen within the recommended implementation structure of the PCMP.

The process is comprised of five parts and is a step-by-step mechanism to confirm the feasibility of each route recommended in the PCMP at the time implementation is proposed. It will assist Regional staff from affected departments to work together, to share information and to facilitate the implementation of the PCMP. Changes to policies and the network will also be considered through the Regional Official Plan, and Transportation Master Plan reviews conducted every five years. The process will be applied in concert with the implementation structure shown in Figure 10, which outlines the relationships between key stakeholders in implementing the Plan.

![Figure 10 – Implementation Structure (York Region)](image-url)
An Extensive Series of Recommendations

The PCMP provides a clear direction for York Region in moving toward the vision developed at the outset of the Study. This is most evident in the listing of recommendations included in the Study Report. Categorized under the headings of Outreach, Infrastructure and Implementation Strategy, the recommendations clearly state the specific actions that the Region will take in implementing the PCMP.

Outreach

Pedestrian and cycling infrastructure such as sidewalks, bike lanes, signed routes, multi-use trails and bike racks or lockers are important components of a pedestrian and cycling plan. However, facilities alone will not produce and support a successful pedestrian and cycling community. Many of the comments received through the consultation process for the PCMP emphasized this point. Outreach initiatives are the primary means of addressing the significant challenge of convincing people that walking and cycling are feasible, safe and desirable alternatives to the automobile for short distance trips.

The strategic framework in the PCMP recommends the implementation of new programs and the continuation of existing pedestrian and cycling initiatives in areas of education, enforcement and encouragement and promotion.

a) Education

Education is one of the most important components of the PCMP. Pedestrian and cycling network users need to be educated to understand on and off-road operating procedures to support a safe and inviting environment for walking and cycling in the Region. The key challenges that are addressed in the education component of the Plan are:

- Providing bicycle education information;
- Funding and delivery of bicycle education programs;
- Conducting focused safety campaigns;
- Providing response process to collisions; and
- Fostering cycling and walking among children.

The PCMP addressed each of these areas with best practices reviews, suggestions for partnering with stakeholders and specific recommendations.

b) Enforcement

Enforcement is key to pedestrian and cycling safety with the principal objective of reducing incidents causing property damage, injury and death. The PCMP outlined how this objective can be accomplished through the following recommended actions:

- Continue to work with York Regional Police to provide patrols of the pedestrian and cycling network to enforce proper operating rules to pedestrians, cyclists and motorists alike;
- Increase the number of officers using bicycles and patrol trails as part of a community policing approach;
• Include pedestrian and cycling safety material in training programs for driver examinations, police recruits, fleet/transit operators and other officials; and
• Request Provincial funding for pedestrian and bicycle safety and promotional programs to assist the Region in its efforts to promote walking and cycling, and educate all road users with the objective of reducing cycling collisions.

c) Encouragement and Promotion

The proper conditions and a suitable environment must be available to pedestrians and cyclists for them to feel comfortable using these travel modes. People will only consider walking and cycling for recreational or utilitarian purposes if it is convenient, safe and comfortable. The primary areas of focus related to encouragement and promotion were:

• Providing end-of-trip facilities for cyclists and walkers, such as showers and lockers, benches and secure bicycle storage;
• Leading by example, by establishing York Region as a model for other employers in encouraging walking and cycling among their employees;
• Facilitating intermodal connections, particularly cycling/pedestrian-transit connections and automobile-cycling connections;
• Producing a Regional cycling map, to be provided at various public venues and events, which would be updated regularly;
• Supporting the development of bicycle user groups, a promotional initiative that can support and encourage utilitarian cycling;
• Working with key partners, including York Regional Police, School Boards, York Region Community and Health Services Department, local municipalities, the Ontario Ministries of Transportation and Health Promotion and cycling organizations; and
• Promoting walking and cycling in York Region as tourism attractions.

Specific recommendations related to each of these focus areas are developed and presented in the PCMP with the objective of making walking and cycling more convenient, feasible and better integrated with public transit.

Figure 11 – Bike Racks at a Municipal Office Building (Town of Markham)
Establishing a “Go-to” Person – The Pedestrian/Cycling Coordinator

It became clear through the course of the Study that in order to be successful over time the Plan needs a “champion”. The PCMP recommended that York Region formally recognize this “point person” by establishing a Pedestrian/Cycling Coordinator Position. This position is proposed to be located in the Planning and Development Services department and assigned responsibility to oversee the implementation of the PCMP. The Pedestrian/Cycling Coordinator will work with the Pedestrian and Cycling Public Advisory Committee, York Region Community and Health Services Department, local municipalities, school boards, conservation authorities and other partners.

Reporting to the Manager of Transportation Planning, the Pedestrian/Cycling Coordinator would manage and guide the implementation of the PCMP by coordinating staff resources and responsibilities, budgeting, program development and delivery as well as the preparation of annual budgets and progress reports. This position is another means of addressing the potential for conflicting priorities by “giving a voice” to pedestrian and cycling interests which is embedded in the Region’s Transportation Planning group.

Annual Progress Reports are recommended for presentation to both the Regional Planning and Transportation Committees and the Public Advisory Committee. These reports will outline the progress made towards achieving the primary goals of the Plan, and measure the success in implementing the pedestrian and cycling network and other recommendations through the application of the performance measures outlined as part of the PCMP. Annual reports will also identify changes in direction and priorities for the upcoming year, and identify budget requests. The implementation program for each year, including the specific routes and programs to be implemented or funded, would be presented to Regional Council for consideration during the preparation and review of the annual departmental budgets.

Working with Others – The Inter-Municipal Working Group

In order to facilitate more open and ongoing communication between Regional and local municipal staff, it was recommended that an informal inter-municipal working group led by the Pedestrian/Cycling Coordinator be formed. This working group, modeled after York Region’s Greening Strategy and Land Securement Partnership, would have staff representation from each of the local municipalities and conservation authorities as well as the Regional Planning, Health and Transportation Departments, Regional Police Service and school boards. It would meet regularly to discuss actions related to coordinating the development of pedestrian and cycling facilities throughout the Region and to keep everyone up-to-date on local initiatives. This forum will provide the opportunity to discuss route planning, implementation, design standards and permit the Region to present and discuss its pedestrian and cycling implementation plans for the upcoming year.

Supporting Local Efforts – The Pedestrian and Cycling Municipal Partnership Program

Another program, and perhaps most notable, was the adoption in October 2006 by Regional Council of the Municipal Partnership Program (MPP). With an initial annual budget of $500,000 per year, this program was designed to assist local municipalities and conservation authorities in implementing pedestrian and cycling facilities within their jurisdiction of the PCMP by providing Regional funding for up to 50% of the construction cost for eligible projects. The program allows integration with local municipal/conservation authorities’ pedestrian and cycling plans, including public transit service that connects communities and people of all ages with
places of interest. The intent of the MPP was to provide a framework and policy for requests from the local municipalities with regard to funding municipal/conservation authorities' pedestrian and cycling infrastructure when these priorities match Regional priorities.

This program was met with a significantly positive response from local municipalities, and serves as an example of how regional governments can cooperate with and support local municipal and stakeholder pedestrian and cycling initiatives. In the fall of 2007, the Region allocated $500,000 per year to the MPP for 2007 and 2008. Five municipalities and one agency submitted applications, and six projects were deemed to be eligible for funding. For 2007, the available Regional budget of $500,000 provided the full 50% funding to three 2007 projects. For 2008, the total costs for six projects exceeded $1 million, so a 50% Regional funding allocation would have exceeded the available budget of $500,000. In order to equitably allocate available funds, a Regional contribution was allocated to eligible projects at a percentage share (32%) that fully utilized the $500,000 budget. In total, the MPP has yielded about 13 kilometres of multi-use pathways and three crossings of major roads and watercourses since 2007.

Figure 12 – A Local Trail in York Region (MMM Group Ltd.)

With continued funding and ongoing promotion, the Region’s MPP can be improved to assist even more local municipalities and conservation authorities with the implementation of pedestrian and cycling infrastructure projects that support the development of a Regional network.

A Ten-Year Implementation Plan and Long-Term Strategy

The recommended implementation strategy includes a 10-year implementation plan and a longer-term strategy (year 11 to 25+). It defines a recommended process, management structure and a set of steps considered necessary for implementation. It also estimates costs for the various infrastructure and programming recommendations that fall within the 10-year plan.
The 10-year plan consists of two 5-year phases for the pedestrian system and cycling network. The approach used to prioritize the pedestrian and cycling infrastructure component of the PCMP included consideration of a set of Planning and Design Guidelines compiled as part of the study and documented as a stand alone technical appendix. Infrastructure priorities were assigned based on a logical build out of the network over time, field observations and the application of a number of phasing criteria, some of which included:

- Connect to existing local municipal pedestrian and cycling facilities;
- Focus on developing a network spine in the short-term that connects the Region through major east-west and north-south links and along corridors with transit;
- Provide facilities at important crossings of pedestrian and cycling barriers when feasible, including watercourses, highways, and mid-block road crossings;
- Focus on improved access to the network;
- Schedule implementation with planned Regional and local municipal capital road and servicing projects. If roadway platform width is sufficient but existing pavement width is inadequate, schedule implementation at the same time road resurfacing occurs;
- All Regional roads proposed for a pedestrian or cycling facility and identified in the Region’s 10-year capital roads forecast should be implemented in Phase 1 or 2; and
- Missing sidewalk links on Regional roads should be prioritized based on connection to transit stops and nodes, connecting to schools, recreation centres and employment nodes.

Table 1 summarizes the number of kilometres for both existing and planned pedestrian and cycling routes by phase and facility type.

### Table 1 – Length of Regional Pedestrian and Cycling Network by Facility Type and Implementation Phase

<table>
<thead>
<tr>
<th>Facility Type [Distance (Km) ¹]</th>
<th>Multi - Use Trail²</th>
<th>Bike Lane</th>
<th>Paved Shoulder³</th>
<th>Signed Only Route</th>
<th>Sidewalk</th>
<th>Total (Km)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing²</td>
<td>62.9</td>
<td>0.0</td>
<td>0.0</td>
<td>44.6</td>
<td>486.4</td>
<td>593.9</td>
<td>30.8</td>
</tr>
<tr>
<td>Phase 1³</td>
<td>33.8</td>
<td>75.6</td>
<td>184.7</td>
<td>84.8</td>
<td>45.3</td>
<td>424.1</td>
<td>22.0</td>
</tr>
<tr>
<td>Phase 2³</td>
<td>26.7</td>
<td>87.7</td>
<td>110.6</td>
<td>38.9</td>
<td>16.6</td>
<td>280.6</td>
<td>14.6</td>
</tr>
<tr>
<td>10 Year Total (Km)</td>
<td><strong>123.5</strong></td>
<td><strong>163.2</strong></td>
<td><strong>295.3</strong></td>
<td><strong>168.3</strong></td>
<td><strong>548.3</strong></td>
<td><strong>1298.6</strong></td>
<td><strong>67.4</strong></td>
</tr>
<tr>
<td>Phase 3³</td>
<td>85.0</td>
<td>131.5</td>
<td>215.3</td>
<td>61.7</td>
<td>135.0</td>
<td>628.4</td>
<td>32.6</td>
</tr>
<tr>
<td><strong>TOTAL (Km)</strong></td>
<td><strong>208.5</strong></td>
<td><strong>294.7</strong></td>
<td><strong>510.5</strong></td>
<td><strong>230.0</strong></td>
<td><strong>883.3</strong></td>
<td><strong>1927.0</strong></td>
<td></td>
</tr>
</tbody>
</table>

¹ For on-road facilities, the distance shown represents the length of the road with two-way bike facilities on it.
For example, 1.0 km of roadway will have a Bike Lane on both sides of the roadway.

² The distances shown represent only bikeway facilities that currently exist on parts of the route network.

³ Roads yet to be built were not taken into consideration when developing the network.

⁴ Distances for Multi-Use Trails in Region road rights-of-way have been assigned to the local municipality or agency/organization in which the trail exists or is proposed.

⁵ A portion of the distances identified for paved shoulder routes are on roads with at least 1.2 m existing paved shoulders.

As an interim solution, these routes could be designated as a paved shoulder bikeway by adding signage.
Monitoring the Implementation of the Plan

Performance measures were established and are being monitored in order to allow for an evaluation of the PCMP over time. This task, led by the Pedestrian/Cycling Coordinator, will give valuable insight on what is working well and what areas need improvement. Collecting data to evaluate the different and changing aspects of pedestrian and cyclist behaviour will assist in evaluating the effectiveness and overall contribution of various activities to achieving the stated vision and goals of the PCMP. The data will establish a benchmark with which to compare later data as the Plan is implemented.

The data collection will be used to:

- Confirm the overall direction and implementation of the PCMP;
- Confirm statistics on the number and type of cyclists;
- Verify the route selection process; and
- Identify the supply and demand for bicycle parking.

Over time, the evaluation system should identify changes in route preference to assist in determining where to implement changes to both “hard” and “soft” pedestrian and cycling infrastructure. The results of this assessment may be used to determine the success of implementing various types of cycling facilities. However, caution must be used in relying on an immediate response to a given improvement. An extended timeframe should be established to ensure that cycling awareness initiatives are in place to assist in changing travel patterns and habits.

What is the Investment?

It is estimated that the total investment to implement new programs and infrastructure and maintain the network is about $44.5 million over the next 10 years. This cost consists of approximately $40.3 million for the pedestrian and cycling networks, $950,000 for off-road trail maintenance and $3.4 million for updates, outreach and programs. Out of the total investment of the 10-year Plan, $28.2 million or 63.5% is estimated to be York Region’s share. The remaining $16.3 million or 36.5% would be the responsibility of local municipalities and the Province.

Costs include on-going funding related to implementing the PCMP, preparing the annual progress report, delivering safety, education and promotional programs, performing network and infrastructure maintenance, staff resources, management and administration.

Towards a More Sustainable Region

The York Region Pedestrian and Cycling Master Plan is an ambitious, comprehensive and unprecedented strategy for achieving the Region’s vision for walking and cycling over the next 25 years and beyond. Even before being approved by Regional Council in April 2008, elements of the Plan were being implemented, specifically the Municipal Partnership Program. York Region was also pleased to have the Plan recognized by the Canadian Institute of Planners that selected the PCMP for their 2008 Award for Planning Excellence in the category of Transportation and Infrastructure. The PCMP was selected from among 44 submissions to receive this award, which recognizes significant achievement in the field of planning, particularly where fiscal challenges in the implementation of transportation infrastructure are addressed.
York Region is committed to moving towards becoming a more sustainable Region, and the adoption of the PCMP, along with related ongoing initiatives such as the Municipal Partnership Program, demonstrate that commitment. In developing the Plan, the Region identified and addressed significant opportunities and challenges, and clearly articulated with specific recommendations a direction to achieving its vision for walking and cycling in York Region. By working proactively with local municipalities and other stakeholders, coordinating infrastructure initiatives with Regional road construction projects, and – most importantly – developing and adopting a comprehensive Region Pedestrian and Cycling Master Plan, the Region has set a course to a future where more people walk and cycle more often for both utilitarian and recreational purposes.