

WATERFRONT TRAIL

DESIGN, SIGNAGE & MAINTENANCE GUIDELINE UPDATE



Waterfront
Trail

2007



Waterfront Trail
Design, Signage and Maintenance Guidelines
2007 Update

Prepared by MMM Group
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- Consultant: MMM Group
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- Waterfront Trail Managers Group
- Consultant Team:
 - Victor Ford and Associates Inc.
 - Allen MacPherson Sir Sandford Fleming College,
School of Natural Resources
 - Paul Peterson, McCarthy Tetrault
- Waterfront Regeneration Trust Staff:
 - Suzanne Barrett
 - Charity Landon
 - Anne Rennert
 - Robyn Whittaker



Hamilton Recreational Waterfront Trail
Source: Waterfront Regeneration Trust (WRT)



The views expressed herein are those of the authors and do not necessarily reflect those of the Ministry of Health Promotion the Government of Ontario.





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Hamilton Waterfront Trail, Pier 4
Source: WRT



1.0 OVERVIEW

1.1 THE WATERFRONT TRAIL AND GREENWAY

The concept of the Waterfront Trail and Greenway was inspired by hundreds of people who participated in public hearings convened by the Royal Commission on the Future of the Toronto Waterfront during the years of 1988-1992. Based on the views expressed by people as well as experts and professionals, the Royal Commission developed nine waterfront principles to capture the emerging consensus around what would make the waterfront more sustainable and healthier. These are: clean, connected, diverse, green, useable, affordable, open, attractive and accessible.

The Waterfront Trail and Greenway is seen as an important step toward achieving waterfront regeneration. The approach to creating the trail was to connect the many existing parks, on and off-road trail facilities, natural areas and centres of activity along the waterfront. The Trail would provide a place for active recreation, a green transportation alternative, a venue to celebrate our heritage as well as an opportunity to regenerate sensitive waterfront lands.

Initially the Trail's geographic scope was the Greater Toronto Bioregion or Hamilton to Trenton. Since 1995, when the Trail was formally launched to the public, communities west of Hamilton to Niagara and east of Trenton to the Québec border have become part of the Trail. As a result, the Waterfront Trail and Greenway connects 41 communities from Niagara to Québec for a total distance of 650 km tip to tip. It takes in two magnificent bodies of water stretching along the Canadian shores of Lake Ontario and the Ontario shores of the St. Lawrence River.

For the most part, the Trail connects and passes through existing public lands. These lands include not only public recreation areas

and natural landscape, but also lands owned by other municipal, provincial, and federal agencies and affiliated bodies, as well as public agencies such as Ontario Hydro.

Since this is a waterfront trail, emphasis has been placed on maintaining the strongest possible connection to the water's edge. In some places, the Trail leaves the waterfront to avoid sensitive natural habitats, to respect private property, or to take advantage of sites of natural, cultural or historic interest.

Continuity is very important. To achieve a continuous route, it is sometimes necessary to identify an interim route for the Trail. These routes may not conform to the long-term goal of a dedicated, off-road trail at the water's edge, and set in a greenway, but they do permit continuous movement until a final route is feasible. Usually these interim routes are on-road along residential or rural streets and sometimes on scenic highways that have paved shoulders. In a very few cases, the Trail is interrupted due to a barrier such as a highway or high speed and/or high volume stretch of road.

While local expression in layout and orientation is encouraged, consistent approaches to design, signage and maintenance should allow users to identify any section of the facility as the Waterfront Trail.

The work of constructing, signing and maintaining the Trail is the responsibility of waterfront municipalities, volunteer organizations, conservation authorities and/or other major landowners.



Upper Canada Migratory Bird Sanctuary
Source: Simon Wilson

*"...Regeneration is a healing process that restores and maintains environmental health, as well as anticipating and preventing future harm. This means striving to ensure that existing land uses and activities are adapted, and new development is designed to contribute to the health, diversity, and sustainability of the entire ecosystem..."*¹

*"In a more compact urban form, where there are fewer opportunities for individual residents to have their own private bit of green backyard, greenways can become a kind of community common, where people renew their contacts with nature."*²

¹ Crombie, 1992, p. 56.

² Crombie, 1992, p. 188.





Toronto Music Garden
Source: WRT

"...By tying together the often disparate attractions of the waterfront, the trail would help create a sense of community stewardship that is essential to the success of the ecosystem approach.

The Trail would also become a symbol of the importance the Province places on the waterfront, and its determination to manage the waterfront in an integrated, ecosystem-based manner.

*In more urban sections, the Trail should be designed not just for recreation, but as a transportation corridor, and as a safe and convenient alternative to driving for those who want to walk or cycle to work or shopping facilities."*¹

The following criteria were developed to guide the planning and design of the general Trail alignment.

Waterfront Trail Priorities

- be continuous along the shore of Lake Ontario and the St. Lawrence River
- follow the water's edge where possible, and provide frequent access to the shore otherwise
- protect and enhance sensitive natural habitats, and create new habitat linkages
- local heritage, character and features will be protected and enhanced
- make use of existing and proposed public properties
- local communities will make decisions regarding trail alignments and character, based on public consultation
- private property rights, the needs of neighbourhoods, and rural and farming communities will be respected
- trail initiatives will contribute to local economic and community development and attract local, regional and tourist use
- provide passage for pedestrians, cyclists, in-line skaters and other trail users along separate alignments where necessary
- ensure the safety of users, by minimizing conflicts with road and rail traffic, and by avoiding hazardous settings
- generally exclude motorized vehicular use, except for emergency and maintenance access or in areas where snowmobile use is acceptable to local communities
- accommodate all ages, abilities and fitness levels, with varying degrees of challenge and a range of trail experiences and settings
- be easily accessible and free of charge
- be useable in all seasons

The Waterfront Trail should be designed in such a manner that it will:

- become a memorable, high-quality asset for the Province of Ontario
- have a distinctive identity and character reflecting a waterfront orientation
- provide a diversity of settings, experiences and designs
- provide a natural or landscape park-like setting, where appropriate, incorporating frequent nodes of open space and active recreational or commercial uses
- be strongly connected to valley trails, community access trails and secondary loop trails
- encourage visitation to features of cultural, educational, or natural interest
- provide interesting approaches to scenic features, and provide access to panoramic vistas from bluffs and lookouts

Figure 1.1 illustrates the Waterfront Trail route by facility type over 900 km. Further details are provided in Appendix L.: Trail Manager's End to End Tour.

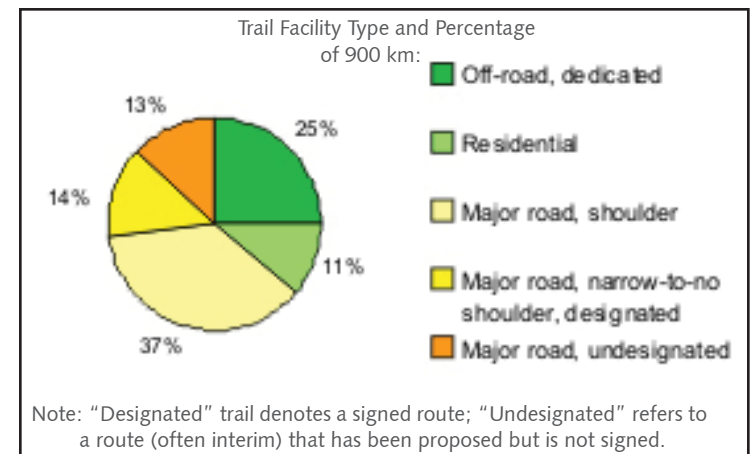


Figure 1.1: Waterfront Trail and Greenway, 2006
Source: Waterfront Regeneration Trust

¹ Crombie, 1990, p.84.



Waterfront Trail and Greenway





Victoria Park, Cobourg
Source: Town of Cobourg

1.2 BACKGROUND – TRENDS AND OPPORTUNITIES

The number of recreational trail users has grown significantly in recent years leading to an increased demand for trail facilities. Across Ontario, recreational trail use is recognized as one of the top three recreation pursuits, having a 20% participation rate and estimated annual growth rate of 2.3%.¹ Activities such as walking, jogging and bicycling rank within the top ten most frequented recreational pursuits for Canadians with trail activities experiencing a yearly overall increase in participation. Concurrently, the range of transportation equipment and mobility devices employed on trail facilities has expanded providing access and opportunity for an even broader range of trail users.

Trail use provides physiological as well as psychological health benefits which include enhancement of one's well-being, mental outlook and self-image; development of one's self-reliance by instilling a sense of freedom and independence; and, opportunity to interact and develop social relationships. Trails also provide a positive means for physical rehabilitation. Nearly two thirds of Canadians do not participate in physical activity with a resultant \$2 billion plus in direct health care costs.² Trails can help address this issue by providing an enjoyable and opportune means of exercise and recreation that is convenient and affordable.

In addition to physical and mental-health gains, trails provide exposure to a variety of neighbourhoods and can help facilitate social interaction, and community-building activity. The implementation of trail projects also engages partnerships between various private and public-sector groups through their development, construction, operation, maintenance and promotion. Trails also provide exposure to a variety of outdoor settings helping to facilitate appreciation for nature and the environment. Moreover, by supporting a variety of self-propelled/

non-motorized activities, trails provide a sustainable means of transportation that is energy efficient and non-polluting. Finally, trails can stimulate the local economy through increased tourist traffic and tourism dollars.

Ultimately, the demand for trails and benefits of trail use are significant. Within the last few decades, various trail organizations, and local municipal and regional governments across Ontario have been implementing trail facilities to support and encourage recreational and utilitarian trail use. It is suggested that providing better access to trails through the development, improvement and expansion of a multi-use trail network will help facilitate higher levels of activity and a corresponding increase in benefits. It is therefore recommended that trail facilities be well planned, well developed and well maintained in order to accommodate an even greater number and variety of trail users, bring about further gains, and provide for further enjoyment and opportunities.

1.3 PURPOSE OF THESE GUIDELINES

The purpose of these guidelines is to provide trail managers, planners, designers and associated bodies including local and regional municipalities, environmental heritage/conservation authorities, trail organizations, landowners, related tourism industries/businesses, other partners and stakeholder groups with a document that will assist them with all aspects of implementing and maintaining the Waterfront Trail.

Section One, Design Guidelines, provides design and planning alternatives and approaches. Applying a high standard of design will reduce ongoing maintenance costs and liability over the long term. It should also enhance the experience, enjoyment and safety for a wide range of trail users, and add value to waterfront communities, increasing the potential for local economic benefits.

"Trails play an important role in building a healthier, more prosperous Ontario." ¹

"Trails provide accessible, widely available and low-cost opportunities to meet the physical activity needs of most Ontarians." ²

¹ Jim Watson in Ontario Ministry of Health Promotion, 2005, p. 3.

² Ontario Ministry of Health Promotion, 2005, p. 20.

¹ Ministry of Citizenship, Culture and Recreation in Marshall Macklin Monaghan, 2001

² Stantec Consulting Limited, 2005.

The 2007 revision provides an increased focus concerning on-road design options and considerations for the Waterfront Trail, and provides technical guidance with regards to the development, implementation and maintenance of a multi-use trail network. The guidelines call attention to relevant traffic engineering principles, applications and best practices, and recommends a set of on-road as well as off-road design treatments to accommodate a variety of trail users.

Section Two, Signage Guidelines, provides recommendations for signage. The goal is to provide trail managers with clear and consistent direction to meet a range of signage objectives.

Section Three, Maintenance Guidelines, provides recommendations for ongoing maintenance. In addition, maintenance activities and considerations are provided for the winter season.

Section Four, Liability and Risk Management Issues, was prepared by McCarthy Tetrault in 1996 and reports on liability and risk management issues affecting trail users, landowners, trail managers and municipalities. It focuses on the legal framework and the responsibilities of municipalities in managing their respective portions of the Waterfront Trail.

The bibliography for this section has been expanded to include several recent reports on the subject of risk management and liability, primarily intended for not-for-profit trail groups.

1.4 LIMITATIONS

This document provides a variety of trail facility concepts and ideas. The guidelines are intended as a general reference for trail managers, planners and designers, and other concerned bodies to be consulted during the development and implementation of multi-use trails. They are compiled from a variety of sources, and are believed to represent the “state of the art” in trail route and facility planning and design in Canada and the United States to

date. However, they are not intended to take precedence over “good engineering judgement.”

None of the drawings contained herein are intended for construction purposes. More detailed guidelines on specific aspects of design and construction can be found in other sources which are referred to as appropriate in this document. In addition, references are given for the most relevant detailed design standards and manuals, which include details on currently accepted practices.



Jack Darling Park, Mississauga
Source: Simon Wilson

“The Ontario Trails Council estimates that trails contribute at least \$2 billion a year to the provincial economy.”¹

“Evidence suggests that improved walking, hiking and cycling facilities lead to higher participation rates.”²

- 1 Ontario Ministry of Health Promotion, 2005, p. 12.
- 2 Stantec Consulting Limited, 2005, p. 10.





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