THE CITY OF WINNIPEG ACTIVE TRANSPORTATION STUDY

- FINAL REPORT -

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SUBMITTED TO:

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SUBMITTED BY:

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The complete version of this report contains two additional documents:

1) **The City of Winnipeg Active Transportation Study – Executive Summary**
2) **The City of Winnipeg Active Transportation Study – Appendices**

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City of Winnipeg Active Transportation Study

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1.0 Introduction

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1.1 Active Transportation Overview

Active Transportation (AT) represents a significant opportunity for the City of Winnipeg to simultaneously improve the health of its residents, increase quality of life, and achieve other environmental and socio-economic benefits. It is a sustainable form of transportation and is defined as any human-powered mode of transportation, such as cycling, walking, in-line skating, skateboarding, ice-skating, or cross-country skiing.

In North America, the main interest in active modes of transportation has been restricted to recreation and leisure. However, there has been a rising interest in using AT to commute to work, school or shopping.[1] Additionally, modes that have been previously considered exclusively recreational, such as skateboarding and in-line skating, are growing in popularity as a form of transportation.

There are many community benefits to increasing the access to and use of sustainable transportation options since, by definition, sustainable transportation provides a system that is efficient, competitive, safe, accessible, and respects the natural environment. The economic implications for both the City and residents include reduced cost of road repairs, related infrastructure, maintenance, and parking. Social implications relate to the reduction in health costs from smog, inactivity/obesity and stress, while other societal benefits include reduced congestion, fewer vehicular crashes, and an overall improvement in the quality of life (both for the individual and the community). The environmental impacts of improved availability of AT options include: reductions in air, water and noise pollution, reduced greenhouse gas emissions, and less inefficient land use due to urban sprawl.[2] Finally, the benefit of more people on the street increases social interaction, helping to improve safety and contribute to a greater sense of community.

From the individual's perspective, the reasons for choosing an active mode of transportation include improving personal health, saving money, reducing environmental impact, and reducing stress.[3] Health benefits are most significant, especially for children and youth. In the long term, health care costs could potentially decline, with a fitter and less obese population.[4] For the community, the benefits of accommodating and encouraging demand for modes of AT

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[1] The City of Winnipeg's Civic Environmental Committee 2002 survey found that 74% of citizens polled are willing to reduce their motorized transportation by walking or cycling more. An Environics poll (1998) found that a majority of Canadians would like to walk (82%) and/or cycle (66%) more than they do at present. The Environmental Monitor, 1994-95 Omnibus Report, determined a high willingness among Canadians (73%) to walk or bike instead of driving for two additional trips per week.

[2] This paragraph relies heavily on "Sustainable Transportation: The Canadian Context," Government of Canada. See: www.sdinfo.gc.ca/reports/en/monograph15/transport.cfm. Last visited November 2004.

[3] Calgary survey (2000) of commuter cyclists reported the top three motivators as exercise, cost savings and less stressful.

[4] Up to 50% of children are driven to and from school each day, and 63% of Manitobans do not engage in enough physical activity ("Case Study: Green Commuting in Winnipeg." Prepared for Transport Canada – Urban Transportation Showcase Program by Verdant Group. March 2004.). The Winnipeg Regional Health Authority's "2004 Community Health Assessment Report" found that 165 of every 1,000 people in Winnipeg are considered obese, compared to 149 per 1,000 Canadians ("Sickness, obesity rife in city: study," *Winnipeg Free Press*, October 17, 2004.).

include reduced traffic congestion at peak periods, reduced need for additional roads, cleaner air through decreased vehicle emissions, more efficient land use, increased ability to attract new residents and tourists, improved health of citizens, improved safety and cleaner air in school zones due to less traffic congestion, reduced noise pollution, and reduced demand for parking.[5] Employers benefit from healthier employees, with reduced sick time and increased productivity, and less demand for employer-provided parking.

A switch to active modes of transportation would also contribute toward meeting Manitoba's targets under the Kyoto Protocol, as well as plans to reduce greenhouse gas emissions under the "Climate Change Action Plan" being developed by the City of Winnipeg. According to research conducted by Resource Conservation Manitoba, the government of Manitoba and the Canadian Fitness and Lifestyle Research Institute, commuting by motor vehicle is the largest single source of greenhouse gas emissions in our province.

1.2 Study Objectives

The Active Transportation Study was intended to provide strategic direction for improving AT opportunities in Winnipeg through improvements to facilities as well as effective policy and promotional initiatives. The principal objective of this Study was to update and expand the Winnipeg *Bicycle Facilities Study*, prepared for the City in 1993, by incorporating facilities for all modes of Active Transportation and examining other opportunities to enhance the AT option within the city through programming, policy and other non-facility based initiatives.

1.3 Study Justification

Since the completion of the 1993 *Bicycle Facilities Study*, there have been considerable developments in the field of AT – both in the growth of knowledge and the implementation of cycling facilities in the city. For example, numerous cities have created their own design standards manuals, which are available on the Internet and can be modified for Winnipeg (see Appendix I). The Parkway System, diamond lanes, creation of the "Cyclist's Map of Winnipeg" and cycling route signage added for the 1999 Pan Am Games are a few examples of facilities built since the 1993 study. A need was identified to incorporate these new elements into the City's transportation strategy.

The decision to undertake the Active Transportation Study was made by the Standing Policy Committee on Public Works, and implemented as a part of the City's 2003 Pedestrian and Cycle Facilities Program.

[5] General sources: *Go for Green*: "Making the Case for Active Transportation" (Fall 2000); *Active Living – Go for Green:* "Developing Communities for Active Transportation"; Health Canada: "Summer Active! – The Benefits of Active Commuting"; "Active Transportation Policy Issues," *Victoria Transport Policy Institute for the Go For Green* "National Roundtable on Active Transportation," April 2003.

1.4 Study Scope

Based on the Terms of Reference[6] and consultation with the Active Transportation Steering Committee[7], the scope of work identified for this Study was to:

- Update the facility recommendations in the 1993 *Bicycle Facilities Study*, by removing those facilities that had been built from the 1993 recommendation list and adding any new recommended cycling facilities to the updated list, as well as broadening the scope of recommended facilities to include other modes of AT (walking, in-line skating, etc.).
- Broaden the recommendations beyond facilities by incorporating AT policy and programming recommendations.
- Include the costs of recommended AT facilities and identify benefits.
- Develop a prioritized implementation program for the recommended AT facilities.

This Study was not intended to be a comprehensive investigation of the facility needs for the entire city of Winnipeg. As a result it did not involve detailed 'ground truthing' of the characteristics and conditions of existing facilities, nor did it involve a detailed analysis of facility standards and construction methods. As a basic premise to this report, it was acknowledged that the fundamental technological recommendations and the undeveloped facility recommendations in the 1993 *Bicycle Facilities Study* were sound, and did not need to be revisited.

A work plan was developed at the beginning of the Study based on the scope outlined in the Terms of Reference, which made provisions for a review of the overall scope and objectives related to the different degrees of emphasis within the Study, following the first phase of the project. The first phase took a broad approach to explore programs and facilities for both commuting and recreation, with an emphasis on cycling and walking. The Steering Committee determined the focus of the balance of the Study would be:

- Commuting & recreation – emphasis was to be approximately 80% to 20%, respectively.
- Cycling, walking & small wheels (e.g. skateboarding and in-line skating) – research was to be divided approximately 60% to 40% between cycling and walking, with some additional attention devoted to small wheels.
- Facilities & programs/policies – the original emphasis on facilities was revised to strike a balance of approximately 30-40% for facilities and 60-70% for programs and policies.

1.5 Study Process

The 1993 *Bicycle Facilities Study* forms the starting point for most elements of this new study. As the scope of the Active Transportation Study did not include detailed analysis of engineering standards for Active Transportation facilities, nor a thorough ground truthing of all AT facilities in Winnipeg, unless specifically identified by members of the Steering

[6] See Appendix A for a copy of the Terms of Reference.
[7] See Section 1.5.2.

Committee for this project or through the public consultation process, the information on these subjects contained within the 1993 report was deemed to be current.

1.5.1 Steering Committee

The Active Transportation Study was guided by a Steering Committee with representation from four City of Winnipeg Departments: Public Works; Planning, Property and Development; Winnipeg Transit; and Community Development and Recreation Services Division. Additionally, there was representation from other interested stakeholder groups: Winnipeg Trails Association, Resource Conservation Manitoba, and the Manitoba Cycling Association. The Project Manager from the Public Works Department, City of Winnipeg, acted as Chair. The Steering Committee was active in defining the scope of the project and in providing necessary direction. Several meetings were held over the course of the Study, to monitor progress and to contribute to the results. The final activity of the Steering Committee was the review of this report.

1.5.2 Public Consultation Overview

Public consultation has occurred throughout the Study and the results are presented in Chapter 4, as well as having been incorporated into the facilities and policy & program recommendations. In the initial Work Plan for this Study, a telephone survey only was proposed as the public consultation phase with a possible Open House, should budget be available. However, during the course of the Study, a number of new opportunities became available that allowed for greater public consultation. In the end, five streams of direct public consultation occurred involving 1500 residents of Winnipeg. Two random telephone surveys were completed and three non-random consultations with subgroups of individuals predisposed to Active Transportation. Additionally, the representatives on the Steering Committee from the non-city stakeholders have provided another avenue to learn about public concerns and desires.

The research goals for these public consultation elements were to:

- Understand the extent to which citizens of Winnipeg use Active Transportation.
- Determine the public's awareness of the existing AT facilities in the city.
- Identify the barriers to participation in Active Transportation.
- Identify opportunities for the promotion and enhancement of the Active Transportation option (facilities, programs, etc.).

Public Works Survey
Through the Customer Services Division of the City's Public Works Department, four questions were added and a small modification was made to three other questions in their semi-annual telephone survey. This was done in order to collect general information on Winnipeggers' use of Active Transportation.

A summary of the results of this survey can be found in Section 4.2.1, with the detailed results located in Appendix B.

Active Transportation Focus Group
A focus group of 10 Active Transportation commuters was organized with the aim of generating ideas about barriers to participation in AT for both commuting and recreation purposes, as well as to identify ways to improve overall participation in Active Transportation.

A summary of the results of the focus group can be found in Section 4.2.2 and the notes from the meeting found in Appendix C.

On-line Survey
In conjunction with the "Commuter Challenge 2004" initiative, organized in Winnipeg by *Resource Conservation Manitoba*, this survey was developed and promoted to participants of this event. For the purposes of this Study, the on-line survey was conducted to learn from occasional recreational and commuting Active Transportation users as to their transportation choices, the identification of barriers, and ways to promote and improve the AT option in Winnipeg.

A summary of the results of this survey can be found in Section 4.2.3, and the questions and detailed results can be found in Appendix D.

Commuter Challenge Contest Entries
Written responses to two contests associated with the Commuter Challenge that required entrants to identify ways to improve their use of Active Transportation were reviewed for their suggestions related to facilities, programs, policies and barriers.

A discussion of the findings from these contests can be found in Section 4.2.4 and the details of the results can be found in Appendix E.

Fall Telephone Survey
The "Active Transportation in Winnipeg Telephone Survey" was conducted by Prairie Research Associates Inc. for the Active Transportation Study. The objective of this survey was to understand:

- Current methods of transportation used by the general public to commute to work, school, shopping, and for recreation.
- Both the general and specific uses of Active Transportation modes.
- Barriers that exist to better use of Active Transportation modes.
- Awareness and use of current facilities to encourage Active Transportation.
- Identification of what might encourage more use of Active Transportation modes.

A summary of the results can be found in Section 4.2.5 and the final report for this survey can be found in Appendix F.

1.5.3 Facilities Review Process

The 1993 *Bicycle Facilities Study* provided the starting point for the facilities review process in this Study. An analysis was conducted of the recommended facilities in 1993 using aerial photographs of the city and consultation with the Steering Committee to identify those that had been achieved (which were added to an updated list of existing facilities) and any changes or amendments to the remaining recommendation list. Additionally, non-cycling facilities and new cycling facilities that had not been identified in the 1993 report were added to the existing facilities list. A very limited amount of ground truthing was conducted to check on existing facilities and to identify new opportunities. Finally, facility recommendations or suggestions identified in the public consultation process were evaluated and placed in the total pool of possible facilities recommendations.

1.5.3.1 General Approach to Costing

For all high priority proposed facilities recommendations, the mileage of each of the recommendations was identified and the cost per linear metre of each facility was provided (see Section 8.3). These costing estimates are approximate and would depend upon a number of variables that would be decided at a later date by the City. Some of the possible variables include: types and size of signs, number of signs per route, date of implementation (inflation), and standards of construction employed.

1.5.4 Comparison to Other Cities

To draw on the knowledge and experiences of other jurisdictions in the areas of Active Transportation – facility development, program implementation and best practices – a number of key North American cities were examined. Comparative cities were chosen based on a number of factors including: similar population size to Winnipeg; similar climate to Winnipeg; innovative Active Transportation programs and facilities; and through recommendation of the Steering Committee. A total of seven cities were studied, five Canadian and two American – Moncton, Ottawa, Minneapolis, Calgary, Edmonton, Portland and Victoria.

Personal interviews took place by phone and e-mail with staff from the cities of Ottawa, Victoria, Calgary, and Moncton. E-mail correspondence also took place with city staff from Edmonton.

Internet research was used exclusively to gather information for the cities of Minneapolis and Portland. Extensive on-line information was gathered for the cities of Edmonton and Calgary, and to a lesser extent, for the cities of Ottawa, Moncton and Victoria.

1.5.5 Glossary

A complete glossary of Active Transportation terms applicable to Winnipeg is presented in Appendix H. Table 3.1-1 in Chapter 3 lists and categorizes the main terms in current use in Winnipeg, such as bicycle route, shared roadway, bicycle lane, and bicycle path.

1.6 Summary

Awareness of and demand for the Active Transportation option is growing, at the personal and community level. There are health, cost and environmental benefits that accrue at both levels and this Study represents one more step for the City toward enhancing AT opportunities in Winnipeg.

To plan for the future of AT in Winnipeg, it is essential to first consider the backdrop in terms of what has been accomplished to date and also connect the threads of AT with other processes and projects that are underway or well into the planning stages. This is done in Chapter 2, which looks at previous studies, the legislative framework, current City policies, and concurrent projects and processes as they relate to AT.

2.0 Background and Context

2.0 Background and Context

To understand the place of Active Transportation within the vision and long-term plans for the City of Winnipeg, it is important to get an overview of the current state of affairs and the developments that have taken place since the 1993 Winnipeg *Bicycle Facilities Study* was conducted. This section provides an overview on:

- previous AT-related studies and reports that have been conducted for the City;
- laws that facilitate and constrain current use and affect demand patterns;
- current City of Winnipeg policies with Active Transportation implications; and
- current projects and processes that provide opportunities to integrate Active Transportation.

This overview provides the necessary context and point of departure for the Study.

2.1 Previous Studies

Winnipeg Bicycle Facilities Study
Completed in 1993, this report was a comprehensive document that set the foundation for the development of a bicycle facilities network within the City of Winnipeg. As mentioned in Section 1.5, the *Bicycle Facilities Study*[1] served as the foundation for the current report. The 1993 study focused on bicycle facilities both for commuting and recreational purposes. The process began by identifying needs, which included reviewing the existing facilities, trip origin and destination information, accident data, and opportunities provided by existing plans and developments. It also included a public survey. This information, along with an extensive review of Winnipeg streets, was used to make recommendations as to what bicycle facilities should be developed to create Winnipeg's bicycle network.

The 1993 *Bicycle Facilities Study* also provided a review of bicycle-related studies to that date. Since then, a practicum on Active Transportation in Winnipeg has been prepared at the University of Manitoba for the City's Planning Department. This section provides a brief summary of that practicum as well as two other reports that are generally related to AT and consequently provide useful background information.

Master of City Planning Practicum
"Active Transportation as an Integral Component of Urban Transport: Factors Influencing Winnipeg" was written by Allison Cook and submitted to the Department of City Planning in 2003. The purpose of the practicum was to evaluate the inclusion of Active Transportation in the City of Winnipeg's planning process.

The study reviewed existing literature and used semi-structured interviews to analyze how Active Transportation has been integrated into the planning process for the development of projects and policies by the City of Winnipeg.

The author noted that interview participants stated that AT historically has not been a priority for the City, but should be going forward. Interview participants went on to explain that, in

[1] The 1993 Winnipeg *Bicycle Facilities Study* is available at the University of Manitoba Library.

fact, Active Transportation considerations have been factored into recent initiatives in the City's transportation system.

Further research directions were recommended including: experience with Active Transportation polices in other jurisdictions; surveying Winnipeg residents about demand for AT and necessary improvements; social marketing efforts to promote Active Transportation; exploring funding opportunities; and employing public participation techniques in planning AT projects.

Other Related Reports
While the Master's practicum described above is the only study that focused directly on Active Transportation in Winnipeg, there are other two others that deal with aspects of AT and are therefore relevant to this report.

Strategic Trails Plan for Winnipeg – was prepared for *Rivers West* and the *Winnipeg Trails Association* (WTA) in July 2003. The purpose of the study was to update the current status of the different community-based trail and greenway organizations, and come up with a shared approach to improve and connect existing trails resulting in a more integrated trail network in Winnipeg. The study looked at existing community-based trails associations in the city and their planned trail activities, including how they could be linked to the Trans Canada Trail. A strategic planning process was undertaken with 13 community-based trail associations to identify priorities for trail connections within Winnipeg, which were organized according to their geographic location. Trail connections with the Trans Canada trail and with trails outside Winnipeg's boundaries were dealt with as a separate priority. A recommendation was also developed that the City adapt its Riverbank Parkway System to take advantage of and connect with the plans and facilities of the community-based trail associations in the various parts of Winnipeg.

Other priorities of the report included physical standards, uses, tourism, marketing, technical and administrative resources. It also included the following specific recommendation:

> That the City of Winnipeg, in consultation with the MRTA [Manitoba Recreational Trail Association], WTA and Rivers West, work together to connect existing trails to create longer and more continuous trail runs – with loops of various lengths throughout the city – and also improve connections to trails outside of the city in the Red River Valley, as set out in the city wide map. (p. 8)

Trail infrastructure on its own is not sufficient to ensure the promotion of Active Transportation. However, it is an essential part of an integrated AT system and the Strategic Trails Plan for Winnipeg provides useful information on the trail network, such as the location of trails, missing links and future plans. It also should be acknowledged that the City of Winnipeg's support for the Strategic Trails Plan for Winnipeg helped contribute to the successful development of its recommendations.

The Business Case for Active Transportation – In July 2004, *Go for Green* released "The Business Case for Active Transportation, the Economic Benefits of Walking and Cycling." *Go for Green* is a national non-profit, charitable organization whose mission is to encourage

outdoor physical activity that protects, enhances or restores the environment, and includes research on and promotion of Active Transportation.

"The Business Case for Active Transportation" was the outcome of a recommendation made at the *Active Transportation Roundtable* held in Wakefield, Quebec, in 2003. The report evaluates the economic, environmental and health benefits of walking and cycling, and estimates their monetary value based on current and targeted usage levels. While it is primarily directed at federal government departments, a number of the findings can be applied at the municipal level.

The report also provides guidelines for quantifying benefits of Active Transportation, including:

- reductions in greenhouse gas emissions,
- reductions in air pollution,
- total environmental benefits, including decreased levels of water and noise pollution,
- automobile user savings,
- enhanced health status and reduced health care costs,
- economic competitiveness, and
- tourism activity, including bicycle tourism.

Even with the currently low national levels of walking and cycling, the report concludes that use of Active Transportation modes results in significant economic benefits of $3.6 billion annually. It also projects that annual economic benefits would double to $7 billion annually if the mode share of Active Transportation increased to 15.2% (to match current levels for Victoria, B.C.). The case for increased government investment in Active Transportation was justified based on these conclusions.

2.2 Legislative Framework

The jurisdiction over Active Transportation in Canada is clear even though each of the three levels of government has some authority over transportation. The federal government takes considerable interest in Active Transportation,[2] due to its known health and environmental benefits; however, while the federal government has a role to play in encouraging and supporting AT projects, it has no constitutional authority to regulate Active Transportation. As a result, the governance of Active Transportation activity, and the related infrastructure and equipment, are the responsibility of the provinces and municipalities.

Active Transportation in Winnipeg is governed by law and regulation. The modes of AT, such as walking, cycling, skateboarding, and in-line skating, are dealt with in Manitoba's *Highway Traffic Act* (H60) and provincial regulations. By-laws set out by the City of Winnipeg[3]

[2] Transport Canada defines Active Transportation as "non-motorized transportation including travel modes such as walking, cycling, skating, skiing, and manual-powered wheelchair."

[3] Under the *Highway Traffic Act*, a highway is "any place or way, including any structure forming part thereof, which or any part of which the public is ordinarily entitled or permitted to use for the passage of vehicles…."

complement and supplement the framework laid out by the province.[4] The City By-laws include the Traffic By-law (1573/77) and the Streets By-law (1481/77).

Active Transportation is not specifically defined in Manitoba's *Highway Traffic Act* despite references to its modes and related equipment in the statute. Skateboards, roller skates, roller blade skates, skis or other apparatus to ride, roll or slide over the ground are considered to be "recreational equipment." A bicycle is defined as "a device having any number of wheels upon which a person sits astride and which is propelled solely by human muscular power through the use of pedals." A pedestrian is defined "as a person afoot, or a person in a wheelchair or a child's carriage or physically handicapped person operating a motorized mobility-aid".[5]

Bicycling, walking, skateboarding, in-line skating, and other modes of Active Transportation are unequally addressed by Manitoba's laws and regulations. For example, there is a "duty of caution" clause in the *Highway Traffic Act* requiring a pedestrian or a bicyclist who is entering, crossing or proceeding along a highway to "at all times, do so with due caution, care and attention, taking into account the traffic on the highway at the time."[6] No reference is made in this the duty of caution clause for an equivalent action by skateboarders or in-line skaters. Further evidence of this inequality is provided by Section 88(1) of the *Act*, which requires compliance with traffic control signals by every driver[7] and pedestrian but remains mute with respect to compliance by cyclists, skateboarders and in-line skaters. Overall, a more precise framework governs pedestrians and bicyclists than skateboarders and in-line skaters.

- **Bicycles:** The legal framework for bicycling covers where bicycles can operate, how they are to be operated, and aspects of the equipment. Cyclists must adhere to all the rules and regulations of the highway; they have the same rights and duties as drivers of motor vehicles.[8] They must travel single file as close as practical to the right-hand curb of two-directional highway.[9] Lane changes, stops and turns must be signalled in a prescribed manner.[10] Bicycles cannot be used to transport items that interfere with the operation of the bicycle.[11] Bicycles that are operated at night must have a light at the front and a light or reflector at the back.

- **Pedestrians:** The legal framework for pedestrian activity is focused largely on the relationship of the pedestrian to motor vehicle traffic. It deals with when and how pedestrians may walk on[12] or cross highways.[13]

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[4] There are three by-laws directly affecting traffic issues in Winnipeg: Traffic By-Law (No.: 1573/77), Streets By-Law (No.:1481/77) and the Private Approaches By-Laws (No.:329/73 and 6546/95). See <http://www.city.winnipeg.mb.ca/transport/by-law.htm>

[5] See http://web2.gov.mb.ca/laws/statutes/ccsm/h060_2e.php The *Highway Traffic Act* CCSM cH60 Section 1(1)

[6] Ibid. Section 75 (SM 2004 c30s6).

[7] The *Highway Traffic Act* defines a driver as a person in physical control of a vehicle, and it excludes from the definition of a vehicle a device moved solely by human muscular power. Ibid. Section 1(1).

[8] Ibid. Section 145(1).

[9] Ibid. Section 145 (5-6).

[10] Ibid. Section 125-126.

[11] Ibid. Section 147(3).

[12] Ibid. Section 143.

[13] Ibid. Section 88, Sections 138-141.

- **Skateboards & In-line Skates:** Although the rules governing skateboarding and in-line skating differ, the legal framework for both these activities merely dictates where they may take place. It does not detail the nature of the equipment, and they do not specify rules for operation.

The legal framework limits the routes available for certain modes of Active Transportation:

- **Cyclists** are permitted to travel on roads used by motor vehicles. They may also use paths that are designated for the use of bicycles and on which motor vehicles are prohibited from travelling. However, bicycles may not be ridden on Winnipeg sidewalks if they have a wheel diameter of over 410mm.[14]

- **Pedestrians** are required to use sidewalks where these are available. However, where these are not available, they must merely walk on the left side of the highway.

- **Skateboarding** is not permitted on a roadway.[15] Moreover, no one is permitted to ride a skateboard onto or over a street.[16] Further, no one is allowed to skateboard on a sidewalk where there is a traffic control device prohibiting such activity.[17]

- **In-line skating** is not allowed on a roadway,[18] except in parks where it is not expressly prohibited.[19] In-line skating is also permitted on roadways designated as bicycle routes when vehicle traffic is restricted to local access by a resolution of the Standing Policy Committee on Public Works.[20] It is legal to in-line skate on sidewalks and on bicycle paths.

Because some city streets do not have sidewalks, there are routes that skateboarders and in-line skaters may not be able to use legally. This is particularly the case in the suburbs.

The Province of Manitoba and the City of Winnipeg[21] have penalties for violations of the laws or by-laws governing Active Transportation. Fines can be charged, for example, if a pedestrian leaves the curb when it is not safe or obstructs traffic,[22] or if a cyclist fails to operate next to the curb or operates a bike with excessive wheel size on a sidewalk.[23]

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[14] Ibid. Section 145(8).
[15] City of Winnipeg By-law: Consolidated update 03-24-04, Traffic By-law No. 1573/77 Section 6.
[16] City of Winnipeg Streets By-law 1481/77 Section 2.12.
http://www.city.winnipeg.mb.ca/transport/bylaws/street/By-Law1481-77.pdf
[17] City of Winnipeg By-law: Consolidated update 03-24-04, Traffic By-law No. 1573/77 Section 6.2 as amended 7883/2001.
[18] City of Winnipeg By-law: Consolidated update 03-24-04 Traffic By-law No. 1573/77 Section 6.
[19] City of Winnipeg By-law: Consolidated update 03-24-04 Traffic By-law No. 1573/77 Section 6.1(b) as amended 5991/92.
[20] City of Winnipeg By-law: Consolidated update 03-24-04 Traffic By-law No. 1573/77 Section 6.1(a) as amended 8162/2002.
[21] Ibid. Section 53.
[22] The Summary Convictions Act (CCSMc. S230) Offence Notices Regulation 139(2), 140(2).
[23] Ibid. 145(2 &2.3).

2.3 Current Policy

Key policies for the City of Winnipeg relevant to this study can be found in "Plan Winnipeg 2020 Vision" and "Sustainable Winnipeg: A Comprehensive Environmental Strategy." The following section summarizes the purpose and role of each of these documents and cites the portions pertinent to Active Transportation.

Plan Winnipeg 2020 Vision
"Plan Winnipeg 2020 Vision" is identified as the long-range policy plan for City Council and was adopted on December 12, 2001. It replaces "Plan Winnipeg…Toward 2010," which was adopted in 1993 and therefore current at the time of the *Bicycle Facilities Study*. The importance of "Plan Winnipeg 2020 Vision" is explained in the Introduction, which refers to Section 583 of *The Act*:

> The passing of a Plan Winnipeg By-law does not require council or any person, association, organization or department or agency of the Crown to undertake a proposal contained in the By-law, but no public work, undertaking or development shall be inconsistent with a Plan Winnipeg By-law. (p. 3)

The vision statement for Winnipeg in this document is:

> To be a vibrant and healthy city which places its highest priority on quality of life for all its citizens. (p. 4)

During public workshops associated with "Plan Winnipeg 2020 Vision," Winnipeg residents identified 10 characteristics that determine quality of life. Several of these are relevant to Active Transportation, namely development that is well planned and orderly; convenient access and mobility to all parts of the city; supportive and well maintained urban infrastructure; knowledge and good health for all citizens; environmental quality in both the natural and built environments; and a city with vitality, as seen in its people and the activities it offers.

Many of the policy statements in "Plan Winnipeg 2020 Vision" are applicable to Active Transportation and provide a solid policy foundation from which to further improve AT opportunities in Winnipeg. The most directly relevant policies are listed in Appendix G.

Sustainable Winnipeg: A Comprehensive Environmental Strategy
"Sustainable Winnipeg: A Comprehensive Environmental Strategy"[24] was prepared by the City of Winnipeg's Civic Environmental Committee and was adopted by City Council on October 27, 2004. The Civic Environmental Committee is an advisory committee that consists of eight citizen volunteers along with the Committee Chair (a City Councillor) and the City's Chief Administrative Officer.

The purpose of the "Sustainable Winnipeg" strategy was to extend and elaborate on the principle of sustainability identified in "Plan Winnipeg 2020 Vision," provide essential background information on environmental issues facing the City of Winnipeg, and guide the development of environmental policy by the City's administration.

[24] To view the report, see: www.winnipegcec.org/environmental_strategy/index.html

"Sustainable Winnipeg" documents the City of Winnipeg's current policy on various interconnected issues, including decision-making and management; climate change and air quality; urban energy; sustainable land use and development; sustainable transportation; solid waste and materials management; sustainable water and wastewater management; and pesticides in the urban environment.

Several of the policy objectives outlined in "Sustainable Winnipeg" are directly pertinent to Active Transportation and are listed in Appendix G, along with suggestions for implementing the policy objectives that relate to AT as outlined in the strategy. For information on the implementation plan stemming from this strategy, refer to "Embracing Sustainability: An Environmental Priority and Implementation Plan for the City of Winnipeg 2004-2006" in Section 2.4.2 below.

Other Related Reports

TransPlan 2010 – The purpose of "TransPlan 2010," released in January 1998, was to implement Initiative 5C-10 in "Plan Winnipeg…Toward 2010," which directed the City to prepare a comprehensive transportation study. Ultimately, the Province of Manitoba partnered with the City of Winnipeg to fund the study, which looked at renewing emphasis on infrastructure; approaches to financing transportation infrastructure within the context of government restraint; opportunities for inter-modal links; and coordination of transportation planning and development functions among government, regulatory and private institutions within the Winnipeg Region.

While the study did not deal with Active Transportation specifically, it acknowledges the importance of active modes of transportation in the context of overall transportation planning and in particular under the concept of Transportation Demand Management. The report also endorsed the recommendations in the 1993 *Bicycle Facilities Study*.

CentrePlan Development Framework – is the coordinated plan for Winnipeg's downtown. The CentrePlan Committee completed the "CentrePlan Development Framework" in June 1999. Its primary recommendation was to "…plan, develop, operate and manage the downtown as a single and special entity." The downtown is considered to be a combined whole made up of unique neighbourhoods, districts and characteristics that have distinct transportation, heritage, public space, and partnership opportunities and needs.

In addition to its primary recommendation to treat the downtown as a single entity, the "CentrePlan Development Framework" provides detailed supporting recommendations, a number of which deal with aspects of Active Transportation in Winnipeg's downtown area. The most important of the recommendations relating to AT suggests linking the downtown to adjacent areas using, among other approaches, a network of pedestrian walkways, and commuter and recreational bicycle routes through the downtown. Other AT-related recommendations include an enhanced Provencher Bridge, which has since been built, and a promenade along Portage Avenue East and Pioneer Avenue.

2.4 Concurrent Projects and Processes

There are several major projects and processes underway in Winnipeg relevant to this study and to Active Transportation in this city. In fact, the number of these concurrent initiatives is in itself significant. Along with previous studies and existing policy, they demonstrate the extent to which the City has embraced Active Transportation, directly and indirectly.

Of the major projects that are planned, each presents an opportunity to integrate active modes of transportation, and include major residential/commercial developments, major road and bridge developments, expansion of the floodway, and private/community trail-building efforts. Processes such as the actions recommended by the City of Winnipeg's Civic Environmental Committee and the forthcoming "Climate Change Action Plan" provide support for Active Transportation while the Integrated Planning Model provides a means to integrate AT throughout the City's planning processes. Winnipeg's participation in the federal Urban Transportation Showcase Program along with Civic processes such as the Environmentally Sensitive Lands Strategy and a comprehensive review of the Zoning By-law all have an opportunity to influence Active Transportation options in the city. Studies and programs such as the Public Use Facilities Study (PUFS) promote active living, particularly for our city's youth, while the "Winnipeg-In-Motion Initiative" provides an opportunity to incorporate Active Transportation into a community-wide wellness program.

A general overview of these projects and processes follows.

2.4.1 Projects

Residential/Commercial Developments

Fort Rouge Yards – Approximately 25 acres of the former CN Fort Rouge Yards have become available for redevelopment. Located just south of downtown and along the future Rapid Transit Corridor, these lands are ideally suited for higher density mixed-use development. Concept plans for redevelopment options are currently being developed. Plans for the Rapid Transit Corridor through these yards includes a recreational path.

Kapyong Barracks – The relocation of the Princess Patricia Second Battalion to CFB Shilo is freeing up 215 acres of land along Kenaston Boulevard. The Department of National Defense has officially approved the land as surplus and it is expected that the Canada Lands Corporation will be redeveloping the site. It is anticipated that comprehensive plan for re-development of the Base will take place as the redevelopment of this site will have planning implications for the surrounding neighbourhood and the City.

St. Boniface Public Market Site – Prior to the 1980's, this brownfield site had been used for livestock related industries for eighty years. Today it provides a redevelopment opportunity. The Administration will be working with community stakeholders to refine redevelopment options and to prepare an action plan for redevelopment of the lands.

Transcona West Area Structure Plan – Transcona West is defined as the area bounded by Regent Avenue on the south, Lagimodiere Boulevard to the west, the CPR rail line to the north

and Plessis road to the east. It is an area of Transcona that is surrounded by existing communities and represents one of the largest potential infill development sites in the northeast quadrant of the city. Development of an Area Structure Plan will guide development and alignment of transportation infrastructure in this area.

Waverley West – The area defined as Waverley West is approximately 3,000 acres of land south west of the intersection of Bishop Grandin Boulevard and Kenaston Boulevard. A Plan Winnipeg Amendment is currently underway to re-designate this area from *Rural Policy Area* to *Neighbourhood Policy Area*. With this re-designation, these lands would become available for urban residential development. Once Plan Winnipeg has been amended, a Secondary Plan will be developed for the area. It is expected that this Plan will incorporate more innovative principles of community design and planning that lead to the development of whole communities with a mix of land uses, densities and housing forms linked by an extensive open space and pathway network. A more connected and integrated street and transportation system is also envisioned to create enhanced opportunities for transit and other forms of non-vehicular transportation.

Major Road Development

Kenaston Underpass / Sterling Lyon Parkway – The Kenaston Underpass Project includes a railway underpass at the CN/Kenaston Boulevard crossing; construction of a new east-west arterial roadway (Sterling Lyon Parkway); a new roadway connecting Wilkes Avenue and Sterling Lyon Parkway; an exit lane between northbound Kenaston and Wilkes; intersection improvements; and land drainage and utility relocation. The project, costed at $43 million, is funded by the Government of Canada, Province of Manitoba, and the City of Winnipeg through the Canada Strategic Infrastructure Fund. The proposed completion date is 2006/2007. Public open houses were held in July and August 2004.

Bridge Development

Maryland/Sherbrook Bridge Rehabilitation
Rehabilitation of the Maryland and Sherbrook Bridges is scheduled to take place in 2005 and 2006. This rehabilitation will see a preserving of the existing structures and replacement of the roadbed, sidewalk and railings. It is anticipated that pedestrian and cyclist facilities over the bridge will be enhanced as part of this project.

Floodway Expansion

Red River Floodway Expansion
This is a $700-million project that will substantially increase the capacity of the floodway to protect Winnipeg. The Manitoba Floodway Expansion Authority called for 'expression of interest' for recreation and economic opportunities associated with the project design, such as hiking, jogging and biking trails. The Opportunity Report that the MFEA will prepare will summarize submissions received, recommend next steps and will serve as a general framework for pursuing future opportunities and partnerships.

Red River Floodway Trail Coalition
This coalition of user groups is advocating a recreational corridor along the 46 km of floodway that runs from Lockport to St. Norbert. A plan has been developed and will be presented to the Clean Environment Commission in February 2005.

Community-built and Private Trail Development

Winnipeg Trails Association / Manitoba Recreational Trail Association – The *Winnipeg Trails Association* is an umbrella group that acts as a resource for trail groups within Winnipeg, and works to connect and develop a trail network in the city. The *Manitoba Recreational Trail Association* is responsible for development of the Trans Canada Trail route in Manitoba, which passes through Winnipeg. Trails have been completed and more are planned, all built with volunteer labour and involving fundraising to cover some or most of the costs. The City of Winnipeg and the Province of Manitoba have both provided financial or other support for these initiatives, which are ongoing.

Fort Whyte Centre – Long term plans for the Centre include a wildlife, pedestrian and cyclist corridor that would connect Fort Whyte, Assiniboine Forest and Park, and the Trans Canada Trail in Winnipeg.

2.4.2 Processes

Embracing Sustainability: An Environmental Priority and Implementation Plan for the City of Winnipeg 2004-2006
In February 2004, the City's Chief Administrative Officer was tasked with developing a priority and implementation plan for the next three years. This plan was approved by City Council in conjunction with "Sustainable Winnipeg: A Comprehensive Environmental Strategy."

The implementation plan addresses many areas related to Active Transportation, namely Climate Change and Air Quality, Sustainable Land and Development, and Sustainable Transportation.

Specific implementation plans over the next three years as they relate to Active Transportation include:

- Establishing the Planning Executive Advisory Committee (see "Toward an Integrated Planning Model" below).
- Developing a Climate Change Action Plan for Winnipeg that will focus on a strategy to reduce greenhouse gas emissions.
- Reviewing and prioritizing parkway systems.
- Participating in the Urban Transportation Showcase Program (see below), which includes AT as one of its elements to reduce greenhouse gas emissions.
- Retaining existing bike racks on buses.
- Promoting Active Transportation with City of Winnipeg employees.

Urban Transportation Showcase Program
The Urban Transportation Showcase Program (UTSP) is a Transport Canada initiative under the Government of Canada's Action Plan 2000 on Climate Change. The $40 million program calls for the creation of community showcase programs to demonstrate and evaluate ways of reducing greenhouse gas emissions from transportation and to address other urban challenges, such as air quality, congestion, safety and rising operating costs.

Winnipeg's Strategy proposal was one of eight, selected Canada-wide to receive funding under UTSP and includes a range of projects geared to reducing of Greenhouse Gas emissions. The terms and conditions of a Contribution Agreement with Transport Canada are currently being negotiated to confirm Winnipeg's participation in the Urban Transportation Showcase Program. One of the projects being proposed in Winnipeg's strategy is the enhancement of the existing Active Transportation trail which links Churchill Drive to the Norwood Bridge. This project would see the structural stabilization of this trail and enhanced lighting along this corridor.

Toward an Integrated Planning Model
In July 2002, the City of Winnipeg adopted a new philosophy that focuses on integrated planning to ensure a "shared vision and consistency in execution." This new approach, outlined in the report titled "Toward an Integrated Planning Model," includes a much stronger coordination among the areas of land use planning, transportation planning, and infrastructure planning.

To assist with this coordinated, interdepartmental approach, the strategy includes establishing a Planning Executive Advisory Committee (PEAC). This committee provides a leadership role in planning and from the Active Transportation perspective, is responsible for reviewing and advising on long-range plans regarding land use, transportation and neighbourhood or community development, and assessing major development proposals at the conceptual stage. PEAC membership includes senior management from key departments, including Planning, Property and Development, Public Works, Winnipeg Transit, Community Services, and Water and Waste.

Sensitive Lands Plan
The City is presently working on an Ecologically Significant Natural Lands Strategy. The strategy aims to identify and prioritize areas of ecologically significant natural lands that need to be preserved and protected, based on a set of criteria which would establish linkages between existing ecologically significant natural lands and the regional recreational trail systems.

Comprensive Review of Zoning By-law
The Planning, Property and Development Department is initiating the comprehensive review of the City's Zoning By-law. The by-law has not been subject to a major review in recent years, and is losing effectiveness as a tool to manage development in the City. The by-law needs to act as an incentive to promote economic development, attract business and industry, and facilitate the building of a world class city. At the same time, it needs to balance the community's objectives for promoting quality of life and creating a healthy community. The zoning by-law translates these multi-faceted objectives into a workable, agreed upon set of regulations to manage urban form in alignment with Council's policies.

Public Use Facilities Study (PUFS)
While PUFS does not specifically address Active Transportation, its overall strategic direction was provided through "Plan Winnipeg." The PUFS report includes verbatim sections from the Plan, such as "supporting the creation of a pedestrian-friendly downtown environment," "implementing a program of assessment and timely replacement of infrastructure in order to maintain the capacity of existing roadways, sidewalks, bike paths…" and that "the City shall invest strategically in new infrastructure by: (i) recognizing that investment in transit improvements, facilities that encourage cycling and other alternative modes, and measures to reduce the reliance on the use of automobiles is most consistent with its commitment to sustainability, compact urban form, and the reduction of greenhouse gas emissions…". Another section relates to the promotion of active living and meeting the leisure needs of the city's residents and visitors.

Physical Activity Coalition of Manitoba (PACM)
A press release dated December 1, 2004 announced the formation of this coalition, which spans non-governmental and government interests in health, education and active living, as well as fitness recreation and sport. PACM's mission is "to support increased physical activity among Manitobans through collaboration, promotion and education." PACM has identified Active Transportation as one of its key initiatives. The coalition launched an active living initiative called "Get Moving Manitoba" on December 4, 2004 (see Section 3.7).

In Motion Initiative
Details are not yet available on this planned new initiative that will be launched as part of a provincial "Manitoba-In-Motion" program. The City's Corporate Services Department and other Civic Departments will be reviewing the potential Civic involvement within the proposed In Motion initiative.

2.5 Summary and Key Observations

The City of Winnipeg has demonstrated a commitment to Active Transportation through past studies, existing policy, future projects and in particular, current and proposed processes. These provide a positive context in which further action and improvement can occur.

In summary, from a legislative perspective, the federal government must work with and rely upon provincial and municipal governments to regulate Active Transportation and provide the necessary infrastructure. The provincial *Highway Traffic Act* and municipal traffic and street by-laws are the key pieces of legislation that govern Active Transportation in Winnipeg.

Nationally, Active Transportation is championed by the federal government because of its positive implications for the health of Canadians and the environment. To these benefits, the provinces and municipalities recognize that Active Transportation, through participation, programs and infrastructure, are important elements that add to the quality of life of their residents. Interest, funding and promotion of Active Transportation also comes from non-governmental sources, such as the various interest groups and associations that are involved in AT programming and lobbying for and development of new facilities.

Involvement in Active Transportation programs and facilities is compatible with the vision set out by the City of Winnipeg in its current policies. Numerous development projects, including residential/commercial developments, major road developments, bridge developments, the floodway expansion, and community-built or private trail developments, present opportunities for further integration of AT facilities.

While significant momentum exists that supports Active Transportation in Winnipeg, opportunities are myriad to further enhance AT. Some of these opportunities include:

- working with the province to improve the governance of all modes of Active Transportation;
- making Active Transportation an integral part of all of the City's planning;
- developing a clearly articulated vision and profile for Active Transportation within the City, with supporting policies;
- linking Active Transportation related policies to reasonable action plans;
- developing a long term framework for action with related benchmarks, which is important in both accountability and communication;
- coordinating the incorporation of Active Transportation elements in the review processes for new and existing developments within the City; and
- improving the regularity of monitoring and review of programs and policies, as related to Active Transportation.

Later chapters will demonstrate the public appetite for such approaches and provide examples from experience elsewhere. Chapter 8 provides recommendations for Active Transportation for the City of Winnipeg, derived from this assessment of current policies and practices and identified opportunities.

3.0 Existing Active Transportation Facilities and Programs

3.0 Existing Active Transportation Facilities and Programs

The City of Winnipeg has already built a number of Active Transportation facilities. Additionally, a variety of agencies provide a number of programs, which support AT in Winnipeg. To determine the need for additional and enhanced AT facilities and programs in Winnipeg, it is important to know what currently exist. This chapter first claries the terminology used to identify and describe AT facilities, and then provides an overview of existing facilities organized by type. The final section of the chapter outlines programs, which the City could potentially tap into rather than duplicating, as well as expanding program delivery.

3.1 Overview of Active Transportation Facility Terminology

There is no stable, comprehensive, universally accepted list of terms used to describe all Active Transportation activities and facilities. Without common terms, discussion of AT and its related facilities is difficult.

Laws and regulations are two main sources of accepted terms in the Active Transportation field. The City of Winnipeg and the Province of Manitoba have used AT terms and adopted related definitions in their legislation and by-laws. The legislation provides definitions for such terms as bicycle facility, pedestrian, sidewalk, and traffic control device. However, not all terms employed in the AT field are defined in the Manitoba legislation and Winnipeg by-laws. The legislation and regulations do not, for example, differentiate between bicycle routes used primarily for commuting and other bicycle routes.

Facilities are also classified and/or defined in technical handbooks and in standards. There is a degree of commonality and compatibility among the terms used in these standards and guidelines. For example, in the various Bicycle Facility design guidelines, three common categories of signage emerge.[1] These are: Regulatory Signs,[2] Warning Signs,[3] and Guide and Information Signs.[4] The Canadian Institute of Planners (2004) has added a compatible fourth category, "Other Signs" and Vélo Québec (2003) has added "Tourist Facility Signs."

Because the AT field is evolving, some terms used in the 1993 *Bicycle Facilities Study* have changed, some have been dropped and others have been added. In 1993, "bicycle route" was used to refer to all roadways; now the term "shared roadway" refers to all roadways. The term "non-pavement bicycle facilities" is no longer in use; these facilities are now included under the broad term "other bicycle facilities." The term "Bicycle Commuter Routes" has been introduced; these routes include roadways that are major thoroughfares with high traffic volumes, high speeds or higher truck traffic.

A glossary of Active Transportation terms that are currently appropriate for use in Winnipeg is presented in Appendix H. This glossary defines such terms as bicycle routes, bicycle lanes, and

[1] CIP, 2004; Drdul, 2004; Vélo Québec, 2003; TAC, 1999.
[2] See Figure 3.1-1.
[3] See Figure 3.1-2.
[4] See Figure 3.1-3.

bicycle paths.[5] The following table (Table 3.1-1) lists and categorizes the main terms in current use in Winnipeg.

Table 3.1-1 Winnipeg's 2004 Active Transportation Study - Facilities Classification System

Category	Sub Categories
• Shared Roadway	• Designated Shared Roadways ▪ Bicycle Routes (recreational) ▪ Bicycle Commuter Route - designated with "Share the Road" signage • Wide curb lane • Restricted Roadway: Recreational • Restricted Roadway: Commuting
• Bicycle Lane	• Delineated • Protected • Bi-Directional • Contraflow • Shoulder Bikeways ▪ Raised Shoulder Bike Lane
• Bicycle Path	• Bicycle Only Path • Multi-Use Pathway • Informal Trails
• Walkways	• Sidewalk • Connector Pathway • Alternative Pedestrian Pathway ▪ widened shoulder pathways ▪ indoor walkways • Multi-Use Pathway & Informal trails
• Other Facilities	• Signage • Bicycle Parking • Bike/Bus Racks • Winter Facilities • Special Constructions

[5] See Figure 3.1-4.

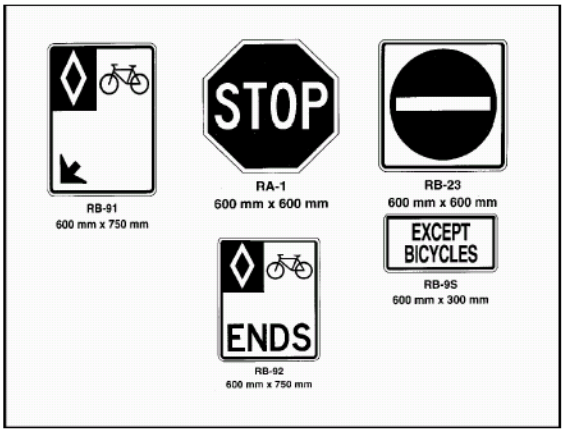


Figure 3.1-1 Example of Regulatory signs (Source: Bikeway Traffic Control Guidelines for Canada, Transportation Association of Canada, 1998)



Figure 3.1-2 Examples of Warning Signs (Source: Bikeway Traffic Control Guidelines for Canada, Transportation Association of Canada, 1998)

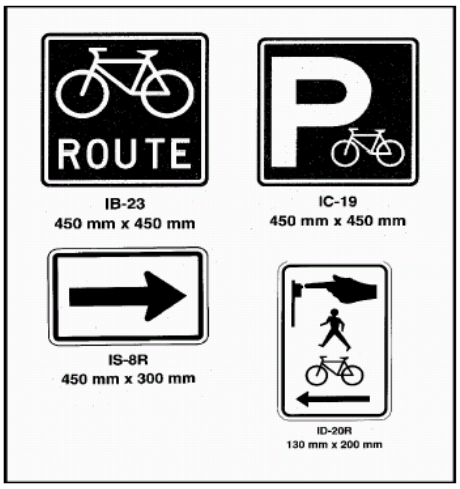


Figure 3.1-3 Guide and Information Signs (Source: Bikeway Traffic Control Guidelines for Canada, Transportation Association of Canada, 1998)

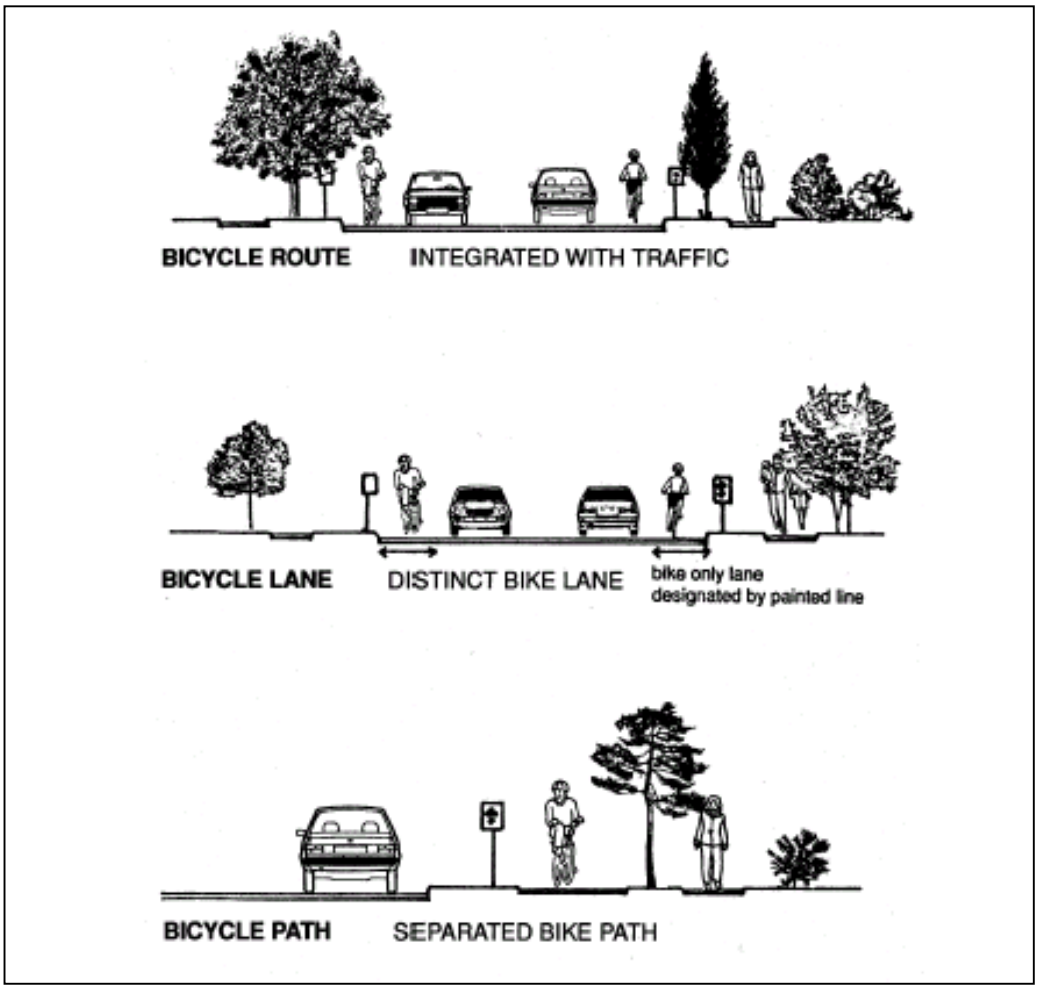


Figure 3.1-4 Types of Bikeways. Source: Go for Green Community Planning Guide (2004)

3.2 Overview of Facility Types

The 1993 *Bicycle Facilities Study* identified facilities and design standards. Under the direction of the Steering Committee, it was concluded that this information is still logical and the information still applies.

There are numerous bicycle facility design manuals and guidelines available for planners and engineers. However, there are no universally accepted standards to which bicycle facilities must be built. Nationally there are standards presented by the Transportation Association of Canada (TAC) in the "Geometric Design Guide for Canadian Roads" (1999) and "Bikeway Traffic Control Guidelines for Canada" (1998), as well as in the Canadian Institute of Planners (CIP) "Go For Green Community Cycling Manual: Planning and Design Guide" (2004, revised edition), which is available on-line. In the United States, The American Association of State Highway and Transportation Officials (AASHTO) produces a publication called the "Guide for the Development of Bicycle Facilities" (1999). Québec has developed an extensive bicycle network throughout the province and Vélo Québec provides a very detailed manual called the "Technical Handbook of Bikeway Design, 2 Edition" (2003). Design standards must not be limited to North American sources, as many European countries have long established, well designed bicycle networks. In Denmark, the Roads Directorate publishes an excellent detailed design manual called "Collection of Cycle Concepts: Catalogue of Ideas 2000." Many bicycle design manuals or guidelines have been published on a regional or municipal level as well (Vancouver, Langley, Portland, Chicago, Montgomery County – Maryland, Washington State). At the regional or municipal level, information appears to be gleaned from a variety of sources and the standards were adapted to suit specific needs. For example, Chicago adopted the design standards for demarcating bicycle lanes on the roadway from Toronto. Samples of design manuals are listed in Appendix I. Wherever possible, web page links were included.

3.2.1 Summary of Facility Types

The 1993 study provided an extensive list of bicycle facility recommendations. The design standards for these facilities have not changed significantly and are not repeated in this document. With some facilities, such as widened curb lanes, there may be more room to adapt standards to work within constraints such as cost or space.

However, some of the terminology has changed significantly, in particular with regard to what is called a bicycle route and what is called a shared roadway. The current terminology is now defined as follows (see glossary for details):

- Bicycle Routes are divided into three categories: a) roads that have been signed as bicycle routes; b) restricted roadways (for recreational purposes, such as Scotia St., Wellington Crescent, etc.); and c) restricted roadways (for commuting purposes, such as the Transit Mall on Graham Ave).
- Bicycle lanes have three categories: a) delineated; b) protected and c) bi-directional.
- Bicycle Paths are divided into: a) bicycle only paths; b) multi-use recreational paths; and c) bicycle trails.

What was coined "non-pavement bicycle facilities" in the 1993 study is now called "other bicycle facilities" and is a broad category that includes everything except physical changes to the road surface. The updated terminology is used in Table 3.1-1.

3.2.1.1 Supplementary information to the 1993 Study

Further elaboration is required for some of the facilities and terminology identified in the 1993 study, due to the availability of new information or expanded definitions.

Signage
Information regarding the frequency and placement of signage was not addressed in 1993. Some examples of design standards can be found within Appendix J. "To ensure signage is understood and respected, it is essential to comply with the standards for shape, colour, dimensions and reflectorization. This applies equally to signs, markings, and traffic lights." (Vélo Québec, 2003). Guidance on choice of size, installation and other details is provided in the *Bikeway Traffic Control Guidelines for Canada*, TAC 1998.

Pavement Markings
These were limited to delineating lane markings in the 1993 study; however, pavement markings go beyond indicating widened curb lanes and shy zones. They can be used to supplement signage, especially in demarcated bicycle lanes. Details on design standards are found in Appendix J.

With regard to signage, signals or pavement markings for the purpose of regulating, warning or guiding bicycle facility users, uniform design and application is desirable to avoid confusion and potentially hazardous situations so that cyclists can navigate bicycle networks with ease (TAC, 1999).

Bridges, Overpasses & Underpasses
One of the biggest areas where choke points develop is crossing bridges and overpasses, and through underpasses. The capital outlay for these types of facilities is significant; therefore incorporating active modes of transportation into the design of new structures is preferable. Examples of some design standards are found in Appendix J.

Maintenance
The 1993 study did not specifically address maintenance standards and issues. However, the maintenance and repair of roadways, pathways and sidewalks play a large part in ensuring the usability of those AT facilities. "Bicycles and cyclists are particularly sensitive to maintenance problems." (National Center for Cycling and Walking, n.d.) Maintenance helps ensure the preservation of the facility as well as improves the level of comfort and safety for the user (Vélo Québec, 2003). Potholes, standing water and pavement heaves are just a few examples that can be hazardous for both cyclists and pedestrians, as cyclists are sometimes forced to swerve around obstacles on the road- bringing them into conflict with motorists. For pedestrians the hazards associated with poorly maintained trails can significantly impact the usage levels of facilities. Vélo Québec (2003) suggests that the level of maintenance required depends on the type of bikeway, its environment and how heavily it is used.

In the public consultation, process both cyclists and pedestrians brought up maintenance issues. For pedestrians, ensuring their walking route is free from snow and ice in winter, and free from puddles and splashing cars during rainy periods is essential. Cyclists share these concerns as well as having safe, well-drained travel lanes that are free from gravel, garbage, leaves, and potholes. Maintenance issues extend to signage to ensure that it remains legible and effective, as well as maintaining the landscape, from vegetation to repairing or repainting bicycle lock-up facilities, benches and trashcans (Vélo Québec, 2003).

Additional information based on experiences elsewhere have been highlighted in the literature that might provide useful solutions. The National Center for Bicycling and Walking (NCBW) suggests that some bicycling maintenance requirements can be made with slight adjustments. "For example if street sweeping crews pay a bit more attention to the right edge of the road, it can benefit bicyclists greatly." They also recommend the objectives found in Table 3.2-1, which are an example of possible solutions for some maintenance issues. While not all of these objectives may be applicable to the reality of the Winnipeg situation, it is a useful starting point for discussion.

Table 3.2-1 Objectives for Solving Maintenance Issues

1. To maintain roadways and bikeways to a relatively "hazard free" standard:
• By sweeping pavement edges and paved shoulders with sufficient care. • By patching surfaces as smoothly as possible and by requiring other agencies or private companies to do likewise whenever they dig up a road or trail. • By making sure pavement overlay projects feather the new surface into the existing one or otherwise do not create new linear joints. • By replacing hazards such as dangerous grates or utility covers as the opportunity arises. • By patching potholes in an expeditious manner. • By routinely cutting back all encroaching vegetation, especially on trails or popular bike routes.
2. To encourage bicyclists to report maintenance problems and other hazards:
• By developing a "bicycle spot improvement" form and distributing copies throughout the bicycling community. • By making sure returned forms are acted upon in a timely fashion.
3. To design and build new roadways and bikeways in such a way as to reduce the potential for maintenance problems in the long term:
• By using edge treatments, shoulder surfaces, and access controls that reduce the potential accumulation of debris. • By using materials and construction techniques that increase the longevity of new trail surfaces.
4. To include maintenance costs and clearly spelled-out maintenance procedures in all bicycle facility projects:
• By including reasonable estimates of the maintenance costs in the project's budget. • By establishing clear maintenance responsibilities in advance of construction.

Source: Bicycle-Related Maintenance Chapter (NCBW, n.d.)

3.2.2 New Options in Bicycle Facilities

Some available facilities are currently not used in Winnipeg and were not discussed in the 1993 report. These include:

Raised Pavement Bicycle Lanes
The Danish have a special form of bicycle lane that is referred to as a "cycle track" in the design guide put forth by the Roads Directorate in 2000. These raised pavement lanes flow in the same direction as traffic and are established along roads with large volumes of motor vehicle traffic and/or high speeds. It is a tiered system that separates the bicycle lane ever so slightly from the roadway and sidewalk and is illustrated in Figure 3.2-1.

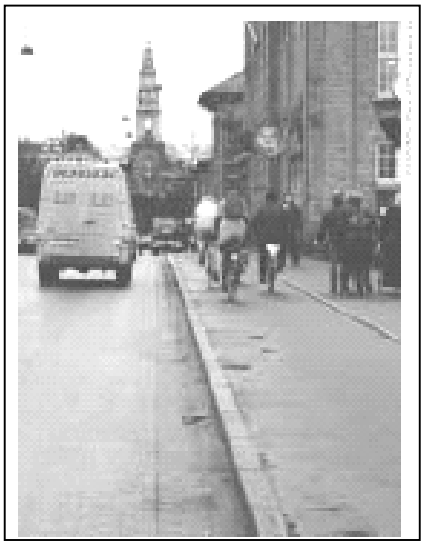


Figure 3.2-1 Example of a Danish Raised Pavement Bicycle Lane (Cycle Track) (Source: Road Directorate, 2000)

Cantilevered Bridges
When it is not feasible to build a new structure, a cantilevered bridge of is one option for trying to widen the structure when dealing with bridges overpasses and causeways (See Figure 3.2-2).

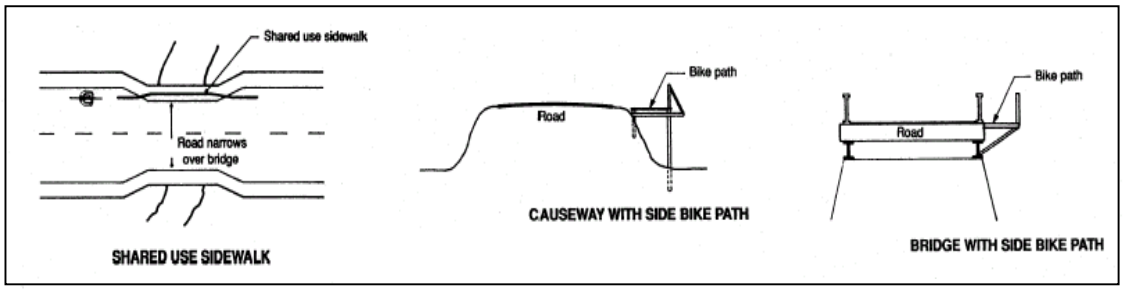


Figure 3.2-2 Infrastructure Access (Source: Go for Green Community Cycling Manual, CIP, 2004)

Staircase Ramps

Staircases pose a significant problem for people with mobility issues and those who are in wheelchairs, using walkers or pushing strollers, as well as cyclists if the bicycle has to be carried up or down the staircase. If space does not permit a ramp to be built that would be suitable for all users, a solution that would at least help the cyclist is to build a ramp on either side of the staircase to allow the cyclist to roll their bike up or down, without having to carry it. Figure 3.2-3 illustrates what such a ramp would look like. A recommended standard is provided in Appendix J.

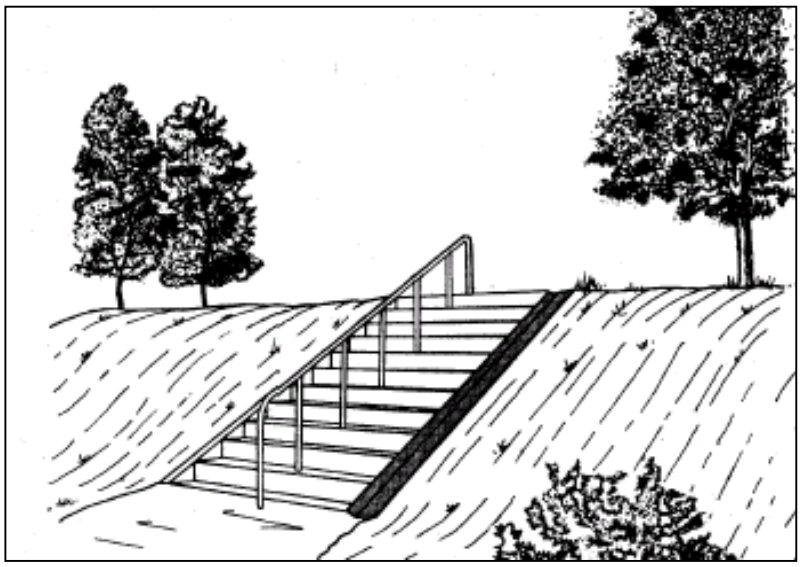


Figure 3.2-3 Staircase Ramp (Source: Go for Green Community Cycling Manual, CIP, 2004)

Bicycle Lockers

At major collector points, transfer points and popular destinations (e.g. The Forks, universities, parks), it may be beneficial to provide secure bicycle lock-up facilities. This could facilitate active commuting for people who live in outlying areas, but who do not feel they can commute the entire distance by bicycle. There are many options for bicycle parking, however, cyclists would likely prefer that their bicycles be protected from the elements, secure and out of sight. The bicycle lockers themselves should still be placed in a highly visible place. The bicycles they contain would be out of sight.

3.2.4 New Options in Non- Bicycle Based Facilities

This report expands on the 1993 study to include other forms of Active Transportation beyond cycling. This includes pedestrians, in-line skaters, skateboarders, and others.

Pedestrian Facilities

The 1993 study did not discuss pedestrian facilities with the exception of multi-use paths. It is important to remember that pedestrian facilities are used for more than just walking. People with physical disabilities/mobility issues, using walkers or pushing strollers require special

consideration whenever there is a change in surface level, and facility design should reflect those needs. Much of the information discussed in regards to bicycle facilities also has relevance for pedestrians, because they use multi-use paths, trails, paved shoulder walkways, bridges, and underpasses. Pedestrians also have similar maintenance concerns when it comes to walkways. Standards used to accommodate cyclists would be ample for pedestrians, however, if a facility were to be geared towards pedestrians only, standards for lane width could be reduced. Issues of crosswalk safety, signal timing, location and design have been examined by Dan Burden and Walkable Communities, and walkability checklists can be found at www.walkable.org.

Pedestrian facilities are outlined in Table 3.2-2, and an explanation of the terminology can be found in the glossary. "Principles for a Pedestrian Facility Design Guide" have been put together by the City of Portland. A summary of these can be found in a table in Appendix J. The "Pedestrian Facilities Guidebook - Incorporating pedestrians into Washington's Transportation System," produced by the Washington State Department of Transportation, provides very comprehensive information about pedestrian facilities. Table 3.2-2 provides a listing of what pedestrian facilities include:

Table 3.2-2 Pedestrian Facilities

Pedestrian facilities include:
• Sidewalks and on-street facilities
• Walkways and trails
• Curb ramps
• Traffic calming and control devices
• Crosswalks
• Grade separations (such as underpasses and overpasses)
• Wide shoulders in rural areas
• Furnishings that create a pedestrian friendly atmosphere (such as benches and landscaping)
• Other technology, design features, and strategies intended to encourage pedestrian travel (such as traffic calming devices including traffic circles, speed humps), planting strips, shelters, public art, and lighting

Source: *Washington State Policy Plan*, 1994

Facilities for Small Wheels

Specific design standards for in-line skating and skateboarding specifically are difficult to find in the literature. For example, in-line skating is included among the user groups of a multi-use path, but ideal path width is calculated based on a cyclist, who requires less path width than an in-line skater. Potential use by small wheel commuters should be taken into consideration in the design of any new multi-use paths. This is also an area that warrants consideration for further research.

Special Facilities

With Winnipeg's long winters there are a unique set of facilities that are more temporary in nature, that need to be rebuilt each season. These include cross country ski trails, skating trails and winter pathways.

In addition to these temporary facilities, a downtown indoor walkway connecting businesses along Portage Avenue and Graham Avenue, from Memorial Boulevard to Main Street, is considered a unique pedestrian facility.

3.3 Existing Bicycle Facilities

Bicycle facilities in Winnipeg have been classified previously in Table 3.1-1 in terms of bicycle routes, bicycle lanes and bicycle paths. A map outlining the existing facilities can be found in Appendix N.

The following tasks were conducted to determine the state of existing facilities:

- Facilities that were identified as in existence in 1993 were reviewed internally and through aerial photographs by the Property, Planning and Development Department of the City of Winnipeg. Those facilities no longer in existence were removed from the list of facilities and were not placed on the map of Existing Facilities for this report.
- Proposed facilities from the 1993 study were reviewed, and those facilities that had been completed (as identified by the Public Works Department and/or the Property, Planning and Development Department of the City) were added to the updated list of existing facilities and where appropriate, were added to the map of Existing Facilities for this report.
- Proposed facilities from the 1993 study that had not been completed were reviewed to determine whether they should still be recommended. If there was no significant reason as to why the facilities identified in the 1993 report should not still be built, they were included in the Complete List of Proposed Active Transportation Facilities for this report, found in Appendix K.
- New bicycle facilities that had not been identified in the 1993 report, but which had since come into existence, were added to the list of Existing Facilities in this report (including bike/bus racks and bike/bus diamond lanes).
- Pedestrian and other Active Transportation facilities (i.e. cross-country skiing trails, skating trails, indoor walkways, etc.) were incorporated into this Study.
- A limited amount of 'ground truthing' was conducted to check on the state of existing facilities, and to identify opportunities for new facilities and demonstration initiatives.

3.3.1 Shared Roadway

All roadways must be considered shared roadways. Cyclists may use all streets within the city, given their designation as a vehicle under the Highway Traffic Act. Most roadways do not have specific facilities

Designated Bicycle Routes
In 1999, a number of bike routes were added and signed in order to connect Pan-Am Games venues, providing Winnipegers with a total of 100 kms of cycling routes within the city. See Table 3.3-1.

Designated Bicycle Commuter Routes
These are routes with "share the road" signage. No "share the road" signage has been implemented on Winnipeg City streets. There is signage along Henderson Highway north, just outside the city limits.

Widened Curb Lane
In the 1993 study, only one street within the city of Winnipeg had a widened curb lane established specifically for the benefit of cyclists (Regent Avenue). The proposed design criteria for a widened curb lane was 4.3 metres. Two other streets were identified as having widened curb lanes at that time, but they were not specifically established for cyclists. With the increased development of 'big box' stores on Regent and the higher traffic volumes, the usefulness of a widened curb lane for bicycle traffic along this section of Regent Ave is called into question. Curb lanes can be widened by re-striping the road surface, narrowing the inside travel lanes and widening the curb lane, which is a relatively inexpensive way to create cycling friendly streets. A difficulty with repainting lane widths occurs when the painted lines do not coincide with the pavement joint lines in the physical road structure, which sometimes makes it confusing for motorists. A second way of widening the curb lane is through physical road construction by narrowing the median, boulevard or sidewalk area. This is a more costly undertaking and is typically linked with capital works projects.

There were several streets proposed for widened curb lanes in the 1993 study, however, no specific tracking mechanism was put in place in order to actually track the changes made. From the limited ground truthing that was done, it was apparent that there are streets in Winnipeg that have a wider curb lane or total pavement width sufficient to delineate a wider curb lane.

The following streets were identified in the 1993 Winnipeg *Bicycle Facilities Study* for the repainting of lane widths and have been implemented. These do not appear in the list generated from the aerial photographs used to form Table 3.3-1.

- Sherbrook St., from Assiniboine River, north to Notre Dame Ave.
- Maryland St., from Assiniboine River to Notre Dame Ave.
- McDermot Ave. (Waterfront Dr. to Sherbrook Ave.)
- Bannatyne Ave. (Waterfront Dr. to Sherbrook Ave.)
- Grosvenor Ave. (Harrow to Wellington Cres.)
- Wellington Crescent, particularly from River Ave. to Academy Rd.

Additional streets were identified as having widened curb lanes, however, it was not verified whether these met the 4.3 metres recommended design standard. They are also listed in Table 3.3-1. Without significant reconstruction of roads, it is not always possible to meet the recommended 4.3 metre curb lane width.

The different municipal departments have different ways of dividing the City of Winnipeg; therefore for ease and clarity, we have chosen to divide the city into four geographic quadrants. Winnipeg is naturally divided into East/West sections by the Red River, and into North/South sections by the Assiniboine River in the West, and by Mission St/CNR Reddit rail line in the East.

Table 3.3-1 Existing Shared Roadway Facilities In Winnipeg[6]

Category	Location	Comments
General	All roadways are shared	Most do not have specific facilities
Shared Roadway- Bicycle Route		All Bicycle Routes are designated with Bicycle Routes Signage:  - Shown on Map of Existing Facilities in Appendix N
Northwest	• North Assiniboine Parkway	Signed portions follow the roadway between Mostyn & Omand's Creek
	• North Winnipeg Parkway	St. John's to Kildonan Park
	• St. James Parkway	Signed portions on Wolesley Ave. W. and Assiniboine Ave. ending at Ferry Rd.
	• Ness Ave. to Fairlane to Portage Ave.	
	• Portage Ave. & Booth St. - Bruce Ave.-Linwood St.-Silver Ave.-Ferry Rd., to St. Matthews- Berry-Sherwin Rd.	
	• Sherwin & Saskatchewan-Empress St.-St. Matthews-Valour Rd-St. James Parkway	
Southwest	• Churchill Parkway	South along the West side of the Red River from The Forks (South Point) to Cockburn
	• Fort Garry Parkway	Cockburn to the University of Manitoba
	• Fort Rouge Parkway	The Forks (South Point), along the south side of the Assiniboine to Wellington Crescent (Maryland Bridge)

[6] Due to difficulty in tracking the date that facilities were constructed, there has been no attempt to identify those facilities that were in existence prior to 1993 and those that were created following the completion of the 1993 study.

Category	Location	Comments
Shared Roadway - Bicycle Route cont'd		
Southwest Cont'd	• South Assiniboine Parkway	Wellington Crescent (at Academy) to Assiniboine Park
	• Harrow	
	• River/ Stradbrook to Wellington Crescent	
	• Taylor	Multi-use path from Borebank to Harrow is signed as a bike route
	• Hurst Way to Parker Ave., to Beaumont to Windermere to Point Rd. to the Fort Garry Parkway	
	• Vialoux Dr. between Assiniboine Park and Moray St. Bridge (part of the Charleswood Parkway)	
	• Wellington Crescent Greenway	
	• University Crescent (sections)	
Northeast	• Kildonan Parkway	
	• Roch St. to Rothesay St. (North/South)	
	• Portion of Regent Ave. W.	
Southeast	• St. Boniface Parkway (Lyndale Dr. & Taché, between Provencher & DesPins)	
	• St. Vital Parkway (Kingston Row/Crescent)	
	• Rue Notre Dame to Des Meurons to Humboldt Ave, East to Victory Pl. and Oakleigh and St. Mary's Rd.	
Shared Roadway – Bicycle Commuter Route		Proposed in 2004 report. None available within the city limits, to date.

Category	Location	Comments
Shared Roadway- wide curb lane		Streets with Widened Curb Lanes (Not on Map) - Based on Information on widened curb lanes provided by City of Winnipeg maps, however no information on actual lane width was available, so it is not known if these lanes meet the minimum 4.3 m recommended design standard.
Northwest	• Dublin between Berry & Notre Dame	
	• Dufferin, between Main St. & Sinclair	
	• Ellice Ave, between Kenaston & Ferry Rd.	
	• Empress/ Eastway, between Eastway & Maroons Rd.	
	• Erin St., between Portage & Notre Dame	
	• Keewatin St., between Notre Dame & Inkster Blvd.	
	• Logan Ave., between Worth St. & Dee St.	
	• Main St., Lomabard to Disraeli	
	• McGregor, between Mountain & Smithfield Ave.	
	• Mountain, between McGregor & McPhillips	
	• Ness, between Olive & Strauss Dr.	
	• Portage Ave., between Westwood & Perimeter	
	• Sargent Ave., between Empress & Ashburn St.	
	• St. Mathews Ave. – entire street	
	• Templeton, Between McGregor & McPhillips	
	• Wellington Ave., between Bradford St. & Airport	
Southwest	• Corydon Ave. between Kenaston & Royal Gate Rd.	
	• Donald between Osborne & Stradbrook	
	• Grant Ave., between Pembina to Roblin Blvd.	
	• Pembina, between Osborne & Hugo	
	• Stafford Ave. – entire length	
	• Taylor Ave., between Waverly& Stafford St.	
	• University Crescent (sections)	

Category	Location	Comments
Shared Roadway- wide curb lane cont'd		
Northeast	• Nairn/Regent, between Kent & Plessis	
Southeast	• Goulet, between St. Mary's Rd. & DesMeurons	
	• Marion, between St. Mary's Rd. & DesMeurons	
	• St. Mary's Rd., sections between Enfield Cres. & St. Anne's Rd.	
	• St. Anne's Rd., between Regal Ave. & Novavista	
	• Dunkirk Dr./ Dakota, between Fermor & Meadowood Dr.	
	• Meadowood. Between St. Mary's Rd. & Dakota	

Restricted Roadways
For many years, the City's Public Works Department (and the previous Streets and Transportation Department) has conducted a program of street closures on Sundays and statutory holidays for the summer season (Victoria Day weekend to Thanksgiving weekend). These streets function as a restricted roadway open only to local traffic and used extensively by recreational cyclists, pedestrians and small wheel users. The streets with summer closures are:

- Wellington Crescent between Academy Rd and Midland rail bridge, from 8 a.m. to dusk.
- Wolsley Ave. between Raglan Rd. and Maryland St., from 8 a.m. to dusk.
- Scotia St. between Kildonan Park and Cathedral Ave., from 9 a.m. to dusk.
- Lyndale Dr. between St. Mary's Rd. and St. Mary's Rd., from 8:30 am to dusk.

Another restricted roadway is the Graham Avenue Mall, which restricts roadway use to buses and bicyclists seven days a week. This restricted roadway, in contrast to the others previously mentioned does not follow a scenic route and is used more for commuter purposes.

3.3.2 Bicycle Lane

Designated bicycle lanes are found within the boundaries of the City of Winnipeg (see Table 3.3-2). The lanes have been classified into a number of sub-categories: Delineated and Unidirectional, Protected lane, Bi-directional Lane, and Other (paved shoulder, bike/bus lane). Most of the lanes within the city boundaries fall into this last category.

In the 1993 study, several of the bicycle lanes that link Winnipeg to outlying points of interest were identified, and nothing was identified as having changed. These are found on the outskirts of the city and extend into rural areas within easy cycling distance. One is delineated and unidirectional, while three have paved shoulders. These bicycle lanes can be found on:

- Provincial Trunk Highway #59 – Winnipeg to Bird's Hill Park
- Provincial Road #204 (Henderson Highway) – Winnipeg to Lockport (delineated & unidirectional)
- Roblin Rd to Headingly (to 0.5 km east of Bridge Rd)
- Perimeter Highway

Shy Zones can most often be found in the curb lane crossing bridges and overpasses. They are delineated markings on the road surface, keeping motor vehicles a little further from the curb. While not specifically a bicycle facility, cyclists often use them as a de facto bike lane, as the shy zones provide cyclist with some extra space to travel over bridges and underpasses. However, following a bridge or underpass, they often narrow quickly, forcing cyclists to merge with vehicular traffic into the same traffic lane.

Table 3.3-2 Designated Bicycle Facilities in and around the City of Winnipeg: Lanes[7]

Category	Location	Comments
Delineated & unidirectional	• None within the city limits	• Henderson Highway to Lockport (PR 204) is an example outside the city limits
Protected Lane	• Norwood Bridge, north and south-bound	• Separated from traffic by a concrete divider
Bi-directional Lane	• Norwood Bridge, north and south- bound	• The separated bike lanes allow bicycles to travel in either direction on this bike lane.
Counterflow Lane	• None	
Other: Paved Shoulder	• Chief Peguis Trail	• Asphalt shoulder separated by mountable concrete curb
	• Bishop Grandin Blvd.: Kenaston to Red River	• Not officially designated but heavily used by cyclists • Shoulder on Bishop Grandin Blvd. from the east side of the red River to Lagimodiere Blvd. is not paved
Other: Bike/Bus (Diamond) Lane	• Goulet St. from Tache Ave. west bound to St. Mary's Rd	
	• St. Mary's Rd. from Tache Ave. north bound to the Norwood Bridge	
	• Main St. from Portage Ave. south bound to the Norwood Bridge & Logan Ave south bound to Bannatyne Ave.	
	• Main St. from Water Ave., north bound onto Disraeli Freeway,	
	• Osborne St. from St. Mary Ave. south bound to Mostyn Pl.	
	• Graham Ave. from Fort to Carlton (east and west bound)	

3.3 Existing Pedestrian Facilities

For the most part Winnipeg streets are lined with sidewalks and pathways for people to stroll along. There are several different types of pathways within Winnipeg. Any of the multi-use paths and trails outlined in Table 3.4-1are suitable for pedestrian use. These would be considered "Off-Street" pathways. There are several paths that do not permit cyclists so this

[7] Due to difficulty in tracking the date that facilities were constructed, there has been no attempt to identify those facilities that were in existence prior to 1993 and those that were created following the completion of the 1993 study.

inventory could likely be expanded. Winnipeg also has numerous "Connector" pathways, especially in neighbourhoods with bays backing onto each other. These "cut-throughs" or "connector" pathways have not been inventoried in this report, however, examples can be found in Fort Garry off Sandra Bay, or in Wildwood and King's Park areas. Alternative Pathways include paved shoulder right-of-ways as well as walkways off street level, such as the indoor walkway system in Winnipeg's downtown, which encompasses:

- York Ave. between Edmonton & Hargrave
- St. Mary's Ave., through the Bay, Portage Place, following buildings along Graham Ave., from Hargrave, to the Concourse
- The Concourse Mall system
- From the parkade by the Public Safety building to City Hall to Concert Hall & Manitoba Museum

Winnipeg also has numerous pedestrian bridges, some of which also permit cycling.

- Assiniboine Park Bridge
- Bunn's Creek Centennial Park (3 Bridges)
- Charleswood Footbridge, crosses the Charleswood Parkway
- CNR Rail bridge at Forks
- Elm Park Bridge (BDI) - pedestrian path is separated from bi-directional bike lane by a concrete divider
- Esplanade Riel
- Midland Rail Bridge (foot bridge) – crosses Assiniboine River
- Omand Park Foot bridge
- Omand's Creek Footbridge off Empress St. E
- Omand's Creek Footbridge Brookside Cemetery (2)
- Seine River at John Bruce Bridge off St. Anne's Rd.
- Seine River at Dumoulin St.
- Seine River at Edgewood & Tremblay
- Seine River at Iroquois Park
- Seine River at Niakwa Rd. & Niakwa Rd. East
- Seine River at Creek Bend Rd.

Pedestrian Facilities include more than sidewalks and pathways, such as crosswalks, traffic-calming devices, lighting, landscaping, and street furniture (shelters, benches, trash bins, etc.) (See Table 3.2-2.)

The City uses "universal design" standards, which are intended to accommodate everyone including persons with physical disabilities. Also, the City of Winnipeg's Access Advisory Committee works with business, government and citizens to deal with accessibility issues, and ensure that fair and equitable access is provided for all Winnipeg residents.

3.4 Existing Shared-Use Facilities

3.4.1 The Parkway System

Winnipeg's Parkway System was the Showcase initiative in the 1993 Bicycle Facilities study. The Parkway system is intended for cyclists and pedestrians as a scenic recreational route along the Red and Assiniboine rivers. Depending on its surface (and location), it may also be used by other forms of Active Transportation and motorized vehicles. The Parkway follows the Assiniboine River on both sides in an east-west direction and the Red River on both sides in a north-south direction, using a combination of roadways, trails and paths. In many locations trails and pathways run parallel to a roadway, in such situation the trails and pathways are considered part of the Parkway, and not the road. Where only a road exists, it forms the Parkway as is the case where there is only trails or pathways. Table 3.4-1 outlines the sixteen parkways in Winnipeg with their start and end locations and surface types. The North Assiniboine Parkway and the South Assiniboine Parkway are two segments of the same Assiniboine Parkway. North and South indicate on which side of the river that particular section of Parkway is located.

Location of the Parkway System
Northwest side of the Assiniboine River at the western end of the city heading east:

- Starting with the Assiniboia Parkway (from the St. Charles Country Club to Assiniboine Park, north entrance), which connects to the St. James Parkway (at the Truro Creek Greenway), which connects to the North Assiniboine Parkway (at the Omand's Creek Greenway), which utilizes Omand Park, the Wolseley bicycle route, the Mostyn/Cornish riverbank pathway and the Assiniboine Riverwalk to the Forks, where it connects with the Parkway systems heading north or south along the Red River.

Along the west side of the Red River from the Forks heading north:

- North Winnipeg Parkway – extending from the Forks, along the west side of the Red River, to the Kildonan Corridor; utilizing Stephen Juba Park, the Point Douglas Yacht Club property, the Prichard Boat Yards property, St. John's Park, Scotia Ave. Bicycle Route, Kildonan Park and Golf Course.

On the south side of the Assiniboine River starting at the western Perimeter Highway heading east:

- The Charleswood Parkway, starting at the west Perimeter highway to Assiniboine Park, connecting to the South Assiniboine Parkway (at Assiniboine Park), which connects to the Wellington Crescent Greenway, (at the Midland rail Bridge), which connects to the Fort Rouge Parkway (at the Maryland Bridge) to the Forks (South Point).

On the west side of the Red River, heading south:

- Starting at the Forks (South Point) is the Churchill Parkway, which connects to the Fort Garry Parkway (at Cockburn St.), which connects to the King's Park Parkway (at the University of Manitoba), which connects to the St. Norbert Parkway (at the Perimeter Highway) and ends at the mouth of the La Salle River (200 rue St.Pierre).

On the east side of the Red River, starting in the northern part of the city, heading south:

- The North Kildonan Parkway (starting at the Bunn's Creek Greenway), which connects to the Kildonan Parkway (on the east side of the Kildonan Corridor), which connects to the Elmwood Parkway (at the Louise Bridge), which connects to the Saint Boniface Parkway (at the Seine River), which connects to the St. Vital Parkway (on St. Mary's Rd. at Lyndale Dr.), which connects to the South St. Vital Parkway (at the Bishop Grandin Bridge), which ends at Maple Grove Park, along the south Perimeter highway.

Once completed, the Parkway System will offer Winnipegers scenic routes along the cities two main rivers. Other routes and trails link into the Parkway system, providing connections to other parts of the city. Several bridges, some of which do not permit motor vehicle traffic, allow Parkway users to cross from one side of the river to the other, thus permitting them to create their own loops if they wish. The completed sections of the Parkway System are referenced, within their corresponding sections, below. The incomplete sections are referenced in Chapter 8, along with other specific facility implementation recommendations.

Table 3.4-1 Winnipeg Parkway System

Parkway	Start Location	End Location	Surface Types
Northwest			
Assiniboia Parkway	Coleridge Park Dr. at Bedson, along Assiniboine Ave. to Westwood & again on the east side of the St. Charles Country Club, along Assiniboine Ave.	Assiniboine Park, north entrance (Truro Creek Greenway)	Roadway
St. James Parkway	Assiniboine Park, north entrance (Truro Creek Greenway)	Omand's Creek Greenway	Truro Creek Greenway – hard surface pathway; roadway to Bruce Park. Bruce Park through Broukevale Cemetery (granular surface pathway). Roadway, along Assiniboine Ave. Switches to granular surface to follow river between Parkside Dr. & Riverbend. Follows bicycle Route on roadway to Wolseley Ave. West & Tylehurst, where it switches to hard surface and granular surface to Omand's Creek
North Assiniboine Parkway[8]	Omand's Creek Greenway	The Forks	Hard surface & granular surface through Omand's Creek Greenway. Roadway to Moystn. From Moystn to The Forks, granular surface pathway.
North Winnipeg Parkway	The Forks	Kildonan Corridor	Granular surface from The Forks to Annabella St; roadway to Hallet St.; granular surface through Beacons Field & St. John's Park. From Scotia to the end of the Parkway, roadway with some granular surface pathways in Kildonan Park
Southwest			
Charleswood Parkway	Caron Park at Musgrove St. & Cass St.	Assiniboine Park	Roadway & hard surface pathways through the Charleswood Greenway
South Assiniboine Parkway[9]	Assiniboine Park	Midland Rail Bridge	Hard surface path through Assiniboine Park and down Wellington Crescent to the Midland Rail line Bridge.
Wellington Cr. Greenway[10]	Midland Rail Bridge	Maryland Bridge	Granular surface pathway from Midland Rail bridge to Harrow. Roadway to Maryland bridge
Southwest Cont'd			

[8] North Assiniboine Parkway and South Assiniboine Parkway are continuations of the same parkway. This division between North and South is for descriptive purposes only.
[9] North Assiniboine Parkway and South Assiniboine Parkway are continuations of the same parkway. This division between North and South is for descriptive purposes only.
[10] Originally part of the Fort Rouge Parkway.

Parkway	Start Location	End Location	Surface Types
Fort Rouge Parkway	Maryland Bridge	The Forks (South Point)	Follows the roadway, except through Munson Park (granular surface pathway) and Fort Rouge & Mayfair Parks (hard surface pathway)
Churchill Parkway	The Forks (South Point)	Churchill Drive and Cockburn St.	Granular surface pathway except between Togo & Glasgow, and Eccles & Baltimore, where it follows the roadway
Fort Garry Parkway	Churchill Dr. and Cockburn St.	University of Manitoba	Roadway except path between Plaza Dr. & D'Arcy Dr. (hard surface pathway)
King's Park Parkway	University of Manitoba	Kilkenny and Perimeter Hwy	Roadway, except through King's Park (hard surface pathway)
St. Norbert Parkway	Cloutier Dr. and Perimeter Hwy	La Salle River (200 rue St. Pierre)	Roadway
Northeast			
North Kildonan Parkway	Bunn's Creek Greenway	East side of the Kildonan Corridor	Roadway
Kildonan Parkway	East side of the Kildonan Corridor	Louise Bridge	Roadway except Kildonan corridor (East) (granular surface pathway) Fraser's Grove Park (hard surface pathway), Elmwood Cemetery (informal trail), & park that runs parallel to Midwinter (hard surface pathway)
Elmwood Parkway	Louise Bridge	Seine River	Roadway
Northwest			
Saint Boniface Parkway	Seine River	St. Mary's Rd. at Lyndale Dr.	Granular surface pathway, except on Tache(between Provencher and DesPins) and Lyndale Dr.(between Walmer & Balsm). On Lyndale from Rosewood onwards (roadway)
St. Vital Parkway	St. Mary's Rd. at Lyndale Dr.	Bishop Grandin Bridge	Roadway, except in St. Vital Park where an informal trail takes you to Bishop Grandin
South St. Vital Parkway	Bishop Grandin Bridge	Maple Grove Park	Roadway except informal trail parallel to River Pointe Dr., granular surface pathway off Normand Park Rd. and granular surface pathway through Maple Grove Park

3.4.2 Paths

Many bicycle paths are found within Winnipeg. There are no "Bicycle Only" paths designated within the City of Winnipeg. The majority of bicycle paths in the city fall under the category of Recreational Pathway. Table 3.5-2 provides a listing of many of the multi-use recreational pathways found in the city. They are listed alphabetically by geographic quadrant (using the Red and Assiniboine Rivers as well as Mission St./CNR Reddit Rail Line as the boundaries). Park roadways have also been included in this list, as they often have reduced speeds and are too short to be considered bicycle routes. Many of these paths are short and do not connect readily to other paths or recreational trails.

An abandoned rail line is included under the "Trail" category. For example the Harte Trail runs parallel to Ridgewood Ave. north of Wilkes Ave. Active rail lines sometimes have worn trails running parallel to them in the right-of-way, such as the Transcona Trail.

Numerous dirt tracks are also used by cyclists. The majority of these are found on public land along the riverbanks, notably in the Assiniboine Park area. These have not been catalogued, but two examples in King's Park and Maple Grove Park are noted. Other trails are worn by use by Pedestrians are the Douglas Trail, the Beaver Creek Greenway and Caron Park.

Table 3.4-2 Designated Multi-Use Facilities in and around the City of Winnipeg[11]

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Northwest						
Multi-use Pathways	Ambergate Park	Ambergate Drive S of Templeton Ave.	450 m	1.8 m	Asphalt	-potential for important link through development
	- Bourkevale Park - Bruce Park - Assiniboine Park North	North side of Assiniboine River, between Assiniboine Park and Ferry Road		varies	Granular Granular & Concrete Asphalt	After Bourkvale Park use Assiniboine Ave. to Bruce Park to Deer Lodge Place & Assiniboine Park north bridge - multi-use
	Burrows - King Edward Park	N/S Burrows Avenue at King Edward Street	665 m	1.8 m	Asphalt	- high use between schools - connects to Albina Fuga Park
	Central Park	Cumberland/Ellice/Edmonton/Carlton	350 m	1.5-2 m	Asphalt	-loop around Park perimeter
	Foxwarren Park	SE of Foxwarren Dr., W of Ritchie St.	570 m	1.8 m	Asphalt	-designed to connect to next development phase
	The Forks River Walkways & Assiniboine River Walks	The Forks, and along north side of Assiniboine River to Mostyn Ave.		2.3-4.2 m	Limestone	-pedestrians & cyclists

[11] Due to difficulty in tracking the date that facilities were constructed, there has been no attempt to identify those facilities that were in existence prior to 1993 and those that were created following the completion of the 1993 study.

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Northwest Continued						
Multi-Use Pathways Continued	Kildonan Park	Main Street – north of Armstrong Avenue			Asphalt, limestone, concrete, wood chips, stone dust	
	Little Mtn. Park	NW of Inkster and Brookside	3km		Other (mowed, woodchips)	
	McBeth Park	East of Red River, between Summerview and Red River Blvd.		2.5 m	Asphalt	
	Omand Park	South of Portage Ave, West of Raglan Rd.		2-3 m	Asphalt, limestone	- Park length, some loops – can travel west on paved path along riverbank, connected with roadways to travel under St. James Bridge - access across railway trestle bridge to Wellington Cres. & connection to Wolseley Ave.
	St. John's Park	East of Main St, South of St. Johns Avenue	1.4km 611 m	1.8 m .9m	Asphalt Gravel	-heavily used -curb cuts lacking
	Water Front Drive (includes: Stephen Juba Park)	West of Red River, East of Waterfront Drive between Water Avenue and Annabella Street			Asphalt/ limestone	
	Sturgeon Creek Greenway	Along Sturgeon Creek from Saskatchewan Avenue to Woodbridge Road	3 km	2 m	Asphalt Other (mowed)	
Trails	Living Prairie Museum	Ness/Silver/Sturgeon			Other	
	St. Charles Grove	East of Perimeter Highway, North of Assiniboine River			Other	

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Nouthwest Continued						
Trails Continued	Westview Park	Northeast Wellington Avenue and Empress Street			Limestone	
Southwest						
Multi-Use Pathways	Assiniboine Forest	North and South of Grant Avenue between Chalfont Road an Shaftesbury Boulevard.			Asphalt, Other (woodchip)	-signed pedestrian only - no restrictions on dirt trails
	Assiniboine Park	North of Corydon Avenue between Park Boulevard North and Wexford Street		2 m	Asphalt, limestone, concrete	- bike pathway & roller blading & multi-use signs
	Charleswood Parkway	NE of Elmvale Crescent and Shelmerdine Drive		3 m	Concrete	
	Churchill Drive Park	South and East of Churchill Drive along Red River		3 m	Limestone, mud	Bike/ pedestrian signs
	Churchill Parkway	From The Forks, south along the Red River to the corner of Cockburn St. S and Churchill Drive		1 m	Limestone	
	Fort Rouge Park	North of River Avenue to Assiniboine River, opposite Cauchon St.		3 m	Asphalt	
	Fort Whyte Centre	McCreary Road			Limestone Other (wood chip, boardwalk)	Private nature reserve
	Grandmont Park	North of Grandmont Boulevard, West of Nolin Avenue			Asphalt	St. Norbert
	King's Park	East of Kings Drive, to Red River. Opposite Patricia Avenue	2.6 km	2 m	Asphalt	Bike/pedestrian signs
	Kirkbridge Park	Bairdsmore/Kirkbridge/Marrington			Asphalt	Also known as Elsewood Bole Park
	La Barriere Park	Outside city limits, south on Waverley Street to the LaSalle River.			Sod, Wood chips	Pedestrian with some Mtn. Bike use & Cross Country Skiing

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Southwest Continued						
Multi-Use Pathways Continued	**Lakeshore Park**	Between Markham/Chancellor/Lake Shore		1 m	Limestone	- Waverley Heights -access to other areas
	Mayfair Park & Mayfair Park East	South of River Ave., on either side of Donald Street.		2 m	Asphalt	Links both parks under Midtown Bridge
	Munson Park	North of Wellington Crescent, opposite Kingsway.		2 m	Asphalt, limestone	Loops through park
	Parc Trottier	West of Rue Le Maire and Dorge Dr.				St. Norbert
	Payment Street Park	Grandmont Boulevard between Waverley St and Payment St.				St. Norbert
	Scurfield Park	North and East of Columbia Drive on south side of Scurfield Boulevard		1.5 – 2 m	Asphalt	Mostly used by walkers Whyte Ridge
	Thelma J. Call Park	Chancellor Drvie between Lake Lindero Rd, Syracuse Cres. And Lakeside Dr.		1m	Limestone	Waverly Heights
	VanWallegham Park	Lindenwood Dr. West at Lindenwood Place		1.5 –2 m	Asphalt	Connection of school to Muys Park, to Brockville St.
Trails	Beaverdam Creek Greenway	South of Roblin Boulevard, west of Berkley Street to Carlotta Cres. opposite Buckle Dr.				
	Caron Park	East of West Perimeter Highway, South of Assiniboine River			Other	
	Crescent Drive Park	East of South Drive				
	Harte Trail	Along former rail line from West Perimeter Highway to Assiniboine Forest, south of Ridgewood Ave.			Granular Asphalt Other	Mud trails used for Mtn. Bike
	King's Park	East of Kings Drive, to Red River. Opposite Patricia Avenue				Mud trails

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Northeast						
Multi-Use Pathways	Bunn's Creek	Between Rothesay and McIvor Avenue	1000 m	2 m- 2.5 m	Limestone	
	Chornick Drive Park	West side of Garden Park and North of Leila Avenue	>1000ft. (300 m)	6 ft./2m	Asphalt	
	Civic Park	Between London Street and Gibson Street	> 1000ft. (300 m)	6 ft./2m	Limestone	Adjacent to Valley Gardens Community Centre with limestone paths
	Ernie O'Dowda Park	Southwest corner of Midwinter Avenue and Levis Street		2 m	Asphalt	Part of Elmwood Parkway
	Fraser's Grove	West side of Kildonand Drive at Rossmere			Paved/Limestone	
	Kilcona Park	Lagimodiere Boulevard between Springfield and Knowles			Asphalt Limestone Other	
	Kildonan Meadows	West of Pleissis, South of Devonshire Drive West and East of Dawnville Drive	> 1000ft. (300 m)	6 ft./2m	Limestone	
	Kildonan Beltway/Chief Peguis Trail Extension ROW	North of Chief Peguis Trail, East of the Red River				
	Morley Kare Park	Between North Meadow Drive and Devonshire Drive	> 1000ft. (300 m)	6 ft./2m	Limestone	
	Rotary Prairie Nature Park	North side of Regent Avenue at Bradley Street			Granular	
	Transcona Bioreserve	East of Bellavance Street, North of CNR Pine Falls rail line			Granular Other	
	Victoria Jason Park	West side of Redonda Street, North of Victoria Avenue	>1000ft. (300 m)	6 ft./2m	Limestone	

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Northeast Continued						
Trails	Douglas Trail	East of Henderson Highway, South of Douglas Avenue to Raleigh St.			Other	
	Transcona Trail	South of CNR Pine Falls rail line from Larch Ave. West to Rotary Prairie Nature Park			Other (mowed)	
Southeast						
Multi-Use Pathways	Archibald	North of Bonivital Pool to Elizabeth Rd., along west side of Archibald St.		3.9 m	Paved	
	Bishop Grandin	Between Shorehill and Lakewood, along south side of Bishop Grandin			Paved	
	Bishop Grandin Greenway	Between St. Mary's Road and Dakota, along north side of Bishop Grandin			Paved	
	Burland Park	Southside of Burland Avenue, West of Paddington Road			Paved	
	Coronation Park	East side of St. Mary's Road, south of Eugenie Street.		2.3 m	Limestone	
	Dunkirk/Fermor	East side of Dunkirk Drive and North side of Fermor Avenue along the Canoe Club Golf Course to the YMCA on Fermor			Asphalt	
	Fermor Ave.	Bonivital Pool to Windsor Park Golf Course, along North side of Fermor		2.3 m-3.9 m	Asphalt	Dismount signs
	Fermor Ave.	Archibald to Lagimodere, along North side Fermor			Asphalt	
	Frontenac Park	North of Cottonwood Road, East of Drake Boulevard			Granular	
	Happyland Park	South side of Marion between the Seine River and Archibald		3 m	Asphalt	
	Island Lakes	North side of Island Lakes Drive between Desjardins Dr and Boul. de la Seigneurie		1 m	Asphalt Some interlocking brick	

Category	Location		Length	Width	Surface	Comments
	Park	Address				
Southeast Continued						
Multi-Use Pathways Continued	Lagimodiere Gaboury Historic Park	West side of Seine River north of Rue Notre Dame			Limestone Asphalt	
	La Verendrye Park	Northwest corner of Rue Laverendrye and Rue Archibald		1m	Limestone	
	Notre Dame East Park	North side of Rue Notre Dame, East of Seine River		1 m- 2m	Woodchip Limestone Asphalt	Concrete pedestrian bridge
	Provencher Park	South side of Provencher Boulevard, East side of Langevin		1 m	Limestone	Also known as the Notre Dame Community Club
	Seine River Greenway	Trails along the Seine from the Red River confluence to Youville St., and south of Bishop Grandin to John Bruce Bridge		2 m - 2.5 m	Asphalt Limestone	
	St. Boniface Hospital & Tache Promenade	West side of Tache, South of Provencher Boulevard		2.5 m	Asphalt Limestone	River walkways. Includes linkage under the Norwood bridge.
	South St. Vital Trail / Hydro right-of-way	Between Paddington Road and Highbury Road, South of Burland Avenue – From St. Mary's Road to St. Anne's Road.		1 m	Asphalt	
	Whittier Park	East side of Rue St. Joseph on the Red River to the confluence with the Seine River.		1 m	Limestone	
Trails	Maple Grove Park	North side of Perimeter Highway, West of St. Mary's				Mud trails close to river
	St. Vital Park	North of River Road, along the Red River				Trails throughout park

3.5 Facilities for Small Wheels

In-line skaters and skateboarders are currently limited to using paved multi-use pathways. No other specific facilities have been designed for commuting using either of these methods.

3.5.1 Skateboard Parks

There are a few skateboard parks within the city of Winnipeg that operate during the summer months, but these focus on skateboarding for recreational purposes rather than for commuting purposes.

- Bertrand Arena, Vimy Arena and Sargent Park Arena offer indoor skateboarding facilities when the rink is not being used for hockey.
- The City of Winnipeg operates a mobile Skateboard park that travels around the city and sets up in various neighbourhoods.
- There are outdoor facilities in St. Vital, on the corner of St. Anne's Rd and Meadowood, in St. Boniface, at Happyland at Marion & Archibald, and in Transcona Park across from Murdock Mackay School on Redonda in Crocus Park
- The Edge Skatepark at 125 Pacific Avenue, offers year round indoor skateboarding.
- Skate – indoor facility located at 337 Pembina Hwy.

3.6 Other Active Transportation Facilities

3.6.1 Bicycle Parking

Although cyclists are allowed to lock their bicycles to trees, signposts, railings and other street furniture, bicycle racks exist throughout the city, most of which are provided through the private sector. Some parkades offer room for bicycle parking as well.

3.6.2 Bus-Bike Racks

Originally tested in Winnipeg on Route 18 – North Main /Corydon in 1999 to facilitate recreational access between Assiniboine Park and Kildonan Park, they were moved to Route 60 – Pembina in all subsequent years to facilitate bicycle commuter travel between downtown and the University of Manitoba. Currently, bus-bike racks are on all Route 60 buses each year from May until October. Presently, there are no plans to expand this program to other routes due to: high cost of acquisition, operational issues (storage space – both in the winter and while on buses), and relatively low usage (see Table 3.6-1).

Table 3.6-1 - Usage of Bicycle Racks on Buses

Year / Route	Reported Usage
1999 / Route 18	108
2000 / Route 60	242
2001 / Route 60	260
2002 / Route 60	195
2003 / Route 60	198
2004 / Route 60	172

3.6.3 Showers/Change Rooms

It would be up to an employer or landlord to decide if they wanted to provide shower and change facilities within their work place. Companies who incorporate fitness facilities or activities may be more likely to provide showers and change rooms. The City of Winnipeg provides such facilities for employees who work at City Hall.

3.6.4 Winter Facilities

Winnipeg's long winters allow for some temporary facilities to be built on an annual basis. A map outlining the winter facilities and indoor walkways can be found in Appendix N.

Cross- Country Ski trails are cut by individual cross-country skiers, especially along the riverbanks. These unofficial trails are maintained by the people who use them. Official trails are maintained in the following parks:

- La Barriere Park
- St. Vital Park
- Assiniboine Park
- Windsor Park Golf Course
- Kildonan Park Golf Course
- Kilcona Park & Golf Course

Skating trails follow the Assiniboine River from the Hugo Street Dock to the Forks and a small section of Red River from north of the Norwood Bridge to the rail bridge north of the Provencher Bridge. A walking path is also maintained along side the skating trail.

A map showing the existing Winter facilities in the city of Winnipeg, can be found in Appendix O.

3.7 Existing Programs

A broad spectrum of organizations are involved in activities related to Active Transportation. They vary from schools to walking clubs, environmental groups to health-related organizations,

trail building groups to business associations, active living groups to Winnipeg Police Services, and urban/transportation planners to cyclists and recreational trail users.
The key organization delivering Active Transportation programs in Winnipeg is *Resource Conservation Manitoba* (RCM), a non-governmental organization. Sustainable transportation is one of RCM's core program areas, with four main programs offered under its Green Commuting Initiatives. They include the:

- "Winnipeg Commuter Challenge" (week-long friendly competition between cities, work places and individuals),
- "Active and Safe Routes to School" (examples include Walking School Bus and International Walk to School Day),
- "off ramp Manitoba" (focused on high school students), and
- "Going Green" (a work place-based program being piloted with four employers).

The *Manitoba Cycling Association* is another key NGO involved in Active Transportation, through:

- the "Cyclist's Map of Winnipeg" & route signage project in 1999,
- on-line information for commuting by bicycle,
- "The Commuter Cyclist" handout, and
- Winnipeg Bicyclist Listserve.

Other local programs include the "Uniform Bicycle Patrol Units" with the Winnipeg Police Service and the University of Manitoba, and Manitoba Public Insurance's safer cycling education resources provided through the Health Education/Physical Education Curriculum in the province for kindergarten through Grade 10.

There are also a number of NGOs involved in trail building, such as the *Fort Whyte Centre*, *Manitoba Recreational Trail Association* and the *Winnipeg Trail Association*, which acts as an umbrella organization to coordinate and support a number of community-based groups working to build a network of trails around the city.

A wide variety of organizations and coalitions focus on active living, of which Active Transportation is or could be a component. Examples include:

- *Physical Activity Coalition of Manitoba* (PACM)
- *Manitoba Physical Education Teachers Association* (MPETA)
- *Active Living Alliance for Canadians with a Disability*
- Participatory programs, such as walking and running clubs, offered through the *Running Room* retail stores and *Prairie Pathfinders*, a not-for-profit walking group.

The programs that exist in Winnipeg are delivered by NGOs. There is some degree of cross involvement, e.g. the "Winnipeg Commuter Challenge" has a number of planning partners that include two levels of government (city and province) and different types of NGOs (cycling, walking, health, environmental). While this event takes place for only five days each year, it could provide the foundation for an ongoing collaboration among a wide variety of NGOs and government departments regarding Active Transportation.

There is ample opportunity for more partnerships on Active Transportation both among the NGOs, and between the City of Winnipeg and specific organizations. Also, there is

tremendous room to include a focus on Active Transportation within the active and healthy living programs being offered by NGOs, where the focus now rests mostly on recreation. Prime examples are the proposed "Manitoba-In-Motion" initiative and the related "Get Moving Manitoba" program presented in January 2004.

Please refer to Appendix L for a listing of existing programs and related organizations.

3.8 Summary and Key Observations

The City of Winnipeg has a great number of Active Transportation facilities already in place. For cycling, the majority of these facilities are targeted shared roadways, developed through the widening of curb lanes and through the designation of signed bicycle routes. Additionally, a variety of different bicycle lanes have had limited testing in the city. The most prevalent pedestrian facilities continue to be sidewalks, although fewer of those are being built, particularly in Winnipeg's suburban areas. Multi-use trails and pathways, used by both cyclists and pedestrians, have also been built by the City. The small wheel user group, including skateboarders and in-line skaters, are restricted in their access to facilities, representing an issue that needs to be addressed by the City.

Despite past and present successes, the City faces a number of challenges regarding facilities, as described in more detail in the next chapter on public consultation:

- Many Winnipeggers remain unaware of the extent of Active Transportation facilities in their city.
- There is demand for further Active Transportation facilities.
- There is a need for consistency between existing and future policies as related to Active Transportation facility development.
- There is a need for a financial commitment by the City to continue to strategically improve existing, and build new, Active Transportation facilities.

To address these challenges, this study has developed both a comprehensive listing of potential facilities and a short list of more immediate priorities. The comprehensive list manifests the broad vision of what Winnipeg can achieve and focuses on maximizing the usability of current facilities, developing demonstration facilities that are unique or new to the city, and developing an AT network. It also notes the need to review and apply design standards. The priority list focuses on very practical, lower cost solutions and emphasises dovetailing with existing plans, in order to achieve maximum success within the current fiscal realities. These facilities recommendations, along with other recommendations appear in Chapter 8.

Regarding programming, although the City is not directly involved with Active Transportation programming, there are a significant number of local organizations that are. Through direct and indirect support of these initiatives, the City has the opportunity to achieve its Active Transportation objectives of increasing participation and improving the Active Transportation network. The City's future participation in local programming by NGOs, through the support and provision of an atmosphere of encouragement to other Active Transportation-oriented organizations, will provide the City with:

- An opportunity for accessing alternate funding sources; and
- A better opportunity to promote Active Transportation programs and facilities.

Finally, it should be noted that leadership by example is very powerful. The City of Winnipeg could lead the community in adopting Active Transportation facilities at and near civic buildings and in embracing programs that support and promote Active Transportation among civic employees. By building on these facilities and programs, and including additional programming, promotion and educational components, more Winnipeg residents might be encouraged to choose active modes of transportation, and thus reap the associated benefits.

4.0 Public Demand for Active Transportation Facilities and Programs

4.0 Public Demand for Active Transportation Facilities and Programs

A solid understanding of public perceptions and demand for Active Transportation can assist the City to plan and implement strategically both facilities and programming. For maximum efficiency of expenditures, the public must first be aware of the availability of improved or new facilities and secondly, choose to use them.

Public consultation was an important aspect of the Active Transportation Study, as identified in both the Terms of Reference and the Work Plan. The primary objectives of this public consultation were to:

- Understand the extent to which citizens of Winnipeg use Active Transportation.
- Identify the barriers to participation in Active Transportation.
- Determine demand for new Active Transportation facilities.
- Measure the likelihood of increased Active Transportation.
- Develop a profile of Active Transportation participants in Winnipeg.

As with the overall scope of this Study, the parameters and objectives of the consultation were broadened to incorporate elements of Active Transportation beyond facilities, including education, promotion, policy, and programming.

While all modes of Active Transportation were represented in the survey instruments and other consultations, cycling and walking were emphasized. There were many reasons for this emphasis, mainly that they are the most popular modes of Active Transportation in Winnipeg. Additionally, the majority of the AT facilities identified and discussed throughout the consultative process were bicycle facilities. The primary reasons for this follow:

- Most existing facilities relate to bicycles (bike routes, diamond bike/bus lanes, etc.).
- Most non-road bicycle facilities can accommodate pedestrians.
- Much of the existing conflict identified through public consultation took place between bicycles and vehicles thus creating a need for addressing bicycle facilities.
- Cycling facilities were the focus of the 1993 *Bicycle Facilities Study* (from which the majority of the City's new Active Transportation facility recommendations were derived).
- The need to update the results from the 1993 study.

Initially, the Work Plan outlined two public consultations: a telephone survey to provide input for the Study, and an open house or workshop following development of the recommendations and implementation plan.

Five public consultations were held before development of the final recommendations and implementation plan, including:

- participation in the Public Works Spring Survey;
- an Active Transportation Focus Group;
- an On-line Survey;
- access to the results of the Commuter Challenge Contest Entries; and
- a Fall Telephone Survey.

Each of these examined different aspects of Winnipeggers' attitudes towards Active Transportation.

Three of the consultations – the Active Transportation Focus Group, the On-line Survey and the Commuter Challenge Contest Entries – reached a portion of the population that was already involved in Active Transportation. (On-line Survey respondents would also include transit riders, carpoolers and some single-occupancy vehicle users.) These surveys were used to generate ideas for improving AT facilities and ways in which the City could promote and/or enhance the Active Transportation experience. The other two consultations – participation in the Spring Public Works Survey and the Fall Telephone Survey – were random surveys of Winnipeg residents. These consultations primarily addressed the objectives listed in the Terms of Reference and tested ideas developed in the three other consultations.

In addition to the objectives listed in the first paragraph, two others were identified through this increased public consultation:

- Determine the public's awareness of existing Active Transportation facilities in Winnipeg.
- Identify opportunities for the promotion and enhancement of the AT option (facilities, programs, etc.).

Beyond this Study, there has been significant research about the use of and demand for Active Transportation facilities and programs across Canada, the United States and Europe. In Canada, two national surveys completed in the last six years provide insight into the national use of Active Transportation. These surveys set a useful context for analysis of the use and demand for Active Transportation facilities and programs in Winnipeg. The "1998 National Survey on Active Transportation" by *Go for Green* established a participation baseline for Active Transportation (specifically walking and cycling) among adults and school aged children. In 2003, Statistics Canada produced a report based on the 2001 national census data entitled "Where Canadians Work and How They Get There." The results of both surveys have been analysed in this section to supplement the data collection that occurred for this Study.

4.1 National Surveys

1998 National Survey on Active Transportation

The aspects examined in this survey included: participation levels; types of trips; frequency and length of trips; barriers and opportunities for increasing participation; and the magnitude of potential shifts.

The key findings from this survey were (see Table 4.1-1 for comparisons between Manitoba and the national data):

- 85% of Canadians report walking for leisure and recreational reasons.
- 57% of Canadians own a bicycle, however, only 26% cycle "at least sometimes" to a routine destination.
- Almost six in 10 Canadians walk as a mode of transportation "at least sometimes" to a routine destination.

- The top five reasons for choosing both walking and cycling as a mode of transportation in Canada are: exercise/health, pleasure, convenience, environmental concern, and saving money.
- High activity respondents (cycling or walking to any destination more than half of the time) perceive a wider range of benefits – exercise, pleasure, and convenience – while low activity respondents (cycling or walking to any destination less than half of the time) perceive a narrower range of benefits, specifically exercise and pleasure. This suggests that people learn to value an activity by participating in it.
- Pleasure was a significantly more important reason for cycling or walking to low activity respondents than to high activity respondents, suggesting that in order to appeal to the former group they would respond better to "pleasure" or "quality of life" references rather than "health" references.
- The top six barriers to walking or cycling as a mode of transportation in Canada are: distance, time, weather, traffic/safety or bad roads, inconvenience, and health/disability.
- 54% of Canadians believe that cycling is dangerous because of vehicular traffic.
- 82% of Canadians would like to walk as a mode of transportation more than they do at present.
- 66% of Canadians say they would like to cycle more as a mode of transportation.
- 70% of Canadians say they would cycle to work if there were a dedicated bike lane that would take them to work in less than 30 minutes.
- 30% of Manitobans cycle "most of the time" to at least one destination, which is more than double the national average.

Table 4.1-1 Results from the *Go for Green* "1998 National Survey on Active Transportation."

	Manitoba	Canada
Walking Data		
Walk as a mode of transportation "sometimes": All Respondents	52%	58%
Those living within 2.5km (base: 64% of all Canadians)	65%	72%
Attitudes toward walking as a mode of transportation: Never have time to walk	27%	31%
No pleasant places to walk near my home	14%	15%
Would "ideally like to walk more" as a mode of transportation	79%	82%
Cycling Data		
Cycle as a mode of transportation "sometimes": All Respondents	30%	26%
Those living within 8km (base: 84% of all Canadians)	34%	28%
Cycle "most of the time" to at least one destination	30%	14%
Would "ideally like to cycle more" as a mode of transportation	65%	66%
Attitudes toward cycling as a mode of transportation: Support Government spending on bike lanes	83%	82%
Would use bike lane	75%	70%
Cycling is dangerous	52%	53%

Where Canadians Work and how They Get There

This report analyzes a variety of factors including: commuting patterns, shifting locations for work locations, working at home, use of various modes of transportation to travel to work (driving, pubic transportation, Active Transportation), demographics of use, etc. We will focus on the Active Transportation elements found in this report.

The key findings from this study were:

- There was a slight rise in the number of Canadian commuters who drove to work in 2001 as compared to 1996 – up to 73.8% from 73.3%.
- As a province, Manitoba had the smallest proportion of workers who drove to work in 2001 (72.4%).
- 6.6% of working Canadians walked to their place of employment, which was down from 7.0% in 1996.
- There was a marginal increase in the number of Canadians that cycled to work in 2001 – up to 1.2% from 1.15% in 1996.
- Women are more likely to walk to work than men (7.9% and 5.4% respectively), and men are more likely to cycle to work than women (1.6% compared to 0.7%).
- The likelihood of cycling to work declines steadily with age, however, the likelihood of walking to work drops with age until the age of 44, where it then increases steadily with increasing age. Employed seniors were just as likely to walk to work as a worker aged 20 to 24.

Table 4.1-2 provides comparisons on walking and cycling between Winnipeg, Victoria, Edmonton, Calgary, Ottawa/Gatineau and the National data.

Table 4.1-2 - Comparison of Active Transportation commuting across municipalities.

	2001		
	% Walk	% Cycle	Distance*
Canada	**6.6%**	**1.2%**	**7.2km**
Victoria	10.37%	4.80%	4.7km
Edmonton	4.69%	1.19%	7.6km
Calgary	5.62%	1.65%	7.7km
Ottawa/Gatineau	6.80%	1.92%	7.8km
Winnipeg	**6.11%**	**1.42%**	**6.0km**

* Median distance between home and work place.

As discussed below, many of the findings in these two national surveys provide comparable data to that gathered specifically in the public consultation process for the Active Transportation Study.

4.2 Key Findings from Public Consultation for the Active Transportation Study

The following sections outline the key findings from the five public consultation processes that were undertaken for this Study. The detailed results of each public consultation can be found in the appendix to this report.

4.2.1 Public Works Survey

The Customer Services Division of the City's Public Works Department conducts a semi-annual telephone survey to collect data on customer satisfaction. The spring survey consists of questions of snow clearing, potholes, civic buildings, customer services, and transportation issues. The fall survey asks questions about parks, cut restoration, litter, and graffiti. For the Spring 2004 telephone survey, four questions were added to the survey instrument to collect information on Winnipeggers use of Active Transportation. Additionally, the category of "cycling" was added as a possible response to questions about modes of travel people use to reach various destinations.

The data collection period for this survey started on June 5 and ended on July 2, 2004. A total of 300 surveys were completed. The estimated error was ± 5.8%, 19 times out of 20. According to the 2001 Canada Census information for Winnipeg, the sample obtained in this survey was fairly representative of Winnipeggers with two exceptions: males were under represented and seniors were over represented. As a result, the data collected in this survey was weighted statistically to better represent the actual population of the city.

Key findings:

- The vast majority of Winnipeggers drive or are driven by others to their place of work, shopping or social/recreational events. More than 4 of 5 people state that driving or travelling as a passenger (in a private vehicle – not on Winnipeg Transit) is their most frequent mode of transportation (see Table 4.2-1).

Table 4.2-1 Most frequent modes of travel.

	How do you most often travel to:		
	Work	Shop	Social/Recreational Event
Driving/Passenger	79.7%	86.4%	85.2%
Transit	12.2%	6.4%	7.0%
Walking	**4.3%**	**6.1%**	**6.0%**
Cycling	**2.8%**	**0.8%**	**0.3%**
Other	1.0%	0.3%	1.5%

- An average of more than 20% of Winnipeggers use Active Transportation modes at least once a week or more to reach their place of work, shopping or a social/recreational event. However, an average of more than 50% of the Winnipeg population identify themselves as never participating in any form of Active Transportation (see Table 4.2-2).

Table 4.2-2 Frequency of Active Transportation use.

	How often do you use Active Transportation to go to:					
	Work		Shop		Social/Recreational Event	
3+ times/week	**10.5%**	**16.5%**	**8.5%**	**25.3%**	**8.8%**	**21.5%**
1-2 times/week	**6.0%**		**16.8%**		**12.7%**	
1-2 times/month	5.2%		15.2%		17.8%	
1-2 times/year	10.7%		9.6%		14.5%	
Never	67.5%		49.8%		46.3%	

- There is a large group of individuals (up to more than 18% of the population) that have the potential to regularly increase their use of Active Transportation in their commute to work, shop and social/recreational events (see Table 4.2-3).

Table 4.2-3 Comparison of levels of Active Transportation use.

	For travel to and from:		
	Work	Shop	Recreational Event
Most often cycle or walk	7.1%	6.9%	6.3%
Use Active Transportation more than once per week	16.5%	25.3%	21.5%
Difference	**9.4%**	**18.4%**	**15.2%**

- Almost 7 out of 10 Winnipeggers reported that they are satisfied or very satisfied with the time it takes them to travel to and from work, shopping or social/recreation events.

- More than 80% of respondents identified that a personal vehicle was their preferred mode of travel and slightly more than one in 10 Winnipeggers identified that cycling or walking was their preferred mode of transportation.

- Almost 60% or respondents said that there was nothing that could be done to encourage them to walk, cycle or use another form of non-motorized transportation. However, almost 40% indicated that additional infrastructure[1] built by the City would encourage them to participate more in active modes of transportation.

Discussion of key findings:

It was not surprising to discover that the vast majority of Winnipeggers travel in a private vehicle when commuting to work, shopping or social/recreational events, however, more than 20% of adults in Winnipeg were found to regularly incorporate some level of Active Transportation in their weekly routine. Nevertheless, almost half of the adult population in Winnipeg said that they do not engage in Active Transportation, and that almost 60% do not

[1] No specific examples of types of additional infrastructure were presented to the participants in the survey.

believe that there is anything that would encourage them to walk, cycle or use another form of non-motorized transportation to commute to a regular activity.

This survey also indicated that there are a large number of people in Winnipeg who use Active Transportation modes to commute to their place of work, shopping and social/recreational events occasionally, but not as their regular mode of travel. This indicates there is a population in the city that might be open to the possibility of increasing their use of Active Transportation as a regular mode of travel.

See Appendix B for detailed results of this survey.

4.2.2 Active Transportation Focus Group

The goal of this workshop was to generate ideas about Active Transportation barriers, benefits and ways to improve participation for the purposes of the recommendations of this Study, and for testing with the general public through the fall telephone survey. The two-hour focus group was held on Tuesday, June 1, 2004 at the Winnipeg Fairmont Hotel, in conjunction with a lunchtime presentation by Dan Burden, Executive Director of *Walkable Communities*.

The focus group consisted of 10 individuals[2] who regularly participate in some form of Active Transportation for commuting or recreational purposes. The purpose of this selection criterion was to ensure that the discussion and results of the workshop were reflective of contributions by individuals who could speak from personal experience using Active Transportation rather than in a professional advocacy capacity or from no AT experience at all. Participants in the focus group were involved in a number of different modes of Active Transportation, including: cycling, walking, jogging, in-line skating, ice skating, and cross-country skiing. The level of participation in AT by the members of the focus group was not meant to be representative of the general population of Winnipeg.

Over the course of the two-hour workshop, four questions were discussed:

- What is the City of Winnipeg doing that makes Active Transportation an attractive option? What could they be doing more of?
- What are the barriers (specific and general) to Active Transportation?
- What are the solutions to these barriers? What should the City be doing that it is not currently doing?
- How would you get people to participate in Active Transportation (change behaviour)?

The following is a list of the key observations and recommendations of the focus group:

- There was recognition of a number of initiatives and facilities built by the City to improve Active Transportation in Winnipeg. They included: widened curb lanes, some bridge designs and construction (Osborne, Provencher), opportunity for winter activity (skating and skiing), bike racks on buses, and the Parkway system.
- All participants expressed a strong preference to make existing facilities better, rather than build completely new facilities. There was a major focus on the need for:

[2] Focus group participants were: Dan Bullock, Neil Cunningham, Jaymi Derrett, Allan Grant, Molly Johnson, Gord McGonigal, Lawrence Peters, Randall Shymko, Howard Skrypnyk, and Harold Westdal.

    - Resolving connectivity issues between, for example, existing bike routes and Sunday street closures.
    - Incorporating consistency of signage throughout the city, including: informational signage when bike routes transition from one treatment to another (e.g. from on-road bike route to bike path), and warning signage for impending hazards (e.g. lane narrowing in underpasses, bridges).
    - Improving maintenance and repair of curb lanes.
- To increase participation in Active Transportation there needs to be an emphasis on behaviour change. Some of the suggested ways to approach this included:
    - Need to project a positive image of Active Transportation as a mainstream activity rather than a "fringe" activity.
    - A pilot program or demonstration initiative where one significant destination was made accessible through AT modes to highlight how easy it is to reach destinations in Winnipeg using Active Transportation.
    - The need for better education of both drivers and cyclists – drivers should be taught about the rights of cyclists on the streets of Winnipeg and cyclists need to be taught the rules of the road. Tied to both of these is the need for proper and adequate enforcement.
- The image of a city is strongly related to its "friendliness" toward Active Transportation. A network of well-maintained facilities for pedestrians, cyclists and other non-motorized modes of transportation reflects well on the city by both residents and non-residents.
- Work with and help the private sector to promote Active Transportation through incentives and education.
- Need to reinstate something similar to the Bicycle Advisory Group, which was recommended in the 1993 *Bicycle Facilities Study*.

See Appendix C for the complete results of the focus group.

4.2.3 On-line Survey

This survey was not initially a part of the public consultation process identified in the original Work Plan for the Active Transportation Study. However, the opportunity to develop this survey and have it promoted through the existing "Commuter Challenge"[3] activities was presented to the Steering Committee by *Resource Conservation Manitoba* as a possible partnership opportunity.

The purpose of this survey was two-fold:

- Provide information to *Resource Conservation Manitoba* about:

[3] The "Commuter Challenge" is national sustainable transportation event that helps to celebrate Environment Week. During this event, green or active kilometres by employees of participating organizations and businesses are tracked and compiled, and the reduction in greenhouse gas emissions in cities across Canada are calculated from participants collectively choosing green or active modes of transportation. In Winnipeg, the Commuter Challenge is organized by *Resource Conservation Manitoba*.

    - The modes of transportation used during the Commuter Challenge by individual participants.
    - The effectiveness of the Commuter Challenge in changing peoples commuting modes of transportation.
- To survey individuals that were on the "cusp" of becoming Active Transportation users (i.e. people who used AT during the week of the Commuter Challenge, but do not use it regularly) and existing Active Transportation users as to their transportation choices, identification of barriers to Active Transportation, and ways to promote and improve the AT option in Winnipeg.

This survey was based largely on a survey developed by *Resource Conservation Manitoba* for an analysis of transportation options used by employees of an organization with which they were working. This was an iterative survey where participants were allowed only to answer certain questions based on their responses to previous questions. For example, only people who had responded that driving was their most frequent mode of travel to and from work (either in the summer or winter), were able to respond to questions about their commuting preferences as drivers.

This survey was placed on the City of Winnipeg's website, with a direct link from the Public Works Department's home page from June 22 to July 5, 2004. The survey was publicized through *Resource Conservation Manitoba*'s Commuter Challenge database to all the Commuter Challenge coordinators at all participating businesses and organizations, who were asked to forward the link to their fellow employees. Additionally, emails were sent out to participants in the focus group and other interested parties. Finally, there was a large 'word-of-mouth' campaign to solicit participation. Individuals were only allowed to complete the survey once, and there were two prizes awarded randomly amongst individuals who shared their name and email address (as an incentive for participation).

A total of 434 people participated in the on-line survey. This was not a random sample, but a useful way of garnering information from a relatively informed subset of the population about Active Transportation.

This survey was broad ranging and incorporated questions that were not specific to active modes of transportation (e.g. transit, carpooling, etc.) to meet the needs of *Resource Conservation Manitoba*, which partnered with the Active Transportation Study to create and deliver this survey.

The following discussion focuses on the results of the AT-related questions from this survey:

The sample population that responded to the on-line survey was distinctly different from the random samples of the Winnipeg population that participated in the two telephone surveys (The Public Works Survey and the Fall Active Transportation Survey). The population that took-part in the on-line survey were much more likely to be involved in Active Transportation as a commuting option than the general public in Winnipeg, and also tended to live closer to their work place (see Table 4.2-4).

Table 4.2-4 Comparison of sample populations based on survey instrument.

		Survey Instrument		
		On-line Survey (summer & winter)	Public Works Survey (year-round)	Fall Telephone Survey (summer only)
Most frequent mode of travel to and from work	Private Vehicle	44.2%	79.7%	72.0%
	Transit	26.3%	12.2%	13.0%
	Active Transportation	24.0%	7.1%	13.0%
Live less than 8km from work		46.8%	N/A	33.3%

There are a number of explanations for this discrepancy, including:

- The survey was promoted through *Resource Conservation Manitoba's* Commuter Challenge database, the Active Transportation Focus Group, and the Active Transportation Steering Committee. All of these avenues had a strong pre-existing emphasis on Active Transportation, and would tend to target individuals who had a tendency toward participating in AT.
- The nature of an on-line survey requires participants to go onto the Internet and locate the survey, rather than passively participate. As a result, it is not unexpected that those people with a strong interest in Active Transportation would have a higher participation rate than those with no interest in AT.

Accordingly, the discrepancy in the population surveyed on the on-line survey versus the random telephone survey is a direct result of the on-line survey's aim to reach people who were already on the "cusp" or near to being on the cusp of becoming moderate or regular AT commuters.

Key findings:

- The Commuter Challenge event organized in Winnipeg by *Resource Conservation Manitoba* has shown to have a positive effect on 28.7% of participants in previous years, and in 2004 many of them chose cycling or walking as their mode of transportation during the event.
- The primary reason that people mostly cycle or walk to work is for health reasons, with almost three-quarters identifying exercise or fitness as an important motivator. Cost savings was also selected as a main reason why they cycled or walked to work (more than 50% also selected this option). Other popular responses included: good for the environment and convenience.
- When people who mostly drive or carpool to work were asked what would encourage them to cycle to work, the top five responses were the same (see Table 4.2-5).

Table 4.2-5 Methods of encouraging drivers and carpoolers to cycle to work.

	People who mostly:	
	Drive to Work*	Carpool to Work*
Safer cycling routes (bike paths/lanes) built by the City	35.07%	43.80%
More convenient cycling routes between home and work	29.10%	29.20%
If my work place were closer to home	28.36%	22.90%
Access to shower/change room/locker facilities at/near work	21.64%	25.00%
Better maintenance of the roads/shoulders along my route	19.40%	16.70%

* Respondents could provide more than one answer, totals may sum to more than 100%.

- The greatest barriers to cycling to work, as indicated by drivers and carpoolers who stated that they would never commute to work by bike, were distance, safety and the weather.
- When people who mostly drive or carpool to work were asked what would encourage them to walk to work, the top two responses were the same (see Table 4.2-6).

Table 4.2-6 Methods of encouraging drivers and carpoolers to walk to work.

	People who mostly:	
	Drive to Work*	Carpool to Work*
If my work place were closer to home	61.20%	55.20%
Direct walking routes, removed from heavy traffic	14.90%	18.80%

* Respondents could provide more than one answer, totals may sum to more than 100%.

- The greatest barrier to walking to work, as indicated by drivers and carpoolers who stated that they would never commute to work by bike, was distance to work.

- A large proportion of individuals who regularly drive or carpool to work participate in Active Transportation for recreational purposes – indicating that if their barriers were addressed they may be willing to use AT modes for commuting (see Table 4.2-7). At this time we have no explanation for the difference in recreational Active Transportation use between drivers and people who carpool for commuting purposes.

Table 4.2-7 Recreational Active Transportation use by private motorized commuters.

	People who commute mostly by:	
	Driving	Carpooling
Cycle recreationally	56.72%	29.17%
Walk recreationally	70.90%	35.42%

- Among regular cycling commuters, the top five elements that would make their cycling route more enjoyable were:

  1 - Safer cycling routes (bike paths/lanes) built by the City
  2 - Better maintenance of roads/shoulders along their route
  3 - More convenient cycling routes between home and work
  4 - Cycling incentives as part of an "employee benefits package"
  5 - Access to shower/change room/locker facilities at/near work

- When this group was asked to write in one specific change that would improve their cycling route, more then 55% indicated some form of infrastructure improvement, e.g. bike lanes on bridges, bike lane or path along Pembina Highway and other arterials, paved shoulders (St. Anne's and Fermor), and more multi-use paths (along Bishop Grandin). Almost 20% cited maintenance issues, e.g. the cleaning of curb lanes, filling potholes and ensuring proper water drainage.

- Among regular walking commuters, the top three elements that would make their walking route more enjoyable were:

  1 - Direct walking routes removed from heavy traffic
  2 - Walking incentives as part of an "employee benefits package"
  3 - A sense of personal safety along the route

  - When this group was asked to write in one specific change that would improve their walking route, almost 30% indicated some form of improved maintenance (specifically snow removal and street drainage issues), while more than 27% indicated some form of infrastructure improvement (including building more bike lanes to get cyclists off of the sidewalks, more crosswalks and winter walking trail to industrial park areas).

Discussion of key findings:

This survey was very useful in identifying different barriers to using Active Transportation to commute that exist among various segments of the "cusp" or "near-cusp" population (i.e. people who appear to be willing and able to increase their use of Active Transportation). Additionally, the results reconfirmed some of the directions that national AT studies and research have indicated regarding motivation for participation in Active Transportation (improved health, enjoyment, etc.), and provided direction for future promotional or educational campaigns that the City could undertake.

Some of the information that was provided in this Study echoes much of the existing research about barriers and motivations around Active Transportation. Among current users, personal health and fitness was a primary motivator for cycling and walking to work; reaffirming that this is a good message and direction to take in the promotion of AT. Many of the barriers to participation cited throughout the survey are not unanticipated – distance, perceptions of safety (in traffic for cycling and a sense of personal safety for walking), and convenience of routes all rate highly. Once again, the barriers identified in this survey reconfirm many of the findings from the public consultation process for the 1993 *Bicycle Facilities Study* and much of the current information on barriers in the Active Transportation literature. All of this informs us that the main issues (and opportunities) have not significantly changed since 1993.

In the results of this survey it was most interesting that among non-AT users, their list of initiatives that could be undertaken to encourage them to cycle to work, focused on improved safety, improved infrastructure, improved maintenance, and the need for shower or change room facilities at or near their work place. Regular commuting cyclists also listed these four items as some of the most important things that would improve their route. This finding

provides very useful direction as to the nature of the facilities and programming that the City could choose to undertake.

Not surprisingly, distance was identified as a major barrier to Active Transportation commuting, particularly for walking. While this is not a barrier that the City can address directly (or in the near future) as it has more to do with urban design, personal residence choices and work place locations, this provides an educational opportunity about the possibility of incorporating walking into the drive/carpool commute.

A final useful finding from this survey was the large percentage of non-AT commuters who regularly participate in Active Transportation for recreational use. In the absence of some of the barriers mentioned above, it is possible that many of these people could become AT commuters – presenting an attractive target population for any kind of directed promotional or educational campaign. Additionally, given the large numbers that participate recreationally, general improvements to the bicycle, pedestrian and other modes of Active Transportation network would benefit this larger population as well.

See Appendix D for detailed results of this survey.

4.2.4 Commuter Challenge Contest Entries

In conjunction with the 2003 and 2004 Commuter Challenges, *Resource Conservation Manitoba* organized two contests to allow people to share their ideas on how to make Winnipeg a more cycling-friendly city (with the opportunity to win a bicycle in the "Olympia Big Bike Giveaway) and what they would do to self-propel their way to work or school on "Clean Air Day" (with an opportunity to win a piece of Mountain Equipment Co-op gear in the "Self-Propelled Clean Air Day Contest").

A total of 112 people entered the "Olympia Big Bike Giveaway" in 2003 and 2004, providing their thoughts on specific improvements on how to make Winnipeg a better place to bike and a total of 42 participants entered the "Self-Propelled Clean Air Day Contest" in 2003 and 2004 with Mountain Equipment Co-op, where they described what piece of equipment would help their "Clean Air Day" commute. Like the Commuter Challenge On-line Survey, it is likely that the participants in these contests are not representative of Winnipeg's population. Rather, it is most likely that these individuals are committed, at some level, to Active Transportation – given their desire to win a bicycle (in the "Big Bike Giveaway") or some type of AT gear from Mountain Equipment Co-op (in the "Clean Air Day Contest"). Thus, these results are believed to be the views of regular users of Active Transportation.

Participants in the "Big Bike Giveaway" identified a number of specific limitations to a pleasant cycling experience, with cyclist safety/hazardous traffic conditions being number one, with almost double the number of citations than any other limitation. The next two frequently named limitations were lack of designated cycling infrastructure and disrespectful drivers.

Within the 112 contest entries to the "Big Bike Giveaway," more than 327 specific infrastructure and/or program recommendations were made, which could be grouped into five broad categories (see Table 4.2-8).

- New Transportation Facilities (including bike lanes, bike/multi-use paths, widen curb lanes, building connectivity, barriers built between cyclists and traffic and paving shoulders)
- Other Transportation Facilities (including more/better bicycle parking, maintenance/cleaning, more signed bike routes, improved signage, bike racks on buses, and more weekend street closures)
- Government Initiative (including allowing bikes on sidewalks, policy and planning recommendations, improved enforcement of rules, tax incentives for Active Transportation, driving disincentives, and allocation of more funding)
- Education/Promotion (including targeting: drivers, cyclists, kids, and safety issues)
- Miscellaneous recommendations (including metal slide along stairs, cycling insurance from MPIC, extension of time for which a bus transfer can be used, and managing the floodway to reduce flooding of the River Walk).

Table 4.2-8 Summary of recommendations from the "Big Bike Giveaway."

	Recommendation	
	Frequency	Percentage
New Transportation Facilities	106	32.4%
Government Initiatives	72	22.0%
Other Active Transportation Facilities	64	19.6%
Education/Promotion	60	18.3%
Miscellaneous	25	7.6%
Total	327	100.0%

The top five specific recommendations for improving the cycling experience in Winnipeg were: bike lanes on major arterials and bridges, more multi-use/bike paths, improved education of drivers and cyclists, marketing and promotion of Active Transportation as a mainstream activity and cycling safety, and allowing bikes on sidewalks. Increased bicycle parking and maintenance/cleaning improvements were cited sixth and seventh most frequently respectively.

The results from the "Clean Air Day Contest" were less applicable to this Study as the responses focused on a desired product that the participants needed/wanted from Mountain Equipment Co-op. Much of the gear that was identified was to help the participant deal with one of three primary barriers to Active Transportation – convenience, weather, and safety. The majority of the participants in this contest were cyclists and tended to cite the need to carry their work material, or a change of clothes for work (thus were requesting panniers and/or a rear bike rack). Another frequent request was for rainwear to help them better deal with inclement weather, while either cycling or walking. Safety issues focused on walking and cycling in traffic and the need for reflective gear to warn drivers of their presence.

Discussion of Key Findings:

The results of the "Clean Air Day Contest" reiterated a number of the barriers to participation in Active Transportation, but also identified some of the easy ways these limitations could be addressed through the acquisition of some form of outdoor gear.

The information gleaned from the "Big Bike Giveaway" provided more detail than the Commuter Challenge On-line Survey as to specific improvements that could be made. In many respects, this open-ended format reconfirmed the categories of improvements and recommendations that were tested in the Commuter Challenge Survey, and helped develop the categories for the Fall Telephone Survey.

It was interesting to note that non-facility recommendations appeared very high on the list from the participants in the "Big Bike Giveaway." Education, promotion, enforcement, and policy and planning were all highly recommended ways in which the City could improve AT opportunities in Winnipeg. This finding is very important in providing support for the need for non-facility programming and policies around Active Transportation.

See Appendix E for detailed results of these contests.

4.2.5 Fall Telephone Survey

The "Active Transportation in Winnipeg Telephone Survey" was conducted by Prairie Research Associates Inc. for the Active Transportation Study. The objective of this survey was to understand:

- Current methods of transportation used by the general public to commute to work, school, shopping, and for recreation.
- Both the general and specific uses of Active Transportation modes.
- The barriers that exist to better use of Active Transportation modes.
- The awareness and use of current facilities to encourage Active Transportation.
- The identification of what might encourage more use of Active Transportation modes.

In 1992, as part of the original Winnipeg *Bicycle Facilities Study*, a combination of telephone and mail-back surveys were implemented to obtain a large survey sample of the target population: bicycle owners and riders. This process was seen as establishing a useful baseline for future surveys. The recent telephone survey that was conducted in October 2004 for the Active Transportation Study was not specifically targeting bicycle owners and riders, but rather was focusing on a broader array of AT modes. However, the 2004 survey builds on some of the knowledge garnered from the 1992 survey although there are few directly overlapping questions. Additionally, the difference in methodology (mail-back versus telephone) made direct comparisons of results difficult.

This survey was conducted between October 1 and 21, 2004. Respondents were selected by random digit dialling, which produced a random sample that included the highest possible percentage of eligible respondents. This comprehensive survey of 69 questions was conducted in October 2004 with a sample size of 602 Winnipeg residents. This survey has an estimated error rate of ±4.1%, 19 times out of 20. According to the 2001 Canada Census information for Winnipeg, the sample obtained in this survey was representative of Winnipeggers, however, slight discrepancies in gender, age and income were corrected by weighting the data.

Key findings:

General participation in Active Transportation

- Currently 84% of Winnipeggers use AT to some degree for commuting or recreational purposes in the non-winter months – almost 8 in 10 walk, more than 40% cycle (among those with access to a bike – almost 60% use it in the non-winter months), about 1 in 7 uses other forms of Active Transportation, such as in-line skating or skateboarding (44% of those with the equipment report using it in a typical non-winter month).
- Almost 70% reported that they incorporate cycling, walking, in-line skating or other modes of Active Transportation into their regular non-winter routine.
    - A typical Winnipegger reports walking four times per week or cycling once a week in the non-winter months.
    - When all Active Transportation activities are combined, residents of Winnipeg appear to be quite active. Indeed, a typical Winnipegger claims to participate in AT activities five times a week in non-winter months (see Table 4.2-9).

Table 4.2-9 Amount of participation in Active Transportation during non-winter months.

Never	15%
1 – 4 times per week	36%
5 – 8 times per week	32%
9 or more times	17%

- The intensity of use varies within the population to the point where three main categories of users can be identified:
    - Irregular users – people who walk less than 5 times per week or use another form of Active Transportation less than 3 times per week.
    - Regular users – people who walk 5 or more times per week or use another form of Active Transportation 3 or more times per week.
    - Commuters – people who self-identify as using Active Transportation to commute to work at least occasionally.
- Only 32% of residents use Active Transportation in the winter months at least occasionally.
- With the exception of walking (79% of Winnipeggers say they walk for commuting or recreational purposes), participation in Active Transportation declines with age, and significantly drops off after the age of 65 (this may be explained by results discussed later in this section, where personal health is identified as a barrier to participation in Active Transportation).
- Other than walking, driving is the most accessible mode of transportation for Winnipeggers, with 84% of the adult population having both access to a motorized vehicle and a valid drivers licence. Access to non-walking modes of Active Transportation (i.e. access to equipment, such as a bicycle, in-line skates, etc.) is lower, and significantly lower for individuals over 65. However, approximately 75% of people aged 18 to 64 have access to a bicycle, and 50% of people aged 18 to 39 have access to in-line skates and/or a skateboard.
    - The population with access to equipment has a much higher rate of participation than the general public.
- While approximately two-thirds of all Winnipeggers have access to a bike, only around 50% cycle, at least occasionally, in the summer months.

- Participation in Active Transportation has not grown among residents of Winnipeg over the past five years. Slightly more people are walking more than they did five years ago, but participation in cycling has declined during this time period – while 17% say they bike more now, twice as many (35%) indicate that they bike less. The most significant decline in cycling has occurred in the 18 to 24 age group – 54% report cycling less now.
    - Some of the primary contributors to reducing participation in cycling, walking and other Active Transportation modes included: health concerns/too old, no access to a bike, not enough time/distances too far, and safety issues/too much traffic.

Commuting and Active Transportation

- The vast majority (82%) of Winnipeggers commute to work using a private vehicle (either driving alone or with others). For 66%, driving alone is the method they use most often.
- More than one-quarter of Winnipeggers use an Active Transportation mode to commute to work at least sometimes in the non-winter months, with 13% (8% walking and 5% cycling) using AT most often to reach their work destination.[4]
- Adults attending school are much less likely than workers to commute by driving, however, driving alone is still the most common method of commuting (42% say that this is the method they use most often).
- 40% of adult students use Active Transportation at least occasionally to reach their school destination, with 25% citing that they use this mode of transportation the most often.
- School age children are more likely to use active forms of transportation on their commute to school than are adults commuting to work or school (see Table 4.2-10).

Table 4.2-10 Comparison between different types of commuters.

Method of transportation used, at least occasionally:	Type of Commuter					
	Adults to work		Adults to school/university		Children to school	
Drive alone or with others	78%		52%		52%	
Winnipeg transit/School bus	22%		28%		41%	
Walk	15%	Total AT 25%	22%	Total AT 40%	39%	Total AT 47%
Cycle	12%		11%		16%	
Other AT	<1%		1%		5%	
Average distance to destination	11.5 km		10.7 km		N/A	

- There is an important population that occasionally commute using Active Transportation, which regularly use a motorized commuting option (see Table 4.2-11).

[4] This statistic is very different from the data collected by Statistics Canada in 2001. One possible reason is that their survey questions ask about mode of transportation for the purposes of commuting to work in the week prior to the due date of the survey (May 15). At this time of year, people are not yet into a regular outdoor routine in addition to variable weather, which can play a significant factor in participation in Active Transportation decisions.

Table 4.2-11 Occasional Active Transportation commuters.

Most common mode of commuting to work:	Also occasionally commute by:		
	Any Active Transportation	Cycling	Walking
Drive alone *(66% of commuters to work)*	**14%**	10%	6%
Winnipeg Transit *(13% of commuters to work)*	**31%**	17%	17%
Most common mode of commuting to school (adults): Drive alone *(42% of adult commuters to school/university)*	**7%**	N/A	N/A
Most common mode of commuting to school (kids): Drive alone/with others *(52% of households with school-aged kids)*	**30%**	N/A	N/A

- Distance to work appears to play an important role in the choice of transportation method.
    - Those who use Active Transportation to commute, at least occasionally, to get to work live the closest to their work place, an average of six kilometres. Some 65% live within eight kilometres of their work place. Those who cycle live further away than those who walk (almost all of whom live within four kilometres of their work place).
    - 33% of all people who work outside of their home live within eight kilometres of their work place, while the average distance that Winnipeggers travel to reach work is 11.5 km.[5] A total of 38% of people who commute to school live within eight kilometres of their destination.
    - The closer people live to their work (or school) destination, the more likely they are to engage in a mode of Active Transportation for their commute. Conversely, the further people live from their work destination, the more likely they are to drive. The average commuting distance for drivers, transit users and AT users is: 14 km, 12 km, and 6 km respectively.
    - People who live within eight kilometres are much more likely to commute to work using Active Transportation (see Table 4.2-12).

Table 4.2-12 Comparison of modes of transportation to work by distance.

Transportation mode for commute to work:	General population	Population within 8 km
Drive (always)	66%	36%
Public transit (always)	13%	18%
Active Transportation (occasionally)	26%	46%

[5] This is a significantly further distance than the Statistics Canada data discussed above in Section 4.1. A few possible reason for this difference are: this Active Transportation Telephone Survey removed those people that work at home; the responses provided in this survey were based on the participants best guess as to the distance from work and most people have a tendency to estimate higher and/or round-up.

- Half of the Winnipeg population uses some form of Active Transportation some of the time for making short trips to run errands or for work purposes, and 20% walk or cycle most of the time, however, the vast majority drive alone for these trips most often (63%).
- 86% of participants regularly shop in stores within two kilometres of their home, and about 70% of those people indicated that they use AT sometimes to visit these stores. However, there are still more than one-quarter of people who do not use AT to visit stores where they shop regularly that are within two kilometres of their home.
- While active modes of transportation may be incorporated into most Winnipeggers' regular routines, only about 1 in 5 (17%) use such methods to commute to work or school even occasionally during the non-winter months.
- The demographic profile of an Active Transportation commuter is: 18 – 24 years of age with some post-secondary education. There is no difference in gender in the use of AT for commuting purposes.

Active Transportation Facilities

- When Winnipeggers were asked to name – top of mind – any changes that had been made in the last 10 years by the City to encourage the use of bicycles, more than 40% stated that they knew of no changes and a further 12% had no response. Of the remaining respondents, the top three facilities identified were:
    - more bike paths/bike trails/bike routes (29%)
    - bike racks on buses/cyclist-friendly bus routes (15%)
    - bike lanes on roads/wider lanes on some routes (10%)
- When respondents were asked about specific improvements, there was greater awareness but limited use of the facilities by the general public. Of those people who were both aware of the improvements and had access to a bicycle, no more than half had used any of the identified facilities (see Table 4.2-13).
    - However, only 6% of all Winnipeggers were aware of all six of these improvements.

Table 4.2-13 Awareness and use of existing bicycle facilities in Winnipeg.

	General Population		People with access to bikes that were aware of and had used the improvement.
	Aware of Improvement	Used the Improvement	
Diamond Lanes and/or Bike Lanes on Norwood Bridge	80%	8%	22%
Bike Racks on Buses	51%	1%	3%
Designated Bike Routes	50%	15%	44%
Parkway System	47%	14%	47%
Widened Curb Lanes	32%	7%	38%

- The more Winnipeggers use active modes of transportation, the less satisfied they are with the Active Transportation facilities in the city. Among AT commuters, only 12% are very satisfied, relative to 25% that are dissatisfied (see Table 4.2-14). As noted in 4.2.5, the three main categories of AT users are identified as follows:
  - Irregular users – people who walk less than 5 times per week or use another form of Active Transportation less than 3 times per week.
  - Regular users – people who walk 5 or more times per week or use another form of Active Transportation 3 or more times per week.
  - Commuters – people who self-identify as using Active Transportation to commute to work at least occasionally.

Table 4.2-14 Satisfaction with AT facilities by use of Active Transportation.

Satisfaction rating:	Type of Active Transportation user		
	Irregular	Regular	Commuter
Very satisfied	22%	23%	12%
Somewhat satisfied	25%	26%	33%
Neutral	28%	21%	19%
Dissatisfied	18%	28%	35%

- When asked to compare their perceptions of Winnipeg's Active Transportation facilities to other major cities, of those respondents with an opinion, only 19% said that they were better and fully 45% felt they were worse.
- The top three facilities improvements that respondents felt would cause them to cycle more are: off-road paths, on-road bike lanes, and signed bike routes. Among regular and commuter users, there is a much stronger indication that participation in Active Transportation would increase "much more" if these types of facilities were built (see Table 4.2-15).
  - Among current transit users, 45% indicated that they would cycle much more often if they could ride their bike to a depot and then catch a bus.
  - Within the category "pathways," pathways through parks and developing more riverbank pathways were identified as increasing possible participation more highly than multi-use paths along major arterial streets. However, all three types were individually rated as high or higher than all other different types of facilities (bike lanes, street closures, etc.).

Table 4.2-15 Impact of improved facilities.

	Participate in Active Transportation much more often (rated 8-10)		
	Irregular	Regular	Commuter
More pathways (between parks, along rivers, etc.)	42%	64%	72%
On-road bike lanes that are striped and signed	21%	31%	52%
Designated signed bike routes throughout the city	18%	27%	43%
Park and ride depots throughout the city	20%	24%	35%
More street closures on Sunday and holidays	15%	24%	23%

- More than three-quarters of Winnipeggers (whether they are regular AT users or not) believe that it is somewhat or very important to upgrade the Active Transportation facilities in the city. This percentage grows to 85% among the active commuter population.
- Tied to this, 68% of Winnipeg residents stated that these facilities should be a priority in the City's budget for transportation infrastructure and initiatives (38% - high priority, 30% - priority).

Encouragement of Active Transportation

- Of all respondents, 6 in 10 were able to identify something that might encourage them to use Active Transportation more often, while 32% explicitly stated that nothing could encourage them. However, of those who indicated there was something that could motivate them, five main motivational categories were identified – more facilities, solving concerns about safety, personal health issues, life circumstances, and other (see Table 4.2-16).

Table 4.2-16 Percentage of Winnipeggers that could be encouraged to use Active Transportation methods.

	Could be encouraged	All respondents
More/better facilities (paths, bike lanes, bike routes, bike parking, etc.)	32%	20%
Health (improved health, make them healthier)	18%	11%
Addressed safety concerns (better drivers, etc.)	15%	10%
Life circumstances (more time, people to go with, closer destination, etc.)	24%	15%
Other (weather, cost saving, etc.)	30%	19%

- Among respondents who are currently walking or cycling more than they were five years ago (35% and 17% respectively), health and fitness was cited as one of their main motivators (37% of walkers and 31% of cyclists). Other top of mind motivations identified were:
    - Proximity to facilities and travel destinations (23% of walkers, 15% of cyclists)
    - Other health reasons (20% of walkers, 14% of cyclists)
    - Enjoyment (7% of walkers, 9% of cyclists)
    - Now own a bicycle (15% of cyclists)
- Although most Winnipeggers feel that they are already quite knowledgeable about the health benefits of Active Transportation, many (56%) would be more likely to participate more fully in AT choices if they knew more.
- There is potentially a significant population who live within an "Active Transportation commute"[6] to regular destinations, who do not currently use AT as a mode of travel, or do so infrequently. For example, 20% of all people who always drive to work live within eight kilometres of their work place. Within this population, 67% have access to a bicycle – this represents a total of 13% of Winnipeggers who always drive and about 11% of all individuals working outside of the home.

Importance of Active Transportation to Winnipeggers

- Winnipeggers (whether AT users or not) say that the presence of Active Transportation facilities, such as the Parkway system, make them feel much more or more positive about their city (79%).
- More than 55% of residents felt that it was very important for the City of Winnipeg to upgrade and increase its Active Transportation facilities, with an additional 20% indicating that it was important.
- Not only do Winnipeggers feel that it is important to upgrade and increase Active Transportation facilities, they also indicate that these facilities should receive budgetary priority – 68% (see Figure 4.2-1).

[6] People who live within eight kilometres of their destination. This is the cut-off distance for the majority of the Canadian population to engage in some form of Active Transportation for the purposes of commuting. See Section 4.1 above and the discussion of the results from the "1998 National Survey on Active Transportation" by *Go for Green*.

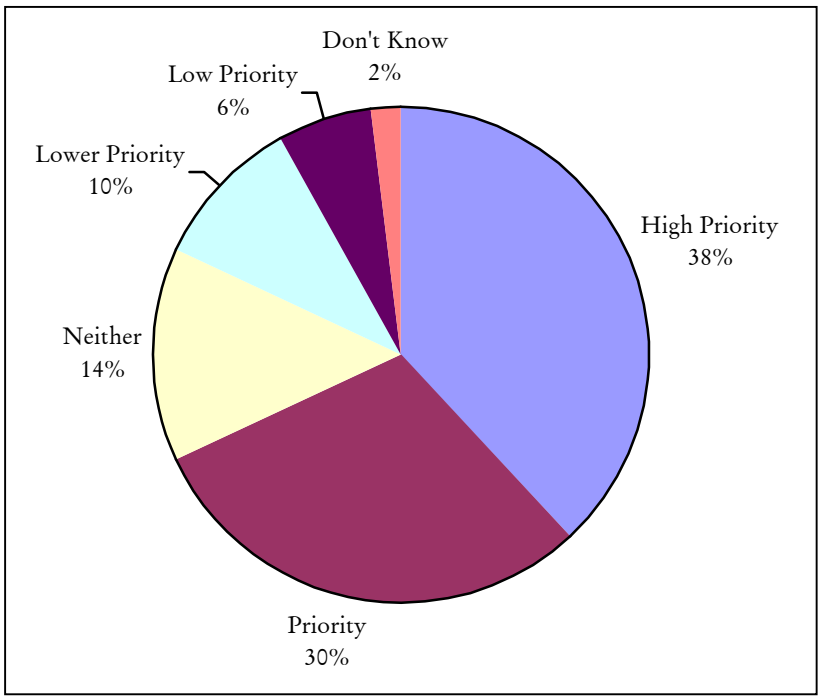


Figure 4.2-1 Budget priority for upgrading Active Transportation facilities.

Discussion of key findings:

A very large percentage of Winnipeggers report using Active Transportation to some degree in the non-winter months, and almost 70% state that they incorporate AT into their regular routine. This indicates that most Active Transportation users in the city are recreational, as less than one in five use AT to reach primary destinations, such as work or school. In the winter, total participation drops significantly with less than one-third of residents saying they use Active Transportation, for any reason, during this season.

Among the different modes of Active Transportation, walking is the most popular, with more than three-quarters of the population indicating they walk for commuting or recreational purposes in the non-winter months. Participation in other modes, including cycling, in-line skating, skateboarding, etc., is significantly less and declines steadily with age. This is due in large part to the equipment that is needed to engage in these modes of travel. Of those people with access to a bike and/or in-line skates, approximately one-half use the associated active mode of transportation at least occasionally in the non-winter months.

Not unexpectedly, distance to a destination was found to be an important element in people's propensity to use Active Transportation for commuting purposes. This is complemented by the finding that, as commuters, school aged children (who tend to live very close to their primary commuting destination) and adults attending school/university (who, on average, live somewhat closer to their destination than working adults) are much more likely to use cycling or walking as a way of reaching their destination than adults travelling to work. This information can be used in future programming and promotional campaigns that target specific populations that may be predisposed or have the ability to participate in Active Transportation for commuting purposes.

Similar to the results from previous elements of the public consultation and the national surveys, Winnipeggers in this survey identified health issues as a primary motivator for their participation in Active Transportation. While most residents felt that they were fairly knowledgeable about the health benefits of Active Transportation, many said that they would be more likely to have higher rates of participation if they knew more. Other key items that people said would encourage them to travel more by AT modes included: addressing safety concerns, more and better facilities, closer destinations, and cost savings. Again, this information can be used by the City when designing specific promotional campaigns and making decisions about future facility construction.

Strong support for increased and improved facilities was indicated through both the relatively low satisfaction expressed about existing facilities by Winnipeggers and the level of importance that they said should be placed on upgrading and increasing Winnipeg's Active Transportation facilities. Additionally, more than two-thirds indicated that AT facilities should receive budgetary priority.

Of the various new facilities that could be implemented in the city, off-road pathways and on-road bike lanes received the strongest support among respondents to this survey. This is quite different from the existing facilities that receive the most usage – the designated bike routes and the parkway system – indicating there is a desire among Winnipeggers to have increased commuter-friendly routes and to have some of the traffic related issues associated with bicycle riding addressed in addition to recreational facilities. There was, however, a strong correlation between the strength of the desire for improved bicycle facilities and the level of current use of Active Transportation facilities.

Other than providing specific data about Winnipeggers attitudes and experiences using Active Transportation, this telephone survey supplied significant information about people who could be on the "cusp" of increased participation in Active Transportation. There is a substantial portion of the population (56%) who say that they would be more likely to participate more if they were provided more information about the health benefits of AT. Additionally, this survey was able to demonstrate that there is a variety of populations that use Active Transportation occasionally for commuting or recreational purposes, many of whom could be converted into more frequent AT users. Some of them live within the eight kilometre distance to their work or other primary destination, and others could be encouraged to walk or cycle more for other purposes, including running errands, etc. This survey also indicated that almost 40% of Winnipeggers who at least occasionally use Active Transportation stop travelling this way in the winter months – another group, that with education, could be converted into more frequent AT users.

See Appendix F for the final report of this survey.

4.3 Public Opinion in Winnipeg Regarding Facilities

Throughout the consultative process there was recognition among regular Active Transportation commuters of existing efforts put forth by the City to improve and build more AT facilities since the release of the 1993 *Bicycle Facilities Study*. These individuals expressed a clear desire for the continued development of Winnipeg's Active Transportation infrastructure

and a focus on improving what currently exists rather than building completely new and/or unrelated facilities. This was most evident in the discussion of the Focus Group, and in the results of the Commuter Challenge On-line Survey and the Commuter Challenge contest entries. That said, there was still strong support among the entire spectrum of Winnipeg residents for more and new Active Transportation facilities.

Throughout the public consultation process and in the results from the "1998 National Survey on Active Transportation," facilities that addressed the issue of safety dominated. While many other barriers to participation in Active Transportation (specifically cycling) were brought forth, facilities that focused on removing cyclists from traffic proved to be the most popular. New facilities that were strongly recommended across the different consultations included: construction of multi-use/bike paths (connecting parks, along rivers, and adjacent to major arterial roads); designated and signed bicycle lanes; bike routes; and widened curb lanes. In open format questions that asked how to improve the cycling experience in Winnipeg, a frequent suggestion was to allow bicycles on sidewalks – thus addressing the conflict between cyclists and motorists and the correlating perceived safety issues of cycling with vehicular traffic. However, it must be recognized that this potentially brings cyclists into a new conflict area – between cyclists and pedestrians. While allowing cyclists on sidewalks is an option that deserves further evaluation in some circumstances, other choices go a long way to resolving the primary concern that lies behind the cycling on sidewalks option, including education of drivers and cyclists about safe interactions, and the different facilities already mentioned.

Maintenance and improved regularity of cleaning curb lanes, shoulders and shy zones on bridges were strongly recommended throughout the consultative process, and particularly among current Active Transportation users. As these are the areas that are used primarily by cyclists, the build-up of grit and/or puddles that occurs over the course of the non-winter months make them unsafe and unpleasant on which to cycle, often forcing cyclists into the main flow of traffic. Maintenance and cleaning were also issues raised in the various public consultations for pedestrians, as related to snow clearing and drainage of puddles in curb lanes.

A final facility recommendation that was frequently cited throughout the consultation was improved access to secure bicycle parking. Not only was secure bike parking at major destinations an important facility for many cyclists, secure bike lockers at Transit Park & Rides were cited by many transit users as something that would encourage them to cycle more.

This public consultation process has shown that there is strong public support for spending on Active Transportation infrastructure. Additionally, the majority of Winnipeggers view AT facilities as being a priority within the City's transportation budget. Not only is there strong support for more and improved Active Transportation infrastructure, these facilities are important to Winnipeggers and impact how they feel about their city, making AT facilities a significant quality of life issue for residents of Winnipeg.

4.4 Public Opinion in Winnipeg Regarding Programs/Policy

Although there were less direct opinions on the types of programs or policy changes that the City could act on than there were for AT facilities, the respondents behaviour and attitudes

toward non-motorized modes of transportation provide direction as to the types of programs and policy changes that could be implemented. Throughout the consultative process, a number of barriers to participation were frequently reiterated: perceptions of safety, distance to destinations, weather, poor road conditions, inconvenient routes, and personal health issues. While some of these are strictly facility-oriented (road conditions) or are unchangeable (weather), many of these constraints can be addressed through programming and policy. Safety, particularly for cyclists in traffic, is not solely a facility issue; indeed, developing educational and promotional campaigns that teach drivers and cyclists about appropriate behaviour and interactions on the road go a long way to addressing this issue. The results of the On-line Survey, the Commuter Challenge contests and the Active Transportation Workshop all highlighted the public's demand for improved education for both drivers and cyclists.

While not ranked as the highest area for the development of programs and policy, enforcement issues were frequently identified as an area that needed improvement. In many ways, this concern is connected with the desire for improved driver education about the right of cyclists to be on the roads of Winnipeg, and for improved cyclist education about the rules of the road. This, in turn, assists in resolving aspects of the safety issue.

Distance as a barrier to increased participation in Active Transportation, particularly for commuting purposes was frequently mentioned. Although it is not possible to change people's residence or commuting destinations through programming or policy, it is possible to educate commuters about ways of incorporate cycling, walking or other non-motorized modes into their commute (e.g. driving part of the way and walking to the final destination, walking during the work day to nearby meetings and errands, or getting off the bus a few stops early to incorporate Active Transportation). Of course, as new facilities are built that would ameliorate the non-motorized portion of the commute, promotion of these facilities by the City would be very valuable.

One programming element that the Fall Telephone Survey, in particular, highlighted was the need for the City to improve the overall promotion of its Active Transportation facilities. More than 40% of survey respondents stated that they were not aware of any improvements to the AT infrastructure in Winnipeg over the past 10 years. When asked about six specific improvements,[7] there was increased awareness, but only 6% were aware of all six. Increasing Winnipegger's awareness of Active Transportation through promotion, advertisements, announcements, and education is clearly indicated.

The public consultations conducted for this Study revealed that there is a large number of Winnipeggers who have both the opportunity and the desire to increase their participation in Active Transportation (people who live within eight kilometres of a primary destination and people who would like to participate more recreationally or for commuting). These people, identified as being on the "cusp," are a prime target audience for any type of promotional or educational campaign in which the City engages. Other groups that could be targeted include: people who stop using Active Transportation in the winter months, people who used to participate more than they do today, and children. The results of the various surveys

[7] The six improvements were: diamond bike/bus lanes, bike racks attached to buses, designated bike routes, the Parkway system, bike lanes on the Norwood Bridge, and widened curb lanes.

conducted for this Study confirmed the national data, specifically that health reasons were the strongest motivators for participation, indicating that general Active Transportation promotional and educational campaigns emphasizing health would be well suited to Winnipeg.

On the policy side, among current AT users there was a strong desire expressed for long-term planning that incorporated Active Transportation into the process. In association with this, participants indicated that they wanted a reinstated Bicycle (or Active Transportation) Advisory Committee put in place. This was seen as a key way of ensuring the future Active Transportation needs of the city be met on an ongoing basis.

4.5 Summary and Key Observations

Public consultation plays a key role as it reveals public opinion on and appetite for Active Transportation facilities or programming in Winnipeg. Over the course of the public consultation for this Study, a total of 1,500 residents of Winnipeg were consulted either through the telephone survey, on-line survey, focus group, or contest entries.

Throughout the consultative process, there was significant consistency in the message that Winnipeggers were sending. Notably, their views did not differ significantly from the general thoughts expressed across Canada in the two national comparative surveys.

Here is what Winnipeggers said:

- Active Transportation is important to their quality of life.
- There is a strong need to bring Active Transportation options into the mainstream of transportation choices.
- The City could help to increase their participation in Active Transportation through the construction and improvement of related facilities.
- There is a need for increased awareness, education and promotion of the Active Transportation option and its related facilities.
- Winnipeggers feel it is important for the City to promote and expand its Active Transportation network and they believe Active Transportation deserves priority in the City's budget.

Perhaps one of the most significant findings is that a considerable population in Winnipeg participates in some form of Active Transportation, but they are not regular AT users. Thus, these people would be inclined to increase their participation in Active Transportation if their specific barriers to participation were addressed. This is essentially a "cusp" population. Much of the previous research[8] on Active Transportation indicates that the cusp population is the best group to target AT promotion to effectively create a modal shift in behaviour change.

Another key finding revealed that relatively few Winnipeggers are aware of the progress that has been made in Active Transportation facilities in the city.

These messages and key findings from the public consultation demonstrate a public desire for the City to financially commit to strategically improve and construct AT facilities. They also

[8] See: material produced by *Go For Green* – www.goforgreen.ca; and Ogilvie, D., et. al.

suggest a need for the City to increase public awareness of improvements to facilities and to meet public demand on the programming side, which could be accomplished by:

- Marketing new programs and facilities to increase public awareness.
- Launching a targeted campaign advocating Active Transportation to individuals who are on the "cusp" of becoming regular AT users.
- Using City-owned advertising mediums to promote programs and events to encourage participation in Active Transportation (e.g. Leisure Guide, bus boards).
- Releasing reports and studies on Active Transportation to the public.
- Providing or supporting education about Active Transportation.
- Using the City's web site to provide information to the public about facilities and programs, and the Active Transportation option.
- Allowing the public to have input on planning and ongoing maintenance issues through a feedback mechanism, such as an e-mail address and phone line.
- Incorporating AT facilities in all new transportation infrastructure projects and infrastructure renewal projects where physically possible, and by enhancing accommodation of AT functions within all City right-of-ways and where deemed reasonable or feasible with particular focus placed on the facilities that constitute the proposed AT network.

In addition to the information gathered from public consultation within Winnipeg, there is an opportunity to learn from the experiences of other cities. In some cases, there are approaches being used elsewhere regarding funding, programming or facility development that could be modified to fit Winnipeg's needs. Also, there are lessons to be learned from the experiences of other cities, some worth emulating and some worth avoiding. The next chapter explores the experiences of seven other cities, five in Canada and two in the United States.

5.0 Experience Elsewhere

5.0 Experience Elsewhere

There is an opportunity to draw from the experiences of other cities both for comparison and to learn about different approaches to facilities and programming that could be adapted for use in Winnipeg. This section provides Active Transportation highlights from Moncton, Ottawa, Calgary, Edmonton, Victoria, Minneapolis, and Portland. These cities were chosen because of their reputation regarding Active Transportation or because of a similarity to Winnipeg in size or climate.

Following the city highlights is an overview of programs that, in some cases, are offered in multiple cities. They include targeted programs for youth, employees and adults, as well as community-wide participatory programs. The final section outlines the lessons for Winnipeg drawn from the experience in these other cities.

5.1 Active Transportation in Select North American Cities

5.1.1 Moncton, New Brunswick

Moncton began to focus on Active Transportation over the last two years, as part of a commitment to improve the health and fitness of the city's residents and accommodate those who wish to use active modes of transportation. The Mayor, who was disturbed by Moncton's poor showing in a national survey of obesity rates and fitness levels, championed this new healthy approach plus a Councillor, who chaired the city's environment committee, struck a subcommittee to move forward with Active Transportation initiatives.

The foundation of Moncton's plan is a 'community-identified' network comprised of major streets and trail routes, along with community streets that residents indicate they would use to bike or walk to their destination.

To gather this information, two public workshops were held to talk about Active Transportation, what it means, and which modes fall under this category. Participants, varying from children to seniors, then went to work in small groups with maps of the city to identify where they live and where they would like to commute. What the City of Moncton heard was that people want to be able to bike (or other modes) to work, want to get their kids to school in active modes, and get to parks and to shopping. The city is now using these target areas as the basis of their work plan. Long-term plans include infrastructure, such as bike lanes, signs and bike racks, along with education.

At this time, Moncton does not have a dedicated staff position for Active Transportation. The lead person is the Community Development Officer, who is responsible for sport, recreation and active living.

While the main thrust of the strategy focuses on health and fitness, Active Transportation elements are woven throughout. For example, the flagship program, called "Stepping Out Moncton." is a pedometer-based active living program launched in January 2004. It incorporates walking or cycling to work, school or shopping as a means for a participant to reach his or her goals. (Equivalent 'steps' are identified for other activities, such as cycling.)

Most recently, Moncton made a concerted effort to put bike rack systems in the downtown area. Their availability and locations were then promoted to the public. Current plans involve putting a bike lane on two major arterial streets and signing other bike lanes. There are also plans to erect panels on 'multi-modal' stations where people lock up their bikes. These panels would contain bike route maps and community events.

The city's web site includes information on the creation of AT facilities in the Moncton Parkway System, how to become active and the benefits of physical activity. Once the map is completed, it will be added to the site.

The City of Moncton has not worked into its strategy any method to track or measure effectiveness of their efforts. The reasoning is that the foundation of their plan came directly from the public and their need for a system that is safer than what is now available.

The bulk of funding for Active Transportation initiatives is provided by the City of Moncton. They have financially partnered with Go for Green, Health Canada, Transport Canada, the provincial milk producers association (title sponsor of "Stepping Out Moncton"), and the provincial health department (main sponsor for "Stepping Out Moncton"). The City partnered with fitness facilities to voluntarily deliver the Stepping Out Moncton program on the basis that participants could potentially turn into customers; almost every gym invited to be part of the program chose to join. Moncton has also partnered with schools and the RCMP to deliver youth-oriented education, such as the "Wiserider" program. They have not had success in attempts to partner with the provincial environment or transportation departments.

In April 2004, the four Atlantic provinces and the City of Moncton held an Active Transportation conference called "Moving Actively through Atlantic Canada." Funding assistance came from Go for Green, supported by Health Canada and Transport Canada. The conference brought together a broad range of individuals with a personal or professional interest in Active Transportation.

Related web sites

City of Moncton – Active Living – Active Transportation:
www.moncton.org/search/english/highlights/ATreport.pdf
Moving Actively through Atlantic Canada
www.lin.ca/activetrans/English/index.cfm?fuseaction=press.main

5.1.2 Ottawa, Ontario

Ottawa recently amalgamated with 12 surrounding municipalities, six of which had their own cycling network plans. The process is underway to create an amalgamated bicycle plan for the City of Ottawa.

The National Capital Commission is separate from the City of Ottawa, but owns one-fifth of the land in the Capital. They are responsible for the pathway network. The City of Ottawa focuses on roadways and prescribes to the belief that the core of the network for cyclists is on-road because it allows people to reach specific destinations. Bike lanes or sidewalks are added

to roads when they are reconstructed, widened or repaved. Within Ottawa's zoning by-laws, bicycle parking is required for most land uses.

Ottawa has branded its alternative transportation efforts as "TravelWise" in its materials and on the city's web site. City staff members produce a bike map and cycling guide. The bicycle map is sold at cost to the non-governmental organization *Citizens for Safe Cycling* to market to the public at a small cost recovery. The map is also available on-line, with the ability to zoom in and view or print portions of the map.

The "Complete Ottawa Cycling Guide," a package of information on all aspects of cycling in Ottawa, including contact numbers, rules of the roads, tips, map promotion, and enforcement issues, is distributed free of charge in the local daily paper. In the past, 300,000 copies of the Guide were distributed each year but due to funding cuts, none were distributed in 2004. The 2003 version of the Guide is available on the City's web site.

The web site also includes 'success stories,' which are profiles of individuals who actively commute to work. There are plans to highlight community leaders who do not drive for use on the web site and in other promotions.

Ottawa has a Manager of Transportation Demand Management, TDM Coordinator (focused on social marketing and promoting all forms of alternative transportation, including transit), Cycling Facilities Coordinator (mainly infrastructure), and most recently, a Walking Facilities Coordinator.

The City of Ottawa has been counting bicycles as part of their traffic count in some areas of the city for 10 years. They are now developing a set of indicators that will provide methodology to measure cycling activity.

In addition to selling the bike maps, the City of Ottawa contracts *Citizens for Safe Cycling* to provide safe cycling courses ("CAN-BIKE"). This NGO is also involved in public events and advocacy.

Staff members believe that having the commitment and plans for cycling facilities included in the highest-level policy document for the city has been critical. It made designers and planners take it more seriously and it has served to develop a strong awareness in Ottawa that every development needs to have bike facilities included, whether it falls under the transportation department or private developments. Also, having a schedule in the plan showing the roads and pathways that are being designated for a cycling facility provides support for those responsible to complete the work.

Walking advocates are much further behind in Ottawa, but there is growing interest in this area. To address this increasing demand, the City added a full-time walking facilities coordinator.

The vast bulk of funding for Active Transportation is provided by the City of Ottawa. Encouragement, education and part of the infrastructure are paid through the Traffic and Parking Operations budget. Roads that are being rebuilt or shoulders paved, etc., are paid

through another departmental budget. For education and encouragement initiatives, they tend to 'partner' with non-profit organizations, which are able to leverage the City's contributions with funding from the private and charitable sectors, as well as other levels of government.

Related web sites

City of Ottawa – TravelWise:
www.ottawa.ca/city_services/traffic/travelwise/index_en.shtml
Citizens for Safe Cycling:
www.cfsc.ottawa.on.ca/

5.1.3 Calgary, Alberta

As identified on its web site, the Calgary Cycle Plan was approved by City Council in 1996 to meet the growing demand for bike programs and facilities. Stakeholders involved in developing the plan included the *Calgary Pathway Advisory Council*, *Elbow Valley Cycle Club*, *Calgary Bicycle Advisory Council*, Calgary Police Serve, and several city departments. There are currently 550 km of pathways and 260 km of on-street bicycle routes, not including the pathways in Fish Creek Provincial Park.

The City of Calgary Pathway and Bikeway Plan, adopted by Council in 2000, sets out the guiding principles related to planning and design of the pathway system and on-street cycle routes, as well as their management. It acts as a supplement to the Calgary Cycle Plan.

To create a map showing future pathways, the City engaged 60 stakeholder groups, which varied from people in wheelchairs, walking and jogging clubs, seniors groups and transit groups to university students. They were asked to detail routes of what they want to see in the future, with an emphasis placed on connecting communities. The map created through this process was approved by City Council so that it has official standing.

There are two types of on-street facilities in Calgary: (1) signed bicycle routes that are on low volume, low speed collector routes (no painted line or extra curb width); and (2) widened curb lanes with a bike stencil painted on the road.

The approach of widening curb lanes and marking them with bike stencils is relatively new to Calgary, and was adopted from the experiences of Edmonton and San Francisco. This required that the City's transportation department seek permission from the Urban Development Institute (venue through which the City of Calgary has an agreement with private developers) to widen the curb lane on major or arterial roads given UDI would be responsible to pay for the extra asphalt to widen the curb lane on both sides from 3.7 metres to 4.3 metres.

The City of Calgary has also had interest from businesses in an industrial area to contribute financially through the local improvement process to have sidewalks built. While the process is typically initiated by residents, it can also come from the City, as was done in this case. A sidewalk would allow employees to walk around the area or to nearby restaurants/shops rather than drive.

After evaluating bike parking by-laws in other cities, such as Ottawa, Vancouver and to some extent Edmonton, the City of Calgary chose not to require a certain number of bike parking spots per thousand square feet. Instead, they provide basic guidelines on different types of bike parking and recommendations on how much to provide. When development permits come in, the City advises developers on how much bike parking they should provide. The flexibility allows some, such as condo developers next to pathways, to provide more and others, such as those in industrial areas, to provide less.

The three main promotional tools used by Calgary are their web site, bicycle map and displays, specifically the "Alternative Transportation Fair," which is set up at shopping centres, large employer offices, the University of Calgary, the Mayor's Expo, Commuter Challenge, etc. City staff produce the bicycle map, with 70,000 printed and distributed every couple of years. This has been reduced from an annual printing of 100,000 copies since many older maps remain in circulation and the map is now available on the web site. New maps are still produced, however, because the city is growing and new subdivision developments are being added. The new maps cost $2.00.

On the web site, viewers can zoom into portions of the bicycle map to a regional pathway level. The City of Calgary is considering showing sidewalk level on their web-based map so that it would include local pathways, regional pathways and connections to LRT. This would allow viewers to zoom into a small section of the map to plan their walking or cycling route to school or the grocery store. The site also includes an e-mail address for the public to reach City staff regarding cycling issues.

Calgary has a fairly extensive program already in terms of combined programs with transit, such as park'n'ride options with bike lockers at LRT stations, etc. A recent addition is a park'n'bike option. In this program, parking lots at some city parks that are not heavily used during the weekday are signed as park'n'bike locations, meaning people can park their cars in this lot and cycle the rest of the way to their office. This was done in response to feedback that with the city's growth, the cycle commute distance was too far from some suburbs to downtown.

The City of Calgary measures work trips into the downtown core from all parts of the city to identify trends in vehicle trips, passenger trips, walking and cycling over long periods of time . While it was acknowledged they would have difficulty directly attributing increases in number of cyclists to social marketing efforts or infrastructure improvements, the traffic counts show that cycling, walking and transit into downtown have all increased dramatically over the last eight years. For example, while the population increased 25% during that time frame, use of the pathway system increased 80%, and while employment in downtown Calgary was also up about 25%, use of pathways into the downtown increased 200%.

An extensive survey of commuter cyclists by the City of Calgary in 2000 found that exercise/fitness was the main motivator by far, followed by the fact that it was cheaper and less stressful than driving. Concern for the environment ranked lower. The survey also showed that most of the 2,500-3,000 cyclists who are entering downtown Calgary each morning are coming from the north and west parts of the city where there are cycling routes and river pathways. Approximately 20 times the cyclists come in from those directions compared with the northeast where there are few facilities.

Regarding the physical appeal of pedestrian/multi-use routes, a process in which 800 people physically marked their commute route on a map at a public house showed that people would go close to 2-1/2 times out of their way to be on a nice, safe, continuous pathway when they could take a faster but riskier, less pleasant road route.

Most of the funding for Active Transportation comes from the City of Calgary. The city pushes developers to incorporate into new subdivisions pathways that connect with surrounding existing communities in all directions. Notably, a small portion of the 5 cents per litre gas tax revenue passed on from the Province of Alberta to the City of Calgary for road improvements is directed toward on-road bikeways and sections of the shared use pathway system that are used for commuting.

They also seek funding for small-scale programs from other sources. For example, the "Walk to Work Challenge" partnered with and/or received financial support from walking companies, the Health Region and the federal government. Funding of some downtown bike racks in Calgary was taken from a fund earmarked for more typical parking infrastructure, such as a parkade.

Calgary formed a Transportation Solutions Group in 2002 to look at the development of non-traditional, cost effective projects, which includes promotion of sustainable transportation choices. The Calgary Transportation Solutions Group worked on a number of initiatives in its first year including a bicycle parking handbook, a new cycling information line, park and bike sites, a pathway and bikeway map, a traffic calming policy manual, intelligent transportation systems and commuting programs. The City of Calgary won the Transportation Association of Canada's Sustainable Urban Transportation Award in 2003 for this unit.

While there are recreational, touring and competitive cycling clubs in Calgary, there is effectively no cycling advocacy group. It is believed by some City staff that the existence of an active advocacy group would help to increase the amount and types of on-street cycling facilities, such as separate bike lanes, in Calgary.

Related web sites

City of Calgary – City Transportation:
www.calgary.ca/cweb/communities/community.asp?UserID=2&CommunityID=217

5.1.4 Edmonton, Alberta

Edmonton is in the process of developing a Bicycle Facilities Master Plan. The city developed a 10-year Multi-Use Trail Corridor Study, approved in 2002, that includes plans to develop 62 km of trail corridors along abandoned rail lines, utility and other rights of way. The corridors emphasize connectivity between residential areas and downtown, the University River Valley Regions, and existing trails and shared sidewalks.

Edmonton has a Trails, Paths and Routes Advisory Committee comprised of trail user groups that work with City staff to plan, develop and manage Active Transportation facilities. Members of the public can apply to sit on this committee.

According to the city's web site, Edmonton has approximately 70 km of shared pathways for pedestrians and cyclists. There are 105 km of on-street bike routes that are promoted on the Cycle Edmonton map. Also, bicycles and taxis are permitted on Edmonton's six km of bus lanes.

There are 115 km of multi-use trails, which are recreational paths within the river valley and parks that are used for walking, cycling and in-line skating. Edmonton has at least 22 major parks along the North Saskatchewan River, known as the 'Ribbon of Green.'

There are currently 3.5 km of bike lanes in Edmonton. These are described on the City's web site as lanes within roadways designated for bicycles only, which are often set up on both sides of one-way streets so that cyclists can travel in both directions.

The "Ribbon of Steel Multi-use Trail and Rail Corridor" is a multi-use trail developed along former CPR lands for pedestrians, cyclists, joggers, skaters, and other modes of Active Transportation. Development of the corridor, which was funded by the Infrastructure Canada Alberta Plan, included aesthetic and safety aspects, such as landscaping, lighting, rest areas, and interpretive features.

Cycling information is found under the Roads & Traffic segment of the City of Edmonton's web site. It includes information on the benefits of cycling, new trails and trail conditions, information on AT tips and safety, and maps, including the Cycle Edmonton Map, Multi-use Trail Map and Highway Traffic Map. Printed copies of the cycling map, produced by city staff, are available at no charge. The cycling information pages on the site include a transportation staff e-mail address at the bottom of each page for the public regarding any concerns or requests.

The Edmonton Land Use By-law requires new buildings and buildings undergoing major renovation to provide bicycle racks. Existing buildings do not have to provide bicycle parking facilities.

The City brought in a sponsor-based bicycle parking program in which over 200 bicycle racks, funded by advertising, were installed downtown and in the Old Strathcona area.

Edmonton has two programs that combine bicycles and transit. The "Bikes on ETS" program enables cyclists to take their bikes onto buses equipped with bike racks on designated routes. The program was expanded through the donation of 23 bike racks from the Edmonton Bicycle Commuters Society. The "Bikes on LRT" program allows Edmonton residents to take their bikes onboard the LRT service.

Edmonton has a Transportation Engineer who works full time on bicycling and other active modes. There is also a Walkable Edmonton team (strategic policy), Smart Choices (a smart development initiative, including walkability/Active Transportation) and the beginnings of a Transportation Demand Management group.

There are two key NGOs involved in cycling education and advocacy in Edmonton. They are the *Bicycle Education Society of Edmonton*, which provides education on safe and effective cycling as well as skills in bike maintenance, bike inspections and helmet fitting, and the

Edmonton Bicycle Commuters' Society, which is a community advocacy group. The Commuters' Society also runs "BikeWorks," a community bike shop that members of the public can use to come in and repair their own bikes.

The City of Edmonton is also focusing on a health and wellness program called "Active Edmonton." In 2002, the Mayor held a meeting with 30 key leaders in Edmonton to discuss how to promote and educate Edmonton citizens about the benefits of physical activity. The Active Edmonton program was developed through leadership and collaboration of the City of Edmonton along with over 35 community partners and 60 volunteers.

The program includes the distribution of informational booklets, the "Active Edmonton Challenge," the Mayor's Active Edmonton Awards, continued and new research on levels of physical activity in Edmonton, ActiveEdmonton.ca web site, television and radio commercials and print advertising, billboard and transit advertising, bridge banners and signage, posters and a media launch in May 2003. To measure the program's effectiveness, research on the levels of physical activity by Edmonton residents will be repeated.

Local champions are profiled on the Active Edmonton web site and feature child, youth, adult and older adult champions, who represent everyday role models. Their stories illustrate how anyone can incorporate activity into their daily lives.

Related web sites

City of Edmonton – Roads and Traffic – Cycling in Edmonton:
www.edmonton.ca/portal/server.pt/gateway/PTARGS_0_2_288_222_0_43/http%3B/CMSServer/COEWeb/roads+and+traffic/cycling+in+the+city/

Edmonton Bicycle Commuters' Society:
www.ecn.ab.ca/ebc/

Active Edmonton:
www.activedmonton.ca/

5.1.5 Victoria, British Columbia

Victoria's Bicycle Master Plan was created in 1995 and is still in the process of being implemented, with a completion date of 2010. On a regional basis, the bicycle master plan focuses on a network with the anticipation that by 2025 they will have 15% of all commuter trips in the four core municipalities being conducted on bike. Cycling and pedestrian counts are included in the City of Victoria's annual traffic count program.

Victoria has an active Bicycle Advisory Committee that meets monthly. The engineering department takes projects from the bike master plan, along with costing on each and the amount of funds available to the committee, and asks them to identify where there are problems, what links are most important and where to focus the available funds.

The City of Victoria's engineering department approaches transportation with the philosophy that they are not going to increase capacity. They have abandoned the approach of "keep building it" and "make it wider."

Within the City itself, the focus is almost exclusively on-road because there is no linear park system. The on-street work focuses on lane narrowing. This is done either by reducing the number of lanes or narrowing the width of a travel lane. In one example, it resulted in a 75% reduction in accidents due to reduced speeds. City staff members are pushing this approach, as it is much less expensive than the massive physical reconstruction of major corridors initially outlined in the 1995 plan.

Most recently, Victoria has put in "bike boxes" that allow cyclists to go to the front of the queue at signalized intersections. This was chosen based on the experiences of Vancouver and Portland.

There is no staff person specifically responsible for Active Transportation. The engineering department is responsible for all cycling infrastructure with input from the Bicycle Advisory Committee.

The *Greater Victoria Cycling Coalition* spearheads the regional cycling map. The City of Victoria plays very little role other than providing some technical information. The GVCC has two representatives on the city's bicycle advisory committee and is considered by city staff to be the "public face" of cycling regarding advocacy, education and events.

Funding for bicycling infrastructure comes from a flat annual amount provided by the City of Victoria. The engineering department also piggybacks cycling facilities onto other capital projects, in which case the money would not come from the bicycling infrastructure funds. Examples include paving projects, replacements of catch basins (grates), etc.

Victoria took advantage of a Provincial Government program that operated on a cost share basis. That program ended a couple of years ago, but the Province of B.C. recently announced a new commitment of $2 million to encourage the creation of new bicycling facilities. The City of Victoria has also partnered with the Insurance Corporation of B.C., which will cost share on implementation of a project if it is deemed to reduce the likelihood of accidents. They have been exploring private sponsorship but so far have not had a project in which individual donors contribute money on a cost share basis.

The City of Victoria is moving towards densification of the downtown core, with parking lots and other surface lots being converted to mixed commercial and residential use. Notably, there will be no parking requirements for these new residential developments downtown. Also, the City will not likely be building any more major parkade facilities in the core. Based on the recommendation of the Bicycle Advisory Committee, Victoria is in the midst of implementing a bicycle parking by-law for developments.

During a major redevelopment of the regional hospital, the City of Victoria required that a transportation demand management plan be created and implemented. Rather than simply adding another 500 parking stalls to the site, they looked at cycling programs, bicycle parking, car/vanpooling, transit improvements with the local transit authority, etc.

The *Victoria Transport Policy Institute* (VTPI) is an independent research organization focused on transportation issues. Their web site contains a section devoted to Active Transportation

and includes a number of research papers. The VTPI produced the background document used for discussions at *the Go for Green Roundtable* held in April 2003.

Related web sites

City of Victoria – Transportation – Cycling:
www.city.victoria.bc.ca/residents/transportation_cyc.shtml

Victoria Transport Policy Institute:
www.vtpi.org/

5.1.6 Minneapolis, Minnesota

The City of Minneapolis is in the process of developing a Bicycle Master Plan (20-year bicycle facility strategy). There are also five-year bike plans for the five geographic quadrants of the city.

Minneapolis has multi-use pathways, bike lanes and bike lockers at park'n'ride stations. A September 2004 press release indicates that there are more than 133 km (80 miles) of existing bike lanes and bike trails in the city. It also indicates that approximately 10,000 cyclists in Minneapolis commute daily to work, school or other activities.

The Loring Bikeway Bridge, which has been in the planning stages for years and will provide an important link between uptown and downtown for cyclists and pedestrians, began construction in September 2004 and will be completed in spring 2005.

Minneapolis requires that bicycle facilities be provided in new developments containing 500,000 square feet or more of new or additional gross floor area, including bike parking spaces, shower facilities and clothing storage. If the automobile parking spaces are monitored, covered or weather protected, bike parking spaces are to be provided on the same basis.

Bike parking facilities must be provided on the basis of one secure bike parking space for every 20 automobile spaces, but with no fewer than four or more than 30 bike parking spots required. Also, bike parking racks are to be provided at the city's expense by the Mall of America at locations agreed upon by the traffic engineer, Mall advisory board and city council.

Bike racks are provided on all buses on all St. Paul/Minneapolis Metro buses and Hiawatha line trains. Bus racks accommodates two bikes and each train can hold four bikes. Secure bike lockers are provided at several Park & Ride lots, light rail stations and elsewhere. Locker rental costs $60 annually or $40 during biking season (April through November) plus a refundable $25 damage deposit. Locations of bike lockers are listed and provided on a map on the Metro Transit web site.

The City of Minneapolis web site contains city-produced maps identifying where to ride and park bicycles, information about the benefits of riding, and links to other AT pages. The University of Minnesota Extension Service produces a "Bicycle Guide and Commuter Map" that is available in bike shops. Under Parking and Transportation Services, the university's web site provides information about bicycle use, such as safety, routes, bikes on buses, maps, and

regulations, and walking. A "Bicycle Advocates" volunteer group helps to monitor the campus and make it a bicycle-friendly place.

The *Sibley Bike Depot* provides bike repairs along with education on how to repair bikes and bike safety, and sells used bikes and accessories. The *Sibley Bike Depot* also donates a bike to the winner of the "Little Earth Bike Essay Contest." In this contest, open to communities across Minnesota, children are asked to write an essay on why they need a bike, what they like about riding a bike and what they would do with their bike if they won.

The Minnesota Bicycle and Pedestrian Alliance is developing the "Minnesota On-street Bicycle Lane Study" to "determine how bicycle pathway termination points and merge points affect the bicyclist's perception of comfort and safety." They also created a comprehensive survey, completed in 2003, to assist with the City of Minneapolis's Bicycle Master Plan. Survey participants received a $5.00 coupon from *Freewheel Bikes*, a free water bottle from the *Hub bike co-op*, and a tire or tube from the *Sibley Bike Depot*.

Related web sites

City of Minneapolis
www.ci.minneapolis.mn.us/citywork/public-works/transportation/bicycles/
Loring Bikeway Bridge press release:
www.ci.minneapolis.mn.us/news/20040920BikeBridge.asp
Metro Transit (Minneapolis/St. Paul):
www.metrotransit.org/serviceInfo/bikesOnTransit.asp
University of Minnesota:
www.umn.edu/pts/biking.htm
Minnesota Bicycle & Pedestrian Alliance – Sibley Bike Depot:
www.bikeped.org/Depot.html
Be Active Minnesota:
www.beactiveminnesota.org/

5.1.7 Portland, Oregon

Portland is often held up as the prime example of a bicycle-friendly city with a truly integrated approach to transportation. The success of this City has largely been attributed to their recognition of the bicycle and active transport as significant modes of transportation. Additionally, the State of Oregon was one of the first states to undertake initiatives set forth by the *Intermodal Surface Transportation Efficiency Act (*ISTEA, 1991), which promoted the development of environmentally sensitive intermodal transportation systems throughout the United States as one of its principal objectives.

The Oregon Transportation Plan (1992) integrates all modes of transportation into city/county transportation planning processes and the Portland Comprehensive Plan includes Active Transportation in the transportation element of the plan.

The City of Portland developed a Bicycle Master Plan (1993-1995), commonly referred to as "The Bicycle Bill," using a steering committee and incorporating input from over 2,000 community residents. This included 12 public forums during 1994 and four public open houses

in 1995 to review the draft plan. Key elements of the recommended system of bikeways focused on connectivity, continuity and direct routes.

Development of an extensive "user friendly" bicycle/pedestrian system has been met with growing demand for these types of facilities and increased usage. This has led to increasing calls for improvements to existing systems and support for additional facilities along with an increased awareness by residents of the benefits of bicycle use and Active Transportation.

The "Bicycle Bill" stipulates that reasonable amounts of funding allocated from the State Highway Fund (the main source of funding when the bill was introduced) toward the Office Transportation will be expended on the development of bikeways and walkways. The amounts are to be based on needed facilities and not determined by the funding source or amount. Expenditures cannot be less than 1% of funds received from the State Highway Fund in any fiscal year. Bikeways and walkways must be provided wherever a highway, road or street is being constructed, reconstructed or relocated. (The 1% minimum is independent from the requirement to provide bikeways and walkways as part of road construction.)

Portland's Bicycle Advisory Committee is composed of 18 members appointed by City Council to "examine, discuss and make recommendations" on bicycle-related activities and issues, including development of new bikeways and pedestrian walkways. The group meets monthly and sessions are open to the public.

In addition to the Portland Bicycle Bill, there is the "Oregon Bicycle and Pedestrian Program." The State of Oregon has a Bicycle Pedestrian Advisory Committee, starting in 1973, which is comprised of an eight-member committee appointed by the Governor. This committee acts as a liaison between the public and the Oregon Department of Transportation, advising on regulation and establishment of bike pathways and walkways.

The "City of Portland Bicycle Program," coordinated by the Portland Office of Transportation, strives to encourage bicycling and make it a more attractive transportation alternative. On staff are two Bicycle Program Specialists and one Assistant Specialist. In addition to facilities and education, they sponsor promotional events, such as "Bicycle Commute Day," "Bicycle in the Rain Day," and "Bike Fest."

In 2001, Portland was selected by *Bicycling Magazine* as the top city overall in North America in its Best Cycling Cities awards. The awards are based on cycling infrastructure, advocacy climate and bike culture.

Portland has a total of 410 km of developed bikeways,[1] including approximately 260 km of bike lanes, 50 km of bike boulevards and 100 km of multi-use trails. More than 5,000 residents commute to work by bicycle according to the 2000 U.S. Census.

Footpaths and bicycle trails are to be provided wherever a highway, road or street is being constructed, reconstructed or relocated. Pathways are typically 10 feet in width. On-road bike

[1] In the U.S., the term bike boulevard does not have a standard definition, but is generally considered to be a street on which bicycle safety is better or improved compared to other streets, e.g. low traffic volumes, traffic control modified for bicycles, etc.)

routes are referred to as bike boulevards. There are bike lanes on 5% of Portland's arterial streets. Portland is also piloting the use of coloured pavement markings (blue bike lanes) to reduce the potential for crashes caused by motorists who are unaware of the bike lane.

The City of Portland provides routine street cleaning, with special attention to areas designated as "High Priority," as indicated by the Bicycle Program.

The Transportation Planning Rule in Portland requires integration of bike parking facilities into "new residential developments of four or more units, new retail, institutional or office locations, and all transit transfer stations, and park and ride lots." Safe bicycle and pedestrian facilities must be provided in "new subdivisions, multi-family developments, shopping and commercial centers and neighbourhood activity areas (e.g. schools, parks, shopping areas, transits stops, employment centers)." It also requires the provision of bikeways on all major arterials.

The Tri-County Metropolitan Transportation District (Tri-Met) coordinates the integration of bicycling and transit by providing bike parking facilities at transit locations, park and ride lots, bike locker rentals, bike racks on buses, and bikeways to transit locations. Cyclists are permitted on all light rail cars at all times except for weekday rush hours.

Findings of the Bicycle Master Plan surveys, group exercises and discussions determined that most participants preferred bike lanes on major roads as the best bicycle facility. Off-street paths were found to draw new cyclists although they are not as cost efficient.

Also, it was found that the most effective method of promoting bicycling among youth involves an action-oriented teaching approach that is integrated with a system of rewards and incentives, e.g. certificate of completion, bicycle/pedestrian licences, free or reduced cost bike helmets/accessories, and discount coupons for area bicycle shops.

The City of Portland web site provides on-line access to a wide variety of bicycle pathway/trails and bicycle facilities maps, including a bike commuter map, downtown bike map, downtown off-street parking map, family friendly bicycle maps, etc. One section provides a list of recently completed projects and future/upcoming projects in bullet point form and divided by geographic area. The web site also includes information on walking and in-line skating in Portland.

Portland has a venue for cyclists to submit requests (by phone, on-line form or request card provided at local bike shops) for small-scale road/bike facility improvements, such as sweeping, surface repair, etc. Notably, the City of Portland includes bicycles in its transportation fleet.

The *Bicycle Transportation Alliance*, a non-governmental organization, provides education and advocacy in Portland, including a bicycle commuter workshop offered to employers and organizations.

The *Community Cycling Center* in Portland provides year-round programs for low-income youth and adults. Examples include the "Create-a-Commuter" program for adults, summer bike day camp, bike safety clubs, summer rides, an alternative transportation center, holiday bike drive, bike maintenance classes, and a "Yellow Bikes" program that scatters free, unlocked

bicycles throughout Portland. The *Community Cycling Center* also includes a professional retail bike shop that is open to the public and sells refurbished bicycles.

Unlike most cities in Canada, where in-line skating is restricted to multi-use pathways, it is legal to in-line skate, skateboard or ride a scooter in Portland. It is legal to skate on any street or sidewalk in the city, except for the downtown core where skating is allowed in the street only. Certain downtown streets have been designated as 'preferred skating routes' and outside downtown, in-line skaters are recommended to use designated bike routes.

Related web sites

City of Portland Office of Transportation:
www.portlandtransportation.org/getaround/
Bicycle Transportation Alliance:
www.bta4bikes.org/
Community Cycling Center:
www.communitycyclingcenter.org/

5.2 Targeted Programs

There are a number of programs available that focus on a targeted audience, e.g. youth/students, employees/workplaces, and adult education. Additionally, there are community-wide programs that are participatory and go beyond broadening awareness to engage and actively involve the public.

5.2.1 Youth/Schools

Active and Safe Routes to School (Go for Green)

Program developed and coordinated nationally by *Go for Green* available to schools and organizations across Canada. The program is promoted and coordinated by different organizations in each province and territory, varying from NGOs to provincial government departments to municipal governments. See: www.goforgreen.ca/asrts/program_e.html. Also, the *Green Communities Association*, who runs an Active and Safe Routes to School program in Ontario, presents many valuable resources on their site at: www.saferoutestoschool.ca.

The Active and Safe Routes to School program includes a variety of initiatives:

- "Walking School Bus" – for young children with adult supervision
- "Biking School Bus" – for older children
- "International Walk to School Week"
- No idling zone for cars around schools
- Central school bus pick-up and drop-off points to increase physical activity – e.g., at St. George Elementary School in New Brunswick, students are dropped off at a designated stop one km from the school. Volunteers then supervise the walk to the school.
- Physical infrastructure changes to increase safety for walkers, cyclists, in-line skaters, etc.

- Policy changes

Go for Green resources are available for order on-line at: www.goforgreen.ca/asrts/tools_e.html

- Fact sheets
- "Active and Safe Routes to School" information
- "How to Organize a Walking/Biking School Bus"
- "Blazing Trail Through the Jungle" workbook
- "International Walk to School Week" brochure/poster/how to organize, etc.

International Walk to School Week
A global event for children, parents, teachers and community leaders to celebrate the many benefits of walking. See: www.iwalktoschool.org

Blazing Trail Through the Jungle
Student workbook and teacher's guide on safe routes to school for grades 3-6. It allows students to map a safe route to school in their community. Developed by *Transportation Options* and available through *Go for Green*.

Walking Tour of Canada
A new on-line program by *Go for Green* that allows students to log the km they have walked to and from school. The distances are tracked on an on-line map to show the students how far they have walked across Canada.

Wiserider
Program developed by *The Co-operators* in Saskatchewan that teaches basic traffic concepts and safe cycling skills. The "Wiserider Cycling Safety Guide" and information on the program is available on-line. See: www.cooperators.ca/life/wiserider/pro_pro.asp

The "Wiserider Program" was launched in 2004 in Moncton. A summer student was hired to deliver it to all playground programs in the city. The City of Moncton is also partnering with the RCMP to deliver this program in schools.

Kids on the Move
Traffic safety curriculum for children in kindergarten through fifth grade available to all private and public schools developed by the City of Portland's Bureau of Transportation Systems Management, Portland Public Schools, and an advisory group of educators and parents. It promotes safety and encourages bicycle and public transportation. Plans are to incorporate middle and high school into the program. See:
www.trans.ci.portland.or.us/saferoutes/learning/teachers/KidsOnTheMove/default.htm

Traffic Safety Town
Educational program developed by the City of Portland that is used in school gyms in conjunction with phys-ed classes to promote traffic safety. It consists of a "40x60 foot tarp with the layout of typical city street blocks complete with motor vehicle travel lanes, bicycle lanes, sidewalks, crosswalks, driveways, homes, parks." It is incorporated as part of Portland's "Kids on the Move" program (see above).

Bike Safety Clubs (Earn-A-Bike)
"Bike Safety Clubs," provided through the *Community Cycling Centre* in Portland, teach low-income youth safe riding skills, basic maintenance, and the importance of wearing a properly fitted helmet. Participants can earn their own bike, lock and helmet by completing the minimum 15 hours instruction and demonstrating they have mastered the skills. Schools provide the space for this after-school program. See:
www.communitycyclingcenter.org/bikeclubs.html

5.2.2 Employees/Workplace

TRAX (Transportation Halifax Project)
Offers workplace-based AT programs through the *Ecology Action Centre* in Nova Scotia, including events such as the "Commuter Challenge," information on cycling safety, vanpools, transit routes; carpool matching service; liaison with management for priority carpool parking; on-site transit ticket sales; AT programs with healthcare workers; sustainable transportation presentations; workshops on cycling safety; and lotteries for free transit passes and carpool parking spots. See: www.trax.ns.ca/

City of Moncton
The City of Moncton has hired a contractor with financial assistance from *Go for Green* to work with three large downtown employers. The goal is to get employers thinking about AT and to look at ways in which they can incorporate within their company opportunities around more active modes of commuting.

City of Calgary
One of the members in Calgary's Transportation Solutions Group works on active commuting under the larger umbrella of alternative transportation. He has made presentations to 39 of the largest employers in Calgary, including oil companies, Safeway, University of Calgary, hospitals, etc.

Bicycle Transportation Alliance (Portland)
The *Bicycle Transportation Alliance* in Portland offers a "Bicycle Commuter Workshop" to employers and organizations. See: www.bta4bikes.org

Walk & Roll: A Guide to Active Transportation to, from and at the Workplace (Go for Green)
Developed by the *Canadian Council for Health and Active Living at Work* and available on the *Go for Green* web site, this guide is a tool for employers to introduce AT into their workplace. See: www.goforgreen.ca/at/Eng/resources/walk.aro

Incentive/reward program examples
- "Parking Cash-out Program" – in California, the State's Parking Cash-Out Program requires certain employers who provide subsidized parking for their employees to offer a cash allowance in lieu of a parking space

- "Points Program" – employees who walk/cycle/bus/carpool to work receive points that can be redeemed for rewards such as time off, gift certificates, cash, etc.
- "Time off with Pay" – employees receive additional time off with pay for participating in their employer's alternative transportation programs
- "Regional $mart Commute Program" – this Washington State program offers cash incentives of up to $192 to employees at eligible workplaces who commit to using alternative commute modes for at least 13 days in a three-month period. See: www.smartcommutenw.com/

5.2.3 Adult Education

CAN-BIKE Program
The "CAN-BIKE" program is a nationally standardized set of courses on how to cycle on-road safely and with confidence. It was developed by the *Canadian Cycling Association* and can be taught through any organization by a certified CAN-BIKE instructor. There are CAN-BIKE courses available for both children and adults, with courses organized into three levels: basic, advanced, instructor. See: www.canadian-cycling.com/e2/canbike/

Citizens for Safe Cycling (Ottawa)
Citizens for Safe Cycling delivers CAN-BIKE to the public under contract to the City of Ottawa. This contract includes "normalization" of cycling education to make it mainstream.

City of Moncton
Moncton plans to pilot adult courses adapted from the "CAN-BIKE" program.

Community Cycling Center (Portland)
Portland's *Community Cycling Center* has a "Create a Commuter" program in which low-income adults are provided with a fully outfitted commuter bike, including lights, lock, helmet, rack, rain gear and other accessories. The program includes five hours of safe commuting and maintenance training. See: www.communitycyclingcenter.org/create-a-commuter.html

5.2.4 Community-Based Participatory Programs

Stepping Out Moncton
This is a pedometer-based program introduced in January 2004 that has been wildly popular with individuals, employers and, potentially, schools. The City of Moncton secured the provincial health department as the main sponsor and then partnered with fitness centres to voluntarily deliver the program and with the provincial milk producers association as the title sponsor to provide the nutritional component of the program. The program weaves in Active Transportation as a key element. See:
www.moncton.org/search/english/CITYLIVING/vitality/Stepping%20Out%20Fall.pdf

Pathways for People Active Transportation Tour
A two-person tour across Nova Scotia led by the Office of Health Promotion, Sport and Recreation, the *Ecology Action Centre*, and *Youth Environmental Action*. The program

promoted Active Transportation in 25 communities in Nova Scotia through public forums, decision-maker meetings, school and youth meetings, and toolkits on developing AT within the community. "Pathways for People" was funded through the provincial Active Kids/Healthy Kids Strategy. See: www.ecologyaction.ca/news/10458403721084.html

Walk to Work Challenge
Organized by a member of the City of Calgary's Transportation Solutions Group, this pilot project ran from September 2003 to September 2004. Participants responded to an ad calling for individuals who do not currently walk, but who would commit to walk to work over a one-year period. Participants' behaviour was surveyed at the start, midway point and end of the program. See: www.hearthealthcalgary.com/agm04/docs/walk_to_work.pdf

Commuter Challenge
This is an annual friendly competition between Canadian communities to encourage people to use alternative modes of transportation during Environment Week (first week of June). Participants register through their employer, school or as an individual. Daily modes and distances are tracked on-line. The program is coordinated nationally by *Go for Green* and delivered by various organizations at the community level. See:
www.commuterchallenge.ca/english/.
For information on the Commuter Challenge in Manitoba, organized by Resource Conservation Manitoba, see: www.resourceconservation.mb.ca

World Carfree Day
Held each year on September 22 with cities participating around the world. Canadian cities with organized efforts around "Carfree Day" include Toronto, Halifax, Hamilton, Kitchener, Montreal, and Victoria. Links to these initiatives are provided on the "World Carfree" site. See: www.worldcarfree.net/wcfd/

Co-operators Wiserider Family Bike Day
Annual event with a variety of activities and demonstrations for the entire family. "Wiserider Day" in Regina attracts over 5,000 people. Moncton held its first "Wiserider Family Bike Day" on June 1, 2004, to kick off the "Commuter Challenge." See:
www.cooperators.ca/life/wiserider/pro_pro.asp

Moncton Tri-community Bike Fest
Family-oriented bicycle festival held for the first time on June 19, 2004.

Bike Week
Launched by the City of Toronto as "Bike to Work Day" in 1988, this annual event to encourage commuters to use bicycles expanded to a full week that coincides with the "Commuter Challenge." It includes hundreds of events hosted by community groups, individuals and businesses across the city. See: www.toronto.ca/cycling/bikeweek/

Several cities across the country hold bike weeks, e.g. Halifax Regional Municipality hosts a "Bike Week" sponsored by *TRAX* and the *Ecology Action Centre*.

Bike Month
In Vancouver, *Better Environmentally Sound Transportation* (BEST) promotes "Bike Month" in June each year. It consists of celebrations, educational activities and public awareness campaigns to encourage Active Transportation. See:
www.best.bc.ca/programsAndServices/bikeMonth.html

Yellow Bike Program
Free community bicycles in Portland organized through the *Community Cycling Center*. See: www.communitycyclingcenter.org/yellowbikes.html

5.2.5 Community-Based Bike Maintenance & Repair Programs

TRAX Bike Again
Volunteer-driven program through the *Ecology Action Centre* in Nova Scotia that accepts used bicycle donations. The bikes are then repaired and loaned on a short- or long-term basis to residents of Halifax. They also provide community-based bike repair workshops.

BikeWorks
Community-driven bike repair shop and education workshops offered through the *Edmonton Bicycle Commuters' Society*.

Sibley Bike Depot
Provides bike repairs and education on how to repair bikes as well as bike safety in Minneapolis.

5.3 Lessons for Winnipeg

The experiences of other cities highlighted in the foregoing section provide examples of successful approaches that the City might consider adopting or adapting for Winnipeg. There are commonalities that can be identified in other centres that could equally apply to our city. The following section briefly summarizes those commonalities and key lessons.

5.3.1 Policy, Planning and Staffing

- Active modes of transportation need to be integrated into the transportation and planning culture, including private developments.
- A dedicated staff position helps to focus and integrate Active Transportation into planning and decision-making processes, and ensure activities move forward.
- An AT strategy endorsed by City Council in the highest-level policy document is needed to guide and support future activities.
- Most cities use internal staff to produce and distribute a cycling map.

5.3.2 Public Input/Participation

- Incorporating public input provides buy-in and can guide the prioritization of activities.

- Advisory committees, with the appropriate composition, can play a key role both as a sounding board and in decision-making.

5.3.3 Public Communication

- It is important to communicate with the public regarding available facilities, including completed, current and future projects.
- The City's web site is an important and cost effective method to provide or share information with the public on topics such as education, bicycling facilities, upcoming projects, etc. and profile local champions. It is useful as a venue for public feedback, particularly regarding maintenance needs and small projects. It also can link to other sites, such as local organizations involved in offering AT programs and other jurisdictions.

5.3.4 Active Transportation Users

- Health (wellness/fitness) is the primary motivator for active commuting.
- Connectivity of bicycling and pedestrian facilities is important to users.
- Aesthetics are important, as active commuters are willing to go out of their way a substantial distance for a more pleasant route.
- People want green spaces and trees in their community for quality of life. While removing medians or narrowing sidewalks might benefit motorists and cyclists, it could be a deterrent to pedestrians and reduce quality of life for residents overall.

5.3.5 Funding, Facilities and Evaluation

- The bulk of the funding will have to come from the City, however, there are partnership possibilities through other government programs, working with NGOs who can leverage funds from foundations and other government departments, and with businesses.
- Road lane narrowing or reduction of lanes is an inexpensive way to create bike lanes.
- Bicycle parking is now legally required in new developments in many cities.
- Cycling receives the most attention but advocacy for walking is growing and cities are starting paying more attention to this area.
- The small wheels segment (in-line skating, skateboards, scooters) represents a small portion of active commuters at this time but is a potential growth area. With the exception of Portland, there is little offered to this segment in the cities highlighted.
- Beyond traffic counts, none of the cities highlighted have implemented formal evaluations to measure the effectiveness of their programs/infrastructure.

5.4 Summary and Key Observations

While not all of the lessons learned from the experiences of other cities necessarily apply to Winnipeg, some of the key observations can be summarized as follows:

- It is essential to have a dedicated AT coordinator to act as the lynchpin, the focal point and the champion for Active Transportation. It is this person who will identify cost-saving partnerships, identify ways to eliminate overlap and duplication, ensure no opportunities are missed, and promote sound community-supported facility development and program delivery.
- AT must be integrated into all City planning and decision-making processes. Interdepartmental coordination is essential to ensure this integration.
- Incorporating public input is important. An advisory committee including AT users and other members of the public is useful as a means of ongoing public input, as a sounding board, and to marshall expert advice.
- Communication with the public is a key element, both in the planning stages and after facilities or programs are implemented. The City's web site can be used as the core platform for this communication.
- Health is a key focus for motivation in promotional campaigns and children and youth should be targeted for educational programs.
- Funding opportunities can be found in a variety of sources, such as other government programs, partnering with business and NGOs, or dedicating a portion of the gas tax revenue.

6.0 Vision for Future Active Transportation in Winnipeg: Preamble to the Recommendations

6.0 Vision for Future Active Transportation in Winnipeg: Preamble to the Recommendations

Active Transportation represents both an opportunity and a responsibility for the City of Winnipeg. Over the past decade, Active Transportation has gradually grown in Winnipeg – facilities have been constructed and programs undertaken. As outlined in Chapter 2, many recent studies or City initiatives have incorporated Active Transportation directly or indirectly, and ongoing processes, such as "Winnipeg-In-Motion" and the "Embracing Sustainability" report, continue to build momentum towards Active Transportation. Remarkably, public consultation reveals that relatively few Winnipeggers recognize the strides that have been made, even as health, quality of life and environmental responsibility remain priorities identified by individuals and the community. The consultations also reveal how important Active Transportation is to Winnipeggers' sense of their city, translating into support for additional programs and facilities that would ultimately form a connected city-wide network.

The recommendations of this Study need to be placed in the context of a broader vision for Active Transportation in Winnipeg. A vision for Active Transportation can articulate the de facto objective of past activities and also look towards the future. A long-term vision for Active Transportation needs to:

- Build on the successes of the past – much has been accomplished and these successes need to be celebrated and further enhanced.
- Coalesce all the many elements that do and could exist.
- Continue to integrate existing and proposed activities, and seek partnerships to ensure efficiency, cost-effectiveness and the best possible likelihood of success.
- Be rooted in the realities of Winnipeg and needs to be practical with tangible results.
- Be linked to existing City of Winnipeg policy, particularly "Plan Winnipeg," allowing the City to be a catalyst to leverage the opportunities that already exist to move forward.

Despite a cold climate, restrained budgets at all levels of government, and other apparent obstacles, the City of Winnipeg and Winnipeggers have already achieved success in Active Transportation. Winnipeg has the opportunity to further be a leader and become an innovator in Active Transportation, which will build a city that matches Mayor Sam Katz's "vision of a city that has plenty of opportunity for its youth, value for our citizen's hard-earned tax dollars, and a healthy thriving environment that allows our business community to flourish".[1] A vision for Active Transportation in Winnipeg foresees a sustainable culture and commitment with policies, practices, programs and facilities that support Active Transportation choices for and by Winnipeggers leading to better health and quality of life, as well as environmental and socio-economic benefits.

The following recommendations provide a comprehensive overview of what still needs to be done to promote Active Transportation in Winnipeg through both programs and facilities. The recommendations have benefited from a review of experience elsewhere and best practices, but the recommendations combine to create a plan and a vision that is specific to Winnipeg and based on listening to the public here. As a result, several recommendations are not only

[1] Katz, Sam. Sam's Action Plan for a New Winnipeg. Election platform. June 2004

innovative, but are also unique to Winnipeg, based on our special circumstances. The recommendations fall under five guiding principles:

- Adopting Active Transportation principles as an integrated part of the City doing business
- Actively promoting Active Transportation among staff and citizens of Winnipeg
- Developing an Active Transportation strategy
- Being innovative and seeking partnerships in funding and supporting Active Transportation facilities and programs
- Establishing a comprehensive, city-wide network of Active Transportation facilities

Although the total list is extensive, each recommendation is practical and pragmatic. It will take commitment and determination to implement, but does not require a large financial investment. By implementing these recommendations, the City of Winnipeg can achieve further successes and change lives for the better. A comprehensive listing of potential facilities has been identified, and a short-list drawn up. Building Active Transportation facilities requires both up-front capital investment and longer-term cash for maintenance. However, the recommendations for facilities focus on lower cost solutions and dovetailing with existing plans, as well as promoting selected demonstration initiatives that will show the City's commitment and highlight achievements while providing needed facilities.

Active Transportation is not new, but what can be new is a clear articulation of the need for and benefits of Active Transportation, and a commitment to continue to move forward in delivering on the promise and providing the opportunity.

7.0 Recommendations

7.0 Recommendations

To continue the growth of facilities and programs from the past decade, and demonstrate the City of Winnipeg's commitment to Active Transportation, there are 36 recommendations presented in this section grouped under five guiding principles. These recommendations will enhance the position of Active Transportation in the City of Winnipeg through the implementation strategy set out in Chapter 8.

The recommendations were determined based on selection criteria identified by the Study Steering Committee. Each of the criteria was applicable to facilities and planning/policy initiatives. The criteria included:

- Identifiable need
- Impact of recommendation
- Raised during public consultation
- Geographic equity
- Relative cost
- Ease of implementation
- Availability of funding
- Applicability to the City of Winnipeg

The recommendations that follow are based on the foundation of five guiding principles for the City of Winnipeg. While some of the individual recommendations stand alone, most interrelate.

PRINCIPLE #1: THE CITY SHALL ADOPT ACTIVE TRANSPORTATION PRINCIPLES AS AN INTEGRATED PART OF DOING BUSINESS.

1. **Hire or dedicate an employee with a clear mandate focused on all aspects of AT.**
   This employee shall be responsible for encouraging and implementing Active Transportation projects and coordinating related interdepartmental activities. He/she shall liaise with advocacy groups and communicate the City's initiatives in AT to the general public. He/she shall seek and promote partnerships to advance the use of Active Transportation and serve as a catalyst for action by the private sector. He/she shall oversee the development and maintenance of the database described in Recommendation 22 and stay abreast of trends in Active Transportation.

2. **Strive to implement AT facilities in all Civic facilities**.
   There are many types of facilities that have been implemented elsewhere that might provide useful solutions in the creation of an integrated bicycle network in Winnipeg. The City can set the example by incorporating and testing new approaches, and by evaluating their success or failure. Successful ideas can then be implemented elsewhere in Winnipeg.

   The City shall continue to demonstrate its commitment to Active Transportation by providing facilities like bike lock-ups and change rooms at Civic buildings.

3. **Incorporate AT facilities in all new transportation infrastructure projects.**

   Include Active Transportation into overall city planning and development, using opportunities presented through capital works projects, development projects and private initiatives set out by various interest groups and associations. Look for partnership opportunities.

4. **Incorporate AT facilities in all infrastructure renewal projects where feasible** (understanding there may be pre-existing site constraints).

   Establish long-term and short-term AT facility goals and set priorities, recognizing that some facility-related tasks such as maintenance are ongoing. The projects making up this plan shall be given priority based on capital works and development projects underway as well as ease of implementation (e.g. low capital intensive, outside initiative, etc.), budget, need and demand. The priorities shall be regularly reviewed to ensure they match current requirements.

5. **Formalize considerations for the integration of AT facilities in private development through tools used within the development review process.**

   a) Develop and adopt AT related standards and guidelines
   b) Incorporate AT principles into Zoning By-laws

6. **Ensure that interdepartmental coordination mechanisms institutionalize consideration of AT.**

   This shall ensure integrated and coordinated implementation of AT concerns, and link policy to action. This interdepartmental coordination shall encompass policy, operations and public works staff.

PRINCIPLE #2: THE CITY SHALL ACTIVELY PROMOTE ACTIVE TRANSPORTATION AMONG STAFF AND THE CITIZENS OF WINNIPEG.

7. **Form an AT Advisory Committee.**

   This committee shall be one mechanism for broad, ongoing consultation. It shall advise Council on Active Transportation policies, programs, expenditure parameters, maintenance issues, priorities, and standards. Terms of reference, goals, structure, etc. shall be determined collectively by the committee. It shall have a diverse membership encompassing city staff, technical experts, business people, advocates, and Active Transportation users, and shall report to the Standing Committee on Public Works. The committee shall work with or include the AT coordinator. Consideration shall be given to forming a subcommittee on technical issues.

8. **Provide information to the general public about facilities and programs.**

   A dynamic web site shall facilitate responses to inquiries and feedback on Active Transportation. The web site shall provide AT information, education on signage, route maps or identification services, cycling safety information, and links to AT programs such as the Commuter Challenge and CAN BIKE.

Mapping features could be provided for cyclists and pedestrians in a manner similar to Transit's NaviGo program. The information provided shall demonstrate that Active Transportation routes are part of a network.

9. **Market new programs & facilities.**

This shall involve giving high visibility to Civic action in the Active Transportation area. It shall use the opening of new AT facilities as an opportunity to encourage their use. The City might, for example, include advocacy in the publicity around the naming of bike routes.

10. **Launch a targeted campaign advocating AT.**

To maximize the impact of the campaign, the individuals to be targeted are those on the "cusp" of full involvement in Active Transportation. For example, they are bike-owners who might be encouraged to use their bikes to commute, recreational runners who might be encouraged to jog to work or individuals simply looking for ways of becoming more active on a regular basis. They might be attracted by themes like "Healthy Commute" or by highlighting the benefits of combined modes like park and walk, park and bike, or bike and bus. It may be possible to attract them through advocacy undertaken jointly with organizations in which they are members, such as the Diabetes Association or the Running Room Walking/Running Clubs, and promote programs through work places. The targeted campaign could run in conjunction with AT events such as the "Commuter Challenge."

11. **Focus on health benefits.**

As identified through the public consultations in Winnipeg and commuter survey conducted in Calgary, health issues are the primary motivator for choosing Active Transportation. A promotional campaign shall be developed that stresses AT advantages in terms of improved or increased physical activity and general health benefits.

12. **Promote programs and events to encourage AT.**

This involves supporting participatory programs and "experiential" events such as the Commuter Challenge that encourage Active Transportation as a mainstream activity. Opportunities for advertising programs include bus boards and the Leisure Guide.

13. **Publicly release reports on AT.**

Reports and studies, like this one, have promotional as well as educational value. High profile release of such studies and reports would publicize the use of Active Transportation. The high profile shall be attained through the use of media and open house presentations.

14. **Allow for public input into ongoing maintenance and planning related to AT.**

Public consultation shall be ongoing and involve discussion of priorities for facility development. Establish formats for informal dialogue such as the use of e-mail or the 986-ROAD phone line to register problem locations.

15. **Lead action by example.**

The City can serve as a model through the improvement or addition of Active Transportation facilities at Civic sites. It shall communicate publicly about the facilities that it provides to its employees. It shall identify high profile City champions and publicize on its web site officials biking or walking to work.

16. **Provide or support education about AT.**

The City shall work with non-governmental organizations, such as health, environmental, service and user groups, and others to include Active Transportation in programs for people of all ages. Educate developers and employers about the advantages of incorporating Active Transportation into their plans and policies. Through these programs, individuals will learn the mechanics (e.g. rules of the road) and the importance of signage (e.g. "share the road" signs). City support for these programs could entail dollars and/or service, and would put priority on supporting existing programs.

17. **Develop programs to educate children.**

This shall involve creating and delivering or supporting education programs for delivery in school and in youth programs. This education program shall be linked to the advocacy of Active Transportation.

PRINCIPLE #3: THE CITY SHALL DEVELOP AN ACTIVE TRANSPORTATION STRATEGY.

18. **Profile the vision for Active Transportation and link it to a clarified AT policy.**

This shall involve clarifying the scope and nature of the policy and reporting widely on its achievements, through press releases, web postings and other means that the City uses to publicize its activities. One specific measure to implement this recommendation is to publicly restate "Plan Winnipeg's" policy related to Active Transportation.

19. **Link policy to reasonable action plans.**

This shall involve instituting clear accountability for implementation and coordinated action. Standards and guidelines shall be adopted for implementation of Active Transportation programs at the project planning level. This shall entail, in part, affirming the City's construction and maintenance standards, which should be based on Transportation Association of Canada and other standards.

20. **Set forward looking, adaptable goals.**

A long-term framework for action shall be prepared and related benchmarks shall be developed to allow achievements to be measured. Such a long-term framework shall, however, allow for flexibility and adjustment as the Active Transportation field grows.

21. **Plan and implement strategically.**

Plans shall encompass walking, cycling and small wheels facilities, and take public needs into account. The plans shall aim at a citywide distribution of connecting routes, the removal of barriers to use and finding a balance between user groups, as there are competing interests by various users. For example, reducing green space to create a bike lane may be valued by cyclists, but would not be aesthetically pleasing for pedestrians; or removing a traffic lane from motorists to use for cyclists might not be valued by motorists.

The facilities, when combined with education and promotion, will encourage people to engage in Active Transportation. Consultation, involving the AT coordinator and advisory committee, shall take place to ensure the facilities meet the needs of current and potential users.

22. **Create and maintain an up-to-date facilities database.**

A database shall identify the facilities, their construction dates and maintenance records, and their standards. It can be used for policing (i.e. to identify applicable regulations), for research (e.g. gap analysis) and in promotional materials. The format of the database shall be prepared in consultation with the planners and engineers who will be the ones using it.

23. **Regularly monitor and revise programs and policies.**

The effectiveness of Winnipeg's Active Transportation programs shall be reviewed every five years by Administration, who shall recommend to Council any required revisions of by-laws, policies or programs. This review shall be supported by cost-benefit analysis, case studies and achievement measures. Input shall also be acquired from national and international organizations (e.g. the Pro-Walk/Pro-Bike conference), which will assist in identifying options for current policies and programs.

24. **Tighten enforcement.**

In conjunction with a public education program, the effective application of Active Transportation rules and regulations will depend upon systematic and equitable enforcement. Making infractions by both motorists and AT users ticketable offences would enhance the awareness by drivers of the rights of cyclists on Winnipeg's roads and require cyclists to adhere to the rules of the road.

PRINCIPLE #4: THE CITY SHALL BE INNOVATIVE AND SEEK PARTNERSHIPS IN FUNDING AND SUPPORTING AT FACILITIES AND PROGRAMS.

25. **Continue and increase a clear, sustained budget allocation for AT.**

At the same time, the City shall continue to seek cost-effective mechanisms to do more with existing dollars and look for cost-saving approaches, such as using recycled asphalt. See also recommendation #31.

26. **Marshal governmental programs.**

The various programs that relate to Active Transportation and that are operated by the three levels of government shall be marshalled. This includes elements of programs in the fields of Health & Wellness, Transportation, Environment & Conservation, Tourism, and Economic Development.

27. **Consider alternatives to funding.**

City staff shall be encouraged to find ways to build and maintain facilities using programs such as "adopt a pathway" or community construction initiatives. The City shall support NGOs pursuing funding from foundations to build such facilities or deliver programming.

28. **Co-fund with developers & business.**

Developers and other businesses shall be encouraged to remove barriers to Active Transportation and to build new facilities, possibly on a cost-shared basis with the City. In return these businesses might be allowed to advertise their contribution to the facility. This would help promote a sense of shared responsibility and program ownership.

29. **Engage with non-governmental organizations.**

The City shall foster public involvement in the provision of programs and facilities associated with Active Transportation. The City shall provide seed funding as a catalyst and may or may not become actively involved in the delivery of the program. Additionally, the City shall encourage partnerships between non-governmental organizations.

30. **Co-fund with other cities.**

Since some of the promotional material and studies done in the Active Transportation field are generic, the City might emulate other multi-city initiatives. With other cities, it could collaborate on or co-fund development of materials or studies supporting Active Transportation. For example, the four Atlantic Provinces and the City of Moncton held a joint AT conference in 2004.

31. **Dedicate a percentage of the federal gas tax revenues directed to the City of Winnipeg towards AT.**

This would generate an additional, dedicated revenue stream for Active Transportation.

PRINCIPLE #5: THE CITY SHALL ESTABLISH A COMPREHENSIVE CITYWIDE NETWORK OF ACTIVE TRANSPORTATION FACILITIES.

32. **Maximize usability of current facilities.**

Maintenance priority is recommended for designated Bicycle Commuter Routes and recreational Bicycle Routes along with bridges and underpasses to provide cyclists with a greater level of comfort and feeling of safety.

Maintenance issues identified in the public consultation process regarding pedestrian facilities dealt with:

- Keeping sidewalks free from snow and ice in winter. In addition to benefiting pedestrians in general, keeping sidewalks clear and ensuring a smooth transition at crossing points is also important to people in wheelchairs, using walkers or pushing strollers.
- Ensuring proper curb lane drainage to prevent pedestrians from being inadvertently sprayed by passing motor vehicle traffic.
- Placing priority on clearing major pedestrian corridors first after a snowstorm. Priority areas would include places with higher pedestrian traffic, such as shopping and business districts, and walkways leading up to bus stops, bridges and overpasses.

33. **Develop demonstration facilities.**

The City shall implement an ongoing program of demonstration facilities that are innovative, fill key gaps, or set an example. Demonstration initiatives would eventually become integrated into the regular Active Transportation projects, e.g. the Parkway system showcased in the 1993 report has become integrated into the bicycle route network and outstanding items are part of the ongoing network building recommendations. Demonstration facilities should receive a higher profile and sections that are completed should be celebrated along the way.

34. **Develop an AT network.**

A connected network helps Winnipeggers use AT facilities between a variety of origin and destination points, whether for commuting or recreation. Part of this involves having signed routes. Beginning and end points should have a rationale behind them. Connectivity is important for the routes to be useable. This also means incorporating AT friendly solutions at choke points.

Signage shall be compatible with the promotional and educational messages. Therefore some existing Bicycle Route signage shall be removed from high traffic streets and reassigned to alternate routes. A second type of bicycle signage shall be used on higher traffic (volume/speed) roads to remind motor vehicles to share the road. These streets are referred to as Bicycle Commuter Routes. Signage shall be standardized and set at the proper sight lines for cyclists and motorists. Signage shall also include warnings, such as lane narrows, lane ends, etc.

Ensure accessible and well-maintained walkways for pedestrians that provide connectivity to destination points (e.g. place of work, parks, bus stops).

35. **Address legitimacy issues for small wheel users**

The question of options for small wheel users (in-line skates and skateboards) and their legitimacy on roads and sidewalks needs to be addressed.

36. **Regularly review design standards.**

Design standards change based on new technologies or new information. There are an increasing number of design guidelines for Active Transportation facilities available. Sometimes the use of facilities changes as well, resulting in changes in demand for facilities. Any new technologies adopted should be compared against standards established by the Transportation Association of Canada or other such organizations, and possibly adapted to make them suitable for Winnipeg. They shall be evaluated, among other things, with respect to cost savings, their place within Winnipeg's existing network, and their ability to service public demand. Construction standards shall be used that are appropriate for the circumstances.

8.0 Priorities and Implementation

8.0 Priorities and Implementation

The comprehensive list of recommendations in Chapter 7 manifests the broad vision of what Winnipeg can achieve. The following section presents a priority list that focuses on very practical, lower cost solutions and emphasizes dovetailing with existing plans to achieve maximum success within the current fiscal realities.

The first part of this chapter identifies priorities among the program and policy recommendations, and briefly presents suggested implementation strategies for these recommendations. The second part elaborates on the different types of facilities and actions to implement them in section 8.2, and then addresses priorities for the facility recommendations in Table 8.2-2. The cost of various treatment options for different types of facilities are outlined in Table 8.3-1.

The complete list of recommended Action Transportation facilities is presented in Appendix K.

8.1 Priorities and Implementation of Program/Policy Recommendations

While all of the recommendations association with programming and City policy are deemed important, not all can be implemented at once or even in the short term. Priorities for implementation in the short term are identified below. Several of them group recommendations from across the five guiding principles presented in Chapter 7.

Program/Policy - Priority #1 - Hire or dedicate an Active Transportation Coordinator

To carry out many of the recommendations, particularly with regards to programs and policies, it is crucial to have someone in place to help move things forward and to coordinate many of the tasks. Therefore, hiring an Active Transportation Coordinator is the highest priority. Much of the implementation of the policy, education, promotion, funding, etc., can fall within this individual's mandate. (recommendation 1)

It is recommended that this position be resident in Public Works Department and that the hiring or transfer occur as soon as possible following the release of this report.

Program/Policy - Priority #2 - Form an Active Transportation Advisory Committee

This committee will build on the expertise of its various members to provide advice and guidance as Active Transportation programs, policies and facilities move forward. It will play an important role in ensuring that the vision of an integrated and coordinated approach is achieved, and will facilitate the implementation of several other recommendations. The committee will also help to set short, medium and long-term goals, and build on the work from the former Bicycle Advisory Committee. (recommendation 7)

It is recommended that the Committee be established soon after the creation and filling of the Coordinator position, and that it occur within the first six months following release of this report. It will be important to formalize the terms of the committee and to clarify how

reporting relationships will work. Establishment of the committee will be the responsibility of the Public Works Department.

Program/Policy - Priority #3 - Build Awareness and Foster Dialogue

Interwoven throughout many of the recommendations is the need to inform the public about Active Transportation and, wherever possible or appropriate, provide an opportunity for public input.

The first opportunity to implement this priority is in the release of this report (recommendation 13). Profile could be gained through the media and potentially through an open house. The City will be able to demonstrate its commitment to Active Transportation and how it will move forward on what is essentially a good news story. Consideration may be given to aligning the release and associated promotion of this report with the proposed In Motion initiative. This would provide a good profile and show it as consistent with a broader Active Living proposal, which will be seeking Civic endorsement in the spring of 2005.

Subsequently, a number of the recommendations could be implemented within the first year following the release of the report, because they are specific and cost-effective. These are:

- Develop an Active Transportation page on the City's web site and ensure it is linked to and from other relevant sites and search engines. Include on this site the opportunity for public input (call, write, e-mail) regarding maintenance or choke spots, and minor projects (recommendations 8 and 14).
    - Profile Active Transportation champions on the City's AT web site (recommendation 15)
    - Increase public awareness of existing Active Transportation facilities and programs on the City's web site, through the Leisure Guide, bus boards, etc. (recommendation 12).
- Include public consultation into the decision making process as the study recommendations are further developed and implemented, to encourage public buy-in and to help set priorities for future projects. Consultation can occur via the web site as noted above, through the Advisory Committee, and also using the informal workshop approach, which was successful in this project. Initiating contact with service groups and NGOs will also serve as a form of public consultation, as well as beginning to work on implementing programs (recommendations 14 and 29).
- Launch a targeted campaign focused on individuals who are already active and who might be encouraged to use active modes of transportation (recommendation 10).
- Advertise, promote and celebrate new initiatives/facilities/successes that occur in 2005 (recommendation 9).

Program/Policy - Priority #4 - Develop a Detailed Action Plan with Time Frames

This report has developed recommendations that will deliver on a vision for Active Transportation for the short- and long-term in Winnipeg. The recommendations must soon be translated into a more specific and more detailed Action Plan that includes responsibilities and time frames for implementation, and a public consultation component. Although action plans will need to be updated regularly, preparation, as quickly as possible, of an action plan for 2005

will demonstrate commitment and facilitate implementation and coordination of other tasks and recommendations (recommendation 19). This action plan would be the responsibility of the Coordinator, working with the Advisory Committee. In this process, the scope and nature of Active Transportation may be clarified (recommendation 18), but an action plan can be developed based on the extensive policy that presently exists. As well, forward-looking and adaptable targets will need to be set (recommendation 20), but the process of setting these targets should not hinder the creation of an initial action plan.

Implementation of this last priority will, in turn, see the creation of a new list of priorities. This Study recommends that emphasis be placed on developing an Active Transportation mindset within the City of Winnipeg (including recommendations 1-7, 15 and 25) and enforcing existing and new traffic laws (recommendation 24).

8.2 Elaboration on Priority Facilities

Access to appropriate facilities forms the foundation of a multi-faceted approach when encouraging people to chose Active Transportation for commuting. Ideally, the facilities should help reduce conflict between users (i.e. motorists/cyclists, motorists/pedestrians, and pedestrians/cyclists/small wheel users), provide connectivity and be easy to follow. These goals are achieved in part through education but also by planning, developing and implementing appropriate facilities. In the long term, a network of routes paths and trails should facilitate Active Transportation. AT facilities should be included in all resurfacing and new roadway construction and development. Where feasible, the public's barriers to participation in Active Transportation (safety concerns, choke-points, etc.) should be addressed. In the long term, it is important to be consistent, ensure geographic representation of facilities, and ensure connectivity to build a proper AT network. A map outlining Winnipeg's future Active Transportation Network, with all priority recommendations completed, can be found in Appendix Q.

The following section elaborates on aspects of the different types of facilities being recommended and provides the background for the priority facility implementation list in 8.2.1.

Maximize Usability of Current Facilities (Maintenance)

To facilitate maintenance of designated Bicycle Commuter Routes and recreational Bicycle Routes, as well as bridges and underpasses, a bicycle-focused maintenance program should be implemented. Table 8.2-1 provides an example of some of the different elements that would be included in a maintenance program for bikeways. The National Center for Bicycling and Walking (NCBW) outlines some objectives for dealing with maintenance related issues, which are outlined in Chapter 3.

Table 8.2-1 Sample Elements of a Maintenance Program for Designated Shared Roadways.

Seasonal
- Filling potholes – especially in curb lanes
- Minor repairs to road surface
- Spring/ Fall major street sweeping to remove accumulated gravel/leaves from curb lane
- Opening of trails. Putting up appropriate signage
Major work
- Improving drainage of curb lanes
- Changing orientation of sewer grates to be bike friendly
- Resurfacing the pavement at the end of its service life
Ongoing:
- Cleaning curb lane from debris (gravel, garbage, snow) on a regular basis (bi-monthly)
- Maintaining drainage of curb lane

Source: Vélo Québec, 2003

For pedestrians, a priority maintenance issue is snow and ice removal from sidewalks and ensuring barrier-free access at crossing points. This becomes particularly important for those citizens with mobility issues. Well-drained curb lanes are also beneficial for pedestrians, as this reduces the amount of splashing from motor vehicles that occurs during wet seasons. A pedestrian facility maintenance program would also include major work in regards to the condition of sidewalks and curb cuts. Seasonal aspects of the maintenance program would include the maintenance of aesthetic items such as landscaping and street furniture (benches, lamp posts, waste bins, etc.).

Designated Shared Roadways



Public Consultation indicated that the most preferred facility treatment were off-road bicycle paths followed by delineated bicycle lanes. The literature indicates that preference of these two facilities depends on the purpose of travel (recreational versus commuting) and the skill level of the cyclist (the degree to which they are comfortable riding with motor vehicle traffic). Generally, cyclists who are commuting by bike prefer to take the most direct route and want easy access to the route, and therefore prefer bicycle lanes. It is recognized that bike lanes and bike paths are the best practices solution, however, we are not able to recommend bike lanes or bike paths along all major arterial roads at this time, due to constraints such as cost and space limitations. We believe that these, along with widened curb lanes, should be taken into consideration in any new roadway construction projects and in future resurfacing projects where applicable.

The underlying reason behind the preference for bicycle paths and bicycle lanes is safety. Cyclists do not feel safe sharing the road. To partially address this issue in the interim, it was decided to incorporate an educational component that builds awareness, and reminds motorists and cyclists to share the road. This combined with adequate curb lane maintenance could go a long way in appeasing the public's concern about safely cycling along major thoroughfares.

Two types of designated shared roadways have been recommended (see Figure 8.2-1). These signed routes are intended to form the foundation of a bicycle network within the city of Winnipeg. *Bicycle Routes* are signed roadways on streets with low to medium traffic volumes (therefore some existing signage on high traffic roads should be removed and the signage reallocated to yet unsigned bicycle routes). *Bicycle Commuter Routes* follow major arterial roads and use "Share the Road" signage to remind cyclists and motorists to share the space.

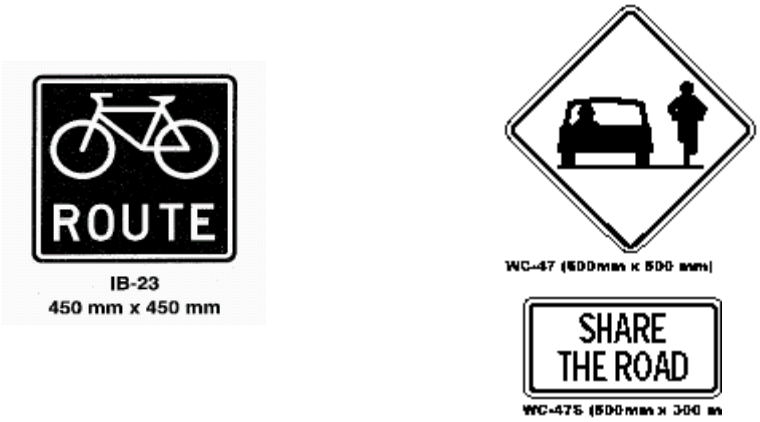


Figure 8.2-1 - Examples of Bicycle Route Signage (left) and Bicycle Commuter Route Signage (right).

Widened Curb Lanes

Although only two streets have been recommended to receive widened curb lanes within the prioritized list of projects to undertake, this is a type of facility that should be taken into consideration whenever road construction is being conducted. In some instances, it is possible to widen the curb lane by simply repainting the lane widths, and allocating more lane width to the curb lane. Ideally, a lane width of 4.3 metres allows cyclists to pass parked cars without being in danger of opening doors, and in lanes without parked cars, it is sufficient room for motorists to pass cyclists without having to change lanes. Streets with widened curb lanes do not necessarily have to be signed with designated Bicycle/Commuter Route signage; however, they can be identified as part of the bicycle route network if they provide necessary linkages or alternative routes.

Bicycle Lanes

This report recommends two areas in which this type of bicycle lane is demonstrated. Delineated and demarcated bicycle lanes are quite common in many European cities and gaining in use throughout North America. The streets chosen for this treatment were adequately wide to accommodate a bicycle lane on the existing roadway. They also are streets on which no parking is permitted. The literature indicates that in addition to striping and signage, a bicycle lane should be demarcated on the pavement (usually with a stencil of a bicycle and a directional arrow), since this allows the cyclist to keep their eye on the road. It provides clear separation between motorists and cyclists. Once an adequate bicycle friendly curb lane maintenance program has been established, the City will want to investigate whether the bicycle lane program needs to be expanded or if the maintenance and road-user education programs are sufficient from the public's point of view.

Bike/Bus Lanes (Diamond Lanes) have been implemented on a few major arteries within the city of Winnipeg. During peak traffic periods these lanes are reserved for bicycle and bus travel. Ideally, they should be wide enough for bicyclists and buses to manoeuvre around each other, without having to switch lanes. This is a possible option for Pembina Highway, as this is a bicycle commuter route with higher use potential.

Paved Shoulder Bikeways are found on urban or rural roads, usually with higher speed traffic. There is typically a paved shoulder with no parking. The paved shoulder should only be demarcated as a bikeway if its width complies with the standard for the speed traveled on that roadway. In most cases this treatment would require demarcating and delineating the shoulder. In some cases it might require paving a shoulder that is not currently paved. There are several high-speed arterial routes that circumnavigate the city for which this type of treatment would be appropriate.

A *Raised Pavement Bicycle Lane* is a similar idea to the Paved Shoulder Bikeway; however, it is a tiered system, raised slightly from the roadway (see Figure 8.2-2). In some instances it might be desirable to include a pedestrian walkway in this facility, which would incorporate an additional tier for a raised sidewalk. This concept does not appear in the North American literature although it is a popular approach for roadways with higher traffic volumes or higher speeds in Denmark.

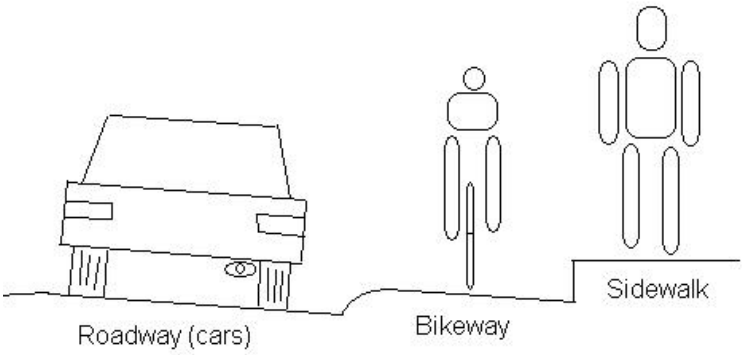


Figure 8.2-2-Raised Shoulder Bicycle Lane

Paths

Although *sidewalks* are prevalent throughout the city of Winnipeg, some areas are under serviced for sidewalk facilities. In the public consultation process, Murray Industrial Park was identified as one such area. Currently there are no sidewalks, and people working in the area who do not commute by car must walk along the road or boulevard to get to a bus stop or to their destination. In the summer months people can walk along the boulevard; however, during the winter months this is not feasible, requiring some type of off-road walking path.

Multi-use Paths can be used by pedestrians, cyclists and other AT users depending on the pavement surface. A good multi-use path should be accessible and wide enough to accommodate the various user groups (including in-line skaters and other small wheel users). Where multi-use paths follow the roadway, sufficient connections should exist. If it is difficult to get on or off a path, cyclists will often prefer to use the roadway.

Other Facilities

Bicycle Lockers can help protect bicycles from theft as well as shelter them from the elements. Having safe, secure bicycle lock-up facilities would likely encourage some people to commute by bicycle, especially those with higher-end equipment. Also, having adequate bicycle parking at destinations is important for those who would like to commute by bicycle.

Staircases pose a barrier to cyclists, people in wheelchairs, using walkers or pushing strollers. If it is not possible to build a multi-user ramp, incorporating a narrow ramp into the structure of a staircase would allow a cyclist to push a bike up or down the stairs with ease. This is a consideration for the Maryland Bridge, on the northwest side of the Assiniboine River. An underpass currently exists to pass under the bridge, but there is a staircase. Ideally, the staircase would be replaced with a ramp, as this is close to the Misericordia Hospital and the underpass is not wheelchair accessible. On the north side of the Norwood Bridge a staircase ramp would help cyclists negotiate between the Forks and the Parkway path.

Building bridges is an expensive undertaking. Often these are also areas where choke points occur, and cyclists prefer not to have to squeeze in with motor vehicles. Adding a *cantilevered sidewalk* to the side of a bridge, and converting the existing sidewalk to a bicycle lane is one possible solution.

Crossing busy streets can be a challenge for pedestrians as well as for cyclists. Kilcona Park is separated from a residential area (All Seasons Estates) by Lagimodiere Boulevard (Highway 59). Easy pedestrian access is non-existent. A pedestrian/cycling *underpass or overpass* would be a possible solution. Vélo Québec (2003) suggests that underpasses are preferred in Canada, because they offer more protection from the elements and require less space to build. On the downside, temporary lane closures would be necessary for the construction of an underpass beneath existing roadways. Since plans for the Chief Peguis extension have not been finalized, there remains the possibility of an overpass on Lagimodiere into Kilcona Park. The actual location providing pedestrian access would need to be compatible with the plans for the Chief Peguis extension. At this point, the proposed crossing location would be at McIvor.

8.2.1 Implementing Facilities Recommendations

The following addresses priorities for the facility recommendations outlined in Chapter 7 and identifies specific types of facilities and actions to implement them.

As described in Section 1.5.3, the Study Team undertook a review of all recommended bicycle facilities from the 1993 report. The master list was updated and expanded to include, to some extent, other AT modes. From this, a short priority list of proposed facilities is recommended and featured in Table 8.2-2. These priorities were identified through public consultation, outstanding items from the 1993 list of priorities, and opportunities provided through capital works projects and projects initiated by local resident groups, committees or associations.

Responsibility for building these facilities will largely rest with Public Works, although some, such as the Parkways, will be the responsibility of Planning, Property and Development. It is

recommended that Priorities #1 and #2 for facilities be implemented beginning in the 2005/06 fiscal year. A more specific five-year action plan and budget should be developed following the designation of the Coordinator and creation of the Advisory Committee. Public consultation should occur as part of the development of this facilities action plan.

A non-prioritized version of this list is arranged by geographic region and treatment in Appendix M. An extensive list that includes all outstanding recommendations made in the 1993 *Bicycle Facilities Study* is found in Appendix K. A map outlining the proposed new facilities can be found in Appendix P.[1] They are organized by type of treatment (bicycle route, bicycle commuter route, raised shoulder bike lane, bike lane, etc.).

Table 8.2-2 Proposed Facilities - Prioritized List[i]

<table>
<tr><td colspan="2">Priority #1: Provide regular maintenance (cleaning and repair) of curb lane and/or bike lane</td></tr>
<tr><td colspan="2">- Emphasis on Priority #3 & Priority #6 routes</td></tr>
<tr><td colspan="2">Priority #2: Include Active Transportation in new roadway construction/ Capital Works projects</td></tr>
<tr><td colspan="2">Examples of Currently slated projects:
- Kenaston Underpass / Sterling Lyon Parkway
- Incorporate AT into Bridge work (Disraeli, Maryland, Redwood)
- Widen curb lane on St. Anne's Rd between NovaVista & Warde
- Widen curb lane on Kenaston Between Academy & Taylor</td></tr>
<tr><td colspan="2">Priority #3: Install 'Share the Road' signage on high traffic Bicycle Commuter Routes [ii]</td></tr>
<tr><td>• Northwest
o Princess/Donald
o Smith/King
o Maryland
o Sherbrook
o Portage
o Main
o McPhillips
o Notre Dame / Keewatin
o St. Matthews
o Isabel/Salter
o Moray
o Leila/Partridge
o Cumberland

• Southwest
o Pembina
o Kenaston (including sections under Capital Works)</td><td>• Northeast
o Henderson Hwy
o Plessis*
o Panet* / Molson
o Ravelston Ave W*
o Reenders*

• Southeast
o St. Mary's
o St. Anne's (including sections under Capital Works)
o Dunkirk/Dakota
o Marion*
o Goulet*
o Archibald</td></tr>
</table>

[1] Maps for Existing Active Transportation Facilities, Existing Winter Active Transportation Facilities and Winnipeg's Future Active Transportation Network can be found in Appendices N, O and Q respectively.

Priority #4: Connectivity – Bike Routes, Parkways and Multi-use Paths

- Sign Bicycle Route -
  - Northwest
    - Assiniboia Parkway
    - St. James Parkway
    - Assiniboine Parkway (river path)
    - Selkirk (Keewatin to Inkster)
    - Machray
    - Alexander
    - Airlies
  - Southwest
    - Chalfont / Cathcart / Eldridge/Rannock
    - Jubilee to Osborne
    - Grosvenor
    - Charleswood Parkway
    - Churchill Parkway
    - Fort Garry Parkway
    - King's Park Parkway
    - St. Norbert Parkway
  - Northeast
    - Elmwood Parkway
    - Kildonan Parkway
    - Munroe Ave*
    - Kildare Ave*
    - McMeans Ave*
    - Bond St.*
  - Southeast
    - St. Boniface Parkway
    - St. Vital Parkway
    - South St. Vital Parkway
  - Removal of Signs
    - Portage Ave.
    - Regent Ave.
    - Empress/ Valour

- Complete parkways
  - St. Boniface Parkway / St. Vital Parkway / South St. Vital Parkway
  - Elmwood Parkway / Kildonan Parkway / North Kildonan Parkway
  - Charleswood Parkway / Assiniboine Parkway (south of river) / Fort Rouge Parkway / Churchill Parkway / Fort Garry Parkway / King's Park Parkway / St. Norbert Parkway
  - Assiniboia Parkway / St. James Parkway / Assiniboine Parkway (north of river) / North Winnipeg Parkway

- New multi-use paths[i]
  - Midland Way (along CPR Midland Line)
  - Waverley (between Wilkes and McGillivray)
  - Cloutier Dr. (full length)
  - Bishop Grandin (between Seine and Red Rivers)
  - Fort Whyte Centre Trail extension
  - Main St. to East St. Paul trail link

- Bridges
  - Disraeli Overpass & Bridge (identified in Capital Works)
  - Maryland Bridge (identified in Capital Works) (ramp under bridge on North side)

Priority #5: Innovative facilities[iii]

- Bike lanes (bike stencil and painted line)
  - Northwest
    - Moray *
    - Murray Park Rd*
  - Northeast
    - Pandora*
    - Bournais*

- Bike lock-ups
  - Northeast
    - Kildonan Place Mall
  - Southeast
    - St. Vital Centre
  - Northwest
    - The Forks
    - Graham Ave Mall (Downtown)
    - Polo Park Mall
  - Southwest
    - Osborne Village
    - Little Italy (Corydon)

- Cantilever bridges
  - Northwest / Northeast
    - **Redwood Bridge (sections under Capital Works)**
  - Southeast
    - Seine River (Marion)*

- Pedestrian bridge or underpass to Kilcona Park (Northeast)

- Raised bike shoulder/sidewalk pilot project
  - Southeast
    - Marion (Archibald to Lagimodiere)*

- Shoulder Bikeways
  - South West
    - Bishop Grandin
    - Kenaston
    - Waverley
  - South East
    - Dugald
    - Lagimodiere
  - North East
    - Molson

- Staircase ramp under
  - **Maryland Bridge (Capital Works)**
  - Norwood Bridge on the North side to path to the Forks from the Parkway

Priority #6: Filling key gaps - Demonstration Initiative Sites

A) Transcona [iv]

- Marion (Commuter Route) / Goulet (Commuter Route)*
- Marion, Archibald to Lagimodiere (raised pavement bike lane & sidewalk)*
- McMeans (Bicycle Route)*
- Kildare (Bicycle Route)*
- Bond (Bicycle Route)*
- Pandora (bike lane)*
- Bournais (bike lane)*
- Dugald (shoulder bikeway – widened, paved shoulder)*
- Lagimodiere (shoulder bikeway – widened, paved shoulder)*
- Munroe (Bicycle Route)*
- between Regent and CNR Pine Falls line(Commuter Route)*
- Ravelston (pave road from Plessis to Bradley and include shoulder)*
- Ravelston (Commuter Route)*
- Panet (Commuter Route)*
- Reenders (Commuter Route)*
- Seine River Bridge at Marion*

B) Industrial Parks: Murray Industrial Park Pilot project -(leading by example) [v]

- Sidewalks or walking trails
  - Moray St between Ness & Saskatchewan*
  - Murray Park Road between Moray & Sturgeon*
- Bicycle Lane
  - Moray St between Ness & Saskatchewan*
  - Murray Park Road between Moray & Sturgeon*

* Demonstration initiatives either create a linkage (linking Transcona to downtown Winnipeg) or fill a key gap

i. Northwest = north of Assiniboine River and west of Red River
Southwest = south of Assiniboine River and west of Red River
Northeast = north of CNR Reddit line and east of Red River
Southeast = south of CNR Reddit line and east of Red River

ii. Streets listed by priority within geographic regions.

iii. Listed in priority by treatment and then by area/street.
iv. Listed by priority to provide facilities and connect Transcona with the city centre and with Henderson Hwy.
v. A demonstration site that fills a key gap by providing Active Transportation access (e.g. areas that are not serviced by sidewalks).

8.3 Facility Costing

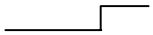
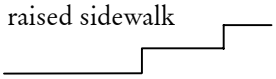
The development of facilities involves capital expenditures and ongoing operation, maintenance, repair, and replacement costs. The least expensive facilities are those that integrate bicycles with existing motor vehicle facilities (e.g. shared and restricted roadways). Table 8.3-1 illustrates estimated unit costs for various types of facilities proposed in this study.

The completion of the Parkway system is partially contingent on acquiring access to privately held land. It is the normal practice of the City of Winnipeg to obtain easement agreements with private landholders. In some instances property acquisition might be required.

For some facilities, there may be opportunities for sharing the cost of developing the facilities. For example, the cost of installing bicycle lockers might be shared with a Shopping Centre's property managers. Integrating Active Transportation facilities into the design of new road/path construction can also present long-term cost savings. Including a requirement for developers to include AT facilities that enhance the quality of life in and the appeal of new suburban neighbourhoods within property development applications is a way of sharing some responsibility for development of AT infrastructure.

Table 8.3-1 Facility Costing

	Width	Material	Unit Cost	Comment
Signage		- supply & install signs on poles	$175 / sign	Assume 6 signs per km
Orientation of Grates		- Replace sewer grates with correct orientation for bicycles	$200 / grate	Ensure that the appropriate size cover is ordered to replace, otherwise cover and frame need to be replaced.
Paved Shoulder		- conform to standards for roadway shoulders		
	1.5 m	Paved	$44 / lin.m.	Assume 50mm asphalt + base.
	2.0 m	Paved	$58/ lin.m.	Assume 50mm asphalt + base. For roads with speeds in excess of 70 km/h
	2.5 m	Paved	$72 / lin.m.	Assume 50mm asphalt + base. For roads with speeds in excess of 80 km/h

	Width	Material	Unit Cost	Comment
Raised Paved Shoulder:				
- bike lane only 	2.2 m wide and 7 to 12 cm raised from road surface	Paved	$178/ lin.m.	Concrete Curb and gutter + 50mm asphalt over 300mm base/sub-base.
- raised lane with raised sidewalk 	1.7 m wide lane (raised 7 to 12 cm from road surface) 1.5 m sidewalk (raised 5- 9 cm from the raised bicycle lane)	Paved	$213 / lin.m.	Concrete Curb and gutter + 50mm asphalt over 300mm base/sub-base.
Bicycle Lane:				
Delineated Lane - One way	1.5 m	Lane marking & signage on existing roadway	$0.20 / lin.m. dashed line	On existing road or pavement (i.e. paving cost not included)
Demarcated	See illustration for design (Figure J-1)	Paint Stencil on road service Epoxy based paint will extend the longevity of the stripe	$75 / bike symbol	
Multi-use Path	3.0 m	crushed limestone	$29 / lin.m.	25 mm depth fines, 100 mm base
	3.0 m	50 mm asphalt	$77 / lin.m.	50 mm asphalt, 150 mm base
	3.5 m 4.0 m	50 mm asphalt	$102 / lin.m.	50 mm asphalt, 150 mm base
	3.5 m 4.0 m	80 mm asphalt	$150 / lin.m.	80 mm asphalt, 200 mm base; suitable for motor vehicles
Railway Crossings		Rubber crossing with filler strips	$3,200 / per crossing based on module 9' wide/ single track width cost of material FOB Winnipeg based on quantity ordered. Can be installed in3',6',9' widths	-based on cost estimate of using HiRail Pedestrail Pedestrian Crossing Surface/this is a North American Standard: contact – John Reid/Jaychris Industrial Rail Supply Jaychris@total.net
Sidewalk	- conform to city's standards	1200 wide concrete sidewalk	$66 / lin.m.	
Cantilevered Sidewalk		Steel	$500.00 lin m	

	Width	Material	Unit Cost	Comment
Bicycle Locker	1door, 1 bicycle 49" H x30"W x74 2" L	- moulded fibreglass reinforced plastic (one piece design)	$1025 US base unit price volume 1- 5 units	Based on information supplied by American Bicycle Security Co.
	1door, 1 bicycle wedge shape 49"H x 30"WF x 4"WB x72"L	- moulded fibreglass reinforced plastic (one piece design)	$965 US base unit price volume 1- 5 units	
		Master key (3 user keys. 1 master key per set)	$35 US. /door	
		Coin operated locks	$150 US/door	
		Locker Numbers	$15 US/door	
		Ventilation System	$15 US/door	
		Gear hooks (2 per locker)	$20 US/locker	
	2 door, 2 bike locker	Polyethylene (one piece design) diagonally divided to hold 2 bikes, but each cyclist only has access to their bike.	$1695 CDN/locker + shipping	Based on Sport Systems Canada quote. Ottawa currently uses CS2-P lockers at park & ride facilities & North Vancouver Rec. department is trying them as well.
Pedestrian/ Cycling Underpass	5 m wide/ Min. 2.75 m high		$650,000 (allowance) based on best estimate of work carried out at Bishop Grandin	May require lane closures during construction. - Include lighting
Pedestrian/Cycling Overpass	5.3 m above roadway and 4.0m wide, structure width = 1 m thick, access ramp 6% grade		$1,000,000 (allowance) based on best estimate of work carried out at Moray	
Staircase with Bicycle Ramp	See illustration (Figure 3.2-3)	Concrete Trough	$45 / lin.m.	- trough depth +/- 75 mm - trough width +/- 300 mm

8.4 Summary

Setting priorities and beginning implementation is the last but crucial step in delivering the vision of Active Transportation in Winnipeg. The following priorities are recommended for implementation in the short term:

- Hire or dedicate the Active Transportation Coordinator

- Form the Active Transportation Advisory Committee
- Build awareness and foster dialogue with the public
- Develop a detailed action plan with time frames
- Begin to implement the priorities for facilities by first identifying projects from the following list:
    - regular maintenance
    - new roadway construction or Capital Works projects
    - signage
    - innovative facilities
    - facilities providing connectivity

By beginning with the priorities identified in this chapter, the City of Winnipeg can actualize both the opportunity and responsibility of Active Transportation, with its many benefits to both individuals and the community.