

Executive Summary



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1.0 Introduction

The Ottawa Pedestrian Plan is a long term (20 plus year) strategy to develop, strengthen and support a pedestrian culture throughout the City of Ottawa. Specifically, the plan identifies and recommends changes in infrastructure, policies and programs that will encourage more people to walk more often. This initiative has been prepared in the context of the City of Ottawa's high level strategic plans, including the Ottawa 20/20 Growth Management Strategy, the Ottawa Official Plan and the Ottawa Transportation Master Plan, in order to provide consistent policies and strategic directions for the future of Ottawa. With its step-by-step approach, the Ottawa Pedestrian Plan capitalizes on local opportunities to make Ottawa one of the most pedestrian-active cities in North America.

The recommendations of the Ottawa Pedestrian Plan respond to at least nine of the objectives outlined in the City Strategic Plan (2007-2010), approved by council in August 2007. These objectives are:

- **Transportation Priority**, Objective 1 – “Improve the City's transportation network to afford ease of mobility, keep pace with growth, reduce congestion and work towards modal split targets.”
- **Infrastructure Renewal Priority**, Objective 2 -“By 2017, close the infrastructure renewal gap in sidewalks, traffic control signals, traffic signs and streetlights.”
- **Solid Waste and Environmental Priority**, Objective 3 -“Reduce greenhouse gas emissions by up to 20% by 2012.”
- **Sustainable, Healthy and Active Priority**, Objective 6 -“Require walking, transit and cycling oriented communities and employment centres.”
- **Sustainable, Healthy and Active Priority**, Objective 9 -“Ensure public health programs that work to promote health and prevent disease are maintained in concert with the growing population of the city.”
- **Sustainable, Healthy and Active Priority**, Objective 11 - “By 2017, close the gap in sidewalks, traffic lights, street lights and bicycle lane infrastructure that has been warranted and unfunded.”
- **Transit Priority**, Objective 1 -“Achieve a 30% modal split (for transit) by 2021.”
- **Planning and Growth Management Priority**, Objective 2 - “Respect the existing urban fabric neighbourhood form and the limits of existing hard services, so that new growth is integrated seamlessly with established neighbourhoods.”
- **Planning and Growth Management Priority**, Objective 4 - “Ensure that City infrastructure required for new growth is built or improved as needed to serve the growth.”

Vision

Through a series of public workshops, consultations with City staff and stakeholder input, a vision was developed for a walkable future in Ottawa. The vision statement guiding the Ottawa Pedestrian Plan is:

Ottawa Pedestrian Plan (Final Report June 2009)

Facilitate year-round walking in the City of Ottawa as a comfortable, realistic, viable, well integrated and well used component of the transportation system in the City.

Goals and Objectives

The goals of the Ottawa Pedestrian Plan are based on input from the public, stakeholders and City staff, as well as goals outlined in the City's high level planning documents. The primary goals of the Ottawa Pedestrian Plan are:

1. Increase the pedestrian modal share across the City.
2. Assist in guiding future city development in such a way that encourages the creation of a high quality pedestrian environment.
3. Develop and strengthen the "culture of walking" in Ottawa.

To achieve these goals, the following objectives need to be realized:

4. Develop an integrated network of pedestrian facilities that includes sidewalks, pathways and pedestrian friendly spaces throughout the city, providing connections to important destinations and transit facilities.
5. Develop policies, tools, processes and practices necessary to plan, implement and care for the pedestrian system.
6. Develop new, and strengthen existing programs to encourage more people to walk more often and make walking a mode of choice.
7. Define implementation priorities for the pedestrian network and supporting programs.

2.0 Study Process

The study process behind the development of the Ottawa Pedestrian Plan consisted of the following three stages, in accordance with the Terms of Reference:

Part 1 – Building the Case for Walkability in Ottawa

This stage involved collecting and reviewing the background policy context for the Pedestrian Plan (Chapter 3); gathering information pertaining to pedestrian activities and infrastructure in the City; understanding Ottawa's pedestrian culture; reviewing best practices from around North America (Chapter 4); and, summarizing results of the public consultation process (Chapter 5).

Part 2 – The Strategy for a Pedestrian Plan

The second stage included developing a metaphor for the Pedestrian Plan to guide the study (Chapter 6); an analysis of the existing pedestrian culture and infrastructure in Ottawa; and, mapping of connectivity and continuity in the existing pedestrian network and recommendations for improvement (Chapter 7).

Part 3 – The Pedestrian Network and Implementation Plan

The final stage involved the development of recommendations for proactive planning, collaboration between departments within the City of Ottawa, and improving pedestrian safety and accessibility (Chapters 8 & 9); recommendations for maintenance and rehabilitation of pedestrian infrastructure, and supportive education and promotion programs (Chapters 10 & 11); as well as an

Ottawa Pedestrian Plan (Final Report June 2009)

implementation strategy for all recommendations made within the Plan (Chapter 12).

PART 1 - BUILDING THE CASE FOR WALKABILITY IN OTTAWA

The City of Ottawa faces some challenges towards becoming a truly walkable city, in large part due to its geographically large and dispersed form, however there are many positive initiatives already in place and there exists considerable support from City council and staff, public health agencies, and Ottawa citizens.

3.0 Study Background

In addition to the City Council's Strategic Directions Report, there are numerous City documents supporting the development of a city-wide pedestrian network. The 20/20 Growth Management Strategy, launched following amalgamation in 2001 as a framework for managing future growth, promotes walking as a socially accessible, environmentally healthy and economically feasible mode of transportation. This framework also encourages the development of livable communities, where housing, employment, parks and other services are all accessible by foot. Ottawa 20/20 is based on seven core guiding principles, of which two are directly relevant to the vision established for the Ottawa Pedestrian Plan:

- **A Green and Environmentally Sensitive City** is a city of wise land use, where walking, cycling and transit are the favoured modes of transportation in order to improve the quality of the natural environment.
- **A City of Distinct, Livable Communities** is a city where housing, employment and community facilities are accessible by walking, cycling and transit, and where transportation modes are barrier-free for the disabled.

Ottawa 20/20 core principles are supported through Official Plan land use and community design policies. Ottawa's Official Plan emphasizes a balanced transportation system, with increased emphasis on public transit, cycling and walking facilities, for the purposes of environmental protection and the improvement of human health. Specific targets such as increasing the peak modal share for walking and specifying the distance to transit stops in new developments are identified in the Official Plan.

The Transportation Master Plan supports Ottawa 20/20 principles through operational policies guiding day-to-day transportation programs and providing a basis for capital and operating budgets. The Transportation Master Plan includes walking as a desirable mode of travel not only on the road network but also on multi-use pathways. Both the Official Plan and Transportation Master Plan identify the need for a comprehensive Pedestrian Plan.

The Ottawa Pedestrian Plan belongs in the tier of planning documents directly below the Transportation Master Plan, along with the Ottawa Cycling Plan, Greenspace Master Plan, National Capital Region Recreational Pathway Plan and also the Ottawa Rural Pathways Plan (endorsed).

4.0 Walkability in Ottawa

In addition to policy support for creating a strong pedestrian culture in the City of Ottawa, the numerous benefits of walkable communities are outlined in the first stage of the Plan:

Ottawa Pedestrian Plan (Final Report June 2009)

- **Improving citizens' health:** Regular physical activity, such as walking, has a demonstrable positive effect on human health. Studies have found that where sidewalks are available, people are more likely to meet recommendations for daily activity.
- **Increasing pedestrian safety:** Pedestrian safety is influenced by both the quality of pedestrian facilities and the quantity of people walking. Paved shoulders and sidewalks can significantly reduce pedestrian-motor vehicle collisions, while increased pedestrian activity within a community has a demonstrated "safety in numbers" effect.
- **Increasing social interaction:** Increasing the number of people walking in a community also increases social interaction. In walkable communities, neighbours meet more frequently while traveling to work, for shopping, or for recreation.
- **Conserving energy and reducing environmental impact:** Many short-distance personal vehicle trips (to and from schools, grocery stores, etc.) could be eliminated if walking was a more viable and desirable alternative, thereby reducing roadway congestion and energy consumption, as well as air and noise pollution.
- **Reduced infrastructure needs and costs:** A reduced reliance on the automobile can reduce the substantial costs associated with providing, maintaining and rehabilitating roadway infrastructure.
- **Economic benefits:** The many economic benefits of a walkable community include consumer and public cost savings, increased land use efficiency, health care cost savings and increased support for local businesses. Walking is also used as an indicator of community livability, which in turn influences business development and tourism.

In recent years, planning and design professionals have been helping communities to develop more livable streets and roadway environments through the introduction of pedestrian and bicycle friendly facilities. Home buyers are also increasingly choosing to live in traditional-styled neighbourhoods where walking is an integral part of the community design. Five exemplary organizations and initiatives for the improvement of the pedestrian environment are:

- **The Ontario Professional Planners Institute:** The 2007 discussion paper "*Healthy Communities Sustainable Communities*" identifies how community planners can apply principles of sustainability to urban design, transportation services and design, and public infrastructure.
- **The Local Government Commission:** This California-based non-profit organization is dedicated to working with community leaders to create healthy walkable communities. Their "*Ahwanee Principles for Resource-Efficient Communities*" helped pave the way for Smart Growth and New Urbanism, two planning movements centred on pedestrian-friendly design.
- **Smart Growth:** This planning movement recognizes the connection between development and quality of life, and advocates for the creation of active and livable communities. The shared characteristics of these communities include compact, transit-oriented mixed-use developments with a pedestrian-scale design.
- **Complete Streets:** The mission of the National Complete Streets Coalition is for planning and design professionals, public transportation experts, natural resource managers and citizens, to work together in support of streets that provide safe access for all users.

Ottawa Pedestrian Plan (Final Report June 2009)

- **Shared Streets:** This concept is modeled after pre-automobile European streets where the street was primarily a place of public meeting and goods exchange. Shared, or Naked Streets allow pedestrians, cyclists and motorists to use a common space without favouring a single user.

In the City of Ottawa, not all of the concepts described above are practical or appropriate. Both the population size and geography of the City, mean that many land uses and communities are not within walking distance of one another. Nevertheless, the completion of the Ottawa Pedestrian Plan, in concert with existing policies and strategies to create more vibrant pedestrian spaces, signals a positive future for Ottawa. Chapters 6 through 12 provide Ottawa-specific recommendations for developing a healthy walkable Ottawa.

5.0 Consultation Process – Pedestrians Have a Say

Central to the development of the Ottawa Pedestrian Plan was the extensive consultation which took place throughout the study. Ottawa residents, City representatives and professionals were actively engaged to provide input into the structure of the study, strategies for changing travel behaviour to increase walking, and maximizing efficiency in the pedestrian network.

With the assistance of Members of Council, a special Public Advisory Committee (PAC) was formed of Ottawa residents representing urban, suburban and rural wards. The PAC assisted in the development of the Terms of Reference for the study (approved by Council 24 August 2005), and participated in the Visioning and Opportunities Workshops. A Technical Advisory Committee (TAC) was also established to draw on the expertise of the City's professionals in planning, urban design, engineering, maintenance, recreation, health, transit, transportation and operations. The TAC assisted in the development of the Terms of Reference for the study, participated in the Visioning and Opportunities Workshops and reviewed the draft Pedestrian Plan.

A series of events were designed to gain insight into the pedestrian perspective, including:

- **Visioning Workshops;** workshops were held with the TAC and PAC in order to develop themes and principles for the Ottawa Pedestrian Plan. Major themes that emerged from these workshops can be classified as Social Marketing, Urban Design and Land Use Management, Network Connectivity, Targeted Implementation, and Institutional Strengthening.
- **Opportunities Workshops;** these workshops, held with both the TAC and PAC, focused on four geographical areas of the city representing four different eras and patterns of development. Participants were asked to consider how the development pattern (Downtown, Middle Urban, Suburban and Rural) influenced pedestrian network connectivity and accessibility, and to identify potential challenges and opportunities for walkability in each area.
- **Public Open Houses;** three public open houses were held at three different locations across Ottawa in order to invite members of the public to comment on key themes and principles of the Pedestrian Plan and to help identify network opportunities. Some of the methods used to gather public comments included interactive display panels, comment sheets, and one-on-one discussion with members of the study team.
- **A Pedestrian Survey;** a significant component of the public consultation process was the Pedestrian Plan Survey which was distributed at public open houses and available on the City of Ottawa's website. The survey was composed of 13 questions organized into four parts: Why You Walk, Walkable Places, Walking Promotion and General Comments. As many

Ottawa Pedestrian Plan (Final Report June 2009)

of the questions were open-ended, the results are not intended to be statistically valid. Nevertheless, the survey was successful with respect to gauging public opinion on walkability in Ottawa and identifying desired improvements to the pedestrian realm.

- **Presentations to other stakeholders;** Presentations were given to both the Pedestrian and Transit Advisory Committee (PTAC) and the Public Health Branch of the City of Ottawa. Participants were asked to identify opportunities for collaboration between City departments to improve the pedestrian environment in the City.

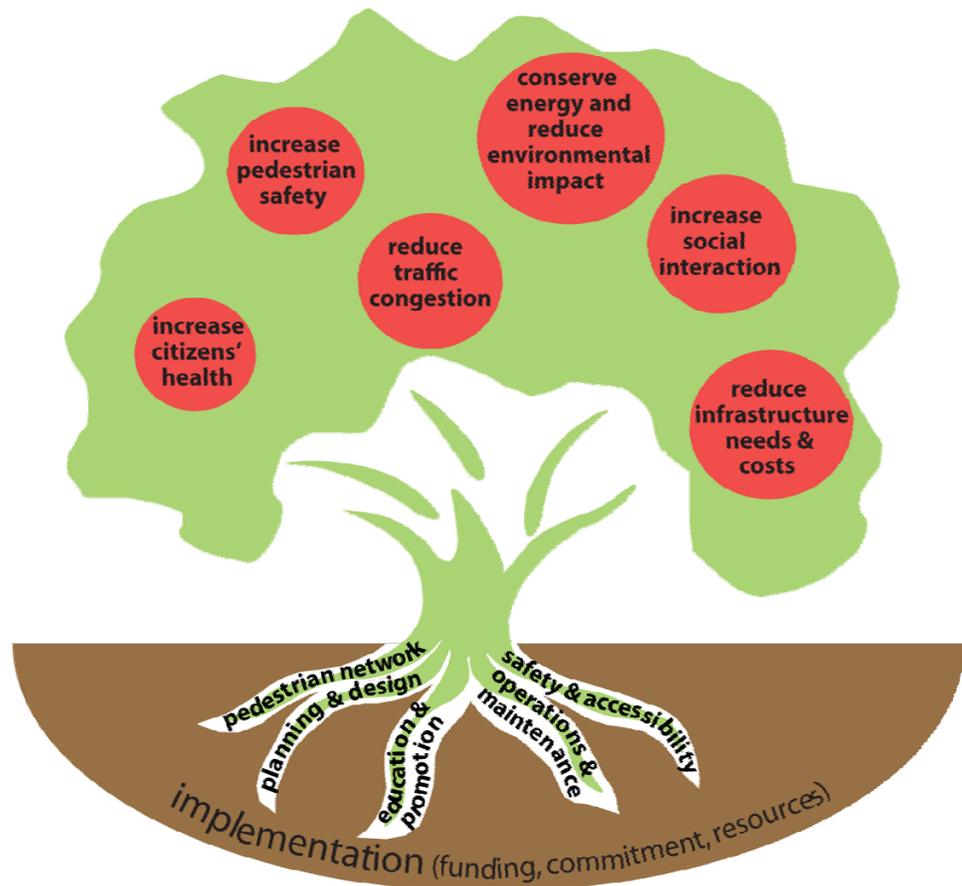
In addition to these scheduled events and formal data collection methods, staff, stakeholders and the public were invited to submit comments by fax, email and telephone at any time during the study.

PART 2 - THE STRATEGY FOR A PEDESTRIAN PLAN

6.0 The Strategic Plan

A tree is used as a metaphor for a successful Pedestrian Plan, and a symbol of a greener, healthier Ottawa. By nurturing and cultivating the Plan, a pedestrian culture will develop and thrive in the City of Ottawa.

The Ottawa Pedestrian Plan Strategic Concept



Ottawa Pedestrian Plan (Final Report June 2009)

Roots are required for support and nourishment. The roots of the Ottawa Pedestrian Plan are the key elements, including: the Pedestrian Network, Planning and Design, Safety and Accessibility, Operations and Maintenance, and Encouragement and Education.

Water, Soil and Nutrients are the inputs needed for a tree to become established, thrive and bear fruit. In the Ottawa Pedestrian Plan, these are represented by commitment, support and dedication from City Council and staff.

The Crown, Flowers and Fruit of a tree are indicative of maturity. As the Ottawa Pedestrian Plan matures, it is expected that more citizens will choose walking as their preferred method of travel and increase demand for a comfortable, safe and accessible pedestrian environment. The Plan will bear fruit such as improved environmental quality, increased physical and mental well-being, and a reduced need for automobile infrastructure, which will in turn grow into other positive aspects of living, working and playing in Ottawa.

7.0 The Network

Although most modes of transportation are planned in a network fashion, pedestrian travel is unique in several ways:

- **Pedestrian travel is portable**, integrating easily with other forms of travel without a requirement for parking or storage.
- **Pedestrian trips are short**, typically less than 2.5km.
- Pedestrians often seek the most direct routes, and may be easily discouraged by barriers.
- Pedestrians can travel many places that do not require formalized routes, such as shortcuts through buildings, alleyways or public plazas.
- Pedestrian travel tends to be concentrated, particularly in shopping areas.
- **Origins and destinations are unique and many**, and a single pedestrian may take different routes between the same origin and destination on any given day.

As a result, the pedestrian “network” presented in the Ottawa Pedestrian Plan is focused on enhancing existing pedestrian infrastructure in areas where a high demand for pedestrian facilities currently exists or is likely to exist in future.

The pedestrian network is composed of both formal and informal facilities, including sidewalks, multi-use pathways, low volume streets and road shoulders. Existing facilities were mapped with data taken from the:

- City of Ottawa Infrastructure database (GIS mapping);
- 2005 Origin-Destination Survey for the National Capital Region;
- City of Ottawa Sidewalk Condition database;
- City of Ottawa aerial imagery;
- City of Ottawa Pedestrian Related Services Harmonization Project;
- City of Ottawa Greenspace Master Plan; and,
- Input from staff, stakeholders and the general public.

Pedestrian travel in Ottawa is correlated with the development history of Ottawa's neighbourhoods. Walking trips are most frequent in the older

Ottawa Pedestrian Plan (Final Report June 2009)

Centretown/Downtown areas, where streets are generally laid out in a grid pattern of short blocks with numerous small parks and a mix of destinations including schools, shops and offices. Virtually all streets have sidewalks that are maintained year-round.

Pedestrian trips are less frequent in the middle urban neighbourhoods, where the grid pattern of streets transitions into a more curvilinear layout with numerous cul de sacs. Land uses tend to be segregated, development densities are lower and there are few to no sidewalks in many residential areas.

Walking is least frequent in the suburban and rural areas, although some suburban neighbourhoods and rural villages share physical similarities with the downtown area. It is probable that most trips are longer than can be accommodated conveniently by walking, as evidenced by the high proportion of cars per household in suburban and rural communities.

The process for developing the pedestrian network consisted of four parts:

- Appropriately addressing and prioritizing missing sidewalk and pathway links;
- Proactively planning for appropriate improvements in existing neighbourhoods;
- Addressing infill development at the lot-scale and neighbourhood-scale; and,
- Planning and designing the pedestrian realm in new neighbourhoods.

Strategies are identified on a district-by-district basis, and based on a hierarchy of facilities, in order to account for neighbourhood differences in pedestrian travel. Districts are also prioritized for improvement based on the current and anticipated demand for pedestrian facilities, as well as the quality of existing facilities. The Ottawa Pedestrian Plan recommends that the proposed network be verified for each neighbourhood through a more detailed study process..

PART 3 - THE PEDESTRIAN NETWORK AND IMPLEMENTATION PLAN

8.0 Planning and Design

Planning and design have a significant influence on walkability in a community from the layout and organization of neighbourhoods to the width of a landscaped boulevard. As a result, in order for Ottawa to improve the pedestrian realm consideration must be given to both the broad-scale planning policy level and the detailed site design level.

The Ottawa Official Plan and the Transportation Master Plan contain policies and principles to support a healthy pedestrian realm, which can be translated into physical changes at the street level through several mechanisms:

- A Pedestrian Charter
- Community Design Plans;
- Site Plan Control;
- Design Guidelines, and;
- Streetscape Design.

The establishment of a Pedestrian Charter is an important step toward creating a culture where people choose to walk. Ontario municipalities such as the City of

Ottawa Pedestrian Plan (Final Report June 2009)

Toronto have created their own charters based on internationally recognized principles of inclusive mobility, designing places for people, increasing safety, and supportive land use planning. A Pedestrian Charter for the City of Ottawa would help to engrain consideration for the pedestrian into City Council and Staff's day to day business practice.

Community Design Plans conform to the Official Plan and provide a guide to long-term growth in a new or existing community. At this level of planning, the pedestrian realm can be brought into the forefront by incorporating principles of walkability into the vision/goals, principles and objectives of the Community Design Plan. The pedestrian component could be strengthened by undertaking a community pedestrian audit which could identify the existing network and note potential improvements. A sample pedestrian audit can be found in **Appendix G** (under separate cover).

A review of the City of Ottawa's urban design guidelines indicated that the City is engaged in improving and strengthening the quality of the pedestrian environment. Nevertheless, it is recommended that a specific set of Pedestrian Design Guidelines be developed that would include specific details for the pedestrian path of travel, crosswalk locations and treatments, and additional considerations such as plazas. These guidelines could also consolidate aspects of good pedestrian design presented in other Ottawa urban design manuals.

Planning the pedestrian network requires an understanding of the desired pedestrian destinations in a neighbourhood and the average length of trip a pedestrian is willing to make. For new site developments, supplemental guidelines, such as Promoting Sustainable Transportation Through Site Design, developed by the Canadian Institute of Transportation Engineers, can be used by City in order to ensure that a complete and integrated pedestrian network is included in the site plan. Development applications should be also evaluated according to development type, integration with transit, and streetscape design.

A review of North American guidelines for sidewalk design was undertaken and the results were compared with current sidewalk policies and practices in the City of Ottawa. Pedestrian-friendly policies, such as the designated "clutter-free" pedestrian zone adopted by the City of Saskatchewan, are presented as models which could be adopted by Ottawa. Detailed updates to the City's Sidewalk Technical Design Guidelines and roadway cross-section guidelines are proposed in order to meet the pedestrian level of service (a measure of pedestrian traffic) and current standards for accessibility.

9.0 Safety and Accessibility

Safety is a major factor, influencing where, when and how often people choose to walk. Studies from the U.S. indicate that streets without sidewalks have more pedestrian-vehicle collisions than those with sidewalks on one or both sides of the street. Vehicular speed is also a concern, as the probability of death resulting from a pedestrian-vehicle collision increases with increased vehicular speed. An analysis of pedestrian collisions within the City of Ottawa indicated that pedestrian-vehicle collisions are most frequent when pedestrians are crossing the roadway, regardless of location or traffic control.

The Government of Ontario Accessibility for Ontarians with Disabilities Act contains detailed information for modifying the streetscape to remove barriers for pedestrians affected by mobility, hearing, visual, and cognitive impairments. A summary of the relevant guidelines is provided in the Ottawa Pedestrian Plan, including standards for sidewalk widths, surfacing, curb cuts and crossing signals.

Ottawa Pedestrian Plan (Final Report June 2009)

The design of safe pedestrian street crossings is essential for the establishment of a culture of walking. The following elements of safe pedestrian street crossings are discussed in detail:

- Pedestrian Crosswalks;
- Pedestrian Crossovers;
- Intersection Crossings;
- Crosswalk Markings;
- Curb Return Radii;
- Curb Extensions or Bulb-outs;
- Channelized Right-turn Lanes;
- Traffic Signal Phasing;
- Pedestrian Countdown Signals;
- Intersection Pedestrian Signals;
- Pedestrian Refuge Islands;
- Freeway Ramps;
- Roundabouts;
- Grade-separated Crossings, and;
- Accessible Pedestrian Signals.

10.0 Maintenance and Rehabilitation

In addition to the design and construction of new pedestrian facilities, the ongoing maintenance and rehabilitation of existing pedestrian infrastructure is central to a successful pedestrian network. Ottawa currently maintains one of the largest municipal transportation networks in all of Canada, and public opinion in the City indicates strong support for continuing or improving the current level of maintenance of roads and sidewalks. The following maintenance and rehabilitation topics are discussed in further detail:

- **Maintenance Quality Standards;** All sidewalks and pathways are inspected annually and deficiencies are noted. The extent or severity is prioritized according to whether the deficiency poses an immediate threat to public safety or merely contributes to the long-term decline of the facility.
- **Who maintains and rehabilitates Ottawa's sidewalks?** Both the Infrastructure Services (IS) and Surface Operations (SOP) of the City are responsible for the ongoing maintenance and rehabilitation of Ottawa's pedestrian facilities. Infrastructure Services is involved in reconstruction of curbs and sidewalk ramps once they have reached the end of their lifecycle, and compiles an extensive Sidewalk Condition Database. Surface Operations conducts regular monitoring and maintenance programs, and is responsible for both winter maintenance and emergency repairs.
- **Consideration for sidewalk maintenance during design;** the necessity for winter maintenance has a significant influence on the design of sidewalks in Ottawa, particularly regarding snow storage and clearance and manoeuvrability of snow removal equipment.
- **Winter sidewalk maintenance;** As with road maintenance, snow clearing on sidewalks is prioritized according to the frequency of use of the facility. In addition to snow clearing, sidewalk maintenance involves

Ottawa Pedestrian Plan (Final Report June 2009)

reducing the height of snowbanks when they block sightlines and improving meltwater runoff to storm drains during thaw periods. Several programs are in place to encourage or facilitate sidewalk clearing, including the “do-it-yourself” Yellow Grit Box program and the Snow-Go program which connects seniors and disabled individuals with snow removal contractors.

- **Pathway maintenance and rehabilitation;** Few jurisdictions have formal maintenance and rehabilitation programs for sidewalks and pathways. In Ottawa, pathway maintenance is coordinated by the city branch responsible for the property on which the pathway is situated. In many instances, the Surface Operations Branch provides this service.

11.0 The Role of Education and Promotion

A successful pedestrian plan does not rely solely on infrastructure or planning and design, but also requires education and promotion to change attitudes so that walking becomes a part of everyday life. In fact, educational and promotional programs have the potential to produce greater returns for a given investment as they reach a broader cross-section of the City’s population than sidewalk rehabilitation or updated design standards.

Education programs must be carefully tailored to the audiences they intend to address, in order to most effectively reach different sectors of the walking and driving population. For example, the educational material designed to improve drivers’ habits around pedestrians will be prepared and delivered differently than promotional material designed to promote walk-to-school programs.

Numerous examples from other jurisdictions of programs to encourage walking and improve pedestrian and driver behaviour are presented in the Pedestrian Plan, including the *Discovery Walks* program in Toronto and the *Look Out for Each Other* campaign in Calgary, Alberta. The City of Ottawa’s Transportation and Public Health divisions have also developed programs for pedestrian education and promotion, a notable example being the *TravelWise* program, which is designed to reduce transportation infrastructure demand by promoting walking, cycling, transit and carpooling as commuter options. Further options for expanding programs and developing partnerships with other agencies are explored throughout this chapter.

12.0 Implementation

Strong public support for improving the pedestrian realm must be matched by leadership from City Council. The first component of implementation is to make an investment in the Plan and its supporting implementation strategies. Certain aspects of the plan can be funded by existing programs, such as infrastructure renewal and new developments, while other aspects could be funded through partnership opportunities with federal and provincial governments. The second component of successful implementation is to ensure that all key aspects of the Plan are supported: the Pedestrian Network, Planning & Design, Safety & Accessibility, Maintenance & Rehabilitation, and Education & Promotion. The completed pedestrian network will consist of approximately 2000km of sidewalks and 1100km of pathways, with 120km of paved shoulders in rural areas (**Table E.1**). To achieve this goal, **Table E.2** presents a summary of technical recommendations, including financial implications and implementation responsibility.

Ottawa Pedestrian Plan (Final Report June 2009)

Table E.1		
Pedestrian facility length by type		
Facility Type		Facility Length (km)
Sidewalks	Existing	1,660
	Requests (<i>New Sidewalk Links Program</i>)	105
	Proposed in Pedestrian Master Plan	265
	Subtotal	2030
Pathways	City Existing	490
	City Planned (through other studies)	380
	Proposed in Pedestrian Master Plan	45
	NCC Existing	140
	NCC Planned (through other studies)	60
	Subtotal	1,115
Grand Total		3,145
<p>Note that the length of facilities reported for the New Sidewalk Links Program includes only the current requests that were considered a "pass" according to a preliminary screening. A number of requested links were "failed" as they did not fit with the intent of the New Sidewalk Links Program. Refer to Sections 7.2.4 and 7.6 for further details.</p>		

Ottawa Pedestrian Plan (Final Report June 2009)

Table E.2

Summary of recommendations

No.	Page	Technical Recommendation	Financial Implications	Implementation Responsibility
Chapter 7 – The Pedestrian Network				
7.1	74	Form an interdepartmental working group comprised of staff involved in planning, design, maintenance and rehabilitation of sidewalks and pathways, to coordinate efforts in pedestrian network management.	Existing Resources	PWS (Strategic Planning?) and all Departments as appropriate
7.2	75	Use walking participation results from the 2005 Origin Destination Survey, and future updates to this survey as a source indicator of possible trends.	Existing Resources	PTE & PWS
7.3	91	Undertake a comprehensive review of roles and responsibilities for all aspects of sidewalk and pathway planning design, operation, rehabilitation and maintenance to ensure that responsibility for all aspects of the pedestrian network infrastructure have been accounted for and properly assigned to the appropriate Branch or Department.	Existing Resources	To be discussed
7.4	91	The scope and budget for new and reconstructed roads are to include the provision of sidewalks and/or multi-use pathways as prescribed by the Pedestrian Plan, the Official Plan and the Transportation Master Plan.	Existing Resources	PTE & PWS
7.5	94	Modify the New Sidewalk Links program using the criteria and weighting system for assessing candidates identified in the Ottawa Pedestrian Plan, so that eligibility is established and a clearer separation of priorities is achieved. This may include recommendations for the development or reinstatement of parallel program(s) for pedestrian facilities, other than sidewalks such as pathways.	Existing Resources	PWS (TPO)
7.6	94	Consolidate pedestrian master data, currently managed independently by various branches, utilizing the corporate GIS tool. This would require processes to ensure data is continually updated and refined by the	Existing Resources	PWS (Strategic Planning?) and all

Ottawa Pedestrian Plan (Final Report June 2009)

		various data "owners". .		Departments as appropriate
7.7	98	Refine and adopt the Community Pedestrian Improvement Process methodology and process to assess the walkability of a community, subdivision or specific site. This methodology proactively improves pedestrian facilities by analyzing pedestrian origins, routes and attractions.	Existing Resources	PWS, PTE & CPS
7.8	103	Establish a Pedestrian Network for Ottawa based on: a) The proposed pedestrian network presented in Schedules 1 through 17; b) Refinements to the network through the application of the Community Pedestrian Improvement Process (as established in recommendation 7.7); c) The consistent application of the Community Pedestrian Improvement Process methodology to all planning and development process, undertaken by all City Branches.	Existing Resources	PWS, PTE & CPS
7.9	124	Launch the Ottawa Pedestrian Plan by selecting a community for a pilot Community Pedestrian Improvement Process from one of the priority communities identified in Table 7.7 of this Plan. Establish an appropriate study budget and review and report on the outcomes of the pilot including any recommendations and future capital funding allocation request.	\$100,000	PWS (TPO)
Chapter 8 – Planning and Design				
8.1	134	Develop a Pedestrian Charter, for adoption by the City, that represents a commitment to creating a walkable and pedestrian friendly-city. Link the Pedestrian Charter to the City of Ottawa Official Plan and Transportation Master Plan.	Existing Resources	PWS & PTE
8.2	135	Integrate pedestrian planning tools and methods, from the Ottawa Pedestrian Plan, particularly the Pedestrian Improvement Process into planning processes (such as the Community Design Plan process), which will then form part of the base pedestrian network. These tools also include walkability audits and the various pedestrian supportive guidelines.	Existing Resources	PTE, CPS & PWS
8.3	135	Establish a priority list of landscape and streetscape improvements within each Secondary Plan and Community	Existing Resources	PTE

Ottawa Pedestrian Plan (Final Report June 2009)

		Design Plans to further walkability.		
8.4	138	Create a Pedestrian Facility Planning and Design Guideline document to be used during the development review and capital works processes. Base the guidelines on a consolidation of the pedestrian-supportive recommendations in existing City guideline documents, as well as the safety and accessibility guidelines presented in the Ottawa Pedestrian Plan.	\$50,000	PTE, PWS and all Departments as appropriate
8.5	144	Require the pedestrian design solutions established by the pedestrian plan to be applied to the development application process. (Reference Recommendations 8.1, 8.3, 8.4, 8.5).	Existing Resources	PTE, CPS & PWS
8.6	144	Amend the Transportation Impact Assessment Guidelines to specifically include the requirement for a description of how the site meets the pedestrian supportive guidelines and Community Pedestrian Improvement Process methodologies (Reference recommendation 8.5).	Existing Resources	PWS (TPO) & PTE and all Departments as appropriate
8.7	154	Use the sidewalk and boulevard guidelines presented in Table 8.4 as a guide for the development or redevelopment of roadways.	Existing Resources	PTE & PWS
8.8	154	On new road construction, road reconstruction and rehabilitation, apply Ottawa's Pedestrian Guidelines and the Community Pedestrian Improvement Process methodology.	Existing Resources	PWS
8.9	154	The defined sidewalk pedestrian zone, meet accessibility guidelines and remain unimpeded.	Existing Resources	PTE & PWS
Chapter 9 – Safety and Accessibility				
9.1	165	Review design elements of sidewalks and street crossings to ensure that they meet accessibility and safety guidelines presented in the Pedestrian Plan and include consideration of pedestrian signal activation devices on pedestrian islands.	Existing Resources	PWS & PTE
9.2	177	Review warrants for ladder markings at pedestrian crossings for their application at locations such as school crossings, roundabouts (particularly multi-lane) and multiple right-turn and left-turn lanes.	Existing Resources	PWS (TPO)

Ottawa Pedestrian Plan (Final Report June 2009)

9.3	187	Improve measures to reduce risks and improve accessibility for pedestrians passing through road construction zones including advanced signing for construction activities, temporary conditions that are fully accessible and pedestrian specific detours where appropriate.	Existing Resources	PWS, PTE and all Departments as appropriate
Chapter 10 – Maintenance and Rehabilitation				
10.1	200	Review road and sidewalk maintenance standards, as an initiative under the City Strategic Plan, with a specific focus on levels of service and maintenance classifications based on the sidewalk's transportation role.	Existing Resources	PWS (SOP)
10.2	201	Support programs, with the assistance of partners, such as the Yellow Grit Box Program and the Snow-Go Program including the development and introduction of new programs to meet specific needs.	Existing Resources	PWS (SOP)
10.3	209	Undertake a comprehensive review of roles and responsibilities for managing the lifecycle continuum (planning, construction, maintenance, rehabilitation, reconstruction and lighting) of pathways to ensure that responsibility for all aspects of the pedestrian network infrastructure have been accounted for and properly assigned to the appropriate Branch or Department. (Reference recommendation 7.1 and 7.3).	Existing Resources	PWS (Strategic Planning?) and all Departments as appropriate
10.4	210	Adopt the winter pathway maintenance criteria presented in Table 10.4.	Existing Resources	PWS (TPO & SOP)
Chapter 11 – Education and Promotion				
11.1	221	Develop and implement pedestrian education and promotion programs under the TDM Program and undertake a review of existing walking promotions to ensure a coordinated approach. (Reference recommendations 7.1, 7.3 and 10.4).	\$50,000	All Departments as appropriate