# 4. Maximize Walkability

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The popularity of walking is one indicator of a vibrant, sustainable city. Along with cycling, transit and carpooling, walking conserves natural resources and reduces pressure on the road network while improving health, preserving the environment and supporting economic activity. Key factors that can motivate more people to walk include:

- Suitable distances from trip origins to destinations
- Pleasant, direct and barrier-free walking routes
- Convenient connections to public transit, schools, parks and community facilities
- Safe and frequent opportunities to cross major roads and other barriers
- Outdoor spaces, both public and private, designed with personal security in mind
- Adequate maintenance practices for walking facilities, particularly in winter
- Positive individual attitudes towards walking

An updated version of the *Ottawa Pedestrian Plan* was prepared in concert with this Transportation Master Plan, and addresses improvements in all of these key areas. Readers are referred to it for more comprehensive details on how Ottawa will become a truly walkable city.

### Action 4-1: Implement the Ottawa Pedestrian Plan

**Pedestrian Charter.** In 2011, the City of Ottawa signed the *International Charter for Walking*. Using that document as a starting point, the updated *Ottawa Pedestrian Plan* includes a customized City of Ottawa Pedestrian Charter establishing the City's vision, goals and objectives for walking. The Charter articulates a commitment to creating a city where people walk because they want to, and it defines a series of guiding principles to create a supportive urban environment.

**Strategies.** The *Ottawa Pedestrian Plan* contains a number of policies and actions for the City to implement. These elements represent an integrated, multi-disciplinary approach to increasing the safety, convenience and comfort of walking in Ottawa over the next two decades. They address land use, walking network development, street and pedestrian facility design, maintenance, safety programs, information, promotion, stakeholder engagement, interjurisdictional cooperation, and performance measurement. This chapter focuses on three key elements, namely pedestrian network development (Section 4.1), creation and maintenance of a walkable environment (Section 4.2), and walking safety and promotion (Section 4.3).

**Targets.** Section 2.4 of this Plan sets a 2031 target for morning peak period walking mode share of 10% across the entire city. This objective represents a marginal increase above current levels, and is the same as the target set in the 2008 TMP. Given that new development in the City is expected to occur primarily in suburban areas outside the Greenbelt, and given the lower rates of walking in those areas, maintaining current levels of walking is considered to be reasonably ambitious, and will require improvements in walking facilities and environments across the city.

### 4.1 Build a Continuous, Well Connected Pedestrian Network

#### Action 4-2: Expand the pedestrian network

**Approaches to expansion.** The City will strategically expand its network of pedestrian facilities using three different approaches:

- As part of new development through the development review process, representing about 60% of new sidewalks from 2010 to 2012
- As part of road construction and reconstruction projects, representing about 30% of recent new sidewalks
- As retrofit projects to fill "missing links" in the existing pedestrian network, representing about 10% of recent new sidewalks

The first two approaches are the most cost-effective, have the least community disruption, and lead to the best overall streetscape. The third approach is an important tool for the City to correct network deficiencies, although it is less efficient and may not be able to meet all design standards where physical constraints exist. The City will regularly identify, evaluate and prioritize candidate retrofit projects (using criteria discussed in the updated Ottawa Pedestrian Plan), and implement them as resources permit.

**Pedestrian facilities on roads.** During its review of development applications and during road construction projects, the City will require the provision of pedestrian facilities on all existing, new and reconstructed roads, as follows:

- On both sides of arterial and collector roads in the urban area and rural villages
- On at least one side of all arterial and collector roads passing through the Greenbelt if deemed appropriate for the urban context
- On both sides of all roads that carry transit service in the urban area and rural villages
- On local roads that lead directly to transit stations and bus stops, schools, public parks, recreation centres, public buildings and institutions, neighbourhood and regional commercial, retail or employment centres
- Within and between neighbourhoods, and from local roads to arterial and collector roads at sufficient intervals to create permeable walkable communities

 Wherever identified by the Ottawa Pedestrian Plan, Secondary Plan or a Community Design Plan

In road corridors where the context is appropriate, a multiuse pathway may be used in lieu of a sidewalk and should be maintained year-round, subject to winter maintenance policies (See Action 4-5).

**Pedestrian facilities accessing transit or linking neighbourhoods.** The City will require the provision of pedestrian facilities as follows:

- Direct connections to rapid transit stations (see Section 6.2), bus stops and other major walking destinations
- Multi-use pathways in or adjacent to rapid transit corridors where physical constraints allow, constructed as part of rapid transit projects (see Section 6.1)
- Pedestrian crossings of rapid transit corridors, considering the nature of demand and alternative crossing opportunities (see Section 6.1)
- Pedestrian crossings to link neighbourhoods that are separated by roads or other physical barriers, where safety considerations permit

This Plan does not identify a definitive listing of pedestrian facility projects. Rather, Exhibit 4.1 identifies the capital budget envelopes for several different types of pedestrian projects.

Exhibit 4.1 Pedestrian Projects – Capital Costs by Facility Type (\$ millions)					
Facility type	Phase 1: 2014-2019	Phase 2: 2020-2025	Phase 3: 2026-2031	Total	
General community links including links in transit-oriented development areas	8.25	9.0	9.0	26.3	
Multi-use pathway structures <sup>1</sup>	13.0	13.0	14.0	40.0	
Total	21.25	22.0	23.0	66.3	

Note: Includes Rideau River Footbridge, Rideau Canal Footbridge and other major structures. All costs are in 2013 dollars.

#### 4.2 Create a Walkable Environment

The creation of a truly walkable environment is an objective that requires attention in many different activities that the City undertakes such as zoning, development review, Community Design Plans, TOD plans, road designs and streetscaping plans. It also requires attention to many different factors including buildings and public spaces as well as transportation infrastructure. This section discusses some of the most important elements of walkability.

#### Action 4-3: Maximize pedestrian level of service in selected areas

Maximizing level of service. One major barrier to walking is the distance that pedestrians must travel across signalized intersections. Simply providing a pedestrian crossing may not be sufficient to provide an adequate level of service. Multiple traffic lanes (whether for through, left or right turn movements), free-flowing channelized right-turn lanes, and large curb radii that might be required for large trucks but enable motor vehicles to turn at higher speeds—all of these can impact on the achievement of a walkable, pedestrian-friendly environment. Particularly in locations where the City wishes to emphasize walking (e.g. downtown, main streets, mixed use centres, and other areas of intensification), the use of double left-turn lanes, three or more straight through lanes, separate right-turn lanes, and deceleration/acceleration lanes should be avoided. Plans will seek to improve levels of service in locations where barriers to walking are high.

**Level of service indicator.** The *Ottawa Pedestrian Plan* recommends a quantitative method for evaluating pedestrian level of service at intersections. This indicator will be a tool for measuring the level of service for walking. It will help to facilitate the decision making process when trade-offs are required, which typically occurs along main streets, downtown, and in transit-oriented development areas, mixed use centres and areas of intensification. Its main objectives are:

- To capture the most important factors that influence the physical design and control of intersections, from the pedestrian's perspective
- To be relatively simple to implement
- To reflect local conditions and expectations

### Action 4-4: Provide quality design

Pedestrian-oriented design guidelines. The *Ottawa Pedestrian Plan* recommends the development of new pedestrian-oriented design guidelines for use in designing new walking facilities and road construction or reconstruction projects, reviewing development applications, and preparing community design plans or secondary plans. The guidelines would be applied where demand warrants enhanced design elements. Examples include:

- Facilities sidewalk width and material, pathway location, intersection geometry and alignment, intersection and mid-block crossings, pedestrian signal priority, pedestrian routes to transit
- Wayfinding signage, mapping and paving patterns to enable navigation by residents and visitors
- Accessibility conformance with the City's Accessibility Design Standards and
  consideration of the Accessibility for Ontarians with Disabilities Act, to address
  grades, slopes, surface treatments, gates, bollards, intersection curb ramps and
  depressions with tactile warnings, and pathway seating
- Lighting consistency with the City's street, park and pathway lighting policies, and incorporation of the principles of crime prevention through environmental design (CPTED) to support safety and personal security objectives
- Landscape and environment boulevards between street curbs and sidewalks that permit stormwater infiltration, use of trees and plantings, sunlight penetration
- Amenities and aesthetics seating, bicycle parking, waste receptacles, views, public
  art, connections to open space, and site furniture providing year-round comfort and
  ease of maintenance

#### Action 4-5: Deliver supportive winter maintenance

Enhanced winter maintenance for key pedestrian linkages. In the City of Ottawa's 2013 Commuter Attitude Survey, snow and ice control on walking facilities emerged as a key concern of residents; 32% of respondents identified snow removal as the pedestrian-related service most in need of improvement. The City's Maintenance Quality Standards set winter maintenance service levels for pedestrian facilities (e.g. minimum snow accumulation to trigger a response, and speed of response from

the end of accumulation). They call for the fastest response (Priority 1) to sidewalks in the downtown core and large employment centres, and give lesser priority to other pedestrian facilities. Section 9.1 of this TMP outlines the allocation of additional funds to cost-effectively increase the winter maintenance priority of pedestrian linkages within 600 metres of rapid transit stations, 200 metres of high-frequency transit corridors, and 300 metres of schools. This enhancement would provide an especially important benefit for customers accessing light rail, Transitway and O-Train services, and for students walking to school.

## 4.3 Improve Pedestrian Safety and Promotion

This Plan's overall framework for road safety (see Section 7.4) identifies pedestrians as one group of vulnerable road users that warrants special action, and the framework for transportation demand management (see Section 8.1) also considers existing and potential pedestrians as key market segments. Below, this section provides an integrated, holistic review of the ways in which the City will work to promote walking and make it safer.

#### Action 4-6: Deliver pedestrian safety programs

**Road crossings.** The City will continue to improve pedestrian crossings at signalized and non-signalized intersections, with the goal of reducing the frequency and severity of preventable collisions involving pedestrians. The current Pedestrian Safety Evaluation Program pilot project enables cost-effective countermeasures.

Audible pedestrian signals and pedestrian countdown signals. The City will continue to implement audible pedestrian signals that help pedestrians with hearing impairments know when they may cross safely in which direction, beyond the more than 640 already in place. The City will also continue to implement pedestrian countdown signals that reduce uncertainty about safe crossing times, beyond the more than 415 currently in place.

**Safe Routes to School.** In Ottawa, a number of partners work together to promote cycling and other modes of safe, healthy travel to school. The City will continue its support for special events and school travel planning, which is an intensive, multi-disciplinary initiative that collaborates with area schools.

Crossing guards and safety patrols. The City currently has 153 adult crossing guards to help children walk to and from school, and will continue to review requests for adult crossing guards and support their provision, including the installation of signs and pavement markings, where they are warranted and resources permit. The Ottawa Police Service also works with schools to train students for safety patrol duties, with the City installing the necessary signage.

Winter walking safety. The City will continue to deliver programs that make it safer to walk in winter. Currently, these include the Snow Go Program that matches seniors and persons with disabilities (and may provide them with financial assistance) with service providers who will clear snow from private driveways and walkways. They also include the Grit Box Program that locates "do-it-yourself" sidewalk grit boxes near staircases and steep hills, and where there are many pedestrians, especially seniors or persons using mobility devices.

#### Action 4-7: Raise awareness and visibility of walking

**Promotion.** Consistent with the discussion of workplace engagement in Section 8.1 of this Plan, the City will continue to promote walking to work through various communication channels and in partnership with employers, schools and community organizations. A key message will continue to be not only the practicality of walking as a mode of transportation, but as its importance as part of a healthy and active lifestyle.

**Public health outreach.** Ottawa Public Health will continue to promote walking as part of its Healthy Eating, Active Living Strategy. Related initiatives include community outreach, special events, web-based information, promotion of walking groups, support for the Ottawa Public Library pedometer lending program, and direct engagement with workplaces and schools to promote active transportation and other forms of physical activity.