

An Age-Friendly Walkability Report

Safe Streets for Seniors and Other Valuable People in Ottawa



Acknowledgements

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Ecology Ottawa has been a key partner in planning, developing and printing this report. Thank you to Karen Hawley and Francois Belanger who worked closely with us, and to Natasha Rogers and Nandita Bijur who input and analysed the data from the audits. We would also like to thank Nandita and François for their contribution to the writing of the report and François for the neighbourhood audit maps.

Three Ottawa communities--Hintonburg, Kanata and the Glebe--were selected for pedestrian audits in three seasons (fall, winter and spring 2014-2015) using an age-friendly, all-season checklist (see Appendix A). The bilingual checklist includes special questions about winter walking. It is available on the Council on Aging of Ottawa web site for community use.

In order to have local participation in each of the audits, a partnership with local community associations was developed. Special thanks to Cheryl Parrott and the Hintonburg Community Association, Darlene Powers at the Good Companions Senior Centre, Julie Gourley, Neil Thomson and the Beaverbrook Community Association in Kanata, and to Karen Ann Blakeley and Pat Goyeche at Abbotsford Senior Centre in the Glebe. Many thanks to the audit participants in each community, who walked the routes and with thoughtful comments made this report possible. Walk Ottawa was also an active support and participant in all the audits.

The City of Ottawa Public Works Department assisted in the development of a Sidewalk Hazard Report Form (see Appendix B), which was used in all the audits to report any immediate or dangerous conditions. Several City staff members participated actively in the audits. Translation of this report was completed by the City of Ottawa – Public Works Department.

We were pleased that City Councillors from all three communities participated in the audit project. Thanks go to Councillor Diane Holmes and Councillor Jeff Leiper in Kitchissippi/Hintonburg; Councillor Marianne Wilkinson in Kanata-Beaverbrook; and Councillor David Chernushenko in the Glebe.

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EXECUTIVE SUMMARY

Age-friendly, walkable environments are particularly important for seniors and people of all ages who live with a disability and/or mobility problems. Seniors and other valuable people walk for leisure (e.g. as a form of recreation and exercise) and as an essential mode of transport (e.g. to get to public transport, services and shops). They value the benefits of walking for health and well-being, independence and mobility.

Pedestrians are walkers. Older pedestrians may use assistive devices such as canes and walkers. Pedestrians also include people using motorized mobility aids such as electric or battery operated wheelchairs and mobility scooters.

This report:

- provides information on the factors that put older adults and other vulnerable pedestrians at risk
- provides information on the policies and plans that affect pedestrian safety and walkability in Ottawa, with an emphasis on the City of Ottawa's Older Adult Plan, which identifies key activities to make transportation age-friendly
- summarizes the findings of three-season, age-friendly walk audits in three Ottawa communities and provides recommendations and suggestions for improvements
- provides an all-season pedestrian safety and walkability audit tool that includes a checklist of questions based on age-friendly measures, as well as tools to audit safety and accessibility in winter, and to report sidewalk hazards
- identifies ways to improve pedestrian safety (especially for older adults and other vulnerable road users) and to make walking more age-friendly in Ottawa.

Age-Friendly Ottawa

In an **age-friendly city**, policies, services and structures related to the physical and social environment are designed to support and enable older people to "age actively" – that is, to live in security, enjoy good health and continue to participate fully in society. Public and commercial settings and services are made accessible to accommodate varying levels of ability (World Health Organization). Age-Friendly Ottawa is led by the Council on Aging of Ottawa in collaboration with the City of Ottawa. This report was developed by the Pedestrian Safety Committee, a sub-committee of the Ottawa Seniors Transportation Committee (OSTC) of The Council on Aging of Ottawa in collaboration with Ecology Ottawa

The age-friendly walkability audits were carried out in Beaverbrook (Kanata), Hintonburg and the Glebe. Details related to safety, accessibility, connectedness and comfort were recorded. City officials and local councillors joined walkers aged 2 to 85 in the audits, and many of the specific problems have already been addressed.

The audit results confirm what is reported in the literature and reports on pedestrian safety and risk. While supports and barriers to walking for seniors and other vulnerable pedestrians have similarities to the population as a whole, there are also some important nuances and differences. For example, the age-friendly design and maintenance of sidewalks and pathways, curb cuts, road crossings and intersections are espe-

cially important for the safety of older pedestrians. Access to public toilets and places to shelter and rest are increasingly important with age. Winter weather imposes serious challenges to seniors and people with disabilities that need to be prioritized for attention in a winter city like Ottawa.

Strategies that address these concerns can prevent falls, and injuries and fatalities related to collisions. By adopting an age-friendly approach to transportation and public space design that assigns priority to users in this order: pedestrians, cyclists, motorcyclists, and drivers, Ottawa will improve walkability and pedestrian safety for all ages, but especially for seniors and other vulnerable pedestrians.

The Council on Aging of Ottawa appreciates having the opportunity to work with community audit participants, Ecology Ottawa and the City to produce this report. We look forward to further collaboration and progress as we strive to make Ottawa a city that is truly age-friendly and walkable for both residents and visitors.

Did You Know?

- By 2031, more than one in five residents in Ottawa will be over 65.
- In Canada between 2000 and 2010, almost 43% of pedestrian deaths were aged 56 and over, although this age group represents less than 20% of the population.
- Older people experience more and higher severity pedestrian injuries than younger people. Injured seniors spend an average of 16 days in hospital, compared to 7 for all age groups.
- Uneven, broken, sloped and slippery sidewalks and pathways can lead to falls, which often have serious, long-term consequences for older people. Pedestrian falls and fear of falling is exacerbated in winter when ice and heavy snowfalls can keep older people inside and socially isolated.
- Some 33% of Canadians over age 65 report having a disability and 81% of people with disabilities use some kind of assistive device.
- Wheelchair users are 3 times more likely to suffer from a car collision, often resulting in death or serious injuries.
- Driving 15 km/h over the set speed limit increases the chance of killing a pedestrian from 45% to 85%.

1. INTRODUCTION

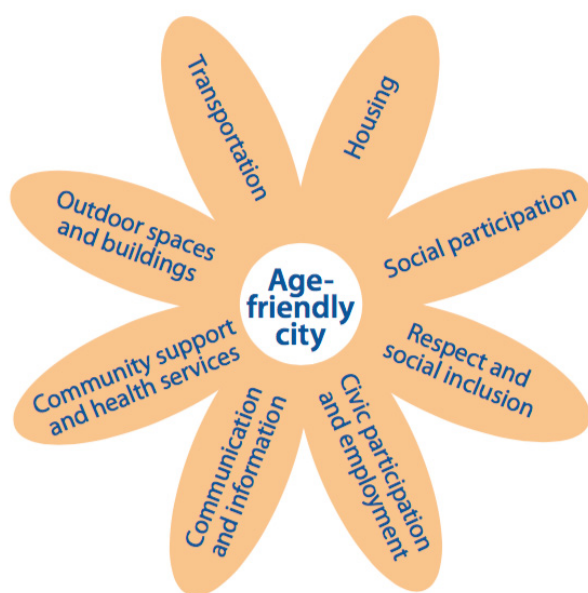
Building an Age-Friendly City

According to the 2011 census, there are 116,600 seniors (65+) living in Ottawa, making up 13.2% of the population. It is expected that this number will more than double over the next 20 years, to a projected 250,000 individuals. By 2031, more than one in five residents in Ottawa will be over 65.

Like many other municipalities in Canada and around the world, the City is responding to these demographic changes and taking action to make Ottawa a more age-friendly city, largely through the creation and implementation of *Age-Friendly Ottawa* (COA) and an *Older Adult Plan* (City of Ottawa).

Age Friendly Ottawa (AFO) is led by the Council on Aging of Ottawa (COA) in collaboration with the City of Ottawa. It is based on the World Health Organization's framework for Age-Friendly Cities and Communities. The WHO *Age-Friendly Cities Guide* identifies eight action areas that define what a community can do to become a safe and healthy place to grow older.¹

WHO - Age Friendly Themes



AFO is working closely with the City of Ottawa, key community partners and older adults to achieve

measurable progress across each of the eight action areas of the Age-Friendly Framework.

Within AFO, the Ottawa Senior Transportation Committee and its Committee on Pedestrian Safety is charged with addressing the specific dimensions of Transportation and Public Spaces and Buildings. As part of its mandate to identify and advocate ways to improve pedestrian safety (especially for older adults) and make walking more age-friendly in Ottawa, the Committee conducted walking audits to assess the degree that walking and travelling by wheelchair and/or scooter is safe and age-friendly. This report summarizes the findings of these audits and provides recommendations and suggestions for improvements.

Why Focus on Pedestrian Safety and Age-Friendly Walkability?

Walking is particularly important for older people who are less likely than younger people to participate in other more vigorous kinds of physical activity, more likely to experience social isolation and less likely to drive a car. Walking is highly valued by older adults for a variety of reasons including improved health and well-being, enjoyable time out-of-doors and in nature, social connectedness, personal mobility, independence, and the ability to get to shops, services and the homes of friends and family members.²

Seniors walk for leisure-related reasons (e.g. for recreation, exercise) and as a mode of transport (to get to public transport, services, shops, etc.). Increasingly, older people can be seen walking dogs several times a day. The research confirms that having companion animals improves the health and well-being of older people and that owning a dog greatly increases the amount of walking an older person does.³

Age-friendly, walkable environments are particularly important for seniors and people of all ages

who live with a disability and/or mobility problems. This report includes travel by mobility scooter and wheelchair as “walking” and the walking audits endeavoured to include participants with mobility devices (such as canes and walkers), as well as motorized wheelchairs.

Risks for Seniors and Other Vulnerable Pedestrians

In Ottawa between 2009 and 2013, 211 collisions (11.2 %) involved pedestrians over age 65.⁴

While the number of collisions involving pedestrians are highest among young people aged 16 to 25, older pedestrians are at greater risk of traffic-related deaths than younger adults.

- In Canada between 2000 and 2010, almost 43% of pedestrian deaths were aged 56 and over although this age group represents less than 20% of the population; half were female and half were male.⁵
- Between 2000 and 2008, 63% of pedestrians killed at intersections were 65 or older.⁶

Older people also experience more and higher severity pedestrian injuries than younger people.⁷ In Canada in 2004-2005, 30% of people admitted to hospital for pedestrian injuries were aged 60 years and older, although this age group represented only 12% of the total population. Seniors also spend the longest amount of time in hospital for their injuries, with an average of 16 days, compared to 7 for all age groups. Also, 9% of older pedestrians admitted for pedestrian injuries died in hospital, twice the national average.⁸

An additional high risk for older people is falling, due to trips, slips and stumbles. Uneven, broken, sloped and slippery sidewalks and pathways can lead to falls, which often have serious, long-term consequences for older people.⁹ Sudden changes on roads and pathways (such as a dog off leash or a cyclist sharing the path) may increase the risk of falls, as do time-constrained road crossings and distracting conditions. Pedestrian falls and fear of falling among older pedestrians is exacerbated in winter when ice and heavy snowfalls can keep seniors inside and isolated.¹⁰

Older pedestrians may also be at increased risk due to declines in vision and hearing and because they may walk more slowly than other age groups.¹¹ Some 33% of Canadians over age 65 report having a disability and 81% of people with disabilities use some kind of assistive device.¹² As the population ages, more and more pedestrians will use wheelchairs, scooters and other aids to help with mobility.

Wheelchair Users More Likely to be Killed

A large US study suggests that pedestrian wheelchair users are 3 times more likely to suffer from a car collision, often resulting in death or serious injuries. The study also found that in more than 75% of collisions that involve a wheelchair user, no “crash avoidance maneuver” by the driver—like braking or steering—was recorded. The authors suggest that better street and intersection design is required to ensure that drivers can clearly see people in wheelchairs crossing the street.¹³

About Us

Ecology Ottawa is a not-for-profit volunteer-driven grassroots organization, working to make Ottawa the green capital of Canada. Ecology Ottawa provides residents with information and tools they need to understand local environmental issues and promote environmental leadership at City Hall. Ecology Ottawa has focused on Smart Growth and Sustainable Transportation, aiming to help Ottawa adopt a sustainable urban form based on compact, complete and transit-supportive communities.

The **Council on Aging of Ottawa (COA)** is a bilingual, volunteer-based charitable organization dedicated to improving the quality of life of seniors living in Ottawa. The Council strives to promote and champion the basic tenets of an inclusive, caring city and the importance of community-wide engagement with a special focus on the vulnerable and isolated.

The **Ottawa Seniors Transportation Committee (OSTC)** of the COA is a partnership group actively involved in identifying barriers to accessibility, gaps in all modes of transportation services and ways to make active transportation (walking, cycling and wheeling) more age-friendly and safe, particularly for older adults. The OSTC advocates for practical solutions that will enhance current systems, infrastructures, policies and practices.

The **Pedestrian Safety Committee** of OSTC works to:

- identify and advocate for ways to improve pedestrian safety (especially for older adults and those using a mobility device) and make walking more age-friendly in Ottawa
- raise awareness of pedestrian age-friendly and safety issues and solutions with OSTC and the community-at-large
- collaborate with other organizations striving to promote age-friendly walkability and advance the interests of pedestrians in Ottawa.

Some Useful Definitions

Age-Friendly City: In an age-friendly city or community, policies, services and structures related to the physical and social environment are designed to support and enable older people to “age actively” – that is, to live in security, enjoy good health and continue to participate fully in society. Public and commercial settings and services are made accessible to accommodate varying levels of ability. (World Health Organization)¹⁴

Seniors and other valuable people: While recognizing the great diversity among people in various chronological age categories, for this report, “seniors” or “older people” are defined as age 65 and over. “Other valuable people” include pedestrians of all ages with special attention to children and people with disabilities who also are vulnerable to pedestrian safety issues.

Pedestrians: Pedestrians are walkers. Older pedestrians may use assistive devices such as canes and walkers. Pedestrians also include people using motorized mobility aids such as electric or battery operated wheelchairs and mobility scooters.

2. ASSESSING PEDESTRIAN SAFETY AND AGE-FRIENDLY WALKABILITY

The Council on Aging of Ottawa All-Season Age-Friendly Pedestrian Safety and Walkability Checklist

In searching for a walkability audit tool, the Pedestrian Safety Committee could not find one that incorporated all of the elements in the Age-Friendly City/Community Guides and paid attention to walking in winter. The Committee adapted a variety of tools to produce the checklist in **Appendix A**. We encourage others to use this tool to perform audits in your community.

The Council on Aging of Ottawa All-Season Pedestrian Safety and Walkability Checklist is organized around four age-friendly areas of concern:

- **Safety:** Street lighting, safety measures and well-maintained sidewalks/walkways promote walking (includes feeling safe, lighting, sidewalks and pathways, intersections, traffic calming, debris and obstructions, signage).
- **Accessibility:** Accessible streets, pathways and street crossings ensure that people of all abilities can easily move about (includes sidewalks and pathways, construction areas, toilets, curbs and street crossings).
- **Convenience and connectedness:** Direct routes between homes, public transport and other destinations are important. Compact and connected neighbourhoods create shorter distances between destinations and promote walking (includes signage, link with public transport and destinations, dog walking).
- **Comfort and Attractiveness:** An attractive, clean neighbourhood with shade, shelter rest areas, and access to stores, parks and services promotes walking (includes garbage and recycling bins, benches, transit shelters, trees, parks, streetscapes).

Other Assessment Tools

Sidewalk Safety Hazard Report Form

The Pedestrian Safety Committee in collaboration with the City developed a Sidewalk Hazard Report Form (**Appendix B**) for older adults to report deficiencies in sidewalk conditions. The form was used in addition to the checklist during each of the audits. Deficiencies reported through this form, and by phoning 311, were prioritized for repair by Road Services Branch, Public Works Department and acted upon quickly.

Snow Moles Questionnaire

The Committee designed a simple 5-question Snow Moles Questionnaire (**Appendix C**) for use in winter months. Snow moles are older adult volunteers who report on what it is like to walk outside on a winter day in Ottawa. There was a low take-up in the use of this questionnaire due to a lack of time to promote its use and the hesitancy of older people to venture out after severe winter weather. The Pedestrian Safety Committee believes that this tool is useful in winter cities as a quick way to audit walking conditions. To our knowledge, no other tool like this exists. We encourage communities with older walkers to use it.

3. POLICIES AND PROGRAMS THAT ENABLE WALKABILITY

Concern about walkability is not a new issue. Pedestrians and cyclists in Ottawa, including the city's vulnerable and valuable citizens, who are the focus of this report, are benefitting from an increased awareness of their needs by the agencies responsible for planning and providing the city's transportation infrastructure. This represents a shift in how transportation is viewed as moving people rather than vehicles and how to most efficiently enhance individual mobility while limiting impacts on physical and financial resources. A number of policy documents, by-laws, design guidelines and programs come into play when deciding on the design and operation of the city's transportation.

The Older Adult Plan

Following a 2011 joint consultation process with older adults, the City of Ottawa developed the Older Adult Plan (for 2012-2014). It contained 74 actions to address the evolving needs of Ottawa's older residents in all of the eight WHO action areas. A progress report was published and a new plan (for 2015-18) was released in October 2015. An annual budget of \$500,000 was approved to assist with its implementation. Appendix D: Measuring Progress: Ottawa Older Adult Plan provides a summary of actions taken on areas related to pedestrian safety and walkability during the 2012-2014 time period and lists the relevant actions outlined in the 2015-18 plan.

Community-Based Age-Friendly Ottawa Action Plan

At the same time as the City produced the Older Adult Plan, the Council on Aging of Ottawa developed a complimentary plan to describe actions that would be taken by the community/voluntary sector. The primary activity related to pedestrians and walkability in the early plan related to the conducting of all season age-friendly audits and the production of this report.

Other Relevant City Plans

The City of Ottawa's Official Plan and its Pedestrian Plan, in concert with the Older Adult Plan and the Accessibility Design Standards document, presents a broad vision for providing transportation services and infrastructure for pedestrians. It anticipates an up to 30 per cent growth in the city's population by 2031 compared to 2006, reaching an estimated 1.1 million people. The proportion of seniors of this total is also expected to increase from about 13% in 2011 to over 20% in the same period.¹⁵ These documents envision that with these demographic trends, active transportation will play an increasingly important role for mobility in the city and recognize the health and social benefits of non-vehicular travel. The plans and guidelines work together to attend to the needs of older people, children and to those with special mobility needs, to create more sustainable, liveable and resilient communities and to ensure an improved quality of life for all residents.

The Official Plan identifies Design Priority Areas where "all public projects, private developments, and community partnerships within and adjacent to the public realm will be reviewed for their contribution to an enhanced pedestrian environment". In these areas of the city, priority will be given to pedestrians and cyclists in the allocation of public rights-of-way, wait-times at traffic signals and City investment in pedestrian infrastructure. Some of these priority areas are identified in the plan as Mixed-use Centres and Traditional Mainstreets or areas within 800 metres walking distance of a Rapid Transit Station or 400 metres of a Transit Priority Corridor. The central area neighbourhoods audited for this report are in these priority areas while suburban Kanata will see changes to its physical infrastructure that will positively affect mobility to and from the Beaverbrook neighbourhood underlining the need for improved local accessibility.

Design Priority in Audit Areas

Audit area	Traditional Mainstreet or Mixed-use Centre	Rapid Transit Station (800m) or Transit Priority Corridor (400m)
The Glebe	Yes	Yes
Hintonburg/Lebreton	Yes	Yes
Beaverbrook (Kanata)	No, but MUC nearby	Yes, in the future

Table 3.1: Design Priority in Audit Areas

A number of policies and programs specifically address the needs of our vulnerable populations, recognizing that road-related accidents disproportionately affect older people and people with disabilities. The City of Ottawa has renewed its commitment to safer roads with its 2012 *Safer Roads Action Plan*, which now aims for zero road fatalities. It seeks to achieve this by promoting good road behaviour from all road users, levying penalties for infractions, and by designing roads that mitigate problems and conflicts in the first place. In addition to the above municipal policies, Bill 41 recently amended the *Province's Highway Traffic Act* to further protect vulnerable road users.

Most importantly, the City has strengthened its ability to assess how to best provide for active transportation and to make its vision and goals a reality. In accordance with the City of Ottawa's Official Plan and Transportation Master Plan, Council adopted a *Complete Streets Implementation Framework* in October 2015, which signals a landmark shift in providing a transportation system that provides for all road users, rather than one that merely serves to move the most vehicles. The policies aim to assess and prioritize the needs of pedestrians and cyclists in considering the physical elements that allow a street to offer improved safety, comfort, convenience and connectedness, as has been the focus of these audits. As streets are renewed under this framework, the City of Ottawa travel environment should over time enable safer and more comfortable access for all users of the road network, regardless of their age, ability, or the mode of transportation they have chosen.

It is important to ensure that the various city plans discussed above are aligned with each other and provide a clear focus and united direction for age-friendly design and maintenance. For example, the Accessibility Design Standards highlights some of the key areas in the Older Adult Plan and found in our neighbourhood audits, such as ensuring accessibility with curb designs, and in and around construction sites and transit centres.

Working Together to Make Ottawa a Walkable Age-Friendly City

There are numerous groups that share the vision of creating accessible, safe and enjoyable walking environments for seniors and other valuable people in Ottawa. **Appendix F** provides a list of organizations and city departments that promote and enable walkability and pedestrian safety. Others that may be involved in partnership efforts to enhance walkability and safety include local community associations, City Councilors, schools and universities, seniors' residences and centres, environmental advocacy groups and urban design professionals.

4. FINDINGS OF ALL SEASONS AGE-FRIENDLY WALKABILITY AUDITS IN THREE COMMUNITIES

Scope and Limits of the Audit Findings

Age-friendly walkability audits were carried out in three seasons in three established Ottawa communities in urban and suburban neighbourhoods, where many older people live. Participants followed a number of different routes in each area (see route maps). A total of 60 people participated in the audits. The participants included women and men ranging in age from 2 to 85 (and several dogs). Each audit included participants walking with a mobility aid (e.g. a walker or wheelchair). Several City staff members and City Councillors from each area participated in the audits.

There are two key limitations to keep in mind when examining the results of the Ottawa age-friendly pedestrian audits:

1. No audits were done in rural communities on the outskirts of the City where many seniors live. It is highly recommended that the Age-Friendly Ottawa checklist be used (and adjusted if necessary to reflect local experience) to conduct audits with seniors in these areas.
2. There were a small number of participants in the winter audits. This reflects the hesitancy of some older people to walk outside when pathways and sidewalks are slippery and/or snow covered. It also reflects the importance of prioritizing efforts to improve pedestrian safety and walkability during the winter months.

Where the sidewalk starts: The perils of winter walking

The efforts of a group living in a seniors' residence to do a walkability audit were stymied three times—once by a fierce ice storm, once by extremely low temperatures, and once by a respiratory infection that discouraged anyone from leaving or coming into the residence. Those residents who did venture out on their own said that the only safe place to walk was down the middle of the road. The sidewalks in their residential neighbourhood were impossible to use.

About the Communities

Here is a description of the three neighbourhoods that participated in the age-friendly walk audits. For pedestrians, construction is a critical factor as these neighbourhoods develop and change.

Kanata Beaverbrook

Beaverbrook is one of Ottawa's oldest suburban neighbourhoods and is touted as a "Garden City" due to the various parks and green space in the area. According to the Ottawa Neighbourhood Study, Beaverbrook is home to a higher than average percentage of older adults and contains multiple schools, which emphasizes the need to conduct age-friendly walkability audits in the neighbourhood.

The audits in Beaverbrook were conducted in partnership with the Kanata-Beaverbrook Community Association, who provided vital local input on the realities of walking in Beaverbrook in the diverse conditions of three seasons.

Some of the main issues that emerged in Kanata-Beaverbrook concerned the accessibility of paths and walkways. Firstly, audit participants found shared-use pathways were not wide enough to accommodate various combinations of pedestrians, cyclists, and those using wheelchairs or strollers. Secondly, participants noted the inaccessibility of many pathways to those using mobility devices, particularly near Leacock Drive and the Parkway (Alice Wilson Woods), due to a lack of winter and overall maintenance. Thirdly, much of the green space in the area, as pleasant and enjoyable it made the walk, had pathways that were often gravel and/or unpaved, and seasonal overgrown vegetation that caused obstructions. These conditions made it particularly inaccessible to those using mobility devices.



Figure 4.1: Some walking paths are too narrow, especially when using strollers or wheelchairs.



Figure 4.2: Lack of maintenance in Beaverbrook hinders accessibility.



Figure 4.3: Height of the Gow Pathway Varley underpass is too short to be practical.



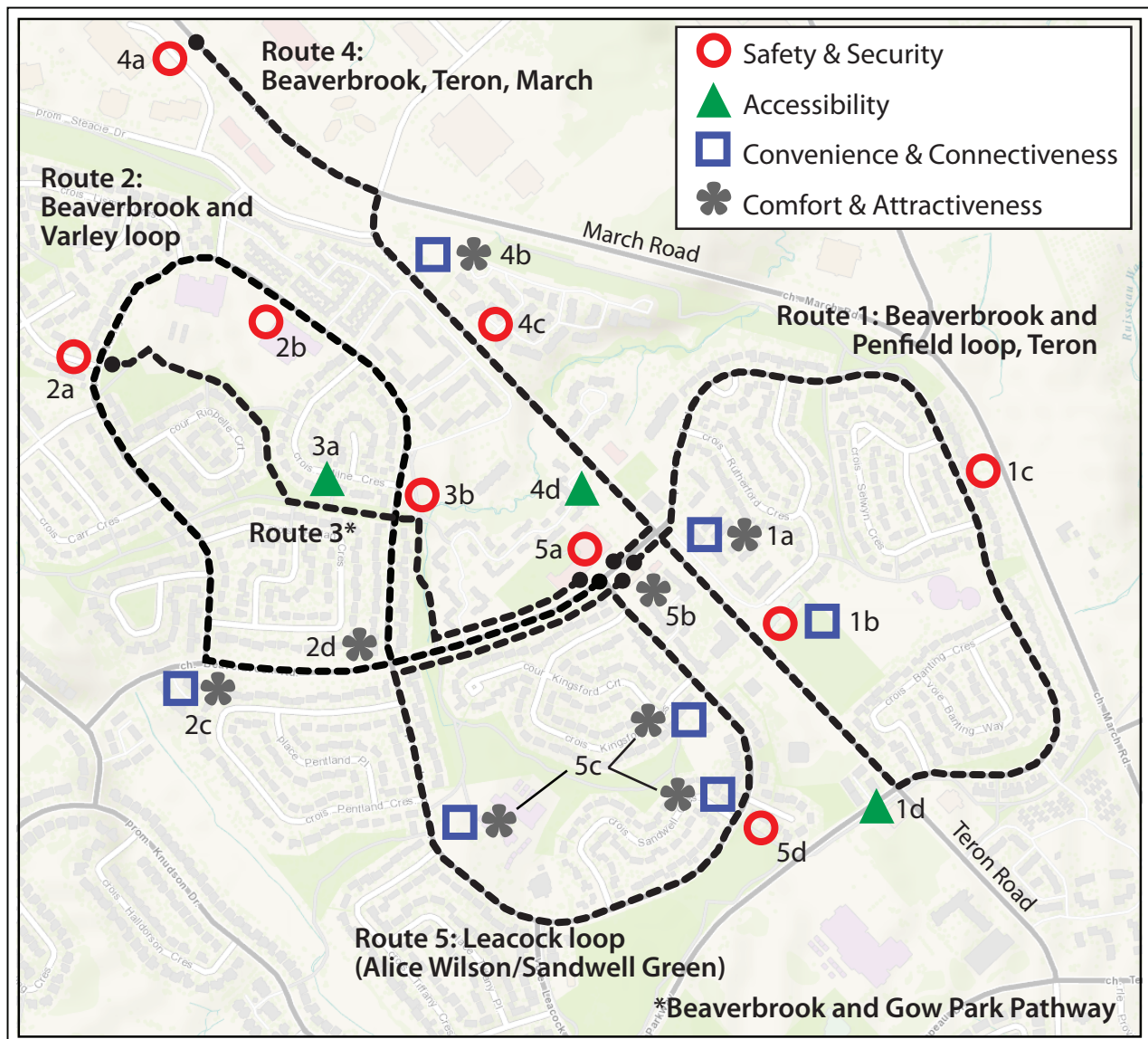
Figure 4.4: Lack of visibility to oncoming traffic along a school route across Leacock Dr. is a hazard to the young.



Figure 4.5: The busy intersection at Beaverbrook and Teron Roads needs a 4-way crosswalk.



Figure 4.6: High traffic area in Earl of March school zone needs crossings and/or traffic control.



Issues identified (see Appendix E for detailed findings):

- | | |
|--|--|
| 1a: sidewalks missing or end abruptly / garbage and recycling bins are lacking | 3a: fallen leaves are a hazard for cyclists and pedestrians/shared use pathways not wide enough to accommodate all users |
| 1b: mailboxes and transit stops poorly lit / need safe crossing midway Teron | 3b: underpass under Varley is low, not well lit and has graffiti - it feels very unsafe |
| 1c: most of the area is poorly lit / curves and vehicle speeds endanger pedestrians | 4a: pedestrians must cross too many lanes-need island in middle for added safety |
| 1d: The Parkway and Leacock inaccessible for those with a walker, wheelchair or stroller | 4b: public transit stops not connected to side walks / lack of bus shelter, and garbage and recycling bins |
| 2a: need safe crossing at Varley Park | 4c: need safe crossing to bus stop on Teron at Bethune Way |
| 2b: traffic speed too high, especially in front of schools | 4d: deteriorated pathway on Teron |
| 2c: public transit stops not connected to side walks/lack of bus shelter, and garbage and recycling bins | 5a: lack of a pedestrian crossing between Leacock Drive and the Beaverbrook Centre |
| 2d: dog waste, graffiti on signs and fences | 5b: lack of bus shelter, and garbage and recycling bins |
| | 5c: public transit stops not connected to side walks / lack of bus shelter |
| | 5d: need safe crossing from Sandwell Green to Earl of March school |

Figure 4.7: Beaverbrook audit routes

Glebe

The Glebe is an old neighbourhood with a relatively high population of older adults. As a fairly residential area in central Ottawa, the Glebe is home to many amenities, which makes it an attractive neighbourhood for people of all ages.

The three-season audit in the Glebe was performed in partnership with the Abbotsford Seniors Centre. The Glebe afforded a valuable setting to conduct walkability audits due to the high number of people who walk or cycle to their workplace, school or services from the neighbourhood. Additionally, as it is a hub of cultural life, it attracts visitors from around the city, especially with the new addition of Lansdowne Place.

One of the dominant themes in the analysis of the audit data revealed that despite being a central neighbourhood, older pedestrians found many of the inner streets in the Glebe to be unsafe or inaccessible. Safe crossing was difficult to find, especially at Monk and Queen Elizabeth, Fifth and Lyon, and Queen Elizabeth Place and Queen Elizabeth Way. The Bank Street bridge was found to be a particular cause of concern, as pedestrians did not feel safely separated from vehicular or cyclist traffic. Also, the sidewalk itself on the bridge was difficult to wheel on in the winter.

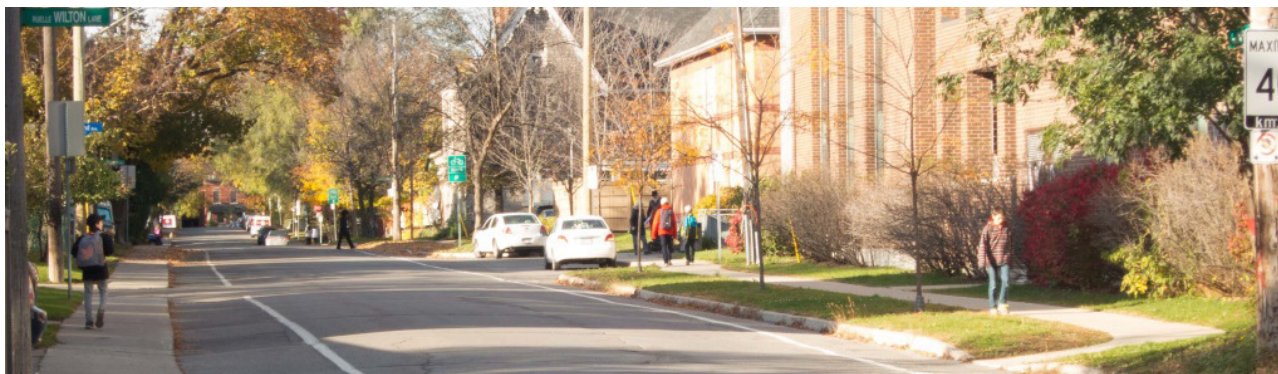


Figure 4.8: Sidewalk on Monk Street ends abruptly at bike lane.



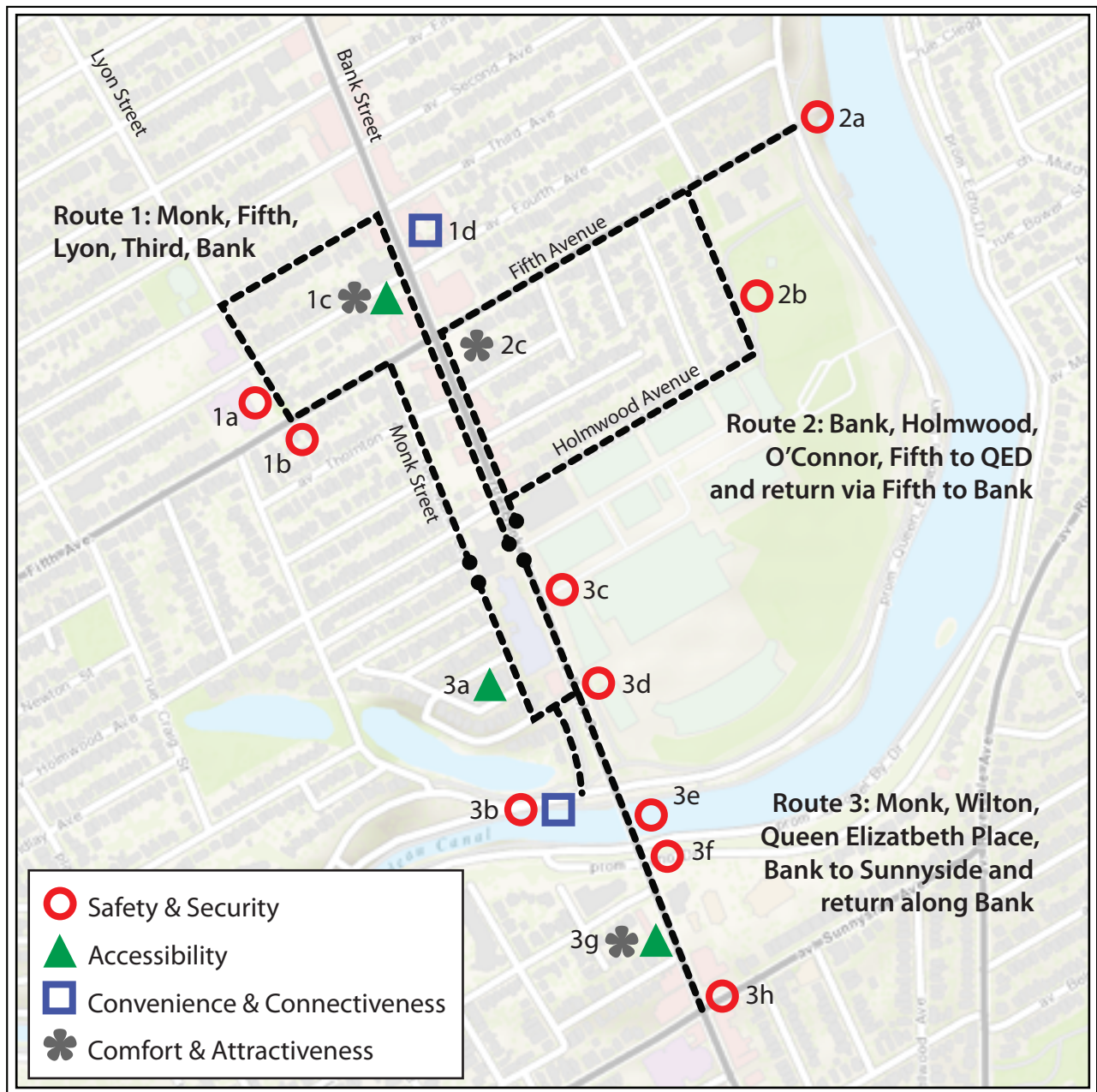
Figure 4.9: Paint indicating crosswalk at busy intersection at Wilton and Queen Elizabeth Place has faded.



Figure 4.10: No crosswalks linking NCC paths to municipal sidewalk network across busy QED.



Figure 4.11: Speed limits on Bank St. Canal bridge (40 km/h) and on shared bike lane (20 km/h) are largely ignored. Many cyclists find bridge too dangerous and continue to ride their bikes on the sidewalk.



Issues identified (see Appendix E for additional findings):

- | | |
|---|---|
| 1a: area poorly lit at night | 3a: sidewalk ends abruptly |
| 1b: lacks safe crossing for pedestrians | 3b: lack of pedestrian and cycle path linkages a danger in this high traffic area |
| 1c: obstructions on sidewalk/many of the trees have died | 3c: crossing is too wide |
| 1d: lack of signage to community attractions | 3d: intersection needs traffic control |
| 2a: pedestrian signals not long enough for older people to cross safely | 3e: cycling and pedestrian conditions unsafe on bridge |
| 2b: lack of sidewalk level lighting | 3f: stop sign not visible to drivers |
| 2c: lack of transit shelters | 3g: poor sidewalk conditions/unattractive streetscape |
| | 3h: traffic light confusing for both drivers and pedestrians |

Figure 4.12: Glebe audit routes

Hintonburg

Hintonburg/Mechanicsville is an old Ottawa neighbourhood, just west of the downtown core. It has recently been crowned the Quartier des Arts/ Arts District of Ottawa, which has increased the foot traffic in the area. It is also along the planned light rail transportation route, which is likely to attract even more pedestrian activity into the area, further emphasizing the need for increased walkability for all ages.

The audits in Hintonburg/Mechanicsville were performed in conjunction with the Hintonburg Community Association and The Good Companions Seniors Centre. At the time of the audits, the neighbourhood of Hintonburg was at the centre of the city's construction plans, which severely impacted the walkability of the area, particularly along Albert/Scott St.



Figure 4.13: Newly surfaced multi-use pathway and transit stop area on Scott Street have been vastly improved since the audit.

Most of the observations in all three routes in this neighbourhood concerned the changes to sidewalk linkages and safe crossing points along Scott/Albert. Many participants noted the lack of safe sidewalks along Albert due to the construction. In particular, there seemed to be a multitude of patches where the sidewalk and/or curb were broken or cracked. Another major issue that emerged, including on the Scott Street bridge, was that pedestrians were not adequately separated from the speeding traffic. One of the audit participants shared: *"I have been clipped by vehicle mirrors while walking this sidewalk with a stroller"*.



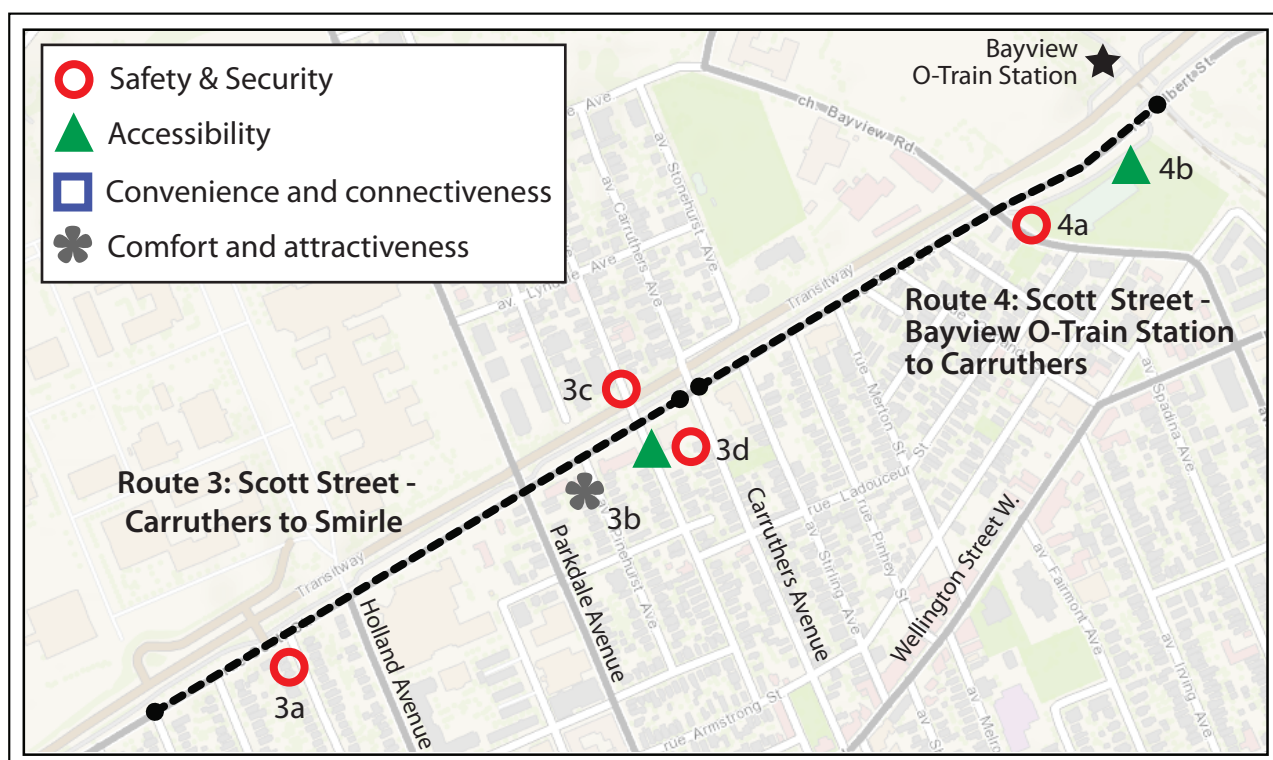
Figure 4.14: Narrow sidewalk areas along Scott Street may prove challenging for some users, especially after snowfalls.

Another common observation was that sidewalks were not wide enough for pedestrians and those using mobility devices. This was especially a problem in the winter when sidewalks were not well ploughed and left the streets very unsafe and inaccessible. Additionally, pedestrians found they often had to move for cyclists using the sidewalk as the road itself was not wide enough to accommodate them.



Issues identified (see Appendix E for additional findings):

- 1a: feel unsafe due to high speed of traffic / lack of adequate separation between pedestrians and traffic
- 1b: lack of trees and shelter
- 2a: NE Preston-Albert right turning lane dangerous for pedestrians
- 2b: lack of trees
- 2c: lack of benches
- 2d: no sidewalk along Slater forcing pedestrians to make a long detour



Issues identified (see Appendix E for additional findings):

- 3a: inhospitable pedestrian environment with traffic too close
- 3b: lots of puddles and slush spray
- 3c: no safe crossing at Hincley (school zone)
- 3d: snow removal issues compromise accessibility and safety
- 4a: design of right-turn slip-lane at Scott and Bayview needs to be improved
- 4b: sidewalks on bridge are too narrow

Figure 4.15: Hintonburg audit routes

Key Overall Concerns for Pedestrians

An analysis of the audits in the three communities suggests the following overall concerns, which need to be addressed if Ottawa is to be truly an age-friendly city.

- **Sidewalk Linkages and Maintenance**

Hintonburg, the Glebe, and Kanata-Beaverbrook all had a substantially large number of broken, cracked, and dangerous sidewalks. Safety and a fear of falling was an overarching concern of audit participants across neighbourhoods and seasons due to the poor upkeep of sidewalks and pathways. Another element emphasized in terms of safety in all three audit areas were the inadequacies of curb cuts at multiple intersections, which should be a priority in order to foster accessibility in a more age-friendly city.

Linkages were also pinpointed as vital to increased walkability for all ages, and as something that was lacking in certain neighbourhoods. Many audit participants shared stories of sidewalks ending abruptly or certain places of interest being inaccessible for those who are not agile.

- **Ploughing and Ice**

Winter brought many challenges for walkability in all three neighbourhoods. One of the prominent issues that occurred in all audit areas during the winter months was the lack of proper ploughing. Often pathways were not cleared at all, whereas at times, re-ploughing walkways created uneven, icy patches, making it quite unsafe and inaccessible for all pedestrians, especially older adults. Large snow piles obstructed view, led to lower visibility for pedestrians at crossing points and made neighbourhood mail boxes hard to reach. Another winter trend observed by audit participants was the shrinking of linkages within their respective pedestrian networks. Many pathways were not comfortable to use.

- **Speeding Traffic and Unsafe Crossings**

Speeding traffic was a recurring complaint around the city by audit participants in all areas and all seasons. This was particularly an issue on narrow bridges and when pedestrians did not feel safely separated from the vehicles (especially in construction zones). This was identified as an issue, not just because of a lack of posted speed limits, but also the lack of enforcement of those speed limits.

There were also quite a few instances of long distances between points of safe crossing on both major and minor roads. This was particularly dangerous in construction areas where pedestrians had no safe place to cross, but were forced to do so anyway. Emphasis was placed on the lack of marked crossing infrastructure, such as zebra crossings, or pedestrian lights or midway islands, which would foster a safer environment for pedestrians.

Another important aspect of safe crossings, especially for older adults and those using mobility devices, is the provision of an adequate amount of crossing time. Older adults and users of mobility devices require a longer period of time to cross the road and this must be accounted for at all intersections.

- **Lack of Age-Friendly Infrastructure**

One of the main benefits of using an age-friendly framework in all nine audits, was the implicit emphasis placed on age-friendly public infrastructure. One example of this is the installation of audible signals to assist seniors and others who are visually impaired. While these were found at main intersections on the Glebe and Hintonburg routes, participants did not know how to use them (i.e. that you need to depress the

button for at least 3 seconds). In addition to adding more of these signals throughout the city, signage and other educational activities are required to teach people how to use the audible signals.

Other age-friendly infrastructure that was scarce and/or missing in all audit areas was open and accessible toilets and drinking fountains. A need for more benches and bus shelters with seats was identified. All three neighbourhoods were well linked to public transit. However, without the infrastructure to make the streets themselves more comfortable and accessible, the merits of a well-connected neighbourhood may be lost.

Specific Findings in the Neighbourhood Audits

Please see **Appendix E: Community Audits - Detailed Findings** for detailed findings and suggestions for improvements in each audit area.

5. RECOMMENDATIONS AND CONCLUDING REMARKS

Important Factors in Pedestrian Safety

In addition to considering the results of the audits described in this report, it is useful to consider what we know about pedestrian injuries and fatalities, including findings related to the drivers involved in these collisions.

According to a report from the Chief Coroner for Ontario:¹⁶

- Ten percent of those involved in pedestrian fatalities in Ontario in 2010 were utilizing assistive devices, such as canes, walkers, crutches and wheelchairs.
- Pedestrian collisions most often occur at intersections, close to bus stops, in a school zone or on multi-lane roads.
- More than half of pedestrian casualties occur at night and/or in low light conditions.
- January is the peak month for pedestrian collisions leading to fatalities in Ontario.
- Drivers are most often at fault in collisions with pedestrians. Common errors among drivers involved in pedestrian collisions include: failing to yield right of way to pedestrians; distraction and inattention, and speeding.
- A 15-year review in Ontario, showed that male drivers aged 25-54 were the typical drivers involved in motor vehicle/pedestrian fatalities. In 2010, 8% of drivers involved in pedestrian fatalities were age 65-plus.

In Ontario in 2010, five pedestrian circumstances accounted for 70% of deaths:¹⁷

1. Pedestrian hit at a mid-block location while crossing (31%). Notably high rates of collision occur for older male pedestrians in this situation (perhaps because it is a long walk to the crossing light). Causes might include motorists not expecting pedestrians to cross at mid-block, reduced visibility when crossing between parked cars, and motorists unable to stop in time.
2. Pedestrian hit on the sidewalk and/or shoulder of the road (14%). The commonest cause of this may be loss of control of the vehicle.
3. Vehicle was going straight through the intersection while the pedestrian crossed without the right-of-way (11%). The cause may be motorists with the right-of-way, not expecting pedestrians to be in the roadway.
4. Vehicle turning left while the pedestrian crossed with the right-of-way at the intersection (7%). The cause may be that motorists may only be paying attention to oncoming traffic and not looking for pedestrians in the crosswalk.
5. Vehicle turning right while the pedestrian crossed with the right-of-way at the intersection (7%). The cause may be that the driver may forget to look both ways before proceeding.

In addition to the above five circumstances, a significant number of pedestrians were struck by a heavy truck (12%) or a public transit vehicle (9%). The cause may be decreased visibility of pedestrians (especially those in low wheelchairs) to drivers of trucks, and with pedestrians entering and exiting public transit vehicles.

Speed Limits are Critical

Pedestrians are more likely to survive collisions with vehicles at speeds of 30 or 40 km/h and less likely to survive collisions at 50 km/h. Driving 15 km/h over the set speed limit increases the chance of killing a pedestrian from 45% to 85%!¹⁸

Recommendations

Based on the information above and the results of our age-friendly community audits, we make the following recommendations:

To the City of Ottawa

1. Follow up on specific problems found in the three neighbourhood audits, especially those that pose a serious danger to pedestrians (Appendix E). And thank you for already have acted on many of the concerns.
2. As a guiding principle, adopt an age-friendly “feet first” approach to transportation and public space design that assigns priority to users in this order: pedestrians (including those using motorized mobility aids), cyclists, motorcyclists, drivers of motor vehicles.
3. Move forward on the actions identified in the Older Adult Plan (Appendix D)
4. Continue to improve sidewalk and pathway conditions to enable seniors to avoid falls and safely move about the community.
5. Encourage use of the Sidewalk Hazard Report Form reporting and timely follow up.
6. Encourage use of pedestrian audits using our checklist in all seasons in other neighbourhoods. Send staff people to join in these audits.
7. Implement an age-friendly, inclusive complete streets approach, which includes:
 - speed reduction strategies.
 - strategies to prevent collisions with people who use wheelchairs, who have vision and hearing disabilities, and others who are at greater risk because of the environment.
 - increasing accessibility for pedestrians with disabilities by providing curb cuts that allow for easy movement by people travelling in wheelchairs, scooters and walkers.
 - equipping all signalled intersections with audible pedestrian signals and providing signage and other educational activities to teach people how to activate these signals.

- preventing collisions occurring at mid-block uncontrolled crossings by incorporating pedestrian crossing islands on roads with four or more lanes and where there are long distances between intersections.
 - strategies to prevent collisions where there are no sidewalks (i.e. pedestrians walk on the side of the road).
 - providing longer crossing times at intersection lights.
 - strategies to improve winter walking including enhanced ice removal on residential streets and escalating snow removal standards from Class B (snow packed) to Class A (bare surface) around all transit stops, schools and in residential areas where seniors' residences are located.
 - improving pedestrian safety and accessibility in construction areas including erecting temporary barriers and providing more space between pedestrian pathways and traffic; enforcing these policies.
 - improving pathways in suburban areas: e.g., removal of debris and encroaching vegetation, enforcing no loose dogs, and improved sharing of pathways among walkers and cyclists.
 - creating a network of safe, accessible, free, clean and environmentally responsible public toilets and water fountains in parks, major transit stops and key public places to meet the needs of residents and tourists in Ottawa; take advantage of new construction and reconstruction to include public toilets (e.g. in new light rail stations); make toilets in public buildings and parks open and accessible all year round; develop a city map of public toilets.
 - enhanced enforcement of the Highway Safety Act requiring drivers to wait until pedestrians have completely crossed the road before proceeding at school crossings and pedestrian cross-overs.
8. Educate drivers (of all ages) on how to avoid collisions with pedestrians and on the vulnerabilities of older and disabled pedestrians.
 9. Review the implications of and plan for increasing numbers of mobility scooters and motorized wheelchairs as the population ages.
 10. Adopt a Vision Zero goal which aims to reach zero fatalities and serious injuries to pedestrians and cyclists by 2020.

Note: A Complete Street is designed for all ages, abilities, and modes of travel. On Complete Streets, safe and comfortable access for pedestrians, bicycles, transit users and the mobility-impaired is not an after-thought, but an integral planning feature.

To Age-Friendly Ottawa-the Council on Aging of Ottawa (COA)

1. Use the COA website to promote pedestrian safety.
2. Post this report on the COA website.
3. Encourage others to take age-friendly action on community walkability and pedestrian safety.
4. Host a Lunch & Learn session about pedestrian safety and healthy walking.
5. Encourage other communities to use our tools and do walk audits in their neighbourhoods with older and younger people together.
6. Continue to work proactively with City departments involved in pedestrian safety and walkability such as Public Works, Safer Roads Ottawa, Ottawa Public Health and the Older Adult Plan.
7. Continue to work proactively with other community organizations who promote and advocate for age-friendly transportation and outdoor spaces so that older adults and other vulnerable pedestrians can navigate the natural and built environments with ease.
8. Monitor the implementation of committed actions related to pedestrian safety and walkability in the Older Adult Plan

Concluding Remarks

Most older people appreciate the benefits of walking, both in terms of well-being and mobility. Seniors and others using mobility aids to walk for both recreation and for transport.

The results from the pedestrian audits documented in this report and a review of key articles on aging and walking, show that while supports and barriers to walking for seniors and other vulnerable pedestrians have similarities to the population as a whole, there are also some important nuances and differences. For example, the age-friendly design and maintenance of sidewalks and pathways, curb cuts, road crossings and intersections are especially important for the safety of older pedestrians. Access to public toilets and places to shelter and rest are increasingly important with age. Winter weather imposes serious challenges to seniors and people with disabilities.

Strategies that address these concerns can prevent falls, and injuries and fatalities related to collisions. By adopting an age-friendly approach, Ottawa (and other cities) can improve walkability and pedestrian safety for all ages, but especially for vulnerable pedestrians, including the very young and people living with disabilities. The precise package of measures that are needed is likely to vary by location but this report provides some guidance on what needs to be done.

The Council on Aging of Ottawa appreciates having the opportunity to work with community audit participants, Ecology Ottawa and the City to produce this report. We look forward to further collaboration and progress as we strive to make Ottawa a city that is truly age-friendly and walkable for both residents and visitors.

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Appendix A: All-Season Age-Friendly Pedestrian Safety and Walkability Checklist* 2014/15

Instructions

Thank you for participating in this Age-Friendly Pedestrian Safety Walkability audit in your neighbourhood.

1. Please fill in the information section at the beginning of the checklist.
2. Complete the checklist on your route. The checklist is divided into four sections:
 - Safety
 - Accessibility
 - Convenience and connectedness
 - Comfort and attractiveness
3. For each question, please check one only: Yes or No or NA (non- applicable). At the end of each section, total the numbers of checks in the Yes, No and NA boxes. You can indicate the location of hazards or problems on the map you have been given.
4. Please give your completed checklist and map to the representative from The Council on Aging of Ottawa – Pedestrian Safety Committee. Your responses will be used to inform the City of Ottawa about walkability in your local area and identify problems and improvements that can be made to the City's Public Works Department.
5. (Optional) Photos are a welcome addition. If you take photos on your route, please send them to [insert name here]

.....

*Adapted by the Pedestrian Safety Committee, Council on Aging of Ottawa from various sources including the Australian Heart Foundation Check List, the Edmonton Walkability Audit and the Easter Seal Checklist for Assessing the Accessibility of Transportation and Mobility.



About the Walk

Region/Area of walk: _____

Names of main streets on route: _____

Approximate distance of walk: ☐ less than 1 km; ☐ 1 km; ☐ 1.5 km; ☐ more than 1.5 km

Date (day/month/ year): _____ Time of day: _____ ☐ a.m.; ☐ p

Winter conditions: ☐ Yes; ☐ No

About the Walkers

Walker 1: Age: ☐ Female or ☐ Male; I walk with a cane or mobility aid: ☐ No; ☐ Yes

Walker 2: Age: ☐ Female or ☐ Male; I walk with a cane or mobility aid: ☐ No; ☐ Yes

Walker 3: Age: ☐ Female or ☐ Male; I walk with a cane or mobility aid: ☐ No; ☐ Yes

Walker 4: Age: ☐ Female or ☐ Male; I walk with a cane or mobility aid: ☐ No; ☐ Yes

Additional walkers: _____

I walk this route primarily for (check one)

☐ Transportation – to reach a specific location e.g. stores, bus stop, school

☐ Recreation – walking for enjoyment and/or physical activity

The Checklist

1.	Safety: Street lighting, safety measures and well maintained sidewalks/walkways promote walking	Yes	No	NA
1.1	Generally, do you feel safe on this walk?			
1.2	If you were to walk this route at night, would it be well lit?			
1.3	Are shared-use pathways safe for both pedestrians and cyclists?			
1.4	Are sidewalks or other safe walkways available on every street on your route?			
1.5	Are sidewalks and other walkways in good repair? Identify any broken or hazardous sections on the map or comments space at the end of this section.			
1.6	Are sidewalks/walkways and public transit stops ploughed well enough for safe walking and wheeling in winter?			

1.7	Are there lights or pedestrian crossings at busy intersections?			
1.8	Are pedestrian lights and pedestrian crossings safely and conveniently located near schools, parks, retirement homes, shops, public transport stops, etc.?			
1.9	Do pedestrian lights allow enough time for older people and young children to cross safely?			
1.10	Do you feel safely separated from the road traffic, e.g., pedestrian islands in the middle of wide street crossings, adequate curbs, etc.			
1.11	Are there roundabouts, speed bumps or other traffic calming measures?			
1.12	Is the neighbourhood free from debris, litter, dog waste, overflowing waste bins, and broken glass?			
1.13	Are crossing points free of obstructions such as vegetation, buses and parked cars that limit your view of the traffic? In wintertime, do snow banks obstruct crossing point views?			
1.14	Are the speed limits for cars appropriate and clearly posted?			
1.15	Is there appropriate/adequate signage identifying the need to slow down near schools and residences for older people?			
SUB-TOTAL (add number yes's, no's and non-applicable)				
<p>Comments or suggestions:</p> <p>Location of identified issues:</p>				

2.	Accessibility: Accessible streets, pathways and street crossings ensure that people of all abilities can easily move about.	Yes	No	NA
2.1	Can people walk or wheel side by side on the sidewalks/walkways, particularly people with strollers and walkers, and using wheelchairs?			
2.2	Are the sidewalks and walking areas free from obstructions such as plant overgrowth, advertising boards, snow piles and ice?			
2.3	Are construction areas safe and accessible?			
2.4	Are open, accessible toilets available to the public along your route?			
2.5	Are the sidewalks/ walkways easy to walk or wheel on, with even surfaces for strollers and wheelchairs, and for learner cyclists?			

2.6	Are there smooth curb ramps at street crossings for people using walkers, scooters, wheelchairs and strollers?			
2.7	Are there audible signal devices at crosswalks and lights?			
SUB-TOTAL (add number yes's, number no's and number non-applicable)				
Comments or suggestions: Location of identified issues:				

3.	Convenience and connectedness: Direct routes between homes, workplaces and other destinations are important. Compact and connected neighbourhoods create shorter distances between destinations and promote walking.	Yes	No	NA
3.1	Is there pedestrian signage on the route such as maps identifying dog off-leash areas, hospitals, libraries and public transit locations?			
3.2	Does this route link with public transit services? If yes, please circle: Bus/ Train/ Other			
3.3	Does this route lead to a destination such as a school, café, library, workplace, place of worship, sports field or recreation facility?			
3.4	Are sidewalks and pathways linked together? If not where?			
3.5	Is there a dog off-leash area separated from children's play areas along your route?			
3.6	If you walked to a cul-de-sac or dead end, was there a safe route connecting you through to another street?			
SUB-TOTAL (add number yes's, no's and non-applicable)				
Comments or suggestions: Location of identified issues:				

4.	Comfort and Attractiveness: An attractive, clean neighbourhood with shade, shelter and rest areas promotes walking.	Yes	No	NA
4.1	Are there places to shelter from rain, hot sun, cold winds and snow?			
4.2	Are there benches/places to stop and rest, particularly for older people and young children? Where, if anywhere, would you add seating?			
4.3	Are there trees along the route to provide shade and a pleasant environment?			
4.4	Are there enough garbage and recycle bins available?			
4.5	Are there transit shelters with adequate seating at key transit stops?			
4.6	Are there any points of interest (e.g. historical markers, public art, parks, community gardens)?			
4.7	Is the neighbourhood free from graffiti and vandalism?			
4.8	Are park areas and playground equipment well maintained?			
4.9	Are there drinking fountains in parks or in other places along the route?			
4.10	Are the street frontages interesting and attractive (e.g. landscaping, fences, shop fronts)?			
SUB-TOTAL (add number yes's, no's and non-applicable)				
<p>Comments or suggestions:</p> <p>Location of identified issues:</p>				

How age-friendly and walkable was your route?

1. Was this walk enjoyable? ☐ No; ☐ Yes Why or why not?

2. Did you encounter any major concerns in terms of safety or accessibility? ☐ No; ☐ Yes
Your local Councillor will appreciate hearing about the hazards/issues you have identified. You can also call 311 to report these.

THANK YOU FOR PARTICIPATING IN THIS AGE-FRIENDLY PEDESTRIAN SAFETY WALKABILITY AUDIT.



APPENDIX B: Sidewalk Hazard Report Form



Sidewalk Hazard Report Form



Please use this form to document the condition of sidewalks in the City of Ottawa that make you feel unsafe as a pedestrian or using a wheelchair or a walker.

To submit the form:

Please submit the form online at serviceottawa.ca. A printable version of this form is available. We ask that you submit the form online at serviceottawa.ca. In addition, you can mail the form to the address below; scan the form and submit via email to 311@ottawa.ca; or, drop off a copy at any client service centre and include the following address:

*Public Works Department,
100 Constellation Crescent, 9th Floor West,
Ottawa, Ontario K2G 6J8*

Thank you for your help in keeping the City of Ottawa a safe place for everyone!

Street/Road	Cross Street/Road
Nearest address, marker or nearby signpost	Direction of travel (i.e. northbound)

To help us identify the damage, please check all that apply:

Damage (i.e. crack in sidewalk, pothole)

- ☐ Rough pavement
- ☐ Pavement cracks
- ☐ Lack of mobility device access (curb cuts)
- ☐ Pothole

Debris (i.e. snow, litter, tree roots)

- ☐ Debris on sidewalk (litter, etc.)
- ☐ Plant overgrowth or Interference
- ☐ Hazardous drain grate
- ☐ Overflowing waste receptacles

☐ Other: _____

Please add any other details on how the hazard(s) indicated above impact you as a pedestrian:

If you would like the City of Ottawa's Public Works Department to provide a status report on the problem you identified please provide your contact information below.

First name	Last name
Daytime telephone contact	Email

APPENDIX C:

Council on Aging of Ottawa - Age Friendly Ottawa

SNOW MOLE QUESTIONNAIRE

You are invited to be a SNOW MOLE and complete a Winter Pedestrian Safety Audit between *day/month/year* and *day/month/year*. SNOW MOLES are older adult volunteers who report on what it is like to walk outside on a winter day in Ottawa.

Instructions to SNOW MOLES

1. Pick a time of day when you need to go out a day or two after winter weather (e.g. heavy snow, freezing rain)
2. Pick a destination: e.g. library, grocery store, bank, drug store, medical appointment
3. Answer the questions below and use the Checklist of 5 questions to audit your walk.
4. Return the completed audit form to your community contact. THANK YOU!

Age-Friendly Ottawa SNOW MOLES: Questions about you and your winter walk

Date (day/month/year): _____ Time of day: ____ a.m.; ____ p.m. _____

Describe winter conditions (i.e. snow, freezing rain, slushy) _____

Region/Area of walk audit: _____

Names of main streets on route: _____

Approximate distance: ____ less than 1 km., ____ 1 km., ____ 1.5 km, ____ more than 1.5 km.

About you: Age ___, Female ____ Male ____ . I walk with a mobility aid: ☐ Yes ☐ No

I walk this route for (check all that apply): ☐ Transportation: to reach a specific location;

☐ Recreation: for enjoyment and/or physical activity; ☐ To question safety and age-friendliness of this route.

THE CHECKLIST

1. Have the sidewalks and streets in front of your house or residence been:

☐ Ploughed ☐ Salted ☐ Sand/Grit ☐ Other: _____

2. Can you walk (or use a mobility device) on the sidewalk safely to get to your destination or to the nearest bus stop? ☐ Yes ☐ No

3. Is the bus stop area clear of snow/ice and fully accessible? ☐ Yes ☐ No

4. Are you able to get to your destination and back home safely? ☐ Yes ☐ No

5. Do you have any other safety concerns?

Thank you for completing and returning this Winter Pedestrian Safety audit

APPENDIX D: Measuring Progress: Ottawa Older Adult Plan

The following shows action commitments relating to walkability and pedestrian safety in the Older Adults Plans as well progress made in 2012-2014.

Actions taken to address commitments in the Older Adults Plan 2012-2014

Action Commitment	Action Taken
1.5 Install additional benches in City parks, on roads, and pathways	34 additional benches have been purchased and/or installed in areas of the city with high concentrations of seniors.
1.6 Install additional pedestrian signal technology to existing signalized intersections and develop a communications campaign on pedestrian intersection safety	12 additional intersections were installed with Pedestrian Signal Technology. Public Works has committed to installing 2 pedestrian signals each year using existing funding. A one-page information sheet was created to promote the safe use of pedestrian signal technology.
1.7 Implement measures such as pedestrian islands and roadway narrowings at selected intersections and mid-block crossings on selected roadways, where appropriate	The Pedestrian Safety Evaluation Program was developed to prioritize pedestrian related road safety improvements to signalized and non-signalized intersections within the City of Ottawa.
1.8 Include walkability assessments in the prioritization of sidewalk maintenance	A Sidewalk Hazard Report Form was developed for older adults to report deficiencies in sidewalk conditions. Deficiencies reported through this new form will be prioritized whenever possible.
1.9 Increase the number of Yellow Grit Boxes along sidewalks	55 additional Yellow Grit Boxes were implemented in areas of the city with high concentrations of seniors.
1.10 Develop an Age-Friendly Parks, Pathways and Public Spaces Checklist	A checklist for Age-Friendly Parks, Pathways and Public Spaces was developed and included as an appendix in the Park & Pathway Development Manual and posted on Ottawa.ca
1.11 Review the Official Plan to ensure it supports the land use needs of older adults.	2012-2015 Plan reviewed and consultation held to develop Older Adults Plan 2016-18
2.3 Develop age-friendly guidelines for the design and placement of bus stops and shelters	
2.4 Review current procedures and coordination between departments responsible for snow removal around bus stops and shelters	An operational review was completed regarding snow removal around bus shelters. New communication arrangements were made between Public Works and Transit Services to streamline snow removal around bus shelters.
2.12 Launch an awareness campaign to reduce sidewalk cycling and encourage safe sharing of pathways with pedestrians	No action taken
2.13 Review the implications of increasing numbers of mobility scooters and motorized wheelchairs on designated bikeways	No action taken
2.14 Launch a safety awareness campaign for older drivers	No action taken

City of Ottawa Older Adult Action Plan 2015-2018

Action Commitment/Timeline	Reporting Indicators
Make on-street bus stop accessibility improvements	Number of bus stops improved
Make transitway station seating improvements	Number of benches installed
Promote discounted and no fare public transit options for seniors	Number of senior bus passes sold Number of senior pay-per-ride fares
Review Para-Transpo service standards	Public engagement in completed review Final recommendations tabled with Transit Commission for approval
Review and adjust crossing times at large/busy intersections	Number of intersections with crossing times adjusted
Increase promotion of grit box program	Number of promotion efforts documented
Install additional pedestrian signal technology to existing signalized intersections	Number of intersections with additional pedestrian signal technology
Inform older adults about locations of public washrooms in City buildings	Map of public washrooms created
Install additional benches on sidewalks and pathways, using a defined strategy	Number of additional benches installed
Prioritize and repair sidewalks based on walkability assessments completed by older adults	Process established to include older adults Kilometers of sidewalks repaired
Make age-friendly improvements and designate one existing city park per year as "age-friendly"	Number of city parks designated as "age-friendly" Number of park planners trained
Develop and install exercise signs in selected city parks	Number of signs and number of parks with signs
Pilot an awareness campaign to encourage businesses to create more age-friendly environments and promote use of entrance ramps	Campaign developed and documented
Promote the City's accessibility design standards to encourage the application of age-friendly principles in the community	Pamphlet developed and number distributed

Appendix E:

Community Audits: Detailed Findings

* Members of the Committee with City of Ottawa Public Works staff returned to the three audit sites on November 17, 2015. Several of the areas of concern had been fixed or improved. This is captured in the third column in the charts below.

Beaverbrook (Kanata)

Route 1: Penfield Drive, Route 2: Varley Lane, Route 3: Gow Park Pathways, Route 4: Access to grocery store, Route 5: Leacock-Alice Wilson/Sandwell Green.

Age-Friendly Concerns	Observations	Status as of November 17, 2015**
Lighting	Routes 1, 2, 3, 5: Poor lighting on streets and pathways; Route 1: mailboxes and transit stops poorly lit.	
Sidewalks and pathways	Cracked, broken and uneven sidewalks reported on all routes; Routes 1, 2, 3, 4, 5: sidewalks missing or end abruptly; Route 4: deteriorated pathway on Teron near townhouses; pothole on sidewalk on Teron near fire station; Route 5: unpaved paths are not maintained in winter and pedestrians are forced to walk on the road; Parkway and Leacock inaccessible for those with a walker, wheelchair or stroller.	
Feeling safe	Underpass under Varley low, not well marked or well lit and has graffiti (feels very unsafe); pathways are secluded, not safe at night; Lisner and Varley very dangerous in winter.	Notes taken by Public Works for review in 2016
Crossings and intersections	Need safe crossings midway Teron, Milne and Varley, Leacock, Varley Park exit and Holly Acre Park entrance, Gow Park, Route 4 (10 minute walk between safe crossing points) from Sandwell Green to Earl of March; private condo roads (Route 3) have no stop signs or pedestrian crossings; Route 4 in front of Metro pedestrians must cross too many lanes-need island in middle.	New crossing with school crossing guard Milne/Varley to be reviewed early 2016. Other crossing issues flagged by City staff.
Traffic concerns	Routes 1, 2: Curves and vehicle speeds endanger pedestrians (exacerbated by snow banks in winter) traffic speed too high, especially in front of schools.	Graffiti cleaned, ground evened and new sign posted.
Obscured vision and obstructions	Large snow banks reported as obstructions on all routes; Route 2 post box obscures vision; Route 5: rocks on path are tripping hazard.	

Signage	Route 1: needs signs about curves in road; Route 2: some street signs broken and need painting; Route 5: need school crossing sign, signage for on/off leash dogs; lack of helpful wayfinding signage at major bus stops; lack of schedule signage at Beaverbrook Community Association bus stop.	
Ploughing in winter	All routes: sidewalks not well ploughed; high snow banks narrow roads and make it dangerous at crossings and to walk in winter Route 2: debris from re-ploughing makes walking impossible; Teron bus stops not ploughed for wheelchair access; post box area not ploughed; connecting path Banting Crescent not ploughed; Route 5: shelters that do exist are not ploughed in winter.	
Garbage and recycling bins	Lacking in routes 1, 2 and 3	
Overgrown vegetation and leaves that obstruct walking	Routes 1, 3 (leaves are a hazard for cyclists and pedestrians)	City staff noted overgrowth areas
Shelter from weather and places to rest	Routes 1, 3, 4 (transit stops): not enough benches; Routes 3 and 4 need more shelters; Routes 1 and 4 need more trees for shade; need a bus shelter at Beaverbrook and Leacock.	
Puddles and flooding	Reported at Penfield and Teron, Riopelle, behind Georges Vanier; road drains blocked up in fall and winter—creates puddles and ice.	
Safely sharing walkways and roads	Routes 2 and 3: off-leash dogs a problem (bitten); Route 2: needs bike lanes; Routes 3, 4: shared use pathways for cyclists, pedestrians and wheel chairs not wide enough (worse in winter).	
Connectedness	Route 2: public transit stops not connected to sidewalks; Route 3 no walkway to bus stop from Pathway; Route 5: poor linkages to paths leading to schools, transit, seniors centre, etc.	
Litter, dog waste, vandalism	Routes 2 and 3: dog waste, graffiti on signs and fences.	

Glebe

Route 1: Bank Street, Monk Street, Third Avenue; Route 2: Bank Street, Holmwood Avenue, O'Connor Street;
Route 3: Bank Street, Wilton Crescent

Age-Friendly Concerns	Observations	Status as of November 17, 2015**
Lighting	Route 1 not well lit. Route 2: lights at Fifth near the Canal are a great improvement! Pedestrian oriented lighting required, especially in the park.	
Sidewalks and pathways	Some cracked or broken sidewalks on all routes; Monk St. sidewalk not wide enough. Sidewalk leading up to QE Drive does not connect to the multi-use pathway by the canal. Repairs needed on Bank St. bridge (holes), manhole cover in front of Barley. No curb at O'Connor & Holmwood. No sidewalk from Glebe Centre to Wilton.	Route 2: New sidewalk & curbs on east side of Holmwood
Feeling safe	See below, in particular crossing at Sunnyside and Bank feels dangerous due to cars attempting to turn from all directions before the light changes.	
Crossings and intersections	Need safer crossings on all routes: Bank & Wilton, Monk & Queen Elizabeth, Sunnyside & Bank, in front of Abbotsford, at Fifth and Monk, Bank & Wilson or Fifth and Lyon, and at cul de sac north of Fifth Avenue. Routes 1 and 2: Curb too high at Bank and Fifth, and presents a challenge for mobility challenged pedestrians, as does the one at Holmwood & O'Connor and Monk & Fifth, which is bumpy and icy in the winter. Route 1: The lights at Bank and Holmwood, Abbotsford & Bank, Queen Elizabeth & Fifth, the Landsdowne entrance and Aylmer are not long enough for older people to cross safely. Route 3: Bank & Landsdowne needs an audible pedestrian crossing signal. This crossing is not friendly for pedestrians, nor is the exit from QE driveway to Bank, and the Bank Street bridge. Fifth Ave signal does not have a full signal The lines at Wilton and Monk (Route 3) need to be repainted, and on Route 1 need more defined cross-walk signage (zebra stripes, etc). In general, there is a lack of traffic calming measures.	Routes 1,2,3: To activate audible walk signal, button must be held down for 3 seconds. Public Works noted crossing needs re-painting in 2016
Traffic concerns	Route 3: Bank and Wilton requires traffic control measures.	

Obscured vision and obstructions	Route 1: the fire hydrant at SW corner of Fifth and Morris is obstructed by overgrown yard, signs not parallel to street - block and can injure pedestrians. Bank St. had many obstructions (signs, overgrowth). Route 2: most stores on Bank St have steps to entrance- difficult for mobility devices. Construction debris on Holmwood; post outside Barley Mow.	
Signage	Route 1: inadequate signage to community attractions. Signs are not parallel to street and so block and can injure pedestrians. Store signs on Bank St. obstruct easy pedestrian flow. Lack of wayfinding signs/overgrowth blocking them at Third, Fourth and Fifth. Route 2: bike signs on Fifth just before Queen Elizabeth are confusing. But new signage at Fifth is a great improvement. Route 3: lacks proper signage for where bike lane begins, and it is not visible from road. The stop sign at library is not visible. Pedestrian signage only on Bank.	
Ploughing in winter	Winter issues on all routes. Route 1: ice raised at curved corners Holmwood and Monk, Morris and Fifth; crosswalks and sidewalks only partially cleared (especially at Bank and Fifth), snow piles obtrusive at Holmwood and Bank, width of plough blade does not accommodate width for strollers, wheelchairs, etc. (especially Lyon and Monk). Route 2: piles of snow and ice at crossings and on sidewalks not safe for wheelchairs, strollers, etc. Snow on sidewalk bad on Holmwood near Adelaide. Route 3: North side of Bank St bridge very poor walking/ wheeling conditions; Monk and Third has bumpy and icy curb cut, very steep. Sidewalks are rough and icy.	
Garbage and recycling bins	Routes 1 & 3: waste bins missing (Bank & Lyon near schools, Bank between Sunnyside and Colonel By). No recycling bins on Route 1.	
Shelter from weather and places to rest	Routes 1 and 2: not enough transit shelters with benches. Route 1: lacks benches for resting. Route 2: insufficient number of places of shelter from weather. Route 3: bench in front of Stella Luna blocks sidewalk.	
Safely sharing walkways and roads	Route 1, sign for David's Tea on sidewalk is too wide; Bank St. has many obstructions (signs, overgrowth).	
Connectedness	Route 1: public transit links only on Bank St. Route 3: sidewalks and pathways not well linked at Wilton and Bank.	
Toilets and accessible doors	Routes 1 and 2: no open, accessible toilets.	

Hintonburg

Route 1: Albert Street – Preston Street to Bayview O-Train Station. Route 2: Albert Street – Empress Avenue to Preston Street. Route 3: Scott Street – Bayview Avenue to Holland Avenue (Carruthers Avenue to Smirle Avenue). Route 4: (O-Train to Carruthers) Scott Street Bridge.

Age-Friendly Concerns	Observations	Status as of November 17, 2015**
Lighting	Route 2: Street lighting does not adequately light sidewalks.	
Sidewalks and pathways	<p><i>All routes: sidewalks are too narrow and pedestrians are not safely separated from speeding traffic.</i></p> <p><u>Route 1:</u> Due to active construction lack of safe sidewalks on South side. Lack of pedestrian signage for alternate routes and safe crossings to North side. Multi-use pathway too narrow for wheelchair and pedestrian to walk side by side when meeting another pedestrian. Concrete sidewalks with grooves between each section uncomfortable for wheelchair users.</p> <p>SW corner of Booth/Albert curb ramp too high and rough.</p> <p><u>Route 2:</u> Sidewalk damaged/broken curb on east side Albert/Booth. Sidewalk between Booth/Rochester is asphalt. No sidewalk on right side going up the hill just after Empress. Sidewalk ends abruptly on Albert St. between Empress and Commissioner. No sidewalk on West side of Preston from Albert to Transitway. Danger to pedestrians Booth/Preston because of fast traffic. Need barriers.</p> <p><u>Route 3:</u> Curb at Scott/Hinchey needs to be depressed. Cracked sidewalks at 1640, 1634, 1600 Scott St. at Huron/Holland. Sidewalks not well ploughed, especially Carruthers to Parkdale. Broken curb at Scott/Carruthers. Hydro pole on SE corner Scott/Parkdale restricts busy pedestrian spot. Curb cuts in wrong place at Manchester, Stirling, Carruthers SW corner.</p> <p><u>Route 4:</u> Bridge has very narrow sidewalk. Curb near Scott/Garland too high, dangerous for wheelchairs/strollers. Curb cut problems: Scott/Manchester; Scott/Hilda; 1364 Scott/Carruthers; Scott/Stirling.</p>	<p>Construction has been completed. Multi-use pathway now in excellent condition.</p> <p>Booth/Albert curb repaired.</p> <p>Route 2: Sidewalks on south side remain narrow but have new asphalt paving.</p> <p>New metal fencing/barrier installed between pedestrian path and traffic.</p> <p>Route 3: Some repair with asphalt/shaving.</p> <p>Route 3: curb cuts not fixed.</p> <p>Route 4: Some curb cut problems have been repaired with paving.</p>

Feeling safe	All routes: feel unsafe due to narrow sidewalks, high speed of traffic and lack of adequate separation between pedestrians and traffic. NE Preston yield turning lane dangerous for pedestrians. Route 3: Not comfortable walking here with children. Brutal pedestrian environment with traffic too close .	
Crossings and intersections	<p>Route 1, 2, 3, 4: Not enough pedestrian crossings and lights should be longer for seniors and mobility devices. Lack of auditory signals.</p> <p><u>Route 1</u>: Pedestrian crossing island at Albert/Empress too narrow, and signal light too short.</p> <p><u>Route 3</u>: No safe crossing at Hinchey (school zone).</p> <p><u>Route 4</u>: Scott/Bayview needs pedestrian crossing/ yield sign or light.</p>	<p>Route 1: 3 pedestrian crossings: Empress; Preston; City Centre.</p> <p>Pedestrian crossing light 25 seconds.</p> <p>Route 2: Crossing lights have been adjusted to max. 30 sec.</p> <p>Route 3: New crossing light planned for Merton.</p>
Traffic concerns	Routes 1,2,3, 4: Narrow sidewalks on south side of all routes are too close to speeding traffic. (Made worse in winter months with snow banks). Routes 1 and 2: lack of speed- limit signage.	Routes 1 &2: Metal fencing barrier between pedestrians & traffic. Routes 3 &4: Cycling lane creates buffer. Route 1: new speed limit sign 50 km.
Obscured vision and obstructions	Route 2: Tripping hazard reported NE corner of Preston/Transitway – electrical junction box.	
Signage	Route 2: Speed limits not clearly posted.	Sign: Speed limit 50 km.
Ploughing in winter	Route 2: Snow removal at Preston/ Transitway poor. Route 3: Sidewalks not well ploughed from Carruthers to Parkdale. Area is sloping and icy. Snow drift at Manchester blocks sidewalk. Snow berms along Scott encroach on sidewalk. Parking lots are cleared and snow dumped onto sidewalks Scott/ Parkdale. Bus shelters not cleared of snow at Scott/ Carruthers. Route 4: Snow banks obstruct crossing point views. Too much snow for mobility devices Bayview/Scott.	
Garbage and recycling bins	All routes: No problems reported	
Overgrown vegetation that obstruct walking	Route 4: Weeds obstruction and trees overhanging Albert/Scott. Overgrowth Scott Street east of Hilda	Overgrowth removed by residents.

Shelter from weather and places to rest	Route 1 and 2: Lack of trees and shelter. Route 1: only places to rest are O-Train station and Bayview bus stop. Route 2: Need to add seating at Rochester.	
Puddles and flooding	Route 1: Uneven asphalt and big puddles from City Centre to Preston. Route 2: Puddling at major intersections. Sidewalk to Westbound transit way bus stop has a low spot susceptible to flooding. Route 3: Lots of puddles and slush spray. Water pooling SW corner of Hinchey, SE corner of Pinehurst, SW corner of Parkdale. Pedestrians get splashed during rain/snow.	Route 1 & 2: New asphalt sidewalk/pathway.
Safely sharing walkways and roads	Route 1: Multiuse pathway--cyclists do not dismount despite posted signage. Route 2: Cyclists using sidewalk.	
Connectedness	Route 1: Bike path near O-Train ends, lack of shared use pathway. Route 2: Detour due to construction. Route 4: No pedestrian connectedness from Manchester St.	
Litter, vandalism	All routes: No problems reported	
Toilets and accessible doors	All routes: Lack of open accessible toilets.	

Suggested Actions

Address each of the specific problem areas reported above, including efforts to:

- improve lighting, especially on pathways (Kanata) and at transit stops
- repair cracked, broken and uneven sidewalks and pathways; give immediate attention to dangerous areas; widen sidewalks as required
- improve safety and accessibility (e.g. add information about how to activate audio signals) at intersections
- provide safe crossings
- enhance snow ploughing and removal of ice and snow
- remove obstructions that challenge the safety of pedestrians and cyclists, including vegetation and leaves
- provide signage that enhances safety, wayfinding and connectedness
- reduce vehicle speed limits, especially near schools and seniors' residences and in construction areas; post clear speed limit signage.
- provide additional garbage and recycling bins
- enforce pick up of dog waste and clean up graffiti on pathways (Kanata)
- develop a plan and take action to ensure open, accessible toilets along major pedestrian and public transportation routes
- continue to increase the numbers of benches and shelters
- investigate areas with large puddles and flooding and remedy the situation
- enforce dogs on leash and provide off leash areas
- educate cyclists and enforce the rules about sharing pathways with pedestrians
- protect pedestrians in construction zones.

APPENDIX F:

Organizations and City Departments Promoting Walkability and Pedestrian Safety

Community Organizations and Coalitions

Council on Aging of Ottawa: www.coaottawa.ca

Ecology Ottawa: <http://ecologyottawa.ca>

GottaWalk: gottawalk.ca.html

An initiative of community partners, which promotes walking for health, enjoyment and practical living

Healthy Transportation Coalition: www.healthytransportation.ca

A coalition of 25 organizations plus individual members that focusses on community organizing, research, and policy development for pedestrian safety and walkability.

Ottawa Community Support Coalition (OCSC): www.ocsc.ca

Members of the OCSC deliver community support services to older adults and adults with disabilities, including programs that support senior pedestrians, physical activity and falls prevention. See the website for a list of organizations in the Coalition.

Ottawa Neighbourhood Study: (ONS): neighbourhoodstudy.ca/walkability

The ONS brings together the University of Ottawa, the City of Ottawa, local Community Health Centres, United Way/Centraide Ottawa, Just Food, and other community-based partners. The site includes walkability assessments of neighbourhoods in Ottawa.

Walk Ottawa: walkottawa.ca

An advocacy group for improvements to pedestrian safety. Walk Ottawa will assist with walk audits.

Walking Groups - GottaWalk: www.gottawalk.ca/walkingguides.html

45 English and French speaking walking groups across Ottawa

City of Ottawa

City of Ottawa Transportation and Parking: <http://ottawa.ca/en/residents/transportation-and-parking>

Older Adult Plan (2016-18): http://documents.ottawa.ca/sites/documents.ottawa.ca/files/documents/oap_2015_2018_action_plan_en.pdf

Pedestrian Safety: <http://ottawa.ca/en/residents/transportation-and-parking/road-safety/pedestrian-safety>

Information on recent measures to improve pedestrian safety

Park and Pathway Development: <http://ottawa.ca/en/city-hall/planning-and-development/whats-happening-your-neighbourhood/park-and-pathway-development>

The Park and Pathway Development Manual guides City staff, external stakeholders, and the development community on safety and walkability.

Reporting Hazards: Dial 3-1-1. During winter, report sidewalk and road hazards at <http://ottawa.ca/en/serviceottawa/road-and-sidewalk-maintenance-winter-season>

Safer Roads Ottawa Program: <http://ottawa.ca/en/http%3A//ottawa.ca/en/residents/transportation-and-parking/road-safety>.

Ottawa Public Health Department: <http://ottawa.ca/en/residents/public-health/healthy-living/walking> (walking and pedestrian safety); <http://ottawa.ca/en/residents/public-health/senior-safety> (falls prevention)

Special Help in Winter

- **The Grit Box Program:** <http://ottawa.ca/en/residents/transportation-and-parking/road-and-side-walk-maintenance/grit-box-program>
In winter, the City of Ottawa places 56 “do-it-yourself” grit boxes at various locations for residents to use on slippery sidewalks and hills. The number of grit boxes has been increased along sidewalks known to have a high volume of older adult pedestrians.
- **Snow Go Program:** The Snow Go Program provides a matching service for seniors and people with disabilities looking to hire an individual or contractor to clear snow from private driveways and walkways. The **Snow Go Assist Program** provides financial assistance to eligible low-income seniors or persons with disabilities needing this service. To learn more and get assistance visit <http://ottawa.ca/en/residents/social-services/seniors/get-help-clearing-snow>