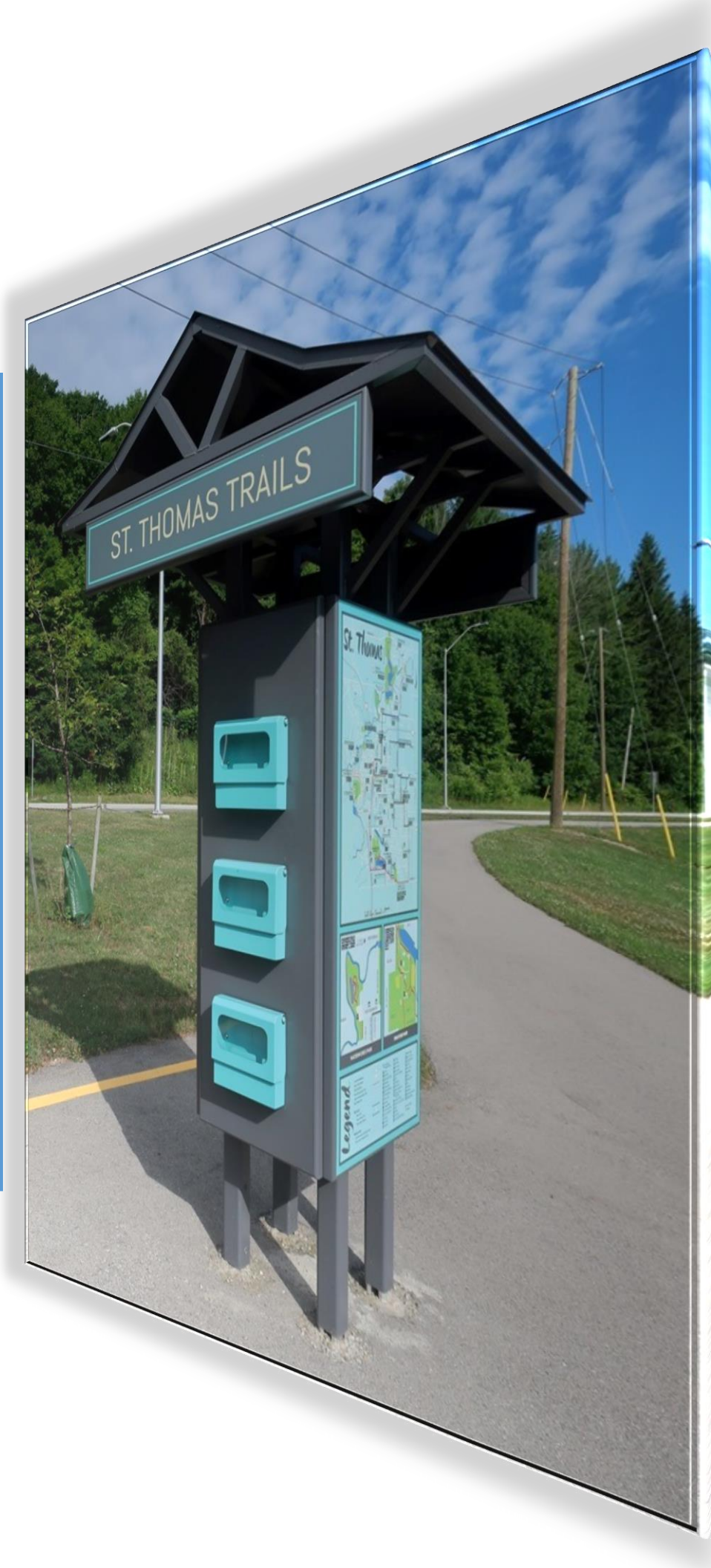
City of St. Thomas Creating Connections Project

Evaluation Report

December 11, 2019



HCA
HARRY CUMMINGS AND ASSOCIATES INC

Executive Summary

Introduction

Creating Connections was a five-year project that was initiated in September 2015 through a partnership between the City of St Thomas, local developers (Doug Tarry Homes Ltd. and Hayhoe Homes), and Southwestern Public Health (SWPH). Principal funding for the project was provided by the Public Health Agency of Canada and matched by the local developer partners creating a total project budget of approximately $1.94 million spread over five years.

The project was led by SWPH and had the following goals:

- To improve the built environment within the City of St. Thomas in order to support increased rates of physical activity.
- To engage families, community members and municipal officials in order to improve walkability within the City of St. Thomas and specifically within the demonstration area.[1]

This report presents the findings of the evaluation of the Creating Connections project. The evaluation covers the full duration of the project (2015-2019) and examines the extent to which the project goals / objectives were met. The research design used a mixed methodology approach consisting of document/data review, key informant interviews with project partners, and surveys including a pre- and post-implementation phone survey and other survey platforms (e.g. social media, mobile apps).

Findings

The Creating Connections project has successfully achieved a number of objectives over the 2015-2019 period. The project engaged with a substantial number of residents through its planning and communication activities and significant additions and improvements were made to the walking infrastructure by the City and developers.

The planning activities ultimately provided the project partners with a better understanding of the needs / interests of the community and this information helped guide the type of walking related infrastructure that was built / improved across the community. The communication / promotional activities served to inform residents about the health benefits of walking and raised awareness about the improvements made to the sidewalks and trails in the community and the new / expanded opportunities for walking to destinations around the community.

Results from the various community surveys point to a positive trend in outdoor walking activity with some trends being more pronounced in the southern portion of the City where the demonstration area is located. The results also revealed significant differences between several subgroups within the sample population and these findings represent potential cues for where future walkability initiatives could be targeted.

Additional details on the performance and results of the project are summarized below.

Planning and Community Consultation and Engagement

Collectively, over 5,000 residents were consulted through various engagement activities over the duration of the project.

[1] The ‘demonstration area’ where the developers contributed to the infrastructure development (e.g. sidewalks, trails) is largely covered by three adjoining neighbourhoods in the south portion of the City: Lake Margaret, Shaw Valley, and South Gate.

This was initiated with the completion of the St. Thomas Walkability Assessment and Action Plan in 2016 where residents were consulted to help inform the creation of a prioritized list of improvements to sidewalks, trails, pedestrian crossings and pedestrian amenities.

Key planning initiatives in 2017 included the release of the updated Cycling and Trails Master Plan and the Age Friendly Community Plan by the City as well as the Access to Recreation Report completed by SWPH and consultation through meetings with a local active transportation advocacy group (Citizens 4 Active Transportation).

Key activities in 2018 and 2019 included the completion of a new Trail Map of hiking and cycling routes in the City and Elgin County and the completion of the Elgin County Trails Study which complemented the Creating Connections project by identifying opportunities for improving trail connectivity throughout the area.

With respect to promotional events / activities, SWPH initiated its communications campaign in 2017 which included a new tag line (*Why not Walk?*) and used a variety of methods (i.e. billboards, videos, and social media) to encourage residents to get out and explore the new trails and sidewalks available. These promotions continued throughout the 2017-2019 period. Announcements through social media included updates on the completion of new trails and sidewalks and the promotion of different walking activities (e.g. walking to school, walking on your work break, walking in winter, etc.). SWPH also promoted the project through information booths at various community events and used a mobile app (Carrot Rewards program) to engage users with interactive content and share additional information and resources related to the project.

In 2019, SWPH presented two community events to celebrate the formal conclusion of the project. The first event was a Trails Challenge where residents were encouraged to use the trails in the City and post selfie photos of their visits to the five trail kiosks in the community. The final event was a Trails Open Event that was hosted by all of the project partners and featured a variety of free activities for children and adults (e.g. nature walks and talks, live music, outdoor yoga, and other fun activities).

Improvements to Sidewalk and Trail Infrastructure

Numerous additions and improvements to the walking infrastructure were made by the developers and the City of St. Thomas over the 2016-2019 period to support physical activity. The developers added new sidewalks and trails as part of their building / construction activity in the southern portion of the City while community wide improvements were made by the City of St. Thomas as part of the Infrastructure Capital Plan which follows a Complete Streets approach to creating streets that accommodate users of all ages and abilities and all modes of transportation including pedestrians, cyclists, motorists and transit users.

The infrastructure improvements made through the City Capital Plan and the Creating Connections project are complementary in that they support an overall improvement in the accessibility and connectivity of residential areas and community destinations. The south trail path is now entirely paved making it a fully accessible form of outdoor recreation and it links into the broader trail system in the community including the Trans Canada Trail.

Key upgrades / improvements made to the sidewalk / trail infrastructure over the 2016-2019 period include:

- Sidewalk installation / upgrades including almost 12km of new sidewalks / trails
- Creation of pedestrian zones through streetscaping
- Upgrades to trail infrastructure (e.g. multiuse trail paving – over 1,500 metres)

- Installation of new pedestrian crossovers (PXOs)
- Upgrades to street intersections and crosswalks
- Installation of new meadow trail (525 metres).
- At least 10km of bike lanes and a new bridge completed with multiuse trail included

Project Outcomes

A key objective of the Creating Connections project was to promote increased rates of walking over the 2016-2019 period and to determine how changes in walking behaviour varied across the community (i.e. the demonstration area in the southern portion of the City vs. the north / central portion of the City). A variety of methods were used to examine walking behaviour in the community including a randomized phone survey of over 380 households in 2016 and 2019 (i.e. at pre- and post-project implementation) that focused on adults 18 years of age or older.[2]

The phone survey results revealed an age bias in the sampling (i.e. younger age groups were under represented in the sample) and it was decided to use additional survey methods as part of the post-project data collection in 2019 to reach younger residents.[3]

Results from the various community surveys point to a positive trend in outdoor walking with some trends being more pronounced in the southern portion of the City where the demonstration area is located. The results also show some notable differences in walking behaviour and opinions among different demographic groups which could inform future strategic actions to further support and enable walking activity in the community.

Leisurely walking in the neighbourhood

Participation rates for 'leisurely walking around the neighbourhood' were very similar in 2016 and 2019. Approximately 70% of the respondents confirmed that they sometimes take leisurely walks and the average number of days they went on leisurely walks over a seven-day period was about 4 days. Respondents in the demonstration area reported slightly higher rates of leisurely walking in 2016 and 2019 compared to the north / central portion of the City.

With respect to the walk duration (round trip), a very slight increase in the average number of minutes walked occurred between 2016 (34 minutes) and 2019 (35 minutes) with a more notable increase occurring in the demonstration area between 2016 (33 minutes) and 2019 (36 minutes) compared to north / central portion of the City.

Walking on trails / in parks in the community

Participation rates for 'walking on trails / in parks in the community' increased between 2016 and 2019. Over 60% of the respondents in 2019 confirmed that they sometimes walk on trails / in parks compared to 55% in 2016.

With respect to rates of walking, a very slight increase in the average number of days spent walking on trails / in parks over a seven-day period occurred between 2016 (2.4 days) and 2019

[2] Younger respondents (e.g. under the age of 39) were under represented while older respondents (e.g. 60 and over) were over represented in the 2016 and 2019 randomized survey. For the purpose of conducting the analysis, the data was weighted to more accurately reflect the actual age distribution of the population for the City of St. Thomas.

[3] This included a self-administered version of the phone survey that was deployed through the SWPH Facebook page and completed by 211 residents. Additionally, a short quiz consisting of four questions adapted from the phone survey was used in the Carrot mobile app and completed by a total of 1,262 residents. Although the participants in the Facebook survey and the mobile app quiz were not selected at random, the results serve to strengthen our understanding of local walking patterns and the key issues of interest to residents across a broad age spectrum.

(2.5 days) with a more notable increase occurring in the demonstration area between 2016 (2.5 days) and 2019 (2.9 days) compared to the north / central portion of the City.

Walking to commercial / recreation destinations

Participation rates for other destination walking increased between 2016 and 2019.[4] Over 40% of the respondents in 2019 confirmed that they sometimes walk to commercial / recreation destinations compared to 35% in 2016.

Self-reported change in outdoor walking activity

A considerable proportion of respondents reported that they increased their outdoor walking activity over the last two years. At least a third of the respondents from the 2019 phone survey reported that they increased their walking activity to some extent over the least two years with 17% reporting a substantial increase in walking. Results from the Facebook survey for the same period found that almost half of the respondents reported an increase in their walking activity to some extent with 25% reporting a substantial increase in walking.

Key motivation for walking

Approximately 60% of the respondents in 2016 and 2019 reported that they walk for health benefits while the proportion of respondents that associate health benefits with walking increased from 83% in 2016 to 87% in 2019.

Approximately 56% of the respondents in 2016 and 2019 expressed interest in walking more.

Lack of time was the most commonly cited reason for not walking more in 2016 (47%) and 2019 (46%).

Neighbourhood walkability

A large majority of the respondents (over 90%) in 2016 and 2019 agreed to some extent that having a walkable community promotes a healthier community. A higher percentage of respondents strongly agreed with this view in 2019 (59%) compared to 2016 (50%).[5]

A large majority of the respondents (approx. 90%) in 2016 and 2019 agreed to some extent that their neighbourhood is walking friendly. A higher percentage of respondents strongly agreed with this view in 2019 (49%) compared to 2016 (43%).

A large majority of the respondents (over 80%) in 2016 and 2019 reported that they felt comfortable using sidewalks in their neighbourhood at night. A higher percentage of respondents indicated that they felt ‘very comfortable’ in 2019 (50%) compared to 2016 (44%).

Approximately a third of the respondents in 2016 and 2019 reported that they felt comfortable using trails and/or parks in the community at night. A slightly higher percentage of respondents indicated that they felt ‘very comfortable’ in 2019 (14%) compared to 2016 (12%).

Approximately 70% of the respondents in 2016 and 2019 reported that they reduce their outdoor walking activity in the winter months. Safety is a key factor that influences walking activity in the winter months (i.e. hazardous conditions associated with snow and/or ice accumulation on sidewalks and trails).

[4] Walking destinations include shops/stores, restaurants, library/community centre, recreation centre, place of worship, etc.

[5] ‘Walkability’ refers to how easily you can walk around your community where walking is easier because there are sidewalks, there is enough room on the sidewalks, the sidewalks are in good shape, there are signs, good lighting at night, and you have places to walk or go to.

A large majority of the respondents (over 80%) in 2016 and 2019 indicated that they were interested to some extent in what the City is doing to make the community more walking friendly. A slightly higher percentage of respondents indicated that they were ‘very interested’ in 2019 (35%) compared to 2016 (29%).

The large majority of respondents (over 85%) in 2016 and 2019 reported that they were satisfied to some extent with the effort by the community to make their neighbourhood more walking friendly. A higher percentage of respondents indicated that they were ‘very satisfied’ in 2019 (35%) compared to 2016 (23%).

Statistically significant findings

Although there was no statistically significant difference between the 2016 and 2019 results reported above (i.e. comparison of the 2016 / 2019 phone survey results), a number of significant differences were found between several subgroups within the 2019 sample and these results could be useful in determining where to strategically target communications / activities in future walkability initiatives.

Female respondents (compared to male respondents):

- Went on more daily leisurely walks ($p \leq 0.05$) and had longer duration leisurely walks ($p \leq 0.05$).
- Went on more daily walks on trails or in parks (the difference approached a level of significance, $p=0.06$).
- Were less likely to agree that their neighbourhood is walkable or walking friendly in the winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$) and less comfortable using the trails and/or the parks in their community at night ($p \leq 0.01$).
- Were more interested in what the City was doing to make the community more walking (wheelchair) friendly ($p \leq 0.01$).
- Were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly ($p \leq 0.05$).

Older respondents over the age of 50 (compared to respondents under the age of 50):

- Were less likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were less likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in the winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$) and less comfortable using the trails and/or the parks in their community at night ($p \leq 0.01$).

Healthier respondents that reported their general health as excellent or very good (compared to respondents that reported their general health as good, fair or poor):

- Went on longer duration leisurely walks ($p \leq 0.05$).
- Went on more daily walks on trails or in parks ($p \leq 0.01$).
- Were more likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were more interested in what the City was doing to make the community more walking (wheelchair) friendly ($p \leq 0.01$).
- Were more likely to agree that the more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is ($p \leq 0.01$).

Respondents with total annual household income of less than $50,000 (compared to respondents with total annual household income of $50,000 or more):

- Were less likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) during winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$).
- Were less likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).

Respondents that live south of Talbot Street, the area that includes the demonstration area (compared to respondents that live north of Talbot Street):

- Went on more daily leisurely walks ($p \leq 0.01$) and more daily walks on trails or in parks ($p \leq 0.05$).
- Were more likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) ($p \leq 0.05$).
- Were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly ($p \leq 0.05$).

Lessons Learned from the Partnership Model

All of the partner members viewed the project as a very positive experience and were highly satisfied with the partnership as a working group. Key factors that contributed to the success of the partnership include:

- Partners sharing a common vision for the community.
- Each partner being a strong advocate for the project within their own organization.
- Having at least one member of the partnership take on the leadership role and keeping the group motivated and focused.
- Having the most appropriate decision-maker(s) from each partner organization involved throughout the project.
- Having the partners actively engaged in the planning and development phase of the project.
- Conducting regular meetings (quarterly) to review progress with activities / action items and related roles and responsibilities.

All of the partner members expressed a high degree of satisfaction with what the project achieved in terms of the community consultation that took place, the addition / improvement of sidewalks and trails across the community, and the extent to which residents have put these enhancements to use.

Finally, the collaborative process used by the partnership provided the value-added benefit of demonstrating how well a public / private initiative can work when built around a common vision.

What are residents saying about the recent additions and improvements made to the walking infrastructure in the City of St. Thomas?

Great efforts have been made, we love the trails in the community, especially the trail around Lake Margaret.

I am so happy and grateful for the Trails in St. Thomas. We are thrilled that Lake Margaret and Pinafore Park trails are paved and our grandchildren love riding bikes there. Thank you and looking forward to new trails!

I love all the paths and trails that the city has been adding to the community. I think it is one of the best things it has ever done.

I love the fact that the pathways and trails in St. Thomas are paved as this is a huge bonus for all types of walkers or cyclists. Since moving back to St. Thomas to retire we've enjoyed using the trails and hope to bike and walk more this year. Thank you, keep up the great active lifestyle trends for the city!

Love my new sidewalks!

Love the community trails. They are always busy!

Love to see all the green areas, trees and flowers on my walks.

Overall, I am pleased the city is doing so much to increase the quality and accessibility of the walkways and trails. Hope they will continue to make more sidewalks and bike paths – especially on the north side of city.

Thanks for all the walking and biking trails. Looking forward to seeing many more! Bike lanes on all main streets, please!!

The city has done an excellent job promoting and improving outdoor recreation.

The sidewalk and trail network are absolutely fabulous. Motorized scooter access is good!

I've noticed more people out walking – this is great to see!

St. Thomas is a great place to live, especially for retirement – there are lots of trails to use.

I really appreciate the improvements to trails and parks. It's a more enjoyable walking experience.

The new path that was made from downtown to Pinafore Park is a great investment.

The new and improved trails are a great addition to the city. Need to continue to promote the walkways and trails across the community and encourage more walking activity in general. Also need to ensure that the whole system is properly maintained.

I'm very please with the new additions and improvements to parks and trails in neighbourhood. The new outdoor fitness equipment in the parks is great for those who may not be able to access a gym. I've noticed many more people using the park and out walking because of these improvements.

I'm excited about the new park being built near South Edgewater and the new trails in neighbourhood. I've noticed a lot of improvements and I'm very pleased with the work done so far.

The connected system of sidewalks and trails is very good. I can get from my home to downtown without needing to use any of the main roads.

The upgraded trail along Lake Margaret has improved walkability in the neighbourhood. I use it often for dog walking and I've observed it being used by many others.

Keep up the wonderful work. The trails are maintained lovely. The trails are great incentive for residents to get more active without a monthly fee. Much appreciation.

Contents

1.0 Introduction

Creating Connections was a five-year project that was initiated in September 2015 through a partnership between the City of St Thomas, local developers (Doug Tarry Homes Ltd. and Hayhoe Homes), and Southwestern Public Health (SWPH).[6] Principal funding for the project was provided by the Public Health Agency of Canada (approximately $1 million).[7] This funding was matched by the local developer partners creating a total project budget of approximately $1.94 million spread over five years.

The project was led by SWPH and had the following goals:

- To improve the built environment within the City of St. Thomas in order to support increased rates of physical activity.
- To engage families, community members and municipal officials in order to improve walkability within the City of St. Thomas and specifically within the demonstration area.

This report presents the final evaluation of the Creating Connections project Harry Cummings and Associates (HCA) was contracted by SWPH in October 2015 to design and implement an evaluation of the project. The purpose of the evaluation was to conduct an assessment of the Creating Connections project which included but was not limited to an evaluation of the components / methods under the Performance Measurement and Evaluation Plan (see Appendix A).

Key project objectives included:

- Engaging the community in a discussion about walkability, community design and connectivity;
- Assessing the walkability of the whole City of St. Thomas;[8]
- Making improvements to walkability in the demonstration area; and
- Increasing rates of walking.

The geographic area included within this project is the City of St. Thomas. The **'demonstration area'** where the developers contributed to the infrastructure development (e.g. sidewalks, trails) is largely covered by three adjoining neighbourhoods in the south portion of the City: Lake Margaret, Shaw Valley, and South Gate.

Evaluation Background

HCA prepared and finalized a work plan for undertaking the evaluation of the Creating Connections project in consultation with SWPH staff in December 2015. The work plan included a project logic model and an evaluation framework that identified the key issues and questions to be addressed, the evaluation design, and the data collection methods and tools (i.e. document / file review, key informant interviews, and survey).

This report presents the final results of the evaluation covering the period from 2015 to 2019.

[6] The project was originally initiated by Elgin St. Thomas Public Health in 2015. Southwestern Public Health was formed in 2018 through the merger of Elgin St. Thomas Public Health and Oxford County Public Health. Southwestern Public Health serves a population of about 200,000 across Oxford County, Elgin County and the City of St. Thomas.

[7] PHAC funding came through the Government of Canada's Multi-Sectoral Partnership Approach to Promote Healthy Living and Prevent Chronic Disease.

[8] A walkability assessment and action plan were completed in 2016 as part of a separate assignment: Elgin-St. Thomas Walkability Assessment & Action Plan Report.

2.0 Methods

The research design used a mixed methodology approach consisting of document/data review, surveys and key informant interviews with project partners. Combining different approaches is useful in triangulating results. The concept of triangulation is based on the assumption that any bias inherent in particular data sources, investigator, and method will be neutralized when used in conjunction with other data sources, investigators, and methods.

The analysis of the baseline data collected in 2016 (i.e. phone survey of randomly selected residents) revealed an age bias in the sampling (i.e. younger age groups were underrepresented in the sample) and it was decided to include additional survey methods as part of the post program data collection in 2019. In addition to replicating the phone survey in 2019, surveys were conducted through a social media platform (i.e. Facebook) and a mobile app. Although the participants in the Facebook survey and the mobile app survey were not selected at random, the results serve to strengthen our understanding of local walking patterns and the key issues of interest to residents. Additional details on the different methods / data collection activities are provided below.

2.1 Documentation of Project Activities and Context

A comprehensive inventory of project activities over the 2015-2019 period was compiled by SWPH staff. All partners had an opportunity to contribute to this process. The inventory includes planning initiatives as well as community engagement/consultation initiatives. The inventory also includes all of the relevant changes/enhancements to infrastructure that occurred over this period to promote walkability in the community. Several activities were also documented for the two years preceding the project (2013-2014) to provide some context with respect to relevant initiatives. All of the project activities / initiatives have been categorized by the neighbourhood(s) where they occurred.

2.2 Project Partner Engagement

HCA developed a survey to monitor / assess the effectiveness of the partnership team over the course of the project. The survey was completed by the members of the partnership in December 2015, 2016, 2017 and January 2019. The survey was used to assess member perception and satisfaction with the project purpose and vision, member roles and responsibilities, group communication, and personal satisfaction with the partnership.

HCA also conducted key informant interviews with project stakeholders at the end of the project (September 2019) to capture more in-depth views on the successes and challenges of the initiative. Interviews were conducted with two project staff at SWPH, two housing development representatives, an elected City of St. Thomas official, a City of St. Thomas staff representative, and a representative of a local active transportation interest group.

2.3 Community Engagement – Household Phone Survey

HCA designed and administered a pre and post-implementation phone survey for residents of the City of St. Thomas. The survey questionnaire was designed to respond to the specific objectives of the evaluation (i.e. identify changes in walking behaviour). The household survey questionnaire is presented in Appendix B.

The survey questionnaire features a combination of qualitative (open ended) and quantitative (closed ended) questions that address the indicators identified in the Performance Measurement and Evaluation Plan. This includes indicators related to neighbourhood

walkability, walking habits / behaviour, attitudes about walking, and contextual factors that are influencing walking habits / behaviour.

The survey also features a series of demographic questions (e.g., age, gender, education, income). Several of the demographic questions were adapted from validated questions used in the Canadian Community Health Survey (e.g. health status and ability to walk short distances) and the Canadian Population Census / National Household Survey (e.g. highest level of education, employment status, household income, household type).[9]

Household Survey Sampling

The household survey focused on individuals living in the City of St. Thomas, 18 years of age or older. Survey participants were selected at random using a list of numbers from the telephone directory (i.e. landline, home phone numbers).[10]

HCA established a sample frame based on the total population of adults (20 years of age and older) to provide a sample of those households with phone numbers listed in the phone directory. Based on the 2016 Population Census, there are approximately 30,790 adults in the City of St. Thomas and it was determined that a minimum of 380 adults needed to be surveyed to achieve a 95% level of confidence (+/- 5% error) in the results.[11]

A pre-test of the survey was conducted during the week of March 14, 2016 with 38 randomly selected residents from the City of St. Thomas. The pre-test was used to assess the utility and quality of the survey questions (e.g., relevant, topical, objective, unambiguous, logical sequence). The pretest results revealed that the survey tool performed well and only a few small refinements were made to the questionnaire to improve clarity and reduce duplication of questions that generated similar responses. The refined survey questionnaire was reviewed by SWPH staff and finalized for full deployment.

Household Survey Deployment

The 2016 pre-implementation phone survey was conducted over a seven-week period from May 9 to June 24 and the 2019 post-implementation phone survey was conducted during the same period (May 8 to June 25). The timing of the survey was chosen to coincide with warmer weather months and the school season to capture school related walking patterns. The survey was restricted to evenings Monday to Friday between the hours of 5:30 and 8:30pm.[12]

A total of 394 residents completed the 2016 pre-implementation survey and 390 residents completed the 2019 post-implementation survey which met the sample target. An attempt was made to stratify the sample by gender to provide a more balanced proportion of male and female respondents. The survey data was compiled directly into an electronic data base (Excel spreadsheet).

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[9] The use of similar demographic questions allowed the researchers to compare the survey group against the general population and provides a further test of the representativeness of the survey group.

[10] The researchers appreciate that this approach does not account for unlisted numbers including cell phone numbers. We note that random digit dialing has increasingly been used as an approach to try and expand the sampling reach but this poses additional challenges (i.e. additional time and resources are spent calling nonworking and non-residential numbers). The practicable approach used in the 2016 pre-implementation (baseline) survey and the 2019 post-implementation survey was to randomly select survey participants from the phone directory.

[11] The 95% confidence level is commonly used in research and the sampling parameters used in this study mean that we can be 95% certain that we would achieve the same results if this survey was conducted again with a +/- 5% margin of error.

[12] Each phone number that was randomly selected was called up to a maximum of three times. If there was no answer after the third call back a new phone number was randomly selected. The first contact person answering the phone was invited to participate in the survey (after confirming that they lived in the City of St. Thomas and were 18 years of age or older). If the first contact person was under the age of 18, they were asked to identify another member of the household who was 18 or over.

In order to complete a total of 394 surveys for the 2016 pre-implementation survey, the HCA survey team called a total of 3,923 unique phone numbers. Approximately 10% of the households that the survey team attempted to reach completed survey. The actual participation rate for the 2016 pre-implementation survey was 20% (based on the households where the survey team spoke with someone in the house).

In order to complete a total of 390 surveys for the 2019 post re-implementation survey, the HCA survey team called a total of 3,661 unique phone numbers. Approximately 11% of the households that the survey team attempted to reach completed survey. The actual participation rate for the 2019 post-implementation survey was 24% (based on the households where the survey team spoke with someone in the house). Additional details for the survey call profile are provided in Table 1.

Table 1: Call profile for completing the 2016 and 2019 phone surveys

Call Profile	2016		2019	
	Number [a]	Percent	Number [b]	Percent
Respondent could not be reached - Number out of service	356	9.1	501	13.7
Respondent could not be reached - No answer	1,500	38.2	1,385	37.8
Respondent not eligible - Lived outside the City limits	73	1.9	143	3.9
Respondent declined to participate	1,600	40.8	1,242	33.9
Respondent completed the survey	394	10.0	390	10.7
Total	3,923	100	3,661	100

[a] A total of 7,112 calls were placed in 2016 when 2nd and 3rd call backs are accounted for.
[b] A total of 6,795 calls were placed in 2019 when 2nd and 3rd call backs are accounted for.

2.4 Community Engagement – Social Media / Internet Survey

The results from the 2016 pre-implementation phone survey revealed that younger age groups (i.e. ages 20-39 years) were underrepresented in the sample and it was decided to use social media (i.e. Facebook) to expand the reach of the post-implementation data collection.

A link to a self-administered version of the phone survey was posted on the SWPH Facebook page on May 27, 2019 and it was boosted on June 10, 2019. The initial posting reached a total of 8,076 people and the boosted posting reached approximately 3,600 people. A total of 243 individuals opened the survey link and 211 of these individuals completed the survey.

A larger proportion of younger respondents responded to the Facebook survey compared to the phone survey (i.e. 25% of the 2019 Facebook survey respondents were between the ages of 20-39 compared to 11% of the 2016 phone survey respondents and 7% of the 2019 phone survey respondents).

2.5 Community Engagement – Mobile App Survey and Quiz

Rapid developments in technology have facilitated the use of smartphones in health promotion and related research activities. Although relatively few smartphone health promotion initiatives have been tested in research studies, there is some evidence which suggests that the use of

mobile apps can have a positive effect in influencing better dietary management and higher physical activity levels.[13]

Mobile App - Health Promotion Survey

In 2018, SWPH established a partnership with the Carrot Rewards program. Carrot is a mobile app that was created in 2015 in collaboration with the Public Health Agency of Canada. The app works as a reward program where users can receive loyalty points from participating partners (e.g. Scene Movie Points, Petro Points, RBC Rewards) for improvement in their health knowledge and physical activity.

The broad objective of the Carrot app for the purposes of SWPH was to promote awareness and understanding of the health benefits of physical activity and spending time outdoors. The app also promoted the use of the recreational infrastructure and trails within the area which complemented the objectives of the Creating Connections project. Several activities/offers were developed in consultation with SWPH in the areas of (1) Canadian physical activity guidelines, (2) health benefits of physical activity and outdoor time, and (3) recreational infrastructure and the trail network within the area. The offer was delivered to a subset of users in Southwestern Ontario.

As many as 1,932 users completed all or a portion of the offers/activities in the Carrot app in June, July and August 2018. The results associated with this use of the app are presented in section 3.4 of the report.

Mobile App - Walking Activity Quiz

In 2019, SWPH used the Carrot app to further expand the reach of the post-implementation survey (i.e. access the younger age demographic). A select number of questions were taken from the post-implementation phone survey and adapted for the Carrot app quiz. The questions focused on the following topics:

- Leisurely walking habits in the last seven days (number of days, average walking time)
- General change in walking behaviour over the last two years
- Perception of St. Thomas as a 'walking friendly' community
- Satisfaction with efforts to make the community more walking friendly

The mobile app quiz was deployed during the same period as the 2019 phone and Internet survey. A total of 1,262 people completed the quiz. A larger proportion of younger respondents responded to the mobile app quiz compared to the phone survey (i.e. 38% of the 2019 mobile app quiz respondents were under the age of 35 compared to 5% of the 2016 phone survey respondents and 3% of the 2019 phone survey respondents). The results from the mobile app quiz are presented alongside the results from the phone survey and the Facebook (Internet) survey in sections 3.3.1 and 3.3.2 of the report.

[13] For example, see *Smartphone Applications for Promoting Healthy Diet and Nutrition: A Literature Review* (Coughlin et al., 2015). Journal of Food and Nutrition.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4725321/pdf/nihms-733996.pdf

3.0 Results

3.1 Project Activities

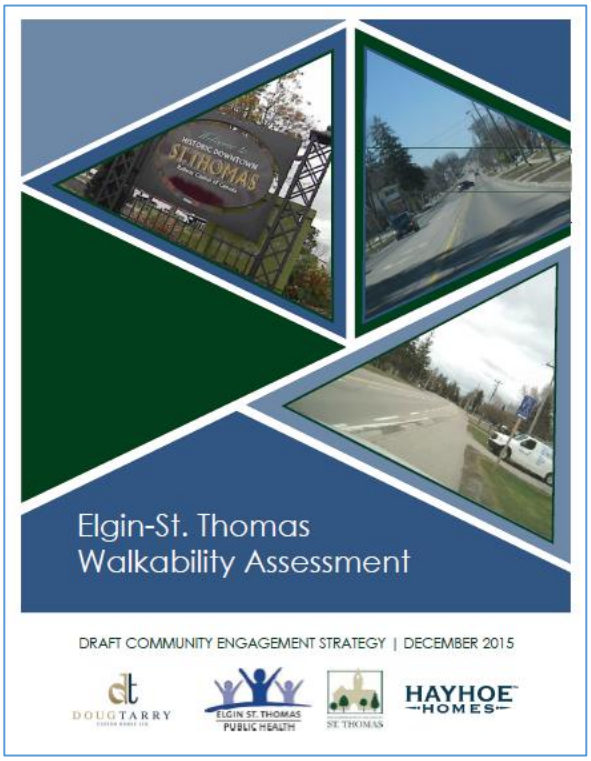
3.1.1 Planning Initiatives and Community Engagement / Consultation

Collectively, over 5,000 people were consulted through the various engagement activities conducted since the project was implemented.

Initiatives in 2015 / 2016

As part of the Creating Connections project launch events in 2015, the Walkability Assessment consultant was hired and background work was initiated.

The St. Thomas Walkability Assessment and Action Plan was completed in 2016. The final report provides an overview of the importance / rationale for improving walkability in St. Thomas and the key stakeholders who have a role/responsibility in creating a walkable community. The report documents the context of walking in the City of St. Thomas including the City's socio-demographic profile and current walking conditions. The report also provides a description of the process/methods used to collect relevant information to assess walkability and it presents the results/findings of the assessment and the proposed solutions to address some of the challenges and barriers. A number of different community engagement / public consultation events were conducted as part of the walkability assessment including stakeholder workshops, public information events, an online survey, and focus groups and key informant interviews. Collectively, over 1,000 residents were consulted through these events.

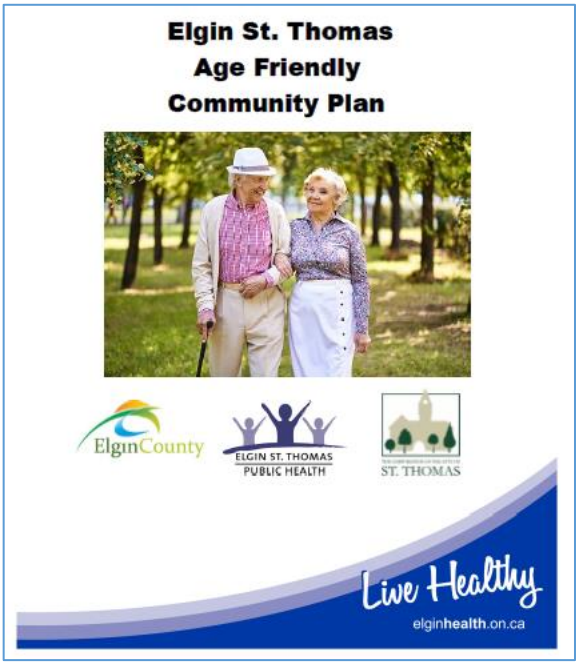


The evaluation consultant for the project (HCA) was hired in 2015 and the evaluation plan was developed and finalized in consultation with the partnership. The other major public consultation work conducted in 2016 was the project pre-implementation phone survey that was conducted by HCA and involved a total of 394 households.

Initiatives in 2017

In 2017, the City of St. Thomas updated Cycling and Trails Master Plan.[14] The first cycling and trails master plan was created in 2014.[15]

In 2017, SWPH, the City of St. Thomas and the County of Elgin developed an Age Friendly Community Plan which included an assessment and consultation process that generated more than 600 interfaces with seniors, family members, service providers and community members through meetings, interviews, surveys, community forum and an implementation planning session.[16] SWPH also completed the Access to Recreation Report in 2017 and conducted two presentations of the report highlights (including walkability) to the Community Leaders Cabinet and the Healthy Communities Partnership.[17]



Other community engagement activities in 2017 included Citizens 4 Active Transportation meetings (6 meetings) with walking as a standing item on the agenda and some members helped to take pictures as evidence of the new paved trails.[18]

In 2017, SWPH initiated its communications campaign, using a variety of different methods to encourage residents to get out and explore the new trails and sidewalks available. Three video interviews were produced involving local residents talking about why walkability matters to them. The videos were posted through social media and used as TV ads in physician offices and eight local Tim Hortons restaurants.

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[14]https://stthomas.civicweb.net/document/8527/Trail_Cycle_Network_june26.pdf?handle=D0C0BFBA57EC4E6EB0DBC696CABF9EC7

[15]https://stthomas.civicweb.net/document/5016/Complete%20Cycling%20Master%20Plan.pdf?handle=5554BC8EF8A24E3CA44B1D2EA78BFCFE

[16] Funded by a grant from the Government of Ontario https://www.elginhealth.on.ca/sites/default/files/file-attachments/basic-page/exec_summary_age_friendly_community_plan_nov_2017.pdf

[17] https://www.elginhealth.on.ca/sites/default/files/file-attachments/reports/access_to_affordable_recreation_final_full_report.pdf

[18] Over the past 5-6 years, a local interest group, Citizens 4 Active Transportation (C4AT), has advocated for and supported efforts to promote active transportation in the City of St. Thomas and surrounding area. This has included efforts to promote walking, hiking, running and biking and improvements to existing trails, sidewalks, paved shoulders, and bike lanes in the community. The ultimate goal of the organizations is to make it easier for people to be active in the community. In early 2018, the organizing members decided to discontinue C4AT as it was determined that they had completed their mandate. C4AT helped in promoting the Cycling Master Plan, bringing the City a bronze designation as a bicycle friendly Community, promoting and aiding in Children's Bike Festivals, promoting C4AT at the Senior's picnics and the Home Show, adding bike racks at various locations throughout the community (funded by the Healthy Communities Partnership and the Health Unit), and many other promotions for a healthy and active lifestyle in St. Thomas and Elgin County. Organizing members have stated that C4AT may be reactivated in the future if the need arises to once again advocate and support the planning for healthy and active lifestyles.

A new tag line, "Why not walk?" was released in 2017 to encourage residents to get outside and explore a new trail or sidewalk in the community.

With respect to social media promotions, SWPH initiated a number of walkability promotions in 2017:[19]

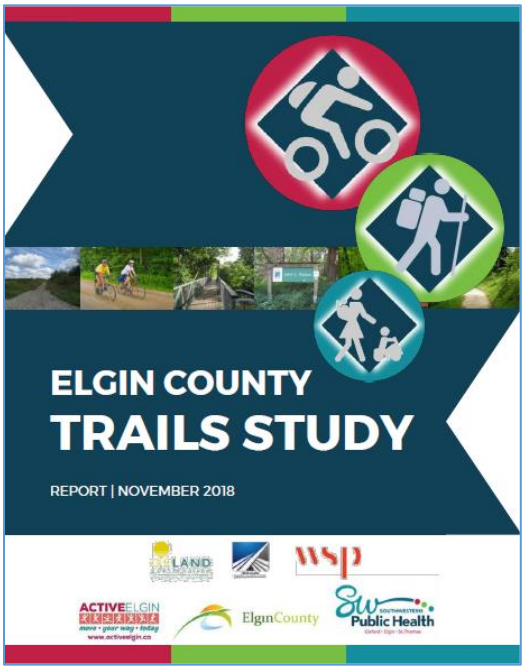
- April 19/20 – 'new trail' and 'new sidewalks' announcements on Facebook (3,154 viewings) and twitter (406 impressions)
- April 27 – 'bike paths' announcement on Facebook (264 viewings) and twitter (281 impressions)
- June 1 – 'Bicycle Friendly Community' announcement on Facebook (219 viewings)
- June 13 – 'new sidewalks' announcements on Facebook (boosted - 16,744 viewings) and twitter (217 impressions)
- June 20 – 'new sidewalks' and 'new map' announcements on Facebook (1,061 viewings) and twitter (232 impressions)
- July 4 – 'new sidewalks and trails' announcement on Facebook (667 viewings)
- July 22 – 'physical activity' announcements on Facebook (1,422 viewings) and twitter (273 impressions)
- Sept. 7 – 'walking to school' announcements on Facebook (2,594 viewings) and twitter (576 impressions)
- Sept. 19 – 'walking on your break' announcement on Facebook (847 viewings)
- Oct. 4 – 'new trails and sidewalks' announcements on Facebook (3,672 viewings)

With respect to broader promotional activities associated with the Creating Connections initiative, Health Promoter Jessica Lang presented to approximately 30 delegates at the Sustainable Mobility Summit in Mississauga (October 31, 2017).[20]

[19] Samples of the social media promotions conducted in 2017 are presented in Appendix F.
[20] https://www.actcanada.com/summit2017/summit-home

Initiatives in 2018

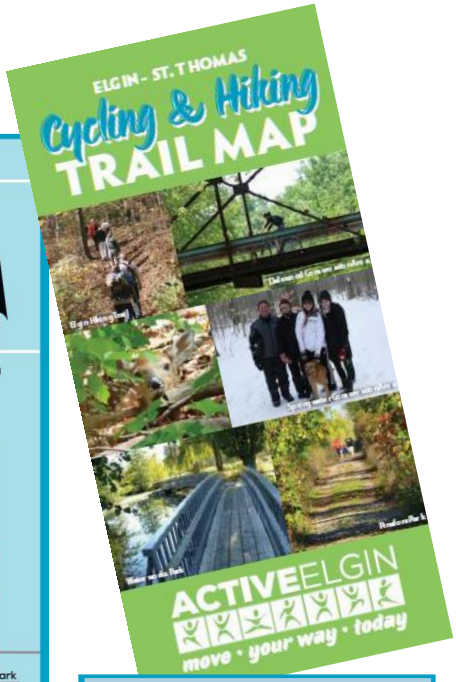
SWPH partnered with the Elgin County Library to encourage people to be active outdoors by offering pedometer kits to residents at all ten branches of the libraries. Each kit includes a pedometer, a tool that tracks steps, along with a reusable calendar and physical activity guidelines. The pedometer kits were circulated to 54 patrons in 2018 making it the fourth most circulated item in the library system in 2018.

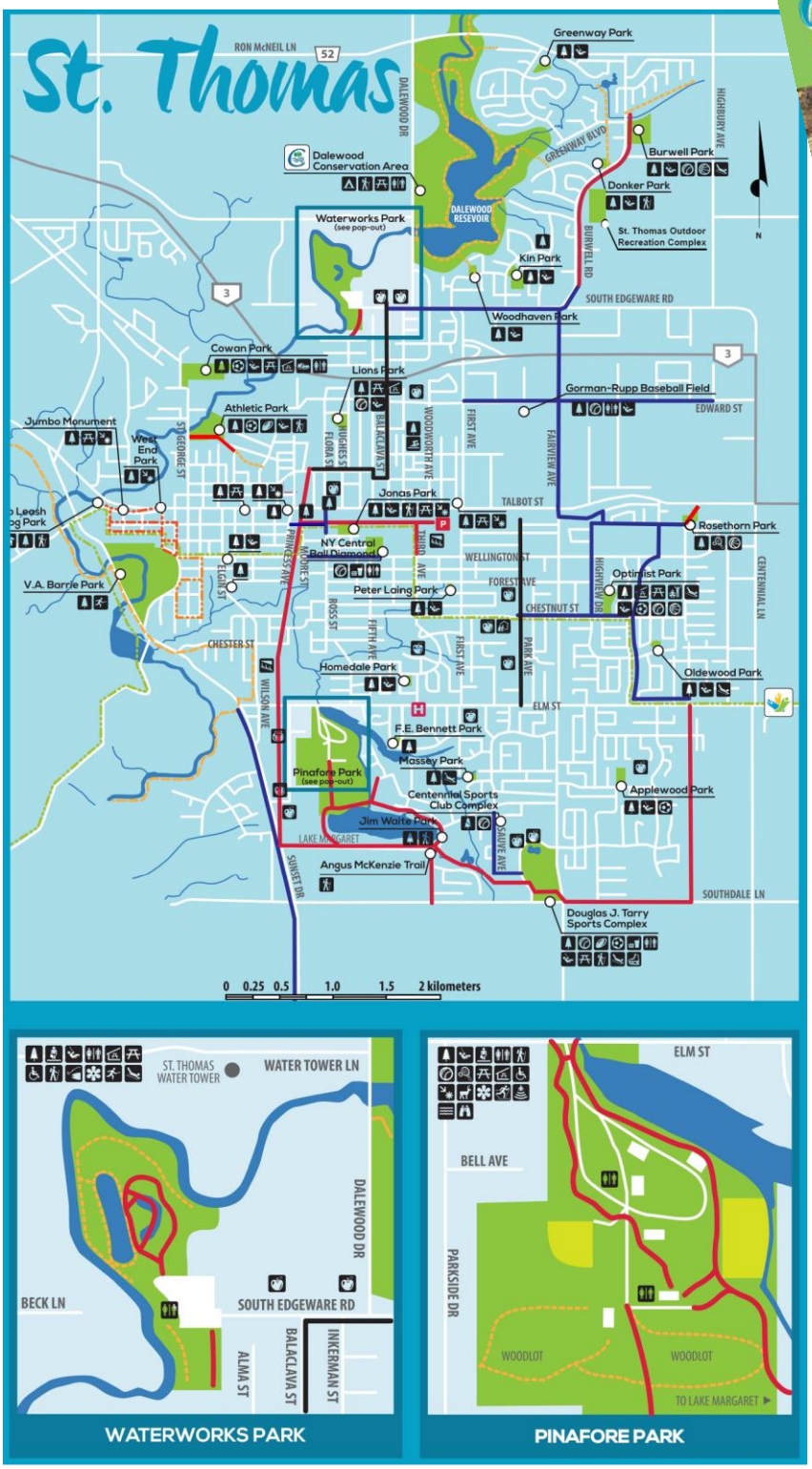


SWPH supported the completion of the Elgin County Trails Study in 2018.[21] The study is intended to be a guide for future development, to build on the trail work and initiatives that have already taken place and to enable those responsible for the design, development and implementation of trails to use a consistent guideline and resource to enhance trail infrastructure, improve overall route connectivity, and overcome barriers while highlighting and preserving areas of natural and cultural significance. The study complements the Creating Connections project by examining the existing trail network in the County and identifying opportunities to improve trail connectivity.

21 https://www.stthomas.ca/UserFiles/Servers/Server_12189721/File/City%20Hall/Environmental%20Services/Cycling%20and%20Trails%20Master/Elgin%20Trail%20Study%20Report%202018%2011%2029_compressed.pdf

A new Trail Map of hiking and cycling routes in St. Thomas and Elgin County was released by ActiveElgin in 2018.[22]





[22] http://www.activeelgin.ca/sites/default/files/documents/2018TrailMap.pdf

SWPH hosted an information booth at the 2018 St. Thomas Home Show to showcase the Creating Connections project and all of the improvements made to date. During this event SWPH representatives distributed trail maps and accessible trail postcards and talked about the partnership with citizens. SWPH partnered with the Elevated Park and responded to questions about this initiative as well.

Support for the development / enhancement of other community amenities has grown since the Creating Connections project was initiated. In 2018, one of the original local developers involved in the project, Doug Tarry Homes Ltd., made a $100,000 contribution to the 2018 capital campaign to advance the completion of the St. Thomas Elevated Park completed within the next year. The contribution was also structured as a 'challenge' to the business community to commit to raising a minimum of $500,000 to construct and install the remaining railings and decks required to span the entire bridge, end to end (300 metres). If successful, the goal is to complete the fabrication over the winter months and final installations will take place in early spring 2019.

With respect to social media promotions, this type of activity was somewhat more limited in 2018 compared to 2017 due to internal technical and communication issues and the merger of Elgin St. Thomas Public Health and Oxford County Public Health in May 2018. Some of the more relevant communication items related to active transportation that were provided through the SWPH Facebook page include the following:

- Sept. 12 – Notification to encourage kids to embrace healthy habits as they return to school such as walking home from school.
- Oct. 1 – Notification about International Walk to School Month and invitation to walk or wheel on October 3 for iWalk day.
- Oct. 24 – Notification about Take Me Outside Day! www.takemeoutside.ca
- Oct. 29 – Notification about "Walk & Wheel Wednesdays" to promote walking children to school.
- Sept., Oct., Nov., Dec. – Healthy Hikes promotions. Free guided hikes at local Conservation Areas

The other significant activity related to social media was the "Walkability St. Thomas Creating Connections" video which was imbedded in the Carrot app to engage users with interactive content and questions. A total of 1,728 Carrot app users watched the imbedded video and ultimately visited the SWPH YouTube channel where additional resources were available (see section 3.4 of the report for additional details on the results of the Carrot app).[23]

With respect to broader promotional activities associated with the Creating Connections initiative, Health Promoter Jessica Lang presented an overview of the Creating Connections project as an example of Age Friendly Environments at the Global Conference on Ageing in Toronto (August 8-10, 2018, Toronto) and she presented at the Association of Municipalities of Ontario Conference in Ottawa on August 20, 2018. Jessica Lang also joined Don Murray (HCA) and Nathalie Holmes (Public Health Agency of Canada) in making a joint presentation at the Canadian Evaluation Society (CES) Annual Conference (May 27-29, 2018, Calgary).[24]

[23] The video has had over 4,700 views as of August 2019: https://www.facebook.com/swpublichealth/videos/1158407954339660/

[24] Abstract Title: Creating Public / Private sector connections for a more livable community. http://c2018.evaluationcanada.ca/

Initiatives in 2019

SWPH continued to promote its "Why not walk?" tag line in 2019 and encouraging residents to get outside and walk.

In May, SWPH presented to Elgin County Council with the top ten recommendations from the Elgin County Trails Study (2018 report).

In May, SWPH launched another offer with the Carrot Rewards App to obtain further information about changes to walking behaviour since physical improvements have been made (1,262 individuals completed a quiz through the app).

In May/June, the evaluation consultant conducted a post-implementation phone survey which included a total of 390 respondents. During the same period, SWPH launched an online version of the survey through its social media platform (Facebook) and generated a total of 211 responses.

Between August 1 and September 14, SWPH ran a Trails Challenge through its Facebook page. Residents were encouraged to go for a walk on a trail in St. Thomas, take a selfie photo beside one of five trailhead kiosks in the community, upload their photo to the Challenge site, and share the challenge with their friends / family. Participants had a chance to win a new FitBit watch. The post resulted in 64 shares and 73 comments and a total of 46 photos were submitted represented a broad range of age groups.

SWPH and project partners organized and hosted the Trails Open Event on September 14 to celebrate the new trail system created by the City of Thomas, Hayhoe Homes and Doug Tarry Homes. The Event was free to the pubic and included prizes and a variety of activities including nature walks and talks, live music, outdoor yoga, and other fun activities for children and adults. The Event was promoted through the SWPH Facebook page where over 1,200 indicated that they were interested in attending and 133 stated they planned to attend (26% of this group were women between the ages of 35 and 44).

With respect to other social media promotions, SWPH initiated a number of walkability promotions in 2019:

- A total of five ads (boosts) on Facebook promoting St. Thomas trails with an average of 2,368 people reached for each ad and an average of 3,974 impressions.
- A combination of 15 posts / ads on Facebook promoting the Trails Challenge Contest and the Trails Open Event with an average of 8,853 people reached for each post / ad and an average of 16,113 impressions.
- A total of three twitter posts related to Why Not Walk and the Trails Open Event were issued in 2019 resulting in an average of 1.070 impressions per post and 21 engagements.
- The St Thomas Trail System was also promoted through the Active Elgin website which resulted in 954 pageviews and an average time on page of just under three minutes.

SWPH used ads on Spotify to further promote walking and the new trail system:[25]

- Between July 22 and September 1, a total of 14,890 Why Not Walk ads were served and 6,489 people were reached resulting in 29 URL clicks (approx. 66% of the listeners were between the ages of 18 and 34)
- Between August 26 and September 15, a total of 14,889 Trails Open Event ads were served and 5,982 people were reached resulting in 18 URL clicks (approx. 74% of the listeners were between the ages of 18 and 34)

With respect to upcoming events, SWPH will be working with Dr. Karen Lee from the University of Alberta (also a PHAC funding recipient) to co-present about walkability projects with developers at the Canadian Home Builders Association conference in March 2020. Doug Tarry will be attending and speaking about the Creating Connections project. SWPH in partnership with HCA is planning to submit an abstract for the 2020 Canadian Evaluation Society Annual Conference (June 14-17, Ottawa).

Table 2 provides an overview of the year to year planning and consultation activities that were carried out until the end of September 2019.

[25] Spotify is an audio streaming platform that provides music and podcasts from record labels and media companies.

Table 2: Planning initiatives and community engagement – 2015 to 2019

Year		Relevant Activity
Pre-project years	2013	➢ School Travel Planning (STP) started at June Rose Callwood PS.
	2014*	➢ Cycling and Trails Master Plan adopted by the City of St. Thomas.
Project years	2015**	➢ Creating Connections funding obtained. ➢ New Director of Environmental Services. ➢ New Trail Map released. ➢ Extensive cycling education campaign. ➢ STP started at McGregor and Davenport PS. ➢ Spot Speed studies conducted by City of St. Thomas in response to request by Thames Valley District School Board for reduction in speed in school zones at 7 road sections – results showed no further action was recommended. ➢ Walkability Assessment consultant hired and background work underway. ➢ Creating Connections Evaluation consultant hired and evaluation work plan developed ➢ Partnership steering committee survey completed – 7 respondents (Dec).
	2016	➢ Healthy Communities Partnership receives Trillium grant to build the case for Get Active Elgin. ➢ Cycling Safety Campaign implemented thanks to Healthy Kids Community Challenge funding. ➢ Police have a pedestrian safety campaign blitz for a week (Nov.). ➢ Municipal consultation (Oct.) - walkability and trails identified as a priority. ➢ Consultation related to the Walkability Assessment ➢ Complete Streets Toolkit Adopted. ➢ Stakeholder workshops – 38 attendees (April). ➢ Public Information centre at Home Show - 300+ consulted (April) ➢ Online survey – 265 respondents (Spring) ➢ Local events including high school focus groups, Northside community hub focus group, and interviews with key stakeholders (e.g. VON and the Alzheimer's Society, etc.). ➢ Walkability Assessment and Action Plan completed (Dec.). ➢ St Thomas HomeShow – spoke with approx. 300 people about existing and new walking facilities. ➢ Community pre-implementation phone survey completed – 394 respondents (May and June). ➢ Partnership steering committee survey completed – 5 respondents (Dec).
	* New City Council (Dec. 2014 and Dec. 2018) ** New federal government (Nov. 2015)	

	2017	➢ City of St. Thomas updated Cycling and Trails Master Plan ➢ Age Friendly Community (AFC) Forum (June 2017) and Implementation Workshop (Sept 2017) as more trails and paths were identified as a need by seniors in developing the new AFC plan (600+ interfaces with seniors, community members, service providers). ➢ Citizens 4 Active Transportation meetings – 6 meetings in 2017 with walking as a standing item on the agenda. Some members helped to take pictures as evidence of the new paved trails. ➢ Access to Recreation Report done with 2 presentations of the highlights of this report (that included walkability) to the Community Leaders Cabinet and the Healthy Communities Partnership. ➢ 3 video interviews – interviews with local residents to talk about why walkability matters to them. ➢ Social media posts engaged the community in a conversation about improvements to walking facilities in St. Thomas. ➢ St Thomas HomeShow – spoke with approx. 300 people about existing and new walking facilities. ➢ Partnership steering committee survey completed – 5 respondents (Dec).
	2018*	➢ New Trail Map of hiking and cycling routes in St. Thomas and Elgin County was released by ActiveElgin ➢ SWPH partnered with Elgin County Library to encourage people to be active outdoors by offering pedometer kits ➢ SWPH supported the completion of the Elgin County Trails Study ➢ SWPH attended the St Thomas HomeShow and distributed trail maps and accessible trail postcards and talked about the partnership with citizens ➢ SWPH established a partnership with the Carrot rewards program to promote awareness and understanding of the health benefits of physical activity and spending time outdoors. The app also promoted the use of the recreational infrastructure and trails within the area which complemented the objectives of the Creating Connections project ➢ SWPH promoted the Creating Connections projects at several conferences including the Global Conference on Ageing in Toronto, the Association of Municipalities of Ontario Conference in Ottawa, and the Canadian Evaluation Society Conference in Calgary)
	2019	➢ Partnership steering committee survey completed – 5 respondents (Jan. 2019) ➢ Continued promotion of the "Why not walk?" tag line ➢ Community post-implementation phone survey completed – 390 respondents (May and June) ➢ Online resident survey – 211 respondents (May-June) ➢ SWPH Carrot Rewards App offer - 1,262 individuals completed a quiz (May) ➢ SWPH launched Trails Challenge (August/Sept.) ➢ SWPH and project partners organized and hosted the Trails Open Event on Sept. 14 to celebrate the new trail system

3.1.2 Improvements to Walkability

A number of infrastructure improvements were made to improve walkability in St. Thomas between 2016 and 2019.

Key infrastructure development in 2016 included:

- Sidewalk infrastructure installation / upgrades including at least 5km of new sidewalks installed which in many instances served to complete missing links in the walking network.
- At least 7km of bike lanes created utilizing unused asphalt.
- Creation of pedestrian zones through streetscaping.
- Upgrades to trail infrastructure including new culvert installed at Mill Creek.
- Installation of new pedestrian crossings.
- Upgrades to street intersections and crosswalks.

Key infrastructure development in 2017 included:

- Sidewalk infrastructure installation / upgrades including at least 3.4km of new sidewalks installed which in many instances served to complete missing links in the walking network.
- At least 3.5km of bike lanes created.
- Installation of new meadow trail (525 metres).
- Multiuse trail paved (900 metres).
- New bridge construction project approved / in progress (as part of multiuse trail)

Key infrastructure development in 2018 included:

- Over 1,000 metres of sidewalks across five different neighbourhoods
- 1.5 kms of sidewalks and multi-use trails added in north end of St. Thomas
- Pedestrian Walkway built from Southpoint Condos to South Path off Southdale Line
- Doug Tarry Homes adds hard surface trail to South Side of Lake Margaret (Angus McKenzie Trail)
- New signal at intersection of Elm and Peach Tree
- New PXO Crossings Sunset at Parkside; Ross at Centre & Centre west of Ross St.

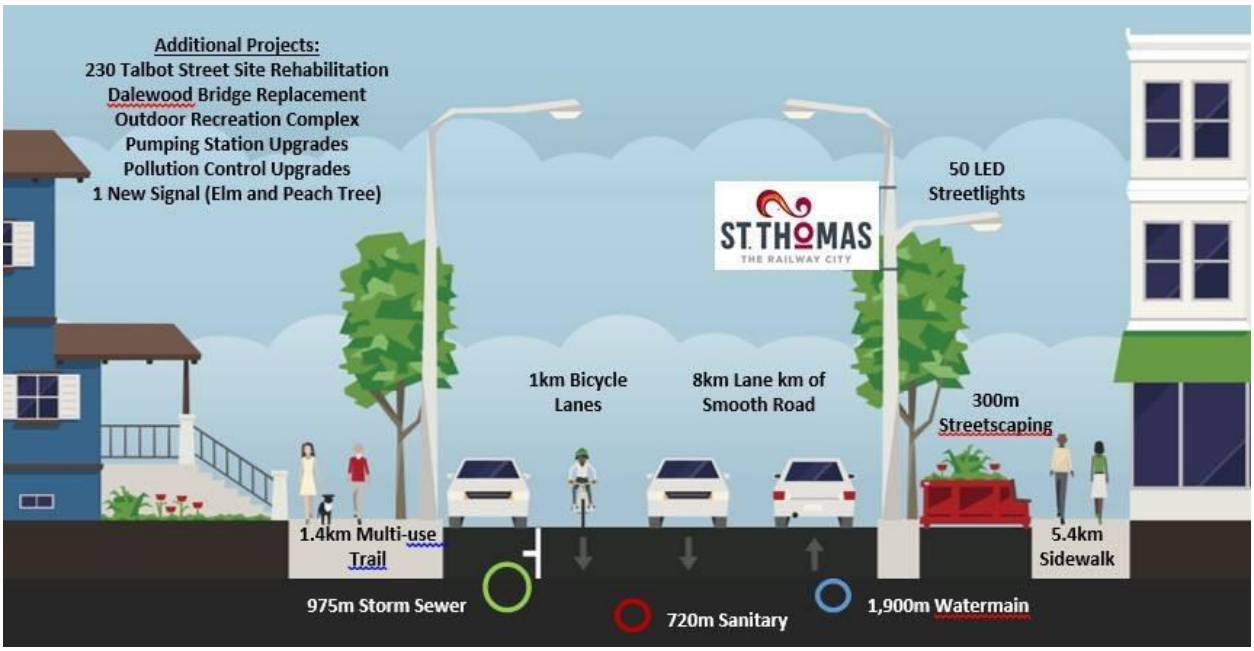
Doug Tarry Homes adds hard surface trail to South Side of Lake Margaret (Angus McKenzie Trail), 2018

Source: Nicole Ooms, Doug Tarry Homes

Construction of the new pedestrian walkway added in the Southgate area of St. Thomas, 2018

Source: Jessica Lang, Southwestern Public Health

The following infographic was produced by the City of St. Thomas (Environmental Services Dept.) and summarizes the 2018 capital works projects that were designed, tendered and awarded. Key highlights include the award of Dalewood Bridge and the new multi-use trail through athletic park and connection to downtown via Hiawatha Street.



Source: City of St. Thomas, 2018 Capital Program - Update No. 1. May 22, 2018.

Key infrastructure development in 2019 included:

- New Dalewood Bridge is completed with multi-use path included
- New walkway to connect Food Basics & CASO Station to Trans Canada Trail
- 1Password Park opened in September and includes multi-use trails throughout the park along with a multi-use path along Burwell Rd. North (590m)
- New bike lane and sidewalk added to Elm Street West as part of road reconstruction (City of St. Thomas capital plan)

Additional details on the measures taken to improve walkability by neighbourhood in 2016, 2017, 2018 and 2019 are presented in Table 3.

NOTE: The **'demonstration area'** where the developers contributed to the infrastructure development (e.g. sidewalks, trails) is largely covered by three adjoining neighbourhoods in the southern portion of the City: Lake Margaret, Shaw Valley, and South Gate.

Table 3: Improvements to walkability by neighbourhood, late 2015 and 2016

Year	Project Activity / Initiative [26]	St. Thomas Neighbourhood											
		South Edgeware	South Gate	Dalewood	Wellington Central	Park and Elm	Elgin Mall	Old Courthouse	Balaclava South	Lake Margaret	Elm West	Northwest Talbot	Shaw Valley
2015	STP – June Rose Callwood PS: Path put in the playground from sidewalk to tarmac								✓				
2016	Empire Parkway – sidewalks installed to link to Orchard Park South Recreational trail providing pedestrian connection to the Orchard Park South community (Nov.).		✓										
	Orchard Park phase 1B started building and first homeowner moved in.		✓										
	Harvest Run Phase 1 (Axford farm) started servicing (Dec.).		✓										
	Dalewood Bridge environmental assessment is completed and decision is made to build a new bridge with a 3.35 m wide multi-use trail			✓									
	SWPH provided two bike racks to St. Thomas Elgin General Hospital and St. Thomas Public Library.										✓	✓	
	5km of new sidewalk at 15 different locations, many completing missing links in the network.				✓	✓	✓		✓	✓	✓	✓	
	7km of bike lanes at 6 different locations, optimizing unused asphalt.		✓			✓	✓			✓			
	Streetscape transformation on Talbot Street creating a distinct pedestrian zone.											✓	
	New culvert at Mill Creek improved trail crossing – DTL.												
	STP started at Mitchell Hepburn PS - new All Way Stop installed with two new crosswalks at Peach Tree Blvd/Raven Ave intersection; sidewalk ramp added to provide another crosswalk at Raven/Penhale intersection; 'No Parking' sign changed in front of school; pavement markings refreshed at round about Peach Tree Blvd /Lawrence Ave.		✓										

[26] Relevant activity in pre-project years include:

- 2013: Kains St. multi-use trail established and Orchard Park South Recreational Trail – 800m north south portion opened.
- 2014: June Rose Callwood PS - new 4 Way Stop at Redan St. / Woodworth Ave.

Table 3 continued: Improvements to walkability by neighbourhood, 2017

Year	Project Activity / Initiative	St. Thomas Neighbourhood											
		South Edgeware	South Gate	Dalewood	Wellington Central	Park and Elm	Elgin Mall	Old Courthouse	Balaclava South	Lake Margaret	Elm West	Northwest Talbot	Shaw Valley
2017	Four new pedestrian crossings installed (at Fairview, Lake Margaret Trail, Bill Martyn Pkwy and Stanley Street)		✓					✓		✓			
	South Path (multi-use trail) paved from Sunset Dr to Penhale (900m)		✓							✓			✓
	Sidewalk added on Talbot from Burwell to Manor Rd (870m)						✓		✓				
	Sidewalk added on First Ave from Talbot to Steele St (200 m)				✓								
	Sidewalk upgraded on both sides of Queen Street b/w Wellington and Central							✓					
	Sidewalk on Gladstone from Elgin to Princess (450m)							✓					
	Sidewalk on Stanley St from Sunset to William (725m)							✓					
	Sidewalk on Ermatinger from Churchill to Montgomery (100m)										✓		
	Sidewalk on Churchill from Fifth to Ermatinger (800m)										✓		
	Bike lanes added to Edward St and Burwell Rd (3.5km)			✓									
	Doug Tarry Homes builds the Butterfly meadow trail (525m)									✓			
	Parkside Drive sidewalk upgraded (150m)												✓
	Sidewalk added to Chestnut (200m) and Erie St (98m)				✓								

Table 3 continued: Improvements to walkability by neighbourhood, 2018

Year	Project Activity / Initiative	St. Thomas Neighbourhood											
		South Edgeware	South Gate	Dalewood	Wellington Central	Park and Elm	Elgin Mall	Old Courthouse	Balaclava South	Lake Margaret	Elm West	Northwest Talbot	Shaw Valley
2018	South Path pavement approved – in progress – from Penhale to OPS Trail		✓										
	Pedestrian Walkway built from Southpoint Condos to South Path off Southdale Line (valued at $7,000)		✓										
	1.5 kms of sidewalks and multi-use trails added in north end of St. Thomas *	✓		✓									
	Flora St. sidewalk around Park (300m) *								✓				
	City reconstructs St. George St. to include new 200m sidewalk *											✓	
	City adds sidewalk to Greedway Blvd. (190M) *			✓									
	Sidewalk improvements in Elm West (70m) *										✓		
	Sidewalk added to Gregory Place (42m)*				✓								
	Sidewalk added to McGibbon (70m) *									✓			
	City adds sidewalk to Pine Valley Drive (200m) *			✓									
	Doug Tarry Homes adds hard surface trail to South Side of Lake Margaret (Angus McKenzie Trail)									✓			
	New signal Elm & Peach Tree		✓										
	New PXO Crossings Sunset at Parkside; Ross at Centre & Centre west of Ross St.												✓

* These improvements/changes were not identified in the original walkability assessment that was initiated in 2015 and completed in 2016.

Table 3 continued: Improvements to walkability by neighbourhood, 2019

Year	Project Activity / Initiative	St. Thomas Neighbourhood											
		South Edgeware	South Gate	Dalewood	Wellington Central	Park and Elm	Elgin Mall	Old Courthouse	Balaclava South	Lake Margaret	Elm West	Northwest Talbot	Shaw Valley
2019	New Dalewood Bridge is completed with multi-use path included			✓									
	New Walkway to connect Food Basics & CASO Station to Trans Canada Trail								✓				
	1Password Park opened in Sept. and includes multi-use trails throughout the park along with a multi-use path along Burwell Rd. North (590m)			✓									
	New bike lane and sidewalk added to Elm Street West as part of road reconstruction (City of St. Thomas capital plan)										✓		

3.2 Demographic Profile for the Community Phone & Internet Survey

The pre and post-implementation phone survey was designed to capture a sample of 380+ randomly selected participants in 2016 and 2019. The target of 380 randomly selected participants was the minimum figure required to achieve a 95% level of confidence (+/- 5% error) in the results.[27] A total of 394 residents completed the baseline phone survey in 2016 and 390 residents completed the post-implementation phone survey in 2019.

As noted in the methods section of this report, the phone survey results revealed an age bias in the sampling (i.e. younger age groups were underrepresented in the sample) and it was decided to include additional survey methods as part of the post program data collection in 2019 to reach younger residents. This included a self-administered version of the phone survey that was deployed through the SWPH Facebook page during the same period as the 2019 phone survey. A total of 211 residents participated in the SWPH Facebook (Internet) survey.

Additionally, a short quiz consisting of four questions adapted from the post-implementation phone survey was used in the Carrot mobile app to further expand the reach of the evaluation.[28] The mobile app was deployed in the same period as the 2019 phone survey and the Facebook survey. A total of 1,262 residents participated in the mobile app quiz.

Although the participants in the Facebook survey and the mobile app quiz were not selected at random, the results serve to strengthen our understanding of local walking patterns and the key issues of interest to residents across a broad age spectrum.[29]

The following section provides an overview of the socio-demographic characteristics of the 2016 and 2019 phone survey respondents as well as the Facebook (Internet) survey respondents.[30] Where applicable the survey group profile is compared against the population profile for the City of St. Thomas using data from the 2016 Population Census which provides a further test of the representativeness of the survey sample.

Only three demographic characteristics were examined as part of the 2019 mobile app quiz (gender, age, and highest level of education).[31]

[27] Based on the adult population total for the City of St. Thomas - 2016 Population Census.

[28] The mobile app questions focused on the following topics:

- Leisurely walking habits in the last seven days (number of days, average walking time)
- General change in walking behaviour over the last two years
- Perception of St. Thomas as a 'walking friendly' community
- Satisfaction with efforts to make the community more walking friendly

[29] A larger proportion of younger respondents responded to the Facebook survey and the mobile app survey compared to the phone survey. Approximately 25% of the 2019 Facebook survey respondents were between the ages of 20-39 while 38% of the mobile app respondents were between the ages of 18-34. In comparison, 11% of the 2016 phone survey respondents and 7% of the 2019 phone survey respondents were between the ages of 20-39.

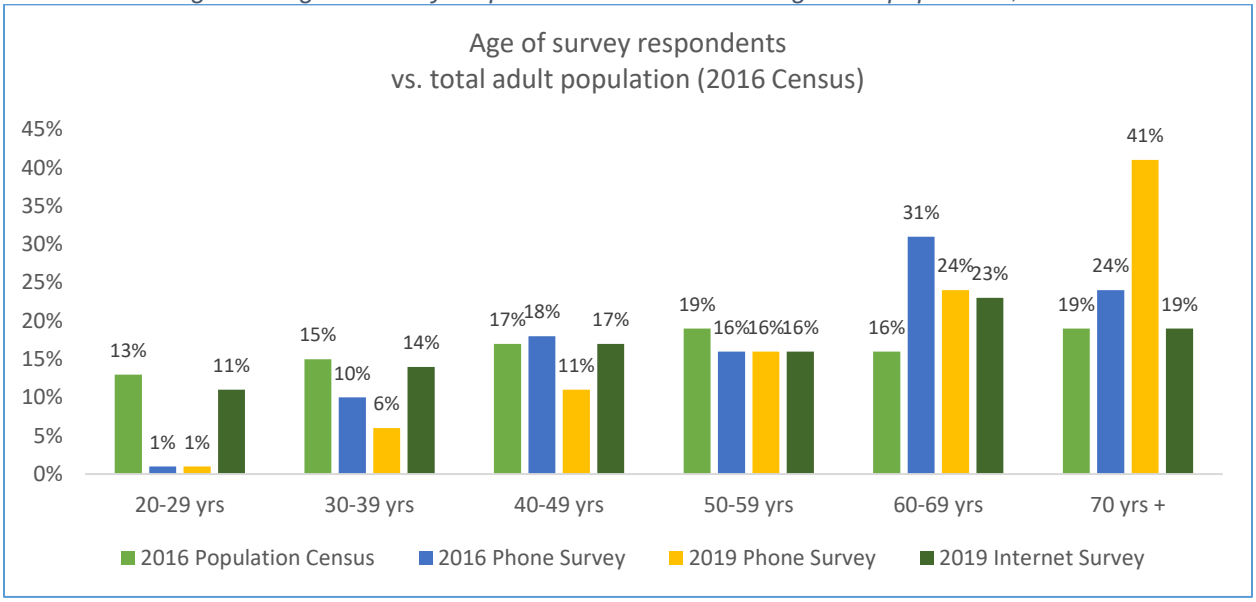
[30] The corresponding data tables for the graphs that are presented in this section of the report are provided in Appendix C.

[31] The demographic graphs for the 2019 mobile app data are presented in Appendix D.

Age of Respondents

The 2016 and 2019 phone survey respondents represent an older demographic compared to the general population profile while the 2019 Internet survey respondents are more closely aligned with the general population profile.[32] The average age of respondents in the 2016 phone survey was 59 years vs. 64 years for the 2019 phone survey. The average age of respondents in the 2019 Internet survey was 52 years.[33]

Figure 1: Age of survey respondents vs. St. Thomas general population, 2016



Duration of Residence in Current Location

Respondents were asked how long they have resided in their current location. The average length of residence reported in the 2016 phone survey was 14 years vs. 17 years reported in the 2019 phone survey. The average length of residence reported in the 2019 Internet survey was 12 years.

Gender

Males and females are both represented in the 2016 and 2019 phone survey samples but overall, there is stronger representation from females. Females accounted for 56% of the respondents in the 2016 phone survey and 60% of the respondents in the 2019 phone survey. The higher proportion of female respondents is consistent with the gender profile for the total population of the City of St. Thomas in 2016 where females account for 54% of the total population (20 years of age or older). Females are noticeably overrepresented in the 2019 Internet survey sample where they account for 89% of the respondents.[34]

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[32] It's worth noting that the development of the Elgin St. Thomas' Age Friendly Community Plan (completed in October 2017) confirmed that older adults value having a walkable community.

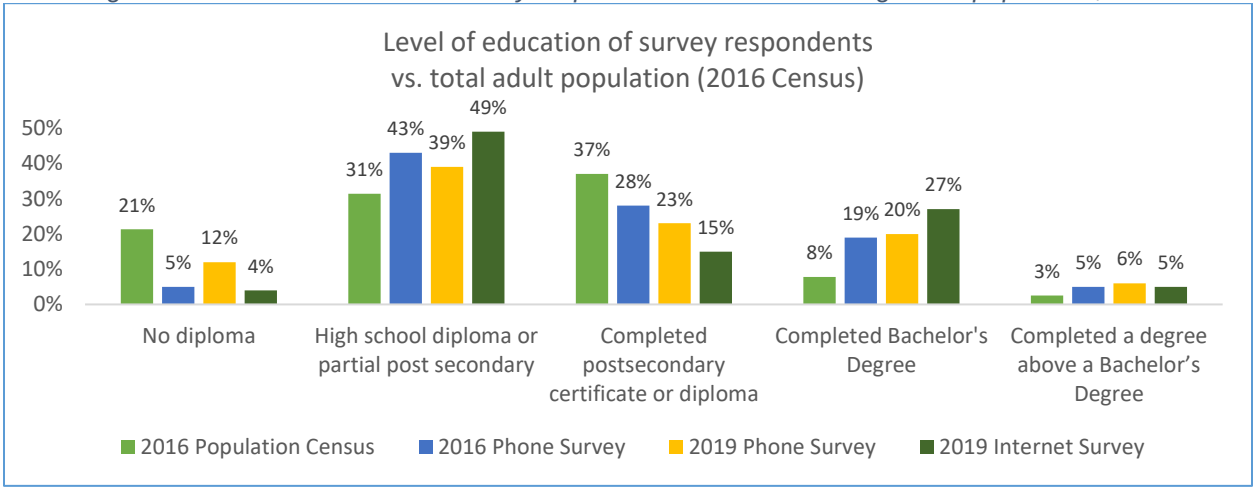
[33] Younger age groups are more strongly represented in the 2019 mobile app quiz where 38% of the respondents are under the age of 35 compared to 5% of the 2016 phone survey respondents, 3% of the 2019 phone survey respondents and 16% of 2019 the Internet survey respondents.

[34] Females are also overrepresented in the 2019 mobile app quiz where they account for 77% of the respondents. Survey response and non-response studies have shown that, in general, women are more likely to participate in

Education

A broad range of education levels are represented in the 2016 and 2019 phone survey samples. However, there is limited representation from individuals who did not complete high school. Approximately 5% of the survey respondents in the 2016 phone survey had no certificate or diploma compared to 12% in the 2019 phone survey. These figures are considerably lower than the figure for the total population of the City of St. Thomas (21% of the adult residents do not complete high school). The 2019 Internet survey sample also had a very low proportion of respondents that did not complete high school (4%).[35]

Figure 2: Level of education of survey respondents vs. St. Thomas general population, 2016



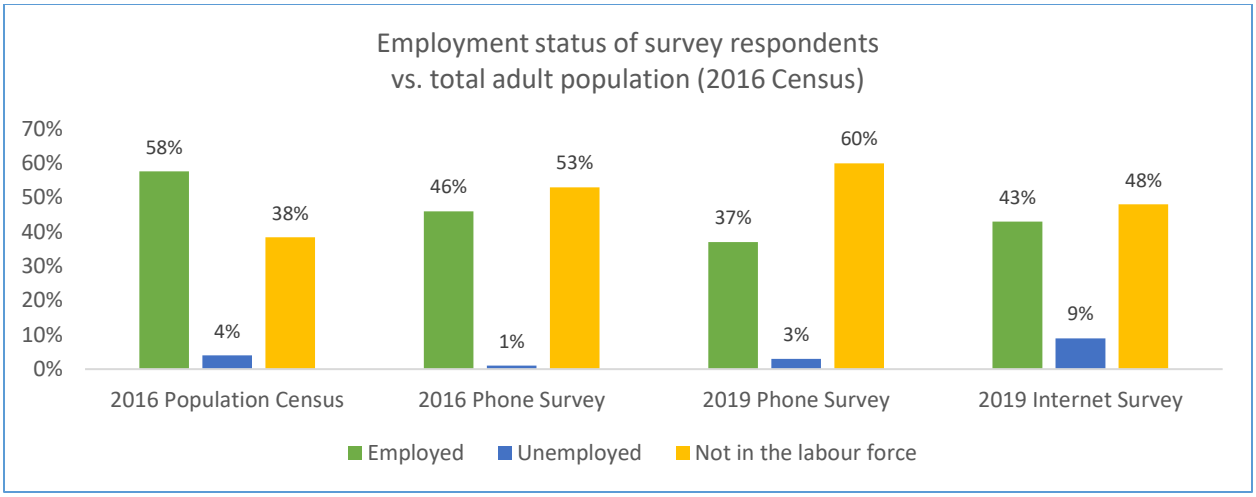
Employment Status

Approximately 46% of the survey respondents in the 2016 phone survey reported that they were employed compared to 37% in the 2019 phone survey and 43% in the 2019 Internet survey. These figures are lower compared to the total population profile for the City of St. Thomas (58%). A large proportion of the survey respondents in 2016 and 2019 were retired which accounts for the lower employment figures.

Figure 3: Employment status - survey respondents vs. St. Thomas general population, 2016

surveys than men. See for example: Curtin, R., Presser, S., & Singer, E. (2000). The effects of response rate changes on the index of consumer sentiment. Public Opinion Quarterly 64: 413–428.

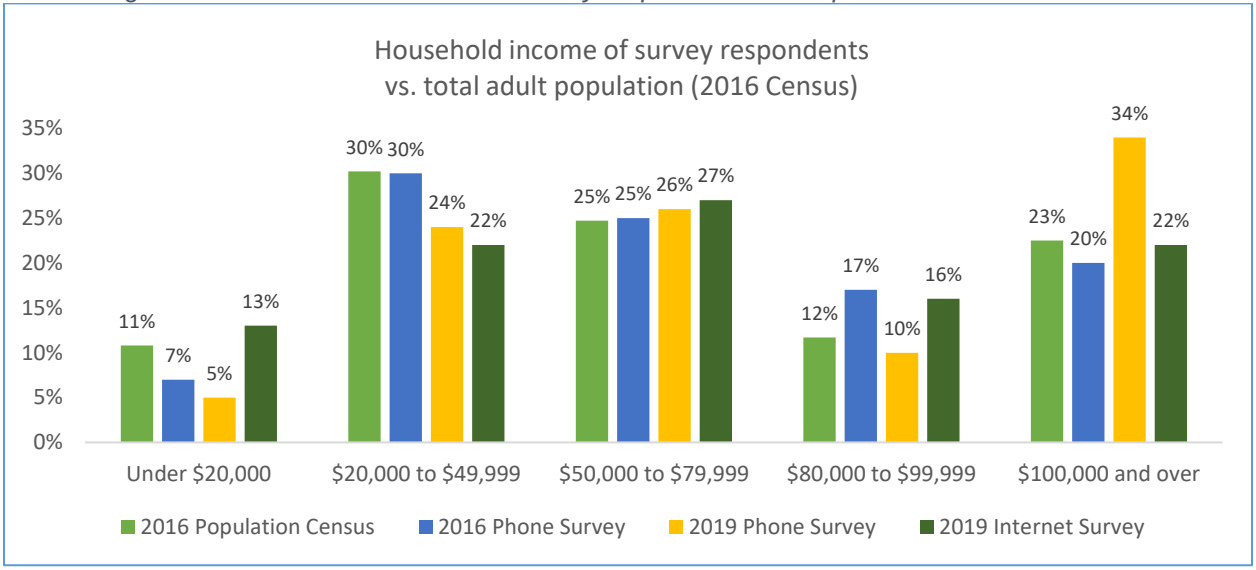
[35] The 2019 mobile app quiz also had a very low proportion of respondents that did not complete high school (3%)



Household Income

A broad range of income levels are represented in the 2016 and 2019 survey samples. Lower income groups are slightly underrepresented and higher income groups are slightly overrepresented in the 2016 and 2019 phone surveys compared to the general population profile. The 2019 Internet survey respondents are more closely aligned with the general population profile.

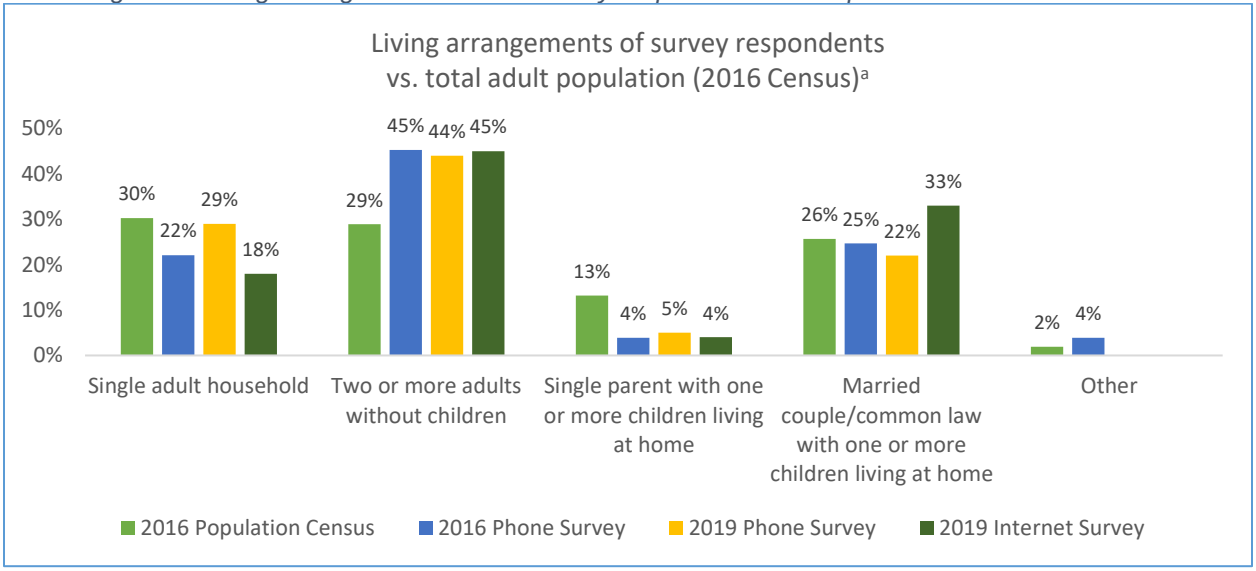
Figure 4: Household income of the survey respondents vs. Population from 2016 Census



Household Type / Living Arrangement

A variety of household types (living arrangements) are represented in the 2016 and 2019 survey samples. Compared to the general population of the City of St. Thomas, the phone and Internet survey groups have stronger representation from households with two or more adults and no children and more limited representation from single parent households.

Figure 5: Living arrangements for the survey respondents vs. Population from 2016 Census



[a] Total number of private households by household type. The categories used in the census vary slightly from the categories used in the survey, so this comparison should only be used in general terms.

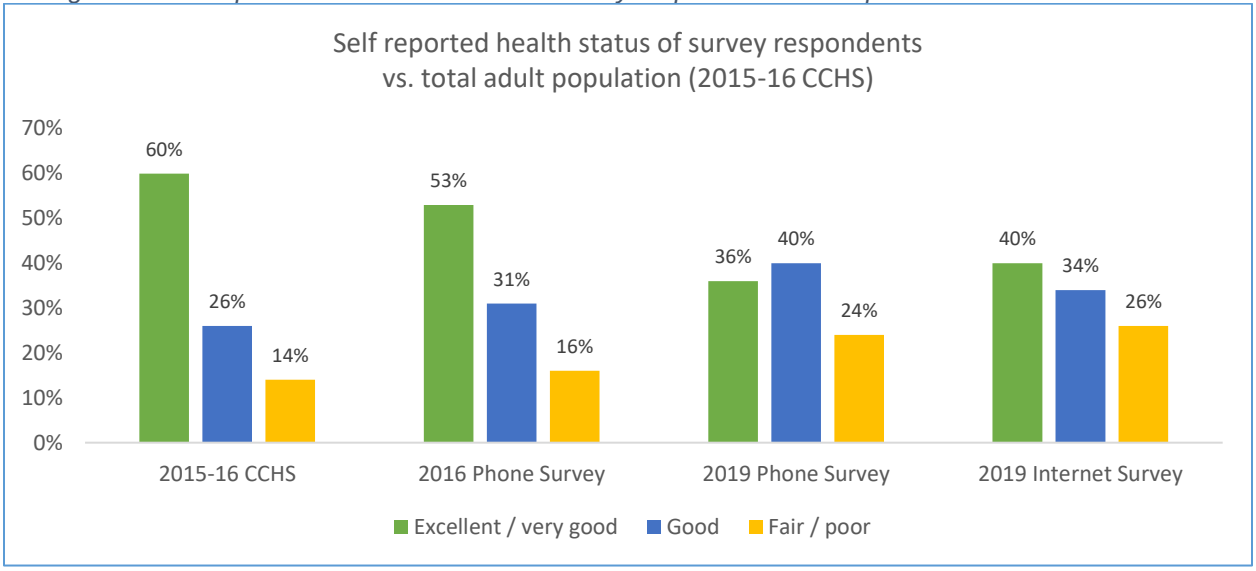
Overall Health Status

A very large majority of the survey respondents reported that they are usually able to walk short distances without difficulty (89% in the 2016 phone survey, 90% in the 2019 phone survey and 90% in the 2019 Internet survey).

Approximately 53% of the respondents from the 2016 phone survey reported that their overall health is excellent or very good compared to 36% for the 2019 phone survey and 40% for the 2019 Internet survey. The Canadian Community Health Survey (CCHS 2015-2016) found that 60% of the residents within the Elgin St. Thomas area reported their overall health as excellent or very good, while 26.5% reported their health as good and 13.9% reported their health as fair or poor.[36] The CCHS profile suggests that individuals with more health concerns / issues are somewhat overrepresented in all three surveys.

[36] The CCHS is a cross-sectional telephone survey that collects information related to health status, health care utilization and health determinants directly from the Canadian population. Health status data refers to the population aged 12 and over who reported perceiving their own health status as being either excellent or very good or fair or poor, depending on the indicator. Perceived health refers to the perception of a person's health in general, either by the person himself or herself, or, in the case of proxy response, by the person responding. Health means not only the absence of disease or injury but also physical, mental and social well-being.
http://www5.statcan.gc.ca/cansim/a05?lang=eng&id=1050509#F4

Figure 6: Self reported health status of the survey respondents vs. Population from 2015-16 CCHS



Place of Residence - Postal Code and Neighbourhood

The geographic distribution of the survey respondents was determined through postal code data. The City of St. Thomas is divided into two forward sortation areas (FSA) and there is a total of 291 unique postal codes of which 63% are in the south FSA (N5R = south of Talbot St.) and 37% are in the north FSA (N5P = north of Talbot St.). The geographic distribution of the survey respondents is fairly comparable to the general population of the City of St. Thomas:

- 2016 phone survey: 343 respondents have postal codes within the City of St. Thomas of which 29% are located in the north FSA and 71% are located in the south FSA.
- 2019 phone survey: 330 respondents have postal codes within the City of St. Thomas of which 34% are located in the north FSA and 66% are located in the south FSA.
- 2019 Internet survey: 172 respondents have postal codes within the City of St. Thomas of which 34% are located in the north FSA and 66% are located in the south FSA.

The following table shows the distribution of the survey samples across the 12 neighbourhoods in the City of St. Thomas (based on postal code data) and a comparison to the proportional distribution for the actual population. All 12 neighbourhoods are represented in the 2016 and 2019 phone survey as well as the 2019 Internet survey and the proportional distribution for the most part is fairly comparable to the actual population.

Table 4: Respondents by place of residence - Neighbourhood

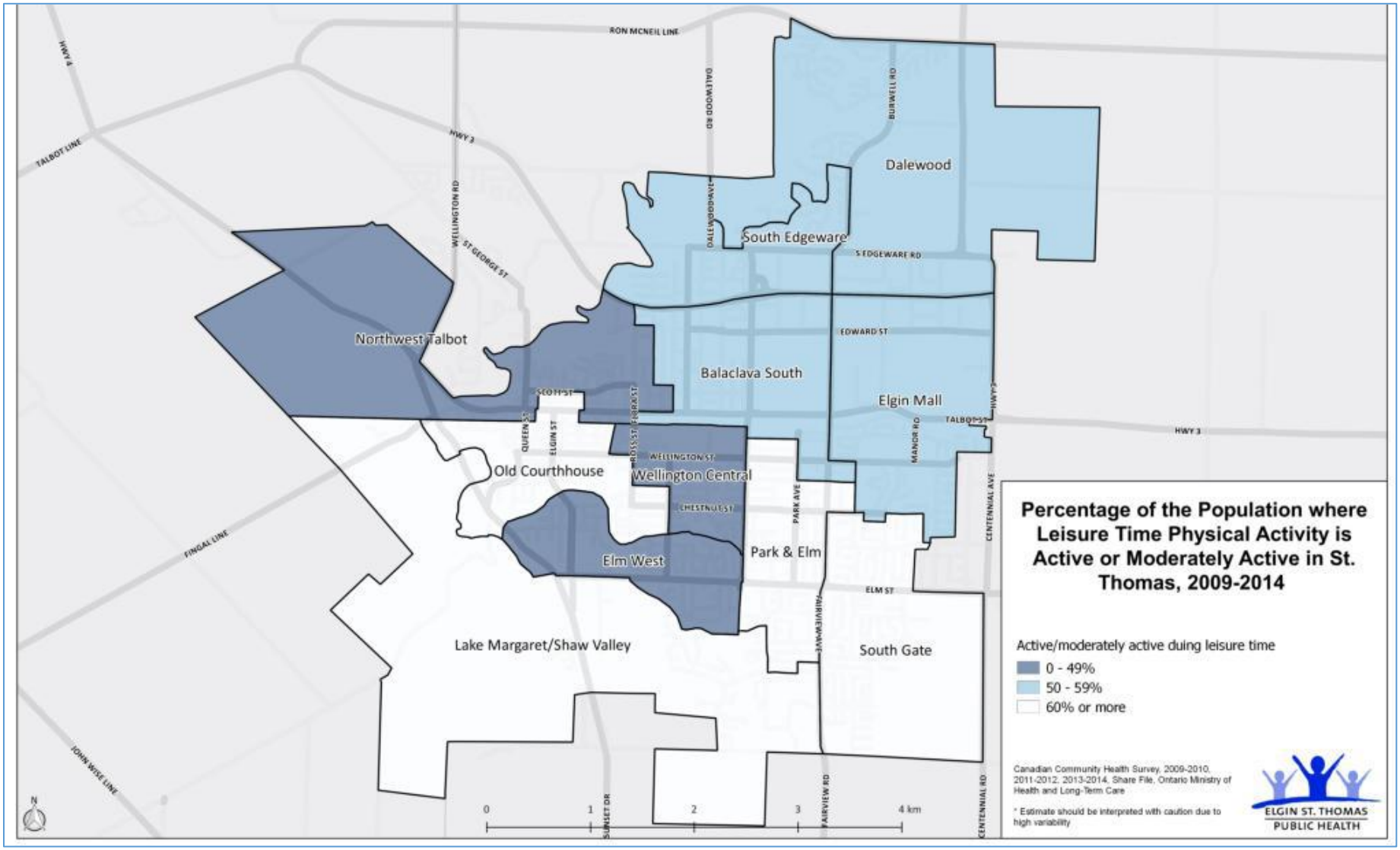
Neighbourhood	Population Total, 2011		2016		2019			
			Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Dalewood	3,355	8.8	37	11.7	27	9.1	13	7.7
South Edgeware	3,110	8.2	57	18.1	20	6.8	16	9.5
Balaclava South	2,735	7.2	21	6.7	20	6.8	10	5.9
Northwest Talbot	2,900	7.6	15	4.8	24	8.1	12	7.1
Elgin Mall	3,855	10.2	23	7.3	33	11.1	16	9.5
Old Courthouse	4,210	11.1	22	7.0	36	12.2	31	18.3
Wellington Central	2,165	5.7	29	9.2	16	5.4	8	4.7

Elm West	2,495	6.6	17	5.4	21	7.1	9	5.3
Park & Elm	4,340	11.4	25	7.9	30	10.1	11	6.5
South Gate	5,605	14.8	44	14.0	42	14.2	27	16.0
Shaw Valley	695	1.8	7	2.2	11	3.7	4	2.4
Lake Margaret	2,450	6.5	18	5.7	16	5.4	12	7.1
Total	37,915	100	315	100	296	100	169	100
Not applicable – on the edge of City [a]			28		34		3	
Did not provide postal code data			51		60		39	
Total			394		390		211	

[a] A number of respondents were not physically located in the City of St Thomas but had a St. Thomas address. There is a high likelihood that these residents would have walked in the City of St. Thomas.

Figure 7 presents a reference map of the City of St. Thomas neighbourhoods.

Figure 7: City of St. Thomas Neighbourhoods by Leisure Time Physical Activity



Source: Elgin St. Thomas Public Health

•This is the best data available on physical activity rates. However, there is some concern that it is a self-reported measure and that the question asks about "leisure time" physical activity rates.

•Many people are active for work, transportation, or to go to school and this would not be reflected in this data.

•55% of Elgin St. Thomas residents are active or moderately active in their leisure time (2011-2012). This is similar to the Provincial rate.

•The areas that are white are more active.

3.3 Community Survey Results

This section of the report presents the results of the 2016 and 2019 phone survey as well as the results of the 2019 Internet (Facebook) survey. Results from the Carrot mobile app survey are also presented where applicable.

For the purpose of conducting the statistical analysis, the data was weighted for the 2016 and 2019 phone survey results to more accurately reflect the age distribution of the population for the City of St. Thomas.[37] The multipliers used for adjusting the 2016 and 2019 phone survey data are presented in the following table.

Table 5: Multipliers used in weighting the 2016 and 2019 phone survey data

Age group	Target % from the 2016 Census [a]	Actual % represented in the phone survey		Weight (multiplier)	
		2016	2019	2016	2019
19 – 39 years	28.7%	11.1%	7.4%	2.60	3.86
40 – 59 years	35.8%	33.5%	27.5%	1.07	1.30
60 years and over	35.6%	55.4%	65.2%	0.64	0.54

[a] The most recent population census period (2016) was used as the reference year for the target proportion.

An independent samples t-test was conducted to determine if there were significant differences between the 2016 and 2019 phone survey response groups for select findings.[38] The analysis included a comparison of respondents living in the southern portion of the City where the housing development partners concentrated their infrastructure development initiatives (i.e. the demonstration area) and the neighbourhoods in the north / central portion of the City.[39]

The following sub-groups were also compared as part of the t-test analysis:

- Male respondents vs. female respondents
- Respondents under 50 years of age vs. respondents 50 years of age and over
- Respondents that reported their general health as excellent or very good vs. respondents that reported their general health as good, fair or poor
- Respondents that have resided in the community for five years or less vs. respondents that have resided in the community for six years or more
- Respondents residing south of Talbot Street (N5R forward sortation area) vs. respondents living north of Talbot Street (N5P forward sortation area)[40]
- Respondents with a post secondary education (partial or graduate) vs. respondents with a high school diploma or no diploma
- Respondents with total household income of less than $50,000 vs. respondents with total household income of $50,000 or more

[37] Younger respondents were under represented and older respondents were over represented in the 2016 and 2019 phone survey.

[38] The t-test assesses whether the mean scores of two groups are statistically different from each other. The t-test produces a p-value which is an indication of the probability that both groups have the same mean. For example, in comparing the satisfaction of males and females with efforts in the community to make the neighbourhood walking (wheelchair) friendly a probability (p value) of 0.4 would indicate that there is a 40% likelihood that you cannot distinguish the group of males from the group of females by satisfaction. If the p value is 0.05 or less you can conclude that the two groups can be distinguished by satisfaction.

[39] Neighbourhoods in the demonstration area (southern portion of the City) include South Gate, Shaw Valley and Lake Margaret. Neighbourhoods located in the north / central portion of the City include Dalewood, South Edgeware, Balaclava South, Northwest Talbot, Elgin Mall, Old Courthouse, Wellington Central, Elm West, and Park & Elm.

[40] The N5R forward sortation area encompasses all of the neighbourhoods in the demonstration area as well as a number of adjoining neighbourhoods in the central portion of the City including Park & Elm, Elm West, Wellington Central, Old Courthouse, and Elgin Mall.

Inferential statistics were not used in the analysis of the 2019 Internet survey results or the Carrot mobile app quiz results as these approaches did not use a random sampling procedure. Furthermore, the raw data from the mobile app quiz was not available from the Carrot Reward Program due to data privacy arrangements.

3.3.1 Walking Behaviour

Survey respondents were asked a series of questions related to their walking behaviour (e.g. modes of active transportation used, frequency and duration of walks, motivation for walking).

Respondents were asked to indicate the most common ways they travel around the community using the sidewalks and/or trails in the community. The large majority of phone survey respondents in 2016 (80%) and 2019 (70%) reported that they walked around the neighbourhood / community.

The next most common form of active transportation used by the phone survey respondents was cycling. The proportion of respondents cycling was very comparable for the 2016 (17%) and 2019 (18%) phone survey groups. A small proportion of the 2016 (11%) and 2019 (6%) phone survey respondents also identified running as a form of active mobility that they use for physical fitness / getting around the community.

The 2016 and 2019 phone survey also included a small proportion of residents (<5%) who use mobility aids (e.g. walkers, canes, manual/electric wheelchairs, motorized scooters) to assist with walking or enable mobility.

The results of the 2019 Internet survey revealed a similar pattern of active transportation activity with the large majority of respondents walking (83%) and a small proportion cycling (12%) and/or running (10%).

Table 6: Modes of active transportation used in the community

Mode of active transportation	2016		2019			
	Phone Survey (n=379)		Phone Survey (n=365)		Internet Survey (n=211)	
	Number	Percent	Number	Percent	Number	Percent
Walk	304	80.2	255	70.0	176	83.4
Bicycle	64	16.9	64	17.5	26	12.3
Run	42	11.1	22	6.0	20	9.5
Walker or cane	6	1.6	10	2.7	6	2.8
Motorized scooter	4	1.1	4	1.1	3	1.4
Skateboard	3	0.8	3	0.8	1	0.5
Wheelchair	2	0.5	2	0.5	3	1.4
Roller blade	1	0.3	1	0.3	2	0.9

Respondents were allowed to identify more than one form of active transportation.

Leisurely Walks

Approximately 73% of the 2019 phone survey respondents reported that they sometimes go for leisurely walks around their neighbourhood which is slightly higher than the proportion for the 2016 phone survey (71%). Results from the 2019 Internet survey are comparable to the 2019 phone survey with 72% of the respondents reporting that they sometimes take leisurely walks around their neighbourhood.

Table 7: Number and proportion of survey respondents that take leisurely walks

Do you sometimes take leisurely walks around your neighbourhood? [a]	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	268	70.9	264	72.5	151	71.6
No	110	29.1	100	27.5	60	28.4
Total	379	100	365	100	211	100

[a] Does not include dog walking or walking to school or work. These walking activities are addressed through separate questions.

Respondents reported on the ***number of days*** they went for leisurely walks over the last seven days. The average reported in the 2016 and 2019 phone survey was very comparable at 4.0 days and 3.8 days respectively. A slightly higher average was reported for the 2019 Internet survey (4.4 days) compared to the 2019 phone survey.

There was only a slight difference between the demonstration area and the north / central area of the City based on the phone survey results. The average number of days walked by residents in the demonstration area was very similar in 2016 and 2019 (4.3 days vs. 4.2 days) as were the number of days walked by residents in the north / central area in 2016 and 2019 (3.9 days vs. 3.6 days). The average number of days walked by residents in the demonstration area was slightly higher than the north / central area in both 2016 and 2019. None of the differences noted above are statistically significant.

Table 8: Average number of days leisurely walking over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	256	4.0	241	3.8	151	4.4
Demonstration area	53	4.3	37	4.2	32	4.6
North / central area	177	3.9	166	3.6	93	4.4

The figures for the demonstration area and the north / central area are based on the reported postal code data.

With respect to the ***walk duration*** (round trip), the average number of minutes walked was slightly higher for the 2019 phone survey respondents compared to the 2016 respondents (35.3 minutes vs. 34.2 minutes). A slightly higher average was reported for the 2019 Internet survey (39.5 minutes) compared to the 2019 phone survey.

There was a more moderate difference in walk duration between the demonstration area and the north / central area of the City based on the phone survey results. The average number of minutes walked by residents in the demonstration area was higher in 2019 compared to 2016

(36.1 minutes vs. 32.8 minutes) while the average for the north / central area was lower in 2019 compared to 2016 (33.4 minutes vs. 34.9 minutes). The average number of minutes walked for the demonstration area was slightly lower than the north / central area in 2016 but slightly higher than the north / central area in 2019. None of the differences noted above are statistically significant.

Table 9: Average duration of leisurely walks (round trip)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of minutes	Number	Average number of minutes	Number	Average number of minutes
All respondents	247	34.2	230	35.3	145	39.5
Demonstration area	48	32.8	36	36.1	31	36.3
North / central area	173	34.9	156	33.4	90	40.7

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents 50 years of age or older went on more daily leisurely walks compared to respondents under the age of 50 ($p \leq 0.01$).
- In 2016, respondents that lived south of Talbot Street (N5R forward sortation area) had longer duration leisurely walks compared to respondents that lived north of Talbot Street (N5P forward sortation area) ($p \leq 0.01$).
- In 2019, female respondents went on more daily leisurely walks ($p \leq 0.05$) and had longer duration leisurely walks ($p \leq 0.05$) compared to male respondents.
- In 2019, respondents that reported their general health as excellent or very good had longer duration leisurely walks compared to respondents that reported their general health as good, fair or poor ($p \leq 0.05$).
- In 2019, respondents that lived south of Talbot Street went on more daily leisurely walks compared to respondents that lived north of Talbot Street ($p \leq 0.01$).

Further evidence that walking in the community is a popular activity came from the 2019 Carrot mobile app quiz. The survey of 1,262 community residents found that at least 69% of the respondents walked in the community on one or more days in the last seven days while at least 38% walked at least three or more days in the last seven days.[41] The Carrot App survey also revealed that at least 65% of the respondents walked an average of 20 minutes or more during their most recent walk while at least 44% walked an average of 30 minutes or more during their most recent walk.

[41] Question used in the Carrot App survey: In the last 7 days, how often did you go for walks using local trails and sidewalks in the community? This includes morning strolls, as well as walks to work.

Walks on trails / in parks in the community

Approximately 63% of the 2019 phone survey respondents reported that they sometimes walk on trails and/or in parks in the community which is moderately higher than the proportion recorded for the 2016 phone survey (56%). Results from the 2019 Internet survey found that 75% of the respondents sometimes take walks in parks and/or in trails which is consistent with the higher figure associated with the 2019 phone survey results.

Table 10: Number and proportion of survey respondents that take walks on trails or in parks in the community

Do you sometimes walk on trails or in parks in the community? [a]	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	210	55.5	229	62.9	159	75.4
No	168	44.5	135	37.1	52	24.6
Total	379	100	365	100	211	100

[a] Does not include dog walking.

Respondents reported on the ***number of days*** they went for walks on trails or in parks in the last seven days.[42] The average reported in the 2019 phone survey was 2.5 days which is very comparable to the average for the 2016 phone survey (2.4 days). A moderately higher average was reported for the 2019 Internet survey (3.2 days) compared to the 2019 phone survey.

There was a slight difference between the demonstration area and the north / central area of the City based on the phone survey results. The average number of days walked by residents in the demonstration area was slightly higher in 2019 compared to 2016 (2.9 days vs. 2.5 days) while the number of days walked by residents in the north / central area in 2019 and 2016 was almost identical (2.5 days vs. 2.4 days). The average number of days walked by residents in the demonstration area was higher than the north / central area in both 2016 and 2019. None of the differences noted above are statistically significant.

Table 11: Average number of days walking on trails / in parks over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	198	2.4	198	2.5	158	3.2
Demonstration area	41	2.5	35	2.9	35	3.1
North / central area	136	2.3	143	2.3	92	3.2

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents 50 years of age or older went on more daily walks on trails or in parks compared to respondents under the age of 50 ($p \leq 0.01$).

[42] For this type of walking activity, the survey respondents were asked to report on the frequency of walks but not the duration.

- In 2019, female respondents went on more daily walks on trails or in parks compared to males and the difference approached a level of significance (p=0.06).

- In 2019, respondents that reported their general health as excellent or very good went on more daily walks on trails or in parks compared to respondents that reported their general health as good, fair or poor (p≤0.01).

- In 2019, respondents that have resided in the community for six years or more went on more daily walks on trails or in parks compared to respondents that have resided in the community for five years or less (p≤0.05).

- In 2019, respondents that lived south of Talbot Street went on more daily walks on trails or in parks compared to respondents that lived north of Talbot Street (p≤0.05).

Walking with a Dog

Approximately 38% of the 2019 phone survey respondents reported that they sometimes walk a dog(s) in the community which is slightly lower than the proportion reported for the 2016 phone survey (41%). Results from the 2019 Internet survey found that 43% of the respondents sometimes walk a dog in the community which is slightly higher than the 2019 phone survey results.

Table 12: Number and proportion of survey respondents that walk a dog(s)

Do you sometimes walk a dog(s) in the community?	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	156	41.1	137	37.5	91	43.1
No	223	58.9	228	62.5	120	56.9
Total	379	100	365	100	211	100

Respondents reported on the ***number of days*** they went for walks with dogs in the community in the last seven days.[43] The average reported in the 2019 phone survey was 5.3 days which is fairly comparable to the average for the 2016 phone survey (5.6 days). A slightly lower average was reported for the 2019 Internet survey (4.9 days) compared to the 2019 phone survey.

There was a slight difference between the demonstration area and the north / central area of the City based on the phone survey results. The average number of days walked by residents in the demonstration area in 2019 and 2016 was almost identical (5.3 days vs. 5.4 days) while the number of days walked by residents in the north / central area was slightly lower in 2019 compared to 2016 (5.7 days vs. 5.3 days). The average number of days walked by residents in the demonstration area was slightly lower than the north / central area in 2016 but comparable in 2019. None of the differences noted above are statistically significant.

[43] For this type of walking activity, the survey respondents were asked to report on the frequency of walks but not the duration.

Table 13: Average number of days walking a dog(s) over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	137	5.6	126	5.3	92	4.9
Demonstration area	31	5.4	26	5.3	17	5.4
North / central area	97	5.7	83	5.3	53	4.8

The figures for the demonstration area and the north / central area are based on the reported postal code data.

Walking to Work

Approximately 7% of the 2019 phone survey respondents reported that they sometimes walk to work which is slightly lower than the proportion for the 2016 phone survey (9%). Results from the 2019 Internet survey found that 14% of the respondents sometimes walk to work.

When we factor out the 'not applicable' group (e.g. walking to work is not a practical / reasonable option) we find that the proportion of phone survey respondents that sometimes walk to work was somewhat higher in 2019 compared to 2016 (25% vs. 18%) and approximately 39% of the 2019 Internet respondents reported that they sometimes walk to work.

Table 14: Number and proportion of survey respondents that walk to work

Do you sometimes walk to work?	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	34	9.0	24	6.5	30	14.4
No	155	40.9	73	20.1	48	23.0
Not applicable [a]	190	50.1	268	73.5	131	62.7
Total	379	100	365	100	209	100

[a] Not a reasonable option - too distant, not employed, retired, work at home, etc.

Respondents reported on the ***number of days*** they walked to work in the last seven days. The average reported in the 2019 phone survey was 3.3 days which is slightly lower than the average for the 2016 phone survey (4.0 days). The difference between the two time periods is not statistically significant. A slightly higher average was reported for the 2019 Internet survey (3.7 days) compared to the 2019 phone survey.

It was not possible to conduct a meaningful comparison of the results for the demonstration area due to the low number of responses.

Table 15: Average number of days walking to work over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	35	4.0	24	3.3	32	3.7
Demonstration area	9	4.1	2	4.5	4	1.5
North / central area	23	3.7	14	2.0	24	3.9

The figures for the demonstration area and the north / central area are based on the reported postal code data.

Walking Children to School

Approximately 14% of the 2019 phone survey respondents reported that they sometimes walk a child / children to school which is very comparable to the proportion for the 2016 phone survey (15%). Results from the 2019 Internet survey found that 14% of the respondents sometimes walk a child / children to school which is consistent with the 2019 phone survey results.

Table 16: Number and proportion of survey respondents that walk a child / children to school

Do you sometimes walk a child / children to school?	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	55	14.6	50	13.7	30	14.3
No	321	85.4	315	86.3	180	85.7
Total	376	100	365	100	210	100

Respondents reported on the ***number of days*** they walked a child / children to school in the last seven days. The average reported in the 2019 phone survey was 3.7 days which is slightly higher than the average for the 2016 phone survey (3.3 days). The difference between the two time periods is not statistically significant. A slightly lower average was reported for the 2019 Internet survey (3.5 days) compared to the 2019 phone survey.

It was not possible to conduct a meaningful comparison of the results for the demonstration area due to the low number of responses.

Table 17: Average number of days walking a child / children to school over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	53	3.3	39	3.7	30	3.5
Demonstration area	14	2.5	4	5.0	17	3.8
North / central area	39	3.6	27	3.8	7	2.4

The figures for the demonstration area and the north / central area are based on the reported postal code data.

With respect to the ***walk duration*** (one way), the average number of minutes for walking to school was slightly higher for the 2019 phone survey respondents compared to the 2016 respondents (13.4 minutes vs. 12.2 minutes). The difference between the two time periods is not statistically significant. A slightly higher average was reported for the 2019 Internet survey (14.6 minutes) compared to the 2019 phone survey.

It was not possible to conduct a meaningful comparison of the results for the demonstration area due to the low number of responses.

Table 18: Average duration of walks to school (one way)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of minutes	Number	Average number of minutes	Number	Average number of minutes
All respondents	53	12.2	38	13.4	27	14.6
Demonstration area	14	13.3	4	14.7	5	9.2
North / central area	39	11.9	25	11.4	16	17.1

The figures for the demonstration area and the north / central area are based on the reported postal code data.

Other Community Walking Activities

Survey respondents were asked if they sometimes walk to travel to destinations in the community (e.g. shops/stores, restaurants, library/community centre, place of worship, recreation centre, etc.). Approximately 41% of the 2019 phone survey respondents reported that they sometimes walk in the community to reach these types of destinations which is slightly higher than the proportion for the 2016 phone survey (35%). With respect to the 2019 Internet survey, approximately 42% of the respondents reported that they sometimes walk in the community to reach these types of destinations.

When we factor out the 'not applicable' group (e.g. walking to these types of destinations is not a practical / reasonable option) we find that the proportion of phone survey respondents that sometimes walk to these types of destinations was moderately higher in 2019 compared to 2016 (60% vs. 43%) and approximately 55% of the 2019 Internet respondents reported that they sometimes walk to these types of destinations.

Table 19: Number and proportion of survey respondents that walk to destinations unrelated to work / school

Do you sometimes walk to get to certain destinations (other than work or school)? [a]	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Yes	131	34.7	149	40.9	89	42.4
No	173	45.7	101	27.8	74	35.2
Not applicable [b]	74	19.6	114	31.3	47	22.4
Total	379	100	365	100	210	100

[a] For example, stores/shops, restaurants, library/community centre, place of worship, recreation centre, etc.
[b] Not a reasonable option - too distant, etc.

Respondents reported on the ***number of days*** they went for walks to reach these types of destinations over the last seven days. The average reported in the 2019 phone survey was slightly lower than the average reported in 2016 (2.9 days vs. 3.3 days). The difference between the two time periods is not statistically significant. A higher average was reported for the 2019 Internet survey (3.8 days) compared to the 2019 phone survey.

It was not possible to conduct a meaningful comparison of the results for the demonstration area due to the low number of responses.

Table 20: Average number of days walking to destinations unrelated to work / school over the last seven days

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average number of days	Number	Average number of days	Number	Average number of days
All respondents	127	3.3	139	2.9	90	3.8
Demonstration area	19	4.1	13	3.6	8	3.4
North / central area	93	3.2	107	2.8	67	3.8

The figures for the demonstration area and the north / central area are based on the reported postal code data.

Change in Walking Habits over the last Two Years

Participants in the 2019 phone and the 2019 Internet survey as well as the 2019 mobile app quiz were asked to reflect on how their walking behaviour changed over the last two years. All three survey platforms revealed an overall pattern of increased walking behaviour (i.e. a higher proportion of respondents increased their outdoor walking activity than respondents that reduced their outdoor walking activity.

- 34% of the phone survey respondents increased their walking activity to some extent while 29% reduced their walking activity and 37% reported no change.
- 49% of the Internet survey respondents increased their walking activity to some extent while 27% reduced their walking activity and 24% reported no change.
- 54% of the mobile app quiz respondents increased their walking activity to some extent while 18% reduced their walking activity and 28% reported no change.

Table 21: Self-reported change in walking behaviour over the last two years

Change in walking behaviour over the last two years	2019					
	Phone Survey		Internet Survey		Mobile App Quiz	
	Number	Percent	Number	Percent	Number	Percent
1 I substantially increased the amount of outdoor walking I do	63	17.3	53	25.4	318	25.2
2 I slightly increased the amount of outdoor walking I do	62	17.0	48	23.0	370	29.3
3 There has been no change in the amount of outdoor walking I do	134	36.9	51	24.4	350	27.7
4 I slightly reduced the amount of outdoor walking I do	52	14.4	19	9.1	135	10.7
5 I substantially reduced the amount of outdoor walking I do	52	14.4	38	18.2	89	7.1
Total	363	100	209	100	1,262	100

A comparison of the average scores for 2019 phone survey did not reveal any statistically significant differences between the two areas.

Table 22: Average change in walking behavior over the last two years (1=Substantially increased and 7=Substantially reduced)

	2019			
	Phone Survey		Internet Survey	
	Number	Average score	Number	Average score
All respondents	323	3.1	209	2.7
Demonstration area	53	3.0	42	2.7
North / central area	224	3.1	125	2.7

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2019, respondents under the age of 50 were more likely to report that they increased their outdoor walking over the last two years compared to respondents 50 years of age or older ($p \leq 0.01$).

- In 2019, respondents that reported their general health as excellent or very good were more likely to report that they increased their outdoor walking over the last two years compared to respondents that reported their general health as good, fair or poor ($p \leq 0.01$).

- In 2019, respondents that lived south of Talbot Street were more likely to report that they increased their outdoor walking over the last two years compared to respondents that lived north of Talbot Street ($p \leq 0.01$).

- In 2019, respondents with total annual household income of $50,000 or more were more likely to report that they increased their outdoor walking over the last two years compared to respondents with total annual household income of less than $50,000 ($p \leq 0.01$).

Motivation for Walking

Respondents were asked to identify their main motivation for walking. The most common motivation for walking as reported by 58% of the 2016 phone survey respondents and 59% of the 2019 phone survey respondents was for the health benefits (e.g. physical activity / exercise). The majority of the 2019 Internet survey respondents (62%) also identified health benefits as a motivator for walking. The two next most common motivating factors for the 2016 and 2019 phone survey respondents were walking the dog and getting to a specific destination (e.g. work, school, store, etc.)

Table 23: Main motivation for walking

Motivation for walking	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
For health benefits - exercise / physical activity	228	58.2	225	58.9	128	61.5
To walk the dog	59	15.1	46	12.0	32	15.4
To get to a specific destination (work, school, store, etc.)	35	8.9	54	14.1	12	5.8
To be outdoors / fresh air	23	5.9	30	7.9	0	0.0
To socialize with neighbours / friends / family, etc.	16	4.1	16	4.2	14	6.7
Convenience	9	2.3	3	0.8	3	1.4
No alternatives	9	2.3	5	1.3	8	3.8
Low cost to get around	2	0.5	0	0.0	3	1.4
Other [a]	11	2.8	3	0.8	8	3.8
Total	392	100	382	100	208	100

[a] For those who stated “other”, the main motivations included taking their children on walks or walking to relax.

Respondents were asked to identify what they consider to be the key benefits of walking. A comparable high proportion of phone and Internet survey respondents in 2016 (83%) and 2019 (87%) associated walking with health-related benefits. A substantial proportion of phone and Internet survey respondents in 2016 and 2019 also appreciate the value of being outdoors when walking and the importance of walking in reducing stress.

Table 24: Benefits of walking

Key benefits of walking	2016		2019			
	Phone Survey (n=379)		Phone Survey (n=365)		Internet Survey (n=211)	
	Number	Percent	Number	Percent	Number	Percent
Health benefits	313	82.6	317	86.8	183	86.7
To be outdoors	190	50.1	139	38.1	148	70.1
Reduce stress	106	28.0	84	23.0	118	55.9
Socializing	61	16.1	75	20.5	61	28.9
Save money (avoid car, public transit costs)	35	9.2	12	3.3	35	16.6

Respondents were allowed to identify more than one benefit of walking.

Factors that Impact Frequency of Walking

Respondents were asked to indicate if they were interested in walking more than they currently do. Approximately 56% of the phone survey respondents in 2016 and 2019 reported that they were interested in walking more while approximately 65% of the 2019 Internet survey respondents indicated that they are interested in walking more.

In the demonstration area, the proportion of phone survey respondents indicating an interest in walking more was slightly lower in 2019 compared to 2016 (47% vs. 56%) while approximately 76% of the 2019 Internet survey respondents indicated that they are interested in walking more.

In the north central area, the proportion of phone survey respondents indicating an interest in walking more was slightly higher in 2019 compared to 2016 (58% vs. 56%) while approximately 61% of the 2019 Internet survey respondents indicated that they are interested in walking more.

Table 25: Interest in walking more

Interest in walking more		2016		2019			
		Phone Survey		Phone Survey		Internet Survey	
		Number	Percent	Number	Percent	Number	Percent
All respondents	Yes	175	55.9	157	56.3	107	64.5
	No	119	38.0	110	39.4	29	17.5
	Not sure	19	6.1	12	4.3	30	18.1
	Total	313	100	279	100	166	100
Demonstration area	Yes	37	56.1	25	47.2	31	75.6
	No	27	40.9	27	50.9	6	14.6
	Not sure	2	3.0	1	1.9	4	9.8
	Total	66	100	53	100	41	100
North / central area	Yes	138	55.9	132	58.4	76	60.8
	No	92	37.2	83	36.7	23	18.4
	Not sure	17	6.9	11	4.9	26	20.8
	Total	247	100	226	100	125	100

Survey respondents were asked to comment on the key factors that prevent them from walking more. The two most common factors reported in each of the three survey groups were lack of time / too many other commitments and health issues and/or disability issues. Another factor that showed up in substantial numbers across all three survey groups was the inconvenience associated with walking (i.e. the distance to a destination is too far to walk).

A small proportion of the 2016 (6%) and 2019 (2%) phone survey respondents suggested that the inadequate maintenance of sidewalks and trails was a factor that limited their walking activity. A much higher proportion of the 2019 Internet survey respondents (19%) identified this as a key factor that limited their walking activity.

Table 26: Factors preventing people from walking more

Factors that prevent people from walking more	2016		2019			
	Phone Survey (n=379)		Phone Survey (n=365)		Internet Survey (n=211)	
	Number	Percent	Number	Percent	Number	Percent
Lack of time / other commitments	179	47.2	167	45.8	75	36.5
Health issues / disability / age	89	23.5	105	28.8	71	33.6
Already walking enough / getting enough exercise	75	19.8	48	13.2	31	14.7
Distance to destinations is too far / not convenient or practical	47	12.4	27	7.4	62	29.4
Sidewalks / trails are not properly maintained	22	5.8	6	1.6	40	19.0
Perceived safety issues	18	4.7	4	1.1	32	15.2
Lack of motivation	0	0.0	18	4.9	4	1.9
Don't like to walk	12	3.2	5	1.4	5	2.4
Poor weather	0	0.0	38	10.4	5	2.4
Prefer to drive or take public transit	3	0.8	2	0.5	16	7.6

Respondents were allowed to identify more than one factor.

Survey respondents were asked to indicate how the winter/colder months affected their walking habits. A slightly higher proportion of the 2019 phone survey respondents compared to the 2016 respondents reported that the amount of walking they do in the winter months is about the same or higher than the summer months (30% vs. 28%). A slightly lower proportion of the 2019 phone survey respondents compared to the 2016 respondents reported that the amount of walking they do in the winter months is less than the summer months (70% vs. 72%).

Approximately 80% of the 2019 Internet survey respondents reported that they walk less during the winter months compared to the summer months while 20% indicated that the amount of walking they do in the winter is about the same or higher than the summer months.

Table 27: Walking habits in the winter months

Walking habits in the winter months	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
I walk much less in the colder months	166	44.4	146	41.2	100	52.1
I walk somewhat less in the colder months	104	28.0	102	28.7	54	28.1
I walk about the same amount in the colder and warmer months	89	23.8	98	27.7	34	17.7
I walk somewhat more in the colder months	11	3.0	5	1.3	4	2.1
I walk much more in the colder months	3	0.8	3	1.0	0	0.0
Total	373	100	355	100	192	100

3.3.2 Neighbourhood Walkability

Survey respondents were asked a series of questions on the walkability of their neighbourhood. The following definition of walkability was provided to the respondents:

Walkability means how easily you can walk around your community where walking is easier because there are sidewalks, there is enough room on the sidewalks, the sidewalks are in good shape, there are signs, good lighting at night, and you have places to walk or go to.

Overall, a large majority of the 2016 (92%) and 2019 (89%) phone survey respondents agreed to some extent that their neighbourhood is walkable / walking friendly. Within this group, a slightly higher proportion of the 2019 respondents **strongly agreed** that their neighbourhood is walkable / walking friendly compared to the 2016 respondents (49% vs. 43%).

A comparable proportion of the 2019 Internet survey respondents (88%) agreed to some extent that their neighbourhood is walkable / walking friendly compared to the 2019 phone survey respondents but a smaller proportion of the Internet survey group strongly agreed with this view (34%).

Table 28: Perception of neighbourhood walkability in general

"My neighbourhood is walkable or walking friendly."	**2016**		**2019**			
	Phone Survey		**Phone Survey**		**Internet Survey**	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
1 Strongly agree	149	42.7	157	48.5	69	33.7
2 Agree	147	42.1	92	28.4	65	31.7
3 Somewhat agree	24	6.9	38	11.7	47	22.9
4 Neither agree nor disagree	8	2.3	6	1.9	1	0.5
5 Somewhat disagree	6	1.7	17	5.2	13	6.3
6 Disagree	12	3.4	7	2.2	5	2.4
7 Strongly disagree	3	0.9	7	2.2	5	2.4
Total	349	100	324	100	205	100

Results from the 2019 mobile app quiz provide further confirmation that a large proportion of residents view their neighbourhood as walkable / walking friendly. At least 80% of the quiz respondents (1,010 of 1,262) agreed to some extent that their neighbourhood is walkable / walking friendly.[44]

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

[44] Question used in the Carrot App survey: How much do you agree or disagree with the following statement: "My neighbourhood is walking friendly (or wheelchair friendly)."

Table 29: Average level of agreement in relation to neighbourhood walkability in general (1=Strongly agree and 7=Strongly disagree)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	349	1.9	324	2.0	205	2.3
Demonstration area	63	2.0	53	2.0	43	2.0
North / central area	248	1.9	225	2.1	126	2.4

The figures for the demonstration area and the north / central area are based on the reported postal code data.

With respect to winter specific walkability, a small majority of the 2016 (62%) and 2019 (53%) phone survey respondents agreed to some extent that their neighbourhood was walkable / walking friendly. A slightly higher proportion of the 2019 phone survey respondents reported that their neighbourhood was not walkable / walking friendly compared to the 2016 respondents (44% vs 34%). It is important to note that differences in winter weather severity in 2016 and 2019 may account for some of the variation noted above.

A slightly higher proportion of the 2019 Internet survey respondents (50%) did not feel that their neighbourhood is walkable / walking friendly compared to the 2019 phone survey respondents.

Table 30: Perception of neighbourhood walkability in the winter months

"My neighbourhood is walkable or walking friendly in the winter months."	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
1 Strongly agree	42	12.2	48	15.0	6	3.0
2 Agree	94	27.3	58	18.1	33	16.7
3 Somewhat agree	77	22.4	62	19.4	43	21.7
4 Neither agree nor disagree	14	4.1	13	4.1	14	7.1
5 Somewhat disagree	54	15.7	38	11.9	35	17.7
6 Disagree	43	12.5	52	16.3	35	17.7
7 Strongly disagree	20	5.8	49	15.3	32	16.2
Total	344	100	320	100	198	100

A comparison of the average scores from the 2016 and 2019 phone survey revealed the following significant differences:

- Survey respondents as a whole were less inclined to agree that their neighbourhood was walkable / walking friendly in the winter months in 2019 compared to 2016 ($p \leq 0.01$).

- Survey respondents in the north / central area were less inclined to agree that their neighbourhood was walkable / walking friendly in the winter months in 2019 compared to 2016 ($p \leq 0.05$).

Table 31: Average level of agreement in relation to neighbourhood walkability in the winter (1=Strongly agree and 7=Strongly disagree)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	343	3.4	320	3.9	198	4.4
Demonstration area	63	3.3	52	3.5	43	4.2
North / central area	245	3.5	223	3.9	120	4.5

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents that reported their general health as excellent or very good were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in general ($p \leq 0.05$) and during winter months ($p \leq 0.01$) compared to respondents that reported their general health as good, fair or poor.

- In 2016, respondents that have resided in the community for five years or less were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in the winter compared to respondents that have resided in the community for six years or more ($p \leq 0.01$).

- In 2019, male respondents were more likely to agree that their neighbourhood is walkable or walking friendly in the winter months ($p \leq 0.05$).

- In 2019, respondents under the age of 50 were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in the winter months compared to respondents 50 years of age or older ($p \leq 0.05$).

- In 2019, respondents that have resided in the community for five years or less were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in general compared to respondents that have resided in the community for six years or more ($p \leq 0.05$).

- In 2019, respondents that lived south of Talbot Street were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in general compared to respondents that lived north of Talbot Street ($p \leq 0.05$).

- In both 2016 and 2019, respondents with total annual household income of $50,000 or more were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) during winter months compared to respondents with total annual household income of less than $50,000 ($p \leq 0.05$ in 2016 and 2019).

Survey respondents were asked to comment on the factors that inhibit their ability to walk outdoors in the winter. The two most common factors reported in 2016 and 2019 were concerns related to the adequacy of snow/ice removal (by the City and neighbours) and concerns about the challenges / safety risk associated with walking in snowy/icy conditions. Wheelchair users

noted that snow and ice accumulation made it especially difficult for them to use sidewalks. A small number of respondents in 2016 and 2019 also identified the poor condition or limited availability of sidewalks as a concern (in some cases this meant having to walk on the road).

Table 32: Factors inhibiting walking in the winter months

Reasons the neighbourhood is not walking friendly during the winter months	2016		2019			
	Phone Survey (n=140)		Phone Survey (n=167)		Internet Survey (n=128)	
	Number	Percent	Number	Percent	Number	Percent
Snow / ice removal (by the City and neighbours) is not adequate	66	47.1	122	73.1	98	76.6
Snow and/or ice accumulation makes it challenging / unsafe to walk	82	58.6	44	26.3	45	35.2
General concerns about the condition or availability of sidewalks	16	11.4	26	15.6	11	8.6

Respondents were allowed to identify more than one reason.

Sidewalk Accessibility

Survey respondents were asked to indicate the extent to which there are sidewalks in their neighbourhood. A large majority of the respondents in 2016 and 2019 (70%+) reported that all or most of the streets in their neighbourhood have sidewalks. A higher proportion of the 2019 phone survey and Internet survey respondents reported that all of the streets in their neighbourhood have sidewalks compared to the 2016 survey (38% and 34% vs. 29%).

Table 33: Presence of sidewalks

How many of the streets in your neighbourhood have sidewalks?	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
All of the streets	101	29.0	123	38.1	70	34.1
Most of the streets	173	49.7	136	42.1	88	42.9
Some of the streets	45	12.9	36	11.1	31	15.1
Few of the streets	20	5.7	12	3.7	11	5.4
None of the streets	9	2.6	16	5.0	5	2.4
Total	348	100	323	100	205	100

Comfort level with using Sidewalks at Night

Survey respondents were asked about their comfort level using sidewalks in their neighbourhood at night. A large majority of the 2016 (91%) and 2019 (85%) phone survey respondents as well as 75% of the 2019 Internet survey respondents reported that they were comfortable to some extent using the sidewalks at night. A slightly higher proportion of the 2019 phone survey respondents (50%) reported that they were **very comfortable** using the sidewalks at night compared to 2016 phone survey respondents (44%).

A higher proportion of the 2019 survey respondents (14% for the phone survey and 21% for the Internet survey) reported that they have some level of discomfort using the sidewalks in their neighborhood at night compared to the 2016 phone survey respondents (8%).

Table 34: Comfort level with using sidewalks in the neighbourhood at night

Comfort level using the sidewalks in your neighborhood at night	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
1 Very comfortable	136	43.9	134	50.2	39	20.1
2 Comfortable	124	40.0	80	30.0	60	30.9
3 Somewhat comfortable	21	6.8	14	5.2	46	23.7
4 Neither comfortable nor uncomfortable / undecided	3	1.0	3	1.1	8	4.1
5 Somewhat uncomfortable	12	3.9	16	6.0	14	7.2
6 Uncomfortable	12	3.9	9	3.4	11	5.7
7 Very Uncomfortable	2	0.6	11	4.1	16	8.2
Total	310	100	267	100	194	100

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

Table 35: Average level of comfort with using sidewalks in the neighbourhood at night (1=Very comfortable and 7=Very uncomfortable)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	310	2.0	267	2.1	194	3.0
Demonstration area	62	1.9	44	1.8	39	2.4
North / central area	218	2.0	187	2.1	120	3.0

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents that reported their general health as excellent or very good felt more comfortable using the sidewalks in their neighborhood at night ($p \leq 0.05$) compared to respondents that reported their general health as good, fair or poor.

- In both 2016 and 2019, female respondents felt less comfortable using the sidewalks in their neighborhood at night compared to male respondents (p≤0.05 in 2016 and p≤0.01 in 2019).

- In 2019, respondents 50 years of age or older felt less comfortable using the sidewalks in their neighborhood at night (p≤0.01) compared to respondents under the age of 50 (p≤0.01).

- In 2019, respondents with total annual household income of less than $50,000 felt less comfortable using the sidewalks in their neighborhood at night compared to respondents with total annual household income of $50,000 or more (p≤0.01).

Survey respondents that reported some level of discomfort with using the sidewalks at night were asked to comment on their reasons for feeling this way. The two most common factors reported in 2016 and 2019 were linked to safety related concerns (i.e. feelings of personal safety and concerns about the adequacy of sidewalk lighting).

Table 36: Reasons for feeling uncomfortable when using sidewalks at night

What are some of the reasons why you feel uncomfortable using the sidewalks in your neighbourhood at night?	2016		2019			
	Phone Survey (n=28)		Phone Survey (n=39)		Internet Survey (n=36)	
	Number	Percent	Number	Percent	Number	Percent
Don't feel safe	12	42.8	31	79.5	23	63.9
Sidewalks are not well lit	9	32.1	10	25.6	9	25.0
Crime in the neighbourhood	4	14.3	1	2.6	6	16.7
Sidewalks are in poor condition	2	7.1	1	2.6	6	16.7
Don't feel safe because of dogs	1	3.6	2	5.1	1	2.8

Respondents were allowed to identify more than one reason.

Survey respondents that reported some level of discomfort with using sidewalks at night were asked to share their suggestions on actions/changes that would make them feel more comfortable. The most common actions identified in the 2016 phone survey were improvements to lighting and improvements to the sidewalk conditions (e.g. sidewalk leveling, replacement of cracked / broken sidewalks). These actions/changes were also identified in the 2019 phone and Internet survey along with increasing / improving security measures (e.g. police presence, video cameras).

Table 37: Suggestions for making people feel more comfortable when using sidewalks at night

What are some of the things you think that could be done to make you feel more comfortable using the sidewalks in your neighbourhood at night?	2016		2019			
	Phone Survey (n=27)		Phone Survey (n=35)		Internet Survey n=25)	
	Number	Percent	Number	Percent	Number	Percent
Improving the lighting	8	29.6	9	25.7	18	72.0
Improving the condition of sidewalks (e.g. levelling and repairs to cracks)	6	22.2	4	11.4	4	16.0
Walking with someone	2	7.4	3	8.6	-	-
Adding security measures (police, cameras)	1	3.7	21	60.0	6	24.0
Don't know / unsure	11	40.7	3	8.6	1	4.0

Respondents were allowed to provide more than one suggestion.

Comfort level with using Trails and/or Parks at Night

Survey respondents were asked about their comfort level using trails and/or parks in the community at night. Slightly fewer than half (44%) of the 2016 and 2019 phone survey respondents and 24% of the 2019 Internet survey respondents reported that they were comfortable to some extent. A slightly higher proportion of the 2019 phone survey respondents (14%) reported that they were **very comfortable** using the using trails and/or parks at night compared to 2016 phone survey respondents (12%).

A slightly higher proportion of the 2019 phone survey respondents reported that they have some level of discomfort using the sidewalks in their neighborhood at night compared to the 2016 phone survey respondents (54% vs. 52%).

Table 38: Comfort level with using trails and/or parks in the community at night

Comfort level using the trails and/or the parks in your community at night	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
1 Very comfortable	27	11.9	30	13.8	6	3.6
2 Comfortable	46	20.4	40	18.4	12	7.1
3 Somewhat comfortable	26	11.5	26	12.0	22	13.0
4 Neither comfortable nor uncomfortable / undecided	9	4.0	3	1.4	11	6.5
5 Somewhat uncomfortable	38	16.8	35	16.1	23	13.6
6 Uncomfortable	51	22.6	43	19.8	42	24.9
7 Very Uncomfortable	29	12.8	40	18.4	53	31.4
Total	226	100	217	100	169	100

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

Table 39: Average level of comfort with using trails and/or parks in the community at night (1=Very comfortable and 7=Very uncomfortable)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	225	4.1	215	4.2	169	5.2
Demonstration area	49	3.6	30	4.2	37	4.6
North / central area	153	4.3	161	4.0	102	5.3

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents with total annual household income of less than $50,000 felt less comfortable using the trails and/or the parks in their community at night compared to respondents with total annual household income of $50,000 or more (p≤0.01).

- In both 2016 and 2019, female respondents felt less comfortable using the trails and/or the parks in their community at night compared to male respondents (p≤0.01 in 2016 and 2019).

- In 2019, respondents 50 years of age or older felt less comfortable using the trails and/or the parks in their community at night compared to respondents under the age of 50 (p≤0.01).

Survey respondents that reported some level of discomfort with using the trails and/or parks at night were asked to comment on their reasons for feeling this way. The two most common factors reported in 2016 and 2019 were linked to safety related concerns (i.e. feelings of personal safety and concerns about the adequacy of lighting on trails/paths).

Table 40: Reasons for feeling uncomfortable when using trails and/or parks at night

What are some of the reasons why you feel uncomfortable using the trails and/or parks in your neighbourhood at night?	2016		2019			
	Phone Survey (n=119)		Phone Survey (n=106)		Internet Survey (n=92)	
	Number	Percent	Number	Percent	Number	Percent
Don't feel safe	54	45.4	52	49.1	50	54.3
Lighting on the park trails / paths is inadequate	47	39.5	59	55.7	49	53.3
Don't feel comfortable with meeting strangers at night	12	10.1	3	2.8	3	3.3
Concerns / fear over animals/wildlife (e.g. coyotes)	7	5.9	6	5.7	3	3.3
Isolation/being alone	5	4.2	13	12.3	9	9.8
Mobility issues related to age/health	5	4.2	3	2.8	-	-
The trails / parks are difficult to use - hilly/rough/uneven	3	2.5	1	0.9	1	1.1

Respondents were allowed to identify more than one reason.

Survey respondents that reported some level of discomfort with using trails and/or parks at night were asked to share their suggestions on actions/changes that would make them feel more comfortable. The most common actions identified in the 2016 and 2019 survey were improvements to lighting and improvements to security (e.g. police patrols, cameras, emergency stations).

Table 41: Suggestions for making people feel more comfortable when using trails / parks at night

What are some of the things you think that could be done to make you feel more comfortable using the trails and/or parks in your community at night?	2016		2019			
	Phone Survey (n=109)		Phone Survey (n=60)		Internet Survey (n=58)	
	Number	Percent	Number	Percent	Number	Percent
More and/or improved lighting	56	51.4	52	86.7	46	79.3
Provide / increase police patrol on trails / in parks	10	9.2	13	21.7	17	29.3
Provide emergency stations/buttons	2	1.8	3	5.0	5	8.6
Establish / promote group walks	7	6.4	4	6.7	1	1.7
Provide more information / maps / signage	4	3.7	1	1.7	-	-
Install cameras on trails	-	-	2	3.3	6	10.3
Install wider paths	1	0.9	-	-		
Don't know / unsure	37	33.9	7	5.0	2	3.4

Respondents were allowed to identify more than one reason.

Improving Neighbourhood Walkability

There is broad recognition that a more walkable city contributes to a healthier community. Approximately 97% of the 2016 phone survey respondents and 98% of the 2019 phone survey respondents agreed to some extent that "*the more walking friendly the City of St. Thomas is, the healthier the community is.*" Approximately 94% of the 2019 Internet survey respondents also agreed with this view to some extent. A slightly higher proportion of the 2019 Internet survey respondents (59%) reported that they **strongly agreed** with this view compared to 2016 phone survey respondents (50%).

Table 42: Walkability and community health

How much do you agree or disagree with the following statement: *"The more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is."*	**2016**		**2019**			
	Phone Survey		**Phone Survey**		**Internet Survey**	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
1 Strongly agree	174	50.0	187	58.8	105	53.3
2 Agree	145	41.7	111	34.9	54	27.4
3 Somewhat agree	19	5.5	12	3.8	27	13.7
4 Neither agree nor disagree	5	1.4	2	0.6	8	4.1
5 Somewhat disagree	2	0.6	2	0.6	1	0.5
6 Disagree	2	0.6	2	0.6	1	0.5
7 Strongly disagree	1	0.3	2	0.6	1	0.5
Total	348	100	318	100	197	100

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

Table 43: Average level of agreement on the relation between community walkability & community health (1=Strongly agree and 7=Strongly disagree)

	2016		**2019**			
	Phone Survey		**Phone Survey**		**Internet Survey**	
	Number	**Average score**	**Number**	**Average score**	**Number**	**Average score**
All respondents	348	1.6	318	1.5	197	1.8
Demonstration area	66	1.5	53	1.6	41	1.9
North / central area	246	1.7	222	1.5	124	1.7

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents 50 years of age or older were more likely to agree that the more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is compared to respondents under the age of 50 ($p \leq 0.05$).

- In 2019, respondents that reported their general health as excellent or very good were more likely to agree that the more walking (wheelchair) friendly the City of St. Thomas is,

the healthier the community is compared to respondents that reported their general health as good, fair or poor (p≤0.01).

- In 2019, respondents that have resided in the community for five years or less were more likely to agree that the more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is compared to respondents that have resided in the community for six years or more (p≤0.01).

Survey respondents were asked how interested they are in what the City is doing to make the community more walking (wheelchair) friendly. There is broad interest among the 2016 and 2019 survey groups on this matter. A slightly lower proportion of the 2019 phone survey respondents (82%) reported that they had some level of interest compared to the 2016 phone survey respondents (90%) while 92% of the 2019 Internet survey respondents expressed some level of interest in what the City is doing to make the community more walking (wheelchair) friendly. A slightly higher proportion of the 2019 phone survey respondents (35%) reported that they are **very interested** in what the City is doing to make the community more walking (wheelchair) friendly compared to 2016 phone survey respondents (29%).

Table 44: Interest in what the City is doing to make the community more walking (wheelchair) friendly

How interested are you in what the City is doing to make the community more walking (wheelchair) friendly?	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
1 Very interested	96	28.7	105	35.0	73	37.4
2 Interested	133	39.7	69	23.0	68	34.9
3 Somewhat interested	73	21.8	72	24.0	39	20.0
4 Neither interested nor disinterested	23	6.9	31	10.3	14	7.2
5 Somewhat disinterested	4	1.2	13	4.3	1	0.5
6 Disinterested	5	1.5	8	2.7	0	0.0
7 Very disinterested	1	0.3	2	0.7	0	0.0
Total	335	100	300	100	195	100

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

Table 45: Average level of interest in what the City is doing to make the community more walking friendly (1=Very interested and 7=Very disinterested)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	336	2.2	300	2.4	195	2.0
Demonstration area	64	2.2	46	2.5	42	2.2
North / central area	238	2.1	215	2.3	122	1.9

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In both 2016 and 2019, female respondents were more interested in what the City was doing to make the community more walking (wheelchair) friendly ($p \leq 0.01$ in 2016 and 2019) compared to male respondents.

- In 2019, respondents that reported their general health as excellent or very good were more interested in what the City was doing to make the community more walking (wheelchair) friendly compared to respondents that reported their general health as good, fair or poor ($p \leq 0.01$).

Survey respondents were asked how satisfied they are with the efforts in the community to make their neighbourhood walking (wheelchair) friendly. The large majority of the 2016 (86%) and 2019 (86%) phone survey respondents as well as the 2019 Internet survey (76%) respondents indicated that they are satisfied to some extent with the efforts in their community to make their neighbourhood walking (wheelchair) friendly. A slightly higher proportion of the 2019 phone survey respondents (35%) reported that they are **very satisfied** with the efforts in their community compared to 2016 phone survey respondents (23%).

Table 46: Satisfaction with efforts in the community to make neighbourhoods walking (wheelchair) friendly

How satisfied are you with the efforts in your community to make your neighbourhood walking (wheelchair) friendly?	**2016**		**2019**			
	Phone Survey		**Phone Survey**		**Internet Survey**	
	Number	**Percent**	**Number**	**Percent**	**Number**	**Percent**
1 Very satisfied	77	23.2	102	34.8	24	13.3
2 Satisfied	151	45.5	106	36.2	61	33.9
3 Somewhat satisfied	57	17.2	44	15.0	52	28.9
4 Neither satisfied nor dissatisfied	22	6.6	9	3.1	28	15.6
5 Somewhat dissatisfied	9	2.7	18	6.1	9	5.0
6 Dissatisfied	9	2.7	8	2.7	6	3.3
7 Very dissatisfied	7	2.1	6	2.0	0	0.0
Total	332	100	293	100	180	100

Results from the 2019 mobile app quiz provide further confirmation that a large proportion of residents are satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly. Approximately 74% of the quiz respondents (930 of 1,262) were satisfied to some extent with the efforts in their community to make their neighbourhood walking (wheelchair) friendly.[45]

A comparison of the average scores from the 2016 and 2019 phone survey did not reveal any statistically significant differences between the two time periods or the two areas.

[45] Question used in the Carrot App survey: How satisfied are you with the efforts in your community to make your neighbourhood walking friendly (or wheelchair friendly)?

Table 47: Average level of satisfaction with efforts to make neighbourhoods walking (wheelchair) friendly (1=Very satisfied and 7=Very dissatisfied)

	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Average score	Number	Average score	Number	Average score
All respondents	332	2.4	293	2.3	180	2.8
Demonstration area	62	2.3	44	2.1	38	2.6
North / central area	235	2.4	207	2.3	115	2.8

The figures for the demonstration area and the north / central area are based on the reported postal code data.

The following significant differences were observed in the subgroups from the 2016 and 2019 phone survey:

- In 2016, respondents 50 years of age or older were more satisfied with the efforts in their community to make the neighbourhood walking (wheelchair) friendly compared to respondents under the age of 50 ($p \leq 0.05$).

- In 2016, respondents that reported their general health as excellent or very good were more satisfied with the efforts in their community to make the neighbourhood walking (wheelchair) friendly compared to respondents that reported their general health as good, fair or poor ($p \leq 0.01$).

- In 2019, female respondents were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly compared to male respondents ($p \leq 0.05$).

- In 2019, respondents that lived south of Talbot Street were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly compared to respondents that lived north of Talbot Street ($p \leq 0.05$).

Suggested Improvements

Survey respondents were asked for their views on possible improvements to make their neighbourhood more walking (wheelchair) friendly. Some of the more common suggestions across the 2016 and 2019 survey groups include adding additional sidewalks / improving existing sidewalks, ensuring that snow and ice are removed from sidewalks, ensuring adequate lighting for sidewalks, expanding and improving crosswalks and ensuring that curbs are accessible for all pedestrians (e.g. cut curbs, ramped curbs, grooved curbs), and expanding and improving trails.

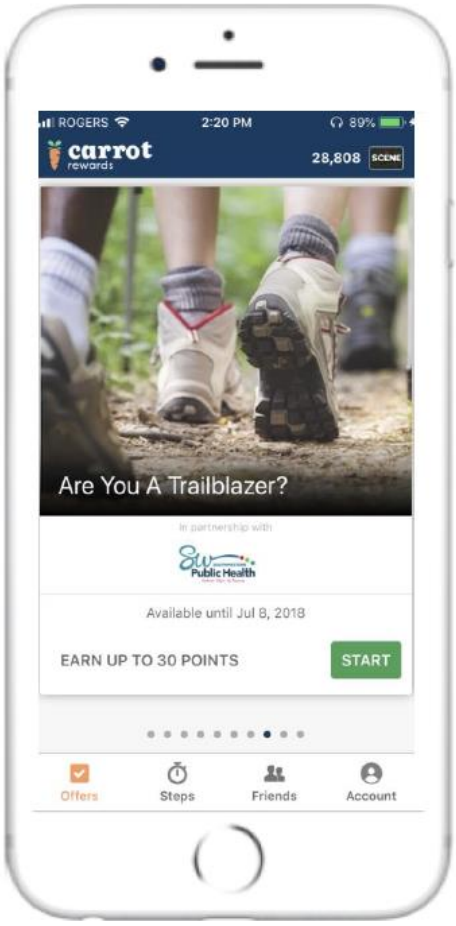
Table 48: Suggestions for making neighbourhoods more walking friendly

What improvements do you think need to be made to make your neighbourhood more walking (wheelchair) friendly?	2016		2019			
	Phone Survey (n=341)		Phone Survey (n=206)		Internet Survey (n=45)	
	Number	Percent	Number	Percent	Number	Percent
Sidewalks (new / improve – wider and level)	80	23.5	63	30.6	18	40.0
Snow / ice removal from sidewalks	45	13.2	30	14.6	5	11.1
Sidewalk lighting (more / improve / repair)	28	8.2	17	8.3	2	4.4
Curbs (ramped / grooved)	26	7.6	17	8.3	6	13.3
Trails (more / longer / improve / maintain)	20	5.9	10	4.9	4	8.9
Bicycle friendly (new paths and lanes)	17	5.0	7	3.4	3	6.7
Lighting for parks & trails (more / improve / repair)	16	4.7	10	4.9	1	2.2
Traffic calming	11	3.2	12	5.8	2	4.4
More / improved crosswalks	10	2.9	12	5.8	4	8.9
Promote walking (health benefits, walking groups)	8	2.3	4	1.9	1	2.2
Signage & maps for trails (more / improved)	7	2.1	2	1.0	1	2.2
Cleaner walkways / paths (more litter bins, remove litter, remove overgrowth)	6	1.8	6	2.9	1	2.2
More destination places (play grounds, sports fields)	5	1.5	4	1.9	1	2.2
Security features (policing, cameras)	5	1.5	3	1.5	2	4.4
Improve public transit (shelters, expand service)	4	1.2	2	1.0	-	-
More walkway rest stops, seating areas / public washrooms	3	0.9	5	2.4	3	6.7
Improved urban planning in general	1	0.3	6	2.9	2	4.4
No suggestions / unsure	119	34.9	49	23.8	3	6.7

Respondents were allowed to provide more than one suggestion.

3.4 Mobile App - Health Promotion Survey Results

As many as 1,932 users completed all or a portion of the offers/activities in the Carrot mobile app in June, July and August 2018. It is important to note that access to the Carrot app was not controlled through a sampling method (e.g. random, stratified or cluster sampling) and the findings cannot be generalized across the wider population. Despite these limitations, the results from the Carrot app are helpful in that they provide additional insights on the views and behavior of residents including certain demographics that were not well represented in the household survey (e.g. younger age groups).



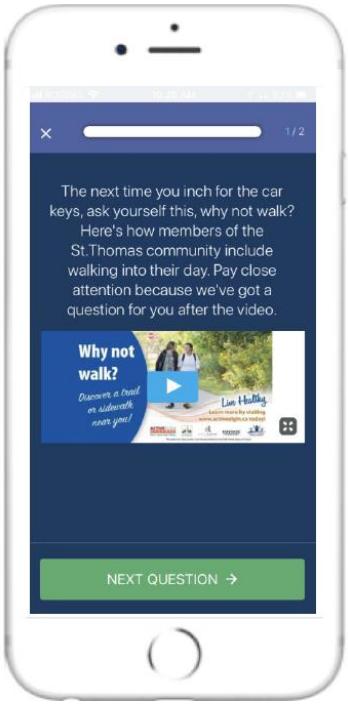
The ages of the Carrot app users range from 13 years to 65 years and over. Approximately 20% of the app users were under the age of 25, 65% were between the ages of 25 and 54, and 15% were 55 years of age or older. Approximately 75% of the app users were female.

The “Walkability St. Thomas Creating Connections” video was imbedded in the Carrot app to engage users with interactive content and questions. A total of 1,728 Carrot app users watched the imbedded video and ultimately visited the SWPH YouTube channel where additional resources are available. After viewing the imbedded video approximately 65% of the users correctly identified the Great Trail (Trans Canada Trail) as the trail that allows them to go from one end of Elgin-St. Thomas to the other.

Just over 80% of the app users are aware that Elgin-St. Thomas has an extensive trail network and at least 40% have used the trail network (e.g. walked, biked, cross country skied, etc.). The findings also show that older users are more likely to be aware of the existing trail network and that female users are more likely to have used the trail network.

App users were asked to identify the biggest barrier that prevents / limits them from accessing recreation in the community (i.e. local parks and trails). Approximately one third of the app users reported that they did not have any barriers to recreation. About 23% of the app users reported that the cost of enrolling in recreation programs was a major barrier while 18% reported that their proximity to recreational facilities was a major barrier. Eleven percent of the app users noted that the limited/poor connectively of sidewalks, bike lanes and trails created a major barrier to recreation and 8% indicated that they lacked sufficient social support in accessing recreation. Younger users were more likely to identify cost of enrolling in recreation programs as a barrier.

After reviewing information about the Elgin-St. Thomas trail network through the app, 59% reported that they planned to use the trails in the future while 35% were undecided. Only 6% indicated that they had no plans to use the trails in the future.



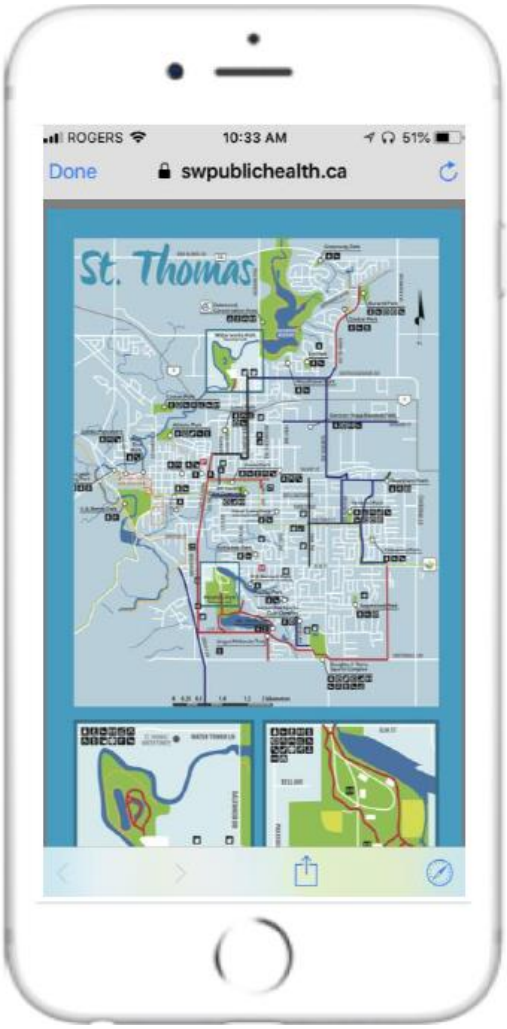
The app users were asked to identify key factors/changes that would further serve to encourage their use of the Elgin-St. Thomas trails. Approximately 45% of the users identified better signage and lighting as key improvements and improved safety in general was identified by a further 18% of the users. Older users were more likely to identify more signage as an important factor for encouraging their use of the trails. About 22% of the users identified the importance of designated bike lanes and 15% of users view improved maintenance as a key factor in promoting grater use of the trails.

The app attracted users from across the City of St. Thomas. Every neighbourhood was represented when users were asked to identify the neighbourhood that they walk in the most. The app user group shows higher numbers of neighbourhood walkers in Dalewood, Lake Margaret, Elgin Mall, and South Edgeware than other neighbourhoods. However, approximately 56% of the app users (997) reported that they do not walk in any of the St. Thomas neighbourhoods.

Table 47 What neighbourhood do you walk in the most?

	Number	Percent
I do not walk in any neighbourhoods	997	56%
South Edgeware	92	5%
South Gate	75	4%
Dalewood	116	7%
Wellington Central	39	2%
Park and Elm	61	3%
Elgin Mall	115	6%
Old Courthouse	50	3%
Balaclava South	12	1%
Lake Margaret	129	7%
Elm West	25	1%
Northwest Talbot	41	2%
Shaw Valley	30	2%
Total	1,782	100%

With respect to impacts, the app users were asked to identify how the changes / improvements to the walking and trail infrastructure in St. Thomas over the last two years influenced their walking habits around the community. Approximately 14% of the users (249) reported that their walking habits have increased significantly and a further 20% (349) reported that their walking habits have increased somewhat. About 65% of the users (1,159) reported no change in their walking habits and only about 1% (25) reported a reduction in their walking habits. App users under the age of 18 were more likely to experience a significant increase in the use of the trail network.



3.5 Observations from Project Partners / Relevant Stakeholders

Key informant interviews were conducted with project partners / relevant stakeholders at the completion of the project to capture their observations / reflections on the project. Interviews were conducted with seven individuals in total (two project staff at SWPH, two housing development representatives, two City of St. Thomas officials - an elected official and a staff representative, and a representative of a local active transportation interest group - NGO).

Key Objectives of the Project and Motivation for Involvement

Project partners / stakeholders were asked to comment on what they viewed as being the key objectives of the Creating Connections project and why they were motivated to participate in the partnership. A common theme that carried across all of the partners was the desire to promote a healthier community.

SWPH staff noted that a key objective was to promote more outdoor physical activity in the community through the creation / linking of more trails and improving related infrastructure (i.e. sidewalks, crosswalks). As observed by one SWPH representative, a broad objective of the partners was to contribute to the quality of life in St. Thomas through the development / improvement of trails that benefit the entire community.

Developers noted that they were interested in bringing people together for a common purpose / interest: to improve the walkability of the neighbourhoods and promote healthy living through walking and getting outdoor exercise. As described by one developer, the project aimed to better connect the community through trails and sidewalks while promoting physical and mental health benefits (e.g. physical activity and socializing when outdoors in the community). The developer further noted that the project would serve to reverse the course of cocooning / disassociating (i.e. people staying indoors and not leaving their premises to explore the neighbourhood and socialize). Another developer emphasized that the project supported the connecting of walking infrastructure to make it easier and more appealing to walk around the neighbourhood and community.

A goal of the City is to make St Thomas a healthy and desirable community to live in by offering a good lifestyle that includes walkways and trails with connectivity to neighbourhoods and other destination points within the City (i.e. walking routes that avoid dead ends). City officials noted that the project played an important role in contributing to ongoing initiatives to improve the walkability of the community through new and upgraded trails that supported a broad range of uses (e.g. walking, wheelchairs, baby strollers, roller blades, scooters, skateboards, bikes, etc.). As noted by one official, the City started installing trails in 2014 as part of its healthy community program and the Creating Connections project helped to accelerate the development of walking infrastructure in the community. City officials also noted that promotion was an important aspect of the Creating Connections project to ensure that residents were better informed about the expanded / improved walking options in the City.

Strengths and Challenges of the Partnership

Project partners / stakeholders were asked to share their views on the strengths and challenges of the of the Creating Connections partnership.

With respect to strengths, SWPH staff emphasized that all of the partners were very supportive of the initiative and that the group worked with a common purpose toward a common vision (i.e. make the community healthier). SWPH staff also emphasized the important role that partners

played as advocates within their own organizations to ensure that the project remained a priority. For example, City staff (representatives with Parks and Recreation and Environmental Services) played a key role in promoting the project vision and related activities to council and this leveraged ongoing support from council to move forward with plans to improve the walking infrastructure.

Developers commented on the importance of having a 'champion' involved in a multi-year project to keep partners focused and motivated. It was noted that SWPH fulfilled this role and provided effective leadership. As descried by one developer, the SWPH representatives were great motivators and very good at bringing people together and getting them to buy into the initiative.

Developers were invited by SWPH staff to assist in developing the funding proposal that was submitted to PHAC and they described this as a helpful collaborative exercise. As noted by one developer, the partners brainstormed ideas on which types of projects were possible / needed (i.e. projects that would promote healthy living). Some of the key themes that came out of the discussions included the importance of encouraging trail use and outdoor activity and exercise and ensuring that that outdoor trails / footpaths would have broad appeal across the community / across demographics (i.e. young and old).

Developers also highlighted the importance of having the right combination of public and private interests involved in the partnership and having the 'most appropriate voices as table' to help inform and decide what actions would be taken and who would be responsible for the actions. It was further emphasized that having City officials involved in the partnership facilitated timely decision making as these officials were familiar with what their department resources could manage / commit to.

Developers noted that the partners were effectively engaged through quarterly meetings and ongoing communication by email and/or phone as needed. As noted by one developer, routine communication was very helpful and it was important to have a dedicated partnership that could talk through challenges and come up with solutions.

City officials observed that the partnership was well structured and included a strong makeup of interests that were needed to facilitate action (i.e. City officials, developers, and SWPH). As noted by one official, the partners were enthusiastic and motivated to bring about positive infrastructure development to promote walking and healthy activity in the community.

The NGO representative noted that the mix of different stakeholders in the partnership provided a great dynamic and it was very valuable to have 'decision makers' actively involved as this allowed the group to enact initiatives and get things done.

The partners identified no significant challenges or issues with the partnership as a working group. Indeed, all of the partners were generally pleased with how well the group of different stakeholders worked together. Overall, the partners maintained consistently positive views in relation to the project purpose throughout the duration of the project. The partners also maintained consistently positive views in relation to the roles and responsibilities of the members and were satisfied with their involvement in the partnership.[46]

[46] See Appendix E for the results of the annual partnership survey.

All of the partners had other ongoing obligations / interests which at times placed limits on their ability to participate in project meetings and it was important to use the meetings to review the action items. Furthermore, it was important for key decision makers to be in attendance at the meetings as this ensured timely input to the discussions.

It was suggested that some promotional activities could have been better coordinated by the partnership to maximize the level of awareness in the community (e.g. ensuring that the most relevant communication officials were engaged in supporting the distribution of promotional materials).

Key Achievements of the Project

Project partners / stakeholders were asked to share their views on the key achievements of the Creating Connections project. All of the partners expressed satisfaction with what the project achieved.

SWPH staff noted that 90% of the trails in the community are now linked and the investment in new trails as well as improvements to existing trails has stimulated a noticeable increase in the use of the trails. For example, it was noted that the previous gravel surface trail around Lake Margaret had very few users and the installation of the new hard surface trail has resulted in an increase in the number of users as well as a greater variety of usage (e.g. travelling on foot, travelling with assistive devices such as wheelchairs, scooters, inline skates, skateboards, etc.).

SWPH staff emphasized that in addition to the concentrated effort to enhance the trail system in the demonstration area, the project also enhanced the overall walkability of the community through the support of enhancements to sidewalks / foot paths / trails in other neighbourhoods. As observed by one SWPH representative, the Creating Connections initiative has brought more people outdoors into the community and residents are meeting each other through the use of the trail system.

SWPH staff further observed, that the project raised awareness about needs in low income areas (i.e. walking is important in these neighbourhoods) and the importance of supporting infrastructure development in these areas (e.g. sidewalks, parks and connected foot paths to destinations).

Developers noted that the new trails and other enhancements made to sidewalks / foot paths across the community have improved the quality of life in the City. Developers focused their attention on the south end of the City (demonstration areas) where they are most active and a key interest of theirs was to build trails and sidewalks that linked into the existing network of sidewalks and trails and avoid dead ends (i.e. provide destinations/circle routes to make the walk feel more like a ‘fresh journey’ for the whole trip). One developer commented that the new trails have been ‘embraced by the community’ and they have directly observed an increase in the number of people using the trails. Another developer noted that there is in increased level of interest and excitement about the improvements that were made.

The developers viewed the public / private sector partnership as a great accomplishment in itself and were impressed with how well suited it was for this type of initiative where there was a common goal: to improve the City and make it more livable. As noted by one developer, all three partners gained value through the project:

- The City can promote the trails and connected sidewalks / footpaths as important amenities that residents and businesses alike can value.

- SWPH can promote an accessible outdoor activity (i.e. exploring the City on foot) and the related health benefits.
- Developers can use the trail system as an attractive selling feature for promoting the quality of life in the City.

City officials noted that the Creating Connections project helped in undertaking a major effort to upgrade the existing walking infrastructure and build new trails which in turn improved the overall walkability of the City. As noted by one official, the project served as a catalyst for advancing the schedule / timeline of infrastructure upgrades and trail development and a key achievement was the linking of trails and pathways in the City which then provided more destination points for walkers and made walking a more attractive option.

City officials also emphasized that the project helped raise awareness about the network of sidewalks / footpaths / trails in the City and encouraged residents to get outdoors and walk. One City official observed that it can be very challenging to get people to be more active but SWPH used some creative ways to encourage residents to get outdoors and experience the trails and walkways in the City

The NGO representative commended all of the partners for their role for making the community more walking friendly:

- The developers have been very community conscious and proactive in incorporating amenities as part of their housing projects to promote / support walking / cycling.
- The City has been active in upgrading sidewalks and enhancing crosswalks, painting lines, etc. and there are great champions on staff who are strong advocates for making improvements to enhance the pedestrian infrastructure.
- SWPH has been very active promoting the health benefits of walking and directing residents to the areas of the community they can explore on foot.

The NGO representative noted that the end result of the committed partners working on interrelated initiatives is a healthier community where everyone potentially benefits.

With respect to community engagement, all of the partners felt that community residents were effectively engaged over the course of the project through the Walkability Study as well as other activities/events. SWPH staff and developers noted that community residents provided valuable input that confirmed that accessibility to walkways / trails was of key importance to the community.

Challenges Encountered by the Project

In general, the project encountered very few challenges but additional thought went toward determining the best use of the funding provided by PHAC. The funding model presented a challenge in that the funds from PHAC could not be used to cover construction materials and related labour costs. Given that a key element of the project involved the establishment of new / upgraded infrastructure, the restriction on applying grant money to related construction costs was something of a limitation and the partners has to ensure that all of these types of costs were covered through the contributions made by the partners themselves. It was noted that the PHAC definition of infrastructure changed part way through the initiative and the partnership had deliberations on what counted as cash contributions vs. in kind contributions. It was suggested that more clarity from PHAC on this matter would have been helpful.

A small number of residents raised concerns about the use of concrete for surfacing the trails (i.e. asphalt is viewed as a softer surface to walk/run on compared to concrete) but concrete was ultimately chosen as the hard surface material as it provides greater durability and requires less maintenance.

A small number of residents also had concerns that the hard surface trails would attract too many recreation devices (e.g. skateboards, roller blades, scooters, bikes, etc.) and make it less appealing to walkers. However, the partnership believed that it was important to promote multi-use trails rather than having the trails underused. The partners also emphasized the importance of educating residents on use of the shared trails (e.g. using signage to inform users about the various types of active transportation they might encounter on the trail and guidelines for trail etiquette).

Other Results / Benefits that Emerged from the Project

All of the partners found their involvement in the project to be a positive experience and a number of value-added benefits surfaced from the experience.

SWPH staff noted that the project provided an important learning opportunity for understanding how an effective public / private partnership could be built around a common vision. The project also provided insights on the importance of having key officials directly engaged at meetings to facilitate timely decision-making and follow-up action.

One SWPH representative observed that the project expanded their understanding of how Public Health can play an important role in community visioning and getting people on board to support an initiative. It was suggested that Public Health typically has a strong focus on outputs but this initiative allowed an opportunity for broader visioning and thinking creatively about possible measures to promote walking and healthier lifestyles.

Developers noted that they gained a fuller appreciation of the City government perspective and its operations as well as valuable insights on the benefits that can come from a collaborative public / private sector initiative. As noted elsewhere in this report, support for the development / enhancement of other community amenities has grown since the Creating Connections project was initiated and one of the developer partners (Doug Tarry Homes) provided a substantial contribution ($100,000) to the 2018 capital campaign to advance the completion of the St. Thomas Elevated Park.

As described by one developer, the partnership has built a legacy for the City and its residents and the south end in particular has really benefited from the project and hopefully this will serve as a model going forward for advancing walkability improvements in new and established neighbourhoods.

City officials noted that the project has greatly advanced the sidewalk and trail infrastructure in the community while providing the added benefit of demonstrating how Public Health, developers, and City officials can be brought together to discuss priorities and challenges and use a collaborate model to promote a healthier community.

4.0 Summary / Conclusions

The Creating Connections project has successfully achieved a number of objectives over the 2015-2019 period. The project engaged with a substantial number of residents through its planning and communication activities and significant additions and improvements were made to the walking infrastructure by the City and developers.

The planning activities ultimately provided the project partners with a better understanding of the needs / interests of the community and this information helped guide the type of walking related infrastructure that was built / improved across the community. The communication / promotional activities served to inform residents about the health benefits of walking and raised awareness about the improvements made to the sidewalks and trails in the community and the new / expanded opportunities for walking to destinations around the community.

Results from the various community surveys point to a positive trend in outdoor walking activity with some trends being more pronounced in the southern portion of the City where the demonstration area is located. The results also revealed significant differences between several subgroups within the sample population and these findings represent potential cues for where future walkability initiatives could be targeted.

Additional details on the performance and results of the project are summarized below.

Planning and Community Consultation and Engagement

Collectively, over 5,000 residents were consulted through various engagement activities since the project was implemented.

This was initiated with the completion of the St. Thomas Walkability Assessment and Action Plan in 2016 where residents were consulted to help inform the creation of a prioritized list of improvements to sidewalks, trails, pedestrian crossings and pedestrian amenities. A baseline survey of community walking habits was also conducted in 2016 involving residents from every neighhourhood in the City.

Key planning initiatives in 2017 included the release of the updated Cycling and Trails Master Plan and the Age Friendly Community Plan by the City as well as the Access to Recreation Report completed by SWPH and consultation through meetings with a local active transportation advocacy group (Citizens 4 Active Transportation).

Key activities in 2018 and 2019 included the completion of a new Trail Map of hiking and cycling routes in the City and Elgin County and the completion of the Elgin County Trails Study which complemented the Creating Connections project by identifying opportunities for improving trail connectivity throughout the area.

With respect to promotional events / activities, SWPH initiated its communications campaign in 2017 which included a new tag line (*Why not Walk?*) and used a variety of methods (i.e. billboards, videos, and social media) to encourage residents to get out and explore the new trails and sidewalks available. These promotions continued throughout the 2017-2019 period. Announcements through social media included updates on the completion of new trails and sidewalks and the promotion of different walking activities (e.g. walking to school, walking on your work break, walking in winter, etc.). SWPH also promoted the project through information booths at various community events and used a mobile app (Carrot Rewards program) to engage users with interactive content and share additional information and resources related to the project.

In 2019, SWPH presented two community events to celebrate the formal conclusion of the project. The first event was a Trails Challenge where residents were encouraged to use the trails in the City and post selfie photos of their visits to the five trail kiosks in the community. The final event was a Trails Open Event that was hosted by all of the project partners and featured a variety of free activities for children and adults (e.g. nature walks and talks, live music, outdoor yoga, and other fun activities).

Improvements to Sidewalk and Trail Infrastructure

Numerous additions and improvements to the walking infrastructure were made by the developers and the City of St. Thomas over the 2016-2019 period to support physical activity. The developers added new sidewalks and trails as part of their building / construction activity in the southern portion of the City while community wide improvements were made by the City of St. Thomas as part of the Infrastructure Capital Plan which follows a Complete Streets approach to creating streets that accommodate users of all ages and abilities and all modes of transportation including pedestrians, cyclists, motorists and transit users.

The infrastructure improvements made through the City Capital Plan and the Creating Connections project are complementary in that they support an overall improvement in the accessibility and connectivity of residential areas and community destinations. The south trail path is now entirely paved making it a fully accessible form of outdoor recreation, and it links into the broader trail system in the community including the Trans Canada Trail.

Key upgrades / improvements made to the sidewalk / trail infrastructure over the 2016-2019 period include:

- Sidewalk installation / upgrades including almost 12km of new sidewalks / trails
- Creation of pedestrian zones through streetscaping
- Upgrades to trail infrastructure (e.g. multiuse trail paving – over 1,500 metres)
- Installation of new pedestrian crossovers (PXOs)
- Upgrades to street intersections and crosswalks
- Installation of new meadow trail (525 metres).
- At least 10km of bike lanes
- New bridge completed with multiuse trail included

Project Outcomes

A key objective of the Creating Connections project was to promote increased rates of walking over the 2016-2019 period and to determine how changes in walking behaviour varied across the community (i.e. the demonstration area in the southern portion of the City vs. the north / central portion of the City).[47] A variety of methods were used to examine walking behaviour in the community including a randomized phone survey of over 380 households in 2016 and 2019 (i.e. at pre- and post-project implementation) that focused on adults 18 years of age or older.[48]

The phone survey results revealed an age bias in the sampling (i.e. younger age groups were under represented in the sample) and it was decided to use additional survey methods as part

[47] Neighbourhoods in the demonstration area (southern portion of the City) include South Gate, Shaw Valley and Lake Margaret. Neighbourhoods located in the north / central portion of the City include Dalewood, South Edgeware, Balaclava South, Northwest Talbot, Elgin Mall, Old Courthouse, Wellington Central, Elm West, and Park & Elm.
[48] Younger respondents (e.g. under the age of 39) were under represented while older respondents (e.g. 60 and over) were over represented in the 2016 and 2019 randomized survey. For the purpose of conducting the analysis, the data was weighted to more accurately reflect the actual age distribution of the population for the City of St. Thomas.

of the post-project data collection in 2019 to reach younger residents. This included a self-administered version of the phone survey that was deployed through the SWPH Facebook page and completed by 211 residents. Additionally, a short quiz consisting of four questions adapted from the phone survey was used in the Carrot mobile app and completed by a total of 1,262 residents. Although the participants in the Facebook survey and the mobile app quiz were not selected at random, the results serve to strengthen our understanding of local walking patterns and the key issues of interest to residents across a broad age spectrum.[49]

Results from the various community surveys point to a positive trend in outdoor walking with some trends being more pronounced in the southern portion of the City where the demonstration area is located. The results also show some notable differences in walking behaviour and opinions among different demographic groups which could inform future strategic actions to further support and enable walking activity in the community.

Leisurely walking in the neighbourhood

Participation rates for 'leisurely walking around the neighbourhood' were very similar in 2016 and 2019.[50] Approximately 70% of the respondents confirmed that they sometimes take leisurely walks and the average number of days they went on leisurely walks over a seven-day period was about 4 days. Respondents in the demonstration area reported slightly higher rates of leisurely walking in 2016 and 2019 compared to the north / central portion of the City.

With respect to the walk duration (round trip), a very slight increase in the average number of minutes walked occurred between 2016 (34 minutes) and 2019 (35 minutes) with a more notable increase occurring in the demonstration area between 2016 (33 minutes) and 2019 (36 minutes) compared to north / central portion of the City.

Walking on trails / in parks in the community

Participation rates for 'walking on trails / in parks in the community' increased between 2016 and 2019.[51] Over 60% of the respondents in 2019 confirmed that they sometimes walk on trails / in parks compared to 55% in 2016.

With respect to rates of walking, a very slight increase in the average number of days spent walking on trails / in parks over a seven-day period occurred between 2016 (2.4 days) and 2019 (2.5 days) with a more notable increase occurring in the demonstration area between 2016 (2.5 days) and 2019 (2.9 days) compared to the north / central portion of the City.

Walking to commercial / recreation destinations

Participation rates for other destination walking increased between 2016 and 2019.[52] Over 40% of the respondents in 2019 confirmed that they sometimes walk to commercial / recreation destinations compared to 35% in 2016.

Self-reported change in outdoor walking activity

A considerable proportion of respondents reported that they increased their outdoor walking activity over the last two years. At least a third of the respondents from the 2019 phone survey

[49] A larger proportion of younger respondents responded to the Facebook survey and the mobile app survey compared to the phone survey. Approximately 25% of the 2019 Facebook survey respondents were between the ages of 20-39 while 38% of the mobile app respondents were between the ages of 18-34. In comparison, 11% of the 2016 phone survey respondents and 7% of the 2019 phone survey respondents were between the ages of 20-39.
[50] Does not include dog walking or walking to school.
[51] Does not include dog walking.
[52] Walking destinations include shops/stores, restaurants, library/community centre, recreation centre, place of worship, etc.

reported that they increased their walking activity to some extent over the least two years with 17% reporting a substantial increase in walking. Results from the Facebook survey for the same period found that almost half of the respondents reported an increase in their walking activity to some extent with 25% reporting a substantial increase in walking.

Key motivation for walking

Approximately 60% of the respondents in 2016 and 2019 reported that they walk for health benefits while the proportion of respondents that associate health benefits with walking increased from 83% in 2016 to 87% in 2019.

Approximately 56% of the respondents in 2016 and 2019 expressed interest in walking more.

Lack of time was the most commonly cited reason for not walking more in 2016 (47%) and 2019 (46%).

Neighbourhood walkability

A large majority of the respondents (over 90%) in 2016 and 2019 agreed to some extent that having a walkable community promotes a healthier community. A higher percentage of respondents strongly agreed with this view in 2019 (59%) compared to 2016 (50%).[53]

A large majority of the respondents (approx. 90%) in 2016 and 2019 agreed to some extent that their neighbourhood is walking friendly. A higher percentage of respondents strongly agreed with this view in 2019 (49%) compared to 2016 (43%).

A large majority of the respondents (over 80%) in 2016 and 2019 reported that they felt comfortable using sidewalks in their neighbourhood at night. A higher percentage of respondents indicated that they felt 'very comfortable' in 2019 (50%) compared to 2016 (44%).

Approximately a third of the respondents in 2016 and 2019 reported that they felt comfortable using trails and/or parks in the community at night. A slightly higher percentage of respondents indicated that they felt 'very comfortable' in 2019 (14%) compared to 2016 (12%).

Approximately 70% of the respondents in 2016 and 2019 reported that they reduce their outdoor walking activity in the winter months. Safety is a key factor that influences walking activity in the winter months (i.e. hazardous conditions associated with snow and/or ice accumulation on sidewalks and trails).

A large majority of the respondents (over 80%) in 2016 and 2019 indicated that they were interested to some extent in what the City is doing to make the community more walking friendly. A slightly higher percentage of respondents indicated that they were 'very interested' in 2019 (35%) compared to 2016 (29%).

The large majority of respondents (over 85%) in 2016 and 2019 reported that they were satisfied to some extent with the effort by the community to make their neighbourhood more walking friendly. A higher percentage of respondents indicated that they were 'very satisfied' in 2019 (35%) compared to 2016 (23%).

Statistically significant findings

Although there was no statistically significant difference between the 2016 and 2019 results reported above (i.e. comparison of the 2016 / 2019 phone survey results), a number of

[53] 'Walkability' refers to how easily you can walk around your community where walking is easier because there are sidewalks, there is enough room on the sidewalks, the sidewalks are in good shape, there are signs, good lighting at night, and you have places to walk or go to.

significant differences were found between several subgroups within the 2019 sample and these results could be useful in determining where to strategically target communications / activities in future walkability initiatives.

Female respondents (compared to male respondents):

- Went on more daily leisurely walks ($p \leq 0.05$) and had longer duration leisurely walks ($p \leq 0.05$).
- Went on more daily walks on trails or in parks (the difference approached a level of significance, $p=0.06$).
- Were less likely to agree that their neighbourhood is walkable or walking friendly in the winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$) and less comfortable using the trails and/or the parks in their community at night ($p \leq 0.01$).
- Were more interested in what the City was doing to make the community more walking (wheelchair) friendly ($p \leq 0.01$).
- Were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly ($p \leq 0.05$).

Older respondents over the age of 50 (compared to respondents under the age of 50):

- Were less likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were less likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) in the winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$) and less comfortable using the trails and/or the parks in their community at night ($p \leq 0.01$).

Healthier respondents that reported their general health as excellent or very good (compared to respondents that reported their general health as good, fair or poor):

- Went on longer duration leisurely walks ($p \leq 0.05$).
- Went on more daily walks on trails or in parks ($p \leq 0.01$).
- Were more likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were more interested in what the City was doing to make the community more walking (wheelchair) friendly ($p \leq 0.01$).
- Were more likely to agree that the more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is ($p \leq 0.01$).

Respondents with total annual household income of less than $50,000 (compared to respondents with total annual household income of $50,000 or more):

- Were less likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) during winter months ($p \leq 0.05$).
- Felt less comfortable using the sidewalks in their neighborhood at night ($p \leq 0.01$).
- Were less likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).

Respondents that live south of Talbot Street, the area that includes the demonstration area (compared to respondents that live north of Talbot Street):

- Went on more daily leisurely walks ($p \leq 0.01$) and more daily walks on trails or in parks ($p \leq 0.05$).

- Were more likely to report that they increased their outdoor walking over the last two years ($p \leq 0.01$).
- Were more likely to agree that their neighbourhood is walkable or walking friendly (or wheelchair friendly) ($p \leq 0.05$).
- Were more satisfied with the efforts in their community to make their neighbourhood walking (wheelchair) friendly ($p \leq 0.05$).

Lessons Learned from the Partnership Model

All of the partner members viewed the project as a very positive experience and were highly satisfied with the partnership as a working group. Key factors that contributed to the success of the partnership include:

- Partners sharing a common vision for the community.
- Each partner being a strong advocate for the project within their own organization.
- Having at least one member of the partnership take on the leadership role and keeping the group motivated and focused.
- Having the most appropriate decision-maker(s) from each partner organization involved throughout the project.
- Having the partners actively engaged in the planning and development phase of the project.
- Conducting regular meetings (quarterly) to review progress with activities / action items and related roles and responsibilities.

All of the partner members expressed a high degree of satisfaction with what the project achieved in terms of the community consultation that took place, the addition / improvement of sidewalks and trails across the community, and the extent to which residents have put these enhancements to use.

Finally, the collaborative process used by the partnership provided the value-added benefit of demonstrating how well a public / private initiative can work when built around a common vision.

Appendix A: Performance Measurement and Evaluation Plan

The following plan is taken from the Request for Proposal as issued by the Elgin St. Thomas Health Unit.

Objectives	Expected Results (Outcomes)	Indicators	Data Collection Tools
To increase rates of walking.	Residents are walking more and are more active.	% of residents who obtain the recommended minimum 60 minutes of moderate to vigorous activity daily. % of residents who walk regularly (daily or couple times per week). % of residents who use the sidewalks, trails etc in St. Thomas.	Randomized telephone surveys with oversampling in the demonstration area.

Objectives	Expected Results (Outcomes)	Indicators	Data Collection Tools
To engage the community in a discussion about walkability, community design and connectivity.	Strengthened partnership between local developers, public health and municipal staff.	Number of partners involved in the project. A partnership evaluation is completed annually.	Meeting minutes. Partnership evaluation survey.
	Increased awareness among community members that walkable communities create healthier communities.	Number of community members that participate in community walkabouts. Results of evaluation survey conducted during the community walkabouts.	Sign in sheet at community walkabouts. Post event evaluation.
	Increased community interest in how their communities are built.	Assessment of attitudes and beliefs regarding walkability post walkabout. Citizens 4 Active Transportation (a local group that advocates for active transportation facilities) has increased membership.	Post event evaluation. Number of members that belong to Citizens 4 Active Transportation.
	Increased commitment from council to prioritize pedestrian orientated design features.	Increased funding in the city budget allocated to the sidewalk. Meters of new sidewalks installed. Meters of new multi-use trails installed.	Council budget will be data set. Engineering department collect that data for retro fitting and Planning department collects the data for new developments.
	Adoption of new design standards or principles that will apply to new land developments.	Number of new pedestrian friendly policies adopted/altered by the City of St Thomas.	Planning department will track policy changes.

Objectives	Expected Results (Outcomes)	Indicators	Data Collection Tools
To assess the walkability of the whole City of St. Thomas.	Access to high quality walking data for residents of the City of St. Thomas which will inform many programs and services in the community.	Data is being used by other programs and agencies (e.g. Active and Safe Routes to School and Citizens for Active Transportation).	City and Public Health will track the number of times other agencies/programs access the data.
To identify and prioritize improvements to walkability and physical activity options for youth, above normal development obligations.	Action plan to improve walkability across the City (including the demonstration area).	Action plan is developed based on all available data.	Plan is complete
To make improvements to walkability in demonstration area.	Walkability has improved in the demonstration area. Physical infrastructure changes to improve walkability in the demonstration area.	Post intervention walkability audits show improved walkability scores. Walkability matrix scores are lowered (i.e. less need for future improvements). Changes are made to the demonstration area.	Walkability audits Walkability matrix Photographs of the area before and after.

Appendix B: Household Phone Survey Questionnaire

Walking behaviour
The first few questions relate to your general health, walking ability and current walking habits.

1. In general, how would you say your health is now? Is it?… *(read options)*

1	2	3	4	5	
Excellent	Very Good	Good	Fair	Poor	Don't Know

2. Are you usually able to walk short distances without difficulty?
   ☐ Yes ☐ No

3. In the last seven days how have you travelled around your community? *(read options - check all that apply)*
   Run Walk
   Bicycle Roller blades / in line skates
   Skateboard Kick scooter
   Wheelchair Motorized scooter
   Other, non-motorized, please specify:

SURVEYOR NOTE: for respondents who use a wheelchair and/or motorized scooter to get around, inform them that the next few questions relate to their activities when they move around their neighbourhood / community.

The next few questions will focus on the way you move around your neighbourhood, on community trails and parks, going to work or school, going with children to school, and other habits.

4. Do you sometimes take leisurely walks around your neighbourhood? Just to clarify, this does not include dog walking or walking to school or work – we have separate questions on those activities later in the survey. For now, we want to focus on leisurely walking.
   ☐ Yes ☐ No

For those who sometimes take walks…

   a. In the last seven days, how many days did you go for walks around your neighbourhood?
   b. On average, how long do your walks last? Please provide an estimate in minutes for the full trip.

5. Do you sometimes walk on trails or in parks in the community? This does not include dog walking – there is a separate question on dog walking.
   ☐ Yes ☐ No

For those who sometimes take walks on trails / in parks…

   a. In the last seven days, how many days did you go for walks on trails or in parks in the community?

6. Do you sometimes walk a dog(s)?
   ☐ Yes ☐ No

For those who sometimes walk dogs…

   a. In the last seven days, how many days did you go for walks with a dog(s)?
   b. Did you walk the dog(s) around the neighbourhood, or on trails / in parks or both?
      - Around the neighbourhood
      - On trails / in parks
      - Both

7. Do you sometimes walk to go shopping, dine out, get to the library/community centre, go to place of worship, take in a movie or other form of entertainment, get to the recreation centre/gym, or go to other destinations in your community?
   ☐ Yes ☐ No
   ☐ Not applicable – not a reasonable option – too distant

For those who sometimes walk to go shopping, etc….

   a. In the last seven days, how many days did you go for walks for these types of activities in your community?

8. Do you sometimes walk to work? Please note, this includes walking all of the way or part of the way to work – for example, to catch a bus.
   ☐ Yes – walk (travel) all of the way ☐ Yes – walk (travel) part of the way
   ☐ No
   ☐ Not applicable – not an option; too distant, not employed, retired, work at home

For those who sometimes walk to work….

   a. In the last seven days when you worked, how many days did you walk to work?
   b. On average, how long does it take you to walk to work? Please provide an estimate in minutes, going one way.

9. Do you sometimes walk children to or from school? Please note, this includes walking all of the way or part of the way – for example, to catch a bus. If the walk to or from school is part of your walk to or from work please indicate as such.
   ☐ Yes – walk all the way to or from school
   ☐ Yes – walk all the way to or from school as part of walk to or from work
   ☐ Yes – walk part of the way
   ☐ Yes – walk part of the way as part of walk to or from work
   ☐ No
   ☐ Not applicable – not a reasonable option – too distant, children are home schooled

For those who sometimes walk children to school…

   a. In the last seven days, how many days did you walk with children to school?
   b. On average, how long does it take you to walk with children to school? Please provide an estimate in minutes, going one way.

10. Are you yourself, attending school, and if so do you sometimes walk to or from school? Please note, this includes walking all of the way or part of the way – for example, to catch a bus.
    ☐ Yes – walk all the way ☐ Yes – walk part of the way
    ☐ No ☐ Not applicable – not a reasonable option – too distant

For those who sometimes walk to school…

c. In the last seven days, how many days did you walk to school?
d. On average, how long does it take you to walk to school? Please provide an estimate in minutes, going one way.

11. In the last seven days have you walked in your community for any reason other than what we've already discussed? For example, for volunteering. If so, please describe the activity and how many days you walked?
    Activity: ____
    Number of days: ____

12. Which of the following statements best reflects your walking habits in the colder months compared to the warmer months of the year? *(read options)*
    ☐ I walk much less in the colder months
    ☐ I walk somewhat less in the colder months
    ☐ I walk about the same amount in the colder and warmer months
    ☐ I walk somewhat more in the colder months
    ☐ I walk much more in the colder months
    ☐ Other, please specify: _____

13. What would you say is your main motivation for walking when you choose to walk? *(Open ended question – Surveyor note: emphasize that we are interested in their number one motivation for walking)*

14. What do you see as some of the key benefits of walking? *(Open ended question)*

15. Are you interested in trying to walk more than you currently do?
    ☐ Yes ☐ No ☐ Not sure

16. What are some of the key factors that prevent you from walking more? *(Open ended question)*

Neighbourhood Walkability

The next few questions relate to the walkability of your neighbourhood.

Walkability means how easily can you walk around your community where walking is easier because there are sidewalks, enough room on the sidewalks, the sidewalks are in good shape, there are signs, good lighting at night, and you have places to walk or go to.

17. How much do you agree or disagree with the following statement:
    "My neighbourhood is walkable or walking friendly (or wheelchair friendly)."
    Do you… *(read options)*

1	2	3	4	5	6	7	
Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Don't know

18. How much do you agree or disagree with the following statement:
"My neighbourhood is walkable or walking friendly (or wheelchair friendly) in the winter months."
Do you… *(read options)*

1	2	3	4	5	6	7	
Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree	Don't know

For those indicating that they disagree in any way…

a. What are some of the reasons that you feel your neighbourhood is not walking friendly during the winter months? *(Open ended question)*

19. How many of the streets in your neighbourhood have sidewalks? Is it… *(read options)*
- All of the streets
- Most of the streets
- Some of the streets
- Few of the streets
- None of the streets
- Don't know

20. How comfortable do you feel using the sidewalks in your neighborhood at night? Are you… *(read options)*

1	2	3	4	5	6	7		
Very comfortable	Comfortable	Somewhat comfortable	Nether comfortable nor uncomfortable	Somewhat uncomfortable	Un-comfortable	Very un-comfortable	Don't know	Not applicable

For those indicating any level of 'uncomfortable'…

a. What are some of the reasons why you feel uncomfortable using the sidewalks in your neighbourhood at night? *(Open ended question)*
b. What are some things you think that could be done to make you feel more comfortable using the sidewalks in your neighbourhood at night? *(Open ended question)*

21. How comfortable do you feel using the trails and/or the parks in your community at night? Are you… *(read options)*

1	2	3	4	5	6	7		
Very comfortable	Comfortable	Somewhat comfortable	Nether comfortable nor uncomfortable	Somewhat uncomfortable	Un-comfortable	Very un-comfortable	Don't know	Not applicable

For those indicating any level of 'uncomfortable'…

a. What are some of the reasons why you feel uncomfortable using the trails and/or parks in your community at night? *(Open ended question)*
b. What are some things you think that could be done to make you feel more comfortable using the trails and/or parks in your community at night? *(Open ended question)*

22. How interested are you in what the City is doing to make the community more walking (wheelchair) friendly? Are you… *(read options)*

1	2	3	4	5	6	7
Very interested	Interested	Somewhat interested	Neither interested nor disinterested	Somewhat disinterested	Disinterested	Very disinterested

23. How much do you agree or disagree with the following statement:
"The more walking (wheelchair) friendly the City of St. Thomas is, the healthier the community is."
Do you… *(read options)*

1	2	3	4	5	6	7
Strongly agree	Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree

24. How satisfied are you with the efforts in your community to make your neighbourhood walking (wheelchair) friendly? Are you… *(read options)*

1	2	3	4	5	6	7
Very satisfied	Satisfied	Somewhat satisfied	Neither satisfied nor dissatisfied	Somewhat dissatisfied	Dissatisfied	Very dissatisfied

25. What improvements do you think need to be made to make your neighbourhood more walking (wheelchair) friendly? *(Open ended question)*

The next few questions of this survey are about your background. This information will help us describe the population who took part in the survey. Feel free to skip any questions that you are uncomfortable answering.

26. What gender do you identify with?
27. Could you please tell me the year in which you were born?
28. How long have you lived at your current location? Years __ Months __
29. What is your postal code?

30. What is the highest level of education that you completed? *(Check one response only)*
    - Less than high school
    - High school graduation
    - Some non-university trades certificate or diploma
    - Completed non-university trades certificate or diploma
    - Some university
    - Completed Bachelor's degree (e.g. B.A., B.Sc., B.S.W.)
    - Completed a degree above a bachelor's degree (Master's or Doctoral degree (e.g. M.A., M.Sc., M.D., D.D.S, Ph.D.))

31. Which of the following categories best describes your household? *(read options)*
    - Single adult household
    - Two or more adults without children
    - Single parent with one or more children living at home
    - Married couple/common law with one or more children living at home
    - Other, please describe your household living arrangement: _____

32. Do you have any children under the age of 18 living at home?
    - Yes – how many? _____
    - No

33. Which of the following categories best describes your current employment status? *(read options)*
    - Employed full time (includes self-employment)
    - Employed part time (includes self-employment)
    - Unemployed
    - Student
    - Retired
    - Homemaker / stay at home caregiver
    - Other, please specify: _____

34. Considering all members of your family living in your household, which one of the following income categories best describes your total family income in 2015 before taxes?

less than $10,000
between $10,000 and $19,999
between $20,000 and $29,999
between $30,000 and $39,999
between $40,000 and $49,999
between $50,000 and $59,999
between $60,000 and $69,999
between $70,000 and $79,999
between $80,000 and $89,999
between $90,000 and $99,999
between $100,000 and $149,999
between $150,000 and $199,999
between $200,000 and $249,999
between $250,000 and $299,999
$300,000 or more

35. How many bicycles are owned by your household?
36. How many cars are owned by your household?
37. Final question: Is there anything else that you would like to say about walking (or using a wheelchair) in your neighbourhood?

Thank you for participating in this survey.

Appendix C: Demographic Profile - Community Phone and Internet Survey, 2016 & 2019

Age of survey respondents

Age groups	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
19-29	5	1.3	5	1.4	19	11.1
30-39	37	9.8	22	6.0	23	13.5
40-49	68	17.9	41	11.2	29	17.0
50-59	59	15.6	60	16.3	28	16.4
60-69	119	31.4	89	24.3	39	22.8
70+	91	24.0	150	40.9	33	19.3
Total	379	100	367	100	171	100
Age range		22 to 97 yrs		19 to 95 yrs		19 to 86 yrs
Average age		59 yrs		64 yrs		52 yrs

Number of years residing at current address

Number of Years	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
5 years or less	113	29.4	101	27.4	71	37.4
6-10 years	79	20.6	71	19.2	40	21.1
11-15 years	68	17.7	47	12.7	24	12.6
16-20 years	33	8.6	32	8.7	16	8.4
More than 20 years	91	23.7	118	32.0	39	20.5
Total	384	100	369	100	190	100
Years range		1 to 54 yrs		1 to 80 yrs		1 to 57 yrs
Years average		14 yrs		17 yrs		12 yrs

Household type / living arrangements for the survey respondents

Household Type	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Single adult household	85	22.1%	107	29.2	34	18.4
Two or more adults without children	174	45.3%	161	44.0	83	44.9
Single parent with one or more children living at home	15	3.9%	17	4.6	7	3.8
Married couple/common law with one or more child at home	95	24.7%	81	22.1	61	33.0
Other	15	3.9%				
Total	384	100%	366	100	185	100

Highest level of education for the survey respondents

Level of Education	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
No certificate / diploma	17	4.5	46	12.4	6	3.7
High school diploma	97	25.7	88	23.7	40	24.8
Some non-university trades certificate or diploma	34	9.0	26	7.0	15	9.3
Completed non-university trades certificate or diploma	104	27.5	85	22.9	24	14.9
Some university	34	9.0	29	7.8	24	14.9
Completed Bachelor's Degree	73	19.3	74	19.9	43	26.7
Completed a degree above a Bachelor's Degree	19	5.0	23	6.2	9	5.6
Total	378	100	371	100	161	100

Employment status for the survey respondents

Employment Status	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Employed full time	145	37.8	106	28.2	60	30.9
Employed part time	30	7.8	34	9.0	23	11.9
Unemployed	4	1.0	11	2.9	18	9.3
Student	0	0.0	2	0.5	2	1.0
Retired	182	47.4	209	55.6	74	38.1
Homemaker / stay at home caregiver	6	1.6	4	1.1	10	5.2
Other	17	4.4	10	2.7	7	3.6
Total	384	100	376	100	194	100

Self-reported health status for the survey respondents

Health Status	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Excellent	82	20.8	41	10.5	32	15.2
Very Good	126	32.0	101	25.9	53	25.1
Good	122	31.0	154	39.5	71	33.6
Fair	48	12.2	60	15.4	46	21.8
Poor	16	4.1	32	8.2	9	4.3
Total	394	100	388	99.5	211	100.0

Annual Household income of the survey respondents

Household Income	2016[a]		2019[b]			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
Less than $10,000	2	0.8	2	1.4	3	2.1
Between $10,000 and $19,999	17	6.5	5	3.4	17	11.6
Between $20,000 and $29,999	19	7.3	9	6.1	11	7.5
Between $30,000 and $39,999	32	12.3	13	8.8	9	6.2
Between $40,000 and $49,999	28	10.8	14	9.5	12	8.2
Between $50,000 and $59,999	29	11.2	11	7.4	12	8.2
Between $60,000 and $79,999	37	14.2	28	18.9	27	18.5
Between $80,000 and $99,999	43	16.5	15	10.1	23	15.8
Between $100,000 and $149,999	36	13.8	32	21.6	25	17.1
$150;000 and over	17	6.5	19	12.8	7	4.8
Total	260	100	148	100	148	100

[a] Household income for 2015, before taxes.
[b] Household income for 2018, before taxes.

Number of bicycles per household for the survey respondents

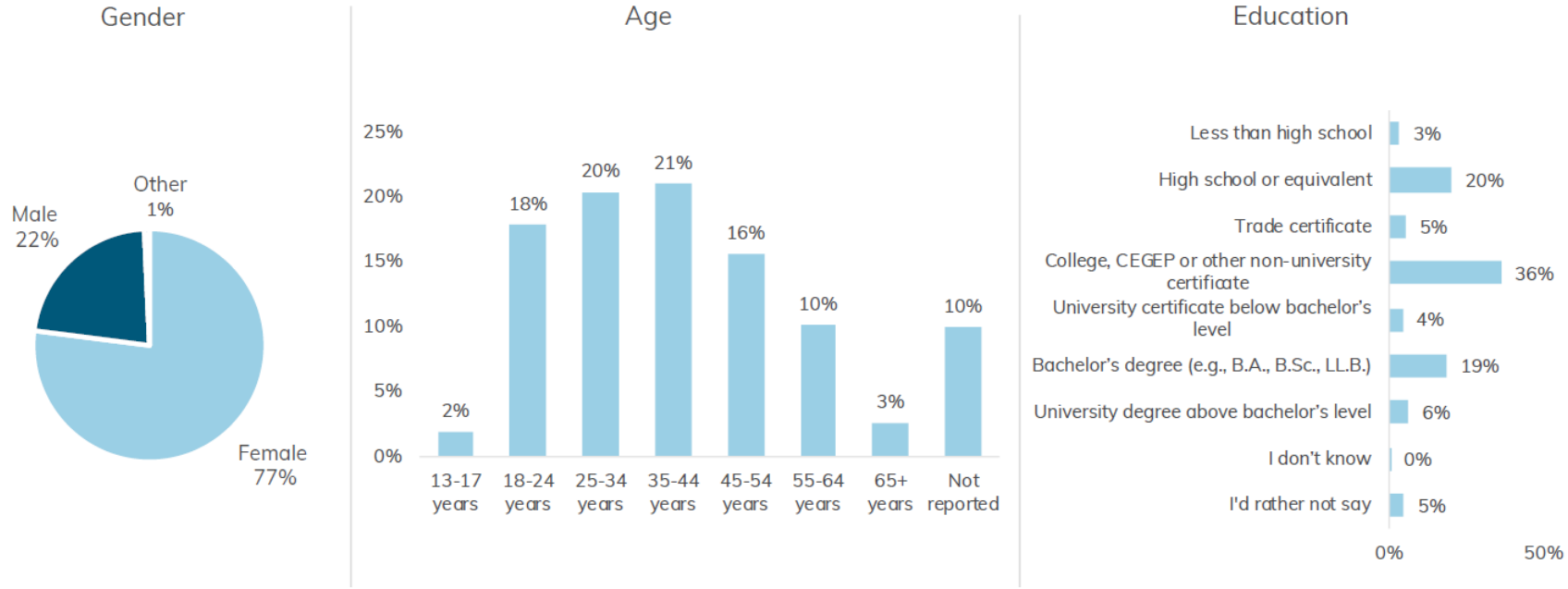
Number of bicycles	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
0	122	31.9	167	45.0	59	30.7
1	73	19.1	54	14.6	38	19.8
2	90	23.6	71	19.1	39	20.3
3	34	8.9	35	9.4	28	14.6
4 or more	63	16.5	44	11.9	28	14.6
Total	382	100	371	100	192	100

Number of motor vehicles per household for the survey respondents

Number of motor vehicles	2016		2019			
	Phone Survey		Phone Survey		Internet Survey	
	Number	Percent	Number	Percent	Number	Percent
0	21	5.4	38	10.2	19	10.1
1	159	41.2	150	40.2	67	35.4
2	157	40.7	137	36.7	86	45.5
3	37	9.6	37	9.9	12	6.3
4 or more	12	3.1	11	2.9	5	2.6
Total	386	100	373	100	189	100

Appendix D: Demographic Profile - Carrot Mobile App Quiz, 2019

A total of 1,262 individuals completed the quiz.



These graphs were prepared by the Carrot Rewards Program.

Appendix E: Annual Partnership Survey Results

The project partners participated in an annual survey to provide feedback on the overall effectiveness of the partnership team. The survey was used to assess member perception and satisfaction with the project purpose and vision, member roles and responsibilities, group communication, and personal satisfaction with the partnership. A total of seven partner members completed the survey in December 2015 and five partner members completed the survey in 2016, 2017, and 2018.[54]

Members were asked to indicate that extent to which they agreed or disagreed with a series of statements based on the following six-point scale:

Strongly Agree	Agree	Slightly agree	Neutral	Disagree	Strongly disagree
1	2	3	4	5	6

The survey reveals consistently positive views from the members in 2015, 2016, 2017 and 2018 in relation to the project purpose and vision. Average scores for the 10 statements under this theme ranged from 1.7 to 2.3 in 2015, from 1.6 to 2.4 in 2016, from 1.5 to 2.0 in 2017, and from 1.0 to 2.2 in 2018.

Average Score on Partnership Member Survey 2015, 2016, 2017, 2018: Purpose and vision

Purpose and vision	Average Score			
	2015	2016	2017	2018
The goals and objectives of this partnership are clear	1.9	1.8	1.6	1.2
This partnership's primary interests fit within my organization's mandate	1.7	1.8	1.6	1.0
This partnership is adding value (rather than duplicating services) for my clients, the community, or the agencies involved	1.7	1.8	1.5	1.8
The relevant organizations in the community are involved in the partnership	2.3	1.8	1.5	1.6
The representatives of the partner organizations bring relevant experience and knowledge to the partnership	1.9	1.8	1.6	1.6
The partnership makes good use of its financial resources	2.1	1.8	2.0	2.2
The partnership makes good use of its in-kind resources (e.g. skills, expertise, information, data, connections, influence, space, equipment, etc.)	1.9	1.6	1.6	2.0
The goals and objectives of the partnership are realistic	1.7	2.0	1.6	2.0
The goals and objectives of the partnership are measurable	1.7	2.4	2.0	1.6
The partnership measures / evaluates its progress against specified goals and objectives	2.1	2.0	2.0	2.2

The survey reveals consistently positive views from the members in 2015, 2016, 2017, and 2018 in relation to the roles and responsibilities of the partnership and the execution of these responsibilities. Average scores for the six statements under this theme ranged from 1.7 to 3.0 in 2015, from 1.4 to 2.6 in 2016, from 1.4 to 2.0 in 2017, and from 1.4 to 2.5 in 2018.

[54] The 2018 survey was completed in January 2019.

Average Score on Partnership Member Survey 2015, 2016, 2017, 2018: Roles / responsibilities

Roles and responsibilities	Average Score			
	2015	2016	2017	2018
This partnership has effective leadership (i.e. there is a strong chair or some other strong leader who is directing the work of the group)	1.7	1.4	1.6	1.6
The roles and responsibilities of the partners are clearly defined	2.4	2.0	1.8	1.8
The roles and responsibilities of the partners are understood by all	2.1	1.8	2.0	2.0
The people and organizations in the partnership work well together	1.9	2.0	2.3	1.4
Most partners participate fully in the meetings (frequent attendance, participation in discussion, etc.)	3.0	2.6	1.4	2.0
Most partners are willing to do something to contribute to the work of the partnership	2.1	1.8	1.6	2.5

The survey reveals consistently positive views from the members in 2015, 2016, 2017 and 2018 in relation to communication matters associated with the project. Average scores for the five statements under this theme ranged from 1.9 to 2.4 in 2015, from 1.6 to 2.8 in 2016, from 1.6 to 1.8 in 2017, and from 1.8 to 2.0 in 2018.

Average Score on Partnership Member Survey 2015, 2016, 2017, 2018: Communication

Communication	Average Score			
	2015	2016	2017	2018
Relevant information is exchanged among group members	2.0	1.6	1.6	1.8
Relevant information is exchanged in a timely manner	2.0	2.0	1.6	2.0
There is limited duplication of communication between group members	2.4	2.8	1.8	2.0
When differences occur, they are dealt with effectively	2.4	1.8	1.6	1.8
We effectively use technology (e.g. email, phone, skype) to maximize communications	1.9	1.8	1.6	1.8

The survey reveals consistently positive views from the members in 2015, 2016, 2017 and 2018 in relation to their involvement in the partnership and the project. Average scores for each of the five statements under this theme ranged from 1.6 to 2.1 in 2015, from 1.6 to 3.0 in 2016, from 2.0 to 2.2 in 2017, and from 2.0 to 2.4 in 2018.

Average Score on Partnership Member Survey 2015, 2016, 2017, 2018: Personal satisfaction

Personal satisfaction	Average Score			
	2015	2016	2017	2018
I am satisfied with my current role in this partnership	1.9	2.0	2.0	2.0
I am comfortable with my own level of participation in the partnership	1.8	2.4	2.2	2.2
The partnership meetings are a productive use of my time	2.0	3.0	2.0	2.0
I am satisfied with the current plans this partnership has in place for achieving its goals	2.1	2.2	2.2	2.4
My participation in this partnership means that I can have a greater impact than I could on my own	1.6	1.6	2.0	2.0

With respect to an overall assessment, all of the members in 2015, 2016, 2017 and 2018 reported that they were satisfied with the partnership.

Partnership members were asked to comment on what they viewed as the biggest benefit of being part of the project partnership. Several of the members reported that they enjoyed networking and working together towards a common goal (i.e. creating a walkable community).

Other benefits reported included:

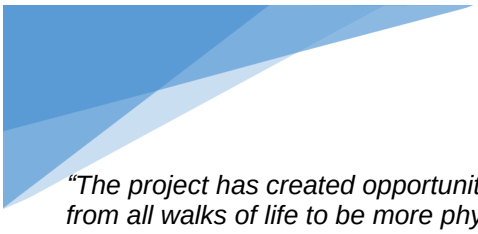
- Working together in the partnership is a more efficient approach to advancing community infrastructure upgrades and services than working as individual organizations.
- Gaining a greater awareness of walking trends and infrastructure development in the community.
- Connecting the different community amenities through sidewalks and trails to encourage residents to be active and to enjoy recreational walking.
- Leveraging funding for more initiatives.
- Evaluating progress and change.
- Using the results (i.e. a more walkable community) as a marketing tool to attract future residents to the community.

"Working collaboratively together, we can achieve more together!"

Project partner

Members identified a number of reasons why they feel the project is important for the City of St. Thomas including:

- It will help make the City a more attractive place to live by making it more open and accessible for all residents.
- It will help to promote an active lifestyle and a cheap and efficient way for residents to get around the City.
- The City needs to improve walkability and the project identifies deficiencies and provides opportunity for planning future construction projects to include new side walks and ensure that sidewalk and recreational trail connections are built.
- It will create more walking loops and eliminate the number of walking dead ends and people will look more forward (and be more motivated) to take a round trip vs. repeating the path they took.



"The project has created opportunity for people from all walks of life to be more physically active and enjoy the outdoors – without needing to rely on sports or recreation programs. Walking, biking, rollerblading... being active is something we should do throughout our lifespan and in the company of others to remain socially connected and mentally well."

"The importance of this group can be physically seen with the changes that have been made in the last few years in the south block of St. Thomas."

"This partnership is providing opportunities for the public to choose healthy lifestyle opportunities."

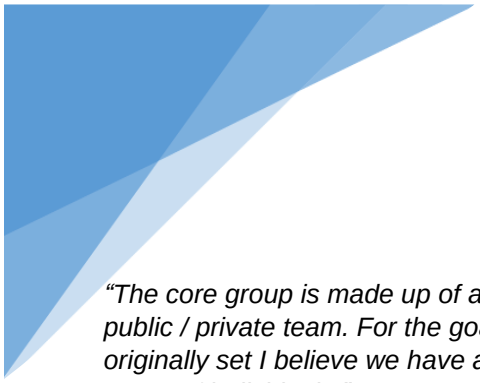
Project partners

With respect to possible improvements to the partnership, several members suggested that it would be helpful to expand the partnership to include greater community representation and at least one member suggested that this would also help to promote greater ownership of the project. Other suggestions for improving the partnership included:

- Ensuring a consistent commitment from members to participate in the partnership and attend the meetings to facilitate a more efficient decision-making process.
- Making the meetings more structured.
- Establishing the annual project cost allocation earlier in the process.

One member further suggested that the conditions of the PHAC funding agreement prohibit the allocation of funds to certain areas (e.g. essential services) which could have made the project more effective/successful.

Another member noted that with development expanding in the area surrounding the City of St. Thomas, the City and Central Elgin should work more closely together in planning the trail systems and creating new connections.



"The core group is made up of a well-rounded public / private team. For the goals that were originally set I believe we have a well-versed group of individuals."

"We have functioned exceptionally well as a group the last few years and have accomplished our goals. We need to set new priorities and create a new vision for what the next few years could look like and the gains that could be made."

Project partners

Appendix F: Social Media Promotions for the Walkability Campaign in 2017

April 19

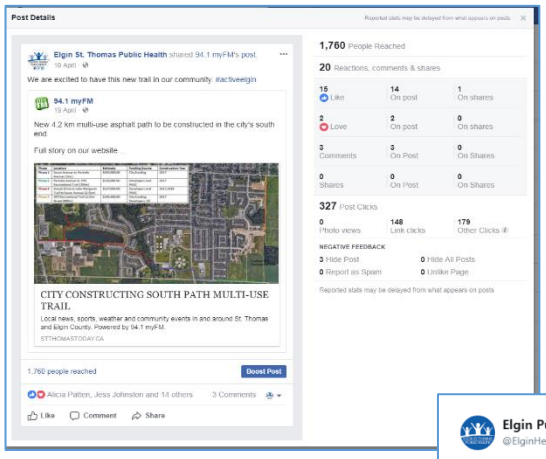
1,760 Reaches

15 Likes

2 Love

327 Post Clicks

3 Comments



196 Impressions

5 Total Engagements

1 Like

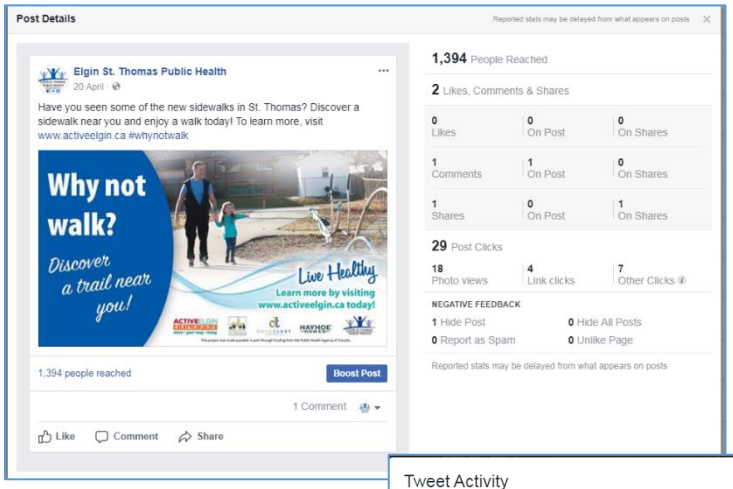
April 20

1,394 Reaches

1 Comment

1 Share

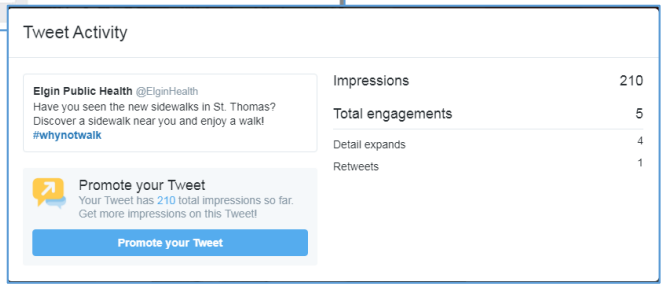
29 Post clicks



210 Impressions

5 Total Engagements

1 Retweet

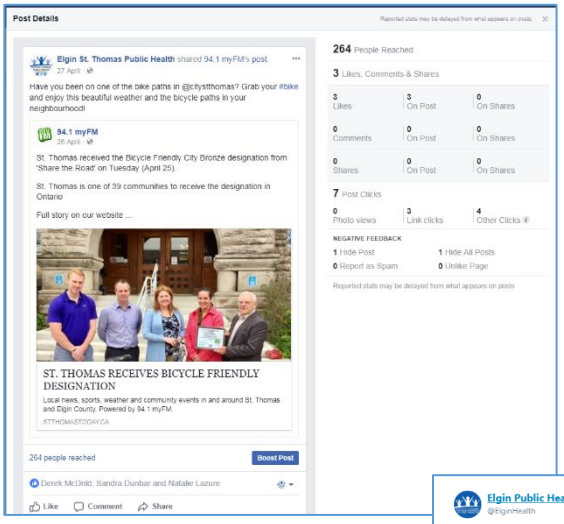


April 27

264 Reaches

3 Likes

7 Post Clicks

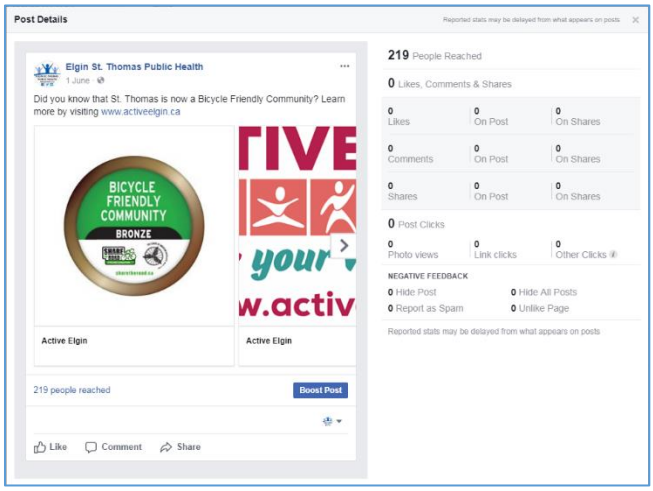


281 Impressions

1 Like

June 1

219 Reaches



June 13 (Boosted)

16,744 Reaches

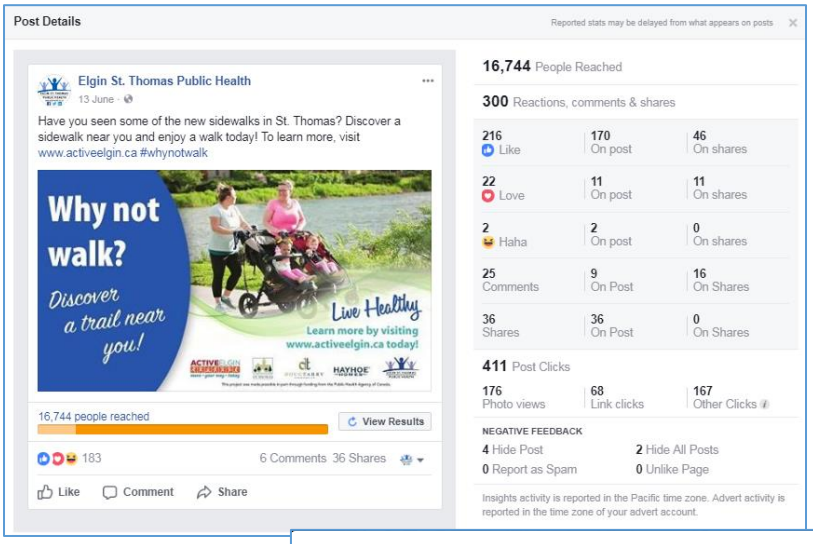
216 Likes

22 Love

2 Haha

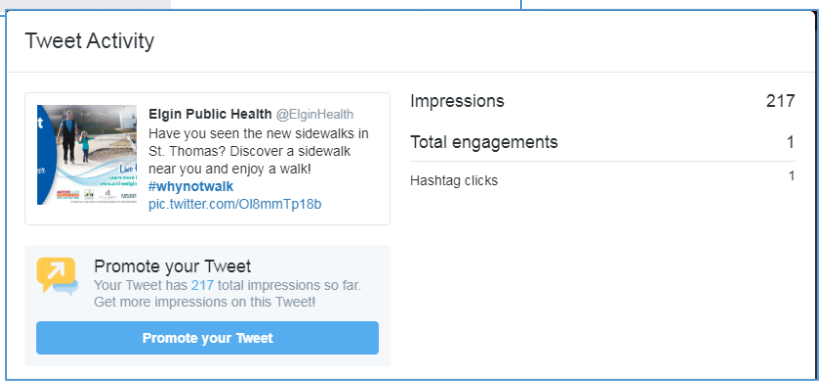
25 Comments

411 Post Clicks



217 Impressions

1 Hashtag Click



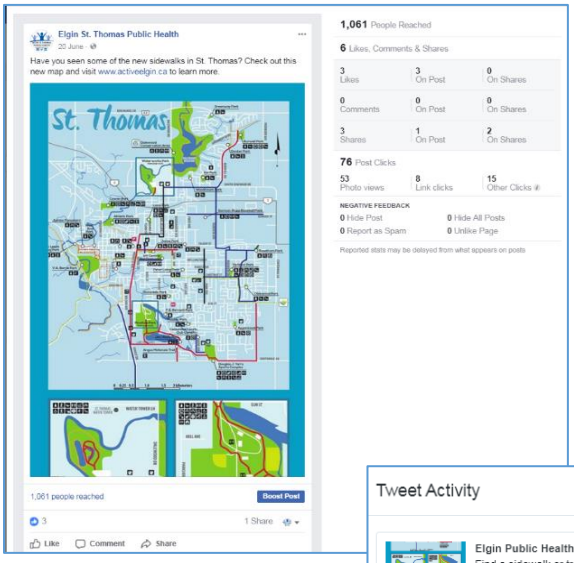
June 20

1,061 Reaches

3 Likes

3 Shares

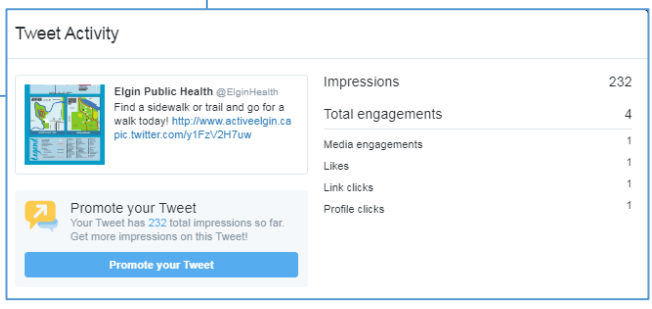
76 Post Clicks



232 Impressions

1 Media Engagement

1 Like

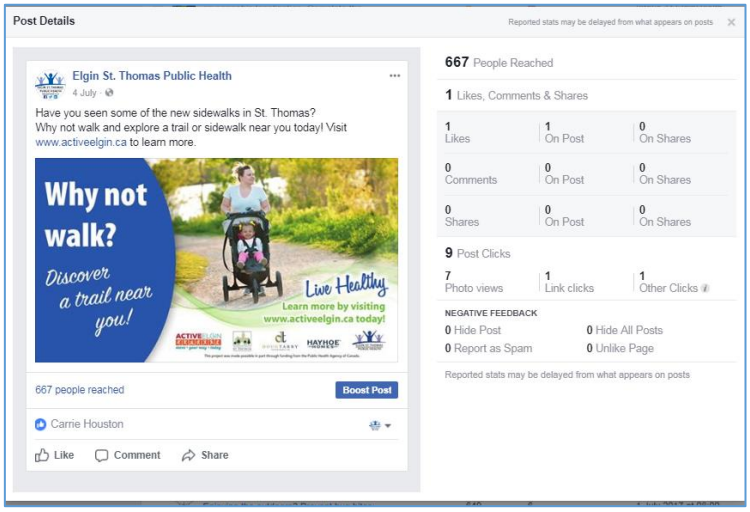


July 4

667 reaches

1 Like

9 Post Clicks



July 22

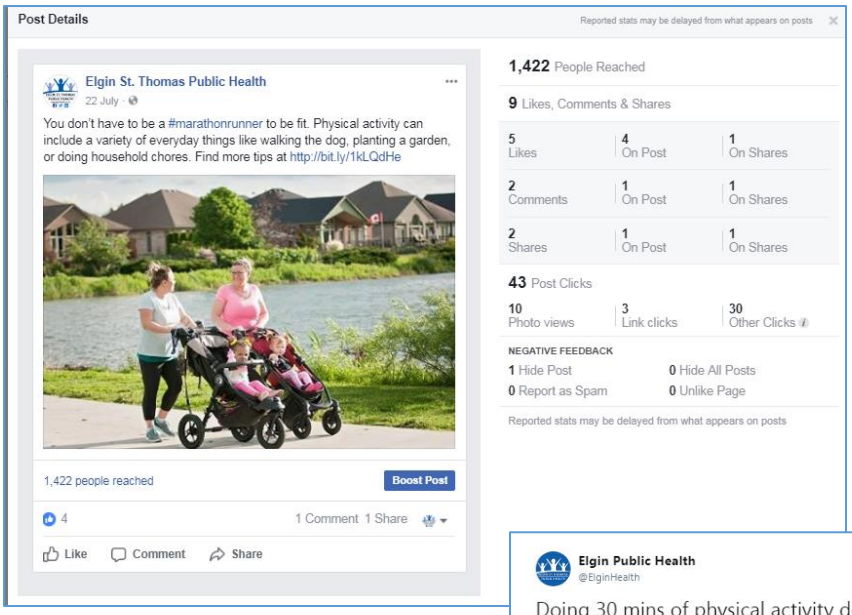
1,422 Reaches

5 Likes

2 Comments

2 Shares

43 Post Clicks



273 Impressions

3 Media Engagements

1 Like

1 Link Click

Sept 7

2,594 Reaches

2 Likes

2 Post Clicks

576 Impressions

2 Likes

1 Retweets

1 Profile Clicks

Sept 19

847 Reaches

11 Likes

1 Love

2 Comments

17 Post Clicks

Oct 4

3,672 Reaches

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