

Addressing Rural Health Needs

Walkable Communities in HALDIMAND and NORFOLK

Acknowledgements Author

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Executive Summary

Introduction to Walkable Communities and walkON



Being walkable is an important aspect of healthy and vibrant communities (Humpel, Owen & Leslie, 2002). Research suggests that the way our communities are designed impacts our levels of physical activity (Humphrey, 2005). Well-designed, compact communities where people can walk to school, work, stores, parks and restaurants significantly reduce the need to drive (Humpel, Owen & Leslie, 2002; Abelsohn, Bray, Vakil & Elliot, 2005). There are many health, economic and environmental benefits of building and sustaining walkable communities (Humpel, Owen & Leslie, 2002). Walking can reduce the risk of coronary heart disease and stroke by controlling blood pressure, high blood cholesterol and obesity (Heart and Stroke Foundation of

Ontario, 2010). As well, walking can reduce the risk of certain types of cancer, Type 2 diabetes, osteoporosis and arthritis (Heart and Stroke Foundation of Ontario, 2010). It also can enhance mental well-being (Heart and Stroke Foundation of Ontario, 2010). Along with its health benefits, walkability is a good investment as reducing traffic, noise, speeds and vehicle pollution has been found to increase property values (Littman, 1999).

The Haldimand-Norfolk Health Unit has been a member of the Central West walkON program since its inception in 2004, along with five other health units (Brant, Halton, Niagara, Waterloo and Wellington-Dufferin-Guelph). The program identified a need to support the development of walkable communities. In keeping with the evidence-based approach, walkON decided to conduct a telephone survey to identify what the public knows about walkability prior to implementing further programs at local levels. This report includes findings from Haldimand County and Norfolk County and makes recommendations based on those results.



SEPTEMBER 2010

Selected Fast Facts

- 41% of respondents were familiar with the term "walkable community."
 - o 32.2% were familiar with the term and correctly identified one of its components.
- "Having places within walking distance" was the most frequent response when asked what a walkable community meant to them.
- 71.6% of respondents said that having connected sidewalks and pathways was the most important component of a walkable community to consider when deciding where to live.
- Three qualities that are not essential to walkable communities are also very important to respondents when deciding where to live:
 - o Having a sense of belonging (87.0% of respondents).
 - o Having a big yard or garden (84.7% of respondents).
 - o Living in a neighbourhood with little or no traffic (80.4% of respondents).
- 71.2% of respondents living in a town, hamlet or small village said that the most important components of walkable communities affecting their ability to be physically active would be having roads, sidewalks and pathways that are in good condition.
- 40% of respondents living in the country felt that having trails or pathways within a five- to 10-minute walking or cycling distance of home could impact their physical activity.
- 55.1% of respondents living in a town, hamlet or small village would oppose the addition of new types of housing.
- 45.6% of country respondents would oppose the addition of paved shoulders to both sides of the road.

Methodology

Survey methodology was used. The survey was divided into five sections:

- Knowledge of walkable communities and walkON.
- 2. Attitudes toward walkable communities.
- 3. Knowledge of how the built environment impacts health.
- 4. Barriers to creating walkable communities.
- 5. Demographics.

Results

Demographics

A greater percentage of survey respondents was female (67.8%, n=200) with the highest proportion of respondents being in the age 41-63 group (53.4%, n=151). Most of the respondents lived in detached homes (89.5%, n=261). The majority of respondents was identified as living in a town/small village/hamlet (62.6%, n=174). The majority of respondents (50%, n=146) had a college or university degree, followed by a high school diploma (27.9%, n=81).

When asked how many days in a typical week they were active for at least 60 minutes per day, 28.1% (n=83) reported being active every day, while 11.9% (n=35) were not even active for one day per week.

Repondents were also asked how many hours during a typical week they spent walking to work, school or doing errands in the past three months. Overall, 37.4% (n=109) of respondents spent less than an hour or no time at all walking to work, school or doing errands.

Knowledge about walkable communities

- 41% of respondents (n=121) were familiar with the term "walkable community."
- 32.2% of respondents (n=95) had heard of the term and were able to identify correctly at least one of its five components.
- "Having places within walking distance" was the most frequent and correct response when asked what a walkable community meant to them.
- More women than men were familiar with the term "walkable community."
- More respondents from the age 41 to 63 group were familiar with the term

and could correctly identify at least one of its components compared to other age groups.

• More Norfolk than Haldimand residents were familiar with the term "walkable community."

Attitudes toward walkable communities

- The most important component of a walkable community that respondents considered when deciding where to live was having connected sidewalks and paths.
- Respondents also felt that living in a neighbourhood with little or no traffic and having a big yard or garden was important.

How the built environment impacts physical activity

- For respondents living in a town, hamlet or small village, the most important component of a walkable community affecting their ability to be physically active would be having roads, sidewalks and pathways that are in good condition.
- For respondents living in the country, having trails or paths within a five- to 10-minute walking or cycling distance of home would positively impact their physical activity.

Perceived barriers to creating walkable communities

- Respondents living in a town, hamlet or small village would be most opposed to adding new types of housing.
- Respondents living in the country would oppose the addition of paved shoulders to both sides of the road.

Conclusion

Haldimand County and Norfolk County have already carried out many initiatives and campaigns to advance walking and cycling in our communities. Some of these include:

- The creation of trails, trail master plans and trail guides.
- Citizen advocacy groups promoting existing trails and the creation of new ones.
- Campaigns: iCANwalk, snow clearing, bike safety, etc.

While great work has occurred in both counties, continued efforts are necessary to make Haldimand County and Norfolk County more walkable, healthy and vibrant.

SECTION ONE: INTRODUCTION AND BACKGROUND



1.1 Purpose of This Report

In 2007, the Central West walkON Coordinating Committee conducted a community survey to assess what the public thought and felt about walkable communities. In keeping with the evidence-based approach to walkON programming, the committee decided that it would be prudent to identify what the public knows about walkability prior to implementing further campaigns and programs at local levels. The results of the survey would inform campaigns and serve as baseline data for evaluation purposes.

This report includes the findings from Haldimand County and Norfolk County and makes recommendations based on the survey results. The purpose of this report is to:

- Provide background and a description of the walkON program and walkable communities.
- Provide information regarding:
 - o Knowledge and attitudes of

walkable communities.

- o How the built environment impacts physical activity.
- o Perceived barriers to creating walkable communities.
- Inform the development and implementation of local programming that will increase support for and action toward developing walkable communities.
- Provide baseline data for evaluating local efforts.

1.2 Introduction to walkON

The Haldimand-Norfolk Health Unit has been a member of the Central West walkON program since its inception, along with five other health units (Brant, Halton, Niagara, Waterloo and Wellington-Dufferin-Guelph). The walkON program began in 2004 as a joint initiative of Heart Health Partnerships from the Central West region of Ontario. It is supported by the Ministry of Health Promotion and is funded as one of the projects of the Ontario Heart Health Program - Taking Action for Healthy Living.

The program identified a need to support the development of walkable communities. After conducting extensive research, including literature reviews and interviews with key players in the communities, walkON developed a mission, structure and plans for the future. The mission of walkON is to promote the development of communities that support walking for transportation, health and recreation. WalkON envisions an Ontario where people value and seek communities that are safe, convenient and accessible to all for their daily needs. WalkON strives to:

- Mobilize communities to focus on improving the built environment through education and access to resources.
- Improve the built environment in order to support walking as a form of everyday, functional and recreational

transportation.

 Increase the proportion of residents in Central West communities who choose walking as a way to be active.

WalkON supports this vision by providing many resources for the public's use, including workshops, information sessions, checklists, tool kits, reports and relevant research.

1.3 What is a Walkable Community?

Being walkable is an important aspect of healthy and vibrant communities (Humpel, Owen & Leslie, 2002). Research suggests that the way our communities are designed impacts our levels of physical activity (Humphrey, 2005). To encourage citizens to rely less on their cars and choose walking, the environment in which they live, work, learn and play must support walking as a form of everyday transportation (Humpel, Owen & Leslie, 2002; Abelsohn, Bray, Vakil & Elliot, 2005). Well-designed, compact communities where people can walk to school, work, stores, parks and restaurants significantly reduce the need to drive (Humpel, Owen & Leslie, 2002; Abelsohn, Bray, Vakil & Elliot, 2005).

There are many health, economic and environmental benefits to building and sustaining communities that support walking as a primary mode of transportation (Humpel, Owen & Leslie, 2002; Abelsohn, Bray, Vakil & Elliot, 2005). Numerous studies have shown that walking can reduce the risk of coronary heart disease and stroke by controlling blood pressure, high blood cholesterol and obesity (Heart and Stroke Foundation of Ontario, 2010). As well, walking can reduce the risk of certain types of cancer, Type 2 diabetes, osteoporosis and arthritis (Heart and Stroke Foundation of Ontario, 2010). It can also enhance mental well-being (Heart and Stroke Foundation of Ontario, 2010). Along with its health benefits, walkability is a good investment as reducing traffic, noise, speeds and vehicle pollution has been found to increase property values (Littman, 1999).



Urban planners, sociologists and other professionals have reviewed the literature relating to factors that influence the walkability of communities. Based on this work, walkON has chosen five key components that define a walkable community (see Figure 1):

- Access to amenities.
- Density.
- Safety.
- Aesthetics.
- Connectivity (walkON, 2009).

Access to amenities

Access to amenities refers to the amount of different land uses within a given area and their proximity to one another. Neighbourhoods should include homes as well as offices, stores, restaurants and other services and amenities such as religious institutions, schools, social and recreational facilities (Handy, Boarnet, Ewing & Kilingsworth, 2002). A neighbourhood could have a large number of homes, but if residents do not have access to services and amenities within a reasonable walking distance, they will still be required to use their cars for transportation (Bray, Vakil & Elliott, 2005).

Density

Density

Density refers to the measure of activity found in an area, often defined as population, employment or building square footage per unit area (Handy, Boarnet, Ewing & Kilingsworth, 2002). Sprawling communities have low density with fewer people living on large lots in large areas far away from businesses, jobs, stores and restaurants (Frank, Schmid, Chapman & Saelens, 2005). Generally speaking, higher population and employment density are related to more walking and cycling (Frank, Schmid, Chapman & Saelens, 2005).

Safety

Safety from injury and crime is also an element of the built environment that may have an impact on physical activity (wal-kON, 2009). Safe walking routes feature separation from the road, traffic calming

Figure 1: walkON's Five Elements of Walkable Communities

Access to Amenities elements, clear and functional sidewalks, adequate lighting, crossing signals and legible street signs (walkON, 2009).

Aesthetics

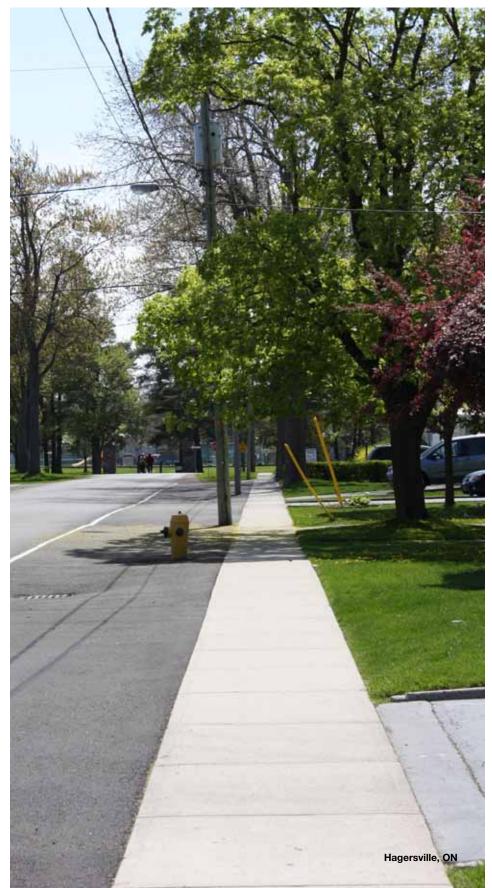
Aesthetics refers to the attractiveness or appeal of an area (walkON, 2009). Aesthetic factors include building design, landscaping and the availability of amenities such as benches and lighting (walkON, 2009). It is the most intangible of the five built environment dimensions to measure (Handy, Boarnet, Ewing & Kilingsworth, 2002).

Connectivity

Connectivity refers to the directness or availability of alternative routes from one point to another within a neighbourhood (Frank & Engelke, 2001). A highly connected street network provides many possible routes between destinations (Handy, Boarnet, Ewing & Kilingsworth, 2002). Areas of urban sprawl have low connectivity, typified by long blocks and dead-end streets or crescents. This indirect street pattern is less safe and less convenient for walking and cycling (Handy, Boarnet, Ewing & Kilingsworth, 2002).

1.4 Haldimand and Norfolk Counties

To delineate the scope of this study, Haldimand and Norfolk Counties were examined. Haldimand and Norfolk Counties are both considered rural communities. The two counties combined have a population of 107,775 (Statistics Canada, 2009). There are no metropolitan cities, urban centres or northern hinterlands, rather small towns and non-metropolitan cities. With population density serving as an indicator of rural populations (Hart, Larson & Lishner, 2005), Haldimand and Norfolk's population density of 37.7 people/km² further supports the claim of their rural nature (Statistics Canada, 2009).



SECTION TWO: METHODOLOGY



2.1 Survey Instrument

The staff of both Halton Region Health Department and Waterloo Region Public Health, in consultation with the Central West walkON Coordinating Committee, developed the survey (see Appendix A). Input was provided by epidemiologists at the participating health units. A pilot was conducted to test the validity of the instrument. Changes were made to specific questions to improve the clarity and flow of the survey. The final survey was divided into the following five sections, however, they do not reflect the exact order in which they appeared.

- 1. Knowledge of walkable communities and walkON.
- 2. Attitudes toward walkable communities.
- 3. Knowledge of how the built environment impacts health.
- 4. Barriers to creating walkable communities.
- 5. Demographics.

Type of Neighbourhood

From the pilot, results indicated that the type of neighbourhood in which respondents lived – e.g., town vs. country – needed to be defined and further explored because different factors relating to walkable communities are more significant to each type of setting. For example, proximity and access to amenities are factors with more relevance in a town setting. Conversely, having paved shoulders on both sides of the road may be more relevant in country settings for enhancing walkability. The following criteria were used to stratify survey respondents:

Living in a town was defined as:

- Living in a downtown centre or core of a city or town.
- Living within a city or town.
- Living in a hamlet or small village.

Living in the country was defined as:

• Living outside of a city or town, including the countryside.

• Living on a farm.

• Living in a residential estate home. Respondents living in a small village or hamlet were categorized with respondents living in a town or city. This decision was made as certain characteristics of

villages and hamlets are similar to towns and cities in regard to walkable communities. For example, similar to respondents living in a town, respondents in a small village or hamlet might be able to walk to some amenities, such as churches, schools, corner stores, community centres, community mailboxes, etc. This would not be the case for respondents living more remotely on a concession road. As well, hamlets and villages have the potential for growth with greater clustering of houses, which is consistent with characteristics of towns and cities.

This distinction between "town/small village/hamlet" and "country" was made for questions relating to knowledge of how the built environment affects physical activity and barriers to creating walkable communities.

It is important to note that the terms "town" and "country" are elusive terms that share no universal agreement among survey respondents. To stratify the respondents based on the type of neighbourhood in which they lived was based on the participants' subjective judgement and perception. A participant's response to questions that measure the type of neighbourhood where he or she lived may be inconsistent with his or her neighbour who lives in close proximity. For example, it is conceivable that neighbours living on the outskirts of the town of Courtland could easily differ on their opinions of whether they lived "in a town" or "outside of a town." Therefore, the validity of their responses may be compromised, and this warrants using a degree of caution when interpreting results.

Other Factors Not Essential to Walkable Communities

The survey also included questions relating to three factors that are not considered essential to walkable communities:

- Having a sense of belonging.
- Having little or no traffic.
- Having a big yard or garden.

Sense of Belonging

A sense of belonging is believed to be a benefit of walkable communities as it allows people to get to know their neighbourhood (Central West walkON Coordinating Committee, 2009).

Having Little or No Traffic

Having little or no traffic usually means living on dead-end streets or cul-de-sacs, which decreased connectivity (Central West walkON Coordinating Committee, 2009).

Having a Big Backyard or Garden

Having a big backyard or garden usually means larger lots and more distance between houses. This negatively impacts the development of walkable communities (Central West walkON Coordinating Committee, 2009).

2.2 Sample Selection

The University of Waterloo's Survey Re-



search Centre conducted the telephone survey, which lasted an average of 10 minutes. Data were collected for seven health units (Brant, Haldimand-Norfolk, Halton, Hamilton, Niagara, Waterloo and Wellington-Dufferin-Guelph) from July to November 2007. Random digit dialling was used to reach respondents. Each number was called up to eight times, with more attempts made when encountering a busy signal.

For Haldimand and Norfolk Counties, the sample size requested by the Health Unit was 300. A final sample size of 295 was achieved. Moreover, out of the 11,597 total eligible surveys for Central West, 3,409 surveys were completed. This resulted in a response rate of 29.4% for the entire Central West area.

2.3 Data Analysis

Nearly all of the survey options of "don't know," "not sure" and "refused" were coded as missing values, with the exception of household income. This occurred for questions where responses were less than 5% and where the response options were not considered valid. These options were excluded primarily to simplify data analysis.

The data were weighted to account for the number of adults living within a household. Since the question about the number of adults within a household was not added until partway through the survey, cases where the data were not collected were given a value of 2.02, representing the average number of adults in the household. The household weight used for Haldimand and Norfolk data analysis equals 0.50600.

The majority of information in this report includes frequencies and chi-squares. Some categories were collapsed to employ 2 X 2 chi-squared analyses. Comparisons were made for some demographic variables. Significant differences were evaluated with chisquare analyses. The data were analyzed using SPSS Statistics (version 17.0).

SECTION THREE: RESULTS



The following results are for respondents from Haldimand County and Norfolk County.

3.1 Demographics

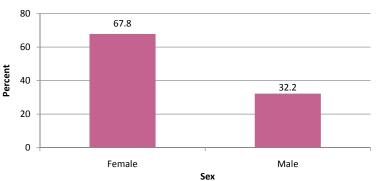
Sex

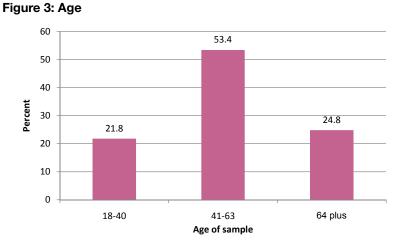
A greater percentage of survey respondents were female than male (67.8%, n=200 vs. 32.2%, n=95) (see Figure 2).

Age

The highest proportion of respondents were from the age 41-63 group (53.4%, n=151), followed by the age 64 plus group (24.8%, n=70) and the age 18-40 group (21.8%, n=62) (see Figure 3).









SECTION THREE: Results



Housing Type

A large majority of respondents lived in detached homes (89.5%, n=261), while only a very small proportion lived in either apartment buildings, condominium buildings, semi-detached houses or attached houses and other dwellings (see Figure 4).

Type of Neighbourhood

The majority of respondents identified as living in a town (62.6%, n=174), with only 37.4% (n=104) living in the country (see Figure 5).

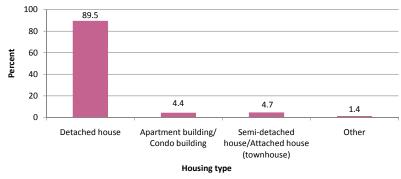
Education Level

Figure 6 illustrates the education level of the sample. The majority of respondents (50%, n=146) had a college or university degree, followed by a high school diploma (27.9%, n=81).

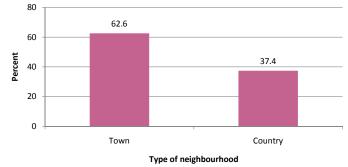
Household Income

Figure 7 provides a breakdown of income levels of the sample. Overall, approximately 30% of respondents (29.7%, n=87) had a household income of less than \$70,000, while 29.1% (n=86) reported an income of greater than \$70,000 (before taxes). Most of the remaining respondents (34.1%, n=101) refused to answer.

Figure 4: Housing Type

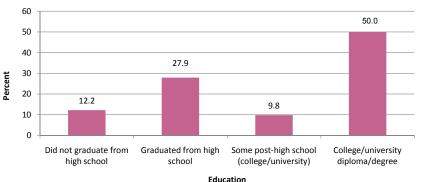




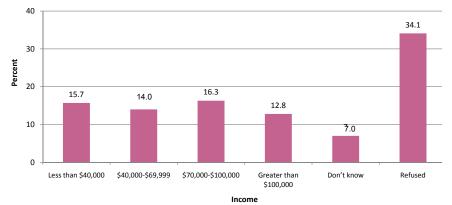


Data Note: Living in a town was defined as either living in a downtown centre or core of a city or town, or living within a city or town or living in a hamlet or small village. Living in the country was defined as living outside of a city or town, including the countryside, farms or residential estate homes.

Figure 6: Education Level







Demographic Summary

Table 1 provides a summary of the demographic data. Age and housing types are representative of Haldimand and Norfolk Counties, while sex, education and household income are not (Statistics Canada, 2009).

Table 1: Demographic Summary Table

	Percent	Sample Size (N=295)			
Sex	Sex				
Female	67.8	200			
Male	32.2	95			
Total	100	295			
Age					
18-40	21.8	62			
41-63	53.4	151			
64 plus	24.8	70			
Total	100	283			
Housing Type					
Detached house	89.5	261			
Apartment building/condo building	4.4	13			
Semi-detached house/attached house (townhouse)	4.7	14			
Other	1.4	5			
Total	100	293			
Type of Neighbourhood					
Town	62.6	174			
Country	37.4	104			
Total	100	278			
Education					
Did not graduate from high school	12.2	36			
Graduated from high school	27.9	81			
Some post-high school (college/ university)	9.8	28			
College/university diploma/degree	50.0	146			
Total	100	291			
Household Income					
Less than \$40,000	15.7	46			
\$40,000-\$69,999	14.0	41			
\$70,000 - \$100,000	16.3	48			
Greater than \$100,000	12.8	38			
Don't know	7.0	21			
Refused	34.1	101			
Total	100	295			

Data notes: (1) Demographic data were weighted to account for the number of adults within the household. (2) Percentages may not add up to 100 due to rounding.





St. Andrew St., Port Dover, ON

County and Towns in Which Respondents Reside

Table 2 provides a further breakdown of the area in which respondents lived. Fiftyseven percent (57.3%, n=165) of respondents lived in Norfolk County, while 42.8% (n=124) resided in Haldimand County. The proportion of respondents in each county was representative of the true population in Norfolk and Haldimand Counties (Statistics Canada, 2009).

Frequency of Physical Activity

Respondents were asked how many days in a typical week they were active for at least 60 minutes per day. The greatest proportion of respondents reported being active every day of the week (28.1%, n=83). Approximately half of respondents (51.3%, n=151) were active at least five days a week, while 12% (11.9%, n=35) were not even active for 60 minutes one day a week (see Figure 8).

Walking

Thirty-seven percent (37.4%, n=109) of respondents reported spending less than an hour (11.1%, n=32) or no time at all (26.3%, n=77) walking to work, to school or while doing errands during a typical week. The greatest proportion of respondents spent between one and five hours performing these activities (32.1%, n=93), while 31% (30.5%, n=89) spent over five hours (see Figure 9).

Table 2: County and Towns in Which Respondents Reside

	Percent	Sample Size	
Haldimand			
Dunnville	13.5	39	
Caledonia	10.2	29	
Cayuga	8.9	26	
Hagersville	6.0	17	
Jarvis	3.7	11	
Townsend	0.5	2	
Haldimand Total	42.8	124	
Norfolk			
Simcoe	26.9	78	
Delhi	10.9	31	
Port Dover	9.5	27	
Port Rowan	6.1	18	
Waterford	3.2	9	
Courtland	0.7	2	
Norfolk Total	57.3	165	
Haldimand & Norfolk Total	100	289	

Figure 8: Over a Typical Week, the Number of Days Physically Active for a Total of At Least 60 Minutes per Day

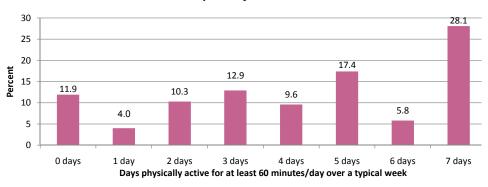
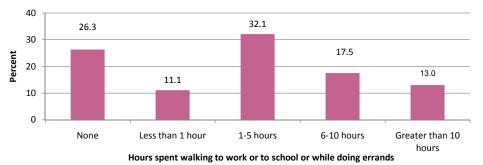




Figure 9: Typical Week in the Past Three Months, Hours Spent Walking to Work, School or Doing Errands



A Walkable Community 11

SECTION THREE: Results

Cycling

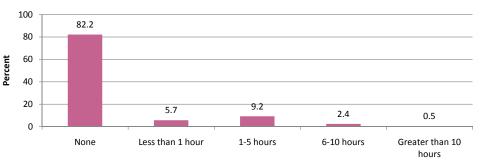
Respondents spent even less time cycling to work, to school or while doing errands during a typical week. Approximately eighty-two percent of respondents (n=242) reported spending no time performing these activities, while the greatest proportion of respondents who did report cycling spent between one and five hours (9.2%, n=27) (see Figure 10).

Summary of Physical Activity Levels

Respondents' reports of physical activity are summarized in the following table.

Table 3: Physical Activity Levels				
	Percent	Sample Size (N=295)		
Number of days physically active for a total of at least 60 minutes per day, typical week				
0	11.9	35		
1	4.0	12		
2	10.3	31		
3	12.9	38		
4	9.6	28		
5	17.4	51		
6	5.8	17		
7	28.1	83		
Total	100	295		
Hours spent walking to work, to school or while doing errands, typical week				
None	26.3	77		
Less than 1 hour	11.1	32		
1-5 hours	32.1	93		
6-10 hours	17.5	51		
Greater than 10 hours	13	38		
Total	100	291		
Hours spent cycling to work, to school or while doing errands, typical week				
None	82.2	242		
Less than 1 hour	5.7	17		
1-5 hours	9.2	27		
6-10 hours	2.4	7		
Greater than 10 hours	0.5	2		
Total	100	295		

Figure 10: Typical Week in the Past Three Months, Hours Spent Cycling to Work, School or Doing Errands



Hours spent cycling to work, school or while doing errands.



3.3 Knowledge of a Walkable Community

Forty-one percent of respondents (n=121) said they were familiar with the term "walkable community," while only 16.2% (n=48) indicated that they were familiar with the walkON program. Thirty-two percent of respondents (n=95) had heard of the term "walkable community" and were able to identify correctly at least one of its five components (see Figure 11). When asked where they saw or heard about walkON, the highest proportion of respondents said the newspaper (24.4%, n=12).

When respondents were asked what a walkable community meant to them, the most common response was "places within walking distance" (19.8% of respondents, n=58). Respondents' knowledge of the other components of a walkable community is outlined in Figure 12.

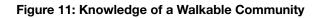
3.4 Attitudes Toward a Walkable Community

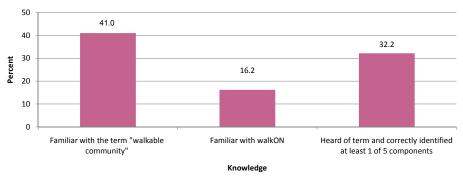
Components of a Neighbourhood that Affect Decisions of Where to Live

Respondents were asked about the importance of the components of a walkable community when deciding where to live. The most important components affecting decisions of where to live were:

- Having sidewalks and pathways that are connected (71.6%, n=203).
- Living within a five- to 10-minute walk of parks (61.8%, n=180).
- Living within a five- to 10-minute walk to stores and restaurants (50.6%, n=73).

Figure 13 displays these and other factors, along with their level of importance when deciding where to live.





Data notes: (1) Percentages do not add up to 100.

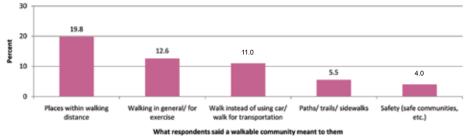


Figure 12: What a Walkable Community Meant to Respondents

Data notes: (1) Percentages do not add up to 100.

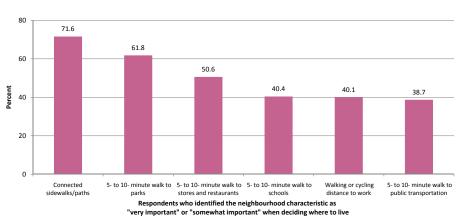


Figure 13: Components of a Neighbourhood that Affect Decisions of Where to Live

Data notes: (1) Scale options: very important, somewhat important, not very important and not at all important. (2) Percentages do not add up to 100.

Factors Not Essential to Walkable Communities

Respondents were also asked about the importance of three other qualities when deciding where to live. Having a sense of belonging (87.0%, n=252), having a big yard or garden (84.7%, n=248) and living in a neighbourhood with little or no traffic (80.4%, n=232) were all important qualities considered by respondents when deciding where to live (see Figure 14). Please note that the qualities "big backyard or garden" and "little or no traffic" are elusive terms that are subject to interpretation.

3.5 How the Built Environment Impacts Physical Activity

Respondents were asked how various elements of a walkable community could affect their ability to be physically active. For this section of the survey, respondents living in towns were asked different questions than those living in the country. Table 4 lists the questions asked of respondents based on their type of neighbourhood (town or country).

Town Respondents

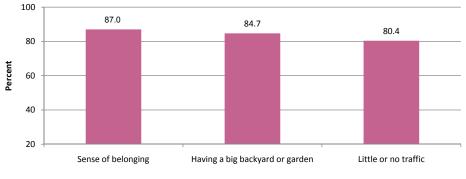
Elements of a walkable community that would most affect respondents' ability to be physically active were:

- Having roads, sidewalks and pathways that are in good condition (71.2%, n=124).
- Having sidewalks and pathways that are connected to each other (61.6%, n=107).

These components are highlighted in Figure 15, along with other elements of a walkable community.



Figure 14: Additional Factors Affecting Decision on Where to Live



Respondents who identified the neighbourhood characteristic as 'Very Important' or 'Somewhat Important' when deciding where to live

Data Notes: (1) Scale options: very important, somewhat important, not very important and not at all important. (2) Percentages do not add up to 100.

 Table 4: Factors of a Walkable Community that Could Affect Ability to be

 Physically Active: Town and Country Questions

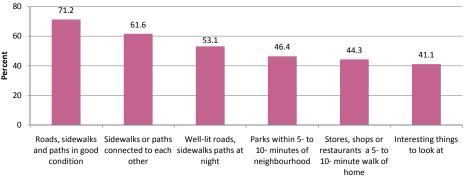
Town

- Having stores, shops or restaurants within a five- to 10-minute walk of your home.
- Having parks within a five- to 10-minute walk of your neighbourhood.
- Having sidewalks or pathways that are connected to each other.
- Having interesting things to look at.
- Having roads, sidewalks and pathways that are in good condition.
- Having well-lit roads, sidewalks and pathways at night.

Country

- Having paved shoulders on both sides of the road.
- Having trails or pathways within a five- to 10-minute walk or cycling distance of your home.

Figure 15: Components of a Neighbourhood that Affect One's Ability to be Physically Active, Town Respondents



Respondents who identified the characteristics of a neighbourhood that could affect their ability to be physically active

Data notes: (1) Scale options: a lot, a little, not at all, not sure and refused. (2) Percentage of respondents who reported "a lot." (3) Percentages do not add up to 100.

Country Respondents

Approximately forty percent of country respondents (39.6%, n=41) felt that having trails or pathways within a five- to 10-minute walk or cycling distance of home could positively impact their physical activity, while only 33.2% (n=34) reported that having paved shoulders on both sides of the road could positively impact their physical activity (see Figure 16).

3.6 Perceived Barriers to Creating a Walkable Community

Respondents were asked about the presence of various neighbourhood components that would add to walkable communities. For respondents who did not have each of these components in their neighbourhood, they were asked how much they would oppose their additions. Again, respondents were asked different questions depending on their type of neighbourhood. These questions are listed in Table 5.

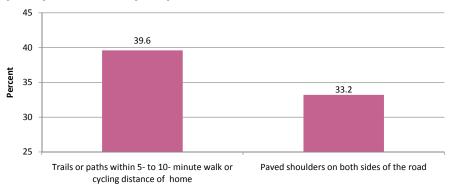
Town Respondents

Town respondents were most opposed to adding:

- 1. New types of housing (55.1%, n=43).
- 2. Stores, shops or restaurants (45.6%, n=22).
- Sidewalks on both sides of the street (45%, n=60) (see Figure 17).



Figure 16: Components of a Neighbourhood that Affect One's Ability to be Physically Active, Country Respondents



Data notes: (1) Scale options: a lot, a little, not at all, not sure and refused. (2) Percentage of respondents who reported "a lot." (3) Percentages do not add up to 100.

Table 5: Barriers to Creating a Walkable Community: Town and CountryQuestions

Respondents were asked about the addition of the following elements to their neighbourhood to improve walkability:

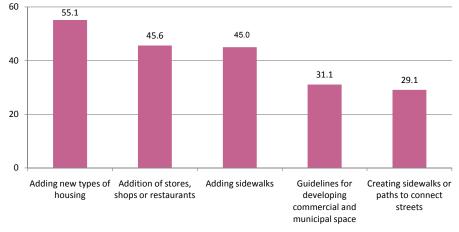
Town

- Addition of sidewalks to both sides of the street.
- Addition of new types of housing (e.g., detached homes, townhouses, apartments, etc.).
- Addition of stores, shops or restaurants within a five- to 10-minute walk.
- Having guidelines for the development of commercial and municipal spaces.
- The addition of sidewalks or pathways to connect streets.

Country

- Addition of paved shoulders to both sides of the road.
- Addition of trails or pathways to your neighbourhood or community.

Figure 17: Barriers to Creating a Walkable Community, Town Respondents



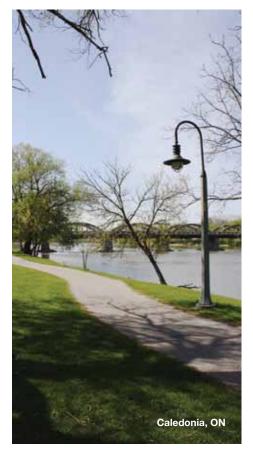
Respondents' opposition to the addition of walkable community components

Data notes: (1) Options: strongly support, somewhat support, somewhat oppose and strongly oppose. (2) Respondents who stated "somewhat" or "strongly opposed." (3) Data points: Opposed guidelines... (31.1%, n=8); Opposed creating sidewalks... (29.1%, n=24). (4) Percentages do not add up to 100.

SECTION THREE: Results

Country Respondents

Approximately forty-six percent (45.6%, n=42) of country respondents were opposed to adding paved shoulders to both sides of the road, while 28.8% (n=12) were opposed to adding trails or pathways to their neighbourhood or community (see Figure 18).



50 40 40 30 28.8 20 10 Adding paved shoulders to both sides of the road Adding trails or pathways

Respondents' opposition to the addition of walkable community components

Data notes: (1) Options: strongly support, somewhat support, somewhat oppose and strongly oppose. (2) Respondents who stated "somewhat" or "strongly opposed." (3) Percentages do not add up to 100.

Table 6: Summary Table

Most important component of walkable communities affecting one's ability to be active

For respondents living in a town:

• Having roads, sidewalks and pathways that are in good condition.

For respondents living in the country:

• Having trails or pathways within five- to 10-minute walk or cycling distance of home.

Barriers to creating walkable communities

For respondents living in a town:

• The addition of new types of housing.

For respondents living in the country:

• The addition of paved shoulders to both sides of the road.



Figure 18: Barriers to Creating a Walkable Community, Country Respondents

Walker St. Port Dover, ON

3.7 Data by Demographics

The following section of the report presents significant comparisons for selected demographic variables: sex, age, county and children at home. Variables were analyzed for differences in knowledge and attitudes.

Sex

■ Knowledge

Significantly more women than men were familiar with the term "walkable community" (46.5% vs. 30.8%) (see Figure 19).

Attitudes

Sex had no effect on attitudes toward a walkable community.

Age

■ Knowledge

The age 41 to 63 group had the largest amount of respondents who were familiar with the term "walkable community" and could correctly identify at least one of its components. Significant differences did exist among age groups. Figure 20 displays the differences by age groups.

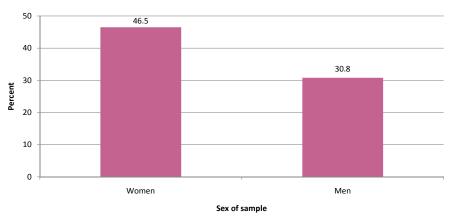
Attitude

When deciding where to live, significant age differences were noted for the following factors:

- Being within a five- to 10-minute walk of public transportation.
- Being within a five- to 10-minute walk of stores and restaurants.
- Being within walking or cycling distance of your place of work (p<0.05).

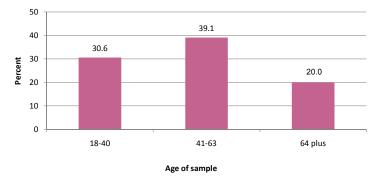


Figure 19: Percentage of Women and Men who Were Familiar with the Term "Walkable Community"



Data Notes: (1) Data points: women, n=92; men, n=29. (2) χ^2 (1, N=292) = 6.40, p<0.05. (3) Percentages do not add up to 100.

Figure 20: Were Familiar with the Term "Walkable Community" and Correctly Identified One Component, By Age Group



Data Notes: (1) Data points: age 18-40, n=19; age 41-63, n=59; age 64 plus, n=14. (2) χ^2 (2, N= 283) = 8.06, p<0.05. (3) Percentages do not add up to 100.



Walking Distance of Pulic Transportation

More specifically, a higher proportion of respondents age 64 and older (57.4%, n=35) said that being within a five- to 10-minute walk of public transportation was important to consider when deciding where to live compared to the other age groups (age 18-40: 22.0%, n=13; age 41-63: 37.4%, n=55) (see Figure 21).

Walking Distance of Stores and Restaurants

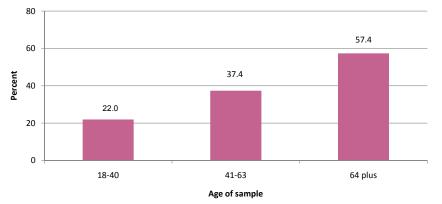
As well, a higher proportion of respondents age 64 and older (66.7%, n=46) said that being within a five- to 10-minute walk of stores and restaurants was important to consider when deciding where to live compared to the other age groups (age 18-40: 36.1%, n=22; age 41-63: 47.7%, n=72). These differences are displayed in Figure 22.

Walking or Cycling Distance of Place of Work

Finally, a higher proportion of respondents age 64 and older (47.6%, n=20) said that being within walking or cycling distance to their place of work was important to consider when deciding where to live compared to the other age groups (age 18-40: 26.2%, n=16; age 41-63: 42.2%, n=57 (see Figure 23).

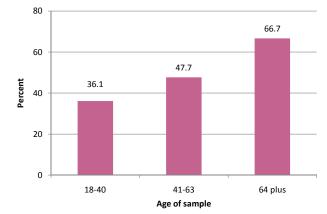


Figure 21: Respondents Stating That Being Within 5- to 10-minutes of Public Transportation is Important When Making a Decision About Where to Live, By Age Group

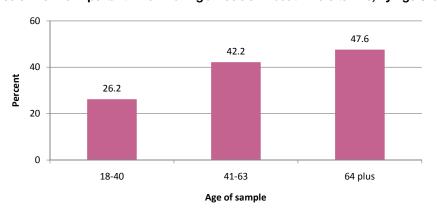


Data Notes: (1) χ^2 (2, *N*=267) = 15.99, *p*<0.05. (2) Scale options: very important, somewhat important, not very important and not at all important. (3) Respondents who reported "very important" or "somewhat important." (4) Percentages do not add up to 100.

Figure 22: Respondents Stating That Being Within a 5- to 10-minute Walk of Stores and Restaurants is Important When Making a Decision About Where to Live



Data Notes: (1) χ^2 (2, *N*=281) = 12.73, *p*<0.05. (2) Scale options: very important, somewhat important, not very important and not at all important. (3) Respondents who reported "very important" or "somewhat important." (4) Percentages do not add up to 100.



Data Notes: (1) χ^2 (2, *N*=238) = 6.08, *p*<0.05. (2) Scale options: very important, somewhat important, not very important and not at all important. (3) Respondents who reported "very important" or "somewhat important." (4) Percentages do not add up to 100.

Figure 23: Respondents Stating That Being Within Walking or Cycling Distance to Their Place of Work is Important When Making a Decision About Where to Live, By Age Group

County

■ Knowledge

Compared to Haldimand residents, significantly more residents of Norfolk County were familiar with the term "walkable community" (48.2%, n=79 vs. 33.6%, n=41) and had either seen or heard about walkON (21.8%, n=36 vs. 9.8%, n=12) (see Figures 24 and 25).

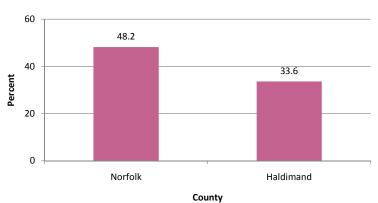
Attitude

Significantly more Norfolk residents than Haldimand residents indicated that being within a five- to 10-minute walk of public transportation was important when deciding where to live (45.5%, n=70 vs. 30.5%, n= 36) (see Figure 26). Although there is no public transportation available in either county, it still is an important factor for respondents when deciding where to live.



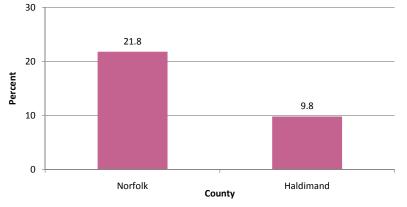


Figure 24: Familiar with the Term "Walkable Community," By County



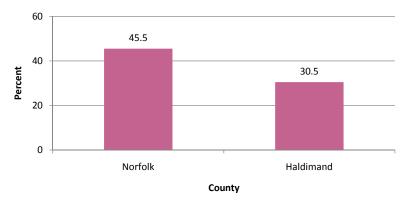
Data Notes: (1) χ^2 (1, N=286) = 6.09, p<0.05. (2) Percentages do not add up to 100.

Figure 25: Familiar With walkON, By County



Data Notes: (1) χ^2 (1, N=287) = 7.23, p<0.05. (2) Percentages do not add up to 100.

Figure 26: Respondents Stating That Being Within five to 10 Minutes of Public Transportation is "Important" When Making a Decision About Where to Live, By County



Date Notes: (1) χ^2 (1, *N*=272) = 6.28, *p*<0.05. (2) Scale options: very important, somewhat important, not very important and not at all important. (3) Respondents who reported "very important" or "somewhat important." (4) Percentages do not add up to 100.

Conversely, more Haldimand than Norfolk residents indicated that living in a neighbourhood with little or no traffic was important when deciding where to live (86.2%, n=106 vs. 76.9%, n=123) (see Figure 27).

Children at Home

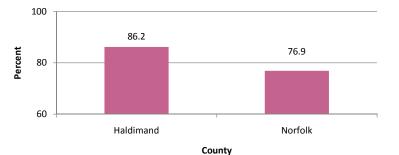
■ Knowledge

Whether or not respondents had children under the age of 18 living at home did not significantly influence their knowledge about a walkable community.

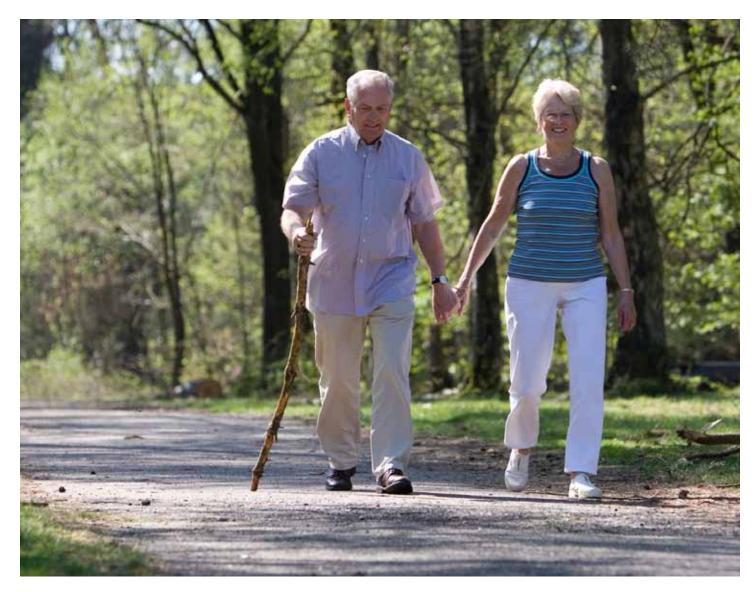
Attitude

Whether or not respondents had children under the age of 18 living at home did not significantly influence their attitudes about a walkable community.

Figure 27: Respondents Stating That Living in a Neighbourhood With Little or No Traffic Was Important When Deciding Where to Live, By County



Data Notes: χ^2 (1, *N*=283) = 3.90, *p*<0.05. (2) Scale options: very important, somewhat important, not very important and not at all important. (3) Respondents who reported "very important" or "somewhat important." (4) Percentages do not add up to 100.



SECTION FOUR: LIMITATIONS

This study has some limitations. The survey response rate is quite low (29.4%), raising questions about the representativeness of the data.

Survey questions were not standardized but rather created for the purpose of this study. Although the initial survey was piloted and questions were changed





to improve clarity and flow, there is still concern with respondents' subjectivity in question interpretation. This limits the reliability and validity of responses.

A distinction was made between respondents who lived in a city, town, hamlet or small village and those who lived in a country setting, which included farms, residential estate homes and the countryside. This was done as different factors relating to a walkable community are more significant to each type of setting. Although this idea is important, the criteria set forth to make this distinction were problematic. No concrete definitions were provided for the different options (e.g., residential estate homes, residents residing on the outskirts of a town or small village, etc.). Responses were based on respondents' subjective judgement, and this could limit the validity of the results.

Haldimand and Norfolk Counties are both considered rural; however, the survey was limited in questions for rural respondents (see Appendix A). For questions relating to knowledge of how the built environment impacts health and barriers to creating a walkable community, rural respondents were only asked about two factors: paved shoulders on both sides of the road, and trails and paths within a five- to 10-minute walk or cycling distance of their houses. This limits the scope of our understanding of a walkable community in our rural setting.

Any survey response is open to certain errors and biases. One type in particular, a social desirability bias is the tendency for people to report in a manner that is socially acceptable. A possible example of this bias in the current survey is the overestimation of respondent's physical activity levels.

SECTION FIVE: SUMMARY AND DISCUSSION



This survey was intended to explore the public's understanding of a walkable community. More specifically, the survey was designed to determine:

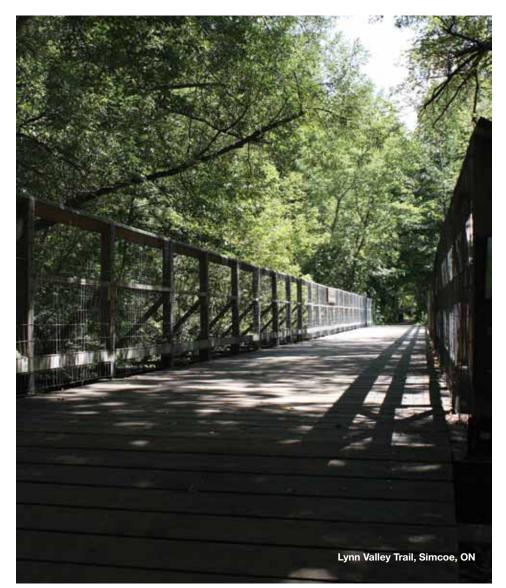
- 1. The public's knowledge about walkable communities and walkON.
- 2. The public's attitudes toward walkable communities.
- 3. What the public knows about how the built environment impacts physical activity.
- 4. What the public's perceived barriers are in the development of walkable communities.

The analysis provides useful information that will assist in implementing campaigns and programs at our local level. The first objective of the study was to determine the public's knowledge about a walkable community. Less than half of respondents (41%) were familiar with the term "walkable community," and when asked what that meant, "Having places within walking distance" was the most frequent and correct response given. More women than men were familiar with the term "walkable community," as were more Norfolk than Haldimand residents. Finally, more respondents from the age 41 to 63 group were familiar with the term and knowledgeable compared to the other age groups.

The second objective was to determine the public's attitudes toward walkable communities. The most important component of a walkable community that respondents considered when deciding where to live was having connected sidewalks and paths. Also, a large majority of respondents placed high value on having a big yard or garden and living in a neighbourhood with little or no traffic. As neither of these components supports a walkable community, promoters and planners need to consider this as they move forward with their campaigns. The age 64 and older group appeared more concerned with the existence of components of walkable communities when deciding where to live compared to respondents in the other age groups. Not only was this age group more knowledgeable, but it is plausible that walking may be their main or only form of transportation, and a walkable community is key to maintaining quality in their lives.

The third objective was to determine what the public knows about how the built environment impacts physical activity. Overall, respondents living in a town, hamlet or small village reported that the most important component of a walkable community affecting their ability to be physically active would be having roads, sidewalks and paths that are in good condition. The importance respondents placed on connected sidewalks and paths that are in good shape is echoed

SECTION FIVE: Summary & Discussion



in their reports of factors that are important when deciding where to live. Respondents living in the country reported that having trails or paths close to home would impact their physical activity. Trails or paths would offer a safe opportunity for walking and cycling rather than using the shoulder of a country road or highway.

The fourth objective was to determine the public's perceived barriers in the development of walkable communities. Respondents living in a town, hamlet or small village were most opposed to adding new types of housing, such as detached homes, townhouses, apartments and condominiums in their neighbourhoods. Residents may feel that this could create more traffic in their community. Opposition from respondents living in the country would come from the addition of paved shoulders on both sides of the road. It is plausible that respondents may see this as neither a practical nor beneficial way of spending financial resources to make their communities more walkable.

Walkability is about the built environment; it needs to support walking and cycling for everyday purposes. Haldimand and Norfolk Counties have already carried out many walkable community initiatives:

 Trails have been created in both counties to offer safe and enjoyable walking and cycling opportunities. The counties, in partnership with the Health Unit, have created and published trail guides to promote these trails.

- Both counties have created their own trail master plans. These plans are in place to assess the current status of trails and identify opportunities for future trails and linkages. As well, these plans will encourage the development of related policies and recommendations regarding ownership, roles and responsibilities.
- Separate groups in each county, Norfolk Pathways for People and Caledonia on the Move, have formed to enhance walkable communities. Through different methods, these groups of citizens advocate for and promote existing paths and the creation of new ones. In addition to these functions, Norfolk Pathways for People also works at a policy level to bring about positive change.

The Health Unit has also implemented many campaigns to advance walking and cycling in our communities. One component of the iCANwalk campaign, for example, offers checklists for people to rate their communities and identify problem areas. This information can then be brought to the attention of the appropriate municipal departments so that improvements can be made. There have also been snow clearing campaigns and campaigns targeting specific segments of the population to promote walking.

Extensive bike safety campaigns have also occurred. These campaigns have included partnerships with the police, politicians, cycling clubs, farmers, government agencies, the Health Unit and others. Some of the activities that have occurred include presentations, posters, equipping bikes with safety features and the distribution of reflective vests and arm bands, DVDs and Ministry of Transportation bike safety booklets.

The analysis included in this report has guided the creation of the following recommendations. While great work has occurred in our communities, continued efforts are necessary to create active communities with residents walking and cycling on a daily basis.

SECTION SIX: RECOMMENDATIONS

- 1. Continue to increase awareness and knowledge and promote walkable communities in both counties.
- 2. Encourage the age 64 and older group to advocate for walkable communities.
- 3. Promote walkable communities in the younger populations.
- 4. Promote and communicate survey results (e.g., the need for sidewalks, places to walk to, etc.) to county departments and stakeholders.
- 5. Enhance partnerships among county departments (e.g., roads, public works, tourism, economic development, etc.) so that collaborative and creative solutions can be designed to improve walking and cycling conditions.
- 6. Further explore walkable communities in rural settings and promote local findings.
- 7. Use the findings from this report to inform presentations and message development on walkable communities for Haldimand and Norfolk Counties.

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Walk On Survey Central West Ontario Health Units

Conducted by UW Survey Research Centre Summer 2007

A: Introduction.

Hello my name is ______ and I am calling from the University of Waterloo on behalf of the ______ public health unit. We are conducting a short 10 minute research survey about neighbourhoods and health.

I'd like to speak to the adult who is at least 18 years old and whose birthday is coming up next. Would that be you?

- If Yes: go to consent
- If No: May I speak with this person now?
- If Yes: go to consent
- If No: Is there a better time to reach them? Set up callback.

If query birthday method:

We need to select someone at random. With each call we make, we ask to speak to the person whose birthday is coming up next. This helps us to ensure that we have a representative sample as some groups of people are less likely to answer the phone.

A2. Consent1

Your answers are important to us, and will be used to help the health unit develop public health programs and services. We have received clearance from the University of Waterloo Office of Research Ethics. The survey will take about 10 minutes to complete, and your answers will be kept confidential. We are not asking for your name or address. You do not have to answer any questions you don't want to. This call may be monitored by my supervisor to assess my performance.

Do you have a few minutes to speak with me now?

- If Yes: Thank you. Go to health unit screener.
- If No: When in the next day or two can we call you back? The survey only takes about 10 minutes. Set up callback or go to refusal.
- If Refused: Thank you for your time. Good bye.
- If Concerns: go to A3

A3. Concerns

Read as needed.

More Info about Survey

This survey is being conducted by 7 central west Ontario health units to collect data on public knowledge and attitudes towards built environments and health. It will help health unit staff to develop a public information campaign about neighbourhoods, physical activity and walkable communities.

Ethics

Please be assured that all data is confidential and no names or addresses are collected. If you have any questions about your participation in this survey please contact Dr. Susan Sykes at the University of Waterloo Office of Research Ethics at (519) 888-4567 ext 36005.

Asks for more information/Health Unit

Ask for health unit. Use paper copy of contact names. Your contact at ______ health unit is ______ at _____ Please feel free to contact them with any questions you may have.

Do you have a few minutes to speak with me now?

- If Yes: Thank you. Go to health unit screener.
- If No: When in the next day or two can we call you back? The survey only takes about 10 minutes. Set up callback or go to refusal.
- If Refused: Thank you for your time. Good bye.



Screen for Health Unit

QA1. Could you please confirm for me, the county or region in which you live? Is it...

Prompt: (If respondent unsure, use list of municipalities.)

- O Brant County
- O Waterloo
- O Halton
- O Haldimand-Norfolk
- O Hamilton
- O Wellington-Dufferin-Guelph
- Niagara
- Other (out of sample) I'm sorry, this survey is not being conducted in your area. Thank you for your time. Good bye.

Health Unit Municipality

If Halton: Which of the following places best describes the municipality in which you live ... (Read main choices, but stop if respondent provides answer)

- Burlington
- O Oakville
- Milton (includes: Bayside, Cambelville, Moffat and Nassagaweya)
- Halton Hills (includes: Acton, Ashgrove, Ballinafad, Georgetown, Glen Williams, Limehouse, Norval, and Stewarttown)

If Brant: Which of the following places best describes the municipality in which you live... (read first two only)

- City of Brantford
- County of Brant (includes Paris, Brantford Township, South Dumfries, St. George, Burford, Oakland, Onondaga, Scotland.)
- Six Nations Native Reserve (out of sample) – I'm sorry, this survey is not being conducted in your area. Thank you for your time. Good bye.

If Niagara: Which of the following places best describes the municipality in which you live...

- O Grimsby
- Lincoln
- St. Catharines
- O Niagara on the Lake
- O Niagara Falls
- O Thorold

- O Pelham
- O West Lincoln
- **O** Wainfleet
- O Port Colborne
- Fort Erie
- O Welland

If Haldimand-Norfolk: Which of the following places best describes the township in which you live...

Haldimand County Townships

- O Caledonia
- Cayuga
- O Dunnville
- O Hagersville
- Jarvis
- O Townsend

Norfolk County Townships

- O Simcoe
- Waterford
- O Port Dover
- O Port Rowan
- O Delhi
- Courtland

If Hamilton: Which of the following

places best describes the municipality in which you live...

- O Hamilton
- O Flamborough
- O Ancaster
- O Stoney Creek
- O Dundas
- O Glanbrook

If Wellington-Dufferin-Guelph: Do you live in Dufferin County, Wellington County

- or the City of Guelph?
 - O Dufferin
 - Wellington
 - O City of Guelph

Help Screen:

Dufferin County: Amaranth, East Garafraxa, East Luther Grand Valley, Melancthon, Mono, Mulmur, Orangeville, and Shelburne

Wellington County: Erin, Puslinch, Centre Wellington, Guelph/Eramosa, Mapleton, Minto, Wellington North If Waterloo: Which of the following places best describes the municipality in which you live...

- City of Waterloo
- City of Cambridge
- O City of Kitchener
- O Township of Wilmot
- **O** Township of Wellesley
- O Township of Woolwich
- O Township of North Dumfries

AB: Knowledge about Walkable Communities

Thank you. I'm going to begin with a couple of general questions about neighbourhoods and physical activity.

AB1. In a typical week in the past 3 months, how many hours did you usually spend walking to work or to school or while doing errands?

Prompt: If last week was typical, think of last week.

- O None
- O less than 1 hour
- O from 1-5 hours
- O from 6 -10 hours
- O from 11-20 hours
- O more than 20 hours
- O don't know
- O refused

AB2. In a typical week in the past 3 months, how many hours did you usually spend cycling to work or to school or while doing errands?

- O None
- O less than 1 hour
- O from 1-5 hours
- O from 6 -10 hours
- O from 11-20 hours
- O more than 20 hours
- O don't know
- O refused

AB3. Have you ever read about or heard of the term "walkable community"?

0	Yes	if yes, go to AB3a
0	No	if no, go to section B

AB3an. What does a walkable community mean to you? Check all that apply. Do not read list.

Prompt: There is no right or wrong answer. What comes to mind when you hear "walkable community"?

- Places are within walking distance (shops, parks, restaurants, schools, etc)
- Walking in general/walking for physical activity or exercise
- Safety (including safe communities/ safety for pedestrians
- Pathways/walkways/trails/ sidewalks
- Walk instead of using a car/walking for transportation
- O Other (specifiy)
- O Not sure
- O Refused

B: Attitudes towards walkable communities

Whether you live in the city or the country, neighbourhoods have many qualities that make them attractive and enjoyable places to live. The first few questions are about how some of these qualities affect your decision about where to live. Suppose you were making a decision today about where to live...

B1. How important is to be within a 5-10 minute walk of public transportation – would you say very important, somewhat important, not very important, not at all important or are you not sure?

Prompt: If they say they live in the country: That's fine, just answer thinking about where you would choose to live.

- O very important
- O somewhat important
- **O** not very important
- O not at all important
- O not sure
- O refused

B2. What about being within a 5-10 minute walk of schools, would you say...

- O very important
- **O** somewhat important
- O not very important

- O not at all important
- O not sure
- O refused

B3. What about being within a 5-10 minute walk of stores and restaurants? Is it...

- **O** very important
- O somewhat important
- O not very important
- O not at all important
- O not sure
- O refused

B4. Suppose you were making a decision today about where to live, how important is it to be within walking or cycling distance of your place of work would you say

- would you say...
 - very important
 - O somewhat important
 - O not very important
 - not at all important
 - O not sure
 - O refused
 - does not work/works from home (do not read)

B5. And having sidewalks and pathways that are connected to each other so you can walk or cycle to places within your neighbourhood? Is it...

- O very important
- O somewhat important
- O not very important
- O not at all important
- O not sure
- O refused

B6. What about having a sense of belonging; such as knowing your neighbours? Is it...

- O very important
- O somewhat important
- O not very important
- O not at all important
- O not sure
- O refused

B7. Suppose you were making a decision today about where to live, how important is it to be living in a neighbourhood with little or no traffic

would you say....

- O very important
- O somewhat important
- **O** not very important
- not at all important
- O not sure
- O refused

B8. How about having a big yard or garden? Is it...

- O very important
- O somewhat important
- O not very important
- not at all important
- O not sure
- O refused

B9. Finally, being within a 5-10 minute walk of parks? Would you say...

- O very important
- O somewhat important
- O not very important
- O not at all important
- O not sure
- O refused

BA1: Information about Neighbourhood

Now I'd like to ask you about your neighbourhood.

BA1. Would you say that your neighbourhood is ...

- located in the downtown centre or core of a city or town
- in a city or town, but not in the downtown centre or core
- outside of a city or town, including in the countryside go to F7B
- not sure
- O refused

BA2. (if live outside of a city or town, including the countryside) Which of the following best describes where you live:

- O on a farm
- O in a hamlet or a small village
- O in an residential estate home
- O other (do not read)

Note: Skip for Sections C and D as follows:

- If BA1 = "in a downtown centre or core" or "in a city or down, but not in the downtown centre or core" Ask section C and section D.
- If BA1 = " outside of a city or town, including the countryside" and BA2
 = " in a hamlet or a small village" ask section C and section D
- If BA1 = "outside of a city or town, including the countryside" and BA2= "on a farm" or "in a residential estate home – ask "Country Questions"
- IfBA1= "not sure" or refused Go to section E
- if BA1= "outside a city or town, including the countryside" and BA2= "other" – Go to section E.

C: Level of knowledge about how the built environment impacts health

Now I'm going to ask you some questions about how much you think your neighbourhood can affect your ability to be physically active. For this question, physical activity refers to activities like walking, jogging, running, cycling, or in-line skating within your neighbourhood. Prompt: If respondent makes comment

about ill health/disability/does not work out, clarify with:

For this portion of the survey, physically active means having a chance or opportunity to be active. If there are further comments: We are not asking about your strength or ability.

C1. Would you say that having stores, shops or restaurants within a 5-10 minute walk of your home could affect your ability to be physically active a lot, a little, not at all, or are you not sure?

- O a lot
- O a little
- not at all
- O not sure
- O refused

C2. How about having parks within a 5-10 minute walk of your neighbourhood, would you say a lot, a little, not at all, or are you not sure?

- O a lot
- O a little
- not at all
- O not sure
- O refused

C3. And having sidewalks or pathways that are connected to each other so you can walk or cycle to places within your neighbourhood?

- O a lot
- O a little
- O not at all
- O not sure
- O refused

C4. Would you say having interesting things to look at could affect you ability to be physically active a lot, a little, not at all, or are you not sure?

- O a lot
- a little
- not at all
- O not sure
- O refused

C5. And having roads, sidewalks and pathways that are in good condition, for example, free from bumps and holes?

- O a lot
- O a little
- not at all
- O not sure
- O refused

C6. Finally, would you say having well lit roads, sidewalks, and pathways at night could affect your ability to be physically active a lot, a little, not at all, or are you not sure?

- O a lot
- O a little
- not at all
- O not sure
- O refused

D: Barriers to walkable communities

Now I'd like to know your opinion about changes that could be made to make it easier to be physically active in your neighbourhood.

Prompt: Physical activity refers to walking, jogging, running, cycling, or in-line skating within your neighbourhood

D1 a) First, do you have sidewalks on both sides of the streets in your neighbourhood?

- O yes
- O no
- O not sure
- O refused

b) If no, would you strongly support, somewhat support, somewhat oppose or strongly oppose adding sidewalks to both sides of the streets in your neighbourhood?

- O strongly support
- O somewhat support
- O somewhat oppose
- O strongly oppose
- O not sure
- O refused

D2 a) Do you have a variety of housing options such as: detached homes, townhouses, apartments and condominiums in your neighbourhood?

- O yes
- O no
- O not sure
- O refused

b) If no, would you strongly support, somewhat support, somewhat oppose or strongly oppose adding new types of housing to your neighbourhood?

- strongly support
- O somewhat support
- O somewhat oppose
- O strongly oppose
- O not sure
- O refused

D3 a) Do you have stores, shops or restaurants within a 5-10 minute walk of your neighbourhood?

- O yes
- O no
- not sure
- O refused

b) If no, would you strongly support, somewhat support, somewhat oppose or strongly oppose adding stores, shops or restaurants to your neighbourhood?

- O strongly support
- O somewhat support
- O somewhat oppose
- strongly oppose
- O not sure
- O refused

D4 a) Are businesses, stores, shops, city/town owned spaces and parks designed to fit with the overall look and design or character of your neighbourhood?

Prompt: Character refers to the overall look, appeal and design of spaces

- O yes
- O no
- O not sure
- O refused

b) If no, would you strongly support, somewhat support, somewhat oppose or strongly oppose having guidelines for the development of commercial and municipal spaces in your neighbourhood?

- O strongly support
- O somewhat support
- O somewhat oppose
- O strongly oppose
- O not sure
- O refused

D5 a) Streets are usually built on either a grid system or a cul de sac system. A grid system refers to a set of streets that cross one another, while a cul de sac system refers to a set of streets with intersections on one end and closed turning areas on the other end. Is your neighbourhood built on a grid or a cul de sac system, or a mixture, or neither?

- $\mathbf{O} \quad \text{grid} \quad$
- O cul de sac
- O mixture
- O neither
- O not sure
- O refused

b) If cul de sac system or mixture: Would you strongly support, somewhat support, somewhat oppose or strongly oppose creating sidewalks or pathways to connect the streets in your neighbourhood more directly to one another?

- **O** strongly support
- O somewhat support
- O somewhat oppose
- O strongly oppose
- O not sure
- O refused

Section CC: Country Questions

Now I am going to ask you some questions about the roads and pathways in your neighbourhood or community.

CC1.a) First, do you have paved shoulders on both sides of the road in your neighbourhood or community?

- O Yes
- O No if no, go to 1b)
- O not sure
- O refused

CC1b) If no Would you strongly support, somewhat support, somewhat oppose or strongly oppose adding paved shoulders to both sides of the road?

- O strongly support
- O somewhat support
- O somewhat oppose
- strongly oppose
- O not sure
- O refused

CC2. Would you say that having paved shoulders on both sides of the road could affect your ability to be physically active a lot, a little, not at all or are you not sure?

- O a lot
- O a little
- O not at all
- O not sure
- O refused

CC3a) Do you have trails or pathways within a 5-10 minute walking or cycling distance of your home?

- O Yes
- O No if no, go to 1b)
- O not sure
- O refused

CC3b) If no Would you strongly support, somewhat support, somewhat oppose or strongly oppose adding trails or pathways to your neighbourhood or community?

- O strongly support
- O somewhat support
- O somewhat oppose
- O strongly oppose
- O not sure
- O refused

CC4. Would you say that having trails or pathways within a 5-10 minute walking or cycling distance of your home could affect your ability to be physically active a lot, a little, not at all or are you not sure?

- O a lot
- O a little
- not at all
- not sure
- O refused

E: Level of knowledge of Walk On Campaign

Now I'm going to ask you a few questions about a public health project.

E1. Walk-On is a project that promotes the development of communities that support walking, running, jogging, cycling, and in-line skating as forms of transportation within neighbourhoods and communities. Have you ever seen or heard about Walk-On?

- O yes
- O no
- O not sure
- O refused

E2n. If yes to E1. Where did you see or hear about Walk-On? Check all that apply. Do not read list.

- O Newspaper
- Television
- O Radio
- Print Materials (pamphlets, brochures, newsletter, flyers, magnet, mail, postcard, bills)
- Passive Visual Media (posters, signs, billboards, bus/transit/ subway ads, movie theatre, mall display)
- Word of Mouth (family, friends, colleagues at work/school, etc)
- Internet/Website/On-line (includes the health department website)
- Other (specify) ____
- O not sure
- O refused

F: Demographics

For the following questions, we are asking about all your physical activities, which may include playing sports, jogging, dancing, yoga, and lifting weights, as well as walking, cycling or in-line skating within your neighbourhood?

F1. Over the past 7 days, on how many days were you physically active for a total of 60 minutes or more per day?

- O 0 davs
- O 1 day
- O 2 days
- O 3 days
- O 4 days
- O 5 days
- O 6 days
- O 7 days

F2. Over a TYPICAL week, on how many days were you physically active for a total of 60 minutes or more per day?

- O 0 days
- O 1 day
- O 2 days
- O 3 days
- O 4 days
- O 5 days
- O 6 days
- O 7 days

These last few questions are for statistical purposes only.

F3. What is your gender? (Ask only if unsure)

- O Male
- O Female

F4. In what year were you born?

F4b. How many adults over the age of 18 are living in your household?

F5. Do you have any children under the age of 18 living in your household?

- O yes
- O no

F6. What is the highest level of education you have obtained? (Do not read)

- **O** did not graduate from high school
- O graduated from high school
- **O** some post-high school education
- college/university diploma/degree
- O don't know
- O refused

F7. What type of dwelling do you live in...

- O detached house
- **O** semi-detached house
- **O** attached house (townhouse)
- **O** apartment building/condo building
- O mixed use building
- O other (specify)
- O not sure
- O refused
- retirement/nursing home/ seniors's complex

F8a. Were you born in Canada?

- O Yes
 - O No

F8b. (if no to F8a.) In what year did you first come to Canada to live?

F9. Could you please tell me how much income you and other members of your household received in the year ending December 31st 2006, before taxes. Please include income FROM ALL SOURCES such as savings, pensions, rent, as well as wages. Was the total household income from all sources: Do not read brackets

- O ...less than \$20,000,
- ...\$20,000 to \$30,000, (29,999)
- ...\$30,000 to \$40,000, (39,999)
- ...\$40,000 to \$50,000, (49,999)
- ...\$50,000 to \$60,000, (59,999)
- **O** ...\$60,000 to \$70,000, (69,999)
- ...\$70,000 to \$80,000, (79,999)
- ...\$80,000 to \$90,000, (89,999)
- O ...\$90,000 to \$100,000, (99,999)
- ...\$100,000 to \$120,000, (119,999)
- **O** ...Greater than \$120,000
- O Don't know
- O Refused

Thank you for your time. If you would like more information, or to see the results of the survey, the results will be posted in early 2008 at www.walkon.ca.

If requested: provide contact info for people without web access.