

# Investigating Age-Friendly Communities through Walkability for Senior Well-Being

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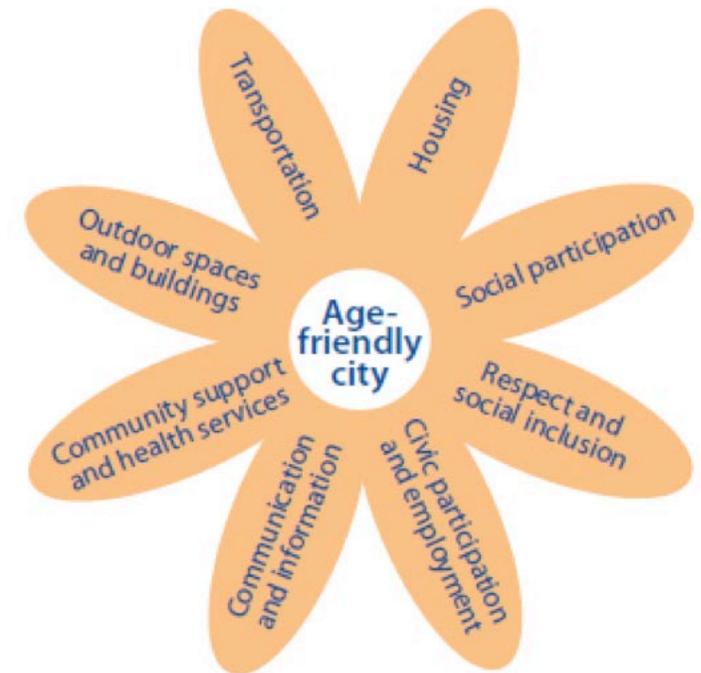
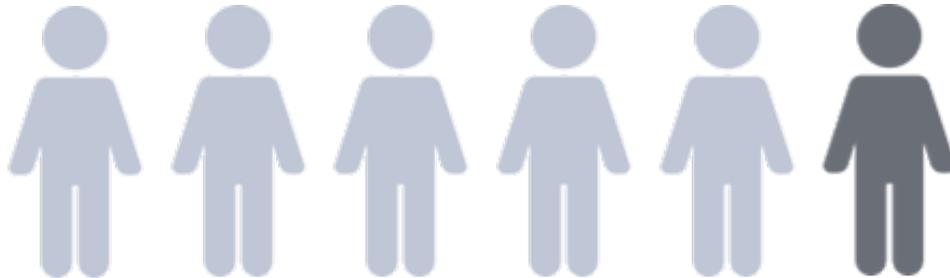




## Age-Friendly City

Aims to encourage active aging and optimize opportunities for health, participation, and security in order to enhance quality of life as people age. An Age-Friendly City adapts its structures and services to be accessible and inclusive of older people with varying needs and capacities.

- Aging population in Ontario
  - 1 in 6 people will be  $\geq 65$  years by 2017
- Active aging to prolong healthy, independent living
- “Person-environment fit” to evaluate the 8 domains
- Walkability linked to “p-e fit” and the Age-Friendly City
  - Adapt structures and services for seniors



The 8 Domains of Age-Friendly Cities



## Walkability

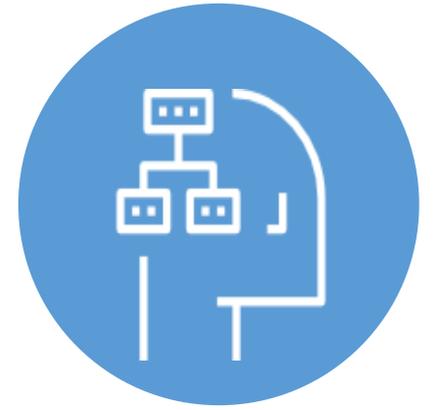
A measure of how conducive a particular area is for walking; how the built environment supports and encourages safe and comfortable walking for all community members to different destinations with relative ease, distance, time, and effort.

- Walking contributes to health through:
  - Preventing cardiovascular disease, obesity, and diabetes
  - Improving emotional well-being and cognitive function
  - Alleviating stress and anxiety
  - Facilitating physical activity and diminishes sedentary behaviour
  - Increasing social interaction with the wider community
  - Fostering familiarity, sense of place, and community
  - Enhancing perception of safety
  - Maintaining mobility
- Walkable environments are inclusive to all members of a community
  - Caters to all ages, ability, income, etc.
  - The most widely-accessible mode of transit



# Measuring Walkability

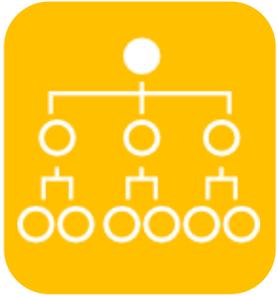
- Objective measures of walkability
  - Audits, checklists, GIS, etc
  - Effective for quantitative, systematic, and fine assessments of walkability
  - Focus on indicators such as:
    - Land use
    - Connectivity
    - Residential density
- Subjective measures of walkability
  - Experiences of built and social environments vary between people
    - Mobility levels
    - Walking speed
    - Rates of fatigue
    - Activity spaces
    - Perceptions of safety
    - Past personal experiences
  - Different perceptions of walkability determine walking behaviour
  - Less use of perceptual data to measure walkability, though on the rise





## Research Question

What is the relationship between perceived and objectively measured walkability for seniors in two contrasting neighbourhoods?



## Objectives

- Identify objective characteristics of contrasting neighbourhoods
- Investigate perceived environmental characteristics for seniors
- Determine the relationship between subjective and objective walkability between and within neighbourhoods



## Methods

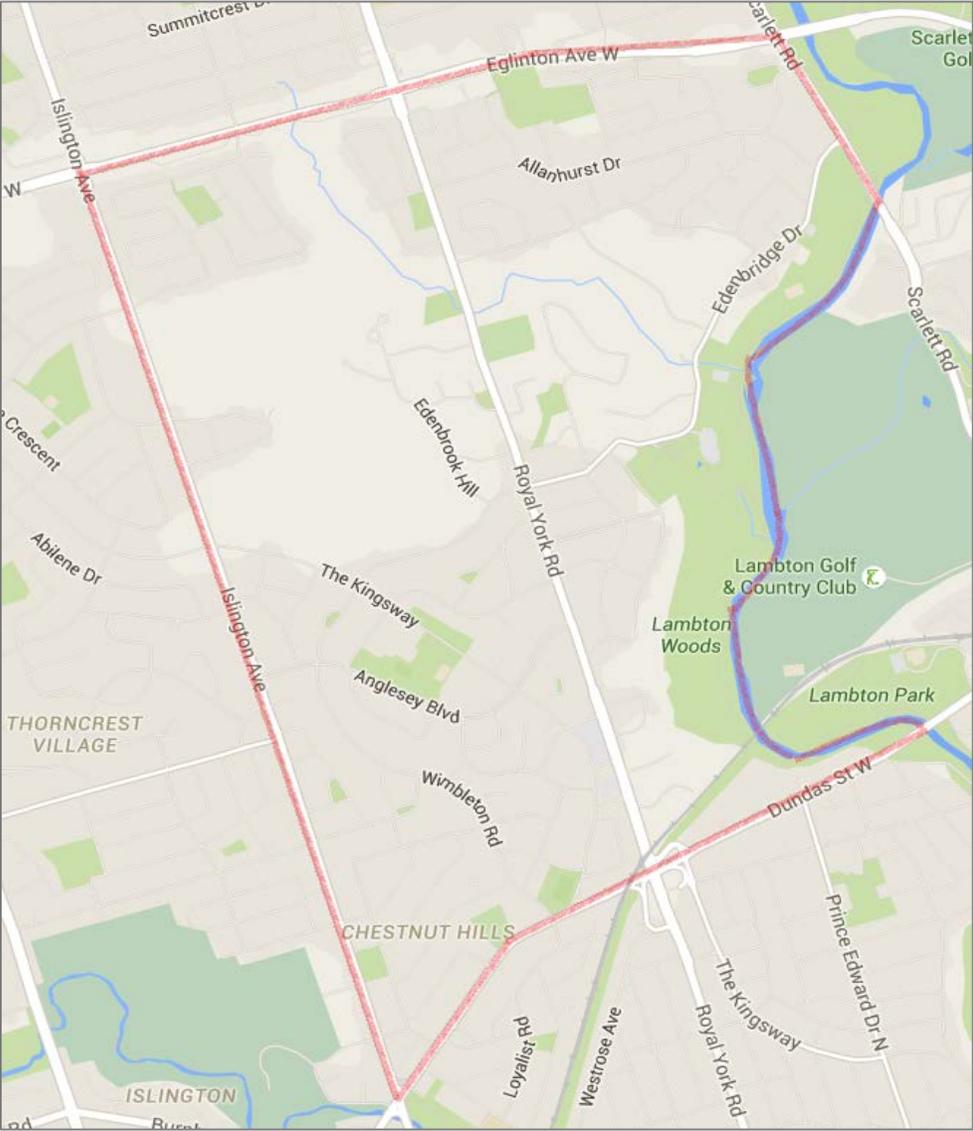
- Walkability audits (SWEAT-R)
- Socio-demographic surveys
- Focus groups
- Go-along interviews



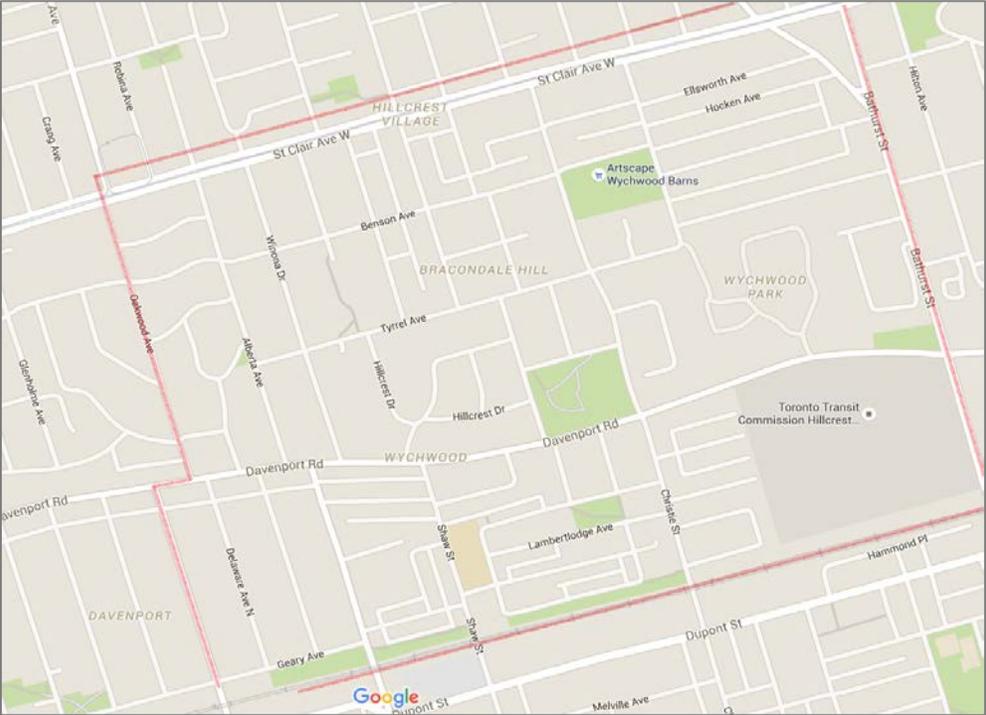
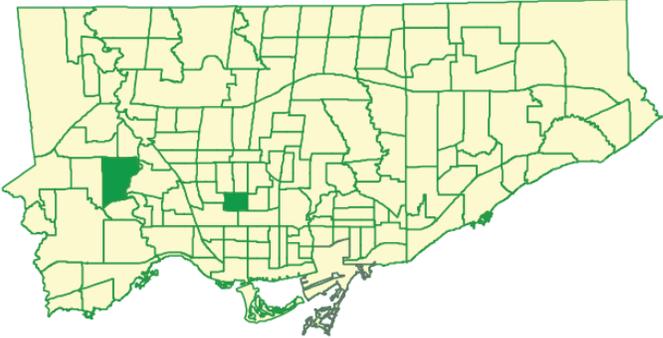
## Participants

- N = 28 adults 65+ yr
- Females = 25
- Males = 3
- Mean Age = 85-89 yr

# Case Study Areas



Edenbridge-Humber Valley

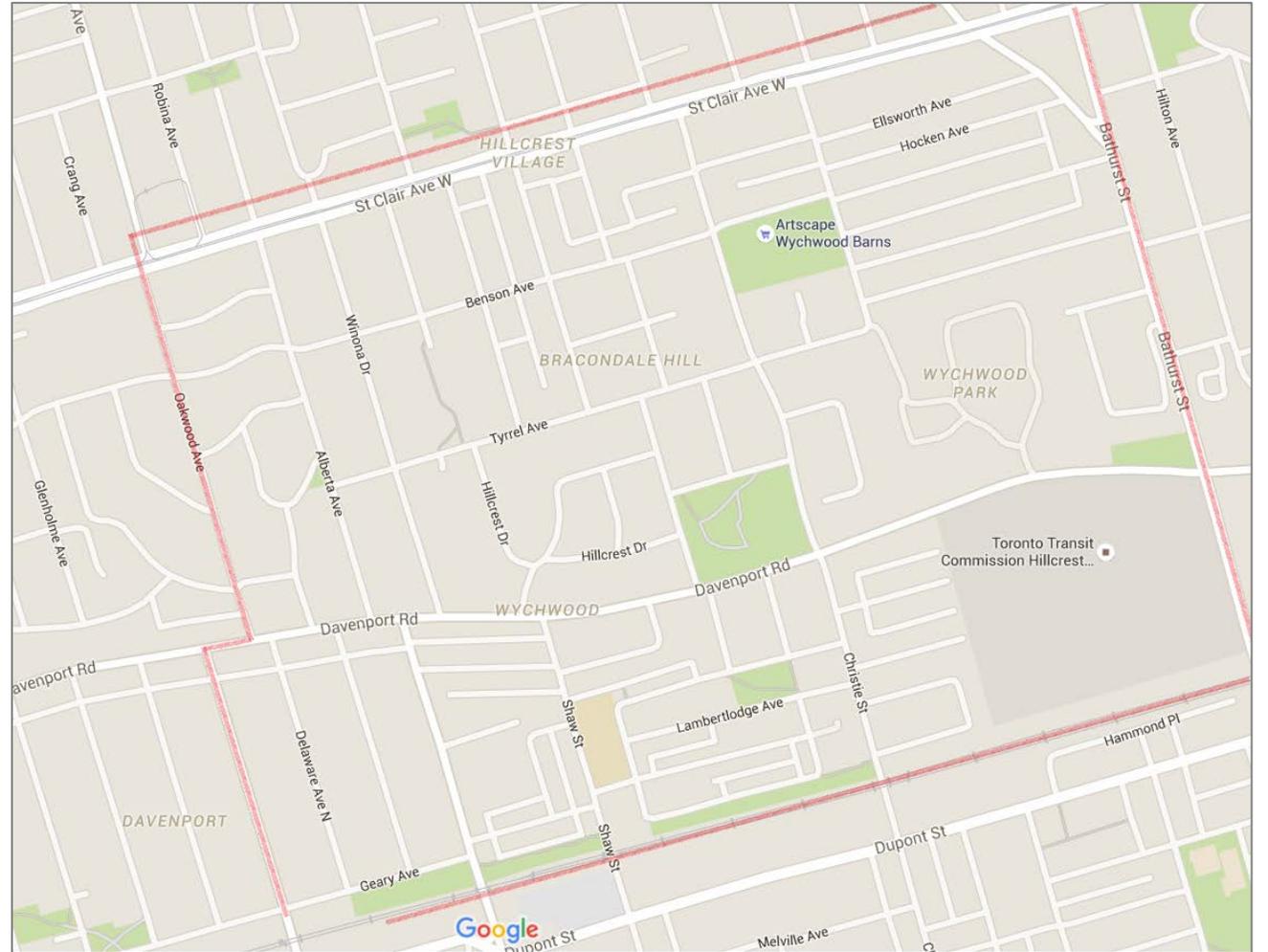


Wychwood

# Objective & Subjective Findings

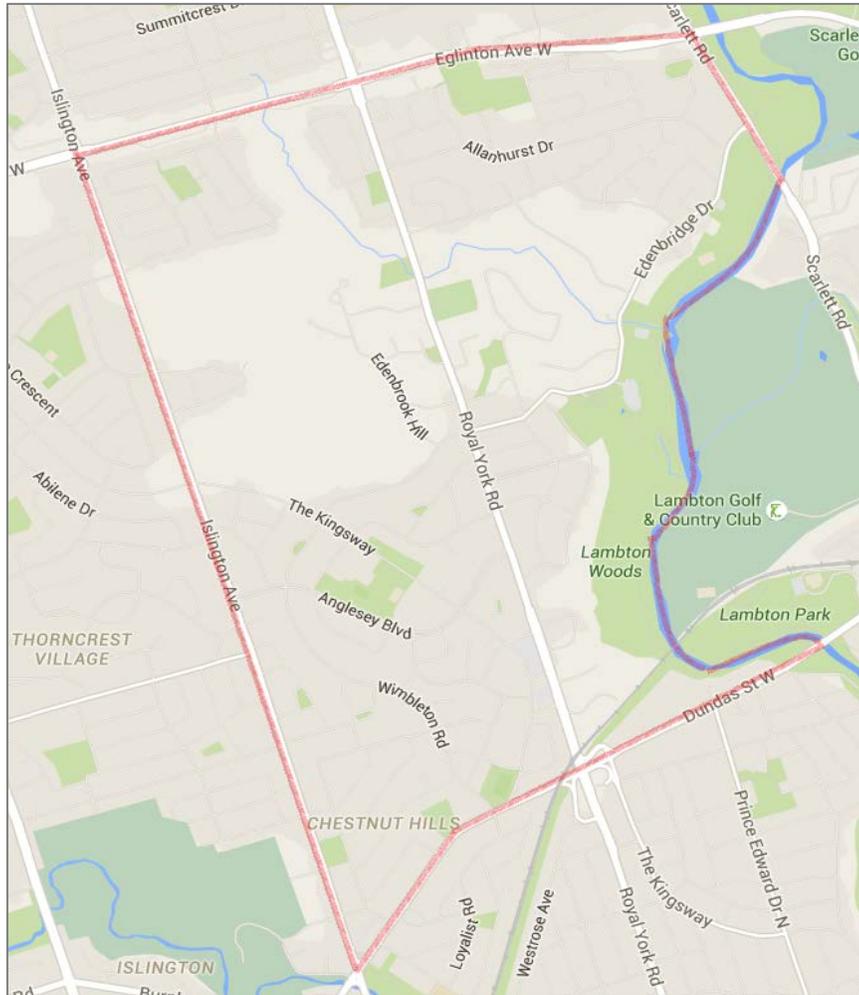


*“We have the convenience stores, you know, which is great for necessities. Where I was before, you had to walk a bit to get near a store... But on the whole, I think it’s very, very good. And I am inclined to go out more now than I would have done in my old apartment.... easy to nip down the convenience store and the drug store” (Lori)*

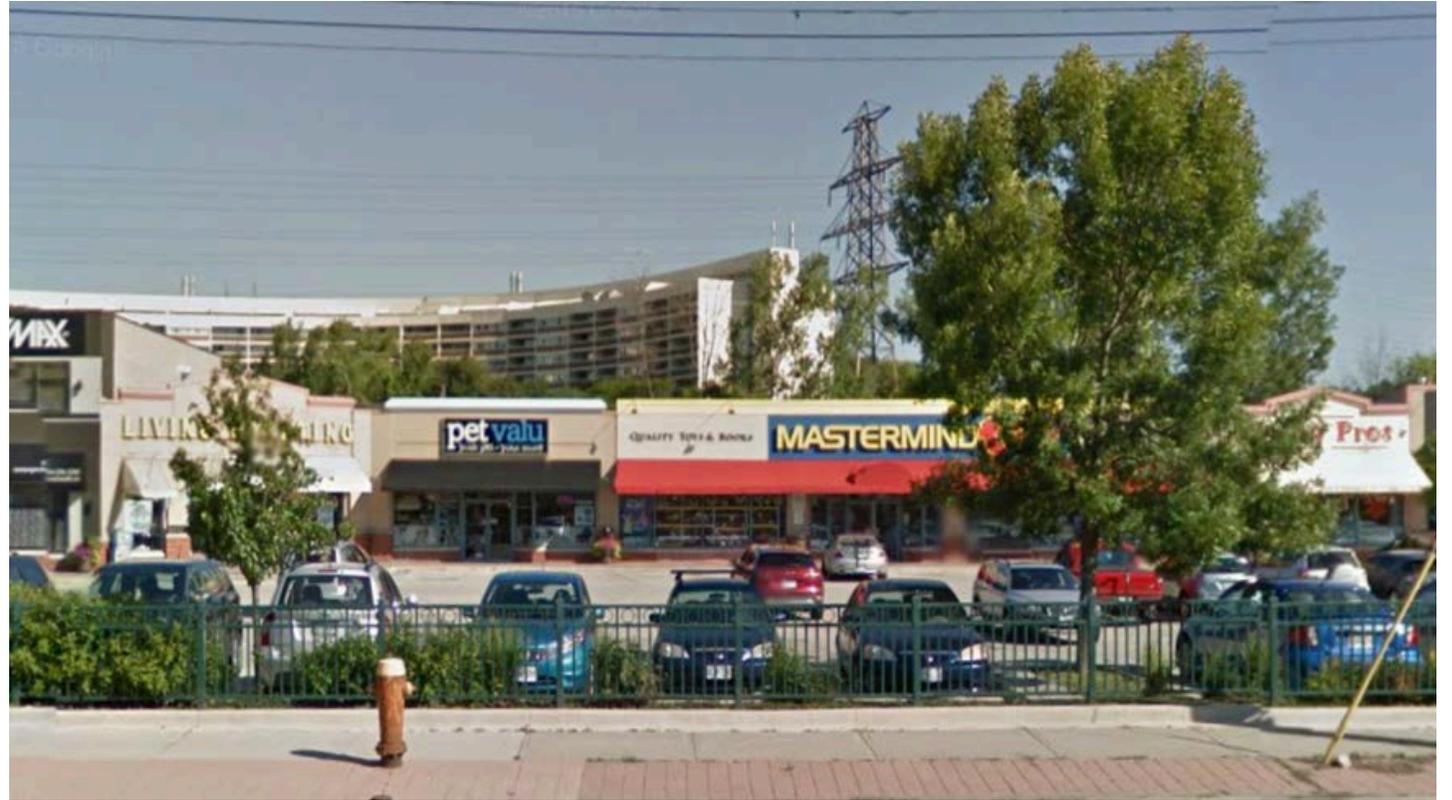


Wychwood

# Objective & Subjective Findings



Edenbridge-Humber Valley



*“Well, there’s no reason for us to go out from A to B!  
There’s nothing there for us! Just look around”* (Helen)

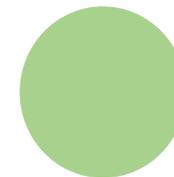
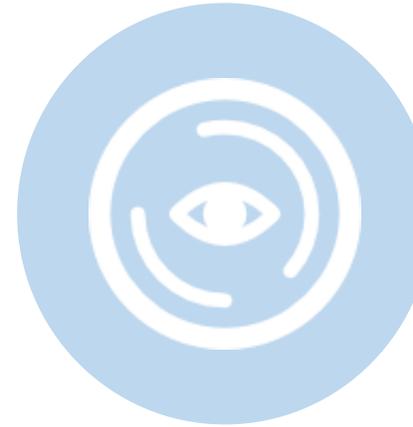
# Summary of Objective & Subjective Findings

- Participant perceptions aligned with objective audit results.
  - However:
    - Less emphasis on physical attributes
- Audit did not cover everything:
  - Overlooked:
    - Social attributes and retirement homes



# The Social Environment

- Safety
  - Audit focused on:
    - Number of street lamps
    - Number of traffic lanes
    - Crossing times at crosswalks
    - Curb cuts
    - Pedestrian signals and systems
  - Audit overlooked:
    - Sense of crime / sense of security
    - Perceptions of number and demographics of area
- Social Capital
  - Audit focused on:
    - Types of land uses
  - Audit overlooked:
    - Number of people on the streets
    - Friendliness of locals
    - Social interactions
    - Sense of community experiences



# Experiences Living in Retirement Homes

*“We don’t have to go to a seniors’ community place because we have everything here” (Gladys)*



*“They bring in clothing here, the stores. They bring them in and – I’ve bought this here, I’ve bought that here, you can buy shoes, you can buy hats, you can buy scarves, underwear... Yeah, we don’t need the stores, really” (Rose)*



*“...we have that roof! Have you been up to see that roof?... You could go there and you can walk around there....For my walking – 164 steps. So people walk around” (Gladys)*



# Concluding Remarks

- Supplement objective measures with subjective measures
  - Create a comprehensive view of community walkability
  - Local residents are best equipped to provide subjective data
- Seniors' opinions and community concerns are unheard
  - Incorporate public engagement component to walkability audits
    - Focus groups with local seniors
- Encourage interactions and collaborations community-wide

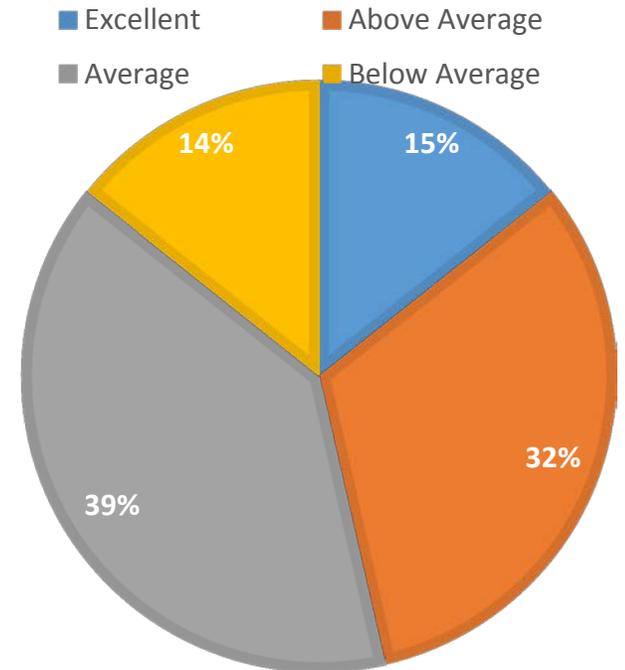


**Questions?**

# Participant Demographic & Health Profile

	WYCHWOOD	EDENBRIDGE- HUMBER VALLEY	TOTAL
POPULATION			
TOTAL	14	14	28
FEMALE	14	11	25
MALE	0	3	3
AGE			
65 – 69 YEARS	1	0	1
70 – 74 YEARS	0	0	0
75 – 79 YEARS	4	2	6
80 – 84 YEARS	3	1	4
85 – 89 YEARS	4	4	8
90 + YEARS	3	6	9

## MOBILITY LEVEL



Wychwood
Christie Gardens
St. Matthew's Bracondale House



Edenbridge-Humber Valley
Delmanor Prince Edward
Chartwell Scarlett Heights

# The Formula for Motivation

$$\text{Motivation} = \frac{\text{Perceived Chance of Success} \times \text{Perceived Importance of the Goal}}{\text{Perceived Cost} \times \text{Inclination to Remain Sedentary}}$$

Chance of Success: Belief in the ability to shape his/her health.

Importance of Goal: The value placed on an activity and perception of benefits.

Cost: Perceived barriers that have negative influence over initiation of activity.

Inclination to Remain Sedentary: The value placed on avoiding activity.