Indicators for a Healthy Built Environment

February 12, 2019 - 1:30 – 3:00 pm
An online discussion with:

Ghazal Fazli, & Justin Thielman, Public Health Ontario
Ahalya Mahendra, Public Health Agency of Canada,
Jacqueline Edwards, Public Health Sudbury & Districts & Tina McBrien, Region of Peel
Patrice Martineau, Statistics Canada
Dany Doiron, Canadian Urban Environmental Health Research Consortium (CANUE)
Jackie Gervais, Health Promoter, Niagara Region Public Health
Kendra Willard, Health Promoter, Halton Region Health Department

Moderated by Paul Young, OHCC Consultant, Urban Designer, Public Space Workshop
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Introduction
Paul Young,
OHCC Consultant, Landscape Architect, Public Space Workshop, PaulYoung@PublicSpaceWorkshop.ca

Use the chat box
1. What indicators or screening tools are you working with?
2. What indicators do you need that you haven’t been able to measure?
3. What are some promising practices that you can share?

Discussion at the end
Background

Built Environment & Health Webinar 2018

- Healthy Neighborhood Design (incl. Healthy Housing)
- Economics
- Healthy Transportation
- Healthy Natural Environments
- Healthy Food Systems
- Meaningful Public and Stakeholder Engagement
- Link to webinar  https://www.youtube.com/watch?v=r1ZzbfFgfg
Purpose

• Host a conversation about BE&H indicators
• Measuring *how well* our BE is supporting health
• Data available/needed (quantitative and qualitative)
Themes for today:

1. Community Based Indicators: Ghazal and Justin

2. Geo-spatial / GIS indicators: Ahalya, Jacqueline, Tina, Patrice and Dany

3. Practitioner Perspective: Jackie and Kendra
poll
Indicators for a Healthy Built Environment: Area Walkability

Justin Thielman, Lead Epidemiologist, Public Health Ontario
Contact: Justin.Thielman@oahpp.ca

Ghazal Fazli, Post-Doctoral Fellow, Public Health Ontario
Contact: ghazal.fazli@oahpp.ca
Built environment and walkability

• **Built environment**: Physical components of the environment that have been created or modified by humans.

• **Food environment**: Are a creation of the human-built and social environments. They are the physical, social, economic, cultural, and political factors that impact the accessibility, availability, and adequacy of food within a community or region.

• **Walkability**: The degree to which a neighbourhood encourages walking, based on population and amenity density and street network.
High walkability
Low walkability
Walkability and public health

• Most people do not achieve minimum recommended amount of physical activity
• Substantial evidence physical activity reduces chronic disease risk
• Interventions that increase physical activity at the individual level often not sustained
The Booth and Glazier Walkability Index

The index can measure how far an average person could walk in 10 minutes from the centre of the area using existing streets and foot paths.

The walkability index includes four components:

- Population density: the total number of people per square kilometer
- Residential density: the total number of occupied residential dwellings per square kilometer
- Walkable destinations: the sum of all “retail and service” destination including public recreation centers and schools
- Street connectivity: the count of all intersections with at least 3 converging roads or pathways divided by the area of the buffer

1Glazier et al. Density, Destinations or Both? A Comparison of Measures of Walkability in Relation to Transportation Behaviors, Obesity and Diabetes in Toronto, Canada. 2014; 9; e85295-e85295
Validation of the Booth and Glazier Walkability Index
Creatore, Glazier, Moineddin, Fazli, Johns, Gozdyra, Matheson, Kaufman-Shriri, Rosella, Manuel, Booth, *JAMA 2016*
Creatore, Glazier, Moineddin, Fazli, Johns, Gozdyra, Matheson, Kaufman-Shriqui, Rosella, Manuel, Booth, JAMA 2016
Creatore, Glazier, Moineddin, Fazli, Johns, Gozdyra, Matheson, Kaufman-Shriqui, Rosella, Manuel, Booth, JAMA 2016

The graph shows the number of daily car trips per 100 persons over the years 2001, 2006, and 2011. The data is stratified by quintile, with quintile 1 representing the least walkable and quintile 5 representing the most walkable. The walkability score medians and ranges for each quintile are as follows:

- Quintile 1: 10.1 (0-12.04)
- Quintile 2: 13.7 (12.05-15.22)
- Quintile 3: 16.8 (15.23-18.60)
- Quintile 4: 20.9 (18.61-25.49)
- Quintile 5: 35.2 (25.50-100)
Figure 1. Adjusted Prevalence of Overweight and Obesity Among Adults Aged 30 to 64 Years and Living in Urban Areas, by Walkability Quintile, 2001-2012

43.3 vs. 53.5%,

45.4 vs. 58.9%,

*adjusted for age, sex, income; used ethnicity-based cut points to define overweight/obesity

Creatore, Glazier, Moineddin, Fazli, Johns, Gozdyra, Matheson, Kaufman-Shriqui, Rosella, Manuel, Booth, JAMA 2016
Figure 2. Adjusted Neighborhood-Level Diabetes Incidence Among an Urban Population Aged 30 to 64 Years, by Walkability Quintile, Fiscal Year 2001-2012

*adjusted for age, sex, income, ethnicity

N~3 million diabetes-free residents/year

Creatore, Glazier, Moineddin, Fazli, Johns, Gozdyra, Matheson, Kaufman-Shriqui, Rosella, Manuel, Booth, JAMA 2016
Diabetes incidence was lowest in most vs. least walkable areas among individuals age 30-64 yrs

Based on weights from IPTW; * includes age, sex, income, % visible minority, % South Asians baseline comorbidity, hypertension, cardiovascular disease (MI, stroke)

Booth GL et al. JECH 2019
Young and middle-aged men (30-64 yrs) followed for 5 years

N=1,658,027

Booth et al., Diabetes Care, 2013
Ethnicity and prediabetes incidence among immigrants to Ontario by walkability

Fazli et al. (submitted)
Smoking rates were higher in high walkability areas

– adjusting for age, sex, ethnicity, comorbidities, area income

N=44,252 from EMRaLD database

Howell et al.
Higher traffic pollution
-> fewer benefits of walkability

Lower traffic pollution
-> greater benefits of walkability

Diabetes
Lower [NO2] HR 0.75
HTN HR 0.65

Howell et al.
N= 2,496,420 living in Southern Ontario cities
Walkability Data: Street Smart Walk Score® (www.walkscore.com)

For given locations, SSWS algorithm based on number and proximity of amenities

Penalties for lower intersection densities and longer block lengths
Walk Score® Metric: Toronto
Population Density: Toronto
Walk Score® Metric: Thunder Bay

Population Density: Thunder Bay
Walk Score® metric in public health research

• Carr et al. validated Smart Walk Score® metric as measure of walkability

• Thielman et al. found adults in areas with highest Walk Score® values did significantly more moderate-to-vigorous physical activity

• Chiu et al. found that moving to neighbourhood with higher Walk Score® values associated with lower risk of hypertension
References


References


• Walk Score. Walk Score Methodology. 2012.
References


The Association of Public Health Epidemiologists in Ontario (APHEO) Core Indicators Work Group standardizes definitions and calculation methods for over 120 public health indicators.
APHEO Built Environment Subgroup
## Current Built Environment Sub-Group Members

<table>
<thead>
<tr>
<th>Member</th>
<th>Area of Expertise</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahalya Mahendra (Chair)</td>
<td>Epidemiologist</td>
<td>Public Health Agency of Canada, Ontario Regional Office</td>
</tr>
<tr>
<td>Ainslie Butler</td>
<td>Epidemiologist</td>
<td>Simcoe Muskoka District Health Unit</td>
</tr>
<tr>
<td>Éric Robitaille</td>
<td>Researcher</td>
<td>INSPQ, Québec</td>
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<tr>
<td>Jane Polsky</td>
<td>Researcher</td>
<td>Statistics Canada</td>
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<tr>
<td>Marc Lefebvre</td>
<td>GIS</td>
<td>Public Health Sudbury &amp; Districts</td>
</tr>
<tr>
<td>Melissa Riou</td>
<td>Senior Planner</td>
<td>City of Greater Sudbury</td>
</tr>
<tr>
<td>Rachel Prowse</td>
<td>Applied Public Health Science Specialist – Healthy Eating and Food Environments</td>
<td>Public Health Ontario</td>
</tr>
<tr>
<td>Steve Johnson</td>
<td>GIS</td>
<td>Public Health Ontario</td>
</tr>
<tr>
<td>Tina McBrien</td>
<td>Public Health Nutritionist</td>
<td>Region of Peel Public Health</td>
</tr>
</tbody>
</table>
Selection and Operationalization of Indicators

- Appropriate experts on the subgroup
- Literature scan
- Understanding further validated by academic experts
Retail Food Environment Indicators

The Subgroup proposed two sets of indicators:

- **Urban Geographic Food Retail Accessibility Indicator**
  1. density of food outlets
  2. the relative density of less healthy food outlets; and
  3. proximity of the population, living in specific geographic areas, to food outlets.

- **Access to Less Healthy Food Retail Outlets Relative to High Schools**
Implementing GIS Based Food Environment Indicators
Tina McBrien
Public Health Nutritionist

Region of Peel
working with you
Implementing GIS Based Food Environment Indicators in the Region of Peel

Goal: Provide Peel communities with easier access to fresh and healthy foods compared to processed and unhealthy foods

Key Priority: To measure and monitor the current food environment across the Region of Peel
Implementing GIS Based Food Environment Indicators in the Region of Peel

Early Learnings:

- Creating a reliable categorized foundation of retail food outlets
- Urban/suburban/rural geography implications
- Availability of additional data to enhance the GIS picture
Working Through the Process
Updating the Food Environment
Going Forward

- This indicator hasn’t been fully tested in the field.
  - Public Health Sudbury and Districts and Peel Region are testing this indicator.
  - We are happy to support other health units if they would like to use this indicator to evaluate their food environment

- In the final stages of developing and testing an indicator that would evaluate the food environment around schools.

- Pause and reflect on what types of indicators health units will need to respond to the modernized standards

- Initially thinking has been to capitalize on existing work to look at alcohol, tobacco and cannabis outlets
Contact Information

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tina.mcbrien@peelregion.ca
lefebvreml@phsd.ca
City Data Project

Patrice Martineau, Statistics Canada

12 February, 2019
The Vision

High-value information on Canada’s cities and user-friendly tools to support decision-making, research, and engagement
Stats & Indicators

- Disaggregate *existing datasets* at the city-level
- Develop *new indicators* relevant for cities
- Consider cities as *units of observation*
City Data Hub

• Central repository of city-level data

• User-friendly tools developed using state-of-the-art technologies

• Many useful functionalities offered

• Incremental development based on user feedback
Contact information

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Statistics Canada
613 219-5899
patrice.martineau2@canada.ca
Indicators for a Healthy Built Environment
the Canadian Urban Environmental Health Research Consortium

February 12 | 2019

Dany Doiron
CANUE Data Linkage Specialist
Research Institute of the McGill University Health Centre
dany.doiron@canue.ca

On behalf of the CANUE team
CANUE has a broad focus on outdoor environmental exposures/urban form metrics, and includes socio-economic information.
The Canadian Urban Environmental Health Research Consortium (CANUE)

- Consistent spatial datasets going back to 1980 and into the future
- Procedures and tools to facilitate linkage with health databases
- Data teams working on developing exposure data covering 6 key domains
- Indexed at the postal code
- CSV format files for easy manipulation
Neighbourhood factors

Canadian Urban Environmental Health Research Consortium
Indicators for a Healthy Built Environment

Neighbourhood factors

**Material and Social Deprivation Index**
- R. Pampalon for INSPQ

**Canadian Active Living Environments Index (Can-ALE)**
- N. Ross at McGill University
- Based on census dissemination areas for 2006 and 2016

**Nighttime light**
- Satellite imagery
- 1 km resolution
- Annual average brightness
- 1992 to 2013
Indicators for a Healthy Built Environment

Neighbourhood factors

Access to Employment - 2016

Canadian Marginalization Index
Indicators for a Healthy Built Environment

Air quality
Indicators for a Healthy Built Environment

**Air quality**

### Fine Particulates
- A. van Donkelaar and R. Martin at Dalhousie University
- Satellite data
- 1 km resolution
- Annual average concentrations
- 2000 - 2015

### Nitrogen Dioxide
- P. Hystad for Health Canada
- Estimated at postal codes
- Annual average concentrations
- 1984 – 2012

### Sulphur Dioxide
- Modelled by Environment Canada
- Satellite data
- 30km resolution
- Annual average concentrations
- 2007 - 2015

### Ozone
- Modelled by Environment Canada using CHRONOS and GEM-MACH
- 21-10km resolution
- Monthly and annual average concentrations
- 2002 - 2015
Indicators for a Healthy Built Environment

Air quality

Monthly Ozone

Monthly Nitrogen Dioxide
Greenness

Weather and Climate

Indicators for a Healthy Built Environment
**Indicators for a Healthy Built Environment**

**Greenness**

**NORMALIZED DIFFERENCE VEGETATION INDEX**
- Processed using Google Earth Engine
- 30m/250m/1km resolution
- Annual average, annual maximum and growing season average at each postal code, and within set distance buffers
- 1984 - 2015

**Weather and Climate**

**INTERPOLATED WEATHER STATION DATA**
- Processed from station observations by NRCAN
- Estimated at 10km grid points and at postal codes
- Daily max/min temperature, total precipitation, consecutive days above/below threshold, extreme events
- 1985 - 2015
Combining CANUE datasets to create a ‘multi-exposure index’

- Six exposures represented as quintile variables
- Lower quintiles = least favorable environments = high air pollution, high deprivation, low walkability, and low greenness
- Higher quintiles = most favorable environments = low air pollution, low deprivation, high walkability, and high greenness
Combining CANUE datasets to create a ‘multi-exposure index’

- Simple addition of quintile ranks across 6 factors (possible range from 6 to 30)
- Low scores = ‘worse’ areas / high scores = ‘best’ areas
Indicators for a Healthy Built Environment

Time trends: “Greenness” (normalized difference vegetation index; NDVI) for 1985

Quintiles for Quebec (1985)
Red -> Low ‘greenness’
Green -> High ‘greenness’
Indicators for a Healthy Built Environment

Time trends: “Greenness” (normalized difference vegetation index; NDVI) for 2000

Quintiles for Quebec (2000)
Red -> Low ‘greenness’
Green -> High ‘greenness’
Indicators for a Healthy Built Environment

Time trends: “Greenness” (normalized difference vegetation index; NDVI) for 2000

Quintiles for Quebec (2015)
Red -> Low ‘greenness’
Green -> High ‘greenness’
Slope of ‘green’ trend: 1985 to 2015
Indicators for a Healthy Built Environment

CanCHEC
Postal code

Pre-linked:

To come:

Canadian Urban Environmental Health Research Consortium
Indicators for a Healthy Built Environment

Data access

Option A:
Directly from CANUE (to be linked with a health database)

Option B:
Via health database (pre-linked data)

User agreement

- Condition of use:
  - Citations
  - Acknowledgements

CAVEAT: postal codes are proprietary, so we can only share freely with academics. Typically, academics request data, develop metrics that are of interest. These can be aggregated to dissemination areas or summarized in reports.
Indicators for a Healthy Built Environment

Data documentation

- General dataset description, methodology
- Time and geography covered
- Variable names and definitions

https://canue.ca/data/
Indicators for a Healthy Built Environment

www.canue.ca
dany.doiron@canue.ca
Public Health’s Role in Active Transportation Performance Indicators

Jackie Gervais,
Health Promoter
Niagara Region Public Health
1 Region and 12 Municipalities
How do we know that we are making a difference?
Indicator Project

Purpose:

• to develop an active transportation indicator system to measure and evaluate infrastructure investment in Niagara
Indicator Project

Principles:

• Provide a baseline in which to measure the growth of active transportation efforts within all 13 municipalities.
• Strengthen partnerships between municipal and regional staff, especially transportation, planning, engineering, public health staff and with citizens.
• Indicators are understood to be interrelated.
• When presenting the indicator results, the social, environmental and political context of each municipality will also be highlighted and taken into consideration.
Indicator Project – Phase one

Active Transportation Categories and Indicators

1.0 Health and Safety
   1.1 Transportation modal shift
   1.2 Rate of pedestrian or cyclist collisions with motor vehicles.

2.0 Policy
   2.1 Level of budget allocation to active transportation.
   2.2 Strength of language in Official Plans.

3.0 Built Environment
   3.1 Kilometers of bike facilities (e.g., off-road multi-use pathway, on-road, shared use lanes).
   3.2 Level of new or reconstruction that includes active transportation facilities/design.
   3.3 Ratio of sidewalk to road lengths within urban boundaries.
## Indicator Project – Phase one

<table>
<thead>
<tr>
<th>Category</th>
<th>Indicator</th>
<th>Technical Elements (measurements)</th>
<th>Potential Data Sources</th>
<th>Key Terms Defined/ Notes</th>
</tr>
</thead>
</table>
| Health and Safety | 1.1 Transportation modal shift | Community Travel  
- Person travel (by mode, purpose and location): % of trips by a given mode  
- Average trip time and length  
- Measure multi-modal level-of-service which recognizes the speed, convenience and comfort of various modes of travel  
- Measure the morning peak-hour travel by pedestrians, cyclists, and public transportation  
- % of walking modal share of all person trips  
- % of cycling modal share of all person trips  
- % of public transportation of all person trips  
- % of motor vehicle use of all person trips  
- % of 5 km or less trips made by active transportation  
- Traffic counts of all modes of travel on roads  
- Work Travel  
  - % of employed people who commuted to work utilizing one or more active transportation means  
  - % of employed people using public transportation to get to work  
- School Travel  
  - % of people that walk or bike to school (e.g. elementary, secondary, post-secondary) | Secondary Data Sources  
- Census data (but may not be at the municipal level)  
- Canadian Community Health Survey data  
- Rapid Risk Factor Surveillance System data  
- Transportation Tomorrow survey is conducted every five years  
- Ontario Municipal Benchmarking Initiative (e.g. Municipal Performance Measurement Program)  
- Urban Transportation Indicators Fourth Survey (2010)  
  2014 it will be revisited | Transportation modal shift refers to a shift in travel behavior from motor vehicle use (auto) to active forms of transportation (e.g., walking, cycling and/or the use of public transportation).  
Multi-modal transportation refers to the use of more than one form of transportation, such as a combination of automobile, walking, cycling and/or public transit (e.g., bus; train; ferry).  
NOTES:  
There are two modes of travel that are of interest: roads and rail (GO & VIA trains). In the category of roads are the following modes of travel: auto, cycling, transit and walking.  
The Urban Transportation Indicators survey will be revisited 2014.  
Every year the Region conducts traffic counts on their roads in order to better classify the road, but currently only counts auto travel. This could be an opportunity to also count other modes of travel such as cycling, public transit and/or pedestrian counts. As of 2014, the Region will count cyclists at signalized intersections at regional roads. Consider the use of cellular activity data such as Strava Metro. |

<table>
<thead>
<tr>
<th>Secondary Data Sources</th>
<th>Primary Data Sources</th>
<th></th>
</tr>
</thead>
</table>
| - Census data (but may not be at the municipal level)  
- Canadian Community Health Survey data  
- Rapid Risk Factor Surveillance System data  
- Transportation Tomorrow survey is conducted every five years  
- Ontario Municipal Benchmarking Initiative (e.g. Municipal Performance Measurement Program)  
- Urban Transportation Indicators Fourth Survey (2010)  
  2014 it will be revisited | - Origin Destination Survey - ask residents how they get around (auto driver, auto passenger, public transportation, walking, cycling or other (skateboard; scooter).  
- Ask Municipal staff- request they provide level of service performance measures for pedestrians, cyclists and public transit users and/or traffic counts of all modes of travel by road type. |  |
## Indicator Project – Phase two

<table>
<thead>
<tr>
<th>Technical Elements</th>
<th>Potential Data Sources</th>
<th>Notes</th>
<th>Accessibility Is the data available at the (R) Regional, (C) CMA(^1), or (M) Municipal level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Person travel by mode, purpose and location</td>
<td>Rapid Risk Factor Surveillance System (RRFSS)</td>
<td></td>
<td>Regional</td>
</tr>
<tr>
<td>% of trips by a given mode (e.g., % of walking modal share of all person trips, % of cycling modal share of all person trips, % of public transportation of all person trips, % of motor vehicle use of all person trips, trip destination)</td>
<td>Urban Development Module 1: Importance of Walking Distance from Home</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Making a decision today on where to live: How important would it be to have each of the following within a 10 min walk or 1km of your home?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>o Recreational facilities</td>
<td></td>
<td>X</td>
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<tr>
<td></td>
<td>o Grocery stores</td>
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<td>X</td>
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<td></td>
<td>o Retail stores</td>
<td></td>
<td>X</td>
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<td></td>
<td>o Restaurants</td>
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<td>X</td>
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<td></td>
<td>o Your workplace</td>
<td></td>
<td>X</td>
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<tr>
<td></td>
<td>o Schools</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>o Community centres or libraries</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>o Public transit</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>% of 5 km or less trips made by active transportation</td>
<td>Urban Development Module 2: Importance of Neighbourhood Characteristics</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Average trip time and length</td>
<td>How would you rate your neighborhood as a place to walk for leisure (walk for fun, exercise, pleasure)?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>How would you rate your neighborhood as a place to walk for reasons other than leisure (running errands, going shopping, walking to library, post office)?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Ideal neighborhood: Importance of having connected sidewalks, pathways</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>Ideal neighborhood: Importance of ... can walk to stores, restaurants, community centres, or schools</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Urban Development Module 3: Frequency of Walking in Neighbourhood Question</td>
<td>In a typical week, how many hours did you usually spend walking around your neighborhood either for fun and exercise, or to go from place to place?</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>RRFSS is an ongoing telephone survey used to gather surveillance data, monitor public opinion on key public health issues, and collect information on emerging issues of importance to public health in Ontario.</td>
<td></td>
<td>Regional</td>
<td></td>
</tr>
<tr>
<td>There are core questions that are asked in addition to a number of limited elective questions that specific health units can ask. Niagara Public Health is part of this program; however there is a competitive process within the health department to have questions included. It is anticipated that the questions, or a portion of the questions will be included every couple of years.</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>It is important to also keep in mind most of these questions measure beliefs in relation to the importance of walking in a person’s local neighbourhood.</td>
<td></td>
<td>Regional</td>
<td></td>
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<tr>
<td>The Urban Development Module 3 is the most relevant module for these indicators as it does touch on behaviour.</td>
<td></td>
<td>X</td>
<td></td>
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</table>
## Indicator Project – Phase three

<table>
<thead>
<tr>
<th>Technical Element</th>
<th>Available Data</th>
<th>Notes</th>
<th>Action</th>
<th>Resources Needed Dept/person responsible for analysis</th>
<th>By when?</th>
</tr>
</thead>
</table>
| Person travel by mode, purpose and location          | Rapid Risk Factor Surveillance System:  
Urban Development Module 1: Importance of Walking Distance from Home: Collected in 2009, 2010 and 2011  
Urban Development Module 2: Importance of Neighbourhood Characteristics: Collected in 2010, 2011, 2012 and 2014. However, the 2012 data is only for 2 of the questions and not the whole module  
Urban Development Module 3: Frequency of Walking in Neighbourhood: Collected in 2012, 2014 and to be collected in 2015 | Module 3 appears to have the most relevant data to demonstrate mode shift.  
If there is only resources to analyze one module, that would be the best one to start with.  
The other 2 modules may provide some background information to help understand the results.  
Sinead McElhone, Organizational and Foundational Standards Division is the contact person for this indicator. | Use the information to develop the narrative for this technical element.  
Consider comparing and contrasting the data across the collection dates to identify trends. | Sinead McElhone, Organizational and Foundational Standards Division |                                      |
| % of trips by a given mode (e.g., % of walking modal share of all person trips, % of cycling modal share of all person trips, % of public transportation of all person trips, % of motor vehicle use of all person trips, trip destination) |                                                                 |                                                                                                                                                        |                                                                                                                                                                                                       |                                                     |          |
| % of 5 km or less trips made by active transportation  |                                                                                                                                                                                                              |                                                                                                                                                        |                                                                                                                                                                                                       |                                                     |          |
| Average trip time and length                          | Canadian Community Health Survey: Data is collected annually.                                                                                                                                               | Mainly adults 18 + (the bulk of the data) although there may be some data available for 12 – 17 year old adolescents. Sample size small for 12-17.  
Sinead McElhone, Organizational and Foundational Standards Division is the contact person for this indicator | Use the available data to provide a picture of trends over time. | Sinead McElhone, Organizational and Foundational Standards Division |                                      |
Indicators – Next Steps
• Staff changes
• Competing priorities
• Coordinated collection of data, and
• Reporting
• Some of the indicators have been included in the Transportation Masterplan
• Talking point
• Guidance document
Thank you

Jackie.gervais@niagararegion.ca
Built Environment Work Group

Kendra Willard
Co-Chair
Built Environment Work Group (BEWG)
Ontario Public Health Association (OPHA)
Goals and Objectives

Goal
To work collaboratively to improve the health of the public as it is impacted by the natural and built environment

Objectives
1. To exchange knowledge on health evidence with stakeholders for improving healthy built environments
2. To influence provincial policy and contribute to provincial initiatives that will support local Public Health efforts to improve the natural and built environment
3. To build upon initiatives, research, and policy development efforts by local public health units and/or by other organizations recognized for their expertise in the area of natural and built environment
4. To complement our members’ efforts to create and maintain healthy built environments
Structure

Listserv
- Available to anyone to post and receive information
- Today’s webinar was a result of a question posted on the listserv

Task Groups
- Lead by an OPHA BEWG member
- Participants can be volunteers who are not part of the OPHA BEWG
- Emerge when opportunities and interests align for ongoing collaboration

Work Group
- OPHA Members who are working on public health and the built environment
- Build and maintain relationships with other organizations and partner initiatives
- Respond to opportunities to comment or advocate on provincial initiatives
Current Task Groups

- Public Health and Planning 101 Online Course
  - Making updates to the course in 2019

- Transportation
  - 4 webinars for public health staff to build capacity to engage in the Environmental Assessment (EA) process

- Affordable Housing
  - Synthesis of literature about 1) affordable housing and public health and 2) homelessness and public health
Contact

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Questions?