

# Walking and Cycling as Transportation in Barrie

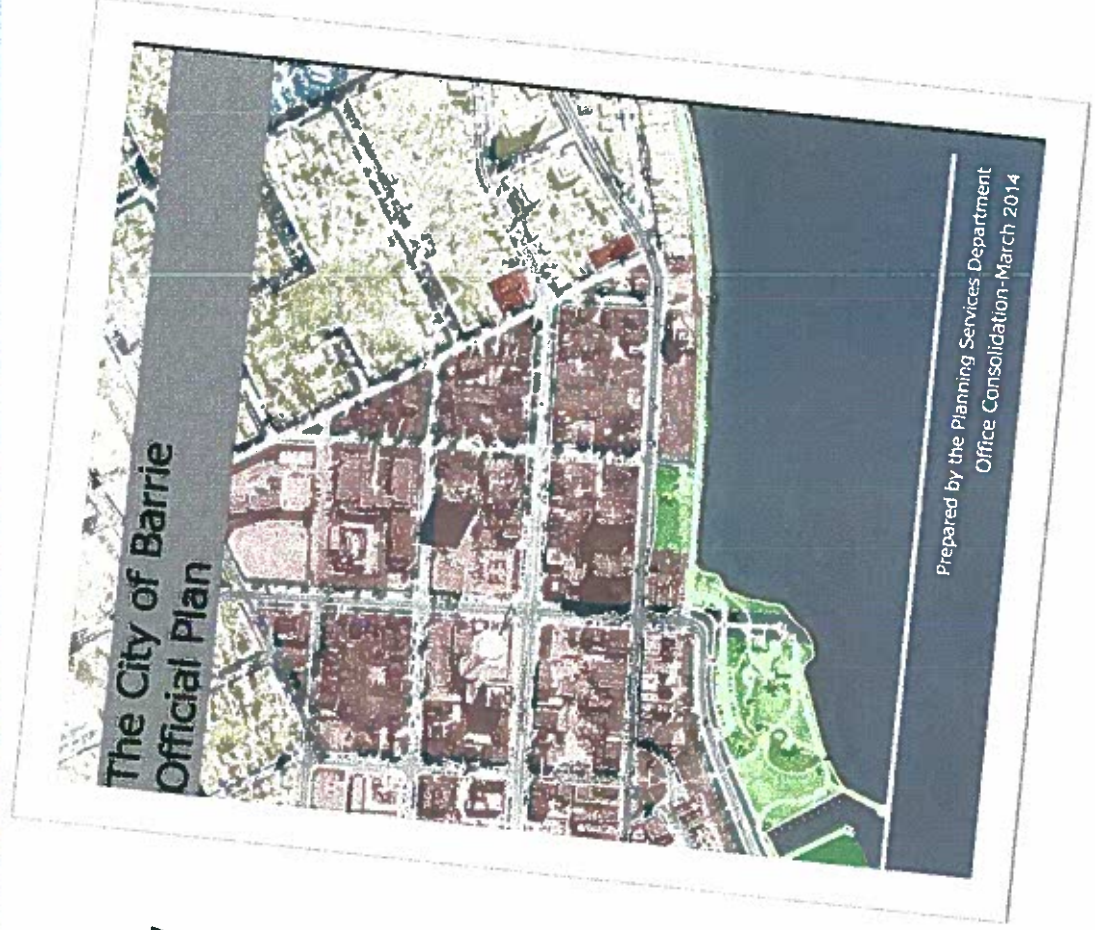


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**Medical Officer of Health**



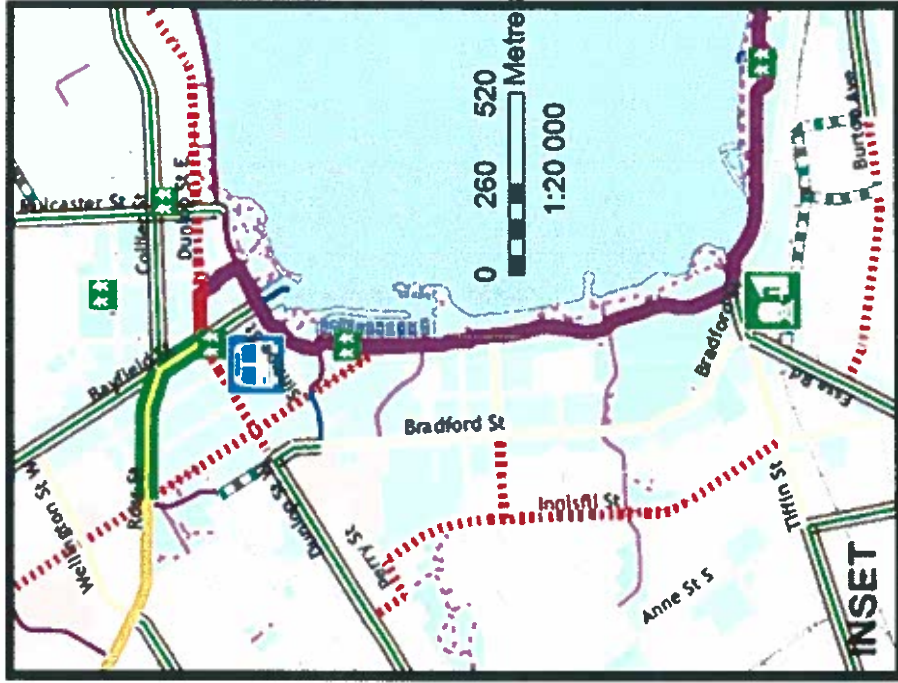
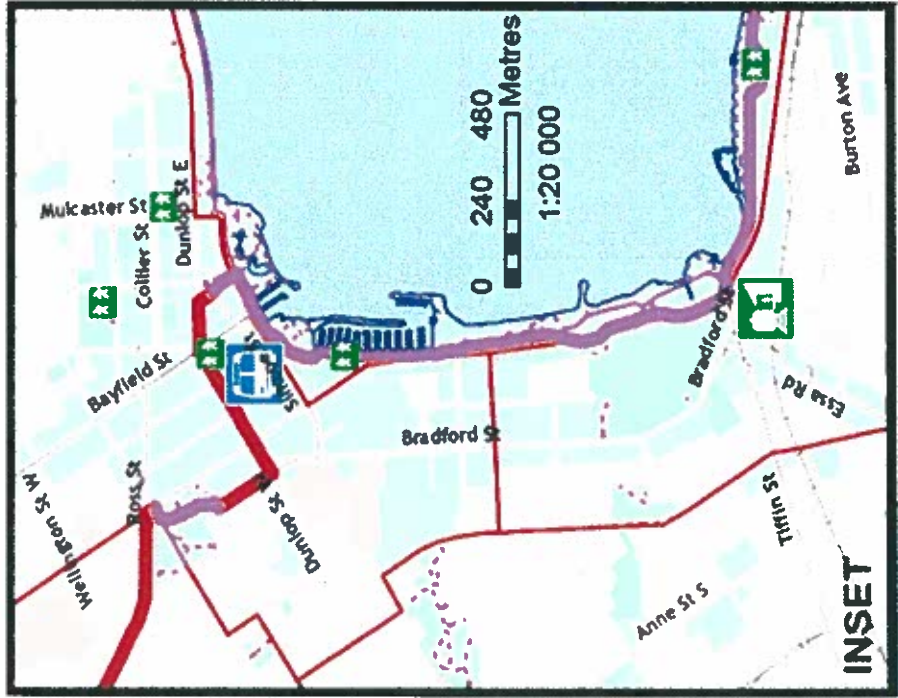
# The City of Barrie

- Barrie has a visionary Official Plan...



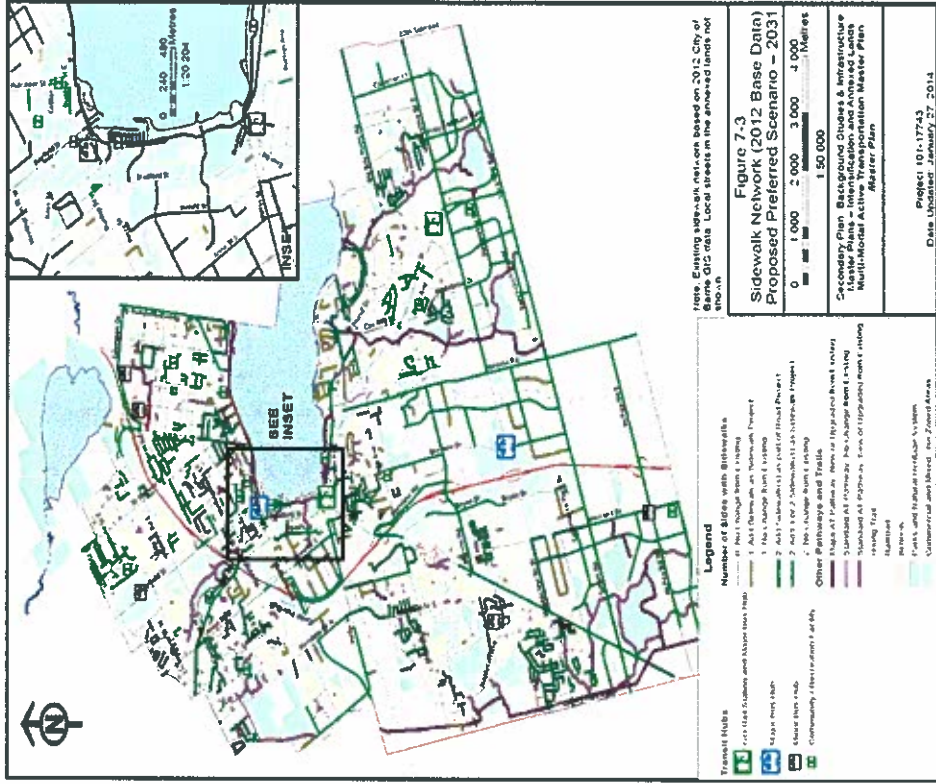
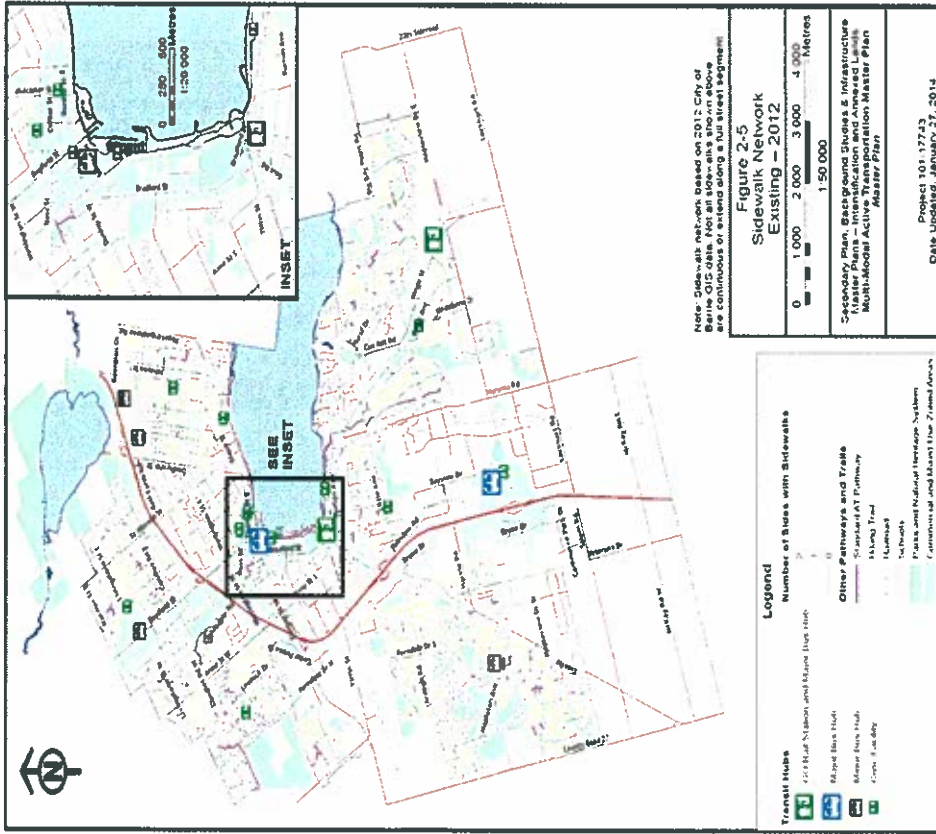


# 20 years – for cycling...





# ...and for walking





# THE HEALTH IMPACTS OF THE BUILT ENVIRONMENT

- Precursors:
  - Ability to be physically active
  - Air quality
  - Access to good nutrition
- Biomedical outcomes:
  - Obesity
  - Blood pressure
  - Injuries
  - Mental health
  - Mortality
- Social determinants:
  - Civic society, social capital, poverty



# WHAT IS ACTIVE TRANSPORTATION?

Any form of human-powered, non-motorized transportation for the purpose of getting from one destination to another, such as:

- Walking
- Cycling
- Using a wheelchair
- Pushing a stroller
- Running
- In-line skating or skateboarding

- Active transportation infrastructure is an important part of community design and connectivity.



# Active Transportation vs. Recreational Activity

## Recreational Physical Activity

Defined as exercise, sports, recreation or hobbies.

Occurs during one's leisure or spare time.

Is not associated with activities as part of regular job duties, household or transportation.

Requires motivation & time to initiate & sustain.

**When busy person is “pressed for time”, usual sacrifice is Recreational PA.**

## Active Transportation

Self-powered human movement.

Primary purpose is to get to a destination or accomplish a task.

Secondary purpose is doing the physical activity.

Done as part of daily tasks – on the “To Do” list.

When busy person is “pressed for time”, the “To Do” list still is addressed.

**If busy person can easily walk to the store, bank, etc – they accomplish necessary tasks & are physically active at the same time.**



# ACTIVE TRANSPORTATION

The journey that will turn this



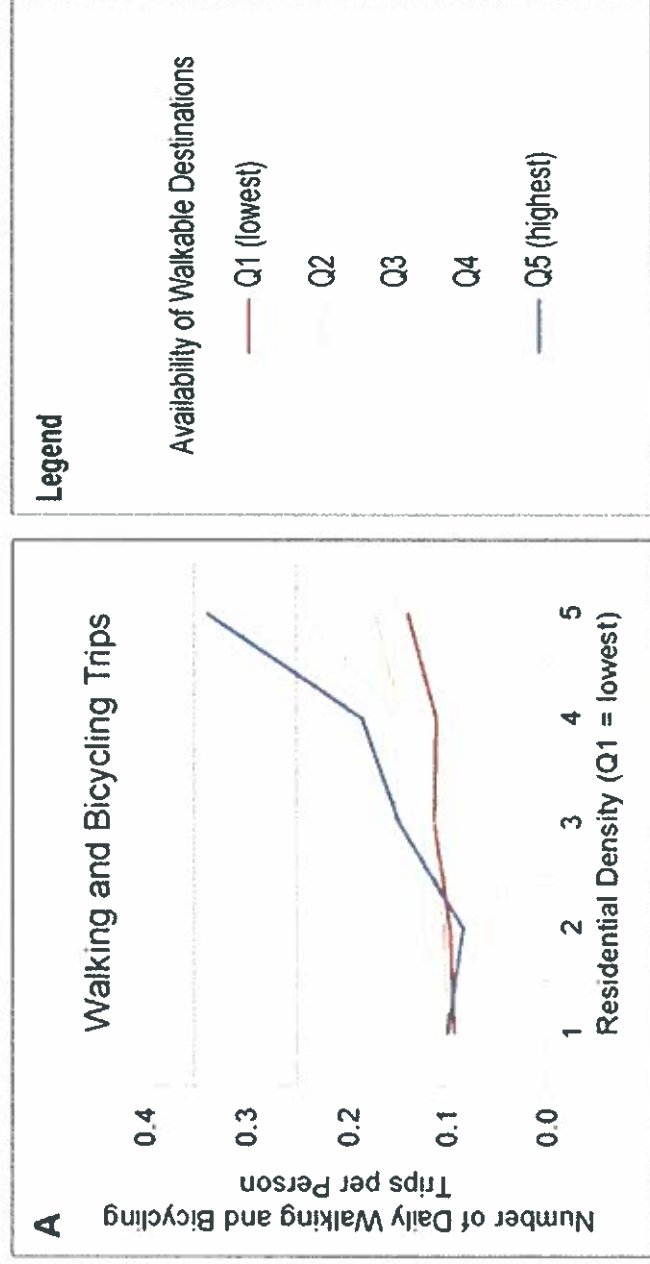
Into this





# Walkable Neighbourhoods

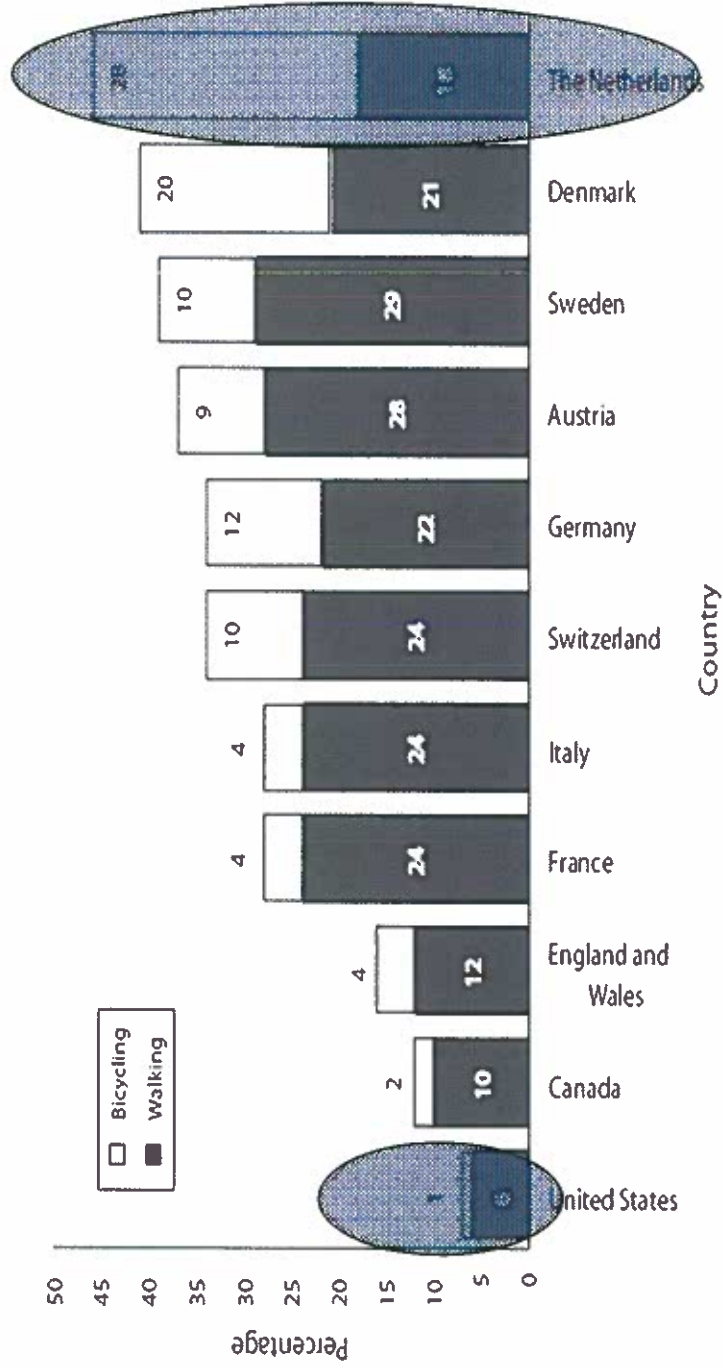
## Transportation Behaviors and Health Outcomes by Residential Density and Availability of Walkable Destinations



Booth GL, Glazier RH, Creatore MI, Weyman JT, Fazli G, Matheson FI, et al. (2014) Density, Destinations or Both? A Comparison of Measures of Walkability in Relation to Transportation Behaviors, Obesity and Diabetes in Toronto, Canada. PLoS ONE 9(1): e85295 doi:10.1371/journal.pone.0085295



# MORE WALKING/CYCLING IN THE NETHERLANDS....



Note. Modal split distributions for different countries are not fully comparable owing to differences in trip definitions, survey methodologies, and urban area boundaries. The distributions given here are intended to show the approximate differences among countries and should not be used for exact comparisons.

Source: Transportation Research Board,<sup>29</sup> Table 2-2, p. 30.

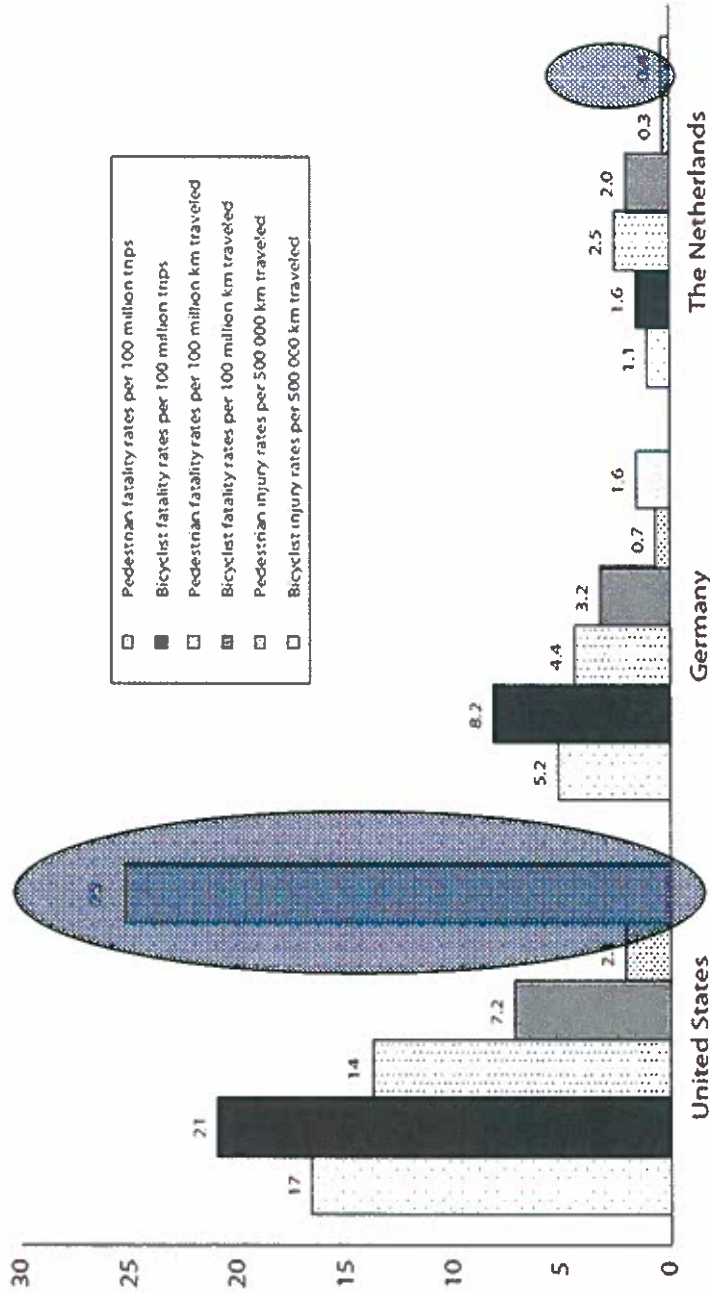
**FIGURE 1—Percentage of trips in urban areas made by walking and bicycling in North America and Europe, 1995.**



From: **Spreading Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany.**  
 Publisher: HEMA & Gijksstra, L. American Journal of Public Health, Sept 2003, Volume 93, No. 9.



# ...BECAUSE IT'S A LOT SAFER



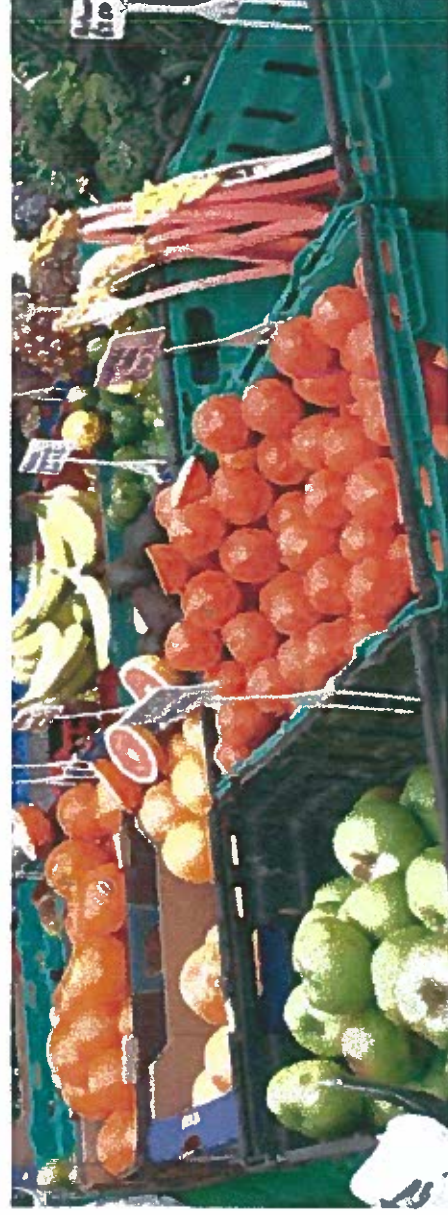
Source: US Department of Transportation<sup>11,12</sup>; Centers for Disease Control and Prevention<sup>13</sup>; German Institute of Economic Research<sup>14</sup>; German Federal Statistical Office<sup>15</sup>; German Federal Traffic Institute<sup>16</sup>; Statistics Netherlands<sup>9</sup>; and Dutch Ministry for Transport, Public Works and Water Management.<sup>20</sup>

**FIGURE 3—Pedestrian and bicycling fatality rates and nonfatal injury rates in the United States, Germany, and The Netherlands, 2000.**



# A healthy community provides opportunities...

- For people to walk and cycle to work.
- For children to be able to walk and bike safely to school.
- To be connected to parks, other neighbourhoods and trails.
- To enjoy the natural environment such as water, farmland and green space.
- To have access to healthy foods that are fresh and affordable in every neighbourhood.
- To have sidewalks, pathways, trails and bike lanes that are inviting, accessible, safe and connected to amenities and public transit.
- For connection to community gathering places.
- Has sufficient density to support all of this.





# Whether you are 8 or 80...



...you need to be able to safely walk and cycle in every neighbourhood...



# Final Thoughts

## Walkable neighbourhoods in Barrie

- Community design is important for people's health.
- Barrie has excellent plans for healthy, complete, walkable and cycleable neighbourhoods.
- SMDHU stands behind change for active transportation in our communities

