

Building a Healthier Simcoe Muskoka

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Overview

- The importance of public health work on the built environment;
- The Simcoe Muskoka (Ontario) context;
- Pursuing the opportunities in Simcoe Muskoka;
- Action throughout the province.

Disclosure of Interests

**When I cycle I
feel young
again.**

.....

**I want to be
able to cycle
safely
anywhere in
the world by
the time I
retire.**



HOME AGAIN — Chuck Gardner, 17 (left), his brother Howard, 15, both of 29 Park Avenue, and John Deraps, 17, of 45 VanBuskirk Drive, have just completed a 500-mile bicycle trip over a period of

six days. During that time they went to a rock concert, did some skin diving and encountered some unfriendly natives, but they're glad they went. As they said, it relieves boredom before they start their jobs. (T-J Photo).

500-mile trip

**Rock concert, rock throwers
all part of cyclists' trip**



**simcoe
muskoka**
DISTRICT HEALTH UNIT

Some Health Impacts Related to the Built Environment

Precursors:

- Ability to be physically active
- Air quality
- Access to good nutrition



Biomedical outcomes:

- Obesity
- Blood pressure
- Injuries
- Mental health
- Mortality

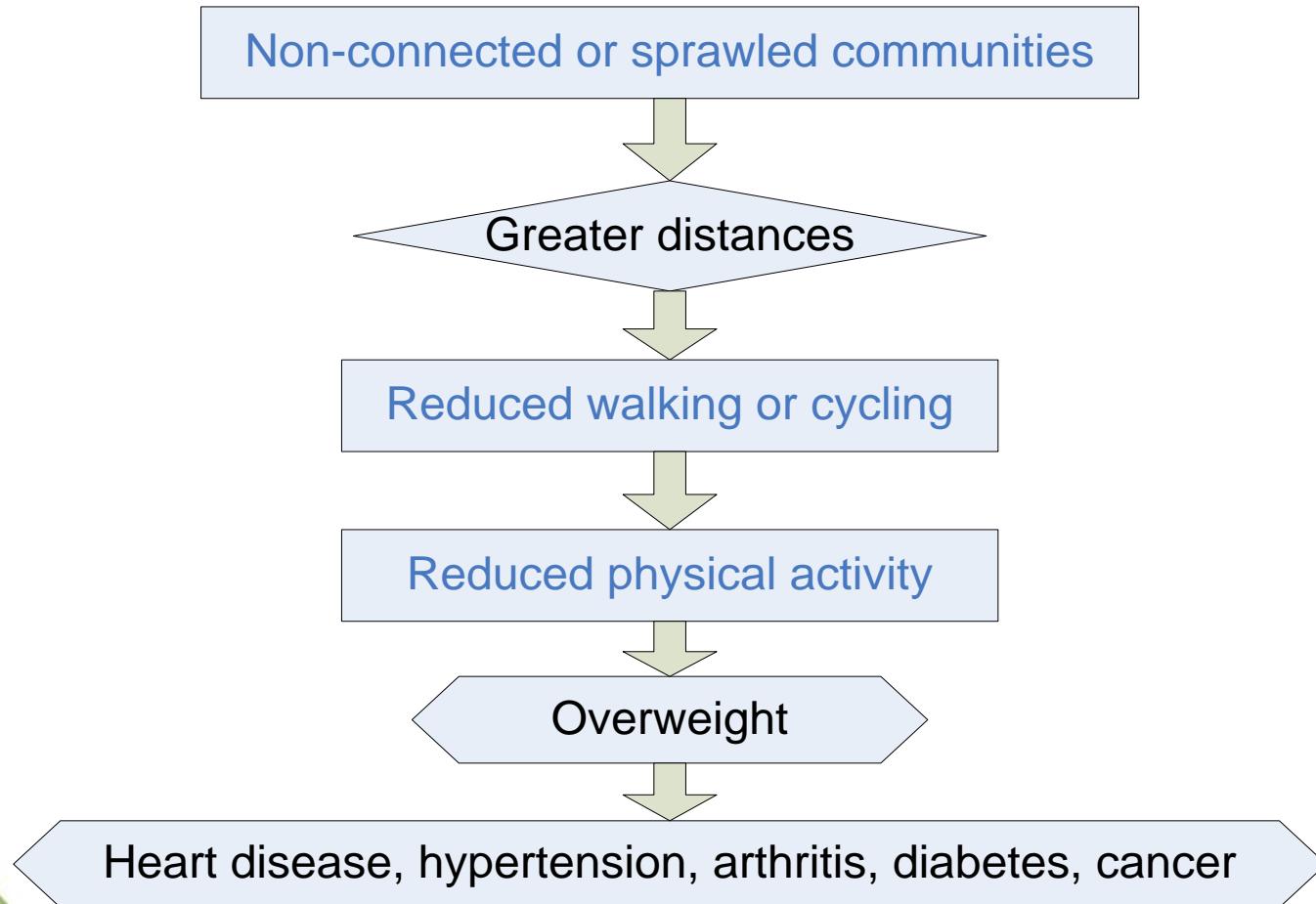


Some Related Broader Determinants of Health

- Social determinants
 - Social capital
 - Safe access to education, work, housing, services
- Carbon emissions



LINKS – Built Environment & Chronic Disease



The Difference Active Transportation Can Make: Physical Activity- Walkable Communities

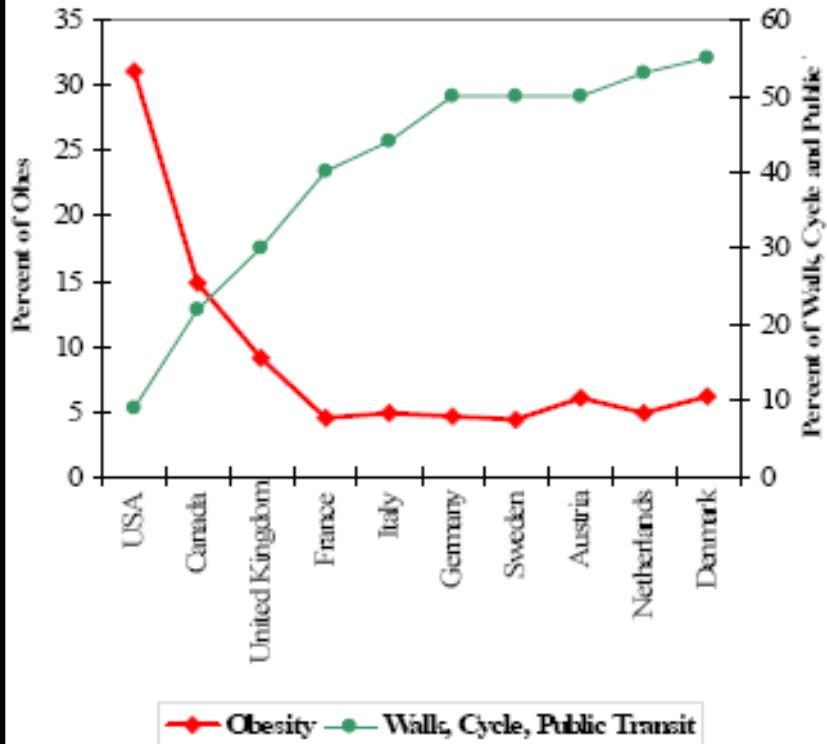
- An analysis of studies in 6 communities found that on average, residents in highly-walkable neighbourhoods took twice as many walking trips as people in less walkable neighbourhoods. Most of the increase was due to walking for errands or to go to work.[\[1\]](#)



[\[1\]](#) Saelens, B.E., Sallis, J.F., & Frank, L.D., Environmental Correlates of Walking and Cycling: Findings From the Transportation, Urban Design and Planning Literatures," Annals of Behavioural Medicine, 2003.

Auto Use and Obesity – International Correlations

Does auto-dependency make us fat? Obesity falls sharply with increased walking, cycling, and transit use.



Background Paper:

National Scan of Actions to Address the Relationship between Built Environments, Physical Activity and Obesity

Draft May 2006

Chronic Disease Prevention Alliance of Canada

Source: Pucher and Dijkstra, "Promoting Safe Walking and Cycling to Improve Public Health, Am Journal of Public Health, September 2003

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 (Surgeon General's Report, 1996).

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.

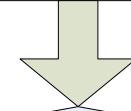
Done as part of daily tasks – on the “To Do” list.

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

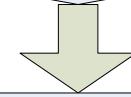
If busy person can easily walk to the store, bank, etc – they accomplish necessary tasks & are physically active at the same time.

LINKS – Built Environment and Injuries

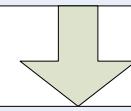
Non-connected or sprawled communities



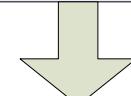
Greater distances



Increased use of motor vehicles

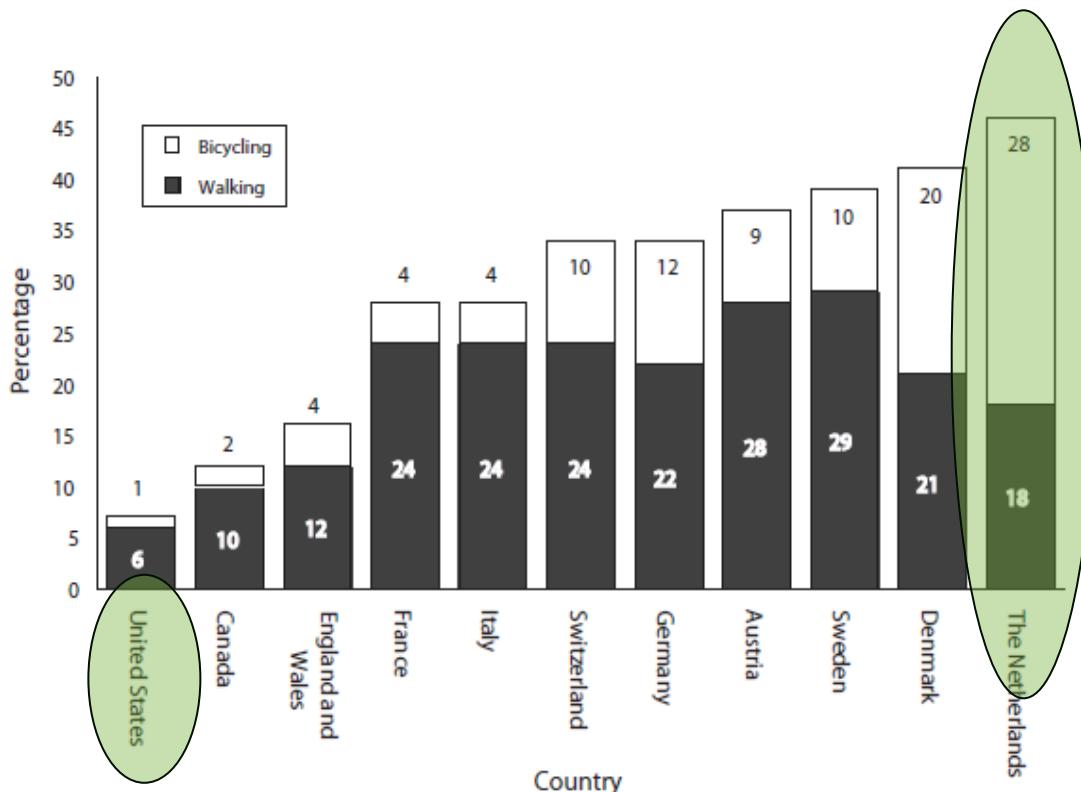


Increased collisions



Injuries and fatalities

A lot more walking/cycling in the Netherlands....



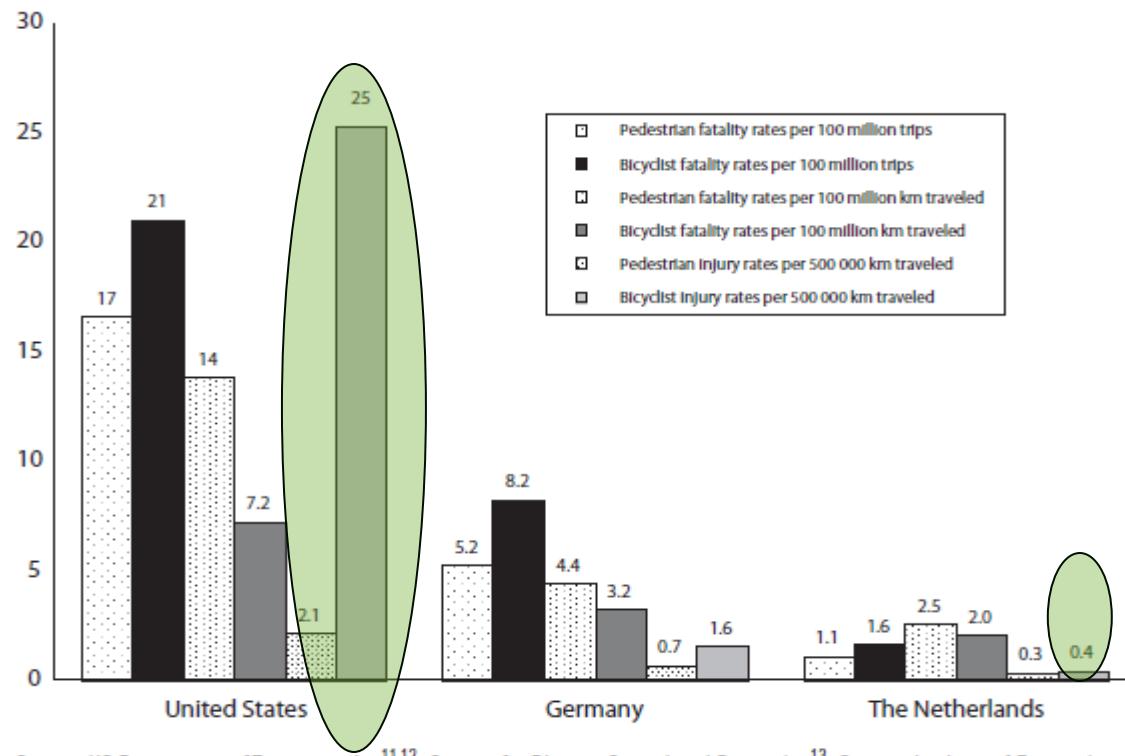
Note. Modal split distributions for different countries are not fully comparable owing to differences in trip definitions, survey methodologies, and urban area boundaries. The distributions given here are intended to show the approximate differences among countries and should not be used for exact comparisons.

Source. Transportation Research Board,²⁹ 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: Promoting Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany. Pucher, J. & Dijkstra, L. American Journal of Public Health. Public Health Matters, Sept 2003, Volume 93, No. 9.

...because it's a lot safer

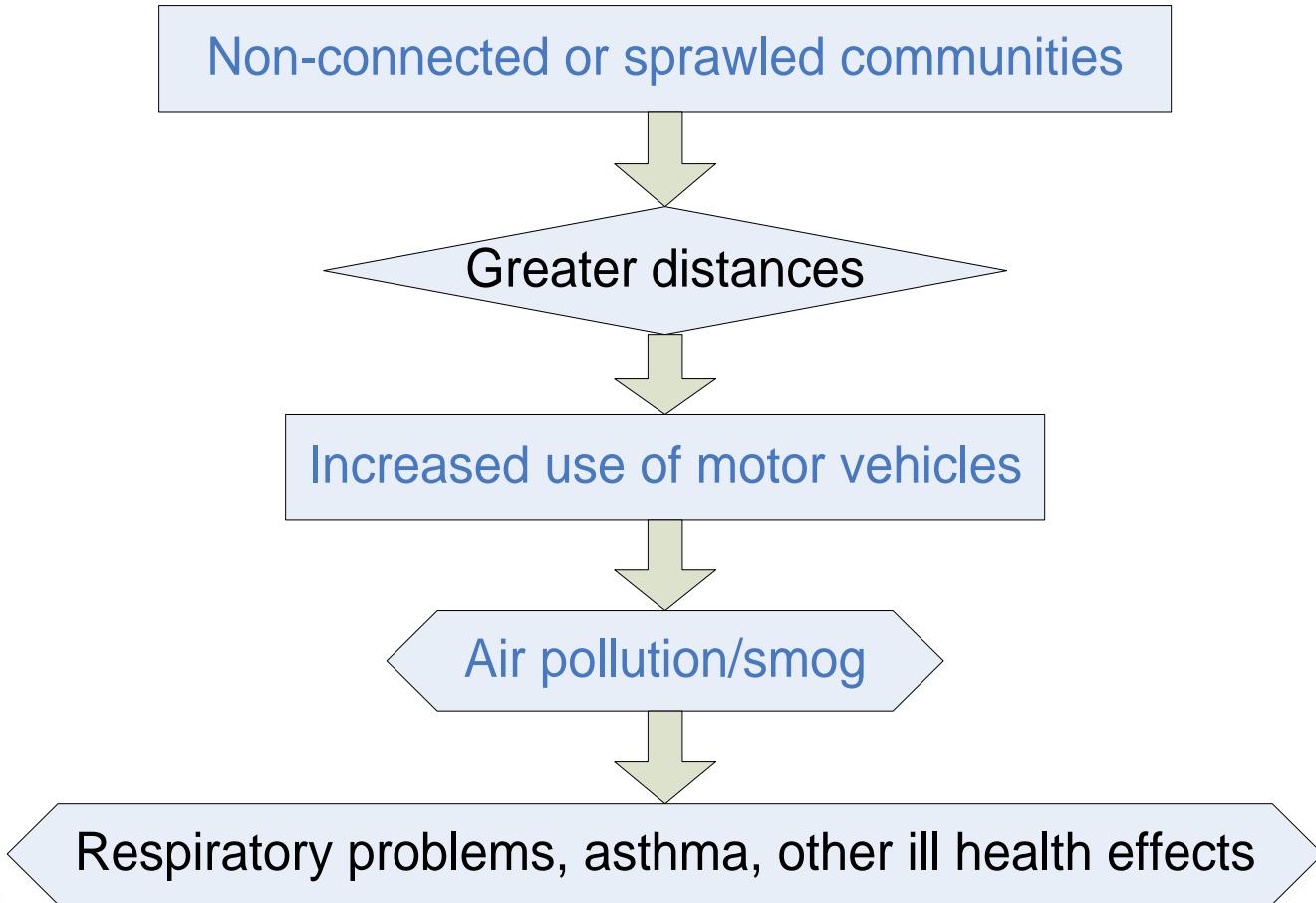


Source. US Department of Transportation^{11,12}; Centers for Disease Control and Prevention¹³; German Institute of Economic Research¹⁶; German Federal Statistical Office¹⁷; German Federal Traffic Institute¹⁸; Statistics Netherlands⁹; and Dutch Ministry for Transport, Public Works and Water Management.²⁰

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

From: Promoting Safe Walking and Cycling to Improve Public Health: Lessons from the Netherlands and Germany. Pucher, J., & Dijkstra, L. American Journal of Public Health. Public Health Matters. Sept 2003, Vol 93, No. 9.

LINKS – Built Environment & Air Quality



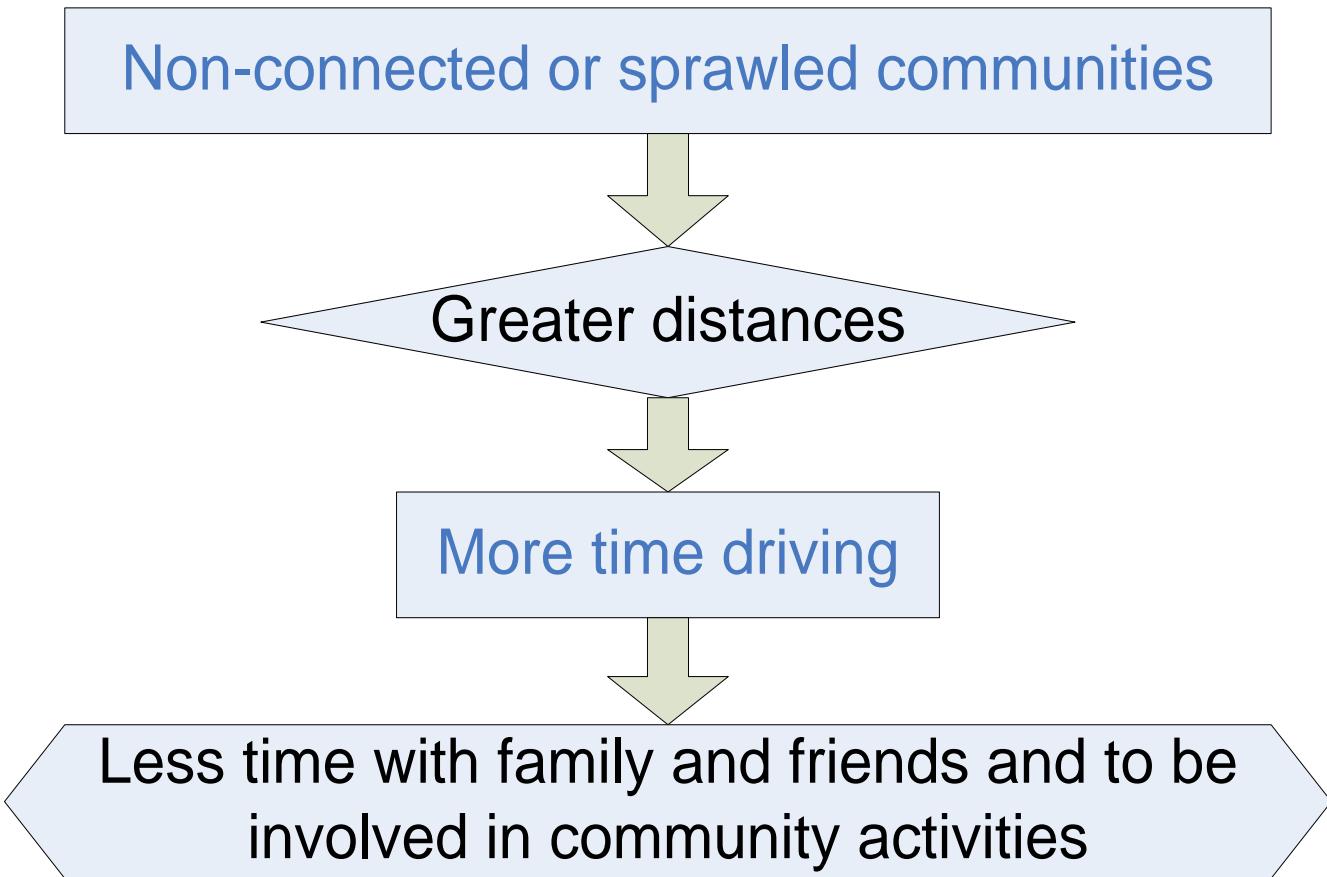
Air Quality

- Living near heavy traffic = 2.5 years loss of life (*Finkelstein et al, Am J Epi, 2004*)
- Atlanta Olympics 1996: increased public transportation = 22% reduction in traffic, 28% reduction in ozone, 41.6% reduction in ER visits for asthma (*Friedman et al, 2001*)

- ◆ Sequence of associations – community design impacts on mode of transportation; more vehicles used, more trips taken, more miles traveled impacts on amount of emissions; impacts on air quality; impacts on health (*Frumkin et al, 2004*)



LINKS – Built Environment & Mental Health



Issue: Social Capital and Well-being

- Each additional 10 minutes spent in daily commuting time cuts involvement in community affairs by 10%. [\[1\]](#)
- Respondents who reported one or no places to walk were significantly less healthy than person who said they had five or more places to walk. [\[2\]](#)
- The intellectual and emotional development of children is more advanced in communities that are walkable and that combine a mix of land uses. [\[3\]](#)



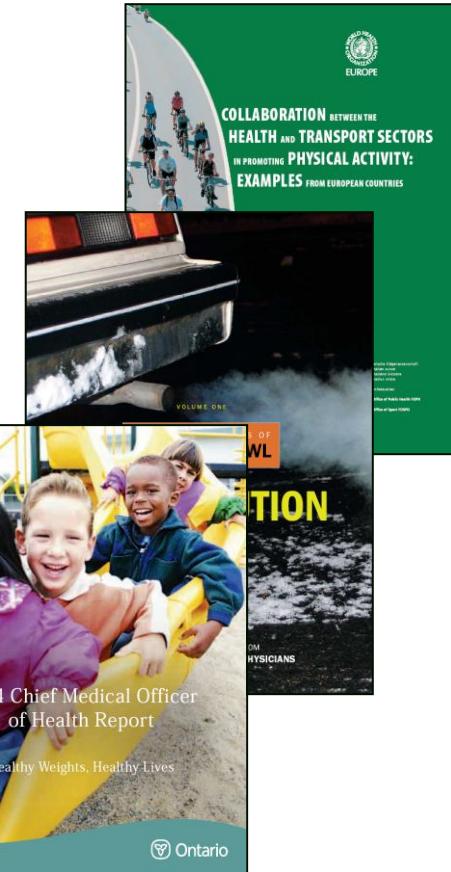
[1] Putman R. (2000, as cited in Frumkin et al, "Urban Sprawl and Public Health: Designing, Planning, and Building for Healthy Communities", 2004)

[2] Rohrer, J., Pierce JR Jr., Denison A., "Walkability and Self-Rated Health in Primary Care Patients," BMC Family Practice, December 2004.

[3] Gilbert & Obrien, 2005

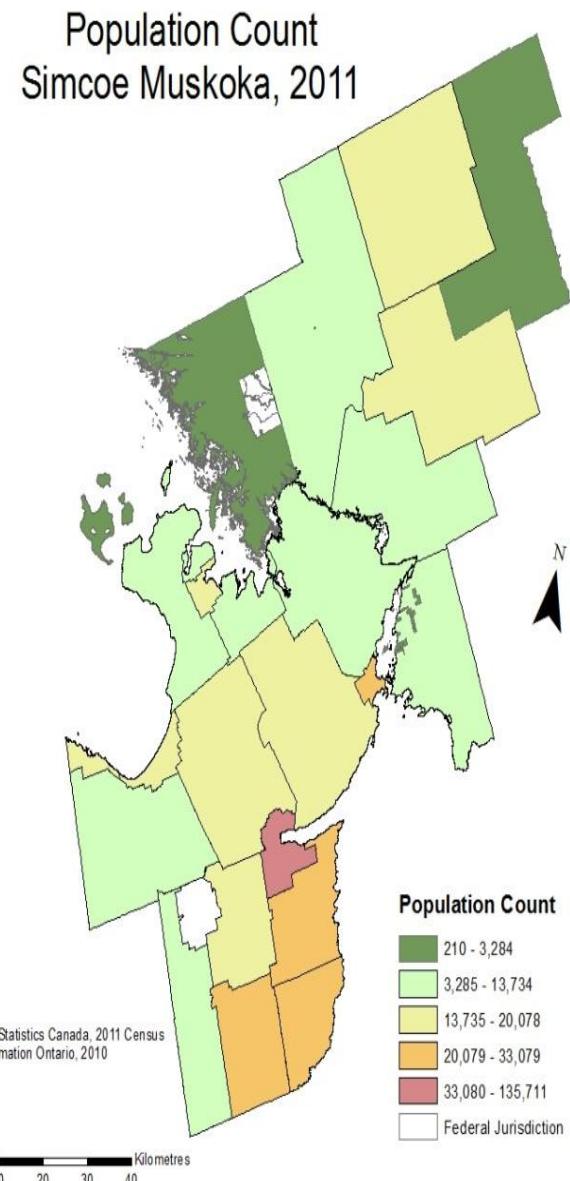
Many have made a connection between the built environment and health

- World Health Organization – European transportation and physical activity collaboration
- Ontario Medical Association – obesity and air quality reports
- Ontario College of Family Physicians reports on Urban Sprawl
- Ontario Chief MOH reports in 2004 and 2011
- Ontario Professional Planners Institute
- The Province of Ontario – Places to Grow
- Heart and Stroke Foundation
- Canadian Index of Wellbeing
- Ontario's Public Health Sector Strategic Plan
- Canadian Medical Association – built environment review paper



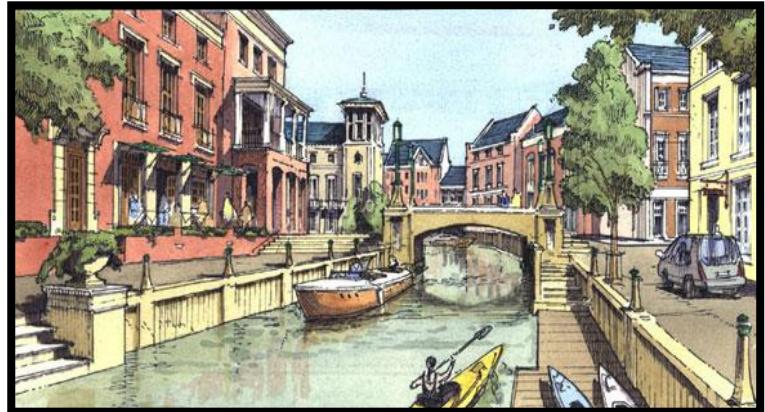
Simcoe Muskoka District Health Unit

- 1 of 36 health units in Ontario
- Independent Board of Health:
 - 5 public representatives (provincially appointed), and 9 municipal representatives
- Servicing 504,110 people (2011 Census) – mixed medium to small urban and rural populations – farmland and cottage country
- 8,797 square kilometers
- Population increase 5% from 2006 to 2011
- Four upper tier / single tier municipalities (26 municipal councils)



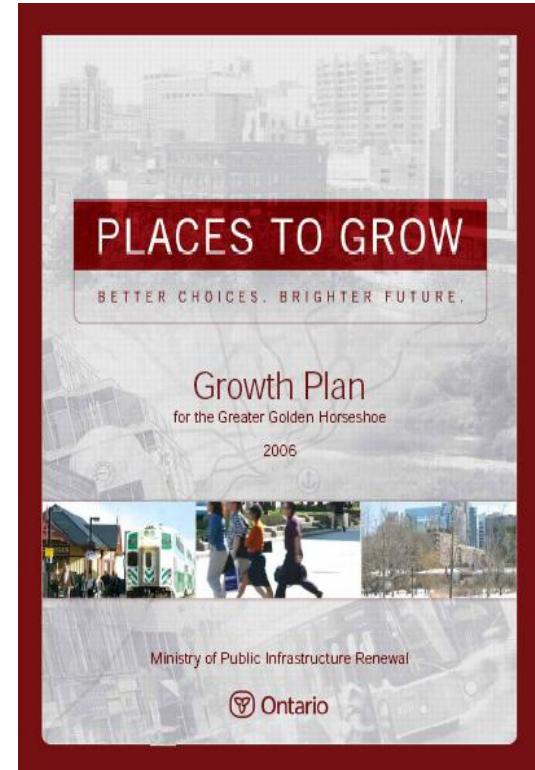
Simcoe Muskoka, 2006: Why focus on the built environment here? Why now?

- Simcoe Muskoka has had a high incidence of preventable disease
- Simcoe Muskoka has been rapidly growing and developing (45% growth increase anticipated over 25 years)
- How this growth and development happens is dramatically impacting on the health of some 500,000 (and more to come) people
- We have seen opportunities to influence how this growth happens



“Discovering” the Built Environment

- Simcoe Muskoka “Call to Action” with municipalities and other partners to address chronic disease reduction through policy and supportive environments – predicated 2005 amalgamation
- 2005 – Ontario’s Places to Grow Act and Policy – healthy, environmentally sustainable, economically beneficial management to growth in the Greater Golden Horseshoe (includes Simcoe but not Muskoka)
- 2006 – SMDHU became aware of the potential public health opportunities posed by this provincial policy



Opportunities to Make a Difference in Simcoe Muskoka

- Community readiness – growth has been a high priority issue, in the media, and from our strategic planning consultations in 2006
- Intergovernmental Action Plan on growth management in Simcoe (with Barrie and Orillia) in 2006 – MOH was on municipal planning committee
- Building Healthy Communities in SMDHU 2007 to 2010 Strategic Plan



Enabling and Informing Our Path

- Building Healthy Communities internal committee – formed in 2006 with cross-agency representation, including senior management with the MOH
- Research - to gather information for use in health unit planning
- 3 Components of Research Study
 1. Literature Review of the evidence on the impact of the built environment on health
 2. Scan of Ontario health units' and community partners' roles/practices in land use planning – partnered with Ontario Healthy Communities Coalition (PHAC funded)
 3. SMDHU manager/director survey – to identify current and potential HU programming related to land use planning and the built environment

**The Impact of the Built Environment
on the Health of the Population:
A Review of the Review Literature**

November 2007

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Early Advocacy Activities

Municipal Elections – Fall 2006

- Provided Fact Sheets with suggestions for municipal action provided to all candidates and on SMDHU website – *A Case for Active Transportation, Air Quality*

Provincial Elections - Fall 2007

- Adapted above 2 Fact Sheets with a provincial perspective
- Developed a 3rd Fact Sheet on Building Healthy Communities
- Provided fact sheets to all local provincial candidates

A Case for Better Air



Simcoe Muskoka District Health Unit

You Can Help Make Good Health Happen In Your Community

Where you live impacts your health. Healthy communities are built with the cooperation and participation of citizens, industry and government. The provincial government is able to enact policies to improve the health of Ontario communities through strategies such as legislation, provincial laws and informed planning to reduce unhealthy air, promote physical activity and encourage economic development that protect the public's health and safety.

A Case for Active Transportation



Simcoe Muskoka District Health Unit

You can help make good health happen in your community

Where you live impacts your health. Your municipality plays an important role in shaping the environments in which you live and in determining the planning and policies that affect your life. Whether it is through parks, zoning bylaws, sidewalk and road planning, the decisions of local governments impact the overall health of everyone in your community. Good health starts with each person, but it takes a community to support it.

Active Transportation = A Healthier Environment = A Healthier You

Think about the decisions that are made in your municipality that affect how physically active you are and how much you are exposed to in your environment. It is important to have safe walking and cycling paths and sidewalks that let you safely walk to school.

Active transportation is any form of "human-powered walking". Active transportation improves health exposure to air pollution. You may also find that in your neighbourhood, and this has also been shown to be especially when affordable and accessible public transit is available.

Did You Know?

In Canada, over half of automobile trips are under 5 km long or either active transportation means.

- Approximately 46% of Simcoe Muskoka adults inactive.⁴
- Local research suggests that almost half of Ontario residents in Simcoe County do not meet the national recommendation of 30 minutes of daily physical activity.
- Experts agree that moderate physical activity is the risk of premature death related to chronic disease and improves psychological and emotional health.
- Active transportation can easily fit into your schedule when combined with travel time for transit.

A Case for Healthy Communities



Simcoe Muskoka District Health Unit

You Can Help Make Good Health Happen In Your Community

Where you live impacts your health. The natural, social, economic and built environments that surround you help to determine many health-related aspects of your life, such as your level of physical activity, the quality of the air you breathe and the types of jobs available in your community. The environments in which we live and work can have substantial impacts on our health. Policies and decisions made by government play an important role in shaping these environments. Whether it is through local park planning, developing infrastructure or designing transportation systems, these decisions impact the overall health of everyone in your community.

Better Planning & Design = A Healthier Environment = A Healthier You

Think about the decisions made by the provincial government that affect the quality of life in your community. Policies implemented at the provincial level affect decisions made at the municipal level, all of which influence the way in which our communities are built and designed. Certain provincial policy states that healthy, livable and safe communities are sustained by "sustainable development and land-use patterns which may cause environmental and public health problems resulting from economic development that may pose an potential threat to human health. For example, access to green space can encourage physical activity and decrease chronic disease; an abundance of agricultural land can provide local, nutritious food choices; and the location of employment centres close to where people live can decrease stress and commute times, and improve air quality.

Did You Know?

- In 2005 there were 53 smog days in Ontario. Smog days are correlated with an increase in visits to physicians, emergency rooms and hospital admissions.⁵
- Driving long distances (or commuting) to work increases stress, can lead to aggressive driving and contributes to air pollution.
- Development that spreads over a large geographical area can lead to a weakening sense of community, which can impact on a person's mental health and well-being.⁶
- Sustainable transportation and transportation development increases impervious surfaces, which produce runoff that can negatively affect groundwater quality.
- A lack of sidewalks and paved shoulders results in fewer people walking or cycling, thereby increasing congestion of our transportation system.
- Unplanned growth can result in the loss of vital agricultural land.

PROVINCIAL ACTION

Building Internal Capacity

- One-year BHC Specialist position in 2008 - 2009
- Planning template approach provided to all managers and supervisors to incorporate healthy built environment content in SMDHU Program Operational Plans – commenced in 2009
- Internal built environment sustainability plan created in 2010
- Trained internal multi-disciplinary and multi-program teams (chronic disease and injury prevention, environmental health) to review official plans and other key BE strategic documents – remains in place
- BHC Committee disbanded in 2010



The Impact of Our Healthy Communities Design Guidelines – Municipal Planners (MP)

- Survey Response rate – 33% (26 of 78)
- Familiarity with resource - 96% yes (25 of 26)
- New concepts introduced – 36% (8 of 22)
 - Social cohesion and well-being (4 of 8)
 - Physical activity (3 of 8)
 - Access to food (3 of 8)
 - Injuries and safety (3 of 8)
- Overall satisfaction with resource – average of 4.1 out of 5 (5 being very satisfied)



HEALTHY COMMUNITY DESIGN
**Policy Statements
for Official Plans**

Our Accomplishments

- Worked with municipalities to incorporate healthy community design principles into Official Plans and other municipal documents
- Provided comments to 11 Official Plans, 17 other strategic documents (such as: provincial policy statements, transportation plans, draft Ontario Cycling Strategy, housing strategies) . Will provide comments to 16 more official plans.
- Hosted / supported 10 municipal workshops on healthy community design
- Raised the profile of BE provincially
- Revised our agency policies / practices
 - Reviewed and revised our office / clinic / service locations with BE lens
 - Agency Green Plan to improve infrastructure & sustainability
 - Anti-idling Policy
 - Distance communication / reduced travel / work from home

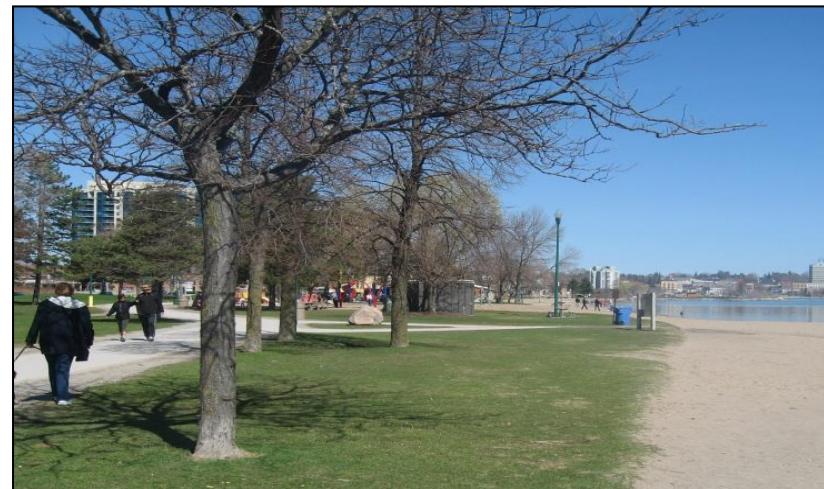
Examples of public health work throughout Ontario to foster healthy community design

- Education and awareness raising within the public health community:
 - alPHa conference Feb 2007 and June 2008
 - ASPHIO conference May 2008
 - HKPRHU hosted active transportation workshop in 2010
 - GBHU hosted Healthy Communities Conference in May 2010
 - CPHA Conference had built environment content in June 2010
 - OPHA Conference on the built environment in October 2010
- Regional / provincial partnerships
 - GTA Clean Air Council – Peel, SM, TO
- Healthy design modeling / assessment tool
 - Peel (with Dr. Larry Frank and Dr. Jim Dunn), Grey Bruce, Haliburton



More examples of public health work in Ontario to foster healthy community design

- Clean Air Strategies / Plans (including anti-idling)
 - Peel, TO, Waterloo, Halton, Simcoe Muskoka
- Active Transportation Plans / Bicycle Paths / Walking Strategies / Planning Tools
 - Peel, TO, York, Hamilton, London, St. Thomas
- Green Building Strategies
 - TO
- Municipal Official Plans / Master Transportation Plans
 - Simcoe Muskoka
- Health Impact Assessment Frameworks / Reports
 - TO, Waterloo, York
- Environmental Assessments
 - York



More examples of public health work in Ontario to foster healthy community design.

- Community Energy Plan
 - Waterloo, York
- Sustainability Strategies
 - York
- Climate Change Mitigation and Adaptation Plans
 - TO, York
- Transit Emissions Reduction / Smart Commute Plans
 - York
- Comprehensive Food Strategies
 - TO, SMDHU
- Ongoing Review and Advocacy
 - OPHA Built Environment Working Group
- Provincial Policy Advocacy
 - Review of the Provincial Policy Statement
 - Provincial cycling strategy
 - Meetings with provincial ministers





Final Thoughts

- There is great potential to improve health in many ways with the built environment.
- At SMDHU we have learned much along way – and we will continue on the journey for many years to come.

Questions?

