

# Healthy Environments

THE TRANSPORTATION SYSTEM IS  
PART OF THE SOLUTION

Transportation Association of Canada (TAC)  
Conference – September 2013

Brandon Sloan, MCIP, RPP



Source: [bikekitchener.ca](http://bikekitchener.ca)



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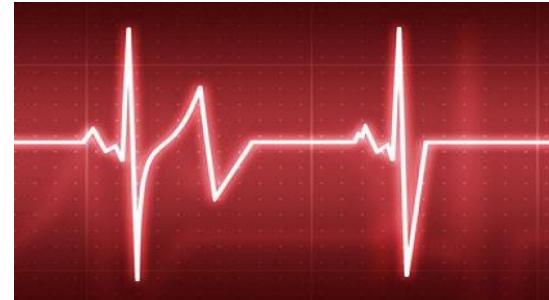
# Healthy Environments

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So what?

What can we do?

- Consider People
- Provide Choice
- Take Action



What else can you do?



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# So What?

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**“the transportation systems around the world are responsible for approximately 5.8 million deaths per year:**

- 3.2 million deaths from physical inactivity;
- 1.3 million deaths from road traffic injuries;
- 1.3 million deaths from outdoor air pollution...



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...on a global basis, the transportation sector is responsible for 23 per cent of the greenhouse gases that are emitted, with land transport responsible for 80 per cent of those emissions”

*Health co-benefits of climate change mitigation – Transport Sector  
World Health Organization Report, 2011*



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Heart disease and stroke costs the Cdn. economy \$22.2 billion every year in physician services, hospital costs, lost wages & decreased productivity.

+\$2.1 billion in Cdn. health care costs are attributable to physical inactivity

21,000 premature deaths due to physical inactivity

National inactivity level among youth = 58%



Source: canequit.com



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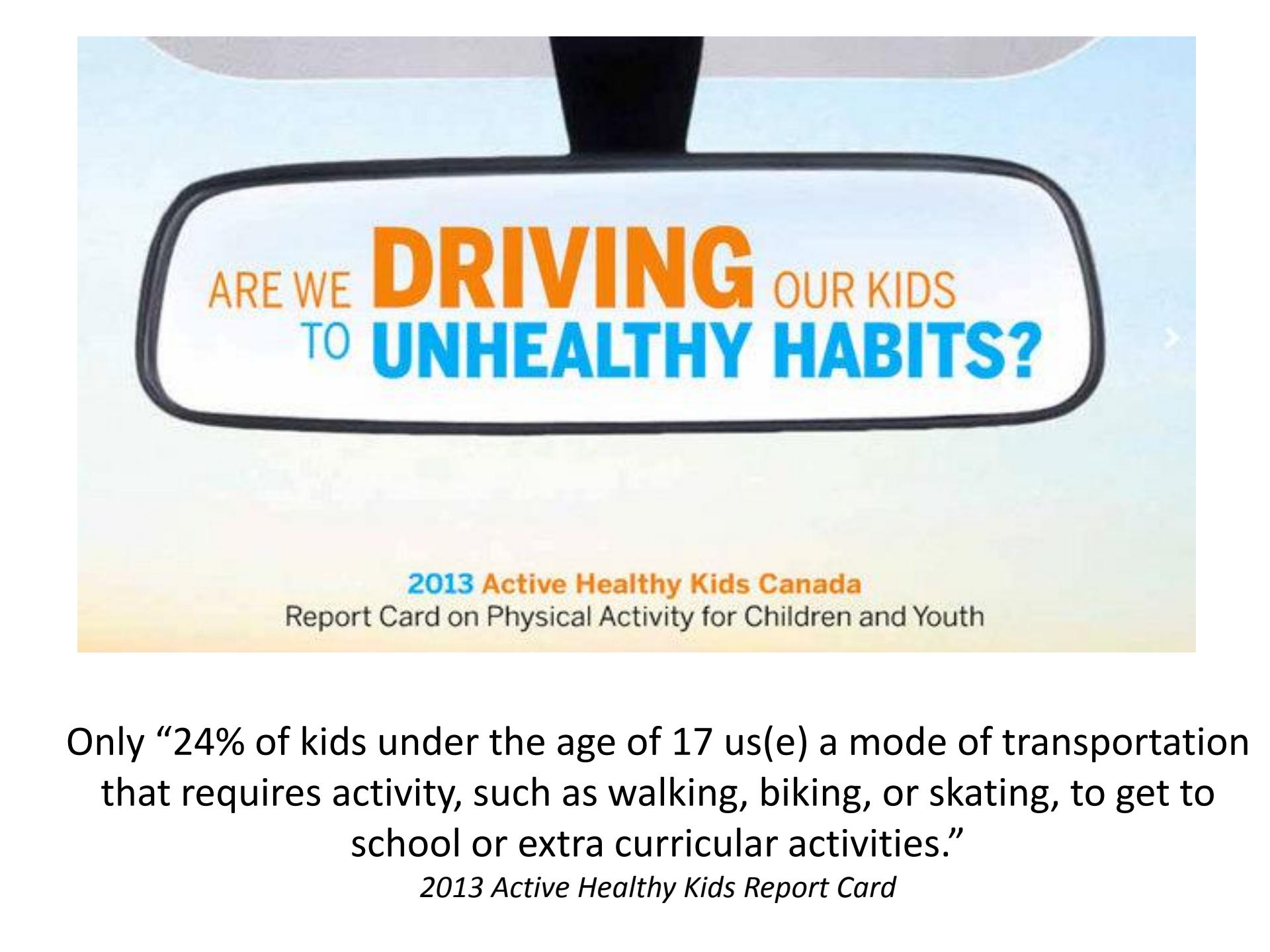
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# ARE WE **DRIVING** OUR KIDS TO **UNHEALTHY HABITS?**

**2013 Active Healthy Kids Canada**  
Report Card on Physical Activity for Children and Youth

Only “24% of kids under the age of 17 us(e) a mode of transportation that requires activity, such as walking, biking, or skating, to get to school or extra curricular activities.”

*2013 Active Healthy Kids Report Card*

1 in 4 Canadian adults are considered obese, along with about 1 in 10 children and youth between ages 6 and 17

2008 economic costs of obesity are conservatively estimated at \$4.6 billion up about 19% from 2000

1 in 4 affected by diabetes or pre-diabetes

*Expected to be 1 in 3 by 2020*



Source: sikskiahealth.com

1 in 4 expected to die from cancer

*Up to 50% can be mitigated by lifestyle changes*

32% of deaths due to cardiovascular disease

*Up to 80% can be mitigated by lifestyle changes*



# How can transportation encourage healthy living?

Transportation affects our health on a daily basis. As one of the leading causes of air pollution, greenhouse gas emissions and transportation-related contaminants contribute to premature deaths and other illnesses. Even though traffic is getting safer, one person

*Source: ebw.evergreen.ca*

# Consider People

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People need safe and inviting places to travel when not protected inside a vehicle

Some take the “People first” approach

Set us up for the next generation to be even healthier



Source: wrha.mb.ca



Source: gov.ns.ca



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# Provide Options

People need equal opportunities for a variety of travel modes

Different people need different modes to different places at different times of the year or at different stages of life

- Since so many “differents” = need more options

Active transportation is a public health priority



Source: tc.gc.ca



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# Take Action

Let's just do it ("Faster")

- Don't always need a buzzword/catch phrase like "complete streets", "road diets", "transit-oriented"...although sometimes it helps
- Connect a detail (i.e. road access, intersection type) with the bigger picture objective

Start with a pilot project

Build capacity

- Training, joint forums, solution database, knowledge exchange, examples, successes



Source: B. Sloan



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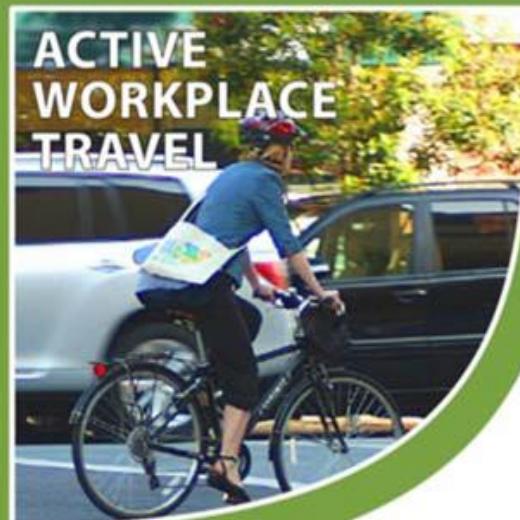
**ACTIVE  
RECREATION**



**ACTIVE  
DESTINATION  
ORIENTED TRIPS**



**ACTIVE  
COMMUTING**



**ACTIVE  
WORKPLACE  
TRAVEL**

*Source: Elgin St. Thomas Public Health*

# Retrofitting Streets

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*Urban Advantage*



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# Retrofitting for Transit

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*Urban Advantage*



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# Retrofitting a Transit Area



*Urban Strategies Inc*



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# Continue Taking Action on...

More Sustainable Transportation initiatives from TAC

Investment in active transportation and public transit

Reduction in travel demand

The shift to walking, cycling, transit



Source: [daveheidebrecht.com](http://daveheidebrecht.com)



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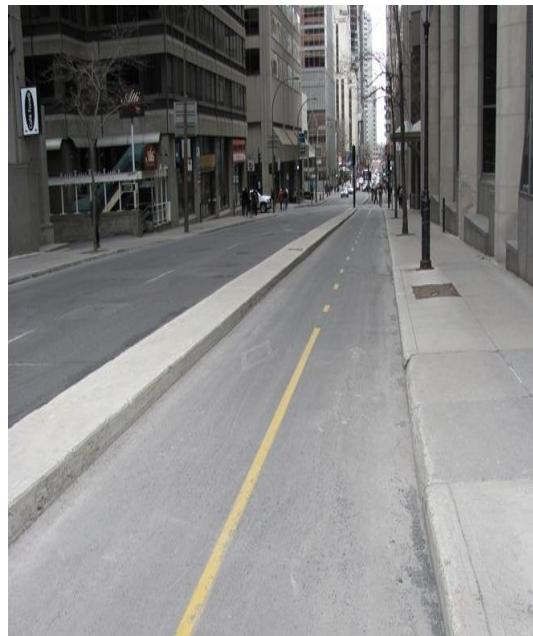
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# Continue Taking Action on...

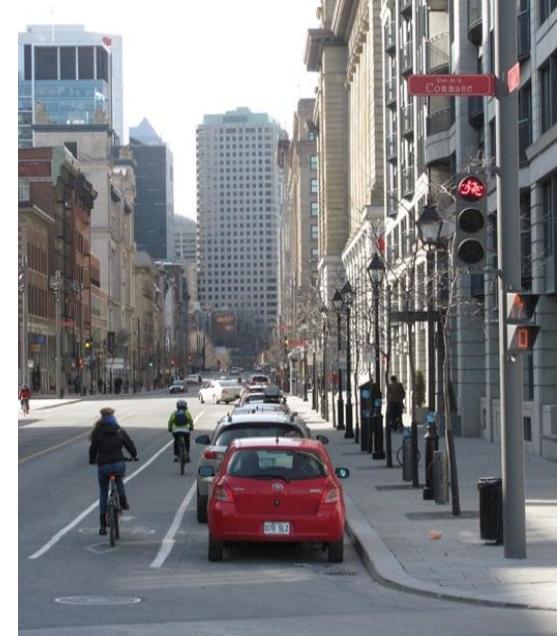
Cycling infrastructure – “bike lanes are a public health priority”



Source: B. Sloan



Source: B. Sloan



Source: B. Sloan



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# Need more...

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Walkability initiatives (GIS layer, improve connections, destinations, etc)

- Many walkability studies determined that safety and comfort concerns caused by vehicle traffic (e.g. traffic speed, volume, road crossing conditions, etc.) were a primary influence on mode choice.
- Perceptions of safety and aesthetic quality of a route play an important part in influencing people's decision to walk (both for themselves and children).
- Path connections, quality street trees and scenery are all aspects of route quality identified as having a positive relationship with people's decision to walk.
- Shorter distances for daily trips occur in areas with building density and a mixture of land uses.



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# Need more...

Ways to make *avenues* as the “spine” of a community not arterial roads as a “barrier”



Source: Brook McIlroy



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# Need more...

## Solutions for maintenance and for project cost issues



Source: [daveheidebrecht.com](http://daveheidebrecht.com)



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# Need more...

“Health” criterion in Environmental Assessments/cost-benefit analyses for transportation & infrastructure decisions

Health impact assessment tools

Engagement and input from public health professionals in transportation initiatives

Enhancement of linkage between TAC and Public Health and Planning Initiatives/Groups



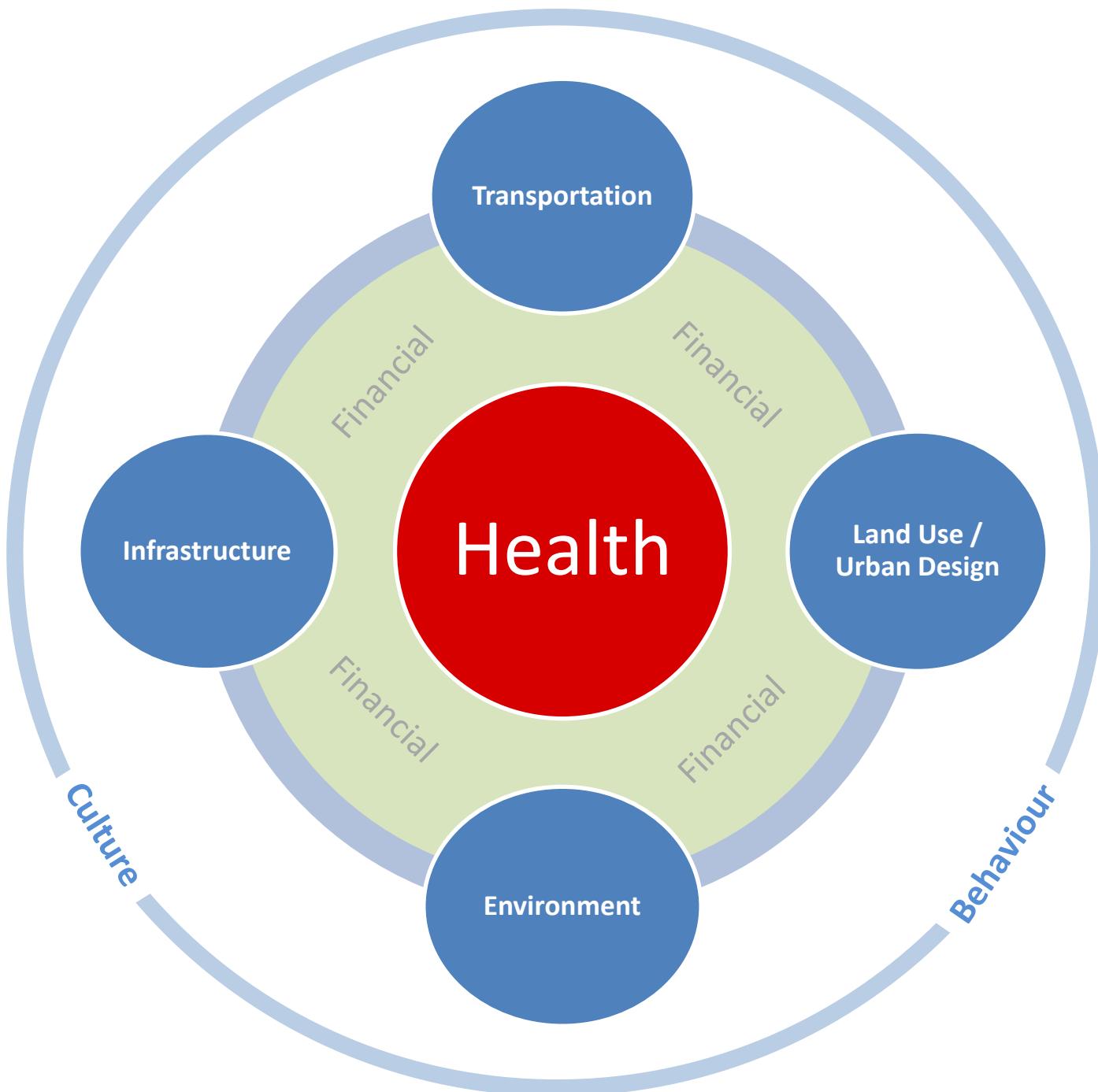
FIGURE: On 350 calories a cyclist can travel 16 kilometres, a pedestrian 5.6 kilometres, and an automobile 30.4 metres.  
CIP Fact Sheet



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# Summary

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Problem = health + environment + overall cost

What can we do?

Consider People                      Better

Provide Choice              =      Faster

Take Action                              Safer

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Bottom Line

Health 

Environment 

Cost 

The Transportation System is part of the solution

“improved active transportation and rapid transit/public transportation is not only healthy; **it is cost-effective**”.

*WHO Report, 2011*

“creating physical environments that facilitate healthy living is a critical component of supporting individuals in making better choices for their health.”

*CIP Fact Sheet – Active Transportation*

A change in mindset is a long-term investment...and it's happening!



*Source: City of Kitchener*

# Additional materials

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## USB key

- CIP Practice Guide
- Fact Sheets – incl. Active Transportation, Health and Community Design
- Weblinks and resources
- Key studies and documents

Numerous examples and resources via web

Canadian Institute of Planners:

<http://www.cip-icu.ca/health>



Source: tc.gc.ca



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# Discussion Question

What actions are you currently engaged in, or what changes could you make to your current actions, to help provide healthy environments?



*Source: theRecord.com*