

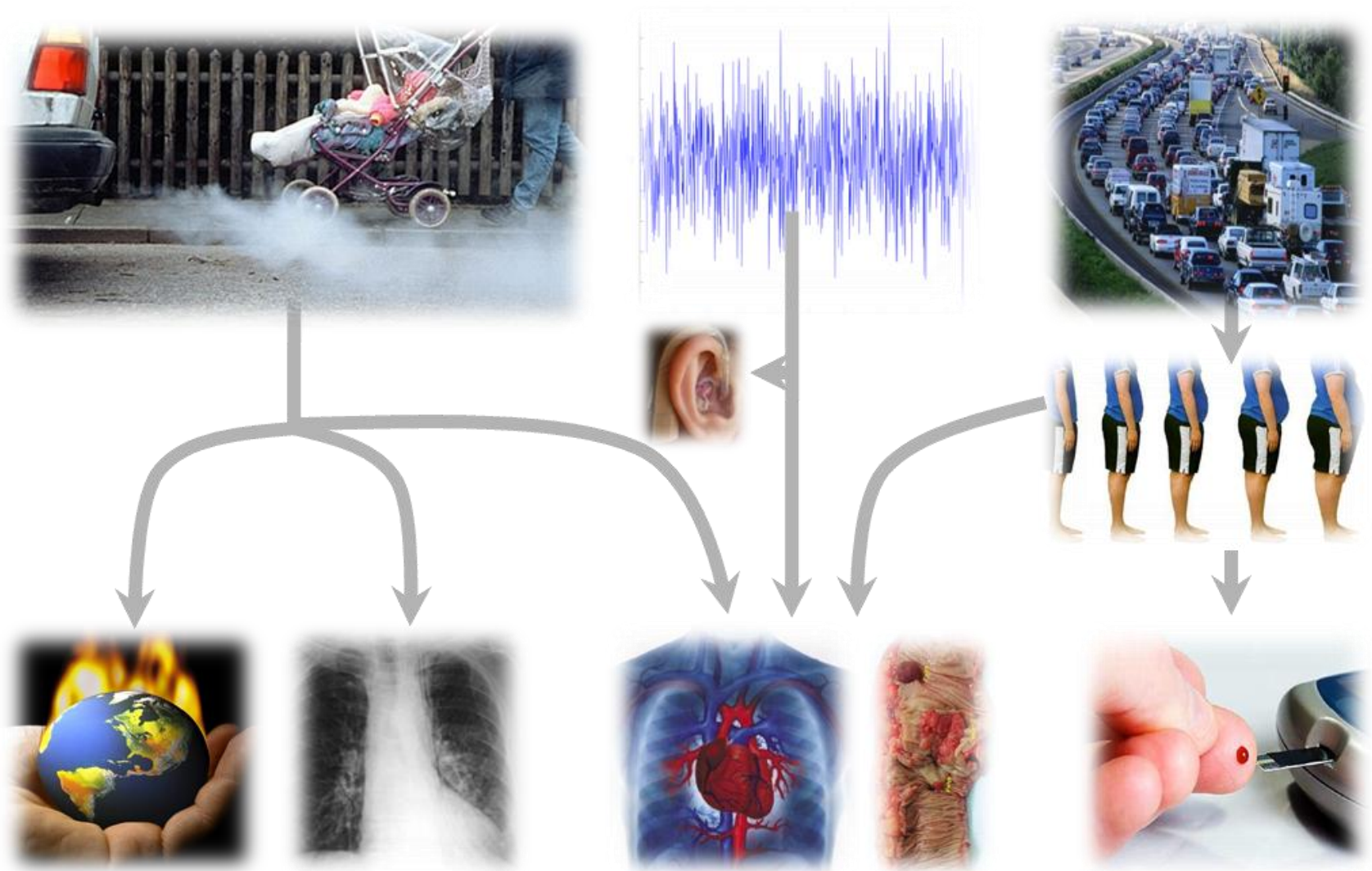


Health and active transportation: an inventory of municipal data collection and needs

Meghan Winters, Faculty of Health Sciences, Simon Fraser University, mwinters@sfu.ca
with Erna Van Balen



Transportation and health



Healthy Canada by Design Project

Goals:

- Document **data collection** related to transportation and health across various sectors
- Document the **data needs** of these organizations
- Describe **promising practices** from other Canadian centres
- Identify synergies, gaps and recommended actions.



Health and active transportation: an inventory of municipal data collection and needs in the Lower Mainland of B.C.

Erna van Balen, MSc, MPhil
Meghan Winters, PhD



Better health.
Best in health care.

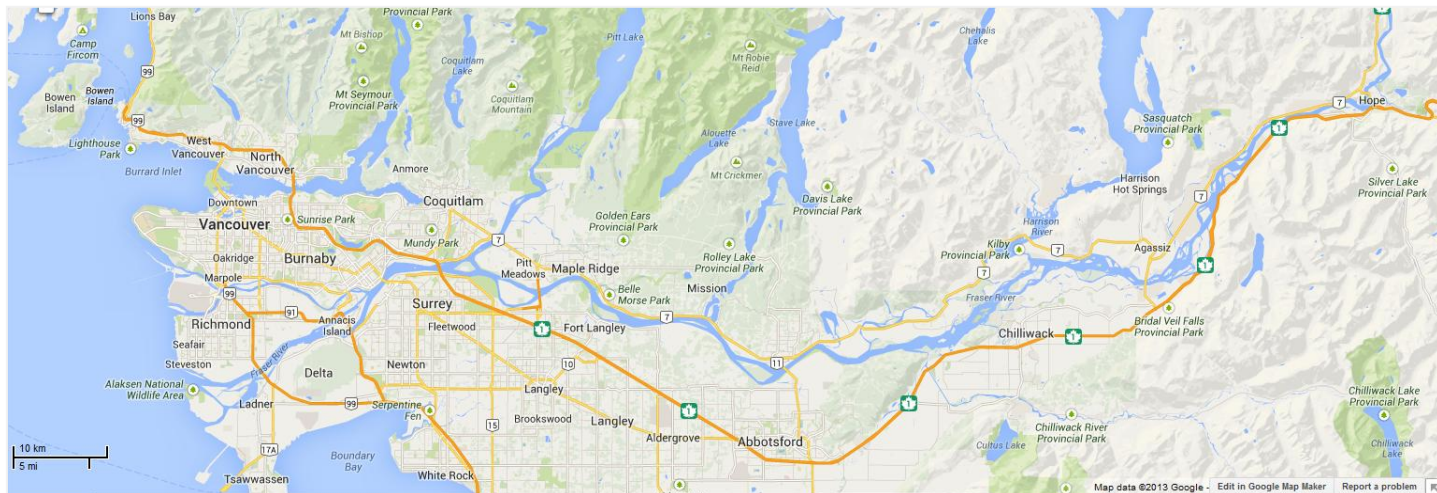


An initiative of:



Setting and Methods

- Across urban, suburban, rural areas in the Lower Mainland of BC
- Interviews: 22 transportation planners in 15 municipalities, 2 health authorities, 2 regional governments, Translink, ICBC, BC Injury Research and Prevention Unit
- Advisory committee: epidemiologists, public health, planners, engineers
- Summarized themes to develop recommendations, guide selection of promising practices



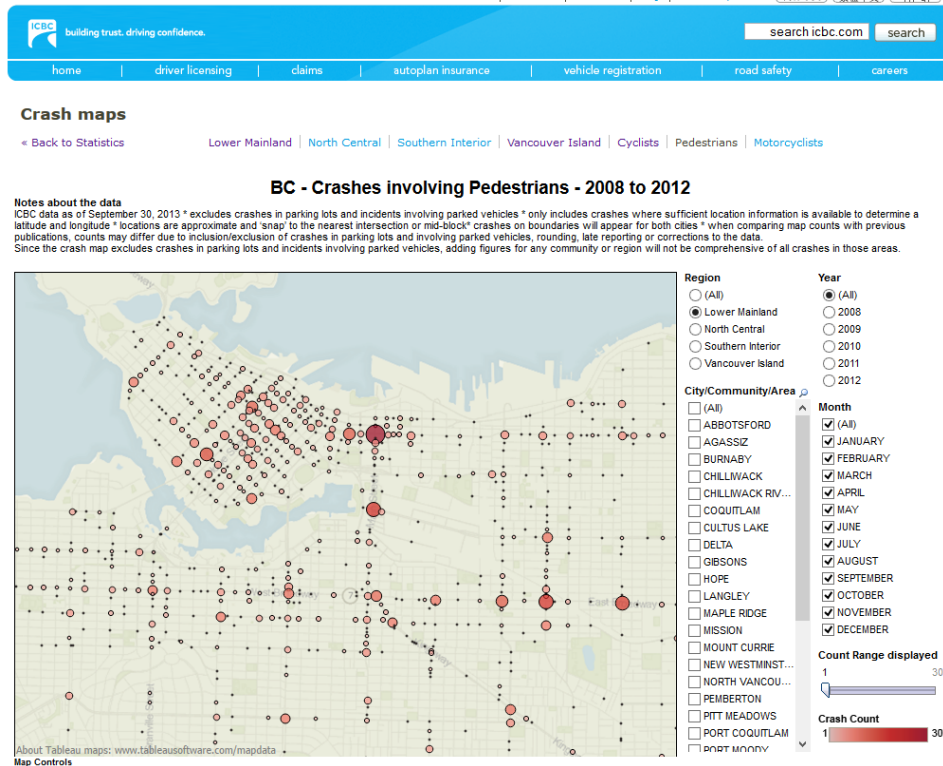
Active transportation data collected by municipalities

- 12 of 15 (80%) municipalities have traffic count programs
- 9 (60%) include cyclist and/or pedestrian counts
- 5 (33%) have formal active transportation count programs
- All municipalities count cyclists/pedestrians on a project basis



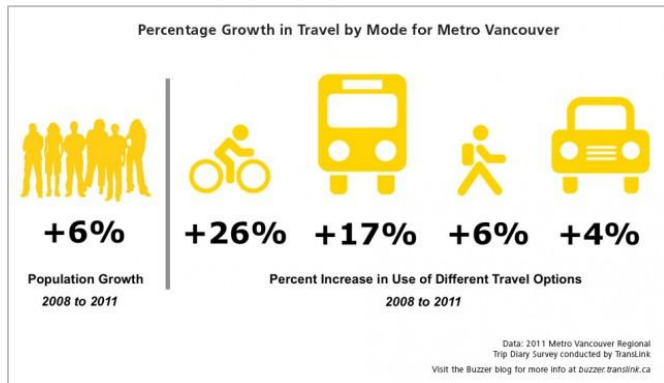
“Health”: Crash and injury data

- Insurance Corporation of BC *** – claimed crashes involving motor vehicles – geocoded, road user type, injury severity
- Health authorities - varying access to hospital data
- BC Injury Research and Prevention Unit - incorporating multiple sources



Other Data Used by Municipalities

- Travel behaviour (Translink Trip Diary, National Household Survey)
- Transit (Translink, BC Transit)
- Traffic counts (BC Ministry of Transportation and Infrastructure)
- Air quality (Metro Vancouver)
- Physical activity, obesity, chronic disease (Canadian Community Health Survey, My Health My Community)



Data Needs

Better (more)
data on active
transportation,
more capacity

Sharing of data
across sectors

More complete
injury data

Methods to link
health and
transportation

Technology and
best practice
sharing

Infrastructure
data
(sidewalks,
parking lots)

General recommendations

1. Establish a regional approach to data collection for transportation and health
2. Establish a regional database of transportation and health data
3. Leverage funding and resources
4. Enhance knowledge exchange between municipalities

Integrating health into transportation planning

	Tier 1	Tier 2	Tier 3
Data currently available	<ul style="list-style-type: none"> • Traffic counts, if any, are for motorized traffic only • Do not have health data 	<ul style="list-style-type: none"> • Have traffic counts, including some AT data • Have some injury data 	<ul style="list-style-type: none"> • Have extensive count programs, including AT • Have injury data from several sources, but no other health data
Data needed	<ul style="list-style-type: none"> • More/better data on active transportation • Best practice of data collection 	<ul style="list-style-type: none"> • Best practice of data collection • Sharing data and accessibility 	<ul style="list-style-type: none"> • Sharing data and accessibility • Linking health and transportation
Promising practices	<ul style="list-style-type: none"> • National Count Day • Peel Data Centre 	<ul style="list-style-type: none"> • National Count Day • Peel Data Centre • Injury and crash maps 	<ul style="list-style-type: none"> • Injury and crash maps • Toronto diabetes map • HEAT, Health Impact Assessments
Recommendations	<p>1 - 4 5</p>	<p>1 - 4 5 - 6</p>	<p>1 - 4 6 - 9</p>

Integrating health into transportation planning

Tier 1

Data currently available

- Traffic counts, if any, are for motorized traffic only
- Do not have health data

Data needed

- More/better data on active transportation
- Best practice of data collection

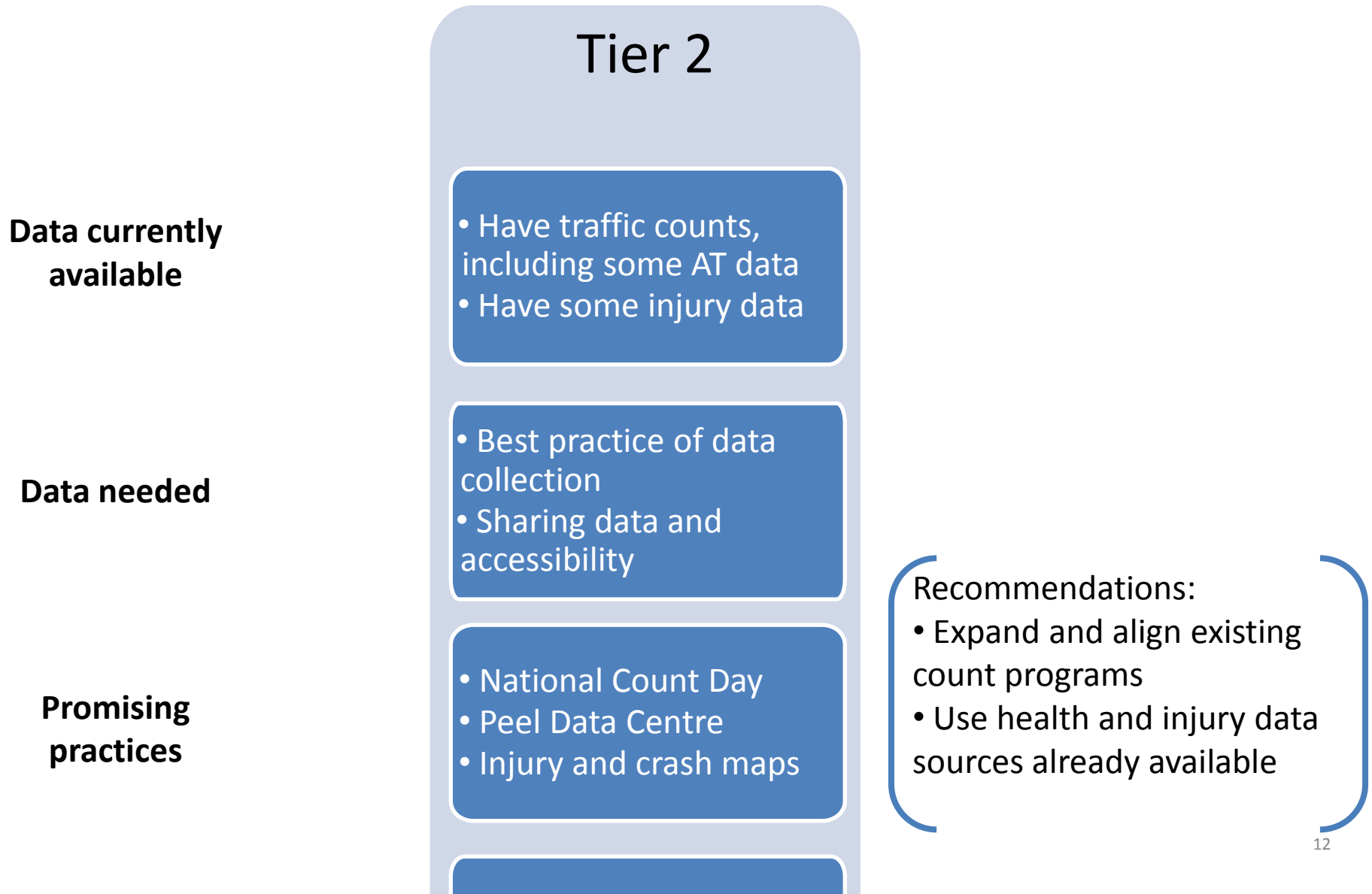
Promising practices

- National Count Day
- Peel Data Centre

Recommendation:

- Expand existing municipal intersection counts to include active transportation

Integrating health into transportation planning



Integrating health into transportation planning

Tier 3

**Data currently
available**

- Have extensive count programs, including AT
- Have injury data from several sources, but no other health data

Data needed

- Sharing data and accessibility
- Linking health and transportation

**Promising
practices**

- Injury and crash maps
- Toronto diabetes map
- HEAT, Health Impact Assessments

Recommendations:

- Access existing health and injury data sources
- Add health-related questions to surveys
- Carry out health impact assessments, HEAT
- Make use of advancing technology

Promising practices Tier 1: National Count Day

National Bicycle and Pedestrian Documentation Project

[Home](#)[Participate](#)[Downloads](#)

Count Dates:

The next count/survey days are **May 6-8, 2014**.
Upcoming days through 2014 are:

- May 6-8, 2014
- July 4-6, 2014
- Sept 9-14, 2014

Stay tuned for the next round of count days!

About

One of the greatest challenges facing the bicycle and pedestrian field is the lack of documentation on usage and demand. Without accurate and consistent demand and usage figures, it is difficult to measure the positive benefits of investments in these modes, especially when compared to the other transportation modes such as the private automobile. An answer to this need for data is the National Bicycle & Pedestrian Documentation Project, co-sponsored by Alta Planning and Design and the Institute of Transportation Engineers (ITE) Pedestrian and Bicycle Council. This nationwide effort provides consistent model of data collection and ongoing data for use by planners, governments, and bicycle and pedestrian professionals.

Methodology

The basic assumptions of the methodology are that, in order to estimate existing and future bicycle and pedestrian demand and activity, agencies nationwide need to start conducting counts and surveys in a consistent manner similar to those being used by ITE and other groups for motor vehicle models.

<http://bikepeddocumentation.org/>

NBPD to Provide Free Summary Reports!

The National Bicycle and Pedestrian Documentation Project has developed a summary report that highlights the valuable information that can be gained from year-long automatic bicycle and pedestrian counts. If your community uses Eco-Counter automatic count technology, the National Bicycle and Pedestrian Documentation Project will provide a free summary report of the data in exchange for submission of the annual automatic count data to the project. This report puts valuable information regarding usage and trends at your fingertips which can be used in grant applications, press releases, annual count reports, etc. Sample reports are available [here](#) and [here](#). Email your Eco-Counter data in excel format to data@bikepeddocumentation.org. Please indicate the exact location of the automatic counter and tell us a bit about the bicycle or pedestrian facility.

News

Promising practices Tier 2: Visualization

ICBC Interactive Crash Maps

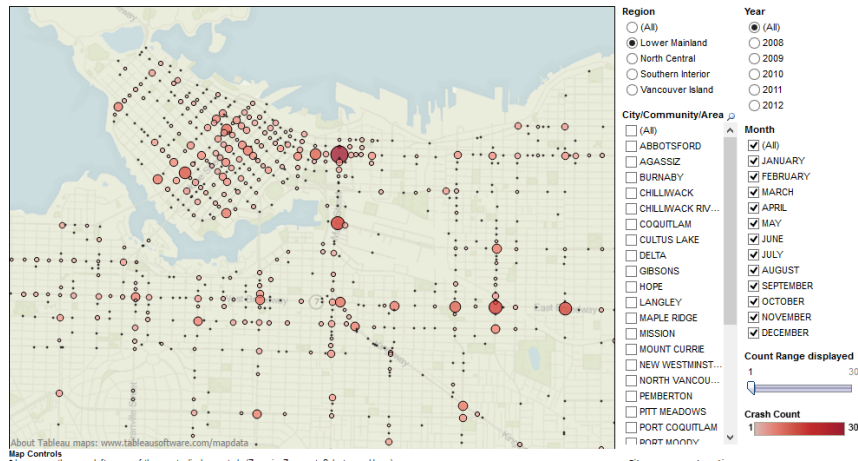


Crash maps

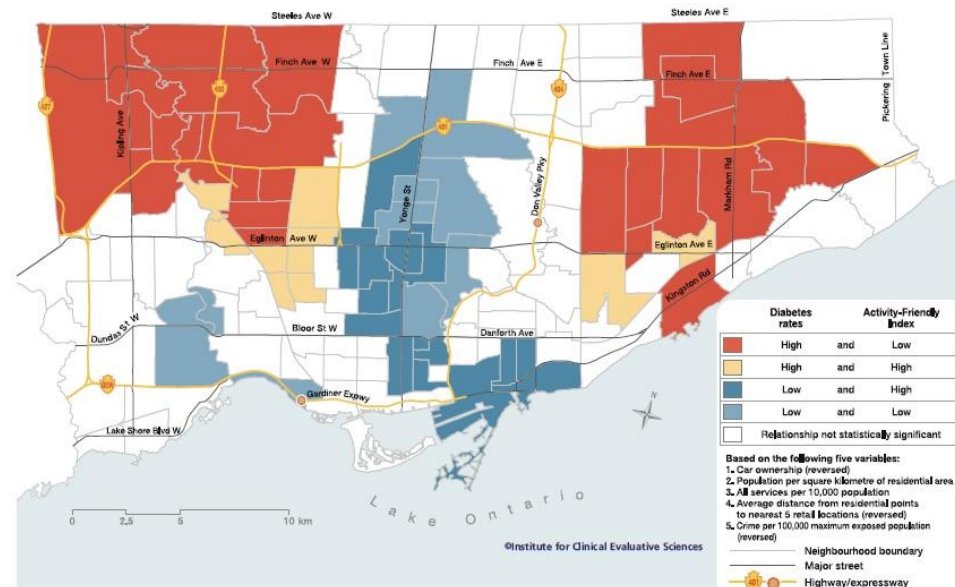
[Back to Statistics](#) [Lower Mainland](#) [North Central](#) [Southern Interior](#) [Vancouver Island](#) [Cyclists](#) [Pedestrians](#) [Motorcyclists](#)

BC - Crashes Involving Pedestrians - 2008 to 2012

Notes about the data
ICBC data as of September 30, 2013 * excludes crashes in parking lots and incidents involving parked vehicles * only includes crashes where sufficient location information is available to determine a latitude and longitude * locations are approximate and "snap" to the nearest intersection or mid-block * crashes on boundaries will appear for both cities * when comparing map counts with previous publications, counts may differ due to inclusion/exclusion of crashes in parking lots and involving parked vehicles, rounding, late reporting or corrections to the data.
Since the crash map excludes crashes in parking lots and incidents involving parked vehicles, adding figures for any community or region will not be comprehensive of all crashes in those areas.



Toronto Diabetes Atlas



Findings

- In 2001, areas in the northwest and eastern parts of Toronto had both high diabetes rates and low scores on the Activity-Friendly Index (AFI).
- A number of neighbourhoods in downtown (south central) and central Toronto had both low diabetes rates and high AFI scores.

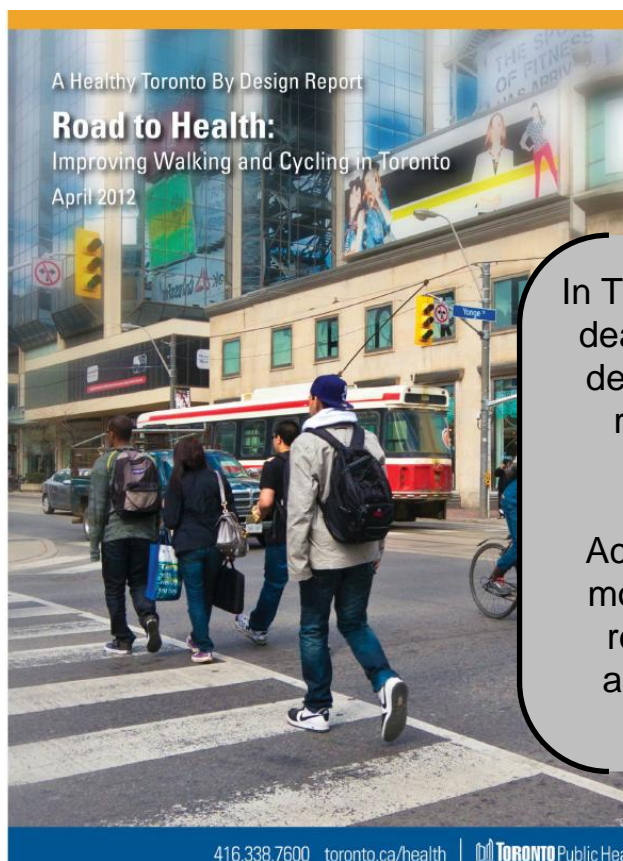
Promising Practices Tier 3: HEAT

Health economic assessment tools
(HEAT) for walking and for cycling



ECONOMIC ASSESSMENT OF
TRANSPORT INFRASTRUCTURE
AND POLICIES

<http://www.heatwalkingcycling.org/>



In Toronto, walking prevented 60 deaths per year and cycling 49 deaths per year (2006 levels), representing \$130 to \$478 million in health benefits

Achieving walking and cycling mode shares of 12% and 6%, respectively, would prevent about 100 additional deaths each year

Discussion

- Acknowledge differences between municipalities
 - Capacity
 - Different views on health
- Opportunities:
 - Connecting people and data sources
 - Leveraging regional initiatives
- Challenges:
 - Data available for different geographic areas
 - Different data available in different geographic areas
 - Different automatic count systems and methods
 - Some needs are not data-related



mwinters@sfu.ca