bikebrampton.ca

Brampton Bicycle Advisory Committee

"Brampton Kids on Bikes" Moving Peel Kids Safely Workshop April 20, 2015





Brampton Kids on Bikes

- Research best-practice Safe & Active Routes to School
- Focus groups, interviews & community meetings
- Stakeholder workshops & meetings
- Develop advocacy message
 - Raise priority & Commitment to reverse the trend...





Review of Literature

http://bikebrampton.ca/wpcontent/uploads/2014/11/2014-Brampton-Kids-on-Bikes-Literature-Review-Report_v2.pdf

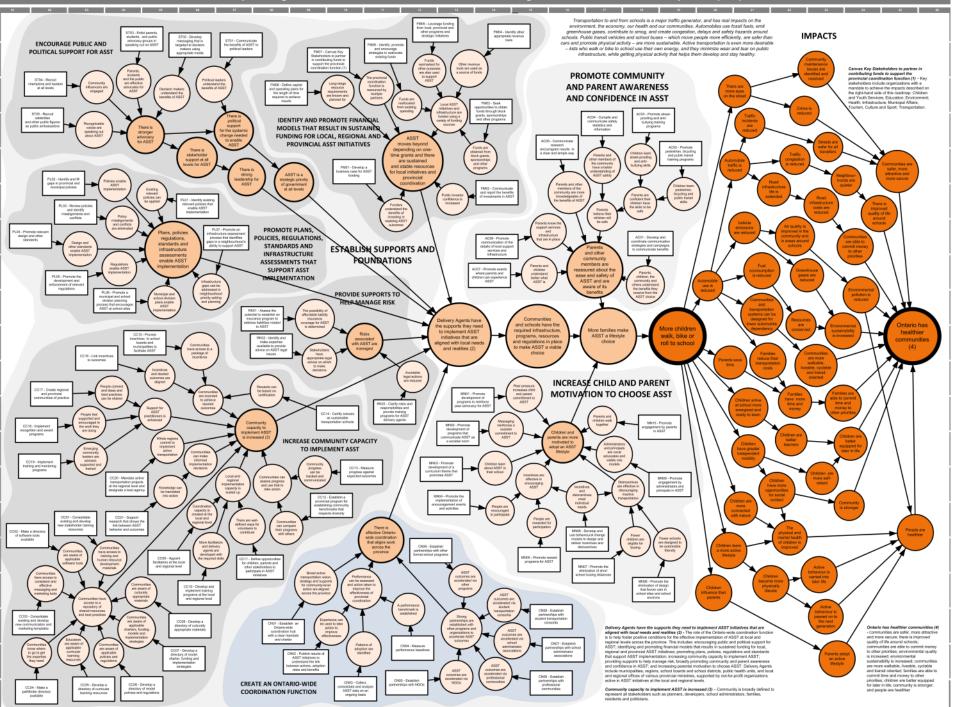


Review of the Literature Report Dayle Laing, David Laing November 17, 2014





Implementing Ontario-Wide Co-ordination for Healthier Communities through Active and Sustainable School Transportation (ASST)



Brampton Kids on Bikes Project Peel Physical Inactivity Health Crisis Workshop Dec 4, 2014

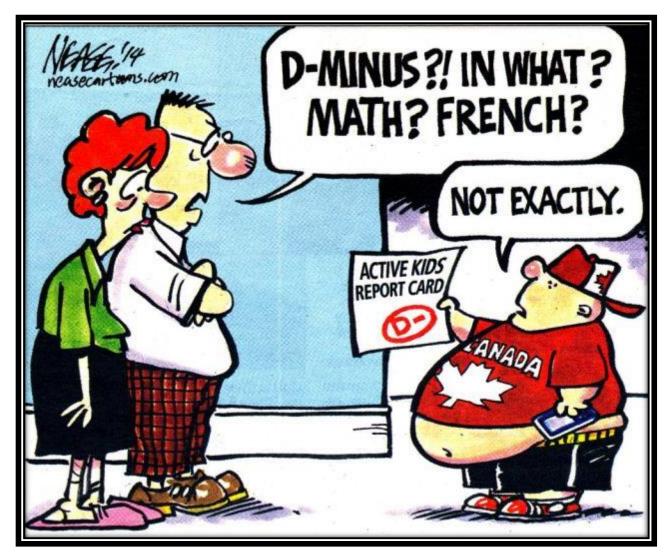
December 4th Workshop Outcomes

- Childhood inactivity is a serious issue
- ASST can help reengineer daily youth activity
- Current actions are inadequate
- Strategy:
 - Top down
 - Provincial Mandate, Municipal bylaw
 - Bottom up
 - Create more awareness
 - Expand STP through PSARTS sub-committee

Math Score Priority...



Brampton Kids on Bikes Project



NEASE cartoon, Brampton Guardian, May 23, 2014)

Brampton Kids on Bikes Project

Current Physical Activity Levels

84% of kids 3-4

7% of kids 5-11

4% of kids 12-17

get 60 minutes / day

moderate to vigorous physical activity

2014 Active Healthy Kids Canada Report Card



Brampton Bicycle Advisory Committee BikeBrampton.ca

Health of our Children & Us...

"We have engineered physical activity out of our daily lives. Until we engineer it back in, we will continue to have a health problem as a consequence" Dr. David Mowat, Medical Officer of Health, 2014

Overweight / Obese Peel grade 7–12 Students

37% of boys 27% of girls

 \diamond

Student Health Survey by Peel Public Health (2011), who measured heights and weights of more than 7,500 Peel students.



Link to Disease

- Heart & Lung Disease
 - 7,006 new cases of heart disease / year in GTHA1
 - 1/3 boys & almost ½ girls Peel Gr 9 students failed their cardiorespiratory fitness scores 2
- Type II Diabetes -- "an economic tsunami"
 57,000 new cases of diabetes / year 1

Improving Health by Design, GTHA Medical Officers of Health, 2014 pp.9-10
 Changing Course, Peel Region Health Study, 2012 p.11



Air Pollution

"Group 1 carcinogenic to humans" (IARC 2014)
Particularly susceptible: young kids, elderly, pregnant women, & those with heart disease, asthma, chronic obstructive pulmonary disease, obesity & diabetes (Peel Region, 2014)

Congestion...

"Communities in the GTA must begin encouraging a significant shift from cars to transit and active transportation. Otherwise, by 2031, road capacity, including currently built and new infrastructure, will handle less than 40% of the projected vehicle demand." (Nick Poulous, Transit and Transportation Planning Consultant, 2014)

Environment...

 $\left(\right)$

- 987,000

7Km

Peel Region Active Transportation Plan & Implementation Strategy, Jan 2012; Peel Long Range Transportation Plan Update 2012 Final Draft

Manual and a second

Daily Trips..

- of work & school trips:
 53% were shorter than 7km
 18% were less than 2 km
 - 81% were taken by car!
 (Peel Long Range Transportation Plan Update, 2012)



Nelson Mandela Public School Traffic Issues Brampton Guardian, Feb 21, 2015

Brampton Kids on Bikes Project

School Drop off Congestion "school administrators and staff spend an average of **30 minutes** each school day managing car traffic at their school."

Metrolinx. Stepping It Up Project:

Qualitative Data from Pilot School Administrators, 2012





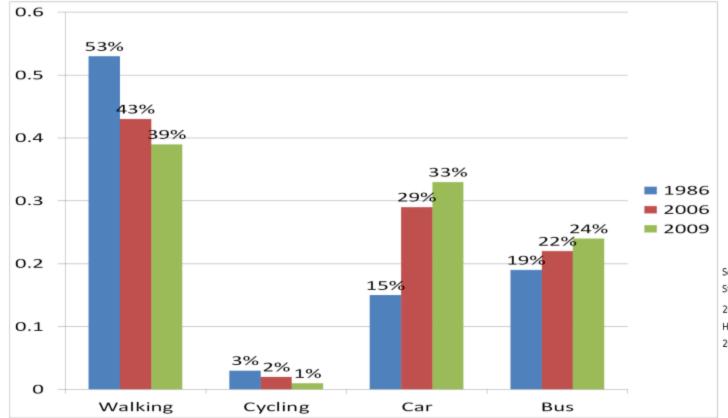
Costs to all of us...

- Healthcare Medical costs
- Productivity our time!
- Road maintenance, Construction
- Environmental cost
- Insurance rates



Brampton Kids on Bikes Project

School Transportation Trends



Sources: 1986 & 2006:{Metrolinx. Stepping It Up—Final Report, 2012}; 2009 (Metrolinx. GTHA School Travel Household Attitudinal Study Report, 2010)





Active Transportation Solution...

"Physical activity is a powerful intervention. It has benefits as large as those provided by drugs in preventing death in the treatment of coronary heart disease, stroke, heart failure and the prevention of diabetes." (The Medical Officers of Health for GTHA, 2014)



Active Transportation for Physical Activity Goals

"Driving our kids to and from school may be robbing them of an important source of daily physical activity." (Healthy Kids Canada Report, 2014)



Brampton Kids on Bikes Project

Academic Performance

"the exercise you get from transporting yourself to school reflects on your ability to concentrate for about four hours into the school day"

"as a third-grade pupil, if you exercise and bike to school, your ability to concentrate increases to the equivalent of someone half a year further in their studies" Professor Niels Egelund,

Aarhus University, Denmark Danish Project Mass Experiment, 2012

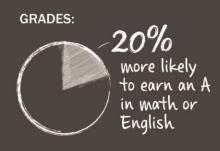




active kids learn better



physical activity at school is a win-win for students and teachers



STANDARDIZED TEST SCORES:



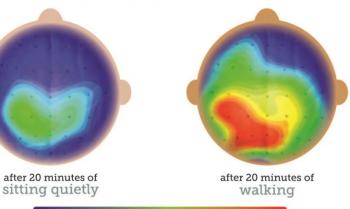
JUST ONE PHYSICALLY ACTIVE LESSON CREATES:



21% decrease in teachers' time managing behavior

physically active kids have more active brains

BRAIN SCANS OF STUDENTS TAKING A TEST:



Red areas are very active; blue areas are least active.

MORE RESULTS:

after 20 minutes of physical activity:

students tested better in reading, spelling & math and were more likely to read above their grade level

after being in a physically active afterschool program for 9 months:

memory tasks improved 16%

SOURCES: Donnelly J.E. and Lambourne K. (2011). Classroom-based physical activity, cognition, and academic achievement. Prev Med. 52(Suppl 1):S36-S42. Hillman C.H. et al. (2009). The effect of acute treadmill walking on cognitive control and academic achievement in preadolescent children. Neuroscience. 159(3):1044-1054. Kamijo K. et al. (2011). The effects of an afterschool physical activity program on working memory in preadolescent children. Dev Sci. 14(5):1046-1058. Kibbe D.L. et al. (2011). The years of TAKE 10I: integrating physical activity with academic concepts in elementary school classrooms. Prev Med. 52(Suppl 1):S43-S50. Nelson M.C. and Gordon-Larson P. (2006). Physical activity and sedentary behavior patterns are associated with selected adolescent health risk behaviors. Pediatrics, 117(4): 1281–1290.

Learn more about why active kids learn better and how schools can help at activelivingresearch.org/activeeducationbrief.

The "Safety" Myth...



(Word balloon edited with apologies to cartoonist GABLE, Globe and Mail, Mar 21, 2015)



Cycling Risk in Perspective

7000

6000

1000

0

Traffic deaths, 5000 (normalized per 15,000 km)
 - 1 cycling fatality 4000
 - 44 auto fatalities 3000
 (Peel Region 3year study, 2004-2007) 2000



Peel 2011



"Stranger-danger" or "Creepers"



(Gavin de Becker, security consultant, Protecting the Gift: Keeping Children and Teenagers Safe (and Parents Sane), 2000)



Active Transportation ...

Benefits outweigh Risks 9:1 to 96:1

(Teschke et al. UBC, (review of scientific literature),2012)



How do we improve Cycling Safety?

- Better infrastructure (on-road marked bike lanes or bike routes) reduces accident risk by 50%
- Education & consistent enforcement
- Small increments in perception of safety, yield significant increases in cycling
- The more bikes on the road, the safer it is for all road users!
- Riding on sidewalks not necessarily safer!



Brampton Kids on Bikes Project

Cultural Norm Shift

"A few parents that had encouraged their children to walk to school noted **disapproval from other parents**; they were seen to be acting in an **irresponsible manner**."

> Greenest City, Informa Market Research. Small Steps Large Rewards, Active & Safe Routes to School Resource Manual, June 2001, p.13

"Good parents allow Active Transportation"





What you can do...

- Encourage your children to walk or cycle
 - Support other parents
- Ask about Active & Safe
 Routes to Schools programs
 - Participate in a school program
 - Advocate in our community



"You changed my life after your [Brampton Kids on Bikes] presentation. My kids walk to school now. I was the parent who would have driven my children to university. I want to start a walking school bus program at my kids' school."



- parent, Brampton Springdale Network Meeting, Mar 26, 2015