

EVALUATING PUBLIC HEALTH IMPACTS OF LAND USE DECISIONS IN PEEL

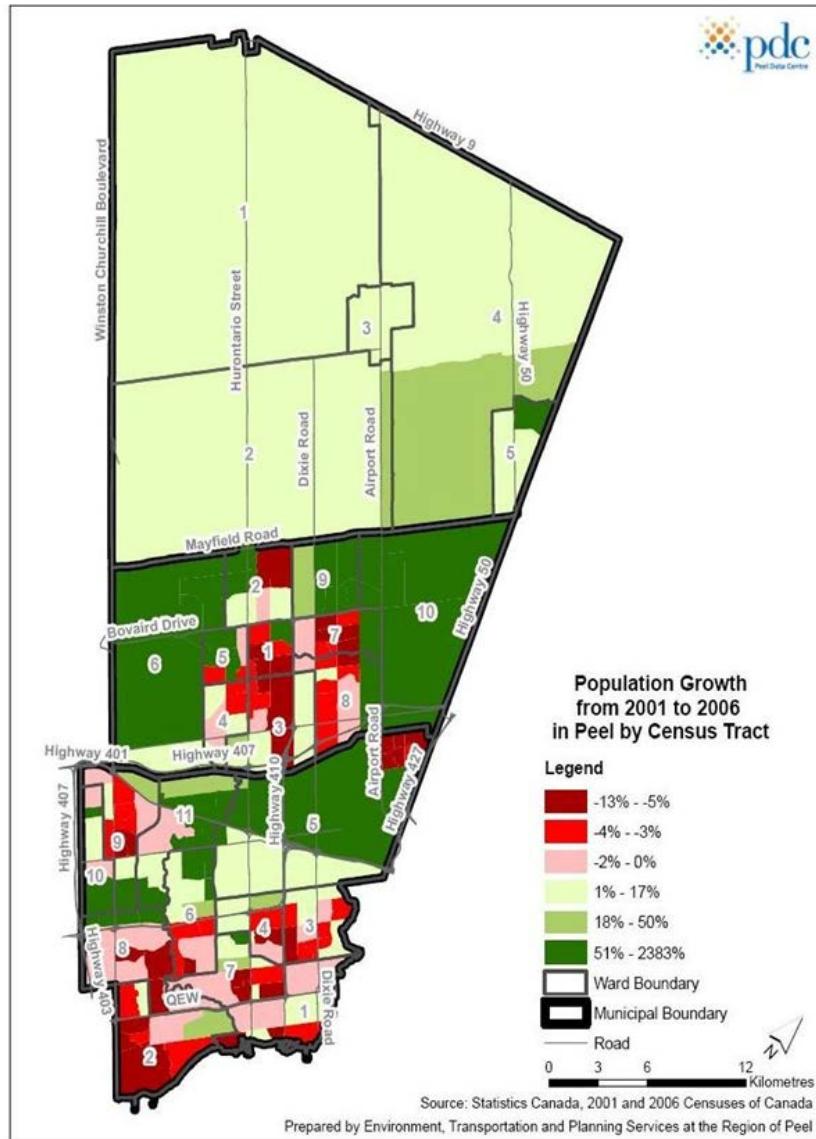


People Matter, 2014 CIP Conference
Shilpa Mandoda, Research and Policy Analyst
Public Health, Region of Peel

GREATER TORONTO AND HAMILTON AREA – REGION OF PEEL



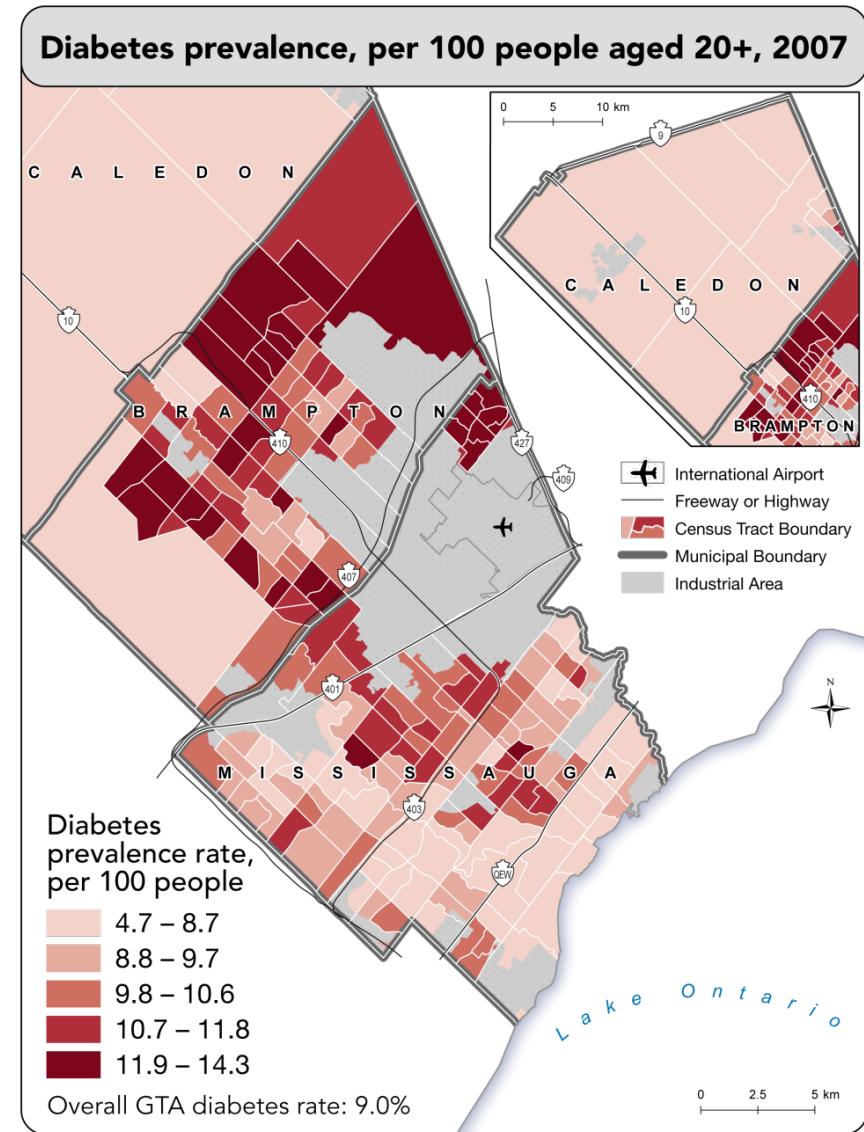
REGION OF PEEL



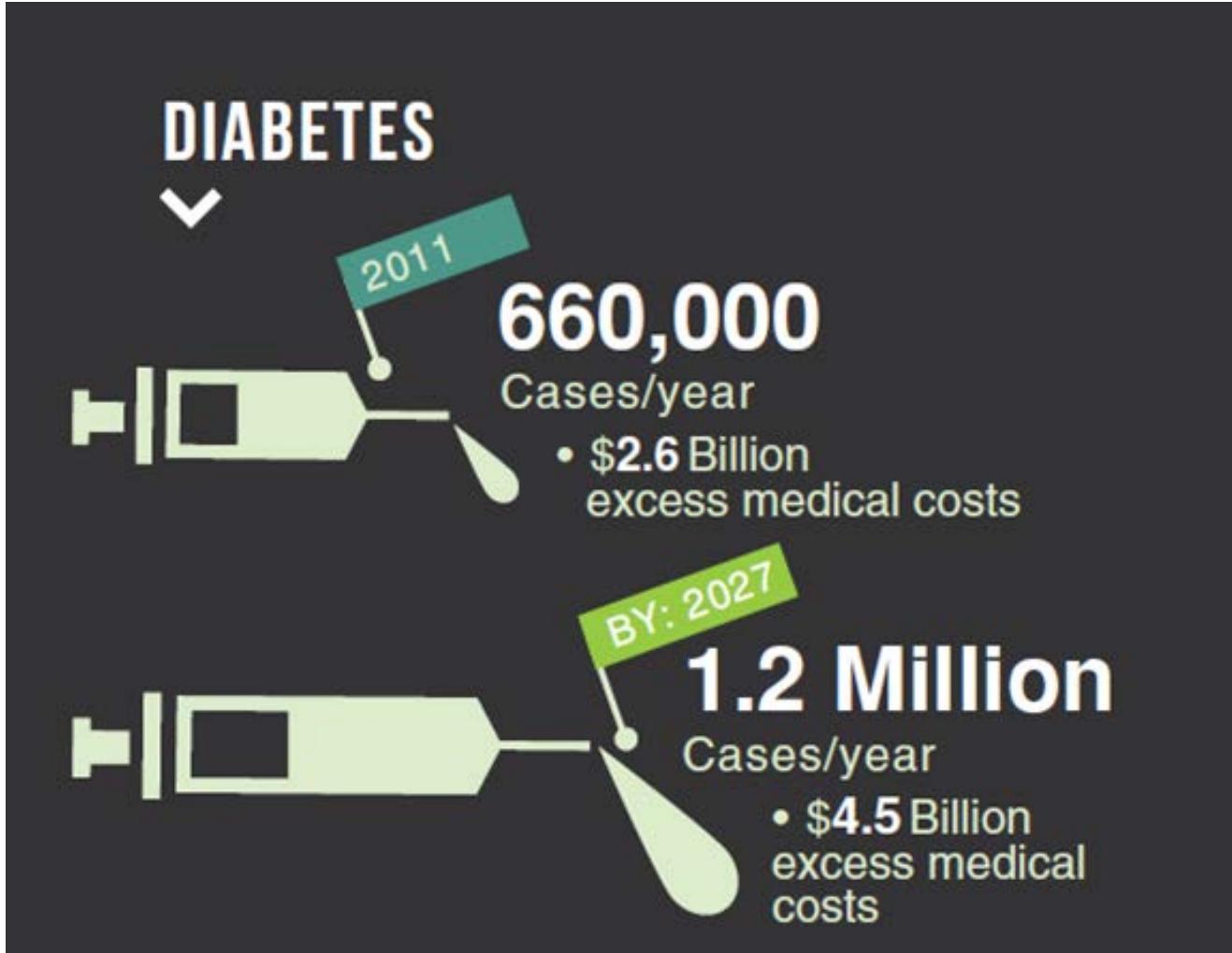
- Peel's **population is 1.3 million** and is anticipated to **grow to 1.6 million by 2031**
- Mix of **urban, suburban and rural**
- Region is dominated by **low density** development
- Five 400-series highways
- Toronto Pearson International Airport located in Peel

INCREASED RISK OF DIABETES IN PEEL

- Diabetes prevalence rates:
 - **Peel Region 9.8**
 - Mississauga 9.46
 - Brampton 11.34
 - Caledon 7.67
 - **Greater Toronto 9.04**
 - **Ontario 8.28**



COST OF DIABETES IN THE GTHA

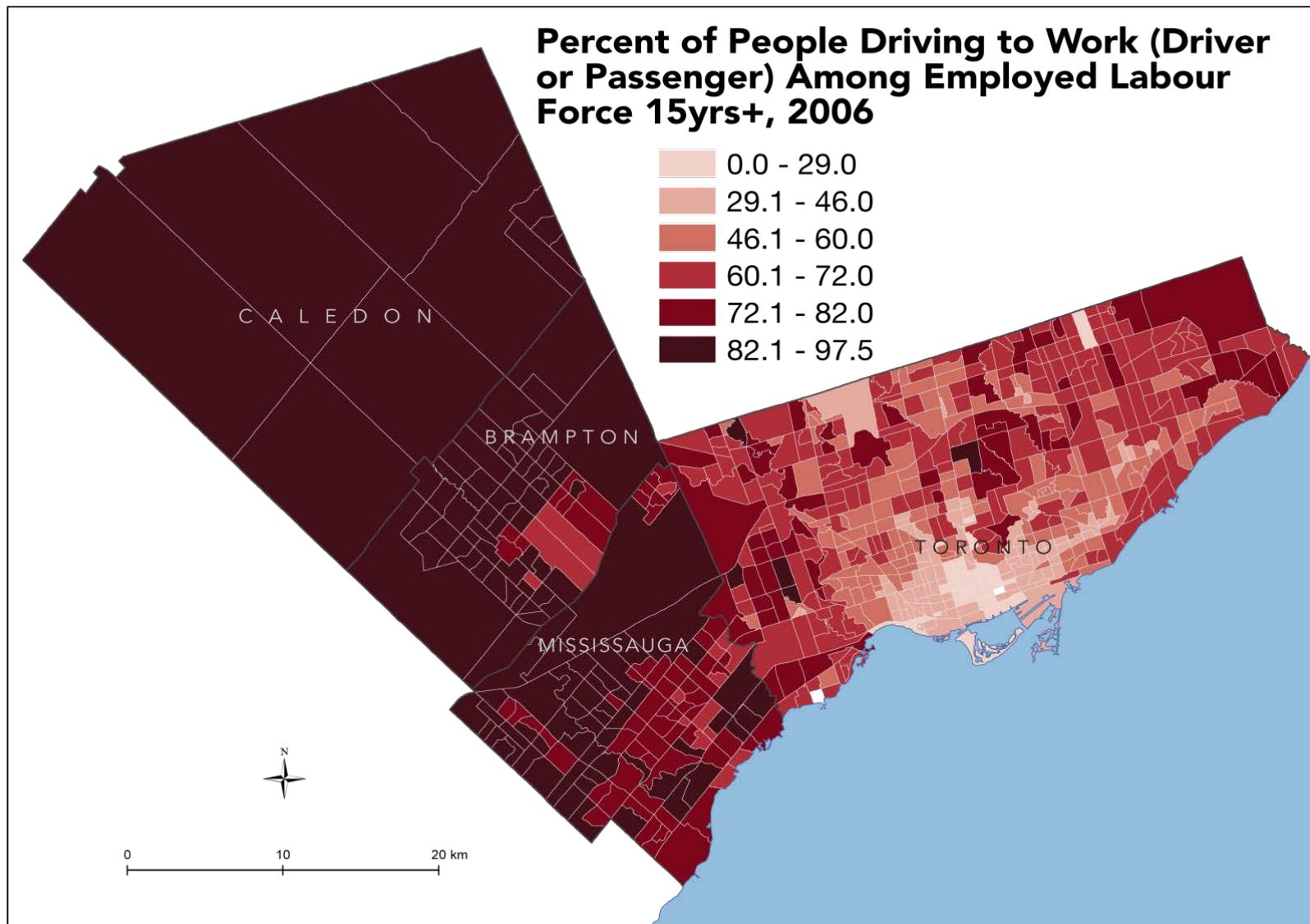


COST OF CHRONIC DISEASE AND PHYSICAL INACTIVITY (GTHA)

**INACTIVITY
& OBESITY** → **\$4** Billion/year
Direct & indirect costs

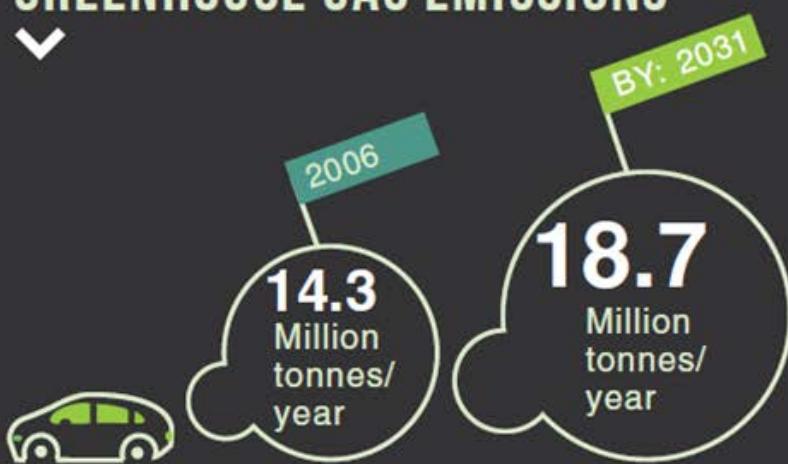
INACTIVITY → **12,500**
New cases of
Diabetes/year

RELATIONSHIP BETWEEN BUILT ENVIRONMENT AND PHYSICAL INACTIVITY



IMPACT OF CONGESTION IN THE GTHA

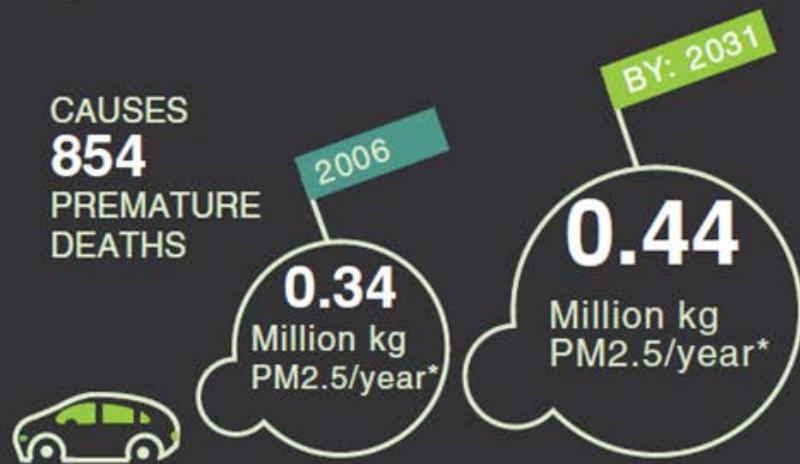
TOTAL TRANSPORTATION GREENHOUSE GAS EMISSIONS



TRAFFIC RELATED AIR POLLUTION



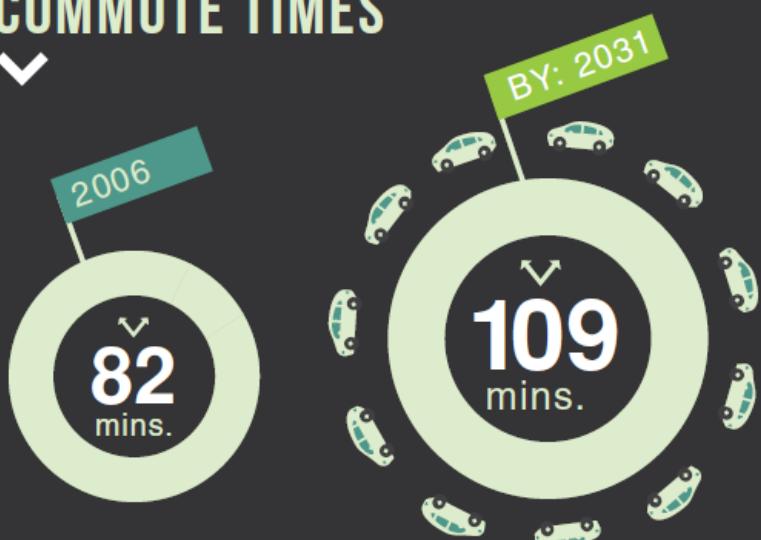
CAUSES
854
PREMATURE
DEATHS



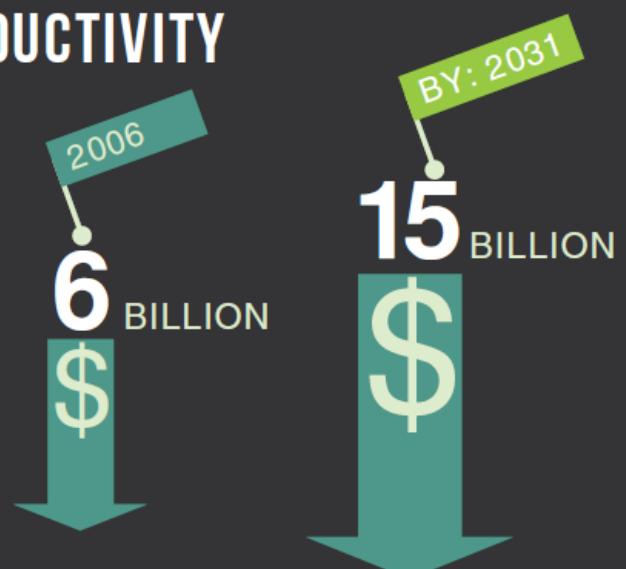
*PM2.5: small particulate matter

COST OF CONGESTION IN THE GTHA

TRAFFIC CONGESTION COMMUTE TIMES



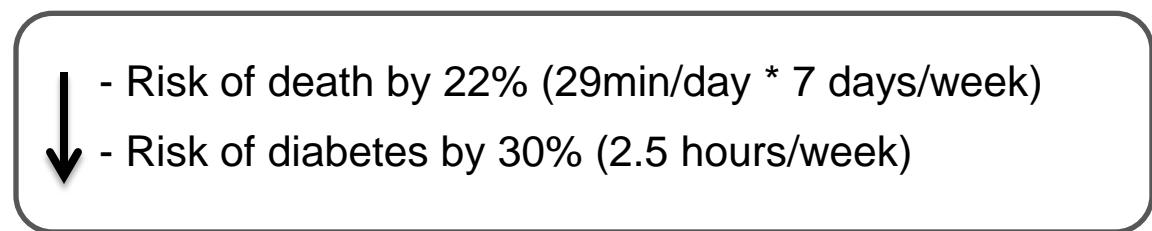
ECONOMIC COST OF LOST PRODUCTIVITY



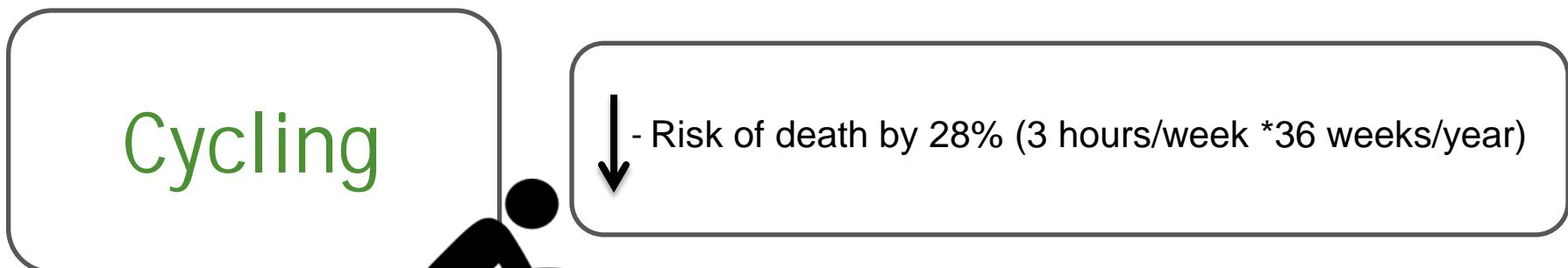
PREVENTION POWER OF WALKING & CYCLING



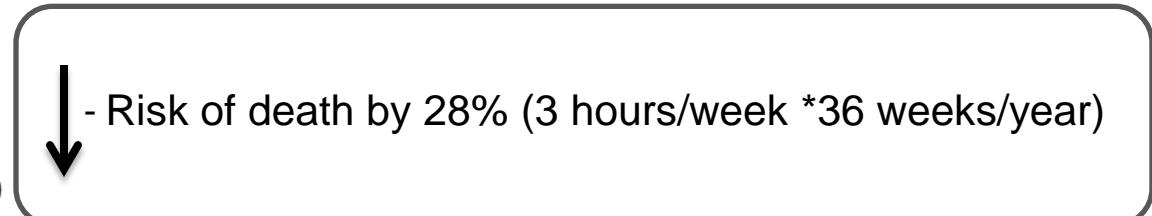
Walking



- Risk of death by 22% (29min/day * 7 days/week)
- Risk of diabetes by 30% (2.5 hours/week)



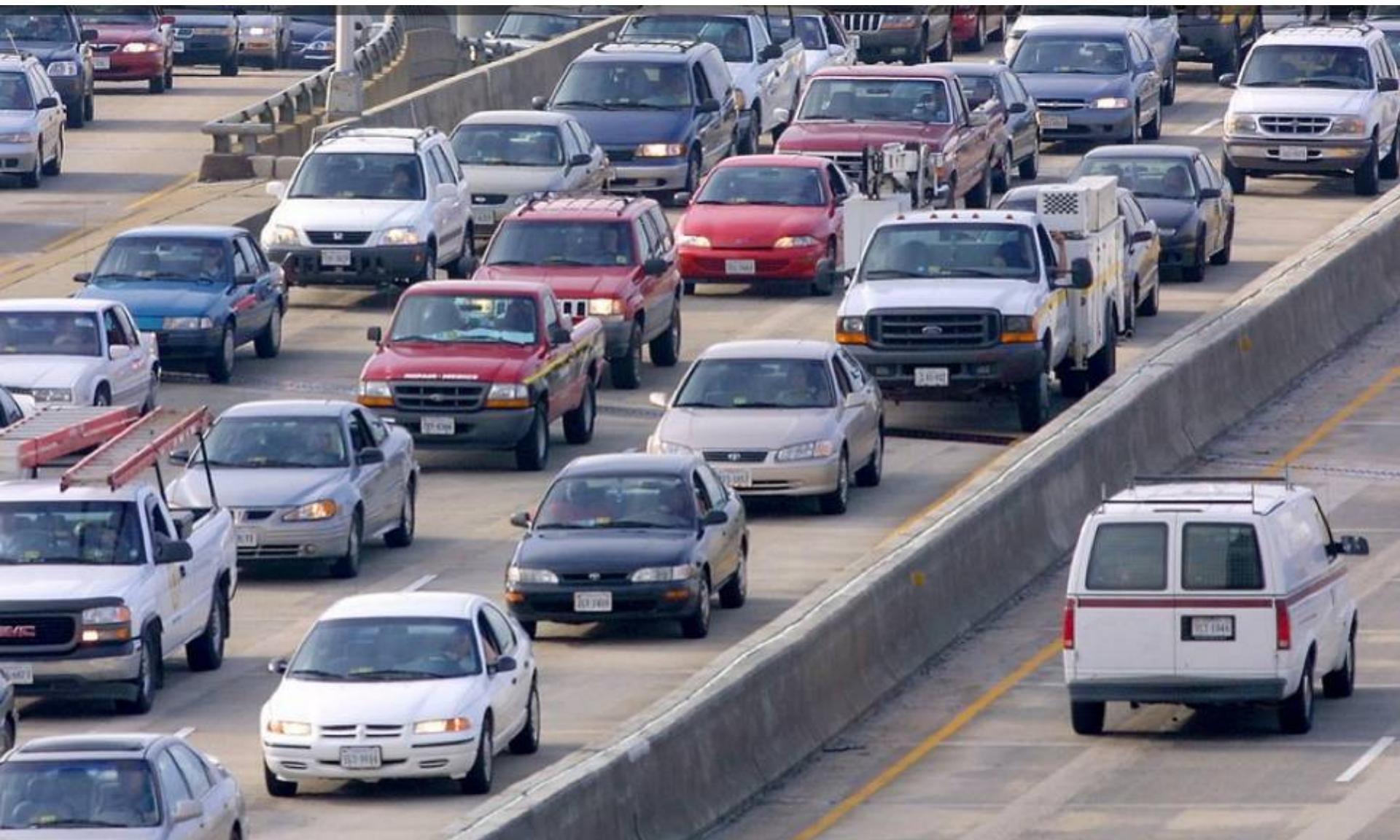
Cycling



- Risk of death by 28% (3 hours/week *36 weeks/year)



Bike to work?



Walk ?



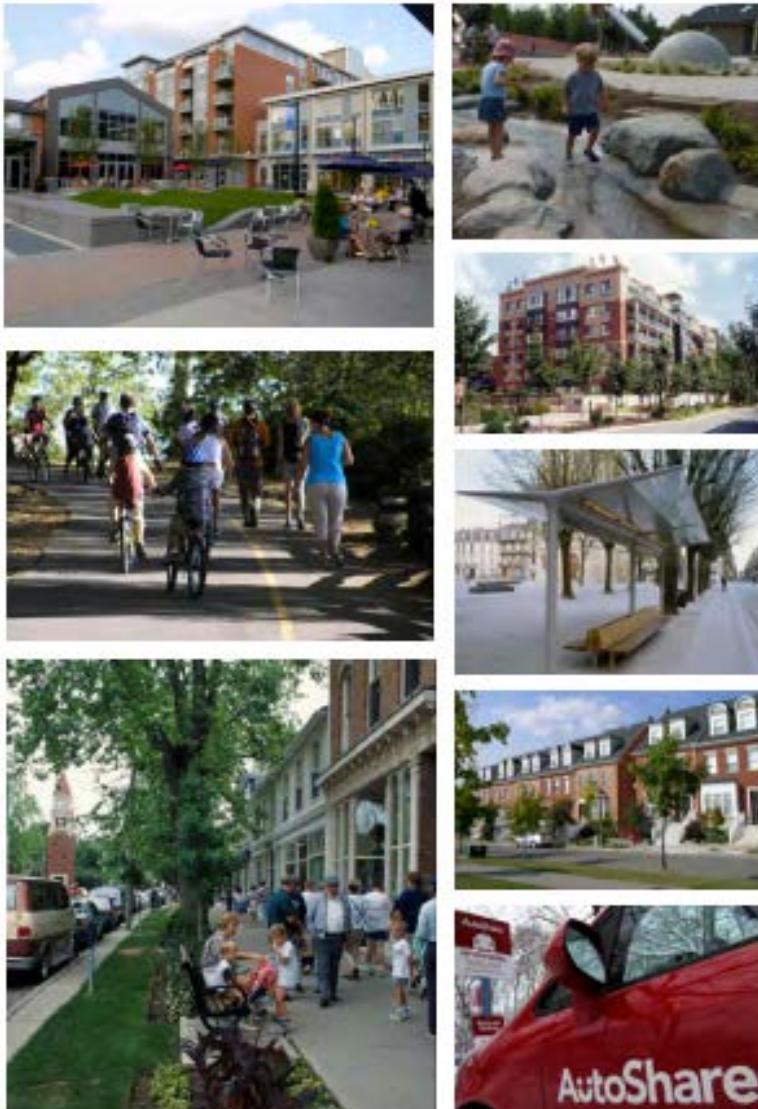


Bike to School ?



PLANNING AND PUBLIC HEALTH

- **Rationale:**
 - Evidence to demonstrate the positive link between health and built environment
- **The Role of Public Health:**
 - Develop **evidence-based** tools to assess health impacts
 - Influence local policies
 - Advocacy and support shared provincial and local goals



HEALTHY DEVELOPMENT INDEX

A framework to provide consistent, quantifiable standards to inform planning decisions

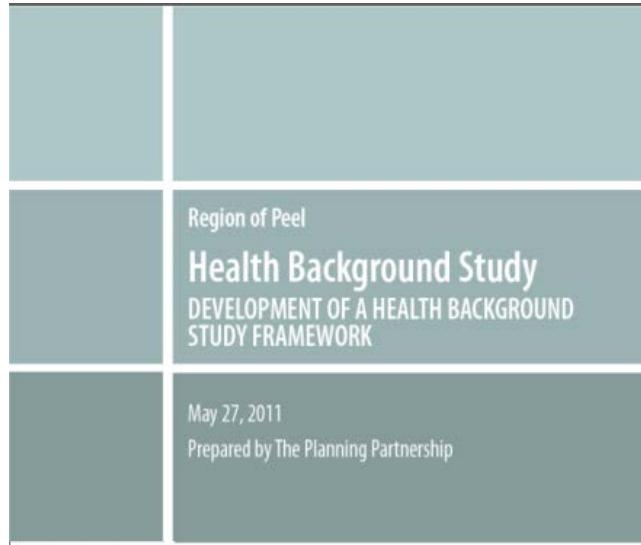


HDI consists of seven “elements” – categories of built environment characteristics that are known to be associated with health:

Density | Proximity to Services and Transit | Land Use Mix | Street Connectivity | Road Network and Sidewalk Characteristics | Parking | Aesthetics and Human Scale

HEALTH BACKGROUND STUDY FRAMEWORK (HBSF)

The HBSF formalizes the use of evidence-based public health considerations in the land use planning process and in turn maximizes the health promoting potential of regional communities

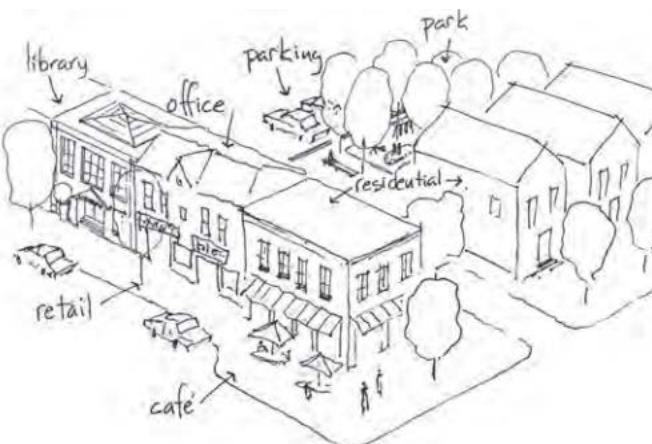


HBSF Includes:

- Refined elements and measures
- Terms of Reference
- Visually-appealing user guide that aids implementation
- Healthy Canada by Design project

ASSESSING HEALTH IMPACTS

Assessing health-related impacts of development proposals and providing considerations for health-promoting enhancement

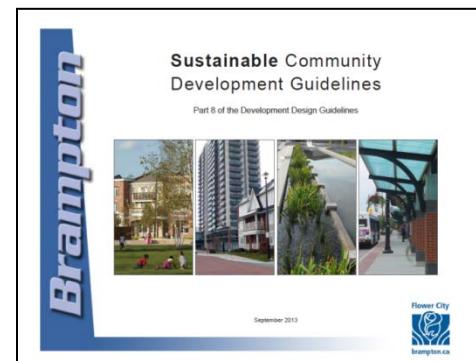


- Commenting on development applications:
 - Secondary Plans
 - Block Plans
- Commenting on Environmental Assessment's (EAs)
 - Pedestrian safety
 - Active Transportation

INFLUENCING PLANNING POLICIES

Influencing local planning policies to reflect key elements of healthy built environments

- Council Resolutions
- Regional and Municipal Official Plan Amendments
- City of Brampton, Sustainable Community Development Guidelines



ADVOCACY

Shared vision of creating healthy communities throughout the GTHA

- Example: GTHA MOH's Report (May 2014)
 - Used the unique, independent and authoritative voice of the Medical Officers of Health
 - Addressed health and planning as a *regional issue* that requires *regional solutions*
 - Identified and supported shared goals across multiple sectors

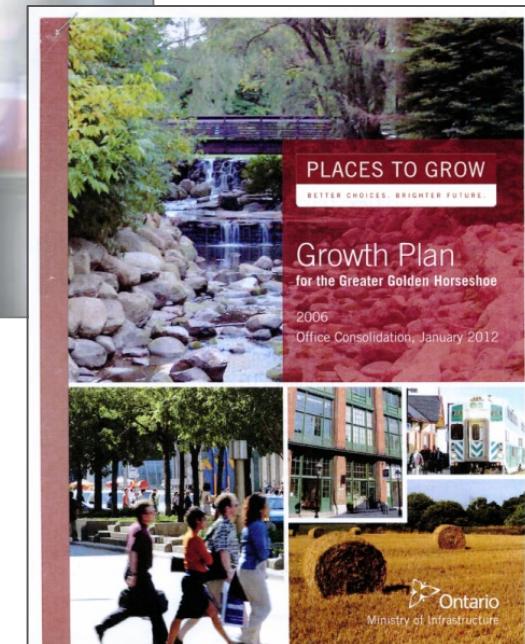


SUPPORT SHARED GOALS

Supporting shared provincial and local goals of compact design, congestion, growth management, public transit and sustainability

Recommendations:

- Fund public transit
- Strengthen provincial policies to support greater active transportation and public transit use
- Normalize the planning for active transportation and public transit by municipalities



IMPROVING HEALTH BY DESIGN



www.healthypeelbydesign.ca

<http://www.peelregion.ca/health/resources/healthbydesign/pdf/highlights-report.pdf>