

# Catalyst for Change:

## Toronto Examples Linking Health and Transportation

Presented at Walk 21 Conference

Vancouver 2011

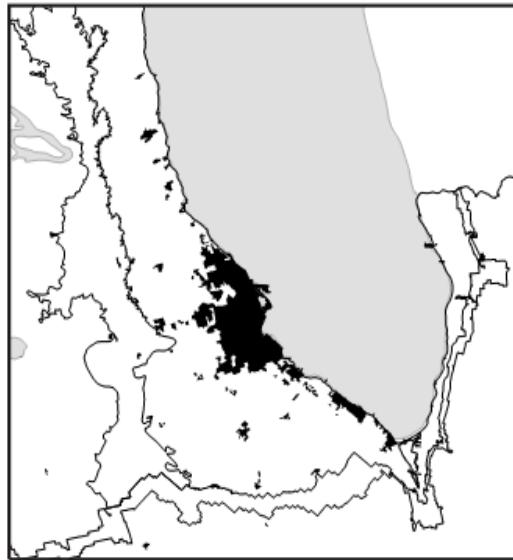
Monica Campbell, Director Healthy Public Policy

Toronto Public Health

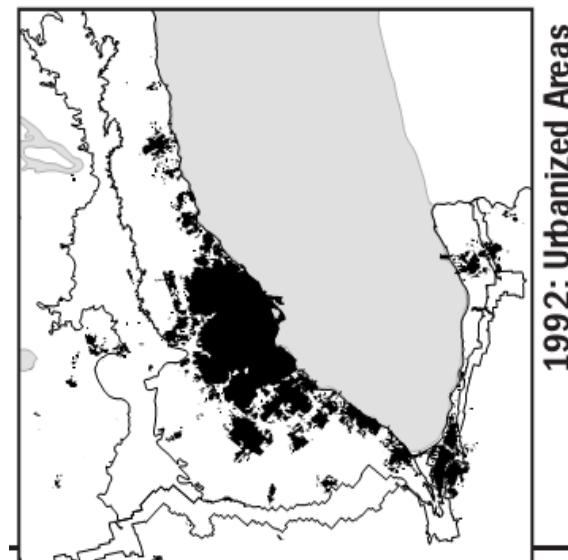


# About Toronto

- Former City of Toronto small, compact (0.65 M)
- Suburban municipalities amalgamated in 1999 (2.5 M)
- Greater Toronto Area (6 M)
- Diverse city building philosophies



**1967: Urbanized Areas**



**1992: Urbanized Areas**

## Established Initiatives

- Environmental Plan
- Air Pollution Burden of Illness
- Sustainable Transportation Strategy
- Climate Change Plan
- Toronto Green Standard
- Apartment residential zoning
- Active transportation
- Residential preferences survey\*
- HIA software tool\*
- Walkability index\*

\* *Healthy Canada By Design, UD4H*

# Established Initiatives

*Clean, Green and Healthy:  
A Plan for an Environmentally  
Sustainable Toronto (2000)*

- Championed by Jack Layton
- 2 years in the making
- Hundreds of individuals/agencies consulted & involved
- Roadmap for the newly amalgamated City (66 clusters of recs)
- Collaborative undertaking: community, councillors, staff
- Integration of all City departments



# Air Pollution Burden of Illness Studies

## Air Pollution Burden of Illness from Traffic in Toronto Problems and Solutions



November 2007

Dr. David McKeown   
Medical Officer of Health  
Toronto  
Public Health

- Air pollution BOI studies in 2000 and 2004 stimulated many policy & program actions
- Traffic BOI possible through collaboration with transportation planners & engineers
- Used Health Canada's AQBAT software
- 440 premature deaths & 1,700 hospitalizations each year
- Reducing vehicle pollution by 30% would save 190 lives and \$900 million annually
- Strong rationale for shift to active transportation to improve health

# Community Partnership

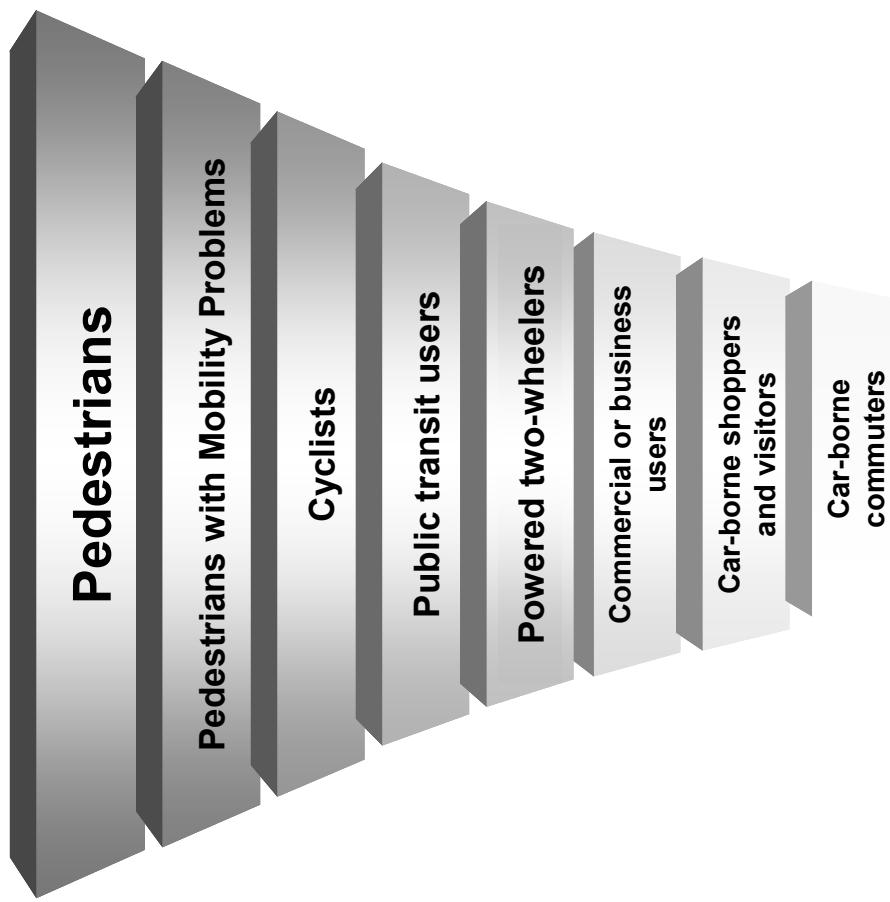
- Clean Air Partnership - NGO with broad partnership support
- Co-Chair GTA Clean Air Council with City of Toronto
- Very successful model of fostering collaboration among all departments & levels of government, and across local municipalities in GTA and beyond



- Active adoption of best practices on voluntary basis across region



# Healthy Transportation Hierarchy

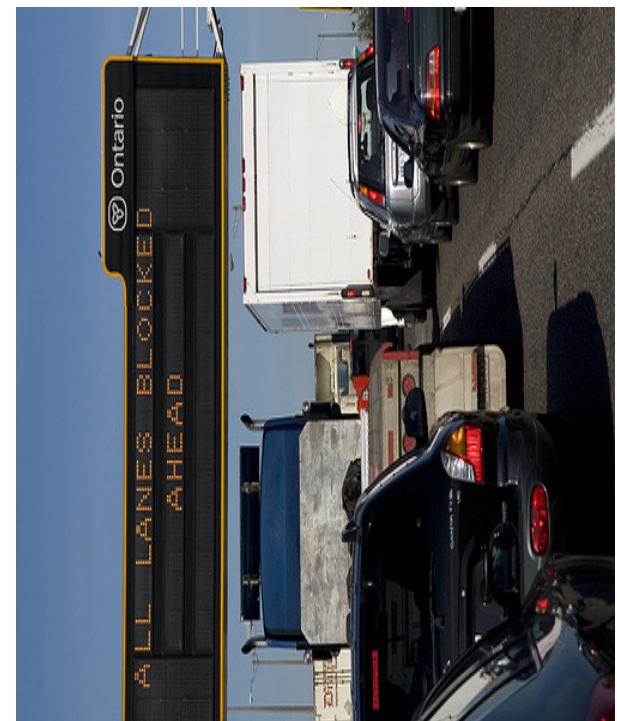
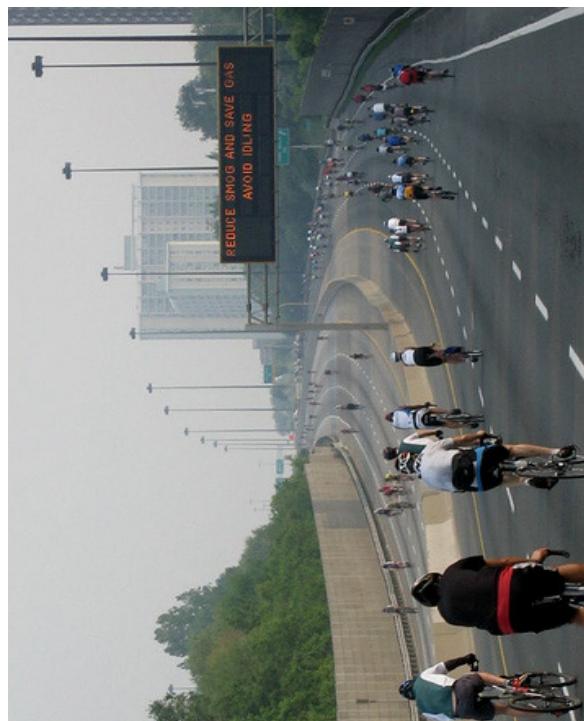


Adapted from World Health Organization 2006.  
*Promoting Physical Activity and Active Living in Urban Environments*

# Sustainable Transportation Strategy

Strategy developed collaboratively, including integration of existing policies & plans such as:

- Official Plan
- Bike Plan
- Walking Strategy
- Transit City Plan
- TTC Ridership Growth Plan



# Toronto's Climate Change Plan

## City's Climate Change Action Plan – *Change is in the Air*

CLIMATE CHANGE, CLEAN AIR AND SUSTAINABLE ENERGY ACTION PLAN:  
MOVING FROM FRAMEWORK TO ACTION  
PHASE 1

### HIGHLIGHTS

June 2007



- Championed by the Mayor
- Developed collaboratively across city ABCDDs
  - >100 actions to reduce the greenhouse gas and smog-causing emissions
- Adopted unanimously by Council July 2007

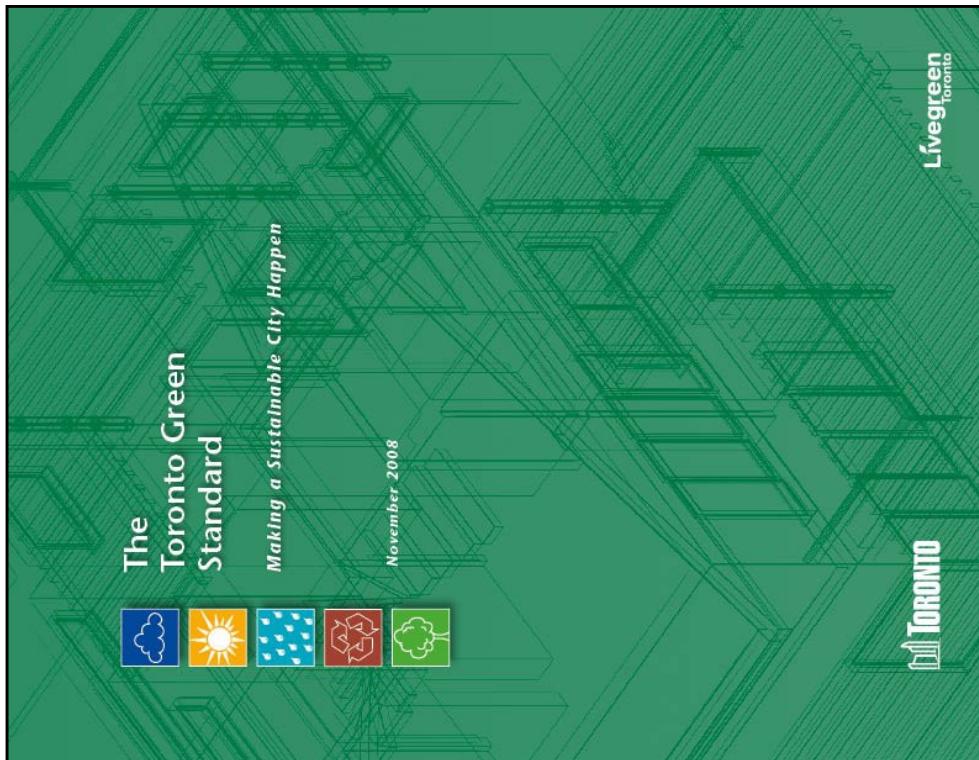
# Toronto's Climate Change Adaptation Strategy

- Adopted unanimously by Council July 2008
- Developed collaboratively across city government
- Included sustainable landuse and transportation actions
- Short-term actions to prevent/minimize impacts
- Actions to guide long term adaptation strategy
- Included
- Rationale included TPH health evidence on air pollution & climate change

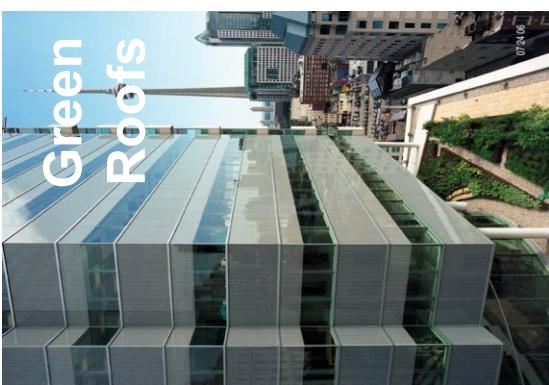
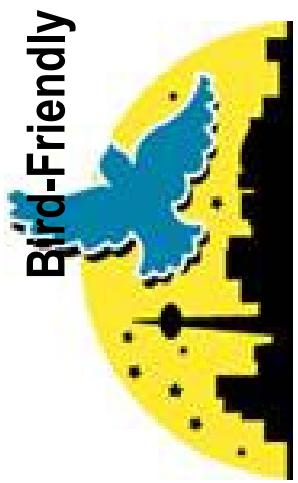
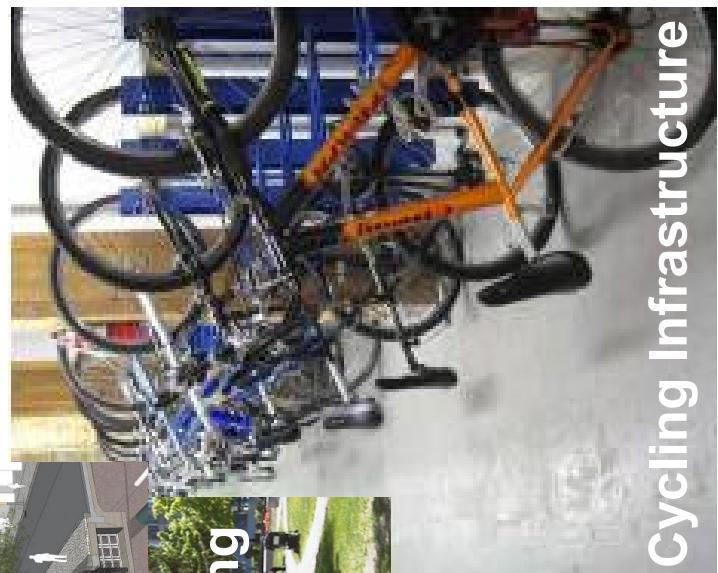


# The Toronto Green Standard

- Set of performance measures for sustainable development
- Addresses City's local environmental concerns
- Tier 1 required for planning applications as of January 31, 2010
- Tier 2 (voluntary) enhanced environmental performance qualify for DC rebate



# TIER 1: MINIMUM REQUIRED STANDARD



+ 25%  
Energy  
Efficiency  
above  
MNECB

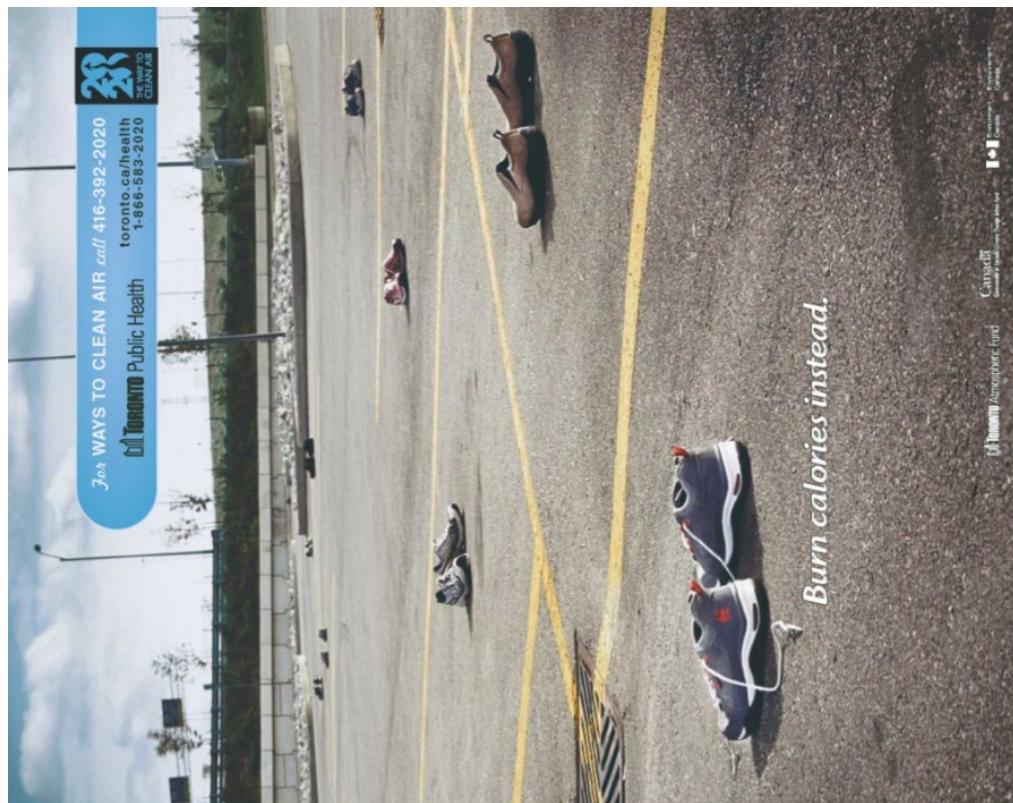


Live Green  
Toronto

TORONTO

# Some Public Health Partnerships

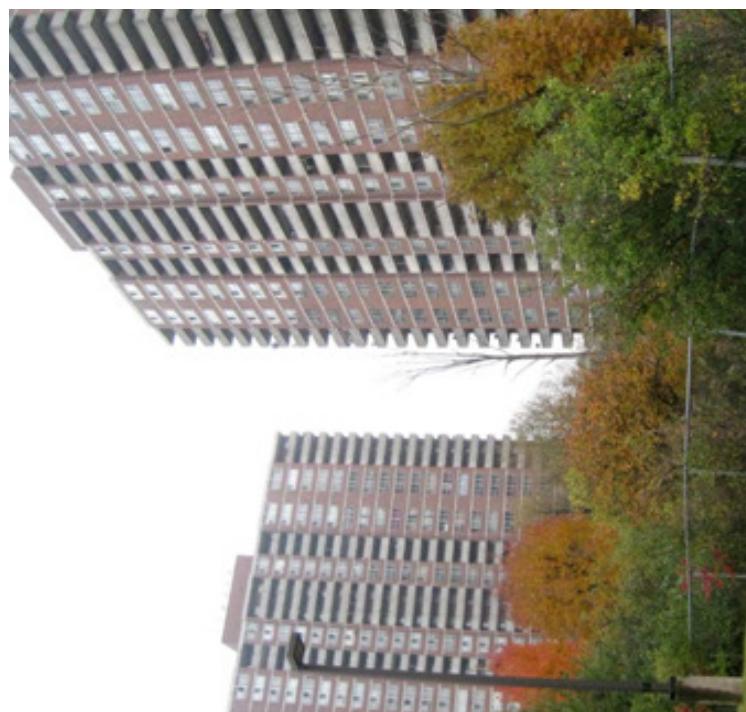
- The Toronto Walking Strategy
- Walk into Health
- Active and Safe Routes to Schools
- Walking audits of neighbourhoods slated for revitalization by planners
- 20/20 The Way to Clean Air



# New Initiatives

# Apartment Residential Zoning

- Examination of site specific zoning issues at residential apartment towers
- Growing concentration of poverty in towers flagged by United Way's *Poverty by Postal Code: Vertical Poverty*
- Restrictive residential zoning can impede mixed use neighbourhoods, access to food establishments, retail and community engagement



# Active Transportation

- Toronto-specific study that makes the case for active transportation
- Synthesize evidence on health benefits of walking, cycling, access to transit
- Provide health-based evidence of solutions
- Enable *Complete Streets* implementation
- Collaboration between public health and transportation division





TPH working with Dr. Larry Frank (principal investigator at UD4H) on behalf of HCBD partnership on the following:

- Residential preferences survey
- Software tool to assess potential health impacts of development scenarios
- Mapping walkability

# Residential Preferences Survey

- Will document demand for various types of residential communities in GVRD & GTA
  - Will determine if walkable neighbourhoods are undersupplied relative to public preferences
- Will reveal perspectives across inner city and outer suburbs
  - Findings can influence future supply of housing and neighbourhood types



# Development of HIA Software Tool



- Uses raw Toronto data to develop *measures* of built form (e.g. land-use mix, residential density, transit availability) & health impacts (e.g. BMI, obesity, CO<sub>2</sub>)
- Analyzes measures to determine *elasticities* (relationships between built form aspects and health outcomes)
- Builds elasticities (coefficients) into software tool
- Can use decision support tool to understand projected impacts of diverse landuse and transportation development scenarios
- Applicable to large Canadian cities

**Not child's play .....**

# Creating & Mapping Walkability Index

Continuous measure of walkability derived from sum of various measures such as:

- Residential density
- Retail floor-to-area ratio
- Land use mix
- Intersection density



# Final Thoughts

- Evolution of cities has been away from healthy, sustainable communities
- Evidence is building on the health benefits of more liveable, equitable and sustainable communities
- Political champions can create a culture of cooperation and urgency in achieving a healthy city

