

# Healthy and Complete Streets



# Building Support for Healthy and Complete Streets



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# Supporting Development of Complete Streets Guidelines

- Transportation Services, together with City Planning, is leading the Complete Streets Guidelines development with 30+ city divisions, committees and agencies as directed by Toronto City Council.

# Supporting Development of Complete Streets Guidelines

- In the Greater Toronto & Hamilton Area (GTHA):
  - 17% of trips are under 2km which are walkable
  - 40% of trips are under 5km which are bikeable
- Need to create infrastructure that supports those trips
- GTHA population is projected to grow to 2.2 million by 2031

- Street infrastructure is health infrastructure
- 7 of the top 10 causes of death in Toronto could be curbed by physical activity met by one's daily commute if walking, or walking to transit, or cycling
  - heart disease, lung cancer, cerebrovascular diseases, diabetes, colon cancer, respiratory disease, and breast cancer

- Identified and assessed published evidence about associations of specific street design choices with health outcomes
  - *Primary Sources*: published meta-analyses, published individual studies (85 appx)
  - *Secondary Sources*: grey literature (75 appx)
- How information can be used to promote healthier street designs in Toronto

# Healthy Street Design

Clean Air

Category	Design element	Safety	Physical activity
Street & network	Street connectivity	Positive	Positive
Roadway	Minimize street width / # lanes	Positive	Positive
	Narrow lane width	Positive	Positive
	Median inclusion	Positive	Positive
	Traffic calming features	Positive	Positive
Intersections & crossings	Intersection control	Positive	Positive
	Midblock control	Positive & Negative	
	Small corner radius & other curb treatments	Positive	Positive
Adjacent buildings and land uses	Retail uses	Positive	Positive
	Open space uses	Not Known	Positive
	Building enclosure & façade	Positive	Positive
	Café/vending space	Positive	Positive



Category	Design element	Safety	Physical activity
Pedestrian	Sidewalk presence & width	Positive	Positive
	Buffer zone	Positive	Positive
	Lighting	Positive	Positive
	Furnishings	Not Known	Positive
	Trees & vegetation	Positive	Positive
	Public transit facilities	Not known	Positive
	On-street parking	Positive & Negative	Positive
Cycling	Bike lanes	Positive	Positive
	Cycle tracks	Positive	Positive
	Off-street bike paths/trails	Negative	Positive
	Bike boulevards	Not known	Positive
	Bicycle parking	Not known	Positive
	On-street parking	Negative	Negative

# Grounded in Real Experience

- Explored how other jurisdictions integrated health information into decision making
- Conducted 16 key informant phone interviews with people who made decisions related to complete streets implementation

# Health Lens Applied to Complete Streets Policies

City	Yes	Indirectly	No
Boston			X
Calgary	X		
Chicago	X		
Edmonton		X	
Hennepin	X		
New York City		X	
Ottawa	X		
Philadelphia			X
San Francisco	X		
Waterloo		X	
<b>Total</b>	<b>5</b>	<b>3</b>	<b>2</b>

# Consideration of Health Impacts in Design

City	Safety	Physical activity	Harmful air	Shade	Mental Health	Violent Crime
Boston	Yes	No	No	Yes	Yes	No
Calgary	No	No	Indirectly	No	No	No
Chicago	Yes	Yes	No	Yes	Yes	Yes
Edmonton	Indirectly	Yes	Indirectly	Indirectly	Indirectly	Indirectly
Hennepin	Yes	Yes	Yes	Yes	No	No
New York City	Indirectly	Yes	No	N/A	N/A	N/A
Ottawa	No	No	No	No	No	No
Philadelphia	Yes	No	No	No	No	No
San Francisco	Yes	Yes	No	Yes	Yes	Yes
Waterloo	Yes	Yes	Indirectly	No	Yes	No
<b>Total (yes)</b>	<b>6</b>	<b>6</b>	<b>1</b>	<b>4</b>	<b>4</b>	<b>2</b>

# Specific Design Features that Impact Health

City	Cycle Tracks	Buffered bike lanes	Curb extensions; yield lines	Reduce design speed; turning radii	Pedestrian Islands
Boston	X			X	
Calgary	X				
Chicago	X	X		X	
Edmonton	X			X	
Hennepin	X				
New York City	X			X	
Ottawa	X			X	
Philadelphia	X	X			
San Francisco			X	X	
Waterloo					X
<b>Total</b>	<b>8</b>	<b>2</b>	<b>1</b>	<b>6</b>	<b>1</b>

# Factors Affecting Considerations of Health in Decision Making

City	Easy	Difficult
Boston	Public awareness about obesity	
Calgary	Demonstrated success	Public impatience
Chicago	Mayoral leadership; strong policy	
Edmonton	Good sidewalk standards; funding	No health background
Hennepin	Public health funding	
New York City		Different data requirements
Ottawa	“Complete streets” resonates	Engineering procedures & standards
Philadelphia	Safety aligns with many departments	Health not prioritized or funded in transportation
San Francisco	Culture – health conscious, progressive	
Waterloo	Inter-jurisdictional committee	

- Created a user friendly resource
- Design Features & Benefits highlights 3 paths to support health
  - *Improve Accessibility*
  - *Ensure Safety and Security*
  - *Enhance the Experience*
- One key factor to successfully implement complete streets is raising awareness and support for the guidelines internal and external to the city

# Accessibility

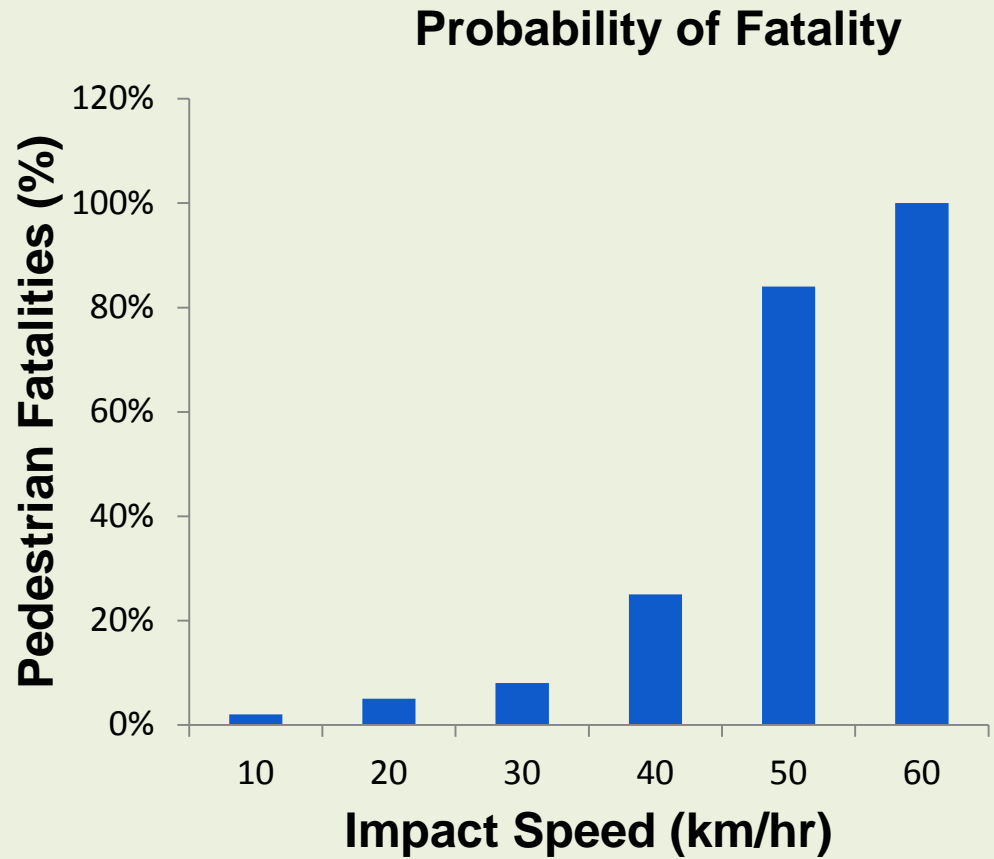


- Short blocks and 4-way intersections to increase connectivity
- Continuity of pedestrian and cycling facilities
- Places to walk to and from





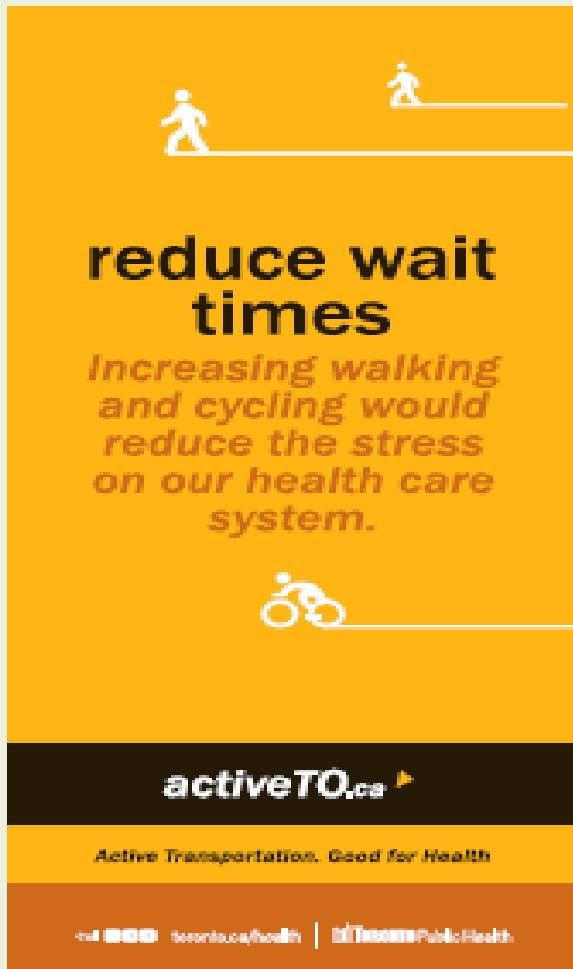
- Continuous sidewalk and bicycle facilities
- Adequate lighting
- Safe intersection crossings






- Wide sidewalks
- Seating
- Trees and landscaping
- Human-scaled buildings
- Attractive building facades


# Building Support for Active Transportation and Complete Streets







## reduce wait times

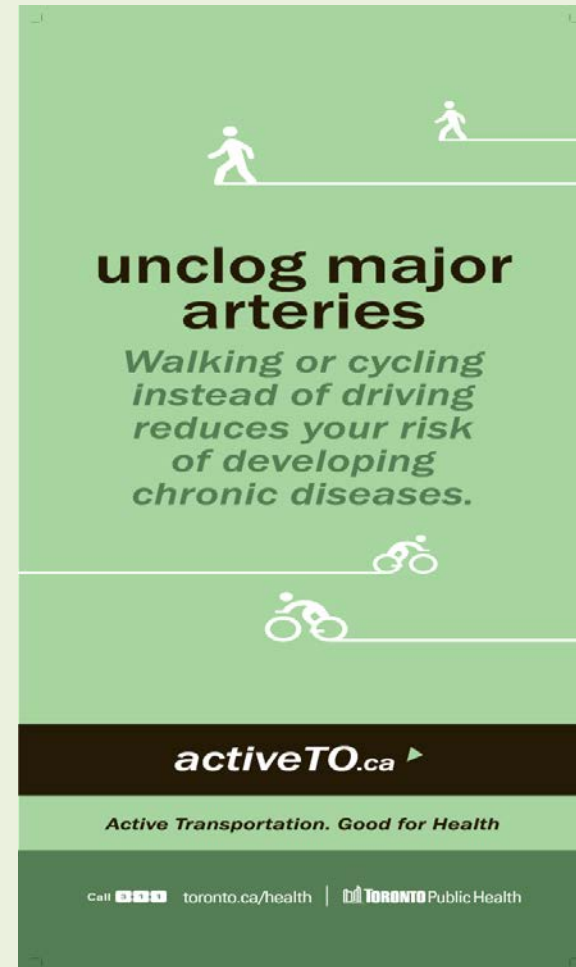
*Increasing walking and cycling would reduce the stress on our health care system.*




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Active Transportation. Good for Health



Call  [toronto.ca/health](http://toronto.ca/health) |  Toronto Public Health







## unclog major arteries

*Walking or cycling instead of driving reduces your risk of developing chronic diseases.*



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- Complete Streets Toronto
  - [tinyurl.com/o67u4hu](http://tinyurl.com/o67u4hu)
- TPH Built Environment
  - [www.toronto.ca/health/builtenvironment](http://www.toronto.ca/health/builtenvironment)
- UD4H
  - [urbandesign4health.com](http://urbandesign4health.com)

- TCAT
  - [www.tcat.ca](http://www.tcat.ca)
- Complete Streets for Canada
  - [completestreetsforcanada.ca](http://completestreetsforcanada.ca)
- Health and Community Design Lab
  - [health-design.spph.ubc.ca](http://health-design.spph.ubc.ca)

