



# Complete Streets Forum

***"Policy matters, and will matter for a long time. Everything we see as right or wrong can be traced back to a policy decision."***

- Geoff Noxon, Noxon Associates Principal

Photo courtesy Jamie Austin

In 2008 the Toronto Coalition for Active Transportation and the Clean Air Partnership hosted Canada's first Bike Summit. The one-day conference provided an opportunity for public, private and non-profit sector professionals, elected officials and community advocates to gather for a day of education, inspiration and connection with the intent of furthering the promotion of bicycling as a main stream transportation option. As the conference's attendance and profile grew (180 attendees in 2008; 220 attendees in 2009), the organizers began to discuss ways to make each year's meeting better than the last. Around the same time, at Bike Summit 2009, an interesting question sparked an important debate: what is a more holistic approach to active transportation policy and planning that has a focal point of *both* cycling and walking while maintaining the interests of other road users as well? The answer was found in the growing movement for Complete Streets, and so the decision was made to officially enmesh the two modes of transportation for the 2010 Complete Streets Forum. This decision helped bring a wider range of professional expertise and interest among the 210 attendees who met at

Toronto's historic Royal York Hotel on April 22nd and 23rd to learn about and discuss a variety of issues, including:

- Complete Streets in the U.S.
- Complete Communities and Active Transportation in Growth Planning
- The Public Health Role
- Making the Tourism Case for Complete Streets
- The Holistic Design Approach to Complete Streets



Photo courtesy Yvonne Bambrick

***"Conferences like this are critical for moving ideas to policy."***

- Scott Thompson, Ministry of Transportation Ontario Assistant Deputy Minister

**tcat** toronto coalition for active transportation



***"If we can capture methane gas from waste to power our garbage trucks, surely we can build streets that are safe for cyclists and pedestrians."***

– David Miller, Mayor of Toronto

## What are Complete Streets?

Complete Streets provide safe access for all road users including pedestrians, cyclists, public transit user and motorists and are comfortable for people with disabilities, children, families and the elderly.

A Complete Streets policy ensures that transportation engineers and planners routinely design and operate the entire right of way to enable safe access for all users. There are about 130 municipal Complete Streets policies in the U.S. so far.

Due to contextual limitations, not every street can or should offer full facilities for every mode, so it is important to define the exceptions granted when developing a Complete Streets policy. Performance measurement - specifically the type that goes beyond motor vehicle level of service

- is also an important component of a successful Complete Streets policy.

A Complete Streets policy can take many forms. Sometimes it is just an internal policy or set of guidelines but the strongest are written into law. In order to move beyond shifting priorities on a project-by-project basis, pursuing complete streets at the policy level is key to effect lasting change.

### **An effective Complete Streets policy development and implementation will:**

- Restructure procedures, including zoning by-laws, building codes and design guidelines
- Rewrite design manuals
- Train planners and engineers and staff in other departments, not just transportation
- Link Complete Streets to funding criteria, targeting specific levies or taxes for projects that plan for Complete Streets.
- Include new performance measures that show results of before-and-after studies (e.g., safety improvements following a road diet project)



Photo courtesy Barbara McCann

***"We should be using the money we already have in current transportation budgets. Retrofit projects always cost more than doing it right the first time."***

– Barbara McCann,  
Complete Streets Coalition  
Executive Director

***"Streets are 20-30% of an urban area – they're publicly owned and should therefore behave in the public interest."***

– Dan Leeming, The  
Planning Partnership  
Founding Partner



***"We need to dispel the myth that reallocating space from cars will result in traffic chaos."***

- Eva Ligeti, Clean Air Partnership Executive Director

## The Economic Case for Public Investment

Portland, Oregon is leading the way, and has been building Complete Streets longer than any other American city. The city is now one of the best and safest cities to be a cyclist, thanks to the city's growing bike network, which has cost only \$60 million (a small fraction of the city's capital budget).

The Clean Air Partnership has now completed two research studies looking at the importance of on-street parking to business, as a reduction in customer parking is often cited by opponents to road reallocation projects. The studies both demonstrated that pedestrians and cyclists spend more than drivers, and that the majority of merchants are not opposed to losing some on-street parking in favour of bike lanes and improved streetscapes.

Metrolinx estimates that each car parking stall costs at least \$30,000 to construct, yet bike parking projects - at a minute fraction of the cost - continue to be seen as pilot projects. This investment imbalance should be corrected.

***"There was a huge latent demand for public space in New York City."***

- Andy Wiley-Schwartz, New York City Department of Transportation Assistant Commissioner

***"It's all right to be incremental, doing as much as is realistic now and the rest later."***

- Barbara McCann, Complete Streets Coalition Executive Director

***"Do what you can in paint, and then when you reconstruct the street do it in concrete."***

- Andy Wiley-Schwartz, New York City Department of Transportation Assistant Commissioner

## New York City's Broadway Transformation

370,000 pedestrians pass through Times Square area each day, yet for years pedestrian space only accounted for 11% of the area. With the conversion, the space is now safer and more inviting for pedestrians - somewhere to stay and enjoy rather than escaping as quickly as possible. In order to implement this plan, and other major Complete Streets project around New York City, the Department of Transportation has positioned their proposals as improvements to safety and efficient travel, avoiding the marginalized or unquantifiable arguments for public space, economic development and livability. This approach has so far won the necessary support for these types of projects. The more potentially controversial projects are proposed first as pilot projects, and only made permanent after extensive evaluation determines that the pilot period was successful. Since the implementation Times Square project travel times have improved and injuries have fallen 63%, with fewer pedestrians forced to walk on the street. On 9th Avenue, which has a separate bike path, crashes of all kinds have fallen by 56%, while bike volumes along the corridor have risen by 50%. In total, 200 miles (322 km) of bike routes were built between 2006 and 2009.



New York City's Complete Streets conversions, photos courtesy Andy Wiley-Schwartz



## Walking and Cycling to Improve Our Health

- 50% of Toronto adults are not active enough to maintain or improve their health
- 57% of youth 12-19 are not active enough for optimal growth and development
- The number of obese children has tripled over the past 20 years
- 10-25% of teenagers and 23% of adults are overweight or obese

Creating communities and providing streets that are safe and convenient to walk and cycle could easily get our population more physically active. For example, in Toronto's waterfront

***"When it comes to transportation and land use planning decisions, we've been incredibly good at hitting the bull's eye on the wrong target."***

- Geoff Noxon, Noxon Associates Principal

## Incorporating Land Use Planning

There is a strong relationship between sustainable transportation and growth planning. For decades, communities across North America, and beyond, have been planning for an unfettered reliance on the automobile – this has ignored the mobility needs of children, the elderly and the disabled. In 2005, the province of Ontario passed the Places to Grow Act, which has provided the basis for creating region-specific growth plans to which

neighbourhood, which is quite walkable, the rate of diabetes among residents is lower than in other parts of the city that are less walkable – there is an important relationship between public health and urban form. More people using active transportation, and getting out of their cars, could ultimately improve air quality as well. In Toronto, there are 1,700 hospitalizations and 440 premature deaths due to traffic air pollution each year. As provincial healthcare costs approach 50% of the total budget, the need to reduce these costs is increasing – Complete Streets are part of the solution.

***"Traffic injuries and death are predictable and preventable with effective street design."***

- David McKeown, City of Toronto  
Medical Officer of Health

municipal official plans must conform. The intent is to create more compact, mixed-use and well-connected communities. However, intensification alone is not enough – good urban form that supports all modes of transportation is necessary. To help municipalities understand and actualize the vision for smart growth, the Ontario Growth Secretariat has prepared a series of urban form case studies, taking best practice examples from Canada and around the world. This effort serves to demonstrate exactly how policies can be executed and to inspire municipalities. However, one trend that has been overlooked by municipal governments and school boards is school sprawl, with fewer schools further apart, thus reducing the opportunity for children to walk or bike to school.



Garrison Woods, Calgary and Port Credit Village, Mississauga, photos courtesy Jamie Austin



## Road Diets

Before the transformation of Toronto's St. George Street, traffic counts showed a 70% mode share for biking and walking, yet 80% of the right-of-way was devoted to cars. Through a combination of efforts by the University of Toronto, City Planning, Urban Design and Public Works, plus the support of a generous private donor, the street was reconfigured from a four-lane to a two-lane street with parking bays on one side of the street, a widened pedestrian promenade and bike lanes. Following the vehicular lane reduction, there has been no noticeable impact on traffic flow, and

today it is one of the city's busiest commuter bike routes and a very pleasant place to walk. This total street conversion was made possible largely by the fact that there was just one landowner (the university) throughout most of the corridor. On streets with multiple landowners, focused coordination and cooperation, as well as clear and consistent design guidelines will help to achieve a consistent vision for a complete street. In Charlotte, East Boulevard is another successful example of a Complete Streets road diet that improved travel, safety and comfort for all road users.



Before-and-After: East Boulevard , Charlotte, NC, photos courtesy Barbara McCann

## Urban Compared to Suburban Options

As planners and politicians are realizing the errors in our past ways, there are different approaches to improving options for walking and cycling, based on the urban versus suburban context. One of the biggest challenges in the coming decades will be to retrofit the suburbs for a way of life that does not always necessitate car use. The advantage in suburban areas is that wider streets provide more space to make complete street improvements.



Car-oriented versus pedestrian-oriented retail development in Burlington, Ontario, photos courtesy Andrea Smith

Planners and urban designers should not assume that more typical suburban land uses, like car mechanics, gas stations, and big box stores, need to disappear – instead they just need to be rethought to fit in with an urban form that supports all modes of transportation. For example, the abundance of franchise outlets can be accommodated in building designs that are close to the street, with entrances fronting the street, and floor space spread out on two levels (with less floor space per level) rather than just on one level (with a greater floor space). Design and construction efforts such as these require coordination and cooperation between public and private sector interests.



Dufferin Street, York Region, photo courtesy Loy Cheah



## Integrating Public Transit

In the Greater Toronto and Hamilton Area, the region's transportation authority, Metrolinx, will be investing \$50 billion to build 1,200 km of rapid transit lines over 25 years. Currently, 70% of the region's commuters drive – the 25-year target is to reduce this mode share to 50% by 2033. In concert with the region's growth planning objectives, transit investment and intensification will be focused around mobility hubs at residential and employment centres. Metrolinx will also share mobility hub guidelines so that municipalities will foster neighbourhoods around transit nodes that encourage walking and cycling to transit.

In the Netherlands, government officials and planners understand very well the connection between public transit use and urban design surrounding transit stations and stops. Bike parking is a critical priority for the Dutch government and the national railway. There are currently 100 guarded bike shelters at stations, 300 stations that have bike lockers, and 150,000 non-guarded bike racks.

The Dutch Railway's OV-Fiets (Public Transport Bike) is proving a successful tool to address the

notorious first mile/last mile challenge to public transit riders. In the Netherlands, on average 40% of train riders get to the train station by bike, while, after riding the train, only 10% reach their final destination by bike. The last mile trips are an opportunity for the Dutch planning and transportation authorities to shift even more trips from cars to bikes. By providing easy-to-rent bicycles at train stations and other transit stops around the country, travelers can reach their final destination by bike, even if they don't happen to have their own bike handy.

There are currently 70,000 subscribers and 5,000 OV-Fiets bikes at 210 rental locations, half of which are in guarded bike shelters, the other half in self-service lockers and dispensers. Users can rent and return bikes with the same smartcard they use on public transit, with on-line billing and payment. Customer surveys reveal that 50% of customers travel more often by train because of OV-Fiets, and 10% say OV-Fiets helped them replace a car journey, resulting in a modal shift.

***"OV-Fiets is the only profitable [public] bike scheme in the world."***

- Kaj Mook, NS OV-fiets Director



OV-Fiets bikes and Bike Dispenser, photos courtesy Kaj Mook

## Toronto's Complete Streets Future

One of TCAT's goals for the Complete Streets Forum was for the City of Toronto to adopt a Complete Streets policy. As such we were quite pleased that Gary Welsh, General Manager of Transportation Services and many other senior transportation staff attended the Forum. Mr. Welsh was quoted in the Toronto Star the day after the

Forum stating that he will take a serious look at adopting a Complete Streets policy in Toronto. True to his word, and wasting no time in getting started, in the week following the Forum Fiona Chapman, Manager of Pedestrian Projects in the Public Realm Section announced that her office had begun to work closely with other divisional partners to develop a Complete Streets policy for the City of Toronto.



# How Do We Get There?

## Charlotte, NC's Urban Street Design Guidelines 6-Step Implementation Process

Like many other prosperous communities, the City of Charlotte is experiencing strong population growth and is preparing for sustained growth in coming years. As part of this preparation, land use transportation planning and policies are working together to create a more sustainable environment for future generations. Included in this effort are the city's new Transportation Action Plan and Urban Street Design Guidelines, which provide a consistent vision for what Charlotte's streets should look like. Implementing the guidelines follows a 6-step process for assessing projects and balancing priorities.

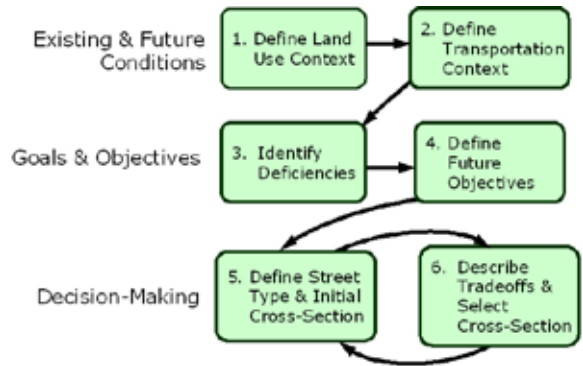


Image courtesy Mark Cole

*"The key is to set out criteria for [Complete Streets] projects first, then people will come to you with projects that meet the criteria – and they're their ideas."*

- Andy Wiley-Schwartz, New York City Department of Transportation Assistant Commissioner

## Politics and Leadership

### Why Canada is behind when it comes to walking and cycling:

1. Insufficient leadership – active transportation is not a priority
2. Insufficient resources – more funding is needed, and more staff to implement an active transportation strategy
3. Lack of public support – stronger demand for better active transportation facilities and programs is needed.

*"It's best to start with leadership – it's cheap, powerful and renewable."*

- Geoff Noxon, Noxon Associates Principal

### Bringing support inside and making the case for Complete Streets

- Use photos, showing good and bad examples of Complete Streets
- Highlight the safety benefits of Complete Streets, since many people die on incomplete streets (e.g., 40% of pedestrian deaths in the U.S. occur where there is no cross-walk)
- Pull together a broad and diverse coalition, not only bike and pedestrian groups
- Host a Complete Streets workshop in your community with planning and policy experts to generate discussion and ideas



Incomplete Streets, photos courtesy Barbara McCann



A Complete Street design concept, photo courtesy Chris Hardwicke

*"There is no 'war on the car'. It's just about revitalizing [streets]."*

- David Miller, Mayor of Toronto

*"Successful cities didn't nibble at the edge of change. They bit off more than they could chew and then came back for more."*

- Geoff Noxon, Noxon Associates Principal



## Tourism

In Canada, bicycle and walking tourism are typically a highly undervalued aspect of active transportation. Active transportation proponents need to put some of their focus on tourism as economic development projects that will have a long-term sustainable effect, especially in communities experiencing economic decline and job loss. Many of today's tourists want healthy, interactive, and authentic experiences, so this is strong potential market for walking and cycling holidays.



Bicycle tourists in Niagara, photos courtesy Louisa Mursell and Ken Forgeron

In Niagara's Wine Country, the region has developed a wine route network for both cars and bikes. The network also has a significant signage and map component, rating every roadway in terms of bicycle-friendliness, conservation areas, significant inclines, and bicycle service shops along the route. The region also has a customizable web-mapping tool to assist with route planning. The Niagara Stay and Cycle service provides baggage shuttle services between participating hotels for those exploring by bike.

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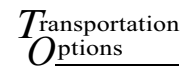
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### COMMUNITY PARTNERS



## Presenters

- Jamie Austin, Ministry of Energy and Infrastructure, Ontario Growth Secretariat Manager
- Matthew Blackett, Spacing Magazine Publisher, Creative Director and Founder
- Fiona Chapman, City of Toronto Manager of Pedestrian Projects
- Loy Cheah, York Region Director of Infrastructure Planning
- Mark Cole, City of Charlotte Department of Transportation Design Section Manager
- Ken Forgeron, Niagara Region Senior Planner
- Antonio Gomez-Palacio, Office for Urbanism Founding Partner
- Arlene Gould, York University and Ryerson University Professor
- Chris Hardwicke, Sweeny Sterling and Finlayson & Co. Architects Associate
- Marlane Koehler, Waterfront Regeneration Trust Executive Director
- Justin Lafontaine, Bike Train Initiative Project Founder
- Dan Leeming, The Planning Partnership Founding Partner
- Eva Ligeti, Clean Air Partnership Executive Director
- Barbara McCann, Complete Streets Coalition Executive Director
- Wayne McCutcheon, Entro Communications Principal and Founding Partner
- David McKeown, City of Toronto Medical Officer of Health
- David McLaughlin, MMM Group Senior Project Manager and Associate Partner
- Andrew McNeill, City of Mississauga Project Manager, Urban Designer and Landscape Architect

- Kaj Mook, Dutch Railways NS OV-fiets Director
- Louisa Mursell, Welcome Cyclists Network Project Manager
- Christopher Norris, Canadian Urban Transit Association Director of Technical Services
- Geoff Noxon, Noxon Associates Principal
- Eric Pedersen, City of Toronto Urban Design Program Manager
- Andrea Smith, City of Burlington Development Planner
- Nancy Smith Lea, Toronto Coalition for Active Transportation (TCAT) Director
- Vito Tolone, City of Burlington Senior Transportation Planner
- Scott Thompson, Ministry of Transportation Ontario Assistant Deputy Minister
- Scott Torrance, Landscape Architect Inc. Principal
- John van Nostrand, regionalArchitects Founding Principal
- Sean Wheldrake, City of Toronto Cycling Infrastructure and Programs Unit Project Lead
- Andy Wiley-Schwartz, New York City Department of Transportation Assistant Commissioner
- Leslie Woo, Metrolinx Vice President of Policy and Planning

## Complete Streets Forum 2010 Organizers

**Executive Committee:** Justin Lafontaine, Nancy Smith Lea, Sean Wheldrake

**Program Advisory Committee:** Wayne Chan, Fiona Chapman, Loy Cheah, Stephanie Gower, Keri Hyde-Baxter, David Lukezic

**Event Staff and Volunteers:** Carrie Armstrong, Yvonne Bambrick, Erica Duque, Hayley Easto, Dave Meslin, Jason Neudorf, Ben Smith Lea, Fred Sztabinski, Alex Zinojinovic

For more information on the Complete Streets Forum and to access presentations, photos and videos visit [www.torontocat.ca/main/completestreetsforum2010](http://www.torontocat.ca/main/completestreetsforum2010)