Complete Streets Initiatives
City of Ottawa

- Complete Streets: Policy Framework
- Complete Streets: Implementation Plans
- A more Complete Street: Laurier Bike Lane Pilot Project

Zlatko.Krstulic@Ottawa.ca
May 27, 2013
Cycling Mode-Share Trends

City Wide
Ensemble de la ville

+40%
2,4%

For AM Peak Period
Pour la période de pointe du matin

Cycling Modal Share (AM Peak Period)
Part modale du cycliste (période de pointe du matin)

1995
2005
2011

1. Rural
2. Suburban Suburbain
3. Urban Urbain
4. Central

+70%
Ottawa’s Transportation Master Plan Update: Complete Streets

The safety, comfort and convenience of all users is essential. Complete streets are designed to accommodate and balance the safety and mobility of all users - pedestrians, cyclists, transit riders and motorists - regardless of age or ability.

The TMP will build on Ottawa’s achievements as an early adopter of many innovative practices included in complete streets. It will:

• re-emphasize the priority of designing for all users;
• continue to stress need for consistent, equitable and transparent trade-offs among competing objectives in transportation planning and design; and,
• identify tools and practices for day-to-day application.

Tools and practices will be developed to assess trade-offs when competing interests arise between different travel modes to ensure the most vulnerable users are best accommodated.
Comfortable Cycling Routes

- All City infrastructure projects will strive to deliver the highest practical level of comfort for cyclists, with the lowest Level of Traffic Stress. Tradeoffs between all modes are inevitable.

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<th>Description</th>
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<td>1</td>
<td>Presenting little traffic stress and demanding little attention from cyclists, and attractive enough for a relaxing bike ride.</td>
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<td>2</td>
<td>Presenting little traffic stress and therefore suitable for most adult cyclists but demanding more attention than might be expected from children.</td>
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<td>3</td>
<td>A moderate traffic stress environment that would typically be considered acceptable by many current cyclists. Cyclists' full attention is required and they may have to integrate with motor vehicle traffic.</td>
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<td>4</td>
<td>High traffic stress environment. Requires integrating with multilane traffic for turning movements. Avoided by most current cyclists; would not be considered by new cyclists.</td>
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Transportation: Safe and Efficient Infrastructure

- New approach for infrastructure based on peak period instead of peak hour
- Greater focus on person trips instead of vehicle trips
- New policies for maximum road and intersection widths

Hourly Traffic Volume Entering and Exiting Downtown Ottawa
Active Transportation - Cycling

- New Cycling Plan Vision Statement that places greater emphasis on bike-transit integration
- New “cross-town bikeways” for route continuity and priority implementation
- Prioritize cycling connections to rapid transit and key employment and educational nodes
- Greater emphasis on cycling safety and education
- Permit new cycling facility types (e.g. segregated bike lane)
- New winter cycling network plan
Perspectives on Intersection Design

“To reach local shops and the library I must cross Hazeldean road which is 6 lanes at the nearest crossing to my house. It is quite dangerous to cross these intersections with 3 young children.

For that reason, I am often forced to use my car for trips that are as little as 2-3 km, when I would much rather walk or bike.”

comment by Ottawa resident, Feb. 2013
Complete Streets Plan for the Core
(“Downtown Moves” project)

- $1B+ Investment in Light Rail (incl. a downtown tunnel) frees up road space in the core
- Downtown streets serve over 100,000 people who work in Ottawa’s compact high-density central area
- Number of downtown residents will double by 2031
- Increased level of service for pedestrians is essential for success of the Light Rail project
Downtown Street Conditions

Queen Street, west of Elgin Street
Queen St (west of O’Connor St) - Before
Queen St (west of O’Connor St) - After
Albert St (at Lyon St) - Before
Albert St (at Lyon St) - After
Mackenzie King Bridge - Before
Mackenzie King Bridge - After
“I’ve travelled around North America and the world, segregated bike lanes are old news,” Watson said. “I hope we can make it permanent, and if there are some minor tweaks that might accommodate some residents at the Bronson end, we can do that.”  Mayor Jim Watson- Ottawa Citizen May 7, 2013
Corridor Selection Process

**Step # 1: Project Initiation**

- Examine the Advantages and Challenges in Designing, Implementing, and Using Segregated Bike Lane Facilities
- Review of International Best Practices for Segregated Bike Lane Design and Implementation

**Step # 2: Choosing a Corridor**

- 33 Potential Corridors
  - Preliminary Screening
  - Stage 1 Evaluation
  - Stage 2 Evaluation
  - Public Consultation
  - Stage 3 Evaluation (Vélo Québec)
  - Selected Corridor: LAURIER AVE.

**Step # 3: Developing the Pilot Project**

- Functional Designs for Pilot Corridor
- Public Consultation
- Detailed Design of Pilot Corridor
- Construction of Pilot Project
- Maintenance and Monitoring of Pilot Project

**WE ARE HERE**
# Route Evaluation

## WESTBOUND

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Functional Design

Intersections: Yield signs, Left-turn bike boxes, Advance signal phase, No-right-turns-on-reds for motor vehicles
Functional Design (Elgin to Metcalfe)
Count and Communicate

Bike Counter Data – Laurier at Metcalfe – Eastbound + Westbound

Wednesday May 08 2655
Since July 10 2011 634780

History - Weekly

16000
14000
12000
10000
8000
6000
4000
2000
Monitoring and Evaluation

On-Going Performance Monitoring
• Regular communication with stakeholders
• On-going monitoring using existing intersection traffic cameras
• Automated bicycle counters with Quarterly Performance Reports to Council

Pilot Evaluation
• Traffic Impact Assessment Report - To determine transportation impacts (travel times, intersection LOS, parking, traffic safety, accident reports, etc.)
• Surveys - To determine stakeholder impacts (street-level retail businesses, office towers, hotels, property management companies, taxi companies, school bus companies, street vendors, courier services, etc.)
Laurier-Lessons Learned..

- “Pilot Project” status a key enabler
  - Motorist yield to cyclists on right
  - Green pavement markings

- Build as raised cycle track vs. pre-cast curb)
  - Vertical vs. horizontal separation minimizes cross section needed
  - Only one curb on each side better accommodates mobility devices
  - Fewer flex posts needed.

- Use flex-posts with spring loaded bases
  - more durable and therefore require less maintenance

- Full time data collection was essential
  - Shows on-going use of facility
  - Allows for comparison with other routes
Future of Bike Tracks in Ottawa

Underway....
- Laurier Pilot (2011 -retrofit)
- Churchill (2014 road re-build)
- Beechwood (2014 development block)

Under consideration...
- Main Street (pending EA)
- Albert (post Light Rail)
- Downtown Moves (post Light Rail)
For additional information…

- Cycling eNewsletter
  - News for Ottawa Cyclists | Nouvelles pour les cyclistes d'Ottawa
- Laurier Segregated Bike Lanes
  - Ottawa.ca/Bikelane
- Downtown Moves
  - ottawa.ca/en/city-hall/public-consultations/downtown-moves