Downtown Bike Network

Safer cycling though engineering, education and patience.
Why?

Increase Safety  
Reduce Pollution  
Active Lifestyle  

Accessible  
Vibrant City
2009 Bicycle Transportation Plan

• City Wide System
• Connector System
• Focused on capitalizing other projects
• Lessons learned
2009 Bicycle Transportation Plan

- 2005 Edmonton Household Survey
- 2006 Edmonton Bicycle User Survey
Edmonton city council votes to get rid of bike lanes along 95 Avenue

BY TREVOR ROBB
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Adios. So long. Sayonara.

After much debate at city council on Tuesday, councillors ultimately decided to say goodbye to a stretch of painted bike lanes from 95 Avenue between 149 and 188 Street and along 189 Street and 87 Avenue to 95 Avenue, which will cost the city up to $475,000.

Installed in September 2013, Ward 6 councillor Michael Ostro goes says the city has drawn the ire of much of the residents in the area.

“We’ve heard nothing but complaints about these bike lanes. I think the residents of the west end of the city will be very pleased,” said Ostro. “These lanes are ill-conceived and not really effective. It doesn’t mean we shouldn’t have designated cycling infrastructure, but the way that these lanes were put in...
Shift Focus to Major Bike Routes in the Core

Interviews with City Council

- Focus on central area where we already have high bicycle ridership
- Create a connected network
- Focus on AAA Routes
- Introduce a 6-part consultation process
- Bring forward funding packages
Extensive Engagement

- 290 – Online Dialogue (Route Location)
- 163 – Public Workshops (Route Location)
- 40 – Stakeholder Conversations (Route Location)
- 170 – Pop-up at Farmers’ Market
- 101 – Online Dialogue (Two Concepts)
- 183 – Public Workshops (Two Concepts)
- 19 – Stakeholder Conversations
- 134 – Online Dialogue (Single Concept)
- 183 – Public Workshops (Single Concept)
- 86 – One on One Stakeholder Interviews
- 10 – Stakeholder Hubs
- 146 – Open House (Aesthetics)
- 35 – Stakeholder Hubs (Aesthetics)

Total Participation: 1560
Bike Lane Pop Ups
But we were taking TOO LONG!
1.0 INTRODUCTION

This report is a technical assessment to support discussion and decisions on a minimum grid of protected bike lanes in central Edmonton to provide bicycle facilities that will attract and support people of all ages and abilities.

1.1 COUNCIL MOTION

City Council made the following motion for Stantec and the City of Edmonton to assess the feasibility of a protected bike lane network in central Edmonton.

<table>
<thead>
<tr>
<th>Minimum Grid for Physically Separated Bike Lane Infrastructure</th>
<th>Sustainable Design</th>
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<tbody>
<tr>
<td>That Administration, in partnership with Stantec, provide an updated report on a minimum grid for physically separated bike lane infrastructure in the City of Edmonton's core and the report should include the potential use of relatively inexpensive (within existing resources) temporary infrastructure (example: bollards, mobile concrete curbs), as can be found in the City of Calgary's pilot project.</td>
<td>Due: Sec 2016</td>
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1.2 DOWNTOWN GROWTH & VISION ZERO

Edmonton is experiencing significant population and employment growth and tremendous investment, particularly in Downtown Edmonton. With the growth, the city is changing, congestion is increasing, and transportation safety concerns are on the rise. There are a number of actions that are underway to tackle these issues related to growth, not the least of which are the Way Ahead and associated Mary's plans, LRT investment, and increasing sections on Valley Line. Like many communities, Edmonton is expanding its site systems approach to transportation through adoption of a Vision Zero policy with the goal of zero fatalities and serious injuries. People walking and cycling are disproportionately involved in these types of collisions and specific actions have been taken to significantly reduce the frequency and severity of collisions between people driving vehicles and those walking and cycling. One action with strong evidence of reducing serious and fatal collisions for people cycling is the provision of bicycle infrastructure, most notably infrastructure that provides physical separation from motor vehicles.
How did we get there?
How did we get there?
What is it?
**Timeline**

**2016**
- **July 12**: Motion from council to pursue project
- **September 28**: Urban Planning Committee - Endorsement
- **October 11**: Council Unanimously Approves the construction of the Bike Network

**2017**
- **April 5**: Installation begins
- **June/July**: Routes open
- **August 26**: Community celebration of opening
Types of cycle tracks and routes

Two-way cycle tracks

5 Street, 7 Street and 12 Avenue

Two-way cycle tracks are on the same one side of the roadway on each of these streets. People cycling are allowed to ride in both directions and need to obey the new bicycle signals that have been installed at all intersections. You will see this type of cycle track typically on roads that allow cars to travel one-way.

One-way cycle tracks
Work Streams

- Integrated Design Team
  - Transportation Design
  - Maintenance
  - Network Operations
    - Signals
    - Traffic Operations
    - Parking
    - Traffic Safety
- Implementation Team
- Education Team
- Communications
2.0  **General Safety Issues for the Downtown Bike Network**

2.1  Vehicles Backing Into Bike Lanes from Parking Lots

2.2  Left-Turns Into an Access and Across Bike Lanes with High Volumes

2.3  Left-Turns Into an Access and Across Bike Lanes with Adjacent Street Parking

2.4  Limited Storage for After Pedestrian Cross-Walk Bike Boxes

2.5  Restrict Right-Turn-On-Red at Bike Boxes and Crossing Bike Lane

2.6  Identification and Treatment at High-Risk Access Locations

2.7  Additional Signing for Left-Turns Across Bike Lanes

2.8  Vehicle Turning Traffic Across Bike Lanes at Intersections

2.9  Need for Bike Detection or Push-Buttons for Bike Lane Actuation

2.10 Restricted Widths for Bike Lanes and Buffer
3.0 LOCATION SPECIFIC ISSUES FOR THE DOWNTOWN BIKE NETWORK

3.1 100 Avenue at 109 Street (Drawing 1 (DTBG-171-01))
3.2 100 Avenue at 107 Street (Drawing 1 (DTBG-171-01))
3.3 100 Avenue between 106 Street and 103 Street (Drawing 2 (DTBG-171-02))
3.4 106 Street Near Jasper Avenue (Drawing 3 (DTBG-171-03))
3.5 103 Street North and South of Jasper Avenue (Drawing 4 (DTBG-171-04))
3.6 103 Street at 100 Avenue (Drawing 4 (DTBG-171-04))
3.7 103 Street near 102 Avenue (Drawing 5 (DTBG-171-05))
3.8 103 Street at 103 Avenue (Drawing 5 (DTBG-171-05))
3.9 102 Avenue Between 105 Street and 106 Street (Drawing 6 (DTBG-171-06))
Bike (non-elongated) Symbol Placement in conflict zone

Green conflict zone material as specified

Solid white line 100mm wide

Typical bike symbol placement in conflict zone masking

Not to scale
Educate and Inspire

Downtown Bike Network

Learn everything you need to know to comfortably ride, walk, and drive the Downtown Bike Network. Watch for new markings on the road, and signs and signals at intersections to safely navigate the Network.

Edmonton’s new adaptable Downtown Bike Network...

offers over 7.8 km of protected bike lanes, shared roadways, and paths to help and inspire Edmontonians of all ages to try new ways to get around Downtown.

Helpful Tips for All Road Users:

**In Your Car**
- Look both directions and shoulder check before turning.
- Watch out for the new signs indicating changes to turning rules.
- Yield to bikes when crossing the bike lane and pedestrians in crosswalks.

**On Your Bike**
- Yield to pedestrians in crosswalks.
- Watch out for new signs indicating how to safely turn at intersections.
- Not sure how to navigate the Network? Dismount onto the sidewalk and observe what others are doing.

**On Your Feet**
- Watch for turning vehicles entering and exiting accessways.
- When crossing the bike lane to get to a parked vehicle, yield to people on bikes.

See green? Watch out for each other.
Greenspace on the roadway marks areas where drivers and cyclists could cross paths. Be aware and take care when crossing.
Traveling slower along the Downtown Bike Network will give you time to see and respond to all the new features.
Downtown Bike Network | City of Edmonton | July 2018

Edmonton.ca/BikeDowntown

LET'S ROLL
Downtown Bike Network  |  City of Edmonton  |  July 2018

Edmonton’s new adaptable Downtown Bike Network...

Helpful Tips for All Road Users:

- **In Your Car**
  - Look both ways, and slow down before turning.
  - Be alert for new signs and signals.
  - Yield to cyclists at intersections.

- **On Your Bike**
  - Watch for turning vehicles.
  - Wear a helmet.

- **On Your Feet**
  - Walk carefully.
  - Be visible.

Bike Turn Boxes

Given Bike Turn Boxes painted at intersections provide cyclists with a safe way to turn left or right.

4 Things to Know

1. Watch for New Signs
2. Don't Stop on the Green Paint
3. Shoulder Check and Look Both Ways
4. Yield to Cyclists when Turning Across the Bike Lanes

Check for oncoming traffic and pedestrians

Edmonton.ca/BikeDowntown
Enforcement Partners

Road users reminded of the rules of the bike lanes

LARRY WONG, EDMONTON JOURNAL  Updated: June 28, 2018

Our Bike Education Street Team & @edmontonpolice were along #yegbikegrid this morning reminding all road users of the rules, signage & signals along the protected bike lanes. Visit edmonton.ca/cycling to learn more about navigating the lanes & what's new! #yegbike #yegtraffic
How are we gathering data?

- Mio-Vision data at eco-counter locations
- Cameras are capturing video over a 24 hr period and analyzing pedestrian, cyclist and motorist data
1 Year Out - Bike counts more than doubled

May 31, 2017
Total ridership pre-bike network
2,454

May 16, 2018
Total ridership post-bike network
5,586
Best Day - June 20, 2018

Total bike count: 6,753
Current State:

- How safe is the Bike Network in operation?
- Review transitions where the Bike Network begins or ends
- Safety review of intersection operations
Street Team Interactions (all 3 routes)

43% of users feel confident travelling the DTBN

83% of cyclists DTBN feel confident

29% of non-cyclists DTBN feel confident
44% of non-cyclists interviewed felt they would start cycling due to the Downtown Bike Network.
“I really like the bike paths. I feel much more comfortable as a cyclist. It’s even encouraged my wife to cycle with me.” ~ User

“Thanks for the tour! I appreciated what Michael and Madison showed me, and I think that my anxiety about riding downtown - in "traffic" has been eased!” ~User
The network has totally changed cycling in downtown for the better... I am looking forward to cycling downtown with my young grandson when the new Alberta museum opens. ~ User

It was a long time coming, but can only serve to make our downtown that much more inviting and livable... I am 59 years old and retired after a 36 year career as an ETS driver... I have never seen this many people out and about on bicycles... ~ User
What’s next for the Downtown Bike Network?

2017/2018 Evaluation
Final Thoughts...

- Stakeholders as valued partners
- Striking the balance - deep engagement vs speedy delivery
- Authenticity in communication
- External endorsement and authentication
- Decision making and integration
- 9 months + years of learning
Downtown Bike Network  |  City of Edmonton  |  July 2018
1. Watch for no right on red signs

Vehicles can’t turn right on a red light