

Integrating Active Transportation Projects into State of Good Repair Road Work

Ellen Bennett & Simran Patel, City of Toronto

November 16, 2022

Integrating Active Transportation Projects into State of Good Repair Road Work



Agenda

- Toronto's Cycling Network Plan & Implementation
- SOGR Road Program & Active
 Transportation Opportunities
- Harbord/Hoskin Case Study
- Concluding Remarks



Example of a Bi-Directional Cycle Track



City of Toronto's Cycling Network Plan

*****50>

The Cycling Network Plan (CNP) serves as a comprehensive roadmap and work plan, outlining the City's planned investments in the near-term and intentions for the long-term.

The CNP is an evolution of the Ten Year Cycling Network Plan, approved in principle in June 2016 and a culmination of significant research, analysis, and extensive public consultation.

The Cycling Network Plan has a rolling three year near-term implementation program

New cycling routes are developed based on a the capital implementation program and the prioritization framework



Cycling Network Plan for former Ward 7, showing planned lanes, trails and corridor studies



City of Toronto's Cycling Network Plan

*****070>

The framework includes:

- the cycling service assessment illustrated in the longterm vision
- strategic alignment with the state-of-good-repair road program
- health and wellness analyses
- road safety focus areas
- planning focus areas

It takes into account the feasibility, complexity, and delivery methods of proposed design options.

The framework applies an equity lens, which is informed by stakeholder engagement, geographic distribution, and a neighbourhood cycling and equity index.



Increasing safety of cyclist by implementing a bike box to allow for safer left turn cycling movements.



Major City-Wide Cycling Network

City Council approved in principle the Major City-Wide Cycling Network as part of the 2021 Cycling Network Plan Update.

- Approximately 200 km or 40% of the Major City-Wide Cycling Network is complete (includes ActiveTO temporary projects)
- Target of 60% completion by 2031 and full completion by 2041







City of Toronto's Cycling Network Plan

Many cycling projects are delivered through the quick build program

A quick build project can include:

- → New or modified traffic signals and pedestrian crossings
- → Pavement marking changes
- → Precast materials such as curb extensions, low walls, curbs and flexible posts
- → Minor concrete work such as new curb ramps with tactile walking surface indicators (TWSIs)



1 Ato»

An example of materials that can be used in quick-build projects, including pavement markings, precast concrete curbs and bollards.



Opportunities for Active Transportation

Cycling's current contracts allow for quick build solutions but do not include more permanent infrastructure

State of Good Repair road work offers additional opportunities:

- Sidewalk widening and enhancements
- Green infrastructure
- Raised cycle tracks
- New signalized crossing
- Raised local street crossings
- Enhanced public transit stops
- Protected cycling intersections



Enhanced public transit stop with a raised cycle track, tactile plates, and signage to allow safe passage for both cyclist and pedestrians.



1 Atos

Opportunities for Active Transportation

Aligning the plan for road work with the cycling network plan creates the window of opportunity for those more permanent measures and reduces cost and time compared to completing each project separately.



Bundled state of good repair and cycling project on Cummer Ave., including a green buffer separating the cycle track and sidewalk from vehicular lanes.





1 Ato

Case Study: Harbord/Hoskin Corridor



Harbord/Hoskin Corridor





100»

Existing Conditions & Areas of Improvement



Single lane for traffic in each direction, with a buffered bike lane, 40km/h, curbside parking on one side.





1 Ans

Existing Conditions & Areas of Improvement



Parking at curbside means bike lane cannot be protected, lane widths do not allow for additional buffer for dooring



Bus service exists along the route, with insufficient space for a modular platform



1 Ans

Existing Conditions & Areas of Improvement





Standards have been updated since the original implementation



1 Ans

SOGR Work on Harbord/Hoskin

*****50>

Major road resurfacing is planned for 2024, including

- replacement of old asphalt surface with new asphalt surface
- repairs of sidewalks and curbs

Opportunities to address some of the areas for improvement which would not have been feasible through existing avenues for active transportation work (Cost, extent of work, type of work)



Similar to Bloor St W, there is an opportunity to introduce raised cycle tracks, permanent buffers, and adjust curb radii



Collaboration Process

- Developed functional plan to demonstrate feasibility and preferred design
- Provided parking counts to justify reduction in parking to accommodate new design
- Worked with other stakeholders such as the TTC to ensure their needs/wants are also met



Worked with TTC to determine new locations and dimensions of bus stops, and the type of facility required.







Proposed Cross Section







Intersection Review to Optimize Space



Review of left turn volumes justified the removal of a dedicated left turn lane to allow space for green infrastructure, including possible bioswales



(AD)

Placement of Raised Tracks





Using the resources of the road work allows for more permanent cycling infrastructure such as raised tracks for locations where people driving frequently stop



Curb Radii Adjustments





Using the resources of the road work also allows for adjustments to the curb radii, here allowing for a reduction in the bump-out to provide more space for cyclists travelling on the contraflow on the cross street



Concluding Remarks

*****375>

It can be difficult to work within existing parameters, but collaboration within City departments creates opportunities to meet future demands for more accessible, safer infrastructure for all road users



Cycling facility using low barrier walls



Thank You

Ellen Bennett (P.Eng) Engineer, Cycling and Pedestrian Projects ellen.bennett@toronto.ca

Siman Patel Transportation Technologist, Cycling and Pedestrian Projects simran.patel@toronto.ca

