TORONTO

STAFF REPORT
ACTION REQUIRED

Ten Year Cycling Network Plan: Project Update and 2016 Implementation Program

Date:	September 8, 2015
To:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	All
Reference Number:	P:\2015\ClusterB\TRA\TIM\pw15007tim.docx

SUMMARY

Transportation Services is currently developing a ten year plan for expanding and improving the City's cycling network. Once completed, in 2016, the Ten Year Cycling Network Plan will serve as a comprehensive roadmap and workplan, outlining the City's planned investments in cycling infrastructure over 2016-2025. This report provides an overview of the Ten Year Cycling Network Plan process undertaken to-date and identifies the proposed 2016 implementation of this plan, for consideration in the 2016 Capital Budget process. A final report will be submitted to Public Works & Infrastructure Committee in 2016 with options for Ten Year Cycling Network Plan implementation for the remainder of the ten year program.

The Ten Year Cycling Network Plan will build on the City's existing network of cycling routes by identifying potential cycling network projects to fulfill the project mandate:

- **Connect** the gaps in our existing Cycling Network;
- **Grow** the Cycling Network into new parts of the City; and
- **Renew** the existing Cycling Network routes, to improve their quality.

Since November 2014, a significant amount of cycling impact analysis as well as public and stakeholder consultation has been underway for this project. Feasibility assessment and implementation planning is currently underway. Where possible, projects are being identified for coordination with planned capital work.

The 2016 implementation program recommends approximately 41 lane-km of on-street cycling network routes to grow, connect and renew the existing cycling network, as well as the initiation of three major corridor studies. The deliverables recommended in this report represent the outcome of cycling impact analysis, feasibility analysis, capital works coordination and consultation. Transportation Services is continuing to conduct feasibility analysis and consultations regarding these 2016 recommendations.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. Public Works & Infrastructure Committee receive the Ten Year Cycling Network Plan: 2016 Implementation Program for information.

Financial Impact

The estimated cost to implement the Cycling Network Plan 2016 Implementation Program is approximately $13.5 million, representing an increase of approximately $4 million more in 2016 than the previously forecast in the 2015 Capital Budget. As a result of a review of cashflows for new and enhanced projects across Transportation Services, this increase can be absorbed in the 2016 Capital Budget.

The financial impact of the remainder of the Ten Year Cycling Network Plan, including options for increasing funding levels to accelerate implementation of the cycling network, will be included in the report to Public Works and Infrastructure Committee in 2016.

The Deputy City Manager and Chief Financial Officer have reviewed this report and agree with the financial impact information.

DECISION HISTORY

At its meeting of June 6, 7 and 8, 2012, City Council adopted a staff report PW15.2 "Toronto Bikeway Trails Implementation Plan". The Bikeway Trails Plan outlines projects to connect and grow Toronto's multi-use trails across the City as part of the Cycling Network. The Ten Year Cycling Network Plan that is under development is focussing on identifying and recommending on-street cycling routes so that together on-street and trail cycling network routes may complement each other and provide a cohesive system of cycling routes across Toronto.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.PW15.2

At its meeting on November 13, 14, 15 and 18, 2013, City Council adopted recommendation PW26.5, directing Transportation Services to undertake a combined Bloor Street – Dupont Street Bikeway E.A. In 2015, Transportation Services has commenced a preliminary feasibility study which will identify design options and associated impacts for bikeways along Bloor Street. Based on the results of the feasibility study and, subject to Council approval, possible implementation and subsequent evaluation of a pilot project could happen in 2016, Transportation Services would proceed with an E.A. Study, if one is required. The Bloor Street – Dupont Street Bikeway Study has been included as a Major Corridor Study to be initiated in 2016. The 2013 Council Decision can be found at:
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.PW26.5

A 2015 Capital Budget Briefing Note with an update on this study can be found at:
http://www.toronto.ca/legdocs/mmis/2015/ex/bgrd/backgroundfile-77390.pdf

At its meeting on June 18, 2014, Public Works and Infrastructure Committee adopted PW32.6 received a report which evaluated the feasibility of closing the gap on the Waterfront Trail –

Etobicoke section, on Lake Shore Boulevard West, between Norris Crescent and First Street. Lake Shore Boulevard West has been identified for a Major Corridor Study and a project for this segment has been included in the 2016 program. The Committee Decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PW32.6

At its meeting on July 7, 8 and 9, 2015 Toronto Community Council adopted staff report TE7.64 "Revitalizing Yonge - Downtown Yonge Street". This report recommends that Council authorize staff to initiate a study of Yonge Street from Queen Street to Gerrard Street, to explore design options for streetscaping and public realm improvements that would increase pedestrian space and have regard for cyclists through the narrowing of the roadway, including the potential reduction of traffic lanes. This study would be undertaken as a Functional Street Design Study. The Council Decision can be found at: http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.TE7.64

ISSUE BACKGROUND

Over the last few years, Council direction for cycling infrastructure implementation in Toronto has focussed on delivery of the Bikeway Trails Implementation Plan and expansion of a separated bike lane network in the downtown. This has resulted in a major expansion of the cycling network with 40 centreline-km of bikeway trails and 15 lane-km of cycle tracks completed since 2011.

Ridership on new cycling network routes has increased substantially. Bicycle volume counts on Sherbourne Street bicycle lanes in 2012 reported a total of 1,200 daily cycling trips, northbound and southbound combined. After the upgrade to cycle tracks in 2014, the count rose to 3,500 daily cycling trips, northbound and southbound combined. The recent Richmond-Adelaide Cycle Track Planning and Design Study Pilot Project Preliminary Evaluation also demonstrated significant ridership increases. On Richmond Street, the 2014 average daily eight hour westbound volume of approximately 500 westbound cyclists increased to approximately 1,300 westbound cyclists in 2015. On Adelaide Street, the 2014 average daily eight hour eastbound volume of approximately 550 cyclists increased to approximately 1,575 eastbound cyclists in 2015.

COMMENTS

This section of the report provides an overview of the Ten Year Cycling Network Plan process undertaken to-date and identifies the proposed 2016 implementation of this plan:

Cycling Impact Analysis

In order to develop the Ten Year Cycling Network Plan, analysis is being undertaken in eight areas to identify the streets where a cycling network route should have the most benefit:

- Current Cycling Demand;
- Potential Demand;
- Population and Employment Density;
- Coverage;
- Barriers;

- Safety Analysis;
- Connectivity; and
- Trip Generators

Current Cycling Demand analysis highlights areas of the city where there are currently high volumes of cycling traffic, to understand where the greatest number of existing cyclists could benefit from new or upgraded cycling network routes. Potential Demand analysis highlights areas where there is currently a high demand for short trips not currently being made by bicycle.

Population and Employment Density analysis maps the number of residents and jobs per square kilometer to understand where the greatest number of people could access the cycling network. Coverage analysis applies a buffer (up to 500 m) around the existing network to quantify the number of new residents and/or employees that could be served, if a proposed new cycling route were added to the existing network.

Barriers analysis informs opportunities to provide safer crossings, within 1 km in either direction from a barrier, including highways, railways, rivers, ravines, etc. Safety Analysis examines the locations of reported collisions involving cyclists.

Connectivity analysis highlights bikeway projects that can close gaps in the existing network and provide routing options. Trip Generators analysis will measure the number of key destinations and opportunities for multi-modal travel served by a bikeway project.

Public and Stakeholder Consultation

Since November 2014, a significant amount of public and stakeholder consultation has been undertaken as part of this project, over the course of two phases. Approximately 10,500 individuals across Toronto have completed the Phase 1 online survey for the Ten Year Cycling Network Plan and over 90,000 trips were recorded by persons using the City's Cycling App data. This input is being used to inform the values and priorities that are being applied in the planning process and to identify and map popular cycling routes for the proposed Ten Year Cycling Network Plan.

As part of Phase 2 consultations, more than 6,300 respondents have provided feedback to-date regarding the draft network map. Eight drop-in consultation events were staged at the City's Civic Centres and along major trails to further invite feedback from the public on the draft map.

Transportation Services staff have collaborated with other City divisions regarding secondary plans, traffic management issues, and upcoming Capital Work planned in their jurisdictions in order to inform the project prioritization.

Meetings with the City Planning, Employment & Social Services, Public Health, Parks, Forestry & Recreation, and Economic Development & Culture divisions have helped to broadly consider the development of the Cycling Network according to a number of lenses, and these divisions have helped to promote the planning process. Meetings have also been held with area councillors to inform the plan's development on a ward-by-ward basis. As appropriate, projects which were initiated prior to 2015 and ready for installation following councillor and stakeholder consultation, have been included in the recommended 2016 program.

Transportation Services is continuing to conduct consultation on the proposed Ten Year Cycling Network Plan. A summary of public consultation will be included as part of the final report to be submitted to Public Works and Infrastructure in 2016.

Feasibility Analysis

A feasibility assessment and implementation planning process is currently underway which includes fieldwork and a review of technical and design considerations, network connectivity, property implications, approval requirements, and preliminary estimated costs. Where possible, projects are being identified for coordination with planned capital work in order to minimize cost and impact of construction.

Ten Year Cycling Network Plan route recommendations will not prescribe detailed designs. For network planning purposes, a range of appropriate designs are recognized for different street types. For example, on "Fast, Busy Streets" such as arterial and major collector roadways, a dedicated facility such as a bike lane, buffered bike lane, or cycle track would be recommended. On "Quiet Streets" such as local roads, a dedicated facility may not be necessary. When traffic speeds and volumes are low, this may represent a comfortable cycling environment with wayfinding sharrow markings, wayfinding signs, and potentially traffic calming, where appropriate.

Some major corridors have been identified as presenting opportunities to create City-wide connections. On these major corridors, it is recognized that to achieve any cycling network link, a Major Corridor Study (similar in scope to an Environmental Assessment Study) would be needed to properly access traffic impacts and to consult with all affected stakeholders. A separate category has been created for these locations because they are intensely used for a wide range of existing activities, and the feasibility of introducing cycling infrastructure should be assessed in conjunction with evaluating traffic capacity, transit impacts, public realm improvements, and commercial pressures.

2016 Implementation Program

The Ten Year Cycling Network Plan: 2016 Implementation recommends approximately 41 lane km of new on-street cycling network routes to grow and connect the existing cycling network, including upgrades to renew approximately 9 lane km of existing routes.

It is proposed that three Major Corridor Studies be initiated in 2016:

- Bloor-Dupont, between Keele Street and Sherbourne Street, to be informed by the results of the preliminary feasibility study currently underway and proposed 2016 pilot project.
- Yonge Street, between Finch Avenue to Sheppard Avenue, in conjunction with a streetscape study
- Yonge Street, between Bloor Street and Front Street, in conjunction with the Revitalizing Yonge - Downtown Yonge Street Functional Street Design Study.

The Ten Year Cycling Network Plan: 2016 Implementation Program incorporates continuing to deliver on projects identified in the 2012 Bikeway Trails Plan. In addition to the initiation of major corridor studies, new on-street cycling network project installations, state of good repair improvements / upgrades to the existing cycling network, and construction of bikeway trails, the

Ten Year Cycling Network Plan: 2016 Implementation Program includes funding for intersection safety improvements and expansion of wayfinding signage.

A summary of the program budget and locations are included in Appendix 2 to this report, titled Ten Year Cycling Network Plan: 2016 Implementation Locations.

CONTACT

Christina Bouchard
Assistant Planner
Cycling Infrastructure & Programs
Transportation Services Division
Tel: 416-397-4849
Email: cboucha@toronto.ca

Jacquelyn Hayward Gulati
Manager
Cycling Infrastructure & Programs
Transportation Services Division
Tel: 416-392-9065
Email: jgulati@toronto.ca

SIGNATURE

_____

Stephen M. Buckley
General Manager
Transportation Services Division

ATTACHMENTS

Appendix 1 –2016 Implementation Program Budget
Appendix 2 –2016 Implementation Program Locations

APPENDIX 1

2016 IMPLEMENTATION PROGRAM BUDGET	
ON-STREET BIKEWAY INSTALLATIONS (41 lane-km)	$1,858,000
MAJOR CORRIDOR STUDIES	$1,250,000
BIKEWAY TRAILS	$8,100,000
LOCALIZED IMPROVEMENTS	$360,000
CONTRACTED PLANNING & DESIGN SERVICES (PROJECT DELIVERY)	$2,028,000
Cycling Infrastructure Capital Account CTP815-05	**$13,596,000**
APPROVED IN THE 2015 BUDGET	*$9,460,000*
PROPOSED INCREASE FOR 2016	*$4,136,000*

APPENDIX 2

2016 IMPLEMENTATION PROGRAM LOCATIONS

ON-STREET BIKEWAY INSTALLATIONS

NEW ON-STREET
Subject to detailed design and consultation

Bayview Ave.	Pottery Rd. to Moore Ave. (2.6 lane km)
Bloor St. W. (Pilot Project)	Shaw St. to Avenue Rd. (5 lane km)
Carlaw Ave.	Riverdale Ave. to Gerrard St. E. (0.4 lane km)
Chatham Ave.	Jones Ave. to Greenwood Ave. (1.2 lane km)
Corley Ave.	Woodbine Ave. to Waverley Rd. (0.6 lane km)
Denison Ave./Bellevue Ave.	Queen St. W. to College St. (2.2 lane km)
Dowling Ave.	Queen St. W. to bridge over Gardiner (1.1 lane km)
Ellis Ave.	The Queensway to Waterfront Trail (0.4 lane km)
Lake Shore Blvd. W.	Norris Cres. to First St. (2.8 lane km)
Norway Ave.	Woodbine Ave. to Lee Ave. (1.6 lane km)
O'Connor Dr. Bridge	Woodbine Ave. to St. Clair Ave. E. (1.6 lane km)
Rathburn Rd.	The East Mall to Centennial Park Blvd. (2.6 lane km)
Waterfront Dr.	Palace Pier Ct. to Marine Parade Dr. (0.4 lane km)
Waterloo Ave./ Gladstone Ave.	Florence St. to Argyle St. (0.6 lane km)
Willowdale Ave.	Sheppard Ave. E. to Steeles Ave. E. (8.4 lane km)
Woodbine Ave.	O'Connor Dr. to Danforth Ave. (3.4 lane km)
Woodbine Ave.	Kingston Rd. to Queen St. E. (1.4 lane km)

ON-STREET BIKEWAY UPGRADES / STATE OF GOOD REPAIR
Design details currently under development and subject to consultation

Gerrard St. E. (2.6 lane km)	Yonge St. to Parliament St.
River St. (1.6 lane km)	King St. E. to Gerrard St. E.
Shuter St. (3.8 lane km)	Yonge St. to River St.
Simcoe St. (1.2 lane km)	Front St. to Queens Quay W.

MAJOR CORRIDOR STUDIES

BLOOR – DUPONT (11 km) Keele St. to Sherbourne St.	To be informed by Feasibility Design Study Underway and proposed 2016 Pilot Project
YONGE (5 km) Finch Avenue to Sheppard Avenue	In conjunction with a Streetscape Study
YONGE (2.7 km) Bloor St. to Front St.	In conjunction with Revitalizing Yonge – Downtown Yonge St Functional Street Design Study

2016 IMPLEMENTATION PROGRAM LOCATIONS	
BIKEWAY TRAILS	
Bayview Multi-Use Trail (Rosedale Valley Road to Pottery Road)	Construction
Pan Am Path – East Don Trail Phase 1	Initiate Construction
Pam Am Path – Gatineau Hydro Corridor Trail (Bermondsey Rd. to Victoria Park)	Initiate Construction
West Toronto Railpath Southerly Extension	Commence Detailed Design
Mid-Humber Gap Phase 2	Initiate Feasibility Study
Etobicoke Creek- North & Sherway Sections	Detailed Design & Construction
Mimico Creek	Construction
Martin Goodman Trail Upgrades - Various	Construction
LOCALIZED IMPROVEMENTS	
Intersection Improvements	Various locations
Wayfinding	Various locations