Appendix A: Implementation of Active Transportation Infrastructure within the City Road Rights-of-way



Report City Council The Corporation of the City of Brampton 2020-08-05

Date: 2020-07-24

Subject: Information Report: Implementation of Active Transportation Infrastructure within the City Road Allowance - All Wards (HF.x)

Contact: Nelson Cadete, Project Manager, Active Transportation, Planning, Building and Economic Development Department

Recommendations:

 THAT the report from Nelson Cadete, Project Manager, Active Transportation, Transportation Planning, dated July 24, 2020, to the Council meeting of August 5, 2020, re: Implementation of Active Transportation Infrastructure within the City Road Rights-of-way - All Wards (HF.x) be received.

OVERVIEW:

- The Active Transportation Master Plan (ATMP) supports the 2040 Vision for Transportation and Connectivity, calling for "a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling and transit".
- The Active Transportation Master Plan identifies a defined implementation strategy that will see a comprehensive network built out through the following programs:
 - Fix-it Program –improvements/enhancements to existing facilities (curb-cuts and proper crossings, wayfinding signage, etc.).
 - Infill Program dedicated infill projects required to complete the planned network by 2041.
 - Capital Program incorporating cycling projects into existing road reconstruction projects and the annual road resurfacing project is part of a 'Complete Streets' approach to designing and enhancing road corridors for all users.

- Key network elements of the ATMP implementation strategy are delivered in partnership with Public Works & Engineering (PWE) and decisions on what elements of the ATMP are constructed are determined well ahead of implementation, to avoid costly changes once projects are tendered and in construction.
- On an annual basis, staff will be preparing a report summarizing the scope of active transportation elements implemented in the preceding year, and outlining the proposed program for the coming year.

BACKGROUND

The Brampton 2040 Vision, "Living the Mosaic" (2018) identifies seven target vision statements and transformative actions to guide Brampton's continuing evolution towards a thriving, urban and complete city. The target vision for "transportation and connectivity" in Brampton is "a mosaic of safe, integrated transportation choices and new modes, contributing to civic sustainability, and emphasizing walking, cycling and transit." The target vision is complemented by associated actions that prioritize active mobility and that support more integrated transportation choices emphasizing walking and cycling.

The Active Transportation Master Plan (ATMP) provides the implementation framework for network plans, policies and programs that support the 2040 Vision. It states that "through developing an integrated, attractive, and accessible system of sidewalks, cycling facilities and trails, Brampton will be a liveable city where all members of the community can safely and conveniently access places, goods and services and connect to transit using active modes of transportation."

The goals of the ATMP are:

- Improve the safety of walking and cycling
- Provide mobility options to all residents, including enhancing the accessibility of the transportation network
- Maximize the value (usage) of existing infrastructure
- Invest efficiently in an expanding network
- Improve access to transit and provide viable active transportation options for the first / last mile

The vision and goals of the ATMP are supported by the following key objectives:

- Establish a broad and well-connected active transportation network that will make travel by bike and on foot a safe and desirable option for school, work, recreation and other trips;
- Create a multi-year implementation strategy to deliver an active transportation network;
- Develop active transportation policies that reinforce the importance of cycling and walking to building a viable, safe and attractive city;
- Improve, expand and develop new programing to educate, encourage, and support a cycling and walking culture in Brampton; and
- Create a framework to measure and assess the progress of active transportation in Brampton.

ATMP Implementation Strategy

The ATMP refined the comprehensive cycling network introduced in the 2015 Transportation Master Plan, and includes a variety of facility types such as signed routes, bike lanes, buffered bike lanes, protected bike lanes, cycle tracks and multi-use paths (located within road allowance) and multi-use trails (located within parks and valley lands).

The recommended active transportation network within the ATMP includes proposed dedicated cycling infrastructure (bike lanes, urban shoulders, or multi-use paths) for most of the City's arterial and collector roads. Given typically higher auto volumes and speeds on such roads, there is a greater need to provide a physical separation between motorists and cyclists. While some local streets may provide valuable links within the cycling network, these roads are typically "low stress" environments (fewer cars and slower speeds) and are too narrow to accommodate dedicated cycling infrastructure.

The proposed 2041 active transportation network has been costed at a value of approximately \$126.6M. The resources and funding required to implement the ATMP are identified and considered as part of the annual Capital Budgeting process.

Key network elements of the ATMP implementation strategy are delivered in partnership between Planning, Building & Economic Development working with Public Works & Engineering, as a part of other capital road improvement projects and programs. Since many of these projects have significant design timelines before actual construction can begin, decisions on what elements of the ATMP are constructed are determined well ahead of implementation. Careful monitoring of design progress and being mindful of changes to active transportation strategies help to ensure that the scope of work is finalized prior to implementation (and avoiding costly change orders once projects have been tendered or are in construction).

CURRENT SITUATION:

The active transportation network is being implemented through the following approaches:

- Fix-it Program improvements/enhancements to existing facilities that will improve Brampton's active transportation network within 10 years. It provides lowcost solutions (such as providing curb-cuts and proper crossings where trails meet roadways, wayfinding signage, etc.) that will yield noticeable improvements for users.
- Infill Program in addition to the cycling and trails projects to be delivered through a coordinated capital program, standalone, dedicated "infill" projects will also be needed in order to achieve the planned 2041 network. An analysis was completed as part of the ATMP to understand what parts of the City have the greatest cycling potential, and therefore the greatest need for new "infill" infrastructure.
- Capital Program opportunities to coordinate implementation of cycling facilities are identified by comparing candidate cycling network routes against the City of Brampton's capital works program for road projects. Incorporating cycling projects into existing road reconstruction projects and the annual road resurfacing project is part of a 'Complete Streets' approach to designing and enhancing a road corridor for all users.

Fix-it Program (Active Transportation Master Plan):

In 2019, a \$2M project budget (Project # 193130-001: Active Transportation Infrastructure Project) was established to address the ATMP's "Fix-it Program" which focuses on enhancing the existing AT network by completing critical gaps with proper pedestrian and cycling crossings. In 2019, the following crossings identified within the ATMP fix-it program were either implemented or in the design/planning stage for implementation:

Project	Location
Etobicoke Creek Recreational Trail	Kennedy Road Signalized Crossing
	(*separate Capital Project)
School Crossing Enhancements (curb	George Vanier Catholic School

depressions)	
School Crossing Enhancements (curb	Larkspur Public School
depressions)	
School Crossing Enhancements (curb	Russell D Barber Public School
depressions)	
School Crossing Enhancements (curb	St. Marguerite Bourgeois School
depressions)	
School Crossing Enhancements (curb	Stanley Mills Public School
depressions)	
School Crossing Enhancements (curb	Hickory Woods Public School
depressions)	
Major Trail PXO Crossings	Fletchers Creek at Queen Mary Drive
Major Trail PXO Crossings	Hydro Corridor Trail at Kingknoll Drive
Major Trail PXO Crossings	Flower City Trail at Queen Mary Drive
Multi-use path Durable Pavement	Heart Lake Road, Wanless Drive and
Markings	Financial Drive
Buffered Bikes Lanes	Heart Lake Road

In 2020, staff will be planning and designing the following:

- Five (5) signalized (cross-ride) recreational trail crossings (at arterial roads);
- Approximately thirty (30) pedestrian crossover crossings, where recreational trails meet collector roads; and,
- Depressing curbs at 17 more school crossings.

Construction of these projects is intended to be started or completed in 2020 but could be delayed by extenuating factors such as designs, permits, procurement, etc.

Infill Program (Active Transportation Master Plan)

\$1.875 Million from the 2018 Operating Budget surplus was allocated to a Project Budget to implement the following active transportation infrastructure projects (*Project* # 187356-001 - Active Transportation Plan (North-South and East-West Routes)):

- An East-West Route; and
- A North-South Route.

East-West Route:

Based on the recommendations of the ATMP and proactive support from the community cycling advocacy for an east-west active transportation network

addition, staff is now overseeing a Cycling Facility Design Feasibility Study for the Vodden Street/Howden Boulevard/Hanover Drive corridor and preparing detailed design drawings for a preferred option.

The project is currently at the 60% design stage, with completion of the ultimate design anticipated by end of summer 2020. With the impetus afforded by the Covid-19 pandemic, the project timeframe had been accelerated, and the scope expanded to include immediate implementation of "interim" bike lanes on Vodden Street and Howden Boulevard between Etobicoke Creek and Chinguacousy Park. In the meanwhile, the "interim" bike lanes that had been delineated by T-54 Traffic Barrels are being painted this summer. This will still be an "interim" design condition providing a transition between the Covid-19 bike lanes and the ultimate design which will be constructed in 2021, in tandem with planned road resurfacing/reconstruction.

The public engagement strategy for the study was adapted to respond to the Covid pandemic, and to date has included a very well-attended virtual stakeholder workshop (May 28, 2020), an online survey ongoing until the end of July, and an earlier mail-out sent to over 4,000 residents/businesses along the corridor encouraging participation in the online survey.

North-South Route:

The proposed north-south route takes advantage of existing facilities (Chinguacousy Rec. Trail, Fernforest Drive and MacKay Street North) by tying them together to provide a corridor that extends across the City culminating at the Bramalea GO Station. The City's Transportation Planning staff will be undertaking a best practices review to identify a wayfinding strategy that would effectively link on-road and off-road infrastructure elements together.

Capital Program (Active Transportation Master Plan)

In 2011, Council approved a direction that the consideration of bicycle facilities be incorporated into all planned construction opportunities such as the annual road resurfacing program, the development review process, bridge and road reconstruction projects (including Environmental Assessments), etc. This same direction was carried through in the ATMP.

In 2019, cycling facilities were considered, identified and implemented within the following road construction projects:

AT Facility	Current Road Project
Fletchers Creek Recreation Trail - Bovaird Drive	*Region of Peel – Resurfacing of

Signalized Crossing	Bovaird Drive
Queen Street - Signalized Cross-ride	James/John Realignment
Buffered Bike Lanes along Central Park Drive	2019 Road Resurfacing Project
School Crossing Enhancement (curb depressions):	
Our Lady of Providence	
Sir Francis Xavier School	
Worthington Public School	
St. John Brebuef Elementary School	
Curb Depressions - Fletchers Creek at Queen	2019 Road Resurfacing Project
Mary Dr	
Urban Shoulders along Kingknoll Drive	2019 Road Resurfacing Project
Financial Drive - Signalized Midblock Crossing	Development Application
Multi-use paths, signalized cross-rides along	Major Road Reconstruction
Countryside Dr	Project
Sidewalks along West Drive	Missing Link Sidewalk Program
Sidewalks along Van Kirk Drive	Missing Link Sidewalk Program

For projects that are underway in 2020, staff has incorporated the following AT infrastructure.

AT Facility	City Roads Program
Curb depressions at 5 school crossings	2020 Road Resurfacing Program
Curb depressions at 17 park path/trail access	2020 Road Resurfacing Program
points	
4.2 km (approx.) of new boulevard multi-use	Road Reconstruction
paths : (McLaughlin Road, Humberwest	
Parkway, Castlemore Road)	
One new pedestrian crossover	2020 Road Resurfacing Program
11.6 km (approx.) of bike lane/urban shoulder	2020 Road Resurfacing Program

CORPORATE IMPLICATIONS:

Term of Council Priorities:

This report supports the Term of Council priority for a Green City as it demonstrates the City's commitment to sustainability by improving active transportation opportunities.

Financial Implications:

Funding for the Active Transportation Infrastructure has been drawing on the following funding sources over the past two years (2019/2020):

- Active Transportation Infrastructure (193130-001) Fix-it Program (\$2M);
- Active Transportation Planning Cycling North-South and East-West routes (\$1.875M)
- Annual Sidewalk Program (\$1.25M 2019, \$600K 2020);
- Annual Controlled Pedestrian Crosswalks (\$50K 2019, \$50K 2020);
- Annual Road Resurfacing Program (total program \$15M 2019, \$15M 2020 which includes curb depressions, painted bike lanes/urban shoulders);Chinguacousy Road Reconstruction - Wanless Drive to Mayfield Road (total project budget \$9.3M includes multi-use paths);
- Castlemore Road Reconstruction (total project budget \$4.1M includes multi-use paths);
- Cottrelle Boulevard Reconstruction Humberwest Parkway to Goreway Drive (total project budget \$31.5M includes multi-use paths);
- McLaughlin Road Reconstruction Wanless Drive to Mayfield Road (total project budget \$9.3M includes multi-use paths);
- Valleyland Development -Riverstone Valley Trail Design (\$100K);
- Pathways Implementation Etobicoke Creek Trail Connection to Brampton Starts Park/CAA Centre (\$250K);
- Riverstone Valley Trail Construction (\$1M); and,
- Valleyland Development Fetchers Creek Recreational Trail/Sheridan Connection Design (\$150K).

With input from Transportation Planning staff (Planning, Building and Economic Development) to refine network implementation requirements to build out the active transportation network, these projects will continue to be considered through the annual budget process, and included in the capital budget request put forward by Public Works & Engineering.

CONCLUSION:

The City's Active Transportation Master Plan lays out a defined strategy to implement a comprehensive citywide active network. This includes a collaborative and proactive approach between Planning and Public Works staffs to consider well in advance the AT needs to be incorporated into planned capital projects and programs (thereby avoiding/minimizing the need for costly changes once projects are already tendered or in construction).

The final active transportation network will be implemented through the following approaches:

- · Fix-it Program improvements/enhancements to existing facilities (curb-cuts and proper crossings, wayfinding signage, etc.).
- Infill Program dedicated infill projects required to complete the planned network by 2041.
- Capital Program incorporating cycling projects into existing road reconstruction projects and the annual road resurfacing project is part of a 'Complete Streets' approach to designing and enhancing road corridors for all users.

Going forward, staff will be preparing an annual report to be delivered in the first quarter of each year, summarizing the scope of active transportation elements implemented in the preceding year, and outlining the proposed program for the coming year. This will also provide an opportunity to advise the community of changes coming to City roads prior to the beginning of construction.

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