



Report to: Development Services Committee

Meeting Date: May 30, 2022

SUBJECT: Active Transportation Master Plan Implementation Strategy and Capital Plan

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RECOMMENDATION:

- 1) That the report dated May 30, 2022 entitled “Active Transportation Master Plan Implementation Strategy and Capital Plan” and staff presentation be received;
- 2) That Council endorse the implementation plan and prioritization process for the ATMP 10-year cycling capital plan described in this report, at an estimated capital cost of \$53.5M, of which \$22.3M will be funded from the City Wide Hard Development Charges Reserve, \$19.2M from the City Wide Soft Development Charges Reserve and \$12.0M from other Non-Development Charges sources (proposed to be funded through a combination of the Community Benefit Charge and non-development related revenues (Non-DC growth reserve)); and
- 3) That the actual implementation of the specific projects within the ATMP capital plan will be subject to the annual capital budget request and approval process; and
- 4) That the operational and maintenance costs, estimated at \$993,000 upon completion of the 10-year program, be phased-in appropriately during the 10-year program term and be subject to the annual budget approval process; and further
- 5) That Staff be authorized and directed to do all things necessary to give effect to this resolution

EXECUTIVE SUMMARY:

- In November 2021, Council directed staff to report back on the following:
 - Definition of the project prioritization process
 - Identification of the draft short term projects within the 10-year plan
 - Identification of the first (5 years) project priorities
 - Identification of the capital and operating costs
 - Identification of the lifecycle costs of the five-year plan
 - Identification funding sources for first 5-year projects
 - Identification of options to address any funding shortfall
 - Identification of resources required for implementation
- The ATMP proposed improvements to the pedestrian and cycling priority networks have been assessed and prioritized based on the following factors:

Pedestrian

- a) Addressing City-wide Sidewalk Gaps;
- b) Enhancing Pedestrian Priority Areas;
- c) Facilitating Safe Crossings;
- d) Improving Accessibility and Safety at Intersections.

Cycling

- a) Projects that coincide with larger planned capital projects;
 - b) Ease of implementation;
 - c) Cycling impact analysis;
 - d) Overall network connectivity;
 - e) Priority neighbourhood score;
 - f) Public and stakeholder input.
- Sidewalk gaps on arterial and collector roads are being addressed separately through the Sidewalk Network Completion Program, while the pedestrian priority areas will require further analysis and identification of specific improvements on local streets. The City already has on-going programs to add controlled and safer crossings of collector roads and in school zones, and accessibility improvements of signalized intersections to meet AODA requirements;
 - A 10-year capital plan for implementing the cycling priority network along with a first 5 year priority project list, based on an objective cycling facility selection process and project prioritization process, have been developed and the network maps of the five/ten-year phasing and facility types are respectively shown in Attachments 'B' and 'A'. A listing of the project priorities for the first five years of the ten-year plan are presented in Attachment 'C';
 - Three investment scenarios to implement the priority cycling network have been developed as follows and detailed in Table 2:
 - Low Investment Scenario: complete the priority cycling network over 20-years
 - Medium Investment Scenario: complete the priority cycling network in 10-years
 - High Investment Scenario: complete the priority cycling network in 5-years
 - The three scenarios were assessed based on the following:
 - Indicator of how each scenario provide connections to all parts of the City, public transit and access to key origins and destinations (Figure 3);
 - Investment level comparison against peer municipalities within the 905-region of the Greater Toronto Area (Table 3).
 - Based on the above assessment, and to maintain the City's status among the peer municipalities, the Medium Investment Scenario is recommended as the proposed ten-year capital plan;
 - The five and ten-year summary of capital and operating cost impacts of the preferred scenario are summarized in Tables 4 and 5 respectively;

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- Subject to Council approval of this capital plan, the implementation of the ATMP capital projects will still require a few more steps in terms of project management, detailed design and construction, with the construction of the first project commencing in 2025;
 - Funding sources for the 10-year capital plan includes development charges (DC) and non-DC sources, subject to the approval of the new Development Charge Background Study and the Community Benefit Charge study in May 2022;
 - External funding are periodically available from senior level governments through grants or matching fund programs, and can be used to offset the non-DC capital costs;
 - Staff anticipates the need for two additional full-time-equivalent resources to manage and successfully implement the cycling capital plan ;
 - All capital project budgets will be requested through the annual capital budget approval process.

PURPOSE:

This report presents and seeks Council endorsement of the implementation plan and prioritization process for the 10-year capital plan of the Active Transportation Master Plan (ATMP).

BACKGROUND:

On November 23, 2021, Council supported the Active Transportation Master Plan (ATMP) and directed staff to report back to Development Services Committee (DSC), on the implementation plan and prioritization process for the 10-year capital plan addressing the following issues:

- Define project prioritization process
- Identify the draft short term projects with 10-year plan
- Identify first (5 years) project priorities
- Identify the capital and operating costs
- Identify lifecycle costs of the five-year plan
- Identify funding sources for first 5-year projects
- Identify options to address any funding shortfall
- Identify resources required for implementation
- Identify ways to minimize the impact to vehicular traffic

OPTIONS/ DISCUSSION:

As part of the ATMP, a short-term (10-year) capital plan was initially proposed, that included improvements to the pedestrian and cycling priority networks.

A 10-year horizon was selected to be consistent with the City Official Plan planning horizon of 2031 and the typical municipal infrastructure program planning term. This allows the priority cycling network capital plan to leverage York Region or City capital plan projects that coincide with the ATMP priority network recommendations, reducing the cost of the ATMP projects.

As all municipal capital plans are typically updated annually or every five (5) years, the capital plan for the ATMP is also recommended to be reviewed and updated at least every 5 years for the following reasons:

- To assess implementation progress;
- To maintain consistency and alignment with changes to strategic policies on growth management and the transportation system (Provincial/Metrolinx, York Region, City, neighbouring municipalities);
- To incorporate technological advancements and changes, particularly with regard to micro-mobility and electrification of the transportation system;
- To maintain the financial sustainability of the ATMP implementation strategy.

PROJECT PRIORITIZATION PROCESS

Pedestrian network improvement priorities are based on several program strategies

The key pedestrian network improvement strategies recommended in the ATMP include:

- Addressing City-wide Sidewalk Gaps
- Enhancing Pedestrian Priority Areas
- Facilitating Safe Crossings
- Improving Accessibility and Safety at Intersections

Sidewalk gaps on arterial and collector roads are being addressed through a separate DSC report on the Sidewalk Network Completion Program that will incorporate and include comments and recommendations from Council.

For the pedestrian priority areas, further analysis is necessary to prioritize the areas and identify specific measures to improve pedestrian network connectivity and safety, including eliminating sidewalk gaps and providing additional pedestrian crossing opportunities on local streets. A separate Council report in the future will present an approach to addressing these pedestrian priority areas.

The City has on-going programs to improve and facilitate safe crossings at intersections and mid-block locations. These include the following:

- Installing traffic signals at intersections where warranted. For 2022, two new signals are being installed at Bur Oak @ Alfred Paterson and at Bur Oak @ Hammersley.
- Installing pedestrian crossovers (PXO) at warranted locations. For 2022, Type 'D' PXOs will be installed at 26 mid-block locations in school zones to improve access to those schools and amenities and overall traffic safety in those school zones. As well, two additional Type 'B' PXOs are being designed and installed at intersections on Copper Creek Drive in 2022.
- Installing cross-rides along Markham Road between 16th Avenue and Major Mackenzie Drive, where the multi-use pathway crosses intersections and driveways. This project will be completed in 2022 as well.

Further reviews and studies will be conducted to identify additional pedestrian crossing opportunities on multi-lane collector roads through the Road Safety Strategic Plan development being initiated this year.

The City has an on-going program to improve signalized intersections to meet Accessibility for Ontarians with Disability Act (AODA) requirements. Since 2012, approximately 50 signalized intersections have received accessibility improvements. The remaining seven signalized intersections will be upgraded as part of larger capital projects that coincide with these intersections such as sidewalk/cycling projects, and development construction projects.

Cycling project prioritization is based on several factors

Programming or scheduling the cycling projects in the priority network into a 10-year capital plan is based on the factors shown in Figure 1.

Figure 1: Cycling Project Prioritization Process



1. Projects that coincide with larger planned capital projects from the City or York Region are incorporated and coordinated with those planned capital projects. This will reduce the capital cost and minimize the disruption to commuters for any future need to retrofit the cycling facility. Examples include York Region's road widening projects along 16th Avenue, Kennedy Road and McCowan Road.
2. Ease of implementation refers to the difficulty or complexity of the cycling project. For example, projects that involve only pavement markings and signage, such as buffered bike lanes, are much easier to implement than cycle tracks and MUPs.
3. Cycling impact analysis relates to the assessment of potential cycling demand based on a series of factors such as connectivity to key destinations, population and employment density, physical barriers and potential for short trips.
4. Overall network connectivity considers a project from a network phasing perspective as well as aiming to establish a minimum connectivity across all City Wards.
5. The priority neighbourhood score is based on the Ontario Marginalization Index, which is a data tool used to understand inequalities in health and other social problems among population groups or geographic areas.
6. Finally, feedback received from the public and stakeholders consulted during the development of the ATMP provides indications of importance of specific network links that can inform their priorities. These can include suggestions to prioritize connections to schools, parks, trails or other key destinations.

The ATMP cycling priority network recommendations will improve network connectivity and safety for cyclists

The ATMP priority cycling network was defined to meet the following objectives:

- To connect all parts of the City through a spine cycling network;
- To create a spine network that connects with public transit and key origins and destinations (e.g. Viva BRT, employment nodes, high schools, community centres, major parks and trails, etc.)

The ATMP recommends two broad areas of improvements to the priority cycling network:

1. Upgrade the existing network
2. Complete the priority network

Upgrades to the existing cycling network includes:

- formalizing existing edge lines (typically 1.5 - 2.0 m urban shoulders) on collector roads as bike lanes or buffered bike lanes;
- retrofitting bike lanes or buffered bike lanes through narrowing of wide traffic lanes;
- adding signage and pavement markings to established shared roadways.

Completing the priority cycling network involves:

- connecting and closing gaps in the network, and
- evaluating different facility type options such as in-boulevard cycle tracks or MUPs, and on-road buffered or protected bike lanes through a facility selection process.

Draft five and ten-year cycling project priorities have been developed

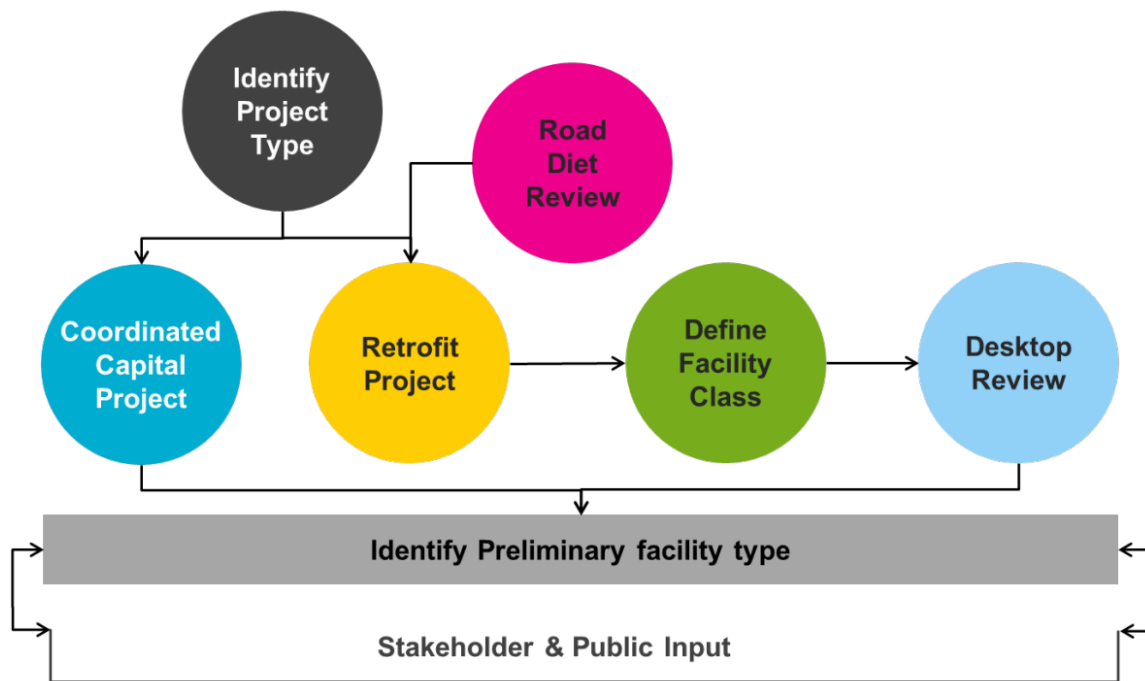
Based on the above prioritization process, draft 5 and 10-year cycling project priorities have been developed. Attachment 'A' provides a map of the 10-year capital plan projects by proposed facility type relative to the existing cycling network. Attachment 'B' presents them in terms of 0-5 or 6-10 year implementation timeframes.

Attachment 'C' presents a listing of the first five-year project priorities, including proposed facility type and cost impacts. It should be noted that these preliminary facility type recommendations are subject to further analysis as each project moves through the implementation steps starting with the detailed design step.

CYCLING FACILITY SELECTION**Facility type selection for a project involves a multi-step process**

Selecting the facility type of a project involves examining it from a high level and classifying it as either being part of a coordinated capital project involving other infrastructure elements or as being a retrofit project purely to define the cycling infrastructure need. Figure 2 depicts this high level process.

Figure 2: Overall Facility Selection Process



Details on each of the steps within this facility selection process is provided in Attachment 'D'.

Physical constraints may limit facility type options available for selection

The above process defines the theoretical process for selecting the facility type for each cycling project. However, physical constraints such as right-of-way (ROW), pavement and boulevard widths and utility constraints can eliminate some facility types from consideration, particularly in retrofit projects.

In the case where an in-boulevard facility is selected, the assumption is that there is sufficient width in the boulevard to accommodate either cycle tracks or MUPs. However, in retrofit projects, road boulevard widths vary, sometimes along the same section of road. As well, there are typically other above and below grade infrastructures and utilities in the boulevard that can also constrain the ability to fit in an in-boulevard facility.

Projects with constrained boulevards may default to MUP as the facility type instead of cycle tracks

Cycle tracks require more width than standard MUPs, by at least 1.0 m. Therefore, in constrained ROWs, MUPs may be selected over cycle tracks due to insufficient boulevard widths and/or significant utility constraints or impacts.

Projects with constrained road pavement widths may eliminate on-street facility types from consideration

Where narrowing of lane widths or reducing traffic lanes are not feasible and/or recommended, in-boulevard facility types such as cycle tracks or MUPs may be the preferred option.

Upgrading or retrofitting on-road facilities are typically much cheaper to build and maintain than in-boulevard facilities

Without reconstructing the road pavement or widening the road pavement, upgrading an existing cycling facility or retrofitting an on-road facility through narrowing or reducing traffic lanes (bike lane, buffered bike lane, protected bike lane or road diet) typically requires only pavement markings and signage. On-road retrofit projects such as buffered bike lanes are, therefore, much cheaper to build than retrofitting cycle tracks or MUPs onto road boulevards.

Where budget constraints exist, closing gaps in the priority network to improve cycling safety through these on-road facilities can be effective and cost-efficient on an interim basis until the longer term, higher order facility can be implemented. Thus, the capital cost of facility types can be a factor in facility selection. Table 1 provides a comparison of capital construction unit costs for different cycling facilities.

Table 1: Cycling Facility Capital and O&M Unit Costs

Cycling /Shared-Use Facility	Capital Cost (\$/km)	Annual O&M (\$/km)
Shared Roadways	\$12,000 - \$50,000	\$ 1,000 - \$ 4,500
Bike lanes & Buffered Bike Lanes	\$25,000 - \$60,000	\$ 6,000
Protected bike lanes	\$300,000	\$ 12,000
Off-road trails (stonedust)	\$450,000	\$ 6,250
Multi-use Paths (concrete)	\$ 950,000 - \$1,100,000	\$ 6,250
Cycle tracks (concrete)	\$1,500,000	\$ 25,000

Retrofitting on-road cycling facilities improves road safety

Adding a cycling facility through narrowing or reducing traffic lanes (bike lane, buffered bike lane, protected bike lane or road diet) can be accomplished without an impact on traffic flow while improving traffic safety. City streets identified for such projects are existing collector roads with wide pavement widths that can accommodate the proposed on-road facility.

Wide pavement widths and traffic lanes promote vehicle speeding in excess of the posted speed limits. Retrofitting cycling facilities onto these roads provides the following benefits:

- Better utilization of existing pavement widths by providing a designated space to improve cycling safety;
- Calming traffic by narrowing excessively wide traffic lanes, thus improving traffic safety and reducing severe collisions;
- Improving pedestrian safety at controlled crossings and intersections.

Where road diets are being proposed as a traffic calming initiative, these locations will also consider the incorporation of a cycling facility to close a gap in the priority cycling network. It is important to note that road diet candidates will only be proposed in locations where the average daily traffic is at or below 20,000 as per the guidelines of the

Ontario Traffic Manual Book 18 and Federal Highway Administration, US Department of Transportation, and where simpler solutions are not available. See Attachment 'E' for a brief summary of road diets. A fuller description of how road diet can be selected is provided in the "Road Diet Review" section of Attachment 'D'.

Recent examples of successful road diet projects in Markham include the 2021 reconfiguration of Copper Creek Drive from four lanes to three lanes plus buffered bike lanes, and the 2010 reconfiguration of Main Street Unionville south of Highway 7 from four lanes to two lanes plus bike lanes and lay-by parking.

Minimizing the impact of each project to vehicular traffic is inherent in the facility selection process

For on-road facilities such as bike lanes and buffered bike lanes, no traffic lanes are being removed. Minimum lane widths are maintained in accordance with design standards for the posted speed limit of the collector road. In most cases, existing road shoulders (edge lines) are proposed to be enhanced and formalized as bike lanes or buffered bike lanes without affecting the traffic lanes. Therefore, these on-road cycling facilities have no negative impact on traffic flow.

For road diet projects, a project typically involves re-configuring a four-lane to a three-lane cross-section plus bike lanes, as was done on Copper Creek Drive. Road diet is employed as a traffic calming measure to improve the overall road safety for all road users while maintaining sufficient traffic capacity for the traffic demand. This is an inherent part of the screening process in identifying road diet candidates.

As noted above, retrofitting on-road cycling facilities improves road safety for all road users.

CAPITAL AND OPERATING COSTS OF THE PROPOSED 10-YEAR CAPITAL PLAN

Low, medium and high investment scenarios were assessed

To help determine an appropriate level of investment in implementing the priority cycling network, three investment scenarios, described in Table 2, were assessed to understand investment level impacts on completing the priority cycling network.

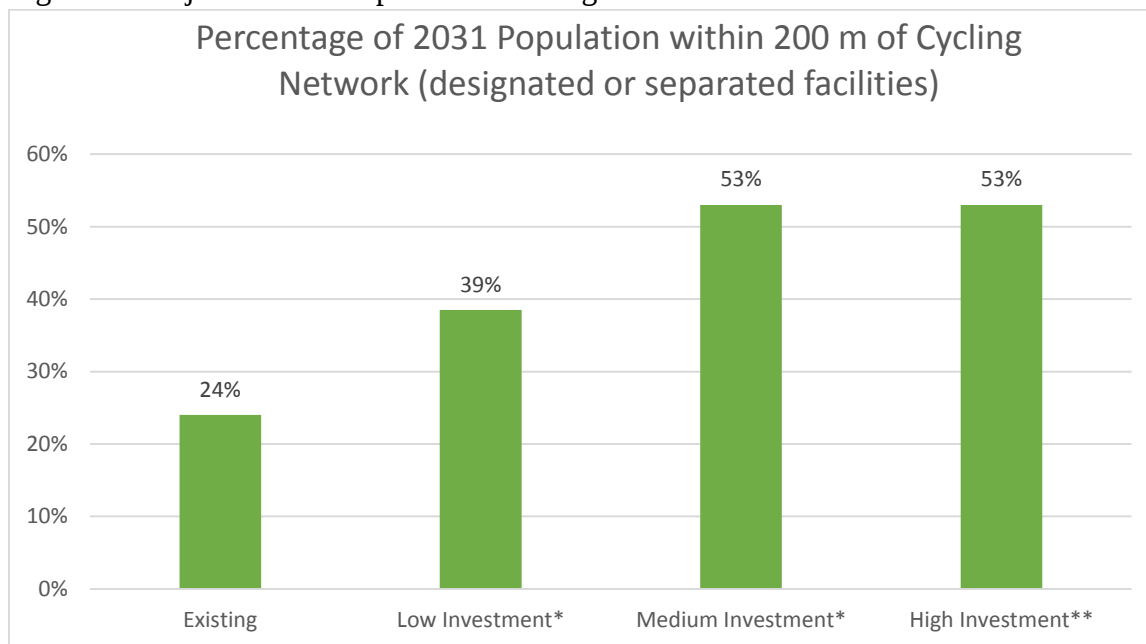
Table 2: Investment Scenarios to Complete the Priority Cycling Network

Scenario	Total Investment on Priority Cycling Network	Time Period to Complete the Priority Network	Average Program Investment per Year
Low Investment	\$53.5M	20 years	\$2.68M
Medium Investment	\$53.5M	10 years	\$5.35M
High Investment	\$53.5M	5 years	\$10.7M

These investment scenarios will complete the priority cycling network in different timeframes of 5, 10 or 20 years. Compared to the Low and Medium scenarios, the High

scenario will have additional logistical impacts and require additional resources to achieve completion of the priority network due to its short timeframe.

Figure 3: Projected 2031 Population Coverage of Investment Scenarios



* after 10-year implementation program

** after 5-year implementation program

Figure 3 shows the proportion of the projected 2031 population living within 200 m of designated or separated facilities in the cycling network, and is an indicator of how the resulting network from each scenario provides connections to all parts of the City, public transit and key origins and destinations, after the 10-year implementation program.

The focus on visible cycling infrastructure is important because people are interested and more willing to try cycling on facilities such as cycle tracks and multi-use paths than on shared routes. Providing access to these facilities is a key objective of the ATMP and priority cycling network, and thus, achieving a 50% access threshold is an important milestone and indicator of progress. This chart shows that only the Medium and High Investment Scenarios meet that threshold.

10-Year Capital Cost of Priority Cycling Network is Comparable to Peer Municipalities

Table 3 provides a comparison of the short-term (10-year) plans of peer municipalities within the 905-region of the Greater Toronto Area in terms of their cycling infrastructure investments. The capital cost of the ATMP priority cycling network compares favourably with the peer municipalities.

Table 3: Municipal Comparison of Cycling Infrastructure Investment

Municipality	Short-Term (10-yr) Plan Cost
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Brampton (2018)	\$ 52.5 M
Mississauga (2018)	\$ 52.5 M
Vaughan (2020)	\$ 125.0 M**
Oakville (2017)	\$ 29.8 M
Markham* (2021)	\$ 53.5 M

*Medium Investment Scenario

**5-year program

City of Vaughan's cycling infrastructure investment for their 2022 – 2026 (5-year) program is approximately \$125M. Vaughan's higher investment is primarily due to a larger capital program as well as a higher proportion of their projects being cycle tracks.

The Medium Investment Scenario for implementing the priority cycling network is recommended

Based on the above scenario assessment and peer municipality comparison, and to maintain Markham's status among peer municipalities, staff recommend that the City proceed with the Medium Investment Scenario as the basis for the development of the 10-year plan as requested by Council.

Draft five and ten-year cycling project priorities have been developed

Based on the above recommended Medium Investment Scenario, draft 5 and 10-year cycling project priorities have been developed.

Table 4 presents a summary of the draft 5 and 10-year capital plan by facility type, the total lengths of each facility type to be built and their associated capital costs.

Table 4: Five and Ten-Year Recommended ATMP Capital Plan Summary

Cycling Facility	Total Length (km)		Capital Cost	
	0 - 5 Years	6 - 10 Years	0 - 5 Years	6 - 10 Years
Shared Roadways	9.0	6.3	\$218,000	\$249,000
Multi-use Paths	14.8	23.2	\$10,617,000	\$21,382,000
Bike lanes	40.2	2.2	\$769,000	\$90,000
Buffered & protected bike lanes	18.6	8.0	\$4,861,000	\$2,054,000
Cycle tracks	3.0	7.3	\$4,589,000	\$7,901,000
Off-road trails	1.2	0.9	\$352,000	\$390,000
TOTAL	86.8	47.9	\$21,406,000	\$32,066,000

Operations budget will increase as more cycling facilities are completed

Cycling facilities are maintained at different levels of service. Table 1 shown earlier includes the annual unit operating costs for the different types of facilities.

Table 5 provides a summary of the annual operating costs for implementing the 10-year cycling capital plan. They represent incremental operational costs as the proposed capital plan is completed. The actual incremental cost will depend on the length and types of

cycling facility constructed each year, and will be requested as part of the annual operating budget approval process.

Also presented in Table 5 is the annual Total Cost of Ownership (TCO) of the cycling capital plan. TCO represents an annualized asset lifecycle cost.

Table 5: Incremental Operating and Lifecycle Costs of the ATMP Capital Plan

Cycling Facility	Total Length (km)		Annual Operating Cost		TCO* (Annual)
	0 - 5 Years	6 - 10 Years	End of 5 Years	End of 10 Years	
Shared Roadways	9.0	6.3	\$ 40,000	\$ 69,000	\$ 102,000
Multi-use Paths	14.8	23.2	\$ 93,000	\$ 238,000	\$ 1,217,000
Bike lanes	40.2	2.2	\$ 241,000	\$ 254,000	\$ 153,000
Buffered & protected bike lanes	18.6	8.0	\$ 112,000	\$ 160,000	\$ 574,000
Cycle tracks	3.0	7.3	\$ 75,000	\$ 259,000	\$ 776,000
Off-road trails	1.2	0.9	\$ 8,000	\$ 13,000	\$ 703,000
TOTAL	86.8	47.9	\$ 569,000	\$ 993,000	\$ 3,525,000
Potential Tax Impact (1%=\$1,647,400)			0.35%	0.60%	

*Total Cost of Ownership (annual) = (Initial Capital Cost + Rehabilitation Costs, if any)/Service life + Annual Operating Cost

Implementation process involves several steps before project construction

Subject to Council approval, implementation of this capital plan will still require a few more steps, including:

- Hire new project managers to provide oversight to the ATMP capital implementation plan;
- Through the Request for Proposal process, retain consultants to conduct detail design for the first 5 year projects, including public/community consultation with impacted stakeholders;
- Review, confirm and obtain Council approval on the detail design and construction program priorities for the first and second year projects;
- Obtain construction capital budget approval from Council;
- Tender the construction contracts.

With this implementation process, the earliest construction project will likely be in 2025.

FINANCIAL CONSIDERATIONS

Funding sources for the first 5-year priority projects and 10-year plan have been identified

At the November 2021 meeting, Council directed staff to assess and include funding for implementing the ATMP in the on-going Development Charges Bylaw update.

Staff have included line items related to the ATMP 10-year plan into the Development Charge Background Study update totaling \$53.5M of which \$22.3M will be funded from

the City Wide Hard Development Charges Reserve, \$19.2M from the City Wide Soft Development Charges Reserve and \$12.0M from other Non-Development Charges sources.

In the draft Development Charge Background Study, 50% of the Non-DC funding will potentially be from the Community Benefit Charge (CBC) and 50% from other non-development related revenues (e.g. Non-DC Growth Reserve). By committing the CBC and non-development related revenues to the ATMP capital plan, funding for the delivery of other future City initiatives may be impacted.

Other City initiatives, that may be funded through CBC, include:

- Automated Waste Management (AVAC system)
- Roads & Other Related Infrastructure (non-DC share)
- Urban Parks
- Parking
- Community Facilities
- Public Realm & Public Art
- Affordable Housing
- Administration of CBC program (e.g. staff costs)
- Markham District Energy Expansion

Other non-development related revenues as described below may be used to fund the non-DC portion of projects identified in the Development Charge Background Study.

The above is subject to the approval of the new Development Charge Background Study and the CBC study in May 2022.

Federal, Provincial and Regional funding programs are available to defray capital and program costs

From time to time, senior levels of government offer direct grant and matching fund programs to municipalities to initiate or expedite projects and programs. Staff will apply to these funding programs as they become available to implement as many of the ATMP capital projects as possible, paying particular attention to reducing the non-DC component of any project or program. The City has been successful in getting funding from Provincial and Regional funding programs in the past for active transportation projects and programs. Examples of past funding sources include:

- the Federal Government's Investing in Canada Infrastructure Program, which includes a funding stream for pathways and active transportation infrastructure;
- the Provincial Ontario Active School Travel Fund (OAST), administered through Green Communities Canada (GCC);
- the Ontario Municipal Commuter Cycling funding program; and
- York Region's Pedestrian and Cycling Municipal Partnership Program.

More recently, the Federal government has started accepting applications to the national Active Transportation Fund (ATF), a five-year, \$400M funding program for active transportation. As reported to the General Committee at its March 21, 2022 meeting, staff

have submitted a series of projects with total project cost in the range of \$14M for funding from this Federal program.

These external funding options may be able to cover costs not eligible through development charges.

Implementing projects and programs will be subject to available funding and the City's annual budget approval process

Capital projects and programs identified for implementation on an annual basis will be submitted to Council for approval as part of the annual budget request and approval process. Each budget request will identify the funding source(s) for the capital costs and indicate the lifecycle and operating impacts.

Life Cycle Implication

As new cycling facilities such as cycle tracks and MUPs are added to City infrastructure inventory, the Life Cycle reserve will be updated accordingly.

HUMAN RESOURCES CONSIDERATIONS

The draft five and ten-year capital plan presented in this report can only be achieved if it is resourced appropriately for implementation. Based on the number of projects and types of project recommended in the capital plan, two additional full-time equivalent staff resources are required for the successful implementation of the above proposed capital plan.

They will be needed to conduct the project planning, detailed design and construction activities of this capital plan. Funding for these two positions are included in the DC funding through the capital administration fee component of each project.

Subject to Council endorsement of this ATMP capital plan, staff will request for these two additional staff resources through the annual budget request and approval process.

ALIGNMENT WITH STRATEGIC PRIORITIES:

The ATMP aligns with the strategic focus for a Safe & Sustainable Community by improving and making active transportation an attractive and sustainable mobility option. Strategic action #3.1.5 states "Implement Active Transportation Master Plan and first and last mile solutions."

BUSINESS UNITS CONSULTED AND AFFECTED:

Operations and Finance were consulted in the development of the capital plan and have reviewed this report.

RECOMMENDED BY:

Frank Clarizio, P.Eng.
Director of Engineering

Arvin Prasad, MPA, RPP, MCIP
Commissioner of Development Services

ATTACHMENTS:

ATMP Implementation Plan – May 30 DSC – Presentation

- A: Proposed ATMP 10-year Capital Plan – Facility Type Network Map
- B: Proposed ATMP 10-year Capital Plan – Phasing Network Map
- C: Proposed ATMP First 5-year Project Priorities
- D: Summary of facility selection process
- E: FHWA Tech Sheet on Road Diet