

Committee of the Whole (2) Report

DATE: Tuesday, May 13, 2025 **WARD(S)**: ALL

TITLE: 2024 CORPORATE ASSET MANAGEMENT UPDATE

FROM:

Vince Musacchio, Deputy City Manager, Infrastructure Development

ACTION: DECISION

Purpose

To seek endorsement of the 2024 Asset Management Plans for Core Assets (Water, Wastewater, Stormwater, Roads and Bridges) and Non-Core Assets (Facilities, Parks, Urban Forestry, Active Transportation, Traffic Control and Streetlights, Fleet and Fire).

Report Highlights

- Development of the 2024 Asset Management Plans for Core and Non-Core Assets aligns with Council's Strategic Priority of Good Governance under the objective of Financial Stewardship and Sustainability.
- Ontario Regulation 588/17 requires the City prepare Asset Management Plans for Core and Non-Core Assets and post them to its website, so they are publicly accessible.
- 98 per cent of core assets (including water, wastewater, stormwater, road and bridge infrastructure) and 88 per cent of non-core assets (including facilities, parks, forestry, fleet, fire and other transportation infrastructure) are in fair or better condition with replacement values of \$6.9 billion and \$1.7 billion respectively.
- The City's capital reinvestment rate for core and non-core assets is currently fifty per cent of the average annual 20-year forecasted capital needs.

Recommendations

1. That Council endorse the 2024 Asset Management Plans for Core and Non-Core Assets and approve making them accessible to the public on the City's website (as specified by Ontario Regulation 588/17) from the Infrastructure Planning and Corporate Asset Management webpage.

Background

Assets are essential to provide the necessary services that contribute to the high quality of life enjoyed by City of Vaughan residents. It is imperative to ensure services are delivered in a safe, reliable, and efficient manner, while sustaining a growing community.

Infrastructure assets are planned, designed, built, owned, operated and maintained by the City.

Overall responsibility of asset management is shared across City departments to effectively and continuously assess, evaluate and improve asset management programs thereby delivering services balanced against considerations of costs and risks.

The City is committed to sustainable asset management practices.

The City has continued to grow its asset base and advance asset management programs to effectively and efficiently manage its assets. Examples of initiatives implemented through proactive asset management include assessing the condition of buildings like community centers, modeling the deterioration of buried pipes in the water distribution system, and evaluating the remaining life on playground equipment to better inform decisions about maintenance, rehabilitation, replacement, and disposal.

Asset Management Planning for Municipal Infrastructure Regulation came into effect in January 2018.

In May 2017, the Province issued the "Proposed Municipal Asset Management Planning Regulation" to implement best practices throughout the municipal sector. The Regulation is intended to provide certainty around future provincial asset management planning requirements and support resilience and sustainability as key aspects of municipal asset management planning. Ontario Regulation 588/17: Asset Management Planning for Municipal Infrastructure came into effect in January 2018.

Ontario Regulation 588/17 is targeted at the issue of many Ontario municipalities having existing infrastructure assets degrading faster than they are being repaired or replaced, putting infrastructure services at risk.

Ontario Regulation 588/17 stipulates that certain asset management elements be in place within Ontario municipalities by specific key dates.

Ontario Regulation 588/17 Requirement	Ontario Regulation 588/17 Requirement Date	City Status for Requirement
Asset Management Policy approved by Council and available on the City's website.	July 1, 2019	Complete
Asset Management Plans for "Core Assets" approved by Council and available on the City's website.	July 1, 2022	Complete
Asset Management Plans for other assets (Non-Core) approved by Council and available on the City's website.	July 1, 2024	Complete
Asset Management Plans augmented with affordability of forecasted levels of service.	July 1, 2025	In Progress

The City's first Asset Management Policy, Core Asset Management Plans and Non-Core Asset Management Plans were approved by Council in March 2019, June 2021 and December 2022 respectively.

The City's first Asset Management Policy was presented at Finance, Administration and Audit Committee on March 4, 2019. The Policy provides a framework to ensure long-term asset sustainability and demonstrates fiscal stewardship for the City's growing and aging asset base. The policy as well outlines roles and responsibilities across the corporation, which are critical to successful implementation of the City's asset management programs.

To empower focused conversations around local and legislated requirements, the policy was divided into six components with the following content:

- 1. Administrative Requirements
 - Strategic alignment
 - Guiding principles
 - Governance and continuous improvement

- 2. Critical Assets and Business Risks
 - Potential risks and vulnerabilities
 - Climate change
- 3. Land-use Planning
 - Community planning
- 4. Infrastructure Financial Management
 - Budgeting and financial planning
 - Capitalization thresholds
- Levels of Service
 - Customer expectations
 - Regulatory requirements
 - Organizational objectives
- 6. Implementation and Communication Procedures
 - Asset management planning inputs
 - Asset management planning outputs

Building on the Asset Management Policy, staff proceeded with the preparation of Asset Management Plans for Core Assets (Water, Wastewater, Stormwater, Roads and Bridges) and presented them at Committee of the Whole (Working Session) on June 2, 2021. Subsequently, staff took the next steps to develop Asset Management Plans for Non-Core Assets (Facilities, Parks, Urban Forestry, Active Transportation, Traffic Control & Streetlights, Fleet and Fire) and presented them at Committee of the Whole (Working Session) on December 7, 2022.

Annual Asset Management Plan updates are necessary to capture new infrastructure assets and associated data with the primary objective being to deliver a financial and technical roadmap for the management of the City's infrastructure assets. The Asset Management Plans provide a means for the City to maximize value from its assets, at the lowest overall expense while, at the same time, maintaining acceptable service levels for residents and promoting green initiatives.

Essential elements of the Asset Management Plans include:

- 1. State of Infrastructure
 - Inventory of assets
 - Condition of assets

- Remaining service life of assets
- 2. Level of Service
 - Performance measures
 - Future demand drivers
- 3. Asset Lifecycle Costs
 - Operations and maintenance
 - Capital renewal and replacement
- 4. Financial Needs and Funding Forecasts
 - 20-Year reinvestment forecast

Development of Asset Management Plans for Core and Non-Core Assets aligns with Council's Strategic Priority of Service Excellence and Accountability under the Objective to Ensure Financial Sustainability and an Effective and Efficient Administration.

Organizations that implement good Asset Management practices will benefit from improved business and financial performance, effective investment decisions, and better risk management. Stakeholders can expect lower total asset life cycle costs, higher asset performance, and confidence in sustained future performance.

In this most recent update, staff have leveraged prior work from external consultants thereby maximizing internal resources, while minimizing costs to update the Asset Management Plans for Core and Non-Core Assets to meet the new regulatory requirements due by July 1, 2025. The updated 2024 Asset Management Plans for Core and Non-Core Assets are attached to this report.

Previous Reports/Authority

Item 2, Report No. 5, of the Finance, Administration and Audit Committee, which was adopted without amendment by the Council of the City of Vaughan on March 19, 2019

The Council-approved Asset Management Policy

Item 2, Report No. 31, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on June 22, 2021

The Council-approved Asset Management Plans for Core Assets

Item 1, Report No. 45, of the Committee of the Whole (Working Session), which was adopted without amendment by the Council of the City of Vaughan on December 13, 2022

The Council-approved Asset Management Plans for Non-Core Assets

Analysis and Options

Fiscally sustainable asset management over the long-term is imperative considering the sizeable valuation of the City's infrastructure and the multiple decades over which the lifecycle of these assets will span.

The replacement value of the City's assets in Water, Wastewater, Stormwater, Roads, and Bridges is sizable at a collective \$6.9 billion.

Service Area	Replacement Valuation	Share of Core Assets Valuation
Water Distribution	\$1.54 B	22.4%
Wastewater Collection	\$1.14 B	16.6%
Stormwater Management	\$2.44 B	35.6%
Road Pavement	\$1.56 B	22.7%
Bridges	\$184 M	2.7%
Total	\$6.87 B	100%

98 per cent of Water, Wastewater, Stormwater, Road and Bridge assets are in fair or better condition.

Service Area	Asset Condition			
	Very Good	Good	Fair	Poor
Water	85.1%	3.7%	3.2%	8.0%
Distribution	05.170	3.7 /0	J.Z /0	0.076
Wastewater	99.3%	0.5%	0.0%	0.2%
Collection				
Stormwater	98.4%	1.1%	0.0%	0.0%
Management		1.170	0.078	0.076
Road	95.6%	4.1%	0.3%	0.0%
Pavement		7.170	0.570	0.070
Bridges	24.1%	71.5%	4.4%	0.0%

The replacement value of the City's assets in Facilities, Parks, Urban Forestry, Active Transportation, Traffic Control and Streetlights, Fleet and Fire is significant at a collective \$1.7 billion.

Service Area	Replacement Valuation	Share of Non-Core Assets Valuation
Facilities	\$703 M	41.4%
Parks	\$296 M	17.5%
Urban Forestry	\$120 M	7.1%
Active Transportation	\$235 M	13.8%
Traffic Control & Streetlights	\$232 M	13.7%
Fleet	\$57.9 M	3.4%
Fire	\$52.8 M	3.1%
Total	\$1.70 B	100%

88 per cent of all Facilities, Parks, Urban Forestry, Active Transportation, Traffic Control and Streetlights, Fleet and Fire assets are in fair or better condition.

Service Area	Asset Condition			
	Very Good	Good	Fair	Poor
Facilities	58.3%	28.0%	12.6%	1.1%
Parks	60.5%	13.0%	2.9%	23.6%
Urban Forestry	65.3%	8.0%	4.1%	22.6%
Active Transportation	68.0%	19.4%	7.0%	5.6%
Traffic Control & Streetlights	59.6%	4.8%	11.9%	23.7%
Fleet	29.4%	5.6%	6.0%	59.0%
Fire	57.1%	2.2%	18.1%	22.6%

A 50 per cent infrastructure funding gap is estimated based on a 20-year forecast of capital needs.

The Asset Management Plans have produced 20-year forecasts of capital needs for Core and Non-Core assets. There is an infrastructure funding gap based on the City's capital reinvestment rate into its Core and Non-Core Assets (forecasted reserve

contributions provide about fifty per cent of the annual forecasted capital needs across Core and Non-Core Assets).

Optimizing existing funding tools increases the City's capacity to close the infrastructure funding gap.

Revisiting the timing and scope of capital projects, optimizing the use of existing infrastructure, funding tools, and revenue sources, such as debt and dedicated contributions to capital reserves, can help increase the City's capacity to begin to close the infrastructure funding gap.

Dedicating a percentage of the property tax levy to fund capital infrastructure projects and future repair and maintenance is an increasingly popular option for municipalities looking to build reserves over time to address infrastructure funding gaps. A variation of this approach is a special levy earmarked for capital infrastructure projects. The levy can be phased in or set at a flat rate. The yield can be set at a percentage of the base year or the current year. It can be brought forward through the budget process, or a separate by-law and it can be built into the tax rate or be broken out and passed separately, with revenues held separately. Property tax bills can also reflect a dedicated infrastructure levy in terms of the tax rate or tax owed.

Financial Impact

The 2024 Asset Management Plans will continue to be an input into the City's Long-Range Fiscal Plan and future annual budget processes. They will facilitate and inform evidence-based decision-making on how the City's assets are operated, maintained, renewed, and replaced. Thereby optimizing costs and mitigating risks over the asset lifecycle while overseeing levels of service provided to residents. Further, the Asset Management Plans also provide formal input into capital project management processes at the City.

Operational Impact

There are no immediate operational impacts anticipated as a result of the report recommendations.

Broader Regional Impacts/Considerations

There are no Regional impacts anticipated as a result of the report recommendations.

Conclusion

The City is in the advantageous position of having most of its infrastructure being relatively young. This is reflected in the fact that 98 per cent of Core assets (including water, wastewater, stormwater, road and bridge infrastructure) and 88 per cent of Non-Core assets (including facilities, parks, forestry, fleet, fire and other transportation infrastructure) are in fair or better condition.

The management of asset lifecycles with appropriate funding of infrastructure reserves is paramount to ensuring asset service levels are maintained over the approaching decades, and to maintain a fiscally responsible and sustainable foundation.

The estimated 20-year forecast of capital reinvestment needs for all Core and Non-Core assets reveals an infrastructure funding gap of approximately 50 per cent.

Staff will continue to regularly update the City's Asset Management Plans to inform future operations and capital expenditure decision-making. Annual update reports will be provided to Council.

Endorsement of the 2024 Asset Management Plans and approval to make them accessible to the public on the City's website from the Infrastructure Planning and Corporate Asset Management webpage is required to ensure compliance with Ontario Regulation 588/17.

For more information, please contact Selma Hubjer, Director, Infrastructure Planning and Corporate Asset Management, ext. 8674.

Attachments

1. 2024 Asset Management Plans for Core and Non-Core Assets, Infrastructure Planning and Corporate Asset Management, March 2025.

Prepared by

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