

Committee of the Whole (2) Report

DATE: Tuesday, May 14, 2024

WARD(S): ALL

TITLE: 2023 DELIVERY REPORT – INFRASTRUCTURE DELIVERY

FROM:

Vince Musacchio, Deputy City Manager, Infrastructure Development

ACTION: FOR INFORMATION

Purpose

The annual Delivery Report provides Council with the portfolio's 2023 accomplishments, and asset group updates with inventory counts and values, as well as an overview of 2023 Infrastructure Development initiatives.

Report Highlights

- 442 projects were undertaken in 2023 with an overall expenditure of \$195 million.
- The Portfolio achieved a 121% "Cash Flow Rate", the percentage of actual versus forecasted cash flow.
- The Development Engineering department joined the Portfolio in January 2022, allowing for further standardization of City-wide Capital Delivery.
- Improvements in program delivery has increased with the further refinement of processes and leveraging available technology.

Recommendations

1. That this report be received for information.

Background

Delivering City spaces through creative and inspired thinking to shape exceptional experiences

The Portfolio's supplementary core values and corresponding behaviours help foster a culture of innovation, collaboration, and creativity. These supplementary core values complement the City's values of RESPECT, ACCOUNTABILITY and DEDICATION, further supporting and advancing our purpose.

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

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. Important elements of the City's asset management cycle are the acquisition, renewal and replacement of infrastructure that provide these services.

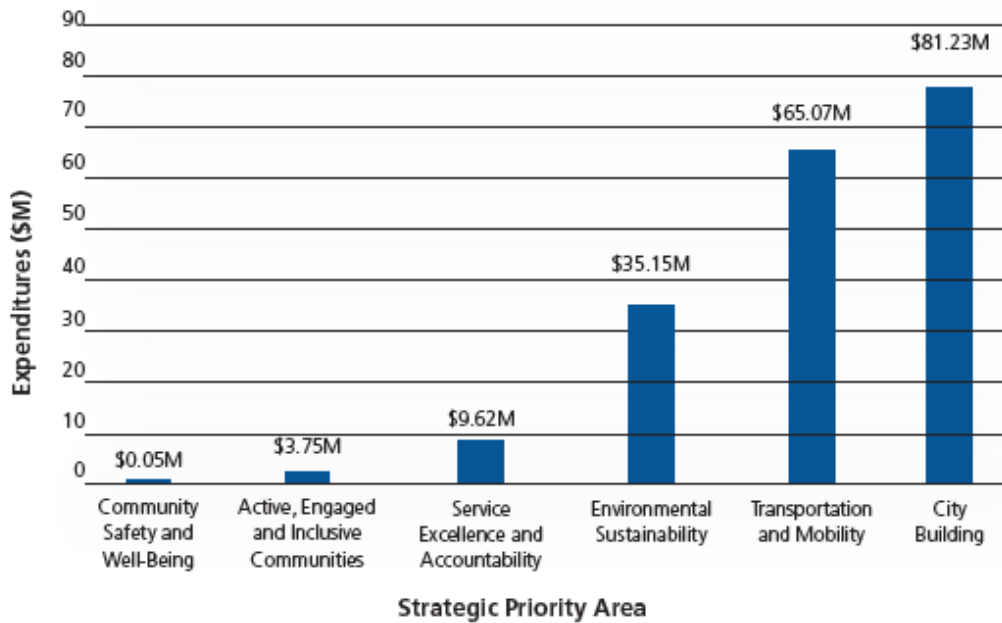
Continuing support of the Council-approved Action Plan to Fight Traffic Gridlock in Vaughan

To accommodate population growth and ensure people can travel throughout Vaughan seamlessly, the Infrastructure Development portfolio worked to progress major projects, such as the Kirby Road Extension and the Canada Drive-America Avenue Bridge. Both of these city-building projects build upon the City's commitment to enhance Vaughan's transportation network and keep residents moving, as part of the Council-approved [Action Plan to Fight Traffic Gridlock in Vaughan](#).

Strong alignment with the 2022-2026 Term of Council Service Excellence Strategic Plan

The Infrastructure Development portfolio continued to contribute to the City's Strategic Plan by planning, designing, initiating and completing projects to support most of the strategic priority areas including Active, Engaged and Inclusive Communities; City Building; Community Safety and Well-being; Environmental Sustainability; Service Excellence and Accountability; and Transportation and Mobility. This contribution significantly aids in delivering on the City's vision to become a city of choice that promotes diversity, innovation and opportunity for all citizens, and fosters a vibrant community life that is inclusive, progressive, environmentally responsible and sustainable.

The following is a summary of the 2023 expenditures (including accruals) by strategic priority:

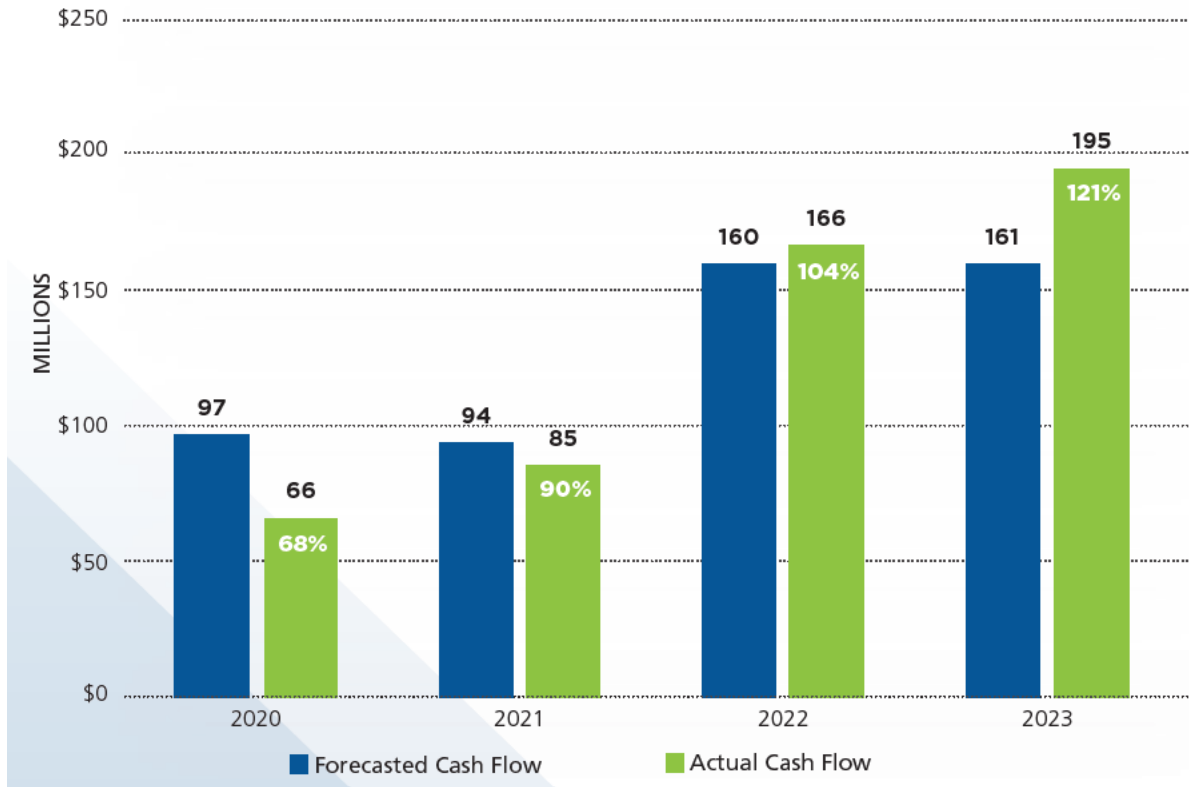


The Portfolio has continued to improve delivery of the annual capital program since the creation of the Infrastructure Development portfolio in 2019.

The main Key Performance Indicator (KPI) to measure the effectiveness of capital delivery for the portfolio is the aggregate cashflow delivery rate. On an annual basis, the portfolio details the delivery plan for the year and determines the required budget utilization (cash flow) to support the delivery of the capital program. This forecasted cash flow is then measured against the actual cash flow to determine the cashflow rate. The portfolio has established a benchmark of 95% cashflow as an appropriate performance measure for the successful delivery of the program. The following is the annual cash flow rate comparison for the past four years.

Annual Forecast to Actual Cash Flow

Note: Percentages on bars represent cash flow rate.



The Infrastructure Development Portfolio achieved a 121% Cashflow rate in 2023.

The portfolio achieved the best cashflow delivery rate since its inception in 2019. In 2023, the portfolio achieved a 121% Cashflow rate with a total delivery of \$195 Million. As a result, the delivery target of 95% was surpassed for a second time.

Previous Reports/Authority

[2022 Delivery Report - Infrastructure Development](#)

Analysis and Options

In 2023, the City invested \$102.48 million in State of Good Repair projects and \$92.39 million in Growth-Related projects for a total of \$194.87 million in expenditures.

The City's capital program can be sub-divided into two main categories: State of Good Repair and Growth-Related programs.

State of Good Repair Program

This program is established through a risk-based review of the condition of the City's infrastructure and its ability to provide the desired level of service to Vaughan's residents. Each asset class is reviewed, and the investment requirements (including rehabilitation and replacement) are determined to ensure that the City achieves maximum value for money. Funding sources for this program are generally capital dollars collected through taxation, infrastructure reserves and the provincial gas tax.

Growth-Related Program

This program is established to deliver new infrastructure to support growth. This includes community infrastructure (e.g. community centres, parks and fire stations), as well as linear infrastructure (e.g. watermains, sewers, sidewalks, cycle tracks and roads). These programs are typically established through the City's Growth Management Strategy and the corresponding master plans that support development. The funding source for this program is primarily collected through Development Charges.

A detailed review of these expenditures, summarized per asset class, are noted below.

In 2023, an investment of \$55.10 million in 125 projects was made to the City's road network.

Roads asset class consists of a network of arterial, collector and local roadways and associated assets to provide the safe passage of vehicles throughout the community. The bridges asset class consists of structures which provide a roadway or walkway for the passage of vehicles, pedestrians or cyclists across an obstruction, gap or facility and are greater than or equal to 3 meters in span.

Overall, the road network includes the following assets:

- roadways
- curb and gutters
- barriers
- pedestrian bridges
- roadway bridges

The 125 road network projects were in various phases throughout 2023:

- 25 in the study phase (includes Master Plans, Environmental Assessments, Feasibility Studies, Pre-Design, etc.)
- 36 in the detailed design phase

- 20 in the construction phase
- 44 were completed.

Some of the key projects include:

- Bass Pro Mills Drive Extension Environmental Assessment
- Canada Drive – America Avenue Bridge
- Kirby Road Extension
- McNaughton Road West Environmental Assessment
- Teston Road Operational Environmental Assessment
- Vaughan Transportation Plan
- Woodbridge Avenue Improvements and Streetscaping Project

An investment of \$34.54 million in 58 projects was made to the City's water, wastewater, and stormwater network.

The water, wastewater and stormwater asset class consist of a network of water and sewer mains and associated assets to provide the safe conveyance of drinking water, sanitary and storm water. This asset class also includes residential and commercial service connections, maintenance holes, and storm water management ponds.

Overall, the water network includes the following assets:

- Watermains
- Chambers
- Hydrants
- Junctions
- Service connections
- Valves
- Water Booster Stations

Overall, the wastewater network includes the following assets:

- Sanitary sewer mains
- Maintenance Holes
- Pump Stations
- Service Connections

Overall, the stormwater network includes the following assets:

- Stormwater mains
- Catch basins
- Inlet/Outlet Structures
- Maintenance Holes
- Management Ponds
- Service Connections

The 58 water, wastewater and stormwater network projects were in various phases throughout 2022:

- 9 in the study phase (includes Master Plans, Environmental Assessments, Feasibility Studies, Pre-Design, etc.)
- 18 in the detailed design phase
- 9 in the construction phase
- 22 were completed.

Some of the key projects include:

- Black Creek Renewal
- Gallanough Park Stormwater Management Facility
- Keele Street Watermain Replacement (Jardin Drive to Langstaff Road)
- Old Maple Area Infrastructure Improvements
- Stormwater Management Facility Improvements
- Watermain Improvements – Phase 1 (Malmo Court, Rodinea Drive, Teston Road)
- Woodland Acres Area Improvements

An investment of \$71.73 million in 118 projects was made to the City's facilities assets.

Facilities asset class consists of all buildings owned by the City of Vaughan to serve citizens, businesses, and City staff.

Overall, the facilities network includes the following assets:

- Administration Buildings
- Community Centres
- Fire Stations
- Heritage Buildings
- Libraries
- Operations Yards
- Sport/Senior Clubs/Other

The 118 facilities projects were in various phases throughout 2023:

- 11 in the study phase (includes Master Plans, Environmental Assessments, Feasibility Studies, Pre-Design, etc.)
- 5 in the detailed design phase
- 77 in the construction phase
- 25 were completed.

Some of the key projects include:

- Carrville Community Centre, Library and District Park
- Dufferin Operations Centre
- Fire Station 7-12

- Garnet A. Williams Community Centre and York Hill District Park
- Vellore Hall Main Floor and Basement Rehabilitation
- Parking Lot Improvements
 - Bathurst Clark Resource Library
 - Al Palladini Community Centre
 - Maple Community Centre
- Vaughan City Hall Welcome Desk – Service Vaughan Project

An investment of \$20.50 million in 103 projects was made to the City’s Parks and Open Spaces Assets.

The parks and open space asset class consist of play spaces and amenities for residents as well as linear open spaces that either expand on the park system or create enhanced linkages between the system of parks and open spaces.

Overall, Parks and Open Space includes the following assets:

- Playgrounds
- Skate areas
- Soccer and Baseball fields
- Splash Pads/Waterplay areas
- Tennis and Basketball courts

The 103 parks and open space projects were in various phases throughout 2023:

- 24 in the study phase (includes Master Plans, Environmental Assessments, Feasibility Studies, Pre-Design, etc.)
- 33 in the detailed design phase
- 18 in the construction phase
- 28 were completed

Some of the key projects include:

- Land acquisition for Future Parkland
- New park developments
 - Alouette Common Park
 - Martin Tavares Park
 - Peter Cipriano Park
- North Maple Regional Park
- Off-leash dog areas
- Park asset renewals
- Pickleball courts
- Bartley Smith Greenway Trail Feasibility Study
- Greenspace Strategic Plan
- Tennis and Racquet Sports Study

An investment of \$12.94 million in 31 projects was made to the City's Active Transportation network.

The Active Transportation asset class consists of walking and cycling infrastructure and facilities offering residents recreational transportation and feasible transportation alternatives to the automobile.

Overall, the active transportation network includes the following assets:

- Sidewalks
- Multi-Use Pathways
- Cycle Tracks
- Bike Lanes
- Multi-use Recreational Trails
- Pathways

The 31 Active Transportation network projects were in various phases throughout 2023:

- 10 in the study phase (includes Master Plans, Environmental Assessments, Feasibility Studies, Pre-Design, etc.)
- 6 in the detailed design phase
- 3 in the construction phase
- 12 were completed.

Some of the key projects include:

- Active transportation infrastructure
- Existing in-boulevard multi-use pathway and trail pavement markings and signage
- Jane Street Uptown Link
- Keele Street Multi-Use Pathway
- Martin Grove Cycle Tracks and Sidewalk Improvements
- New Westminster Drive Road Rehabilitation and Improvements Project
- Vaughan Super Trail Development
- Weston Road Sidewalk and Cycle Tracks

The Infrastructure Development portfolio continues to develop long-range infrastructure planning studies to support future growth.

The portfolio works closely with the Planning and Growth Management portfolio to develop important infrastructure plans to help support and guide future growth within the City. Infrastructure Development oversees several long-range master plans, strategies, and studies, which integrate infrastructure requirements with environmental assessments and planning principles.

The team is committed to protecting the City's interests and needs as it oversees third party projects, plans and initiatives which may impact Vaughan's linear infrastructure. Some of the key projects include:

- Infrastructure System Optimization Program (ISOP)
- Parking By-law 064-2019
- Parks By-law 134-95
- Teston Road Environmental Assessment
- Teston Road Individual Environmental Assessment
- Traffic By-law 284-94
- Transportation Innovation Program
- Urban Water Plan
- Vaughan Transportation Plan
- Yonge North Subway Extension
- Yonge-Steeles Corridor Secondary Plan Collector Roads
- Widening Highway 7

The Real Estate Department continues to support the Growth-Related Projects, ensuring the timely delivery of infrastructure.

The Real Estate team supports city-wide initiatives by securing property rights such as Permissions to Enter, Temporary Easements and, where required, securing and/or disposing of land. In 2023, non-tax revenue of more than \$400,000 was generated from the sale of surplus City lands and/or easements. More than 130 Development applications were reviewed, resulting in more than \$21 million cash-in-lieu of parkland revenue.

In 2023, Real Estate services contributed to the advancement of the following projects:

- Athabasca Drive Sewer Project
- Canada Company Avenue Culvert Rehabilitation Project
- North Urban Park Property in the Vaughan Metropolitan Centre

In addition, Real Estate Services works with the Province of Ontario and the Regional Municipality of York to secure property rights required for regional and provincial infrastructure initiatives in the city, including roads, sewers, transit, and rail.

Development Engineering joined the Infrastructure Development portfolio in January 2022, further standardizing City-wide Capital Delivery.

With the City of Vaughan's new Organizational Structure introduced in January 2022, the portfolio welcomed the Development Engineering department. The team is responsible for the expeditious review, approval, inspection, and processing of

municipal services for land development. The addition of the department to the Infrastructure Development portfolio will help ensure that the vast majority of infrastructure is delivered in a standardized manner. Synergies between the infrastructure planning and delivery groups will allow for a coordinated and efficient approach to growth-related infrastructure projects.

2023 Intake Summary

- 256 Pool Permits
- 1,279 Grading Permits
- 11,539 Inspections Performed

The following is a summary of municipal infrastructure delivered through the development approval process and growth-related projects that were assumed by the City of Vaughan:

2023 Assumption Summary

- 17 Land Development projects with a value of \$36.8M
 - 22.45 lane kilometres of road
 - 18.5 kilometres of watermain
 - 15.6 kilometres of sanitary sewer
 - 18.8 kilometres of sidewalk
 - 13.5 kilometres of storm sewers
 - 459 streetlights
 - 3 stormwater management pond

Some of the key projects include:

- Barons Street Extension to Nashville Road
- Garnet Williams Way Extension
- Block 27 Municipal Class Environmental Assessment for development of road network and servicing
- Block 34 East development of roads and services (Walmart site)
- Block 59 Anatolian Drive and bridge/creek crossing construction

Communications for all projects were significantly enhanced in 2023.

Throughout 2023, Infrastructure Development -- in collaboration with City departments, consultants and our partners in Corporate and Strategic Communications -- developed and executed comprehensive communications strategies to promote awareness and support vital connections with clients, stakeholders, City Council, staff and the community. There were over 700 project communications to support the 2023 capital program. These communications included:

- Project memos
- Newsletters
- Notices
- Public service announcements
- New Releases
- Social Media Postings
- Meetings/consultations
- Reports
- Digital Signage Across City-Networks
- Mobile Signs
- Digital Ads
- Printed promotional materials

Financial Impact

There are no immediate financial impacts associated with this report.

Operational Impact

There is no immediate operational impacts associated with this report.

Broader Regional Impacts/Considerations

There are no broader regional impacts associated with this report.

Conclusion

The significant achievements, as identified within this report, demonstrates that the portfolio remains focus on Capital Delivery. Advancing project management processes and technology has allowed the portfolio to achieve \$195M in Capital Delivery with a 121% “cashflow rate”, the percentage of actual vs. forecasted cashflow. The framework has been developed to undertake larger more complex City Building projects in all asset classes.

For more information, please contact: Kaitlyn Greto, Program Manager – Special Projects, Infrastructure Development, ext. 8370.

Attachments

1. Infrastructure Development 2023 Delivery Report

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