



Planning and Infrastructure Department

2022 Operating Budget
Budget Committee of the Whole



Planning & Infrastructure Department 2022 Draft Budget

2022 Draft Budget Submitted and Reviewed by:

A handwritten signature in black ink, appearing to read "Kelvin Kwan".

Kelvin Kwan
Commissioner, Planning and Infrastructure Department

A handwritten signature in black ink, appearing to read "David Dexter".

David Dexter
Director, Financial Services and Treasurer



Planning & Infrastructure Department 2022 Draft Budget

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Planning and Infrastructure Department Summary

Overview

The Planning and Infrastructure Department is the amalgamation of former Planning and Regulatory Services and former Environment Infrastructure Services, as part of the City’s migration into a three-commission model. For the purposes of budget coordination and presentation, the department’s budget has been separated into two business units: (1) Planning and Building Services; and (2) Infrastructure and Engineering Services.

The Planning and Building Services business unit is responsible for planning, policy development, implementation and ongoing monitoring of the progress and realization of the vision for the physical (land use) future of the City in accordance with the Planning Act. Part of this responsibility also includes the issuance of building permits and the administration and enforcement of the Building Code. The workgroups responsible for commenting and review of applications for development approvals and related permits and inspections all work together to foster a common approach and common expectations, aiming for consistent outcomes that achieve the goals of the Official Plan and the Strategic Plan in a positive way.

The structure of the Planning and Building Divisions are shown below:

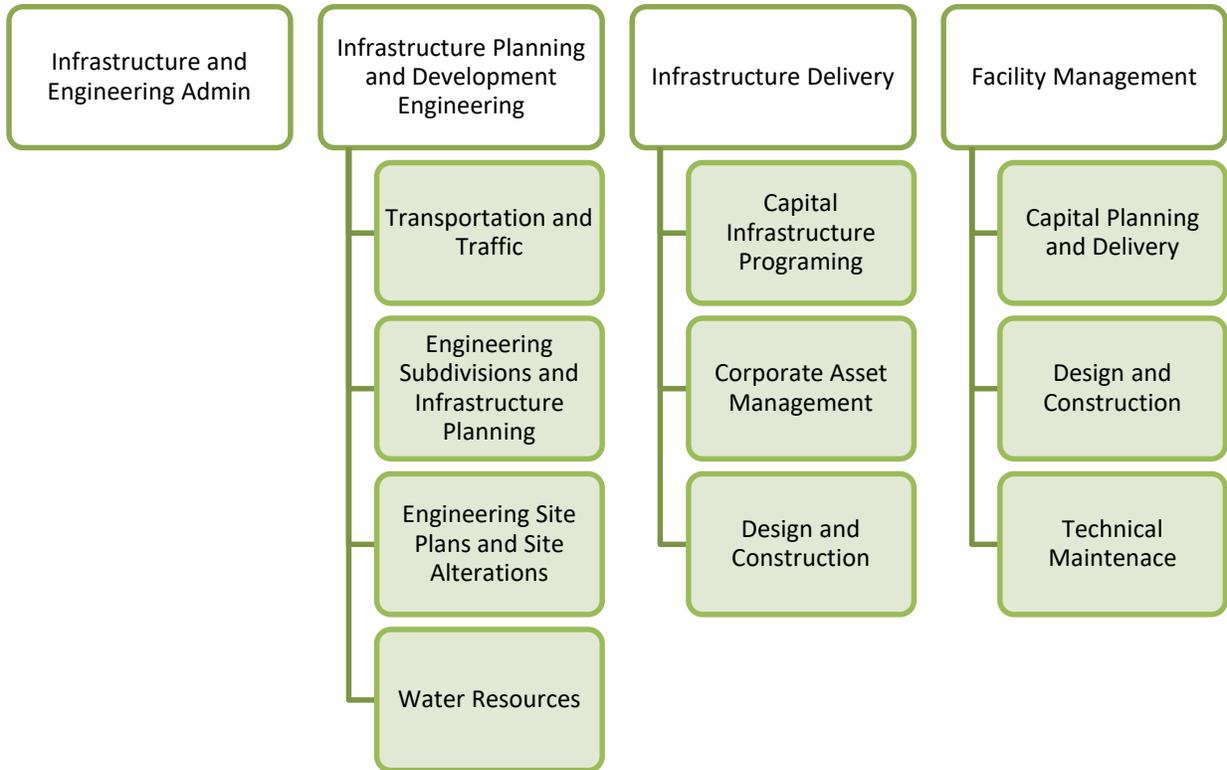




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The Infrastructure and Engineering Services business unit is focused on long-term strategic planning, programming and delivery of the City's infrastructure through the development process or long range capital plans supported by the corporate Asset Management Plan.

The delivery of these services is organized into three Divisions led by the Executive Director for Infrastructure and Engineering Services, reporting to the Commissioner:



Infrastructure Planning and Development Engineering is responsible for development related engineering services, storm water management, infrastructure planning and transportation for the City.

Infrastructure Delivery is responsible for the capital programming and forecasting of the annual budget for the City's municipal and parks infrastructure programs. The Division also provides the function of the Project Management Office for the department to support capital delivery as well as third party engineering reviews and inspection.

Facility Management is responsible for the City's vertical infrastructure including the delivery of capital projects, for renewal and new building construction as well as provide technical maintenance to all City Facilities.

Overview – Continued

2021 Accomplishments

Development Planning

- Opening of the City's Ground Floor customer service hub;
- Approval of the Amazon delivery station in the Headford Business Park;
- Digitization and online launch of Pre-Submission Meeting Requests, Municipal Address and Street Naming Applications, Part Lot Control Exemptions and Site Plan Applications;
- Launch of planning inquiries tracking and municipal addressing applications in Phase 2 of EnerGov;
- Settling of a number of contentious LPAT appeals that resulted in Section 37 contributions to fund the construction of Miles Hill Parkette and the Harding Park Revitalization Project;
- Approval of the first purpose built rental development under the Region's Purpose Built Rental Development Charge Deferral program (13042 Yonge Street);
- Approval of the Additional Residential Unit Zoning By-law; and,
- Ongoing work on the City's new Comprehensive Zoning By-law including public engagements through surveys, stakeholder consultations and public information centres on numerous topical items

Policy Planning

- Concluded Phase 1 and 2 of Official Plan Update
- Completed Community Energy and Emissions Plan
- Digitized Tree Permit Process
- Parks Plan Update Initiated

Building Services

- Completion of E-permit application and review system for housing projects
- Implementation of building permit and inspection processes for the newly created Additional Residential Units (ARUs) program
- Implementation of Online Zoning Bylaw enquiry system
- Substantial completion of Comprehensive Building Bylaw Review project
- Commencement of Digitization of historical records

Infrastructure Planning and Development Engineering

- Implemented digital transformation of divisional processes for digital engineering review and traffic data request process.
- Implemented service improvements resulting from Completion of two LEAN reviews for site alteration permit processes and residential infill permits and the Municipal Inspections process (ongoing).
- Delivery of the Division's core services, and processed over:
 - 340 development submissions
 - 260 site alteration permits
 - 190 grading inquiries
 - 145 traffic and parking inquiries
 - 35 site plan agreements 8 subdivision assumptions
 - 21 development agreements (subdivision and servicing)
- Substantially completed the Stratification Study and Parking and TDM Strategy
- Implemented traffic operations and safety improvements city wide
- Completed 3 Valleyland Restoration feasibility studies and two sediment removal projects

Overview – Continued

2021 Accomplishments (continued)

Infrastructure Delivery

- Inclusion of the City's Core+ asset data including service levels, lifecycle and risk into Enterprise Asset Management System
- Approval of 2021 Asset Management Plan For Core+ Assets
- Capital Budget Lean review completed and improvements implemented
- 5 Design projects completed for Linear and Parks Infrastructure
- 12 Construction projects completed for Linear and Parks Infrastructure
- Project Management Manual Stage 1, 4, 6, and 7 Completed
- Standards Update Draft – Stage 1 and 2 Completed
- Water Distribution Network Model – Calibration Completed
- Waste Water Collection Network Model – Calibration Completed

Facility Management

- Developed continuous improvement culture through implementation of section performance metrics, process analysis and enhanced strategic planning
- Active management of facilities to anticipate approximately 25% utility and operational savings
- Initiated Emergency Preparedness Plan during COVID-19 including Facility shutdown and restart plans
- Ensure staff and public safety through EBC security upgrades, contractor screening, installing protective screens, HVAC re-start program, ensure sufficient PPE Inventory

Overview – Continued

2022 Priorities

Development Planning

- Complete Phase 2 testing and rollout of the PRM System;
- Digitize and launch online all remaining development planning applications and streamline the development approval process through the use of delegated authority where appropriate (i.e. condominium approvals);
- Complete the ongoing LEAN project for development planning inquiries;
- Complete the ongoing Development Services Fee review;
- Prepare servicing allocation update report and consider revisions to the City's Interim Growth Management Strategy;
- Participate in ongoing Ontario Land Tribunal hearings; and,
- Complete public engagement for various issues associated with the Comprehensive Zoning By-law project and continue ongoing work to align with the Official Plan Update

Policy Planning

- Phase 3 of Official Plan Update
- Park Dedication By-law Update and Community Benefit Charge Development
- "Greening The Hill" Environment Strategy Update
- Yonge and Garden Entrance Feature Design

Building Services

- Completion of Comprehensive Building Permit Fee Review project
- Completion of design and Implementation of building permit processes in the new Corporate database system (Energov) in collaboration with IT Division
- Continuation of Digitization of historical records
- Commencement of Digitalization of Site Inspection processes

Infrastructure Planning and Development Engineering

- Complete Development Engineering Fee Review
- Complete Citywide Stormwater Network Model
- Continue to work on the TMP and MESP updates in collaboration with the City's Official Plan and Development Charge By-Law updates
- Provide transportation and engineering support on corporate priorities including City's Official Plan, Comprehensive Zoning By-Law, Centre Secondary Plan, DC By-Law Update and the Yonge North Subway
- Commence/complete work on 6 Stormwater and 3 Transportation E/A's /Feasibility Studies
- Testing and roll-out of Phase 2 of the Energov implementation
- Completion of the LEAN review for municipal inspections
- Completion of the Traffic Operations and Safety study

Overview – Continued

2022 Priorities (continued)

Infrastructure Delivery Services

- Update Enterprise Asset Management to Include all Non-Core+ Assets
- Improvements to asset management prioritization risk framework (e.g. climate adaptation)
- 18 Design projects for Linear and Parks Infrastructure
- 13 Construction Projects for Linear and Parks Infrastructure
- Delivery of RHDDO (Early Priorities)
- 2022 KPI and Roster Report
- Project Management Manual update Stages 2, 3, and 5 and incorporate KPMG Recommendations
- Flood Remediation Environmental Addendum
- City Wide Standards Update Complete
- Water Distribution Infrastructure Citywide Modeling Complete
- Wastewater Collection Infrastructure Citywide Modeling Complete

Facility Management

- Continue to ensure Emergency Preparedness Plan is followed while City facilities are re-opened in 2022 and ensure full alignment with operational needs
- Continue with divisional Organizational Management activities to improve service delivery
- Continue to identify energy efficient opportunities to reduce operating impacts



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Planning and Building Services

2022 Departmental Budget Highlights – By Division

Budget Category	2020 Actuals	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Change
Commissioner's Office	\$ 1,066,255	\$ 416,875	\$ 758,100	\$ 594,100	\$ (164,000)	
Development Planning	2,670,716	2,127,157	3,041,100	3,106,000	64,900	
Policy Planning	2,904,422	2,273,055	3,302,900	3,403,400	100,500	
Building Services	3,819,484	2,979,475	4,493,100	4,728,900	235,800	
Total Expenditures	\$ 10,460,876	\$ 7,796,563	\$ 11,595,200	\$ 11,832,400	\$ 237,200	2.0%
Commissioner's Office	\$ (10)	\$ -	\$ (1,500)	\$ (1,500)	\$ -	
Development Planning	(2,890,874)	(1,991,309)	(2,585,800)	(2,660,200)	(74,400)	
Policy Planning	(476,901)	(306,128)	(322,600)	(338,500)	(15,900)	
Building Services	(5,120,984)	(5,393,569)	(5,794,600)	(6,030,400)	(235,800)	
Total Revenues	\$ (8,488,769)	\$ (7,691,005)	\$ (8,704,500)	\$ (9,030,600)	\$ (326,100)	(3.7%)
Commissioner's Office	\$ 1,066,245	\$ 416,875	\$ 756,600	\$ 592,600	\$ (164,000)	
Development Planning	(220,158)	135,849	455,300	445,800	(9,500)	
Policy Planning	2,427,521	1,966,927	2,980,300	3,064,900	84,600	
Building Services	(1,301,500)	(2,414,093)	(1,301,500)	(1,301,500)	-	
Total Net Budget	\$ 1,972,107	\$ 105,557	\$ 2,890,700	\$ 2,801,800	\$ (88,900)	(3.1%)



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Planning and Building Services

2022 Departmental Budget Summary

Budget Category	2020 Actual	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) Unfavourable	% Change
Personnel - Full-Time	\$ 9,703,359	\$ 7,174,322	\$ 10,890,400	\$ 10,952,900	\$ 62,500	
Personnel - Casual	331,732	487,804	284,400	468,200	183,800	
Contracts / Services	69,896	24,858	145,100	127,600	(17,500)	
Materials / Supplies	160,911	76,733	259,300	267,700	8,400	
Other Expenditures	194,978	32,846	16,000	16,000	-	
Total Expenditures	\$ 10,460,876	\$ 7,796,563	\$ 11,595,200	\$ 11,832,400	\$ 237,200	2.0%
User Fees and Fines	\$ (7,234,403)	\$ (6,606,980)	\$ (7,165,900)	\$ (7,270,100)	\$ (104,200)	
Reserve and Reserve Funds	(1,254,366)	(1,084,025)	(1,538,600)	(1,760,500)	(221,900)	
Total Revenues	\$ (8,488,769)	\$ (7,691,005)	\$ (8,704,500)	\$ (9,030,600)	\$ (326,100)	(3.7%)
Net Budget	\$ 1,972,107	\$ 105,557	\$ 2,890,700	\$ 2,801,800	\$ (88,900)	(3.1%)

Budget Category	2021 Approved Budget	Base	Legislated	Growth/Services Enhancement	2022 Draft Budget
Personnel - Full-Time	\$ 10,890,400	\$ 62,500	\$ -	\$ -	\$ 10,952,900
Personnel - Casual	297,500	183,800	-	-	481,300
Contracts / Services	132,000	(17,500)	-	-	114,500
Materials / Supplies	259,300	8,400	-	-	267,700
Other Expenditures	16,000	-	-	-	16,000
Total Expenditures	\$ 11,595,200	\$ 237,200	\$ -	\$ -	\$ 11,832,400
User Fees and Fines	\$ (7,165,900)	\$ (104,200)	\$ -	\$ -	\$ (7,270,100)
Reserves & Reserve Funds	(1,538,600)	(221,900)	-	-	(1,760,500)
Total Revenues	\$ (8,704,500)	\$ (326,100)	\$ -	\$ -	\$ (9,030,600)
Net Budget	\$ 2,890,700	\$ (88,900)	\$ -	\$ -	\$ 2,801,800



Planning and Infrastructure Department 2022 Draft Budget

Commissioner's Office

Program Description

The Commissioner's Office of the Planning and Infrastructure Department is responsible for providing corporate direction on planning, policy development, implementation and ongoing monitoring of the progress and realization of the vision for the physical (land use) future of the City in accordance with the Planning Act and Building Code. In addition, the Commissioner's office is responsible for long-term corporate asset management planning and delivery of capital projects related to linear assets (roads, sidewalks, underground pipes, water, sanitary and storm sewers), parks, facilities and environmental assets. These functions include long-term strategic planning, programming and delivery of the City's infrastructure.

This office also provides professional advice and assistance to the City Manager, all other municipal departments, as well as to the Mayor and Members of Council

2022 Budget Highlights

Budget Categories	2020 Actuals	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable)/ Unfavourable	% Change
Personnel - Full-Time	\$ 875,594	\$ 401,978	\$ 648,100	\$ 480,400	\$ (167,700)	
Personnel - Casual	121,134	(599)	5,600	5,600	-	
Contracts / Services	31,923	-	10,000	10,000	-	
Materials / Supplies	36,663	15,241	94,400	98,100	3,700	
Other Expenditures	941	254	-	-	-	
Total Expenditures	\$ 1,066,255	\$ 416,875	\$ 758,100	\$ 594,100	\$ (164,000)	(21.6%)
User Fees	\$ (10)	\$ -	\$ (1,500)	\$ (1,500)	\$ -	
Reserves & Reserve Funds	-	-	-	-	-	
Total Revenues	\$ (10)	\$ -	\$ (1,500)	\$ (1,500)	\$ -	0.0%
Net Budget	\$ 1,066,245	\$ 416,875	\$ 756,600	\$ 592,600	\$ (164,000)	(21.7%)

Personnel – Full Time

Personnel - Full Time have decreased \$167,700 due to the elimination of the three receptionist positions due to reorganization within the department

Materials/Supplies

Materials/Supplies have increased \$3,700 in conferences and external training adjusted to reflect correct department headcount

Planning and Building Services

Development Planning

Program Description

The role of the Development Planning Division is to:

- Process and review development applications submitted in accordance with the *Planning Act* and *Municipal Act*. Development applications are considered in the context of the City's Official Plan policies and accepted planning principles. Such applications include Official Plan and Zoning By-law Amendments, Plans of Subdivision, Site Plans, Plans of Condominium, Part Lot Control Exemptions, Sign By-law Amendment, Consent and Minor Variance applications and related matters;
- report and make recommendations to Council, assist and liaise with other departments, developers, applicants, residents and public agencies on matters related to planning and development applications; and;
- appear at the Ontario Land Tribunal and other administrative tribunals in defence of the decisions of Council and/or staff recommendations related to planning matters.

Also under the Development Planning Division umbrella is the Committee of Adjustment which is empowered to:

- vary a Zoning By-law where, in its opinion, the change is considered minor;
- approve the enlargement or extension of a building;
- approve a change in use with respect to a non-conforming building or property;
- interpret the meaning of a Zoning By-law where the by-law is written in general terms; and,
- grant Consents for severances, easements, rights of way, power of sale and validation of title.

2022 Budget Highlights

Budget Categories	2020 Actuals	Preliminary	2021 Approved Budget	2022 Draft Budget	Variance	% Change
		Actuals Sept 30, 2021			(Favourable) / Unfavourable	
Personnel - Full-Time	\$ 2,573,231	\$ 2,035,138	\$ 2,988,000	\$ 3,048,200	\$ 60,200	
Personnel - Casual	59,109	81,056	14,500	14,500	-	
Contracts/ Services	11,585	7,505	13,100	13,100	-	
Materials / Supplies	26,392	2,662	25,500	30,200	4,700	
Other Expenditures	399	796	-	-	-	
Total Expenditures	\$ 2,670,716	\$ 2,127,157	\$ 3,041,100	\$ 3,106,000	\$ 64,900	2.1%
User Fees	(2,890,874)	(1,991,309)	(2,492,700)	(2,565,300)	(72,600)	
Reserves & Reserve Funds	-	-	(93,100)	(94,900)	(1,800)	
Total Revenues	\$ (2,890,874)	\$ (1,991,309)	\$ (2,585,800)	\$ (2,660,200)	\$ (74,400)	(2.9%)
Net Budget	\$ (220,158)	\$ 135,849	\$ 455,300	\$ 445,800	\$ (9,500)	(2.1%)

Development Planning - continued

Personnel – Full-Time

- Full-time Salaries & Benefits have increased due grade/step level, benefit rate and general cost of living increases

Material/Supplies

- Materials/Supplies increase of \$4,700 is a result of membership costs increases offset against a decline in conference and mileage costs to reflect the historical trend in spending for these accounts

User Fees

- Development Revenues increase of \$72,600 reflects fee increases approved in the Tariff of Fees By-Law and historical trend

Reserve & Reserve Fund

- Increase in Transfer from Reserves due to funding for Site Plan Inspector from the Inspection Reserve Reserves

Planning and Building Services

Policy Planning

Program Description

The Policy Planning Division develops and implements a wide range of municipal planning policy initiatives including the development and review of the City's Official Plan. They also conduct area land use studies and provide up-to-date research on a variety of planning topics including the environment, housing, parks and open space, demographics, infrastructure, transportation and the economy. In addition, the Division provides policy development and recommendations on heritage matters as well as detailed urban design reviews of all new development within the City. It plays a key role in monitoring changes in the regional and provincial policy and legislative environment in which the City operates, and provides expert advice to Council on such matters. The Division is also responsible for the policy development and implementation of the City's Public Art Program.

The Park and Natural Heritage Section is responsible for implementing the vision for the City's park and open space system including conducting Park and Trail Master Plans, carrying out detailed analysis including for land acquisitions, providing input to the City's Capital Plan process, and managing developer or agency design-build park/trail projects. This area ensures the City's park, open space, trail and natural heritage interests are protected through the development approval process and the administration of the City's Private Tree By-law. Also part of this Division is the Sustainability Section, which is responsible for broad-scale environmental policies, plans and initiatives such as the City's Environment Strategy, Resilient Richmond Hill climate change initiatives, Urban Forest Management Plan and greenway systems, as well as environmental education and engagement with the community stakeholders.

2022 Budget Highlights

Budget Categories	2020 Actuals	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Change
Personnel - Full-Time	\$ 2,574,606	\$ 2,046,760	\$ 3,114,700	\$ 3,207,700	\$ 93,000	
Personnel - Casual	145,351	187,848	69,800	69,800	-	
Contracts / Services	20,796	12,628	66,500	74,000	7,500	
Materials / Supplies	25,352	20,170	47,900	47,900	-	
Other Expenditures	138,316	5,650	4,000	4,000	-	
Total Expenditures	\$ 2,904,422	\$ 2,273,055	\$ 3,302,900	\$ 3,403,400	\$ 100,500	3.0%
User Fees	\$ (103,243)	\$ (114,103)	\$ (66,700)	\$ (73,300)	\$ (6,600)	
Reserves & Reserve Funds	(373,658)	(192,025)	(255,900)	(265,200)	(9,300)	
Total Revenues	\$ (476,901)	\$ (306,128)	\$ (322,600)	\$ (338,500)	\$ (15,900)	(4.9%)
Net Budget	\$ 2,427,521	\$ 1,966,927	\$ 2,980,300	\$ 3,064,900	\$ 84,600	2.8%

Policy Planning - continued

Personnel – Full-Time

- Full-time Salaries & Benefits have increased \$93,000 due to grade / step level, benefit rate and general cost of living increases

Contracts/Services

- There is a \$7,500 increase in contract services mainly from engagement and marketing costs such as advertising and social media related to on going projects and initiatives

User Fees

- User Fees increased \$6,600 reflective of fee increases approved in the Tariff of Fees By-Law and historical trend

Reserve & Reserve Funds

- An increase of \$9,300 in Transfer from Reserves attributable to increases in personnel costs for 2 fully funded positions (Senior Parks Planner, Parks Planner). funded by the Parks Inspection Reserve

Planning and Building Services

Building Services

Program Description

The Building Division is responsible for the administration and enforcement of the Building Code and all its applicable laws including the Zoning By-law, ensuring compliance with the objectives of the Code in areas of fire and structural safety, accessibility and energy conservation, among others. Compliance with Zoning By-law ensures land use compliance in the construction of buildings. The Division comprises of two Sections – Plans Review and Compliance, and Inspection.

The Plans Review and Compliance Section services all Building Permit types in the architectural, structural, and mechanical disciplines by performing Building Code review to confirm compliance with all applicable laws before the issuance of a permit. In addition, the Section is responsible for the application of Zoning By-laws to building permit applications. The Building Inspection Section enforces the Building Code and other applicable laws through field inspections and the review of professional reports. The investigation of public complaints is also a service provided by the Inspection Section.

The Building Code Act provides municipalities with powers to require building permit fees from permit applicants. In establishing fees, the Act, “The total amount of the fees must not exceed the anticipated reasonable cost of the principal authority to administer and enforce this Act in its area of jurisdiction”. The requirements of the Act do not limit municipalities to the costs directly related to the service; building permit fees can also include indirect corporate management costs related to the provision of service and costs related to future compliance requirements or fee stabilization reserve fund contributions.

The City developed a strategy for service stabilization, in that the Building Permit Stabilization Reserve Fund should be maintained to reduce the resourcing and budgetary challenges associated with a cyclical economic downturn and ongoing legislative requirements under the Building Code Act. As a good practice, a comprehensive review of the Building Division’s ‘fee for service model’ is typically undertaken every few years to maintain a financial sustainable operation. To this effect, the Division has initiated, in collaboration with other Divisions of Planning and Infrastructure Development, the search for a suitable external consultant to carry out the comprehensive fee review study and to provide findings and recommendation on an updated fee structure. This project is expected to be completed in 2022.

2021 has been a very busy year for Building Division as staff delivered excellent service to the building industry in a facilitating high volume of construction activity in Richmond Hill. The Division is on track to match or exceed the previous best results of 2016 in terms of Estimated Value of Construction and building permit fee revenues. As of September, the Estimated Value of Construction for building permits issued, stands at just over 624 million dollars exceeding the previous best of approximately 615 million dollars in 2016. Similarly, the building permit revenues will likely match or exceed the 2016 revenue of approximately 5 million dollars.

The above figures reflect the continued economic growth of Richmond Hill as a city of choice for investment and new residents.



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Building Services - Continued

2022 Budget Highlights

Budget Categories	2020 Actuals	Preliminary Actuals Sept 30, 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Change
Personnel - Full-Time	\$ 3,679,928	\$ 2,690,445	\$ 4,139,600	\$ 4,216,600	\$ 77,000	
Personnel - Casual	6,139	219,499	194,500	378,300	183,800	
Contracts / Services	5,592	4,725	55,500	30,500	(25,000)	
Materials / Supplies	72,504	38,660	91,500	91,500	-	
Other Expenditures	55,321	26,146	12,000	12,000	-	
Total Expenditures	\$ 3,819,484	\$ 2,979,475	\$ 4,493,100	\$ 4,728,900	\$ 235,800	5.2%
User Fees and Fines	\$ (4,240,276)	\$ (4,501,569)	\$ (4,605,000)	\$ (4,630,000)	\$ (25,000)	
Reserves & Reserve Funds	(880,708)	(892,000)	(1,189,600)	(1,400,400)	(210,800)	
Total Revenues	\$ (5,120,984)	\$ (5,393,569)	\$ (5,794,600)	\$ (6,030,400)	\$ (235,800)	(4.1%)
Net Budget	\$ (1,301,500)	\$ (2,414,093)	\$ (1,301,500)	\$ (1,301,500)	\$ -	0.0%

Personnel – Full-Time

- Full-time Salaries & Benefits have increased \$77,000 due to grade / step level, benefit rate and general cost of living increases

Personnel – Casual Staff

- Casual wages and benefits increased \$183,800 to add casual staffs required to help transform the Division moving towards modernization including digitalization of records, and improvement in service levels.

Contracts/Services

- Contracts/Services decreased \$25,000 in consulting costs related to the Comprehensive Building Permit Fees Review to be completed in 2022

User Fees

- User Fees increased \$25,000 in plumbing permit revenues to reflect historical trend of revenue collection

Reserve & Reserve Funds

- There is an increase draw from the Building Permit Reserve of \$210,800 as result of the increase in personnel costs, consulting costs for the upcoming Building Permit Fees Review study offset by the increase in revenues.



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Infrastructure and Engineering Services

2022 Infrastructure and Engineering Budget Highlights – By Division

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Chg
I&E Administration	\$ 411,105	\$ 216,110	\$ 355,000	\$ 364,500	\$ 9,500	
Infrastructure Planning and Development Engineering	3,384,512	3,033,737	4,386,800	4,928,400	541,600	
Infrastructure Delivery	4,210,886	3,662,917	5,092,300	5,089,800	(2,500)	
Facilities Management	11,493,195	8,368,869	14,917,800	15,209,500	291,700	
Total Expenditure	\$ 19,499,698	\$ 15,281,634	\$ 24,751,900	\$ 25,592,200	\$ 840,300	3.4%
Infrastructure Planning and Development Engineering	\$ (1,683,500)	\$ (1,645,682)	\$ (1,956,500)	\$ (2,445,700)	\$ (489,200)	
Infrastructure Delivery	(1,395,477)	(1,030,092)	(1,388,400)	(1,413,500)	(25,100)	
Facilities Management	(1,288,821)	(340,788)	(1,082,400)	(1,145,800)	(63,400)	
Total Revenue	\$ (4,367,799)	\$ (3,016,562)	\$ (4,427,300)	\$ (5,005,000)	\$ (577,700)	13.0%
I&E Administration	\$ 411,105	\$ 216,110	\$ 355,000	\$ 364,500	\$ 9,500	
Infrastructure Planning and Development Engineering	1,701,012	1,388,055	2,430,300	2,482,700	52,400	
Infrastructure Delivery	2,815,409	2,632,825	3,703,900	3,676,300	(27,600)	
Facilities Management	10,204,374	8,028,081	13,835,400	14,063,700	228,300	
Net Budget	\$ 15,131,900	\$ 12,265,073	\$ 20,324,600	\$ 20,587,200	\$ 262,600	1.3%



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Infrastructure and Engineering Services

2022 Infrastructure and Engineering Budget Summary

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Chg
Personnel - Full-Time	\$ 10,382,447	\$ 8,857,559	\$ 12,337,300	\$ 13,029,800	\$ 692,500	
Personnel - Casual	175,013	140,959	201,800	246,100	44,300	
Contract / Services	761,331	715,776	1,018,300	1,024,000	5,700	
Materials / Supplies	7,729,006	5,352,482	10,633,500	10,735,100	101,600	
Other Expenditures	68,403	214,858	177,500	173,700	(3,800)	
Transfers to Other Funds	383,500	-	383,500	383,500	-	
Total Expenditures	\$ 19,499,698	\$ 15,281,634	\$ 24,751,900	\$ 25,592,200	\$ 840,300	3.4%
User Fees	(120,771)	(164,974)	(145,700)	(148,700)	(3,000)	
Reserves and Reserve Funds	(2,822,500)	(1,962,200)	(3,253,800)	(3,712,100)	(458,300)	
Other internal Sources	(545,400)	(454,850)	(545,400)	(598,400)	(53,000)	
Other Revenues	(879,127)	(340,788)	(482,400)	(545,800)	(63,400)	
Total Revenues	\$ (4,367,799)	\$ (3,016,562)	\$ (4,427,300)	\$ (5,005,000)	\$ (577,700)	13.0%
Net Budget	\$ 15,131,900	\$ 12,265,073	\$ 20,324,600	\$ 20,587,200	\$ 262,600	1.3%

Budget Category	2021 Approved Budget	Base	Legislated	Annualization	New / Growth Staff & Programs	2022 Draft Budget	% Chg
Personnel - Full-Time	\$ 12,337,300	\$ 305,600	\$ -	\$ -	\$ 386,900	\$ 13,029,800	
Personnel - Casual	201,800	44,300	-	-	-	246,100	
Contract / Services	1,018,300	5,700	-	-	-	1,024,000	
Materials / Supplies	10,633,500	96,200	-	-	5,400	10,735,100	
Other Expenditures	177,500	(27,000)	-	-	23,200	173,700	
Transfers to Other Funds	383,500	-	-	-	-	383,500	
Total Expenditures	\$ 24,751,900	\$ 424,800	\$ -	\$ -	\$ 415,500	\$ 25,592,200	
User Fees	(145,700)	(3,000)	-	-	-	(148,700)	
Grants / Donations	-	-	-	-	-	-	
Reserves and Reserve Funds	(3,253,800)	(155,700)	-	-	(302,600)	(3,712,100)	
Other Internal Sources	(545,400)	(53,000)	-	-	-	(598,400)	
Other Revenues	(482,400)	(63,400)	-	-	-	(545,800)	
Total Revenues	\$ (4,427,300)	\$ (275,100)	\$ -	\$ -	\$ (302,600)	\$ (5,005,000)	
Net Budget	\$ 20,324,600	\$ 149,700	\$ -	\$ -	\$ 112,900	\$ 20,587,200	1.3%



Planning and Infrastructure Department 2022 Draft Budget

Infrastructure and Engineering Administration

The general administration of this business unit includes the planning, co-ordination and delivery of all engineering and infrastructure related activities spanning the three divisions of:

- Infrastructure Planning and Development Engineering
- Infrastructure Delivery
- Facility Management

The scope of the work includes:

- Initiating and developing capital programs to ensure infrastructure system reliability for the public
- Ensure legislated obligations are satisfactorily addressed
- Assess benchmarks and performance standards to encourage a culture of continuous improvement
- Ensuring that adequate funding and resources are available to complete approved programs
- Providing professional technical advice to the other client Departments and City stakeholders

2022 Budget Highlights

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	% Chg
Personnel - Full-Time	\$ 379,945	\$ 209,468	\$ 260,800	\$ 268,300	\$ 7,500	
Personnel - Casual	13,751	-	-	-	-	
Contract / Services	168	-	1,400	1,400	-	
Materials / Supplies	17,240	6,643	92,800	94,800	2,000	
Total Expenditures	\$ 411,105	\$ 216,110	\$ 355,000	\$ 364,500	\$ 9,500	2.7%
Total Revenues	\$ -	\$ -	\$ -	\$ -	\$ -	
Net Budget	\$ 411,105	\$ 216,110	\$ 355,000	\$ 364,500	\$ 9,500	2.7%

Personnel

- Full-time salaries and benefits increased by \$7,500 due to grade / step level, benefit rates changes and general cost of living increases

Material / Supplies

- Conference and training allocation increased by \$2,000 due to staffing grade level changes

Infrastructure and Engineering Services

Infrastructure Planning and Development Engineering

Program Description

Infrastructure Planning and Development Engineering is responsible for development related engineering services, storm water management, infrastructure planning as well as transportation for the City. This Division oversees the following:

Development Review: As part of core business functions, the Division is responsible for technical reviews and approvals related to new development applications including subdivisions and site plans. These reviews include, but are not limited to, technical reports and designs related to road, water, wastewater, and stormwater infrastructure, traffic operations, parking and TDM, illumination, and noise. As part of this process, the Division also administers the MOEE Transfer of Review process. In addition, the Division addresses development related inquiries related to construction activities.

Transportation and Infrastructure Planning: The Division oversees the development of the Transportation Master and Urban Environmental Master Plans that identify the long-term growth related transportation, linear infrastructure, and storm water needs for the City. This also includes the completion of environmental assessments for projects related to these plans. The Division is also responsible for a number of the strategies and initiatives that support growth including, but not limited to, the City's Parking and TDM strategies, water resources monitoring programs, and the oversight of the City's water, wastewater, and stormwater models.

Traffic Operations and Safety: The Division also oversees traffic operations and safety for the Municipality, undertaking neighbourhood assessments, providing technical advice on traffic safety, operations improvements and implementing related programs, as well as addressing traffic and parking inquiries from the public.

Grading and Site Alteration: The Division also oversees the permitting process for single-family infill homes, pools, and other site alterations under the City's Site Alteration By-Law. As part of this function, the Division also investigates all grading related inquiries and makes technical recommendations for improvements or enforcement under the related By-Law.

2022 Budget Highlights

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2020 Approved Budget	2021 Draft Budget	Variance (Favourable) / Unfavourable	%
Personnel - Full-Time	\$ 3,086,685	\$ 2,792,777	\$ 3,921,900	\$ 4,406,200	\$ 484,300	
Personnel - Casual	149,707	127,204	154,600	185,300	30,700	
Contract / Services	76,482	80,897	198,500	223,500	25,000	
Materials / Supplies	58,973	24,440	68,300	73,700	5,400	
Other Expenditures	12,664	8,420	43,500	39,700	(3,800)	
Transfers to Other Funds	-	-	-	-	-	
Total Expenditures	\$ 3,384,512	\$ 3,033,737	\$ 4,386,800	\$ 4,928,400	\$ 541,600	12.3%
User Fees	\$ (119,000)	\$ (156,582)	\$ (142,100)	\$ (145,100)	\$ (3,000)	
Reserves and Reserve Funds	(1,564,500)	(1,489,100)	(1,814,400)	(2,300,600)	(486,200)	
Total Revenues	\$ (1,683,500)	\$ (1,645,682)	\$ (1,956,500)	\$ (2,445,700)	\$ (489,200)	25.0%
Net Budget	\$ 1,701,012	\$ 1,388,055	\$ 2,430,300	\$ 2,482,700	\$ 52,400	2.2%



Planning and Infrastructure Department 2022 Draft Budget

Infrastructure Planning and Development Engineering – Continued

Budget Category	2021 Approved Budget	Base	Legislated	Annualization	New / Growth Staff & Programs	2022 Draft Budget
Personnel - Full-Time	\$ 3,921,900	\$ 97,400	\$ -	\$ -	\$ 386,900	\$ 4,406,200
Personnel - Casual	154,600	30,700	-	-	-	185,300
Contract / Services	198,500	25,000	-	-	-	223,500
Materials / Supplies	68,300	-	-	-	5,400	73,700
Other Expenditures	43,500	(27,000)	-	-	23,200	39,700
Transfers to Other Funds	-	-	-	-	-	-
Total Expenditures	\$ 4,386,800	\$ 126,100	\$ -	\$ -	\$ 415,500	\$ 4,928,400
User Fees	(142,100)	(3,000)	-	-	-	(145,100)
Reserves and Reserve Funds	(1,814,400)	(183,600)	-	-	(302,600)	(2,300,600)
Total Revenues	\$ (1,956,500)	\$ (186,600)	\$ -	\$ -	\$ (302,600)	\$ (2,445,700)
Net Budget	\$ 2,430,300	\$ (60,500)	\$ -	\$ -	\$ 112,900	\$ 2,482,700

Personnel

- Full-time salaries and benefits increased by \$484,300, where \$415,500 is related to three new staff requests, with the remaining increase related to grade / step and benefits increases of existing positions. The three new staff requests include:
 - Project Manager – Infrastructure Modelling
 - Will oversee and maintain the City’s newly developed stormwater, sanitary, and drinking water models in support of a number of City initiatives, including:
 - Province’s legislated requirement for municipalities to transition to a System-Wide Environmental Compliance Approval (ECA) process by 2022
 - The Asset Management Plan
 - Operation and maintenance of City drinking water, wastewater and storm water infrastructure
 - Municipal infrastructure design and approvals for new developments
 - Project Coordinator – Illumination
 - Will provide technical expertise with respect to illumination across the organization, including:
 - Conducting development related technical reviews, approvals, and inspections;
 - Support on City and Regional capital infrastructure projects;
 - Review of public and Council inquiries related to existing illumination and supporting the enforcement of the City’s Light Pollution By-Law
 - Senior Transportation Planner
 - Will provide both project and development capacity for the Division
 - Tax rate funding for this position will be fully offset by adjusting funding for existing Transportation Engineer positions from 50% to 90% from Development Engineering Review Reserve, as these positions will be repurposed to exclusively focus on development review.



Reserve and Reserve Funds

- Of the \$415,500 related to new staff requests, \$302,600 will be funded directly from the Development Engineering and Inspection reserves. The remaining \$112,900 tax impact will be further offset by increasing reserve draws for existing staff, as these positions will be repurposed to focus on development related activities.
- One time Water Quality Protection Draw \$30,700 to fund Casual Staff to support the legislated transition to system wide Environment Compliance Approvals (ECA)
- Phase in reduction of \$1,000 of Water Monitoring Reserve draw
- Increase users fees through Tariff of Fees update

Contracts/Services

- Removing \$50,000 development engineering fee review project from 2021 and adding one-time \$75,000 to update Health and Safety Standard Operating Procedure project, which is to be fully funded from Inspection Fees reserve

Other Expenditures

- Reduction of \$3,800 in Other Expenditures includes a combination removal of 2021 one-time request and additions of capital cost related to new staff and minor capital request for field staff technology to reduce paper and improve digitization of records, funded from Development Engineering reserve



Infrastructure and Engineering Services

Infrastructure Delivery

Program Description

The division is responsible for the programming and delivery of the City's linear and parks infrastructure projects, and the Corporate Asset Management program (long-term planning and sustainable management of the City's built infrastructure).

The division is structured to provide core services that include Capital programming of these municipal assets and to provide leadership for the development of the annual capital budget and forecast. To support effective service delivery, the Project Management Office (PMO) and inspection services reside in the division to ensure quality assurance and control during project delivery. It also ensures fiscal responsibility and that all infrastructure assumed by the City meets municipal standards.

As well, the Division currently leads the City's ISO14001 Environmental Management System.

2022 Budget Highlights

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable / Unfavorable)	%
Personnel - Full-Time	\$ 3,954,545	\$ 3,436,791	\$ 4,783,200	\$ 4,858,100	\$ 74,900	
Personnel - Casual	11,554	13,755	47,200	60,800	13,600	
Contract / Services	196,775	187,745	175,000	84,000	(91,000)	
Materials / Supplies	33,529	16,512	78,900	78,900	-	
Other Expenditures	14,484	8,114	8,000	8,000	-	
Transfers to Other Funds	-	-	-	-	-	
Total Expenditures	\$ 4,210,886	\$ 3,662,917	\$ 5,092,300	\$ 5,089,800	\$ (2,500)	0.0%
User Fees	(1,771)	(8,392)	(3,600)	(3,600)	-	
Grants / Donations	-	(93,750)	-	-	-	
Reserves and Reserve Funds	(689,500)	(473,100)	(839,400)	(811,500)	27,900	
Other internal Sources	(545,400)	(454,850)	(545,400)	(598,400)	(53,000)	
Other Revenues	(158,806)	-	-	-	-	
Total Revenues	\$ (1,395,477)	\$ (1,030,092)	\$ (1,388,400)	\$ (1,413,500)	\$ (25,100)	1.8%
Net Budget	\$ 2,815,409	\$ 2,632,825	\$ 3,703,900	\$ 3,676,300	\$ (27,600)	-0.7%

Personnel

- Full-time salaries and benefits increased by \$74,900 due to grade / step level, benefit rates and general cost of living increases
- Casual wages and benefits increased \$13,600 for Co-Op / Summer Student position to address seasonal workloads

Contracts/Services

- One-time \$41,000 consulting cost related to LEAN Capital process review completed and \$50,000 for Inspection fee review removed in 2022



Reserve & Reserve Funds

- Reserves and Reserve Funds have increased by \$25,100 due to a combination of:
- Removing One-time funding of \$91,000 for 2021 consulting items
- Increasing Inspection fee draws of \$63,100 to appropriately fund for field staff salary
- Increasing Water and Wastewater allocation of \$53,000 to fund salary changes



Infrastructure and Engineering Services

Facility Management

Program Description

The Division provides planning and administration of all programs required to maintain 62 City facilities. Maintenance of City facilities include functions such as building maintenance, security, utilities and life safety systems. This division also develops strategies and establishes programs to ensure City facilities are maintained to industry standards, for example, the division plays a leadership role in the area of energy conservation and greenhouse gas emissions reduction by implementing recommendations in the City's Energy Conservation and Demand Management Plan (CDM). The division also provides project management services for design and construction of major renovations and new facilities for all City departments.

2022 Budget Highlights

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	%
Personnel - Full-Time	\$ 2,961,271	\$ 2,418,524	\$ 3,371,400	\$ 3,497,200	\$ 125,800	
Contract / Services	487,906	447,135	643,400	715,100	71,700	
Materials / Supplies	7,619,264	5,304,887	10,393,500	10,487,700	94,200	
Other Expenditures	41,255	198,324	126,000	126,000	-	
Transfers to Other Funds	383,500	-	383,500	383,500	-	
Total Expenditures	\$ 11,493,195	\$ 8,368,869	\$ 14,917,800	\$ 15,209,500	\$ 291,700	2.0%
Reserves and Reserve Funds	(568,500)	-	(600,000)	(600,000)	-	
Other Revenues	(720,321)	(340,788)	(482,400)	(545,800)	(63,400)	
Total Revenues	\$ (1,288,821)	\$ (340,788)	\$ (1,082,400)	\$ (1,145,800)	\$ (63,400)	-5.9%
Net Budget	\$ 10,204,374	\$ 8,028,081	\$ 13,835,400	\$ 14,063,700	\$ 228,300	1.7%

Facility Administration

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Varian (Favourable) / Unfavourable	%
Personnel - Full-Time	\$ 2,961,271	\$ 2,418,524	\$ 3,371,400	\$ 3,497,200	\$ 125,800	
Contract / Services	3,541	84,550	116,200	116,200	-	
Materials / Supplies	120,591	149,772	413,500	418,000	4,500	
Other Expenditures	41,255	198,324	126,000	126,000	-	
Total Expenditures	\$ 3,126,658	\$ 2,851,170	\$ 4,027,100	\$ 4,157,400	\$ 130,300	3.2%
Reserves and Reserve Funds	(568,500)	-	(600,000)	(600,000)	-	
Other Revenues	(369,700)	(224,500)	(378,000)	(378,000)	-	
Total Revenues	\$ (938,200)	\$ (224,500)	\$ (978,000)	\$ (978,000)	\$ -	0.0%
Net Budget	\$ 2,188,458	\$ 2,626,670	\$ 3,049,100	\$ 3,179,400	\$ 130,300	4.3%



Planning and Infrastructure Department 2022 Draft Budget

Facilities – Net Budget By Facility Type

Facility by Type	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	%
City Administration	2,553,623	1,727,148	2,811,000	2,903,900	92,900	
Recreation	2,527,973	1,840,023	3,803,200	3,892,500	89,300	
Arenas	1,474,160	561,139	2,130,100	2,139,400	9,300	
Fire Stations	253,362	277,971	358,600	360,600	2,000	
Libraries	693,610	566,038	901,900	907,800	5,900	
Heritage	454,450	367,868	702,000	600,500	(101,500)	
Other	58,739	61,224	79,500	79,600	100	
Net Expenditures	\$ 8,015,916	\$ 5,401,412	\$ 10,786,300	\$ 10,884,300	\$ 98,000	0.9%

Facility Budget by Categories

Budget Category	2020 Actuals	Preliminary Actuals Sept 30 2021	2021 Approved Budget	2022 Draft Budget	Variance (Favourable) / Unfavourable	%
Hydro	\$ 2,852,232	\$ 1,724,866	\$ 4,161,000	\$ 4,299,400	\$ 138,400	
Water	477,214	261,341	937,900	895,000	(42,900)	
Heating Fuel	728,754	481,571	951,300	951,300	-	
Other Material/Supplies	3,335,759	2,644,447	3,929,800	3,924,000	(5,800)	
Materials/Supplies	\$ 7,393,960	\$ 5,112,224	\$ 9,980,000	\$ 10,069,700	\$ 89,700	
Contract / Services	589,078	405,475	527,200	598,900	71,700	
Transfers to Other Funds	383,500	-	383,500	383,500	-	
Total Expenditures	8,366,538	5,517,699	10,890,700	11,052,100	161,400	1.5%
Other Revenues	(350,621)	(116,288)	(104,400)	(167,800)	(400)	
Net Budget	\$ 8,015,916	\$ 5,401,412	\$ 10,786,300	\$ 10,884,300	\$ 98,000	0.9%

Personnel

- Full-time salaries and benefits increased by \$125,800 due to grade / step level, benefit rates changes and general cost of living increases

Material/Supplies

- Utilities is a major expenditure component under Materials/Supplies. Material/Supplies increased by \$89,700 due primarily to changes to utility rates and consumption. The section continues to look for conservation opportunities to reduce overall consumption in order to lessen the annual budget impact

Contracts/Services

- Contracts/Services costs increased by \$71,700 due to a combination of:
 - \$51,700 increased insurance premiums at Municipal Office, these premiums are negotiated rates and current municipal coverage options are limited and
 - Security costs is budgeted to increase by \$20,000 due to contracted rate increases and anticipated increases to need in 2022

Other Revenues

- Other revenues are budgeted to increase by \$63,400 due to the combination of the full year impact of expired lease agreements at the Operations Centre and Municipal Office and the commencing of Post Office (Heritage) rental revenues in 2022

New Staff Request

Project Manager (Infrastructure Modelling)

Overview

Executive Summary

Council approved a \$2,200,000 investment in 2019 to develop drinking water, wastewater and stormwater computer models to help keep the City in compliance with a number of Provincially legislated requirements and to ensure that City infrastructure is planned, designed and operated effectively.

A Project Manager (Infrastructure Modelling) position is needed in 2022 to manage, maintain and update these computer models which will support of a number of City initiatives and activities, including:

- The Province's legislated requirement for municipalities to transition to a System-Wide Environmental Compliance Approval (ECA) process by 2022
- The Asset Management Plan, which is also a Provincially legislated requirement
- The Resilient Richmond Hill plan for climate change mitigation and adaption efforts
- Future capital infrastructure planning and design
- Operation and maintenance of City drinking water, wastewater and stormwater infrastructure
- Municipal infrastructure design and approvals for new developments

This position will be funded by 50% through the Development Engineering Review Reserve to support the review, design and approval of new infrastructure related to development applications. The remaining 50% of the salary is expected to be funded by the drinking water, wastewater and stormwater reserves for the support provided to various divisions for the City initiatives and activities noted above. However, since this position is not accounted for in the rates that fund these reserves, it is proposed that this portion of the salary be temporarily funded through the Development Engineering Review Reserve until a review of the current drinking water, wastewater, and stormwater rate structure can be completed. This rate fee review is expected to occur in 2022/2023.

Background

Council approved the development of computer models for the City's drinking water, wastewater and stormwater infrastructure systems as part of the 2019 capital budget. The computer models were necessary to identify system risks and prioritize capital and operating investments across all three systems. The physical size and sheer complexity of these systems required sophisticated computer modelling to determine:

- How they function today and to optimize their current operation
- How to meet expanding capacity needs due to future growth and intensification
- How to accommodate changes in capacity requirements arising from new regulations and standards
- How to plan for changing environmental conditions such as climate change, drought and flooding conditions

Project Manager (Infrastructure Modelling)

The needed computer models are also required to meet legislated requirements from the Province for Asset Management, as data from these models are a key contributor to the City's Corporate Asset Management Plan. In addition, the models are needed due to the legislative requirement for all municipalities to transition to a System-Wide ECA process for wastewater and stormwater systems.

The three computer models will also provide significant support to Richmond Hill's climate change resilience efforts for the three types of infrastructure by allowing staff to determine what modifications are needed with the changes in weather patterns to ensure these services can continue to be provided to residents reliably and safely. In addition, the ongoing management and maintenance of these computer models will provide staff with the ability to determine whether there is any municipal infrastructure that needs to be improved to mitigate risks to human health, safety, property and the environment. Ensuring safe and reliable drinking water, wastewater and stormwater services is a core municipal responsibility.

The development of these models is currently underway, and they will be operational and ready for staff use in 2022. As such, a Project Manager (Infrastructure Modelling) position will need to be in place by next year to oversee, update, maintain and manage the information for these models on an ongoing basis. Due to the complexity of the computer models and the specialized education, skills, training and expertise that are required to work with these models, a specialized permanent staff resource is needed to oversee the computer. This staff request is consistent with the 2019 operating budget business case approved by Council for the funding of the drinking water, wastewater and stormwater computer model development project. This document indicated that once the models were complete, dedicated staff resources would be required in order to oversee and maintain them in order to ensure these capital investments remain useful over the long term.

This position will reside in Infrastructure Planning and Development Engineering (IPDE), as it will be providing technical support to the development industry as well as various City divisions and external agencies.

Program Description

In order to maintain and make full use of the computer models with data analysis for various City divisions, a dedicated resource is needed. All three models will be maintained in the IPDE Division as a "one stop shop" for drinking water, wastewater and stormwater computer model support and data analysis for greater operational efficiencies.

Once all three computer models are fully completed by the external consultants in 2022, the internal and external maintenance and support needs will begin right away. As such, a dedicated resource is needed in the IPDE Division in 2022 so they can develop detailed knowledge of the models to support the current and future infrastructure needs for the City as well as developers.

The primary tasks and duties of this dedicated staff resource will be to oversee and maintain all three computer models, including ensuring external data sources that the models use (such as new GIS and digital topographic data) are correctly and promptly updated into each model. This position will also provide support towards a number of City divisions (including, but not limited to, Infrastructure Delivery, Public Works Operations, and Policy Planning) which will require information and data analysis from the computer models to conduct infrastructure repair, future capital project design, climate change adaption and asset reporting to the Province as required by legislation.

Project Manager (Infrastructure Modelling)

For instance, the IPDE division will be using the models to manage the different infrastructure systems and have the ability to report annually to the Province, a new legislative requirement that comes into effect in 2022.

In addition, the data contained within the models will be a valuable source of information for Planning and Development Engineering staff to more efficiently process development applications and for developers and their consultants to design new infrastructure that will ultimately be connected to the City-owned system.

City capital projects will use the data analyzed from the computer models to determine if any drinking water, wastewater or stormwater pipes needs to have a design change and to confirm that this change will not adversely impact the services provided to the public (for example, pipes under a road that is being reconstructed).

Another example of critical model usage includes the ongoing data needs of staff in Public Works Operations (PWO), who currently pay external consultants for modelling services information for both water distribution and wastewater collection operational issues, including water distribution pressure and flows in and around the Mackenzie Health Centre, low pressure complaints and servicing throughout the City, and wastewater surcharge conditions and infrastructure assessment.

This position will allow Richmond Hill to continue to fulfill its obligations for wastewater and stormwater management systems under Section 53 of the Ontario Water Resources Act as the City transitions to a System-Wide ECA. The work from this staff position will also allow the City to remain in compliance with Provincial asset management legislation, Ontario Regulation 588/17 (Asset Management Planning for Municipal Infrastructure). Although the original 2019 operating budget business case for the computer model development project had identified multiple dedicated staff resources once the models were complete, at this time it is recommended that only one staff resource be approved during the transition period towards full model usage, in order to allow time determine whether additional staff is required based on the actual demand from internal and external groups.

Relationship to Council's Strategic Priorities 2020-2022:

The staff resource is in support of Council's 2020-2022 Strategic Priority of "Fiscal Responsibility", as it will provide City staff with crucial information for the efficient use of funds towards the maintenance and management of Richmond Hill's drinking water, wastewater and stormwater assets, and will ensure better infrastructure is built by developers for the City-owned system, as well as provide key information towards the Asset Management Plan. It also allows the City to better identify and plan infrastructure needs and program them appropriately in the City's Capital Plan, and will be used to establish appropriate water, wastewater and stormwater rates in the future.

This position also supports Council's 2020-2022 Strategic Priorities "Balancing Growth and Green" and "Getting Around the City" since each of the three infrastructure systems that are modelled have cross connections with various developments, initiatives and City asset and properties.

Climate Change Considerations:

During the course of the development of the drinking water, wastewater and stormwater computer models, impacts to each system due to climate change are being investigated. The development of these models allows for City staff to determine the impacts that climate change will have and where funds should be focused to minimize those future impacts. As new climate change information becomes available, the computer models will be updated to better identify the vulnerabilities and weaknesses of each system so funding can be used more effectively to mitigate health and safety risks, as well as property impacts to the public, and will ultimately reduce liability for the City.

Comparative Analysis

A number of other nearby municipalities which already have large-scale system-wide computer models also have dedicated staff resources for the management and maintenance of these models. Both the City of Markham and City of Toronto have dedicated staff resources for their wastewater and stormwater computer models. Similarly, the City of Kitchener, the municipality whose model development framework was used for Richmond Hill's stormwater computer model, also has dedicated staff resources for the ongoing maintenance of their wastewater and stormwater computer models.

Analysis of Alternative Approaches

Three alternatives were considered in lieu of securing a dedicated staff resource for the maintenance and management of the drinking water, wastewater and stormwater computer models: 1) Do nothing, 2) Use existing staff resources, and 3) Use the services of external engineering consultants for the maintenance and support of the models.

The first alternative, Do Nothing, means that once the three computer models are complete and ready for use, they will not be maintained in a standard or fulsome way, and there will not be a dedicated resource available to support internal and external requests. The outcome of this alternative will result in the models not being fully utilized as the data will become outdated quickly if it is not regularly updated, and new additions to the model will not be input in a standard way such that the model results will become less reliable and useful. The usefulness of the models will also be reduced since the use of the model requires a specialized skillset with the adequate technical knowledge about the three infrastructure system types and of complex computer models. Over time, this alternative would result in the \$2,200,000 of capital funding invested by the City for the development of the models to become obsolete without regular updates, upkeep and oversight.

The second alternative, using existing staff resources, means that the computer models will be maintained and managed internally with one or more staff already working for the City. Although some basic tasks for the models will still be completed, this alternative only slows the progression towards obsolescence since all of the required maintenance tasks will not be completed due to a lack of capacity with the existing staff complement. In addition, what little maintenance that is conducted will likely contain errors that will make the computer models less reliable since the needed specialized knowledge and skills are not fully available with existing staff.

Project Manager (Infrastructure Modelling)

The third alternative, using the services of engineering consultants, means that the City will subcontract the ability to use the models to an external consultant company and will not have the knowledge and skillset for the operation of the models internally. The cost for these services are estimated to be in the order of \$200,000 to \$300,000 per year. Using an engineering company potentially reduces the timeliness of the resource linked to the models which will result in delays during critical times (e.g. emergency repairs to infrastructure, or for a sensitive capital project or development) and eliminates the increased internal knowledge of the infrastructure that the City owns and operates each day. Finally, this alternative does not allow for value-added benefits that an internal dedicated staff resource would provide as only core tasks will be performed by the consultant. In addition to this alternative being more costly than an internal City staff resource, there are also increased risks to the management of City infrastructure as there is less direct oversight of the model, and fewer overall benefits to the Corporation. It should also be noted that this scenario will continue to require City staff time and resources to oversee, coordinate, review and provide direction to the consultant.

Cost and Benefit Analysis

Part of the function of these models will be used to inform and support the design and approval of new infrastructure delivered through development. The models will also need to be updated to include this infrastructure once it is constructed. It is anticipated that 50% of the Project Manager's efforts will be related to these tasks. As such, 50% of the salary and overhead for this position will be funded through the Development Engineering Review Reserve, which actively receives revenues from fees collected through development approvals and is intended to pay for the staff time and minor capital costs related to these services that the City provides.

The remaining 50% of the Project Manager's efforts will be related to providing modelling and data analysis information to other City divisions, such as the Infrastructure Delivery division for City capital projects, the Public Works Operations divisions for the ongoing operation and maintenance of the drinking water, wastewater and stormwater infrastructure, and the Policy Planning divisions to support the planning and implementation of climate change mitigation measures in Richmond Hill. As such, 50% of the salary and overhead for this position will be funded through drinking water, wastewater, and stormwater reserves in the future.

However, as the rates that fund these reserves currently do not account for this position, this salary will be funded entirely from the Development Engineering Review Reserve until a review of the drinking water, wastewater, and stormwater rates can be completed, which is expected to occur in 2022/2023.

Although more than one dedicated staff resource is likely required to meet the internal and external demand for the computer models in the long term, it is recommendation that only one staff resource be approved at this time as the City transitions towards full model usage, and also has the opportunity to evaluate long term needs and demands. The estimated costs of the dedicated resource are presented in the table below.

Business Case - New Staff Request

Project Manager (Infrastructure Modelling)

	Current Year (2022) Impact	Full Year (2023) Impact
Start Date	01-Jan-22	
End Date or Contract Terms	31-Dec-22	
Full Time or Contract	Full Time	Full Time
CUPE/Admin/SEA/FIRE	Admin	Admin
Grade	7	7
Step	5	5
Annual Salary	\$ 130,600	\$ 132,800
Annual Benefit	31,600	31,600
Operating Costs		
Salaries (Prorated Salary Based on Start Month)	130,600	132,800
Benefits	31,600	31,600
Corporate allocation for training	300	300
Corporate allocation for conference	1,400	1,400
Equipment & Vehicle Rental		
Specialized or mandatory training		
Membership		
Uniforms		
Minor Capital (cell phone and smart phone charges)		
Total Operating Costs	\$163,900	\$166,100
Funding Source		
Reduction in casual wages & benefits		
Program efficiencies (contracts, consulting, etc)		
Development Engineering Review Reserves	163,900	
Water / Wastewater / Water Quality Reserve		166,100
Tax Rate	0	0
Total Funding Sources	\$163,900	\$166,100
Difference	0	0
Capital Costs		
Office Furniture (<i>If Required</i>) (\$7.5K) & desktop with standard software (\$4,800) (Desktop or Laptop Computer, Standard Corporate Software, Soft/Land Line Telephone and Associated Service costs, Data/Telco cable runs (<i>If Required</i>) etc). Rugged Toughbook (\$7,600) with vehicle mount and other accessories (\$1,800). Smartphone & first year licensing/operating costs (\$1,100)	\$8,000	
Office built for Managers and above (<i>if Required</i>) (\$35K)		
Computer hardware/software beyond standard issue	\$ 1,000	
Vehicle		
Total Capital Costs	\$9,000	\$0
Funding Source		
Development Engineering Review Reserves	9,000	
Water / Wastewater / Water Quality Reserve		
Cash to Capital Reserve		0
Total Funding Sources	\$9,000	\$0
Difference	0	0
Total Operating and Capital Costs	\$172,900	\$166,100

New Staff Request

Project Coordinator (Illumination)

Overview

Executive Summary

- The Infrastructure Planning and Development Engineering Division (IPDE) is requesting the approval of an **Project Coordinator (Illumination)** position for 2022.
- Illumination expertise has been identified as an organizational **gap** that exists across the organization, and has been included in the Infrastructure Planning and Development Engineering Division's Operating Budget –year outlook since 2020. This need was further validated through SWOT analysis conducted for both the Infrastructure and Engineering Business Unit and Infrastructure Planning and Development Engineering Division in 2021.
- This role was historically being supported by the previous Senior Traffic Analyst who has since retired and had knowledge and expertise in this specialty area from their previous role with Richmond Hill Hydro. While not part of the job requirements for the Senior Traffic Analyst, the organization was able to leverage the staff members knowledge and undertook these responsibilities in addition to the responsibilities associated with the Senior Traffic Analyst position.
- When the staff member retired in late 2020, attempts were made to recruit an individual with the qualifications and skills in both the areas of illumination and traffic safety/operations. It became apparent that illumination is a very specialized area, which traffic specialists do not typically have expertise. The demand for illumination expertise has been growing as illustrated in Figure 1.
- The Project Coordinator (Illumination) will support a number of Divisions across the organization, including but not limited to the IPDE, Infrastructure Delivery Division, Community Standards Division, and the Public Works Operations Division. This position will provide technical expertise and support with the development related reviews, approvals, and inspections; City and Regional capital infrastructure projects; review and enforcement of public and Council inquiries related to existing illumination and the City's Light Pollution By-Law.
- Approximately 80% of the work performed by this position will be related to development review, approvals and inspections. As such, the salary and overhead will be 40% funded from the Development Engineering Review Reserve fund and 40% from the Development Inspection reserve fund. The remaining 20% of salary and overhead will be tax supported.

Background

Historically, the IPDE department's former Senior Traffic Analyst has provided illumination support and expertise for the Division as well as to various Divisions across the City including but not limited to the Infrastructure Planning and Development Engineering Division (IPDE), Infrastructure Delivery Division, Community Standards Division, and the Public Works Operations Division. While this is not a job function of the Senior Transportation Analyst, this legacy function was inherited by the previous incumbent in this role based on the experience and knowledge gained through duties performed in their previous role with Richmond Hill Hydro.

Business Case - New Staff Request

Project Coordinator (Illumination)

However, as the City has continued to grow and intensify, it became apparent that the Senior Traffic Analyst could not meet the increasing demands of their core traffic responsibilities, while continuing to provide the illumination support and expertise to the Division and across the organization.

As such, the need for a Project Coordinator (Illumination) position was identified through the City's 2019 Operating Budget process, and has been included in the IPDE Division's 3-year outlook since 2020. However, this position continued to be deferred due to other organizational priorities.

This organizational gap and the need for a specialist position has been subsequently confirmed as part of SWOT analysis conducted with the creation of the Infrastructure and Engineering Services business unit in 2020, and further SWOT analysis conducted in 2021 for the IPDE division.

The former incumbent Senior Traffic Analyst retired in late 2020. As part of the recruitment process for their replacement, attempts were made to find a candidate with the qualifications to provide both traffic operations and safety expertise, as well as illumination expertise. Through this process, it became very apparent that the specialized qualifications and education, experience, and training required from illumination perspective are not typically possessed by traffic safety and operations professionals.

Currently, the illumination function being is temporarily filled through an internal secondment, which has been funded through available 2021 gapping resulting from transportation vacancies early in the year. However, these transportation positions have since been filled and the gapping funds will no longer be available in 2022.

It should be noted that formal processes, qualifications, and responsibilities have been established to clearly outline the requirements of this position from a corporate perspective.

Role

As noted above, the Project Coordinator will provide support and expertise to various departments and divisions across the organization, as follows:

- **Development Applications and Inspections:** The Project Coordinator (Illumination) will provide technical expertise and reviews of lighting designs and photometric plans related to new subdivision and site plan applications, as well as conduct assumption and end-of-maintenance inspections for municipal illumination assets that are delivered as part new development.
- **Capital Project Support:** The Project Coordinator (Illumination) will provide technical illumination expertise and input to the lighting design for new City facilities and linear infrastructure delivered by the Infrastructure Delivery and Facility Management Divisions, including compliance with the City's illumination standard and Light Pollution By-law. This position will also provide technical support for illumination upgrades for existing facilities and linear infrastructure, as well as coordination with Regional illumination projects and assets.
- **Illumination Assessments:** The Project Coordinator (Illumination) will provide technical expertise and support to the Public Works Operations, by carrying out detailed illumination assessments to provide Public Works Operations staff with the necessary technical information and recommendation to address public inquiries regarding the municipal lighting and standards.

Business Case - New Staff Request

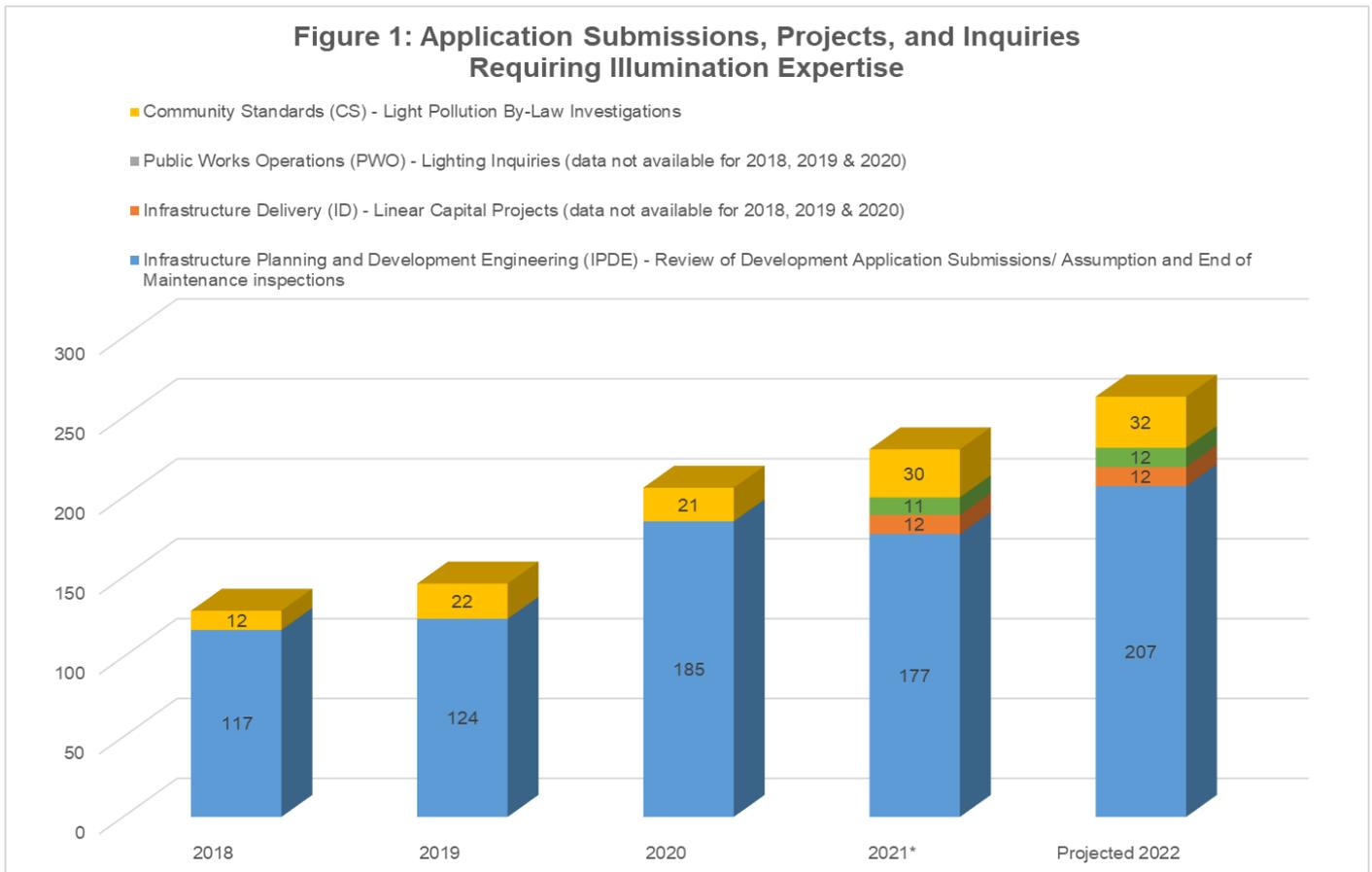
Project Coordinator (Illumination)

- Light Pollution By-Law Compliance:** Similarly, the Project Coordinator (Illumination) will support the Community Standards Divisions, by carrying out technical assessments related to public inquiries/complaints and making recommendations with respect to compliance and enforcement of the City’s Light Pollution By-law.
- Other Functions:** The Project Coordinator (Illumination) will also provide strategic and technical support various corporate initiatives such as asset management, capital planning, future standards development and updates, sustainability policies and plans, etc.

Need

As noted above, Illumination is a specialized technical field that requires very specific education, training, knowledge and experience, which is not possessed or required by any current positions within the organization. As such, a Project Coordinator (Illumination) is needed to continue to provide the technical expertise and support for the services noted above that are currently offered by the City.

Furthermore, as indicated in **Figure 1**, the assignments and projects requiring specialized illumination expertise have increased year-over-year since 2018, and are expected to continue to do so in the foreseeable future as the municipality continues to grow and intensify, as municipal standards continue to shift and evolve, and as aging infrastructure needs to be repaired, replaced or upgraded.



* 2021 total includes 153 actual submissions as of August 2021 and 77 projected submissions to end of year. Breakdown of submissions received by August 2021: 118 (IPDE), 8 (ID), 7(PWO), 20 (CS)

Business Case - New Staff Request

Project Coordinator (Illumination)

The workload represented by this data supports the need for a full-time Project Coordinator (Illumination) in order to be able to provide timely responses, meet established review times, and achieve customer service objectives of the Municipality.

Risks to the City and Other Divisions

- **Reputational Risk:** As Illumination related workload continues to increase, City's ability to meet their customer service objectives, including meeting turnaround times for development submissions, processing timely assumptions, or providing timely responses to the public. This risks negative impacts to the reputation of Council, the Municipality, as well as other Divisions and Departments.
- **Development Process:** Illumination review is one component of the larger overall planning application approval process. Not being able to provide timely review for development application submissions can delay this overall process, which affects the customer service objectives of other divisions within the organization, including the Development Planning Division.
- **Legislated Timelines:** It should be further noted that timelines for responding to development applications are legislated through the Planning Act, and delays in these responses expose the City to potential to Ontario Land Tribunal (OLT) appeals for lack of response, and puts the decision-making on Planning Applications in the hands of the OLT rather than staff and Council.
- **Infrastructure Delivery:** Without Lighting input to capital design projects, there is potential delay to the delivery of key linear infrastructure projects or that additional lighting expertise may need to be outsourced as an additional expense to the City to ensure that the Illumination Standards and Light Pollution By-law requirements are met.
- **Customer Service Inquiries:** There is risk that the City may not be able to provide timely responses to lighting inquiries received by the Public Works Operations and Community Standards Divisions or that additional lighting expertise may need to be outsourced by the respective Divisions to provide the technical justification.

Program Description

Timeline: Based on the existing and projected responsibilities to support the various Divisions, the Project Coordinator (Illumination) position is required as soon as possible, starting in January 2022.

Position Summary: Reporting to the Manager, Transportation and Traffic, the Project Coordinator (Illumination) position will be responsible to provide lighting expertise on various projects in the Infrastructure Planning and Development Engineering (IPDE), Infrastructure Delivery (ID), Public Works Operations (PWO), and Community Standards (CS) Divisions.

For IPDE, the this position is responsible for the review and inspections of municipal lighting and private site lighting submissions in support of development applications submissions for compliance with City's Illumination Standards and Light Pollution By-law. For Infrastructure Delivery, the Project Coordinator (Illumination) is responsible for the review of street and pedestrian lighting for City and Regional roads projects and provides input to the City's capital forecast. The Project Coordinator (Illumination) will also support Public Works Operations and Community Standards by providing technical assessments to address customer service inquiries with respect to lighting.

Business Case - New Staff Request

Project Coordinator (Illumination)

Key Duties and Responsibilities:

- Review and approve illumination designs, photometric plans and lighting studies in support of development applications.
- Conduct assumption and end of maintenance inspections of new infrastructure delivered through development to ensure compliance with City's Standards and Light Pollution By-law.
- Coordinate lighting asset information/documentation regarding lighting with multiple divisions including Operations, Financial Services, GIS.
- Liaise and correspond with the public, developers, consultants, other departments, and external public agencies in the investigation of lighting issues related to development applications an/or public inquiries.
- Review and provide input regarding street and pedestrian lighting for both City and Regional capital projects.
- Provide input to the 10-year capital plan regarding illumination projects.
- Provide technical support to other Divisions/Departments such as Community Standards and Public Works Operations by carrying out investigations related to lighting inquiries/complaints received from the public, and providing recommendations for appropriate actions. These investigations include, but are not limited to technical reviews and assessments, site visits, data collection.
- Lead or facilitate changes to City's existing illumination standards & specifications, by-laws, as well as the development of new policies and standards.

Relationship to Council's Strategic Priorities 2020-2022:

This resource supports the following Strategic Priorities:

Balancing Growth and Green – The position ensures that lighting within the Municipality is compliant with the City's Standards and Light Pollution By-laws, as well as industry guidelines, which fosters the implementation of sustainable lighting that is energy efficient and mitigates negative impacts on the environment – both for public assets as well as private sites.

Fiscal Responsibility – The position will ensure that municipal lighting delivered through capital projects or development, is designed and installed in accordance the City's which will help to achieve the full asset life of this infrastructure, while minimizing increased maintenance and unnecessary replacement/upgrade costs.

Strong Sense of Belonging – Lighting has the potential to refine and define Richmond Hill's identity through the development of a unique sense of place (e.g., Weldrick-Nightstar Bridge). As the City continues to grow there is an opportunity for the Project Coordinator (Illumination) to develop and refine guiding standards, plans, strategies and policies for integrated lighting approaches that support place-making in the public realm, particularly along & within key corridors and outdoor destinations.

Getting around the City – Appropriate illumination is essential to ensure the safe movement of pedestrians, cyclists and drivers throughout the City. It also provides security at night. This mandate highlights how Project Coordinator (Illumination) is aligned with the objectives of the transportation and traffic section, making this position well placed within City's organizational structure. The resource also supports the Transportation's Master Plans and Strategies, as lighting is integral to traditional, sustainable and active transportation by facilitating multimodal mobility after dark.

Climate Change Considerations:

This position contributes to climate change mitigation by ensuring the installation of energy efficient lighting, which is in conformance with the City’s standards (for municipal infrastructure) and lighting industry best practices (e.g. for private infrastructure).

This position also supports mitigation of light pollution and reduction of energy consumption by assessing compliance of development applications with the Sustainability Performance Metrics.

Comparative Analysis

Table 2 provides a comparative analysis that was undertaken with respect to how illumination responsibilities are handled by comparable York Region Municipalities. Some of the smaller municipalities within York Region outsource illumination work, based on their volume of activity. However, when considering the most comparable York Region Municipalities, both the City of Markham and City of Vaughan, have full time staff positions within the departments that are most equivalent to the City of Richmond Hill’s Infrastructure Planning and Development Engineering Division. These positions provide illumination support for development review, linear capital projects, and addressing lighting inquiries, similar to what is being proposed for the City’s Project Coordinator (Illumination).

TABLE 2: Comparative Analysis - Lighting Responsibilities

Municipality	Development Application Submissions, Assumptions and End of Maintenance	Linear Capital Projects	Lighting Inquiries
City of Markham	Full Time City Staff	Full Time City Staff	Full Time City Staff
City of Vaughan	Full Time City Staff	Full Time City Staff	Full Time City Staff
Town of Newmarket	Outsourced	Outsourced	n/a
Town of Aurora	Outsourced	Outsourced	n/a

Analysis of Alternative Approaches

Several alternative approaches were considered in lieu of a full time Project Coordinator (Illumination), and ruled out.

- Consideration was given to outsourcing lighting reviews, assessments and inspections. However, this alternative is expected to be very costly given the current workloads, as each review is estimated to cost \$1,000 to \$2,000 or more, depending on the complexity of the assignment and the turnover timing, which could result in annual cost upward of \$400,000 per year. In addition to this, internal staff time and resources will still be required to coordinate and oversee these assignments and contracts, which would still continue to impact the Divisional capacity.

Business Case - New Staff Request

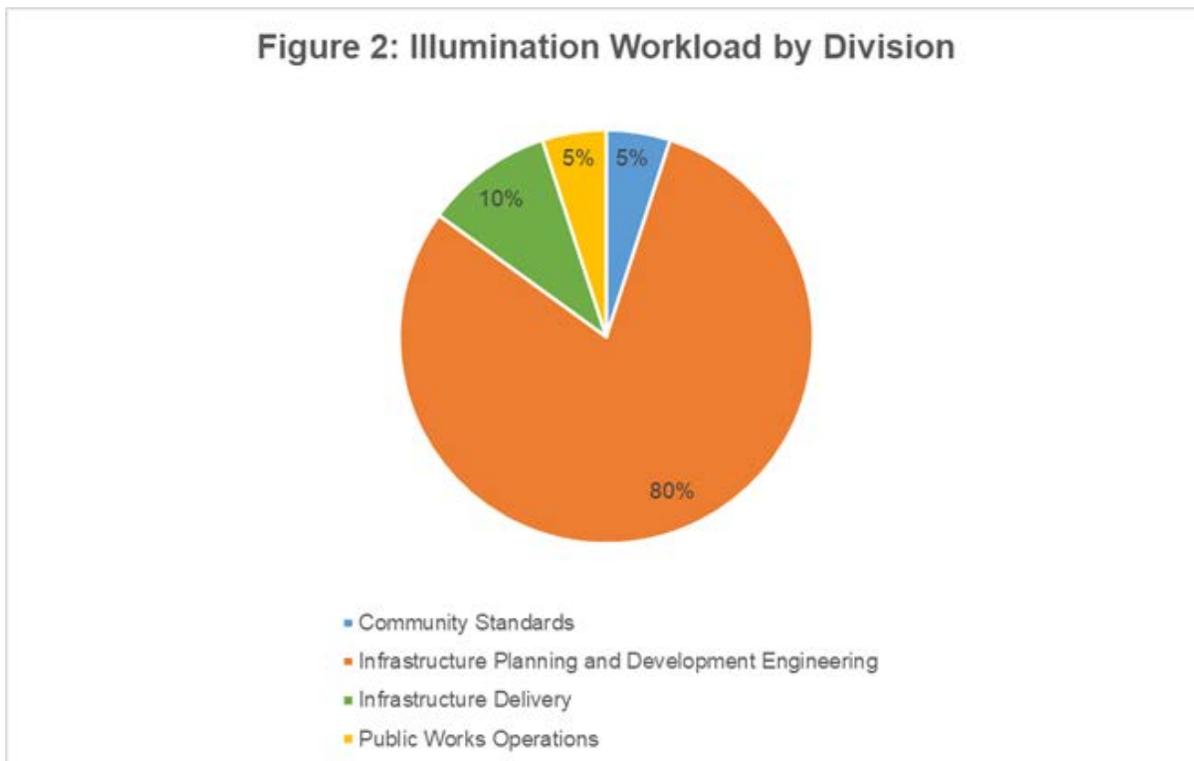
Project Coordinator (Illumination)

- Consideration was also given to relying solely on documents and certifications prepared by the developers qualified consultants, as part of development application submissions and inspections. This alternative is not considered viable, as it would increase risk that infrastructure has not been designed or installed to level of satisfaction of the City, or does not comply strict City standards and the Light Pollution By-law. This increases the risks of assets meeting their full life cycle expectancy, or resulting in additional repair, maintenance, and replacement costs. In addition, there is increased liability and risk should an incident occur due to inadequate illumination, which was not confirmed by City staff. Finally, under this scenario, the City would continue to lack in-house expertise to address lighting inquiries and support Capital projects.
- Consideration was also given to training existing Traffic Analysts in illuminations design and analysis and incorporating lighting reviews into their workload. However, this option is not considered viable as this would require extensive education including a post secondary degree in lighting design, electrical engineering or landscape architecture with a specific focus on lighting or lighting certification. Furthermore, this option would continue to pose capacity challenges for the Division as traffic operations and safety inquiries continue to also increase.

Cost Benefit Analysis

The compensation for this position is proposed at SEA Grade 7. This level was selected due to the education, experience and abilities typically required for a subject matter expert in the role of Coordinator at the Richmond Hill, and is consistent with the compensation of these positions in the City.

Figure 2 below provides a breakdown of the estimated time that the Project Coordinator (Illumination) will spend supporting key functions and divisions across the City. This is based on the historical and projected assignments and project identified in **Figure 1**, as well as an assessment of the typical time spent on the various types of assignments.



Business Case - New Staff Request Project Coordinator (Illumination)

Based on this breakdown, 80% of the work performed by this position will be development related reviews, approvals and inspections. As such, it is recommended the salary and overhead for this position be funded 40% from Development Engineering Reserves, 40% from Development Inspection Reserves, both which actively receive revenues from fees collected through development approvals and are intended to pay for the staff time and minor capital costs related to the review and inspection services that the City provides to the development industry. The remaining 20% will be funded through the tax rate, as these tasks are primarily operational in nature. **Table 3** provides a breakdown of the operating costs for this position.

Business Case - New Staff Request

Project Coordinator (Illumination)

TABLE 3: OPERATING AND CAPITAL COST FOR PROJECT COORDINATOR (ILLUMINATION)

	Current Year (2022) Impact	Full Year (2023) Impact
Start Date	01-Jan-22	
End Date or Contract Terms	31-Dec-22	
Full Time or Contract	Full Time	Full Time
CUPE/Admin/SEA/FIRE	SEA - 35 hr	SEA - 35 hr
Grade	7	7
Step	5	5
Annual Salary	\$ 100,000	\$101,700
Annual Benefit	28,000	28,000
Operating Costs		
Salaries (Prorated Salary Based on Start Month)	100,000	101,700
Benefits	26,400	26,800
Corporate allocation for training	300	300
Corporate allocation for conference	0	0
Equipment & Vehicle Rental		
Specialized or mandatory training		
Membership	1,300	1,300
Uniforms		
Minor Capital (cell phone and smart phone charges)	1,100	
Total Operating Costs	\$129,100	\$130,100
Funding Source		
Reduction in casual wages & benefits		
Program efficiencies (contracts, consulting, etc)		
Development Engineering Reserve (40%)	51,600	52,000
Development Inspection Reserve (40%)	51,600	52,000
Grants		
Tax Rate (20%)	25,900	26,100
Total Funding Sources	\$129,100	\$130,100
Difference	0	0
Capital Costs		
Office Furniture <i>(If Required)</i> (\$7.5K) & desktop with standard software (\$4,800) (Desktop or Laptop Computer, Standard Corporate Software, Soft/Land Line Telephone and Associated Service costs, Data/Telco cable runs <i>(If Required)</i> etc). Rugged Toughbook (\$7,600) with vehicle mount and other accessories (\$1,800). Smartphone & first year licensing/operating costs (\$1,100)	\$6,000	
Office built for Managers and above <i>(if Required)</i> (\$35K)		
Computer hardware/software beyond standard issue		
Vehicle		
Total Capital Costs	\$6,000	\$0
Funding Source		
Development Engineering Reserve (40%)	\$2,400	
Development Inspection Reserve (40%)	\$2,400	
Grants		
Cash to Capital Reserve	1,200	0
Total Funding Sources	\$6,000	\$0
Difference	0	0
Total Operating and Capital Costs	\$135,100	\$130,100

New Staff Request

Senior Transportation Planner

Overview

Executive Summary

- The Transportation and Traffic Section within the Infrastructure Planning and Development Engineering Division (IPDE) is currently resourced with one Project Manager – Transportation Planning and two Transportation Engineers. The Project manager is primarily responsible for leading the City's Transportation Planning studies (i.e. Transportation Master Plan, Parking and TDM Strategy, Environmental Assessments, etc.) and supporting other key initiatives across the organization (Official Plan update, DC By-Law update, Comprehensive Zoning-By-Law update, Secondary Plans, Yonge Subway Extension project, etc.). The Transportation Engineers are primarily responsible for the review of transportation, parking, and noise matters related to development applications.
- Historically, the Transportation Engineers have been able to provide capacity to support the Project Manager on the delivery of some projects. However, over the last several years, increasing pressures due to the volume and complexity of development applications has affected the ability of these engineers to provide project support and still achieve the customer service timelines and objectives on the development side.
- These increasing pressures have been identified as part of the Operating Budget in previous year, and this position has been included in the IPDE Division's 3-year outlook since 2020. However, this new request was not put forward until the Division was able to fill all previous vacancies (which occurred in 2021), and true capacity needs could be determined.
- As such, the IPDE Division is requesting a Senior Transportation Planner in 2022 to provide both project and development **capacity** for the Division.
- Approximately 80% of the workload for this position will be for transportation planning project support, while the remaining 20% will be to provide transportation policy planning support on higher order development applications (i.e. Official Plan and Zoning-By-Law amendments). Therefore 20% of this position will be funded from the Development Engineering Review Reserves, while the remaining 80% will be funded through tax rate. It is important to note that the 80% tax rate funding for this position will be **fully offset** by adjusting funding for the existing Transportation Engineers from 50% to 90% from Development Engineering Review Reserve, as these positions will now be almost exclusively dedicated to supporting development review.

Background

The Infrastructure Planning and Development Engineering Division has identified the need for a Senior Transportation Planner position for 2022, as part of the three-year staffing outlook in the 2020 Infrastructure Planning and Development Engineering Budget. This position will help lead, manage, and support transportation planning projects and initiatives including, but not limited to, City and external agency planning projects, transportation planning projects, environmental assessments, parking strategies, and other transportation engineering projects resulting from the continued growth and intensification of our Municipality and the Region.

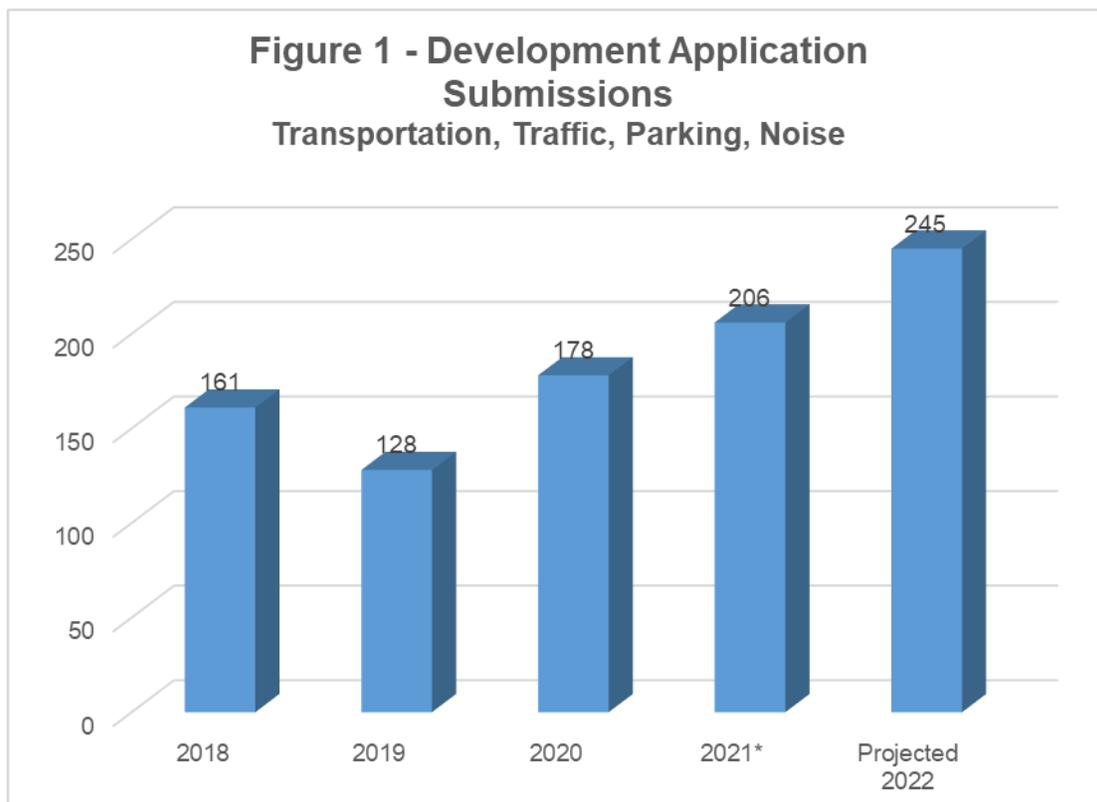
Business Case - New Staff Request

Senior Transportation Planner

Currently, these projects and functions are partially be supported by Transportation Engineers within the Infrastructure Planning and Development Engineering Division.

IPDE currently has two Transportation Engineers. Their capacity is currently shared between the review of development applications and other responsibilities such as leading transportation planning and capital projects (i.e. Parking and TDM Strategy and EA's) as well as a number of feasibility studies.

However, as indicated by the data in **Figure 1**, development related submissions for the Transportation Engineers has continued to increase in volume over the last several years.



* 2021 total includes 137 actual submissions as of August 2021 and 69 projected submissions to end of year.

It is note that these submissions also continue to increase in complexity as the City continues to shift away from greenfield development and moves toward more infill and intensification. This trend is expected to continue into the future as the green field areas within the City are almost built out and transportation plans and traffic issues have evolved and are now more focused on growth corridors, key development areas and major transit station areas.

Based on the increasing demands from both development applications and transportation infrastructure planning and transportation capital projects needs, these positions no longer have the capacity to fully address the development application demand while continuing to deliver these smaller transportation capital projects.

As a result, in order to respond to the increasing development pressures, and to be able to continue to meet legislated planning review times, the capacity of existing Transportation Engineering staff needs to be directed exclusively to development review.

At the same time, the IPDE Division also has one Project Manager, Transportation Planning position to lead, manage, and support major transportation planning projects and initiatives such as the Transportation Master Plan Update, the Transportation Development Charges By-law Update, Official Plan Update, Comprehensive Zoning By-Law Update, various Secondary Plans, the Yonge North Subway Extension project, and various Environmental Assessments. With the level of effort and responsibility associated with these projects, the Project Manager does not have the capacity to undertake additional projects and workload currently led by the Transportation Engineers.

The Division has attempted to try to keep up with the increasing development activity demands by assigning development reviews to the Traffic Analyst, who was already operating at or above capacity while carrying out his core duties of addressing inquiries for traffic safety and operations. It is recognized that this was a temporary solution as the demand for traffic inquiries has also increased and there is a need to allow staff to focus on their core responsibilities to provide the expected level of customer service.

As such, the follow key strategic actions are proposed to add depth and capacity to the Division as well as to streamline roles and responsibilities to allow staff to focus and deliver projects and conduct development review in a more efficient manner:

- It is recommended that the existing Transportation Engineers be fully dedicated to the review of development applications to be able to address the increasing demand. With this shift in responsibility, there is an opportunity to shift the tax supported funding for these positions to the Development Engineering reserve.
- It is recommended that a new Senior Transportation Planner position be created to take on the current and future transportation planning projects that the Transportation Engineers are responsible for.

Risks to the City and Other Divisions

- **Adequately Plan and Protect for Transportation Infrastructure:** The City will not have capacity to adequately plan and protect for transportation infrastructure projects by completing Environmental Assessments and feasibility studies.
- **Reputational Risk:** As development application submissions increase, there is risk to the Transportation section's ability to meet customer service objectives of the City, for which the primary customer is the development community. This risks negative impacts to the reputation of Council and the Municipality.
- **Development Application Timelines:** The development review function in Transportation is only one key component in the larger overall planning application approval process. Without this function, the overall process can stall which affects the customer service objectives of other sections and divisions within the organization, including the Development Engineering section within IPDE as well as the Development Planning Division.
- **Legislated Functions:** It should be further noted that timelines for responding to development applications are legislated through the Planning Act, and delays in these responses expose the City to potential to Ontario Land Tribunal (OLT) appeals for lack of response, and puts the decision-making on Planning Applications in the hands of the OLT rather than staff and Council.
- **OLT Representation:** Further, without this position, the City may not have capacity for professional staff to give expert evidence in support of the City's position at the OLT.

Program Description

Timeline:

Based on the projected development application submissions and transportation infrastructure projects, the Senior Transportation Planner position is required as soon as possible, starting in January 2022.

Position Summary:

Reporting to the Manager, Transportation and Traffic, the Senior Transportation Planner position will be primarily responsible for leading and project managing transportation infrastructure projects such as Environmental Assessments, feasibility studies, Parking and TDM Strategy and any special transportation projects required to support key initiatives such as the Richmond Hill Secondary Plan and Yonge North Subway Extension.

Key Duties and Responsibilities:

- Project Manage key transportation infrastructure planning projects including Environmental Assessments and feasibility studies as well as key transportation capital projects such as the Parking and Transportation Demand Management Strategy and other parking studies.
- Engage with internal and external stakeholders to establish project scope, requirements and alignment with City policies and by-laws.
- Review project background information; prepare project Terms of Reference and coordinate the procurement of consulting services, as required.
- Coordinate with staff to collect pertinent data and background information such as traffic and active transportation data, as-built drawings, topographic surveys, sites plans and subdivisions.
- Lead a multi-disciplinary project team of external consultants and consult with internal departments to ensure projects completed on time and within scope/budget.
- Review reports, policies, plans, maps and technical analysis to ensure the project meets requirements.
- Liaise with federal/provincial/regional/municipal and other external agencies in developing project approaches.
- Coordinate public consultation; collect feedback from internal and external stakeholders.
- Prepare staff reports and deliver presentations.
- Coordinate City transportation capital projects with neighbouring municipalities, York Region, Province, Metrolinx and other external agencies to receive feedback.
- Sit on Technical Advisory Committees and other project committees for external transportation projects and coordinate with City Departments for comments. Provide key input and assist in developing the City's capital forecast.

Relationship to Council's Strategic Priorities 2020-2022:

The Senior Transportation Planner position supports the Council Strategic Priorities of Getting Around the City, Balancing Growth and Green, Fiscal Responsibility and Strong Sense of Belonging by ensuring that the appropriate transportation infrastructure, inclusive of sustainable transportation facilities, and transportation demand management strategies from the Official Plan, Transportation Master Plan and other key policy documents are implemented in an efficient manner to support growth and intensification in the City of Richmond Hill.

Climate Change Considerations:

The Senior Transportation Planner position contributes to climate change mitigation by implementing an efficient and effective transportation network supported by appropriate transportation demand management measures to minimize greenhouse gas emissions from motorized vehicles through development applications, including compliance reviews with the Sustainability Performance Metrics.

Comparative Analysis

In general, the majority of comparable municipalities in GTA have dedicated staff to lead and project manage transportation infrastructure planning and transportation capital projects. Similarly, the review of transportation related studies and representation at Ontario Land Tribunal hearings for development applications are completed by dedicated staff in comparable municipalities across the GTA. Comparable municipalities include the City of Vaughan, City of Markham, Town of Oakville, City of Pickering and Town of Ajax.

Some smaller municipalities that are not comparable to Richmond Hill in terms of population and the volume and complexity of development application submissions typically outsource transportation peer review services as a more economically viable option. However, based on the number and complexity of development submissions that Richmond Hill receives, outsourcing peer review services would not be viable.

Transportation infrastructure planning and capital projects are still lead and managed by dedicated staff in smaller municipalities.

Analysis of Alternative Approaches

Alternative approaches were evaluated and ruled out.

- Consideration has been given to **outsource transportation related reviews** of development applications in an effort to keep up with the demand. However, this alternative is very costly (\$5,000-\$7,000 per application submission based on recent experience), and is not considered fiscally viable over the medium to long term due to the high volume of applications. This option also continues to require internal staff time and resources to manage, coordinate, and oversee this consultant and their work.
- Reassignment of qualified existing staff to assist in the review of transportation development applications to meet the demand has been considered. This alternative is not viable as it would not allow staff to focus on their core responsibilities and would result in a backlog of work in other transportation core business functions.

Cost and Benefit Analysis

The compensation for the Senior Transportation Planner position is SEA Grade 8, which is consistent with the current compensation level of the other Senior Planners in the City.

Based on type of work that will be conducted by this position, it is recommended that 20% of the operating cost for this position be funded from Development Engineering Reserves, which actively receives revenues from fees collected through development approvals and is intended to pay for the staff time and minor capital costs related to these services that the City provides. The remaining 80% will be tax supported.

However, as the roles and responsibilities of the existing Transportation Engineer positions will also shift to be primarily focused on development review, it is recommended that the draw of the Development Engineering Reserve for these positions be increased from 50% to 90% for each position in the Division's base budget.

This adjusted reserve draw for the Transportation Engineer will offset the tax rate impacts of the Senior Transportation Planner position, resulting in **no overall tax rate impacts** for the Division.

Table 2 summarizes the operating and capital costs related to the Senior Transportation Planner position.

Business Case - New Staff Request

Senior Transportation Planner

Table 2: Operating and Capital Costs – Senior Transportation Planner

	Current Year (2022) Impact	Full Year (2023) Impact
Start Date	01-Apr-22	
End Date or Contract Terms	31-Dec-22	
Full Time or Contract	Full Time	Full Time
CUPE/Admin/SEA/FIRE	SEA - 35 hr	SEA - 35 hr
Grade	8	8
Step	5	5
Annual Salary	\$ 100,700	\$ 102,400
Annual Benefit	30,400	30,400
Operating Costs		
Salaries (Prorated Salary Based on Start Month)	75,500	102,400
Benefits	22,800	30,400
Corporate allocation for training	300	300
Corporate allocation for conference	900	900
Equipment & Vehicle Rental		
Specialized or mandatory training		
Membership	900	900
Uniforms		
Minor Capital (cell phone and smart phone charges)	1,100	
Total Operating Costs	\$101,500	\$134,900
Funding Source		
Reduction in casual wages & benefits		
Program efficiencies (contracts, consulting, etc)		
Development Engineering Reserve (20%)	20,300	27,000
Grants		
Tax Rate (80%)	81,200	107,900
Total Funding Sources	\$101,500	\$134,900
Difference	0	0
Capital Costs		
Office Furniture (<i>If Required</i>) (\$7.5K) & desktop with standard software (\$4,800) (Desktop or Laptop Computer, Standard Corporate Software, Soft/Land Line Telephone and Associated Service costs, Data/Telco cable runs (<i>If Required</i>) etc). Rugged Toughbook (\$7,600) with vehicle mount and other accessories (\$1,800). Smartphone & first year licensing/operating costs (\$1,100)	\$6,000	
Office built for Managers and above (<i>if Required</i>)(\$35K)		
Computer hardware/software beyond standard issue		
Vehicle		
Total Capital Costs	\$6,000	\$0
Funding Source		
Development Engineering Reserve (20%)	\$1,200	
Grants		
Cash to Capital Reserve	4,800	0
Total Funding Sources	\$6,000	\$0
Difference	0	0
Total Operating and Capital Costs	\$107,500	\$134,900