



Town of Newmarket Council Information Package

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Date: April 8, 2022

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Financial Services

Distributed: March 31, 2022



Resolution by Town of Georgina Council dated March 2, 2022

RESOLUTION NO. C-2022-0080

Moved By Councillor Neeson

Seconded By Councillor Fellini

WHEREAS Lake Simcoe is one of Ontario's largest watersheds, home to First Nations since time immemorial, and situated in the growing communities of Simcoe County, York Region, Durham Region, and the cities of Barrie and Orillia;

WHEREAS the watershed faces threats due to eutrophication, largely from phosphorus runoff and other contaminants into the lake and its tributaries;

WHEREAS the lake is a significant source of drinking water, as well as being integral for local recreation, tourism, agriculture and other key economic drivers;

WHEREAS the previous federal government funded a "Lake Simcoe Clean-Up Fund" of \$65 million over 10 years between 2007 - 2017, but that fund has not been renewed;

WHEREAS during the 2019 federal election, the Hon. Chrystia Freeland committed \$40 million over 5 years towards Lake Simcoe;

And WHEREAS during the 2021 federal election, the Liberal Party of Canada committed to "Implement a strengthened Freshwater Action Plan, including an historic investment of \$1 billion over 10 years. This plan will provide essential funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe...";

And WHEREAS the Conservative Party of Canada also committed to re-funding the Lake Simcoe Clean-Up Fund in the 2019 and 2021 general elections with an investment of \$30 million over five years;

And WHEREAS, further to the Minister of the Environment and Climate Change's mandate letter dated December 16th, 2021, which directs the Minister to "...establish a Canada Water Agency and implement a strengthened Freshwater Action Plan, including a historic investment to provide funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe..."

THEREFORE BE IT RESOLVED that the Council of the Town of Georgina:

1. Supports federal funding for a Lake Simcoe Restoration Fund that represents a significant percentage of the overall Freshwater Action Plan Fund, with funding in excess of previous commitments, beginning in the 2022 budget;

2. Asks that such funding be used to undertake:
 1. Shoreline mitigation and restoration, including in the tributaries of the Holland River, Maskinonge River, Black River, Pefferlaw River and the Holland Marsh;
 2. The assistance of the federal government to achieve up to or more than 40 percent high quality natural cover;
 3. Projects to ameliorate contaminated sites in the watershed;
 4. Upgrades to help retrofit municipal infrastructure such as wastewater and stormwater facilities to decrease total current discharges from existing facilities;
 5. Purchasing and conservation of more forests and wetlands under the auspices of the Lake Simcoe Region Conservation Authority (LSRCA); and
3. That a copy of this resolution, along with a letter from the Mayor, be sent to the federal Minister of Finance; the Minister of the Environment and Climate Change; the President of the Treasury Board; the Members of Parliament for York-Simcoe, Newmarket-Aurora, Barrie-Springwater-Oro-Medonte, Barrie-Innisfil, Simcoe North, Haliburton-Kawartha Lakes-Brock, and Durham; and to all Lake Simcoe-region municipalities and the LSRCA, with a request for their endorsement.

Carried Unanimously.



March 29, 2022

The Honourable Chrystia Freeland PC MP
Deputy Prime Minister and Minister of Finance
Department of Finance Canada
House of Commons
Parliament Buildings
OTTAWA, Ontario K1A 0G5

Re: Lake Simcoe Restoration Fund

Honourable Deputy Prime Minister Freeland:

I am writing to you today to make a pre-budget submission in accordance with a motion presented by my colleague Councillor Dave Neeson and passed unanimously by members of the Town of Georgina Council asking that the federal government fulfil bipartisan commitments towards creating a Lake Simcoe Restoration Fund in the upcoming federal budget.

The motion is enclosed for your reference.

As you know, both local Liberal and Conservative MPs ran on the promise of restoring and exceeding funding that used to exist to help protect Lake Simcoe under the auspices of the Lake Simcoe Clean-up Fund. You yourself made such a commitment of a \$40-million fund during the 2019 election in Barrie. The commitment to a billion-dollar Freshwater Action Fund, which would include funding for Lake Simcoe, is in the Hon. Steven Guibeault's mandate letter as Minister of the Environment and Climate Change.

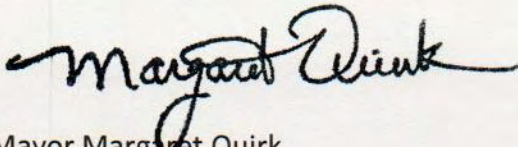
We ask that funding greater than previous commitments be invested to protect the Lake Simcoe watershed in this year's budget. Such funding should be over and above previous commitments given that funding for the Lake has been in hiatus since the previous fund expired in 2017, and due to inflationary pressures. As the motion outlines, such funding could be used for land conservation, shoreline restoration, cleaning up contaminated sites, reducing discharges from existing wastewater treatment plants, and other tangible means to restore the health of the watershed.

The Town of Georgina and other Lake Simcoe Region Municipalities, are growing and so we need to take environmental mitigation and restoration efforts seriously, alongside a federal partner.

I understand this motion has also passed in the Town of Bradford West Gwillimbury, the Town of Innisfil, the Town of Newmarket and is being considered by several other municipalities across our region, demonstrating, I believe, the great unity in our area for federal action to protect Lake Simcoe.

Thank you for considering this request.

Sincerely yours,

A handwritten signature in black ink that reads "Margaret Quirk". The signature is written in a cursive, flowing style.

Mayor Margaret Quirk
Town of Georgina

cc:

Hon. Steven Guibeault, PC MP, Minister of Environment and Climate Change, House of Commons,
Ottawa, ON K1A 0A6

Hon. Mona Fortier PC MP, Federal President of the Treasury Board

Tony Van Bynen, Newmarket-Aurora MP

Scot Davidson, York-Simcoe MP

Doug Shipley, Barrie-Springwater-Oro-Medonte MP

John Brassard, Barrie-Innisfil MP

Adam Chambers, Simcoe-North MP

Jamie Schmale, Haliburton-Kawartha Lakes-Brock MP

Erin O'Toole, Durham MP

Lake Simcoe Region Conservation Authority c/o Robert Baldwin, CAO

Lake Simcoe-region Municipalities; Mayors and Councils



North Algona Wilberforce Township

1091 Shaw Woods Road
RR #1 Eganville, Ontario K0J 1T0

Tel: 613-628-2080

Fax: 613-628-3341

March 7, 2022

The Honourable Doug Ford
Premier of Ontario
Legislative Building
Queen's Park
Toronto, ON M7A 1A1

Dear Premier,

RE: Dissolve Ontario Land Tribunal

At its meeting held on March 1, 2022, North Algona Wilberforce Township adopted the following resolution with respect to the Ontario Land Tribunal:

WHEREAS Municipalities across this Province collectively spend millions of dollars of taxpayer money and municipal resources developing Official Plans that meet current Provincial Planning Policy; and

WHEREAS an Official Plan is developed through months of public consultation to ensure, "that future planning and development will meet the specific needs of our community"; and

WHEREAS our Official Plan includes zoning provisions that encourage development of the "missing middle" or "gentle density" to meet the need for attainable housing in our community; and

WHEREAS our Official Plan is ultimately approved by the Province; and

WHEREAS it is within the legislative purview of Municipal Council to approve Official Plan amendments or Zoning By-law changes that better the community or fit within the vision of the Official Plan; and

WHEREAS it is also within the legislative purview of Municipal Council to deny Official Plan amendments or Zoning By-law changes that do not better the community or do not fit within the vision of the Official Plan; and

WHEREAS municipal planning decisions may be appealed to the Ontario Land Tribunal (OLT - formerly the Ontario Municipal Board or "OMB"), an unelected, appointed body that is not accountable to the residents of North Algona Wilberforce Township; and

WHEREAS the OLT has the authority to make a final decision on planning matters based on a "best planning outcome" and not whether the proposed development is in compliance with municipal Official Plans and Provincial Planning Policy; and

WHEREAS all decisions—save planning decisions—made by Municipal Council are only subject to appeal by judicial review and such appeals are limited to questions of law and or process; and

WHEREAS Ontario is the only province in Canada that empowers a separate adjudicative tribunal to review and overrule local decisions applying provincially approved plans; and

WHEREAS towns and cities across this Province are repeatedly forced to spend millions of dollars defending Official Plans that have already been approved by the province in expensive, time consuming, and ultimately futile OLT hearings; and

WHEREAS lengthy, costly OLT hearings act as a barrier to the development of attainable housing:

1. NOW THEREFORE BE IT HEREBY RESOLVED THAT North Algona Wilberforce Township requests the Government of Ontario to dissolve the OLT immediately thereby eliminating one of the most significant sources of red tape delaying the development of more attainable housing in Ontario; and
2. BE IT FURTHER RESOLVED THAT a copy of this Motion be sent to the Honourable Doug Ford, Premier of Ontario, the Minister of Municipal Affairs and Housing, the Leader of the Opposition, the Leaders of the Liberal and Green Party, all MPPs in the Province of Ontario; the Large Urban Mayors' Caucus of Ontario, the Small Urban GTHA Mayors and Regional Chairs of Ontario; and
3. BE IT FURTHER RESOLVED THAT a copy of this Motion be sent to the Association of Municipalities of Ontario (AMO) and all Ontario municipalities for their consideration.

Your favorable consideration of this request is respectfully requested.

Sincerely,



Michelle Mantifel
Clerk-Treasurer

cc: Minister of Municipal Affairs and Housing;
Leader of the Opposition;
Leaders of the Liberal and Green Party;
MPPs in the Province of Ontario;
Large Urban Mayors' Caucus of Ontario,
Small Urban GTHA Mayors and Regional Chairs of Ontario;
AMO and All Ontario Municipalities

Regional Council Decision - 2021 Drinking Water Systems Report

On March 24, 2022 Regional Council made the following decision:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities, City of Toronto, Region of Peel and the Ontario Chief Drinking Water Inspector (Ministry of the Environment, Conservation and Parks).

The original staff report is attached for your information.

Please contact David Szeptycki, Director of Strategy and Innovation at 1-877-464-9675 ext. 75723, or Beth Weir, Director of Operations, Maintenance and Monitoring at 1-877-464-9675 ext. 75340 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Regional Clerk's Office, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
O: 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Environmental Services
March 3, 2022

Report of the Commissioner of Environmental Services

2021 Drinking Water Systems Report

1. Recommendation

The Regional Clerk circulate this report to the Clerks of the local municipalities, City of Toronto, Region of Peel and the Ontario Chief Drinking Water Inspector (Ministry of the Environment, Conservation and Parks).

2. Summary

This report and attachments satisfy Council reporting requirements for water quantity, quality and compliance in Ontario Regulation 170/03 – Drinking Water Systems and supports Council in meeting its standard of care requirements under the *Safe Drinking Water Act, 2002* (the Act).

Key Points:

- In 2021, 100% of 16,639 laboratory analyzed samples and over 99.99% of 40 million continuous monitoring analyzer readings were within regulated standards and confirm York Region's high quality drinking water. All adverse results were addressed and reported. Additional information on 2021 adverse results is in Attachment 1
- In 2021, all Ministry of the Environment, Conservation and Parks inspections of the Region's drinking water systems scored 100%. Additional information on 2021 calendar year inspections is in Attachment 2
- York Region received perfect scores in the Chief Drinking Water Inspector's Annual Report Card for the Province's 2020-2021 fiscal year, with 100% for water samples meeting Ontario's drinking water quality standards and inspections
- Drinking water systems operated within permitted volume and capacity limits. Additional information is in the Water Volume and Capacity section of this report and in Attachment 3
- Environmental Services implements advanced systems monitoring, controls, and a multi-barrier approach to protect drinking water and public health

3. Background

York Region complies with the *Safe Drinking Water Act, 2002* to protect public health through drinking water

The Ministry of the Environment, Conservation and Parks (the Ministry) regulates municipal drinking water systems in Ontario. The Act was developed to address factors that led to the Walkerton tragedy. As a result, Ontario now has some of the safest drinking water in the world.

The Act requires municipalities to report annually on drinking water. It also imposes a standard of care upon Municipal Council members. Councillors are required to exercise the level of care, diligence and skill regarding oversight of municipal drinking water system that a reasonably prudent person would be expected to exercise. This includes ensuring the protection and safety of users of municipal drinking water systems. Council protects people in their communities by ensuring financial sustainability, asset management, risk mitigation and continual improvement of the Region's water systems.

This report summarizes 2021 calendar year drinking water systems information with further details in the attachments as follows:

- Reported adverse water quality events and corrective actions (Attachment 1)
- Ministry inspection findings and corrective actions (Attachment 2)
- Performance data for each drinking water system (Attachment 3)
- Monetary expenses for each drinking water system (Attachment 4)

York Region partners with Public Health, its nine local municipalities, and neighbouring municipalities to provide safe drinking water

Within York Region, water is delivered through a two-tiered water system. The Region operates and maintains 15 drinking water supply systems, which provide water to all nine local municipalities. Our local municipal partners maintain their distribution systems to distribute high quality water to residents and businesses. Each local municipality is similarly required to report annually on its drinking water systems.

Environmental Services and York Region Public Health maintain a 24/7 response system to address potential water quality issues. Public Health assesses potential health impacts from reported adverse water quality test results. No follow-up corrective actions were ordered by Public Health in 2021 including no boil water or drinking water avoidance advisories due to water quality concerns. Procedures are in place to ensure close cooperation with Public Health, local municipalities and the Ministry to ensure effective communications while protecting public health water quality concerns.

Despite COVID-19, Environmental Services, our local municipalities and Region Public Health continue to provide safe and uninterrupted water and wastewater services to York

Region residents and businesses. These unprecedented times underscore the direct link water and wastewater services play in supporting our communities' public health by providing reliable, safe and clean drinking water

Multi-barrier approach to risk management protects drinking water systems and public health

A multi-barrier approach proactively protects drinking water and promotes quality and safety, while informing preventative and corrective actions when required. Elements of this approach include Source Water Protection, sustainable asset management, training and licencing of operators, operational strategies, Drinking Water Quality Management Standard, system audits, a strict Provincial Inspection and Enforcement Program, and research that anticipates and proactively prepares the Region for future water quality and operational challenges. The 2021 Research and Innovation Update memo, also on this agenda, provides more information on research activities undertaken to support the department's service delivery.

Source Protection Program prevents contamination of Ontario's drinking water

York Region's Drinking Water Source Protection Program continues to identify, mitigate, and report current and future threats to drinking water sources as required by the *Clean Water Act, 2006*. Continued focus areas include:

- Requiring proposed developments in vulnerable areas to plan carefully ensuring safety of our immediate and long-term drinking water supply, including completing proactive monitoring and mitigation activities
- Source Water Protection Incentive Program, which encourages and supports businesses to make changes to protect drinking water sources
- Working together with the Province, local and neighbouring municipalities, and Conservation Authorities to align our programs and plans to ensure consistent, effective and successful protection of all sources of drinking water

In 2022, York Region's Source Water Protection Program will continue to serve the community through these focus areas. Implementation efforts are documented and reported to the Province as required by the *Clean Water Act, 2006*.

Provincially mandated training provides staff with required knowledge to sustain high performing water systems

York Region continues to deliver a fulsome training program complete with relevant virtual and in-person training, abiding by all COVID-19 restrictions and Public Health protocols. This training program is tailored to ensure that operators receive required provincially standardized education and that on-the-job training translates regulatory requirements into operational practice. Training equips staff to manage drinking water systems competently and efficiently in compliance with applicable licence requirements and best practices.

Drinking Water Quality Management Standard helps drive continual improvement

The Region adheres to a statutory quality management standard that protects public health through consistent practices for managing and operating water systems, and by proactively identifying and mitigating risks. The standard requires an approach to identifying and resolving inefficiencies through process and procedure improvements. The 2021 Integrated Management System Update Report provides more information.

Provincial inspections and enforcement assess compliance

York Region facilities are inspected annually by the Ministry to confirm compliance with regulations, licenses, permits and Ministry procedures. Staff maintains a positive working relationship with regulators to identify and mitigate risks identified in our watersheds and systems.

York Region’s data management practices continue to evolve in terms of producing information and insights. Online instruments and comprehensive sampling generate billions of data points about the performance of our drinking water systems. Over the past five years, staff have iteratively developed automated data analysis processes that save staff time by comparing process data against regulated limits for reporting. These automated tools flag reporting data exceeding regulated limits and prompt staff to follow up on details as appropriate. Empowering staff with the right tools, technology and training allows them to gain insights into the data, which supports our industry-leading drinking water operations.

Comprehensive data management practices also enable sharing of meaningful datasets on the Region’s website. An interactive report at york.ca/drinkingwater provides an effective way to learn about the Region’s drinking water systems. The complete dataset may also be downloaded from the Region’s Open Data site. Easy to access data supports Council’s Strategic Plan Objective of “Maintaining public confidence in Regional government” and the Vision 2051 goal of “Open and Responsive Governance”.

4. Analysis

WATER QUALITY

All 2021 laboratory samples met regulatory limits exemplifying York Region’s safe high-quality drinking water

Our comprehensive sampling program includes regulatory, in-house and research samples in response to operational needs and regulatory changes. In 2021, the York-Durham Environmental Laboratory performed 16,639 water quality tests for York Region’s drinking water systems. 100% of all samples collected and analyzed by the laboratory in 2021 were within regulated limits and standards.

Table 1 summarizes laboratory analyzed water quality test results reported as adverse water quality events in 2021. The laboratory initiates a notification process when sample analysis

indicates a parameter requires reporting. Staff responded to each adverse test result, performed and reported on all corrective actions. There were no risks to public health because of these adverse events.

Attachment 1 summarizes all reported adverse water quality events.

Table 1
Adverse Water Quality Events
Reported from Laboratory Analyzed Samples in 2021

Parameter, Drinking Water System (DWS) and Number of Occurrences	Summary of Reported Sample Results and Corrective Actions Taken
Sodium <ul style="list-style-type: none"> • Holland Landing DWS (1) • Keswick DWS (1) • Queensville DWS (1) • Stouffville DWS (1) • York DWS (1) 	<p>Sodium levels between 20.8 and 32.9 mg/L were reported in April at North Maple Reservoir, Holland Landing Well 2, Sharon/Queensville Wells 3-4, Stouffville Wells 1-2 and Keswick Woodbine Ave Elevated Tank.</p> <p>The reporting requirement for sodium is once every 57 months for results exceeding 20 mg/L. Health Canada's guideline for sodium in drinking water is an aesthetic taste objective of 200 mg/L.</p> <p>Operators resampled these facilities to confirm sodium levels and notified York Region's Medical Officer of Health.</p>

The five sodium results in Table 1 were above the reporting threshold of 20 mg/L, prompting notification to York Region's Medical Officer of Health and the Ministry. The threshold for sodium is not a compliance limit or regulated standard; it ensures that residents on sodium restricted diets have information about sodium levels in their drinking water. Sodium is found naturally in surface and groundwater as it is present in most rocks and soils across Southern Ontario. Typical background groundwater sodium concentrations in York Region range from 3 to 46 mg/L.

Continuous monitoring analyzers and online equipment safeguard drinking water delivered to residents

In addition to sampling conducted by operators, 376 online analyzers continuously monitored system performance, creating an estimated 40 million water quality records in 2021. Online analyzers continuously monitor several water quality parameters, including chlorine residual, which is an indicator of disinfection level. Analyzers and other online equipment are calibrated regularly by trained staff.

Highly sensitive analyzers monitor water quality at all times and automatically stop water production if a concern is detected. The Region's Remote Operations Centre monitors the system 24/7 and dispatches field operators to respond to alarms or unusual trends and perform corrective actions as required. These systems and processes greatly reduce the risk of non-potable water entering the drinking water system.

Real-time monitoring system and analyzer readings showed compliance with regulatory limits for water safety parameters

Of the 40 million analyzer readings in 2021, staff reported 14 adverse water quality events. Most events self-corrected or needed minor equipment adjustments. Operators confirmed drinking water safety through onsite tests and restarting facility operation. There was no risk to public health because of these adverse events.

Table 2 summarizes the continuously monitored analyzer readings reported as adverse water quality events in 2021. Attachment 1 summarizes all reported adverse water quality events.

Table 2
Adverse Water Quality Events
Reported from Continuous Monitoring Analyzer Readings in 2021

Parameter, Drinking Water System (DWS) and Number of Occurrences	Summary of Reported Sample Results and Corrective Actions Taken
High Chlorine Level <ul style="list-style-type: none"> • Aurora DWS (1) • Schomberg DWS (6) • York DWS (1) 	<ul style="list-style-type: none"> • Adverse events in Schomberg DWS were the result of our application of chlorination in the allowable upper range to achieve optimal water quality within the distribution system • High chlorine residual events resulted from temporary, minor equipment or process errors • Corrective actions for high chlorine levels include collecting grab samples and recalibrating analyzers
Filtration Performance <ul style="list-style-type: none"> • Georgina DWS (1) 	<ul style="list-style-type: none"> • High turbidity reading resulted from temporary process error • Corrective actions included collecting grab samples and restoring facility to normal operation

Parameter, Drinking Water System (DWS) and Number of Occurrences	Summary of Reported Sample Results and Corrective Actions Taken
High Fluoride Level <ul style="list-style-type: none"> • Georgina DWS (5) 	<ul style="list-style-type: none"> • Fluoride is continuously monitored at Georgina Water Treatment Plant, where it is applied within optimal range recommended by the Medical Officer of Health • When alarms trigger for fluoride readings above operational limits, the facility immediately stops directing water to the distribution system • Operator will backflush system to prevent the treated water from leaving facility and ensure correct fluoride dose

2021 CALENDAR YEAR MINISTRY INSPECTIONS

In 2021, all drinking water system inspections scored 100%

In the 2021 calendar year, all Ministry inspections scored 100%. There were 15 inspections completed for the Region's drinking water systems. All worker health and safety protocols related to COVID-19 were adhered-to during inspections. There were no non-compliance findings in 2021; Ministry staff included four administrative best management practice recommendations, which staff have implemented. Attachment 2 outlines the 2021 calendar year inspection results.

CHIEF DRINKING WATER INSPECTOR 2020-2021 RATINGS

York Region received top scores in the Ontario Chief Drinking Water Inspector's 2020-2021 Annual Report

Ontario's Chief Drinking Water Inspector releases an annual report, which rates all regulated drinking water systems in Ontario. Reporting timelines are based on the Ministry's previous fiscal year from April 1, 2020 to March 31, 2021. York Region along with the City of Toronto and Peel Region, which supply the majority of York Region's drinking water, received high scores. Table 3 outlines the scores for GTA municipalities.

Table 3
Ministry of the Environment, Conservation and Parks
2020-2021 Chief Drinking Water Inspector's Annual Report Scores

Municipality	Inspection Rating (%)*	Water Quality Tests Meeting Standards (%)*
York Region	100.00	100.00
Durham Region	100.00	99.93
City of Toronto	100.00	99.89
Halton Region	99.68	99.94
Peel Region	97.51	99.99
Provincial Average	98.51	99.82

*Average of scores for all drinking water systems within the municipality

York Region achieved an overall inspection rating of 100% in the Chief Drinking Water Inspector's Report. Details on 2020 inspections and sample results are found in the 2020 Drinking Water Systems report to Council dated [April 8, 2021](#).

York Region achieved an overall sample compliance rating of 100% in the Chief Drinking Water Inspector's Report for laboratory analyzed samples meeting the requirements of O.Reg.169/03: Ontario Drinking Water Quality Standards. This regulation sets out standards for a total of 151 microbiological, chemical and radiological parameters. Details on 2020 adverse water quality incidents are found in the 2020 Drinking Water Systems report to Council dated [April 8, 2021](#).

Historically, York Region has scored very well in the Chief Drinking Water Inspector's Report, often scoring above the Provincial average, with combined inspection and test result averages ranging between 99.17% (2017/2018) and 100.00% (2020/2021) over the previous five years.

WATER VOLUME AND CAPACITY

All drinking water systems operated within permitted water volume and capacity limits

In 2021, York Region's drinking water systems operated within their maximum daily and monthly average withdrawal limits.

York Region continues to maintain compliance with:

- The *Safe Drinking Water Act, 2002* and its regulations
- Terms and conditions of the Region's Permits to Take Water and supply agreements with the City of Toronto and Peel Region
- Permitted Intra-Basin Transfer volumes for water taken from (and returned to) Lake Ontario for communities in the Lake Huron watershed

York Region continues to ensure sufficient drinking water capacity for the Region's growing population. Attachment 3 illustrates important data about the amount of water taken from each water source. This data informs decision making regarding long-term, reliable water sourcing and servicing. Maximum permitted volumes support forecasted population growth to 2051. Long-term water demands will be refined in the updated Water and Wastewater Master Plan, which is currently underway.

5. Financial

Effective and comprehensive asset management is critical to delivering reliable and sustainable water services

York Region delivers high quality drinking water in a safe and cost-effective manner. In December 2021, the Environmental Services 2022 budget and operating outlook submissions were approved. In addition to funding for maintaining assets that are wholly owned and maintained by York Region, many projects are cost-shared with Peel Region and the City of Toronto. These investments support long-term drinking water security and supply. Effective asset and infrastructure management is critical to the Region's ability to deliver services that sustain our growing communities. The approved 2022 Capital and Operating Budgets share information on how water and wastewater assets are funded.

In September 2021, Council approved 2022-2027 water rates and reserve adjustments that will bring the Region to full cost recovery while supporting intergenerational equity and debt reduction. One of the key features of full cost pricing is fully funding asset management work to ensure our systems continually remain in a state of good repair and perform optimally.

York Region invested \$22.1 million in 2021 to maintain and improve drinking water systems

The Drinking Water Systems regulation requires water utility owners to “describe any major expenses incurred during the period covered by the report to install, repair or replace required equipment.”

In 2021, York Region invested \$22.1 million installing, repairing or replacing equipment used to treat, store and deliver safe drinking water. This is a small cost compared to water asset replacement cost of \$2.3 billion; this investment demonstrates the importance of routine maintenance to maximize asset performance and minimize costs. Environmental Services

has budgeted \$436 million for water system rehabilitation over the next 10 years. These rate-supported costs are funded through the Environmental Services water budget, as approved annually by Council. These expenses do not include operational costs or salaries and are summarized in Attachment 4.

Drinking tap water is the financially and environmentally responsible choice

Tap water is affordable compared to bottled water, and our municipal water is highly regulated and constantly monitored. Bottled water sales continue to grow, and recent statistics show bottled water has surpassed the consumption of other commercially available beverages. The cost of bottled water is significant compared to tap water. For example, spending \$1 on bottled water can buy the equivalent of over 600 bottles worth of tap water. Bottled water also generates plastic waste that is difficult to recycle and additional costs from packaging and transportation. Drinking tap water is the financially and environmentally responsible thing to do.

6. Local Impact

York Region and its nine local municipalities work together to distribute high quality drinking water

Water quality standards are maintained through collaboration between York Region and the nine local municipalities. Although ownership and operation of the water systems is two-tiered, the Region and the local municipalities coordinate operation of highly efficient and integrated systems to provide safe and uninterrupted water supply to our shared customers.

Regional staff meet quarterly with each local municipality to collaboratively discuss, coordinate and resolve operational issues. This continued partnership with local municipalities has resulted in numerous operational strategies to deliver high quality water to our residents.

Each local municipality is independently rated by the Ministry on its local distribution system inspections and drinking water quality test results.

7. Conclusion

York Region's drinking water systems must comply with strict provincial regulations to keep drinking water safe. In 2021, all laboratory samples met compliance limits and no non-compliances were identified through Ministry inspections, confirming the excellent performance of York Region's drinking water systems. The ongoing excellence of our drinking water systems is supported through continual improvement initiatives including data management work.

This report and attachments satisfy the Council reporting requirements in Ontario Regulation 170/03 – Drinking Water Systems and support Council in meeting statutory standard of care requirements under the *Safe Drinking Water Act, 2002*. The drinking water quality and

systems data, posted on york.ca/opaenda and on york.ca/drinkingwater, satisfy the public-facing water quality and systems information reporting requirements under the Act. It demonstrates the Region's commitment to operational excellence through continual improvement, while also fulfilling our obligation to communicate performance to Council, stakeholders and the public. Council demonstrates due diligence required for decision-making under their statutory standard of care by reviewing and considering the information contained in this report when exercising decision-making authority.

For more information on this report, please contact David Szeptycki, Director of Strategy and Innovation at 1-877-464-9675 ext. 75723, or Beth Weir, Director of Operations, Maintenance and Monitoring at 1-877-464-9675 ext. 75340. Accessible formats or communication supports are available upon request.



Erin Mahoney, M. Eng.

Commissioner of Environmental Services

Recommended by:



Bruce Macgregor

Chief Administrative Officer

Approved for Submission:

February 9, 2022

Attachments (4)

eDOCS #13596224

2021 SUMMARY OF ADVERSE WATER QUALITY INCIDENTS AND CORRECTIVE ACTIONS

The Ministry of Environment, Conservation and Parks and the York Region Medical Officer of Health were satisfied with corrective actions taken for all events in the summary below and had no further direction.

Ansnorveldt DWS

There were no adverse water quality incidents for this drinking water system.

Aurora Sub-System (York Drinking Water System)

Incident Description	Date	Test Result	Corrective Action
Combined Chlorine Residual > 4.0 mg/L (Regulatory Relief Sites)	Nov 6	5.00 mg/L	Operator attended site, restored facility to normal operation.

Ballantrae-Musselman's Lake Drinking Water System

There were no adverse water quality incidents for this drinking water system.

Georgina Drinking Water System

Incident Description	Date	Test Result	Corrective Action
Filter Performance	Feb 2	>0.1 NTU	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
Fluoride > 1.5 mg/L	Jan 26	2.00 mg/L	Flow halted upon alarm and prevented water from entering the distribution system. Operator attended site. Facility returned to normal operation. Compliant grab sample taken.
	Mar 24	1.89 mg/L	Flow halted upon alarm and prevented water from entering the distribution system. Operator attended site. Facility returned to normal operation. Compliant grab sample taken.
	Jun 4	2.00 mg/L	Flow halted upon alarm and prevented water from entering the distribution system. Operator attended site. Facility returned to normal operation. Compliant grab sample taken.
	Jun 7	2.00 mg/L	Flow halted upon alarm and prevented water from entering the distribution system. Operator attended site. Facility returned to normal operation. Compliant grab sample taken.
	Aug 26	2.00 mg/L	Flow halted upon alarm and prevented water from entering the distribution system. Operator attended site. Facility returned to normal operation. Compliant grab sample taken.

Holland Landing Sub-System (York Drinking Water System)

Incident Description	Date	Test Result	Corrective Action
Sodium > 20.0 mg/L	Apr 15	21.9 mg/L	Operator attended site. Resample taken.

Keswick Sub-System (York Drinking Water System)

Incident Description	Date	Test Result	Corrective Action
Sodium > 20.0 mg/L	Apr 7	32.9 mg/L	Operator attended site. Resample taken.

King City Sub-System (York Drinking Water System)

There were no adverse water quality incidents for this drinking water system.

Kleinburg Sub-System (York Drinking Water System)

There were no adverse water quality incidents for this drinking water system.

Mount Albert Drinking Water System

There were no adverse water quality incidents for this drinking water system.

Newmarket Sub-System (York Drinking Water System)

There were no adverse water quality incidents for this drinking water system.

Nobleton Drinking Water System

There were no adverse water quality incidents for this drinking water system.

Schomberg Drinking Water System

Incident Description	Date	Test Result	Corrective Action
Combined Chlorine Residual > 3.0 mg/L	Feb 21	3.10 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
	Mar 30	3.66 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
	Apr 24	3.04 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
	May 30	3.12 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
Combined Chlorine Residual > 4.0 mg/L (Regulatory Relief Sites)	Sep 9	4.48 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
	Sep 10	4.10 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.

Sharon/Queensville Sub-System (York Drinking Water System)

Incident Description	Date	Test Result	Corrective Action
Sodium > 20.0 mg/L	Apr 21	22.0 mg/L	Operator attended site. Resample taken.

Stouffville Sub-System (York Drinking Water System)

Incident Description	Date	Test Result	Corrective Action
Sodium > 20.0 mg/L	Apr 7	26.3 mg/L	Operator attended site. Resample taken.

York Drinking Water System: Markham, Richmond Hill, Vaughan

Incident Description	Date	Test Result	Corrective Action
Combined Chlorine Residual > 3.0 mg/L	Feb 24	3.75 mg/L	Operator attended site, facility restored to normal operation. Compliant grab sample taken.
Sodium > 20.0 mg/L	Apr 14	20.8 mg/L	Operator attended site. Resample taken.

Accessible formats or communication supports are available upon request.
 Contact Corporate Communications at 1-877-464-9675 ext. 71234
 or ycorporatecommunications@york.ca

2021 SUMMARY OF INSPECTION FINDINGS AND CORRECTIVE ACTIONS

System Name and Inspection Date	Inspection Score (%)	Summary of Findings and Corrective Actions
Municipality: Aurora		
Aurora DWS October 26, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Municipality: East Gwillimbury		
Queensville DWS March 1, 2021	100	No non-compliance findings and two best management practice recommendations from this inspection: <ul style="list-style-type: none"> • Minor discrepancy between equipment installed onsite and the facility permit. Equipment onsite removed to align with permit and documentation was updated as appropriate. • Procedure for collecting water samples did not specify how to make corrections to digital sample custody forms. Staff reviewed the process and updated instructions to assist staff.
Mount Albert DWS November 10, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.

System Name and Inspection Date	Inspection Score (%)	Summary of Findings and Corrective Actions
Municipality: Georgina		
Georgina DWS January 14, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Keswick DWS March 15, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Municipality: King		
Ansnorveldt DWS January 15, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
King City DWS March 8, 2021	100	No non-compliance findings and one best management practice recommendation from this inspection: <ul style="list-style-type: none"> Ministry was not notified of a York Region staffing change using the correct form. A routine task was created to submit this type of change using the correct form.
King City DWS November 1, 2021	100	No non-compliance findings and one best management practice recommendation from this inspection: <ul style="list-style-type: none"> A routine facility logbook entry was missing the time of arrival for the Operator-in-Charge. The entry was later improperly amended to include this information. The logbook procedure was updated to clarify record keeping best practices and staff were re-trained.

System Name and Inspection Date	Inspection Score (%)	Summary of Findings and Corrective Actions
Ansnorveldt DWS November 16, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Municipality: Vaughan		
Kleinburg DWS January 27, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Municipality: Whitchurch-Stouffville		
Stouffville DWS February 4, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Stouffville DWS October 19, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Ballantrae-Musselman's Lake DWS October 27, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
Municipality: Markham, Richmond Hill, Vaughan		
York DWS March 29, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.
York DWS October 28, 2021	100	No non-compliance findings or best management practice recommendations from this inspection.

Accessible formats or communication supports are available upon request.
Contact Corporate Communications at 1-877-464-9675 ext. 71234 or
ycorporatecommunications@york.ca

eDOCS #13596241

2021 PERFORMANCE DATA SUMMARIES FOR YORK REGION'S DRINKING WATER SYSTEMS (DWS)

2021 Water Quality & Capacity Summary Ansnorveldt DWS

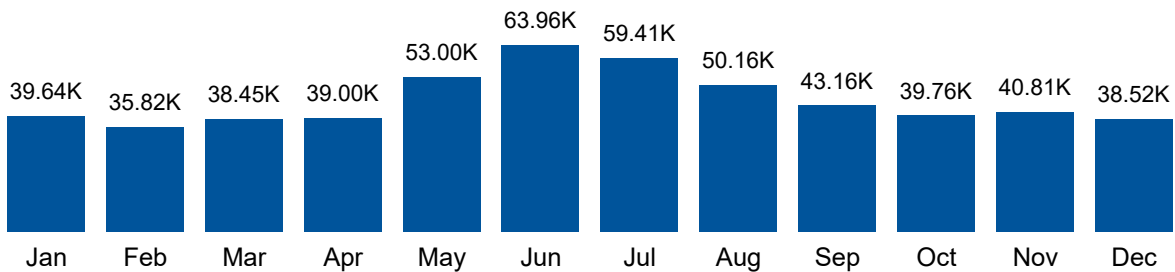
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Ansnorveldt DWS.

Chlorine	Fluoride	Sodium	Lead
1.51 mg/L	0.25 mg/L	41 mg/L	Not Detected (<0.0005 mg/L)

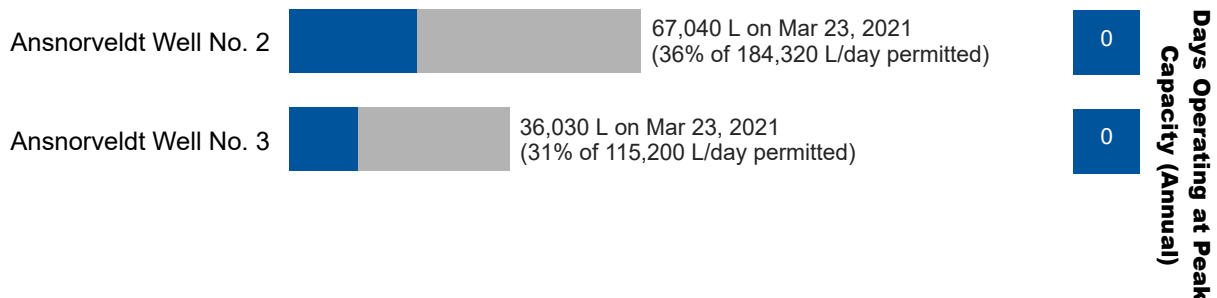
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Ansnorveldt DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Aurora DWS

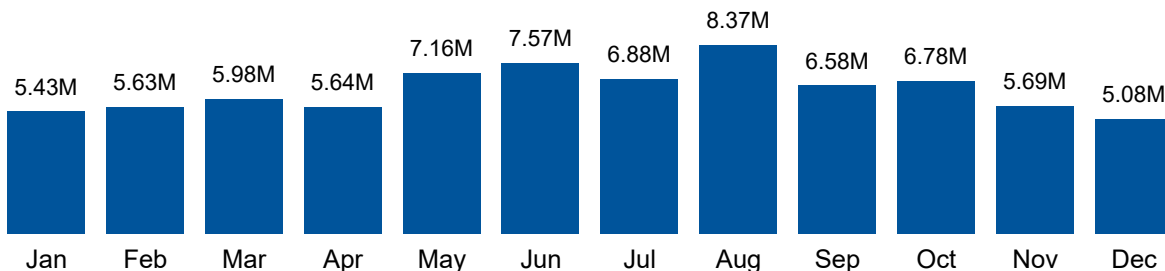
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Aurora DWS.

Chlorine	Fluoride	Sodium	Lead
2.65 mg/L	0.37 mg/L	15 mg/L	Not Detected (<0.0005 mg/L)

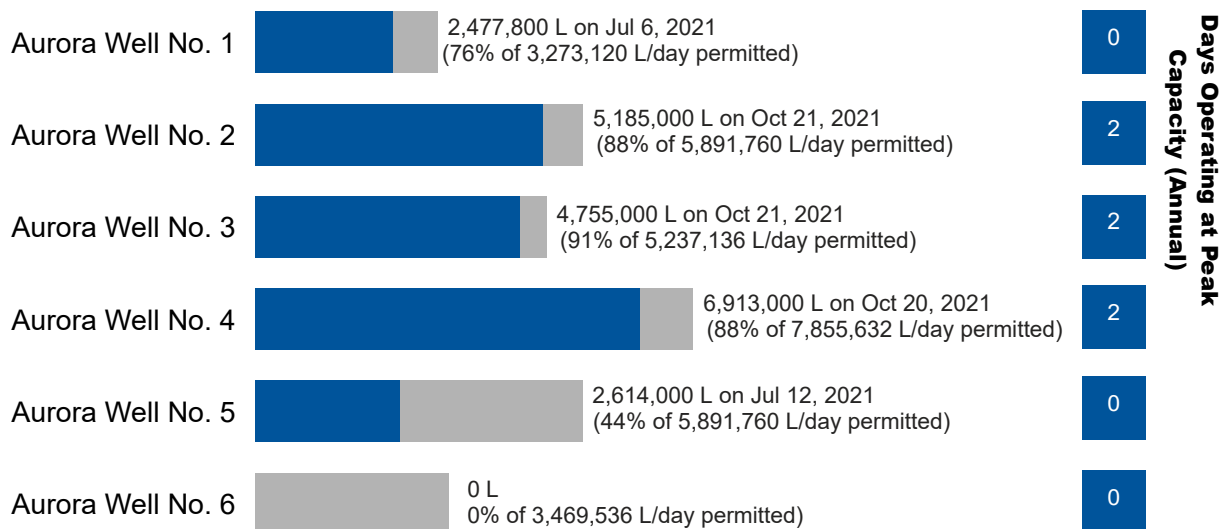
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Aurora DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary

Ballantrae/Musselman's Lake DWS

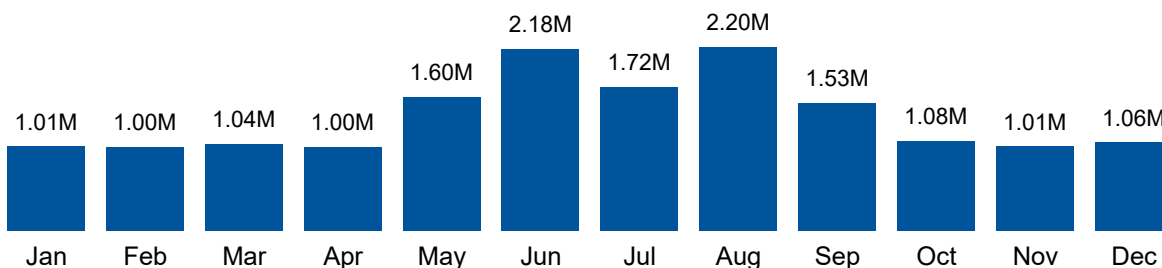
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Ballantrae/Musselman's Lake DWS.

Chlorine	Fluoride	Sodium	Lead
1.56 mg/L	0.08 mg/L	12 mg/L	Not Detected (<0.0005 mg/L)

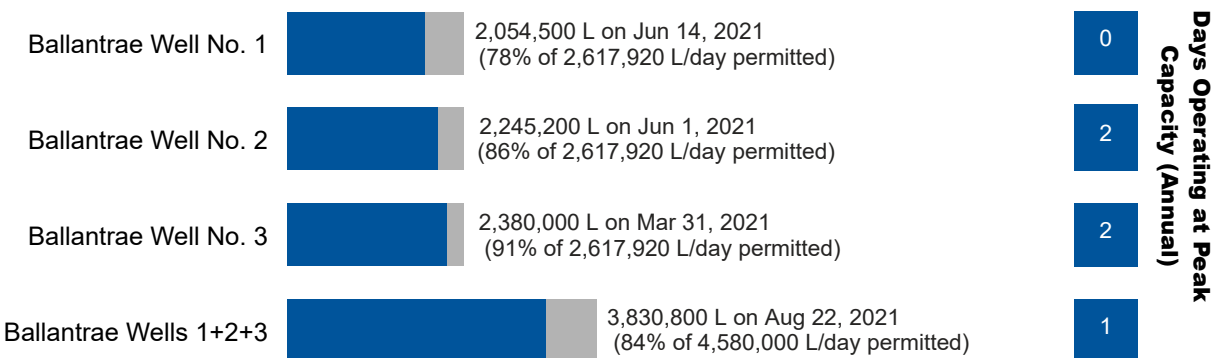
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Ballantrae/Musselman's Lake DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Georgina DWS

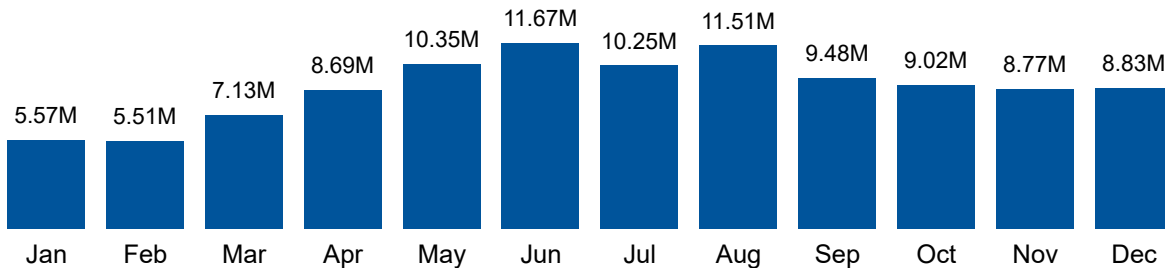
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Georgina DWS.

Chlorine	Fluoride	Sodium	Lead
1.65 mg/L	0.68 mg/L	33 mg/L	Not Detected (<0.0005 mg/L)

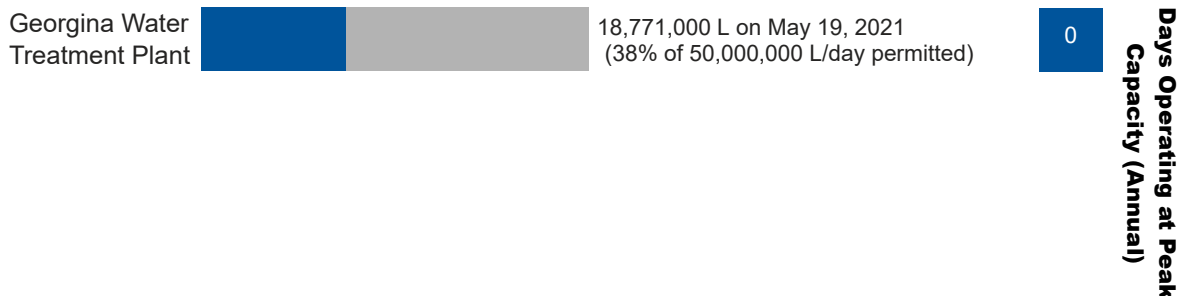
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Georgina DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Holland Landing DWS

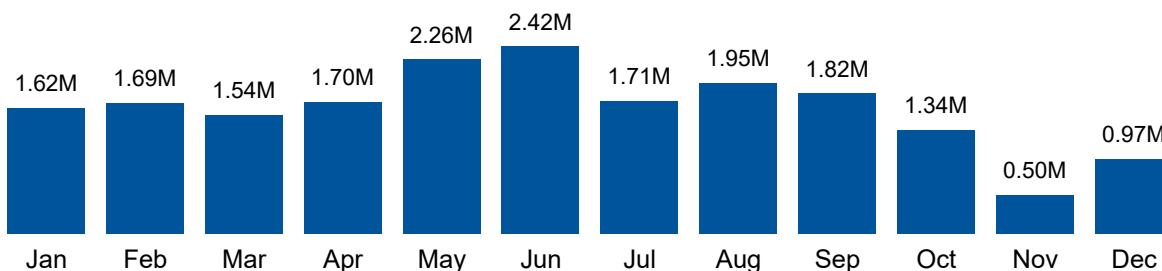
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Holland Landing DWS.

Chlorine	Fluoride	Sodium	Lead
2.54 mg/L	0.21 mg/L	20 mg/L	Not Detected (<0.0005 mg/L)

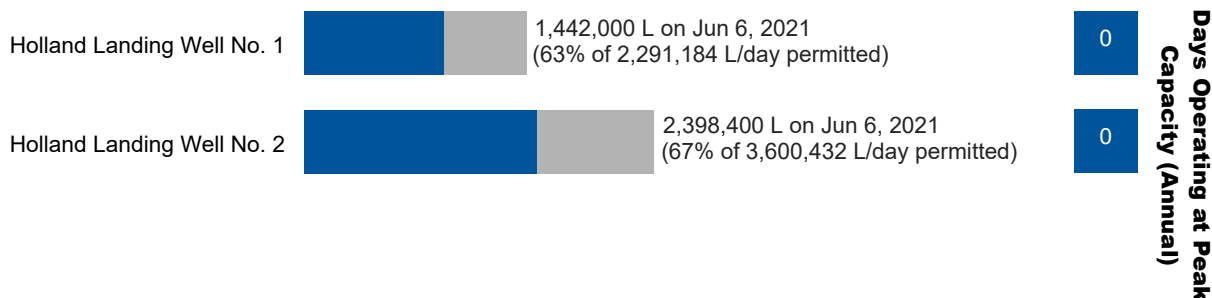
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Holland Landing DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Keswick DWS

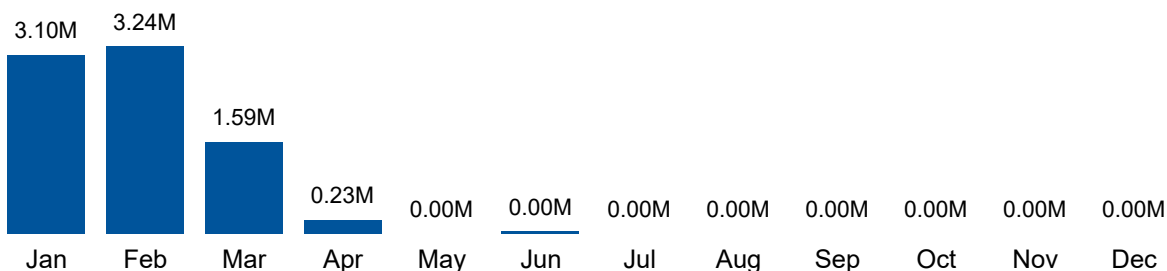
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Keswick DWS.

Chlorine	Fluoride	Sodium	Lead
1.32 mg/L	0.60 mg/L	33 mg/L	Not Detected (<0.0005 mg/L)

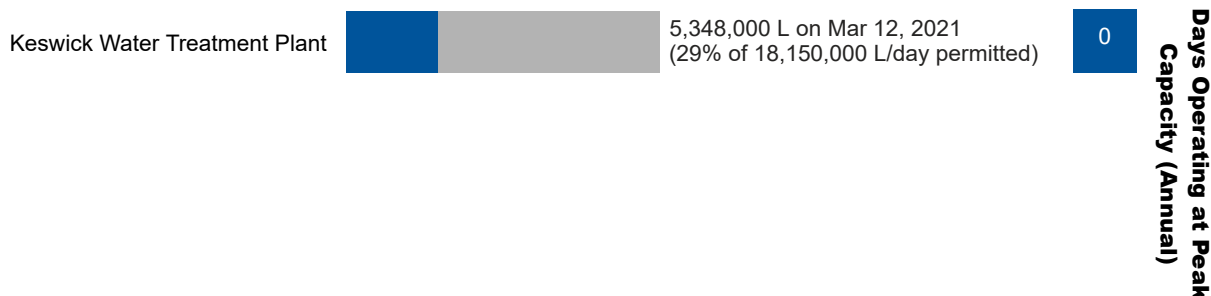
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Keswick DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary King City DWS

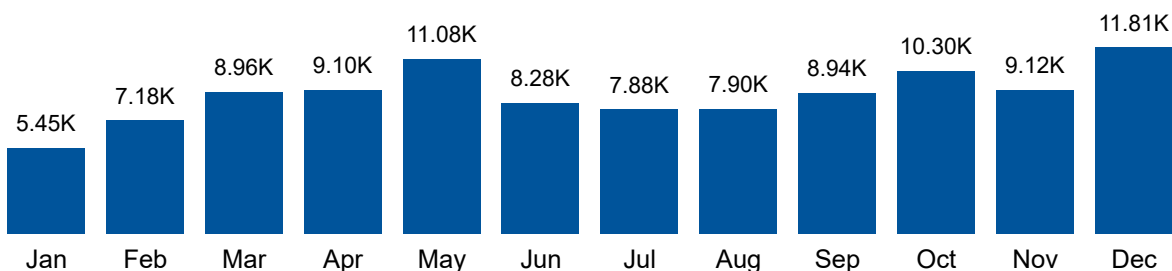
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from distribution facilities in the King City DWS.

Chlorine	Fluoride	Sodium	Lead
1.97 mg/L	0.58 mg/L	20 mg/L	Not Detected (<0.0005 mg/L)

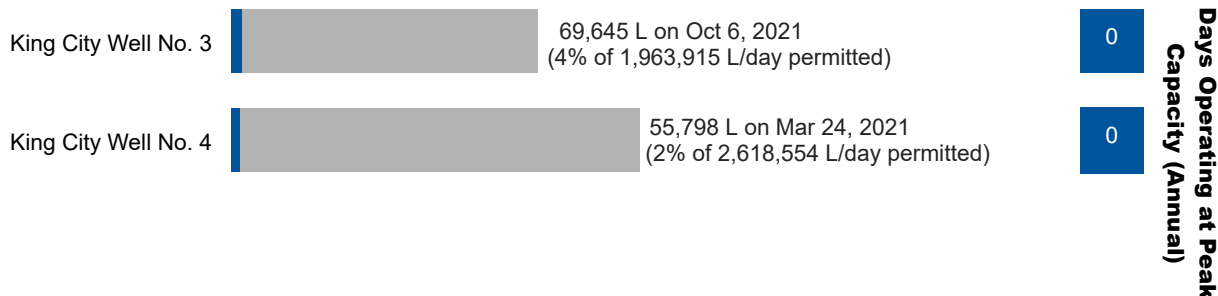
System Monthly Average Flow

The following chart shows the average flow of water withdrawn from wells to maintain standby availability in litres per day (L/day) each month in the King City DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Kleinburg DWS

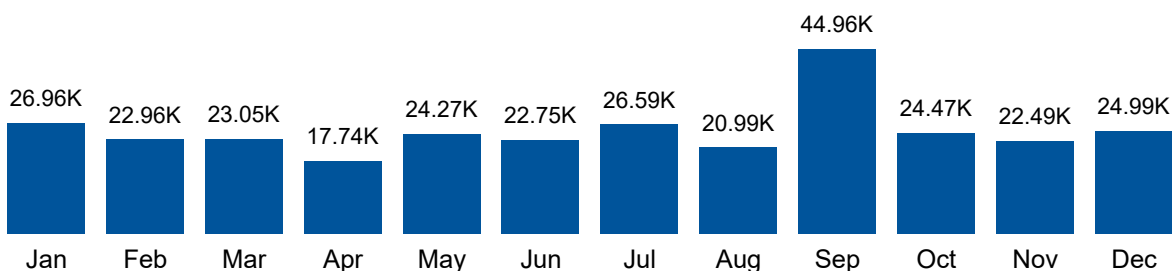
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from distribution facilities in the Kleinburg DWS.

Chlorine	Fluoride	Sodium	Lead
1.87 mg/L	0.58 mg/L	18 mg/L	Not Detected (<0.0005 mg/L)

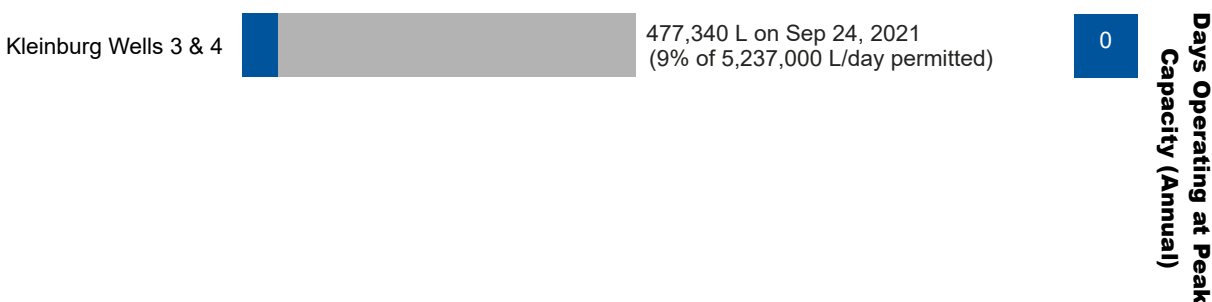
System Monthly Average Flow

The following chart shows the average flow of water withdrawn from wells to maintain standby availability in litres per day (L/day) each month in the Kleinburg DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Mount Albert DWS

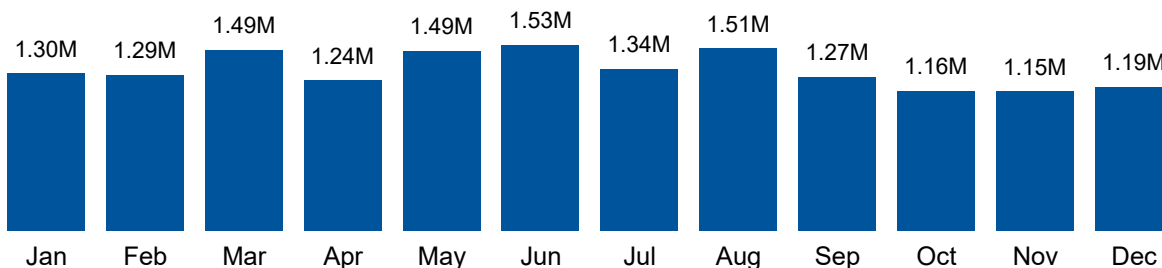
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Mount Albert DWS.

Chlorine	Fluoride	Sodium	Lead
1.60 mg/L	0.06 mg/L	12 mg/L	Not Detected (<0.0005 mg/L)

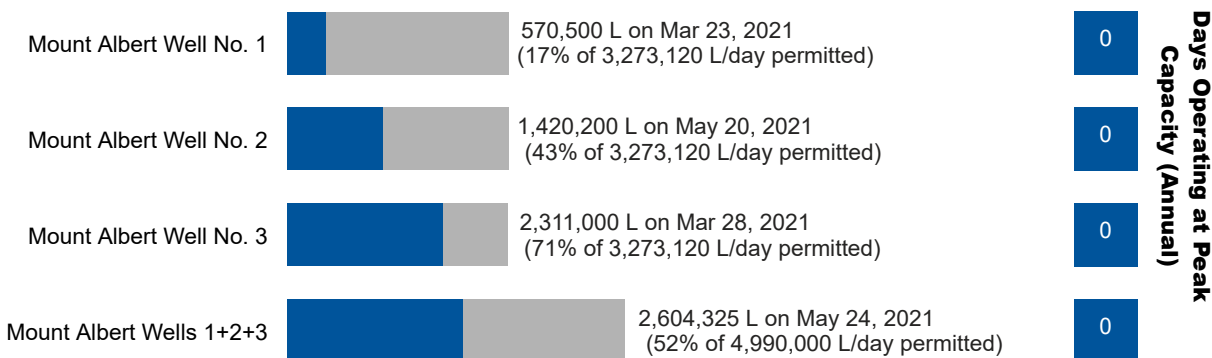
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Mount Albert DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Newmarket DWS

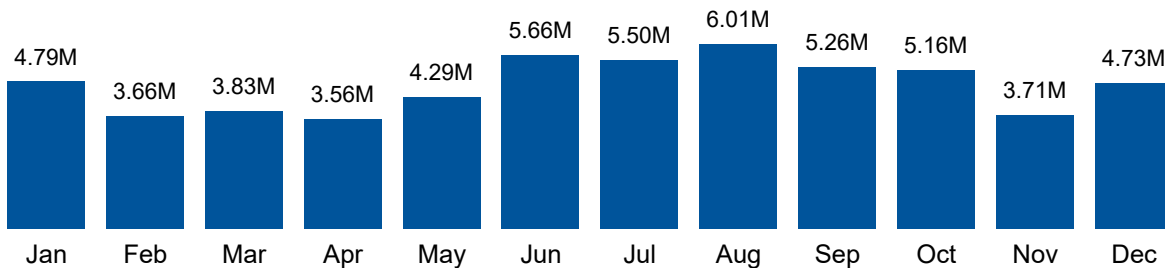
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Newmarket DWS.

Chlorine	Fluoride	Sodium	Lead
2.60 mg/L	0.33 mg/L	18 mg/L	Not Detected (<0.0005 mg/L)

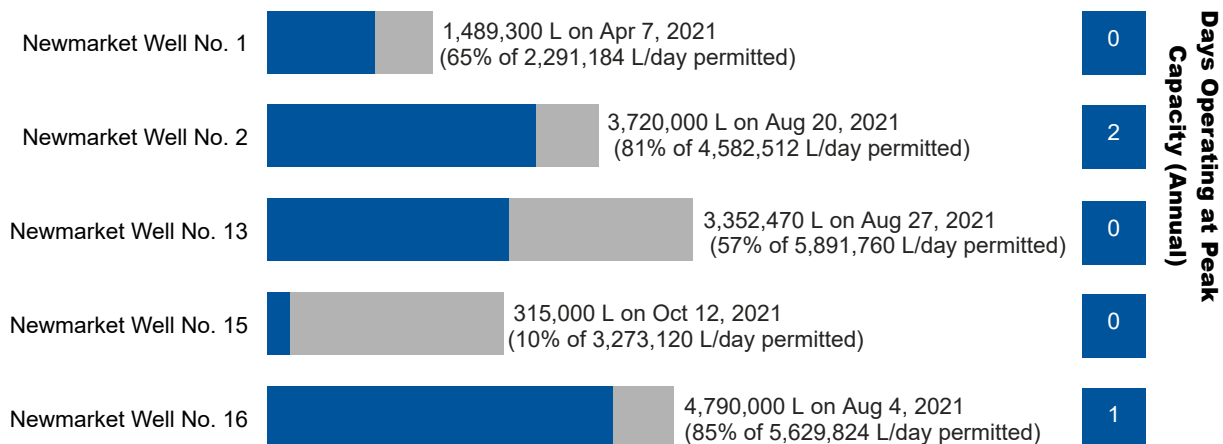
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Newmarket DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Nobleton DWS

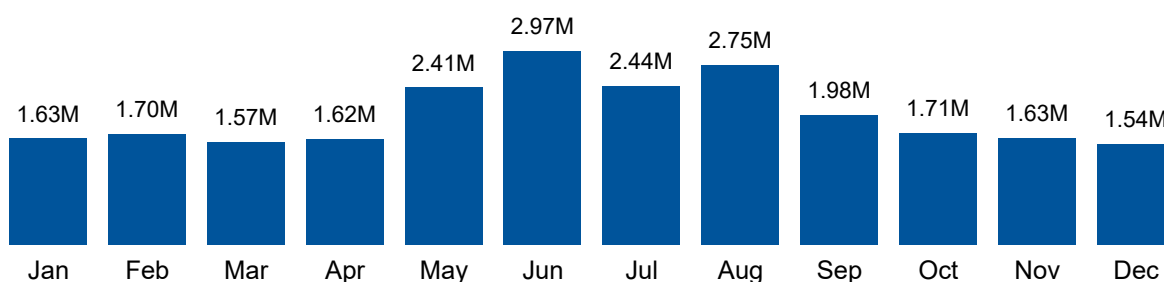
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Nobleton DWS.

Chlorine	Fluoride	Sodium	Lead
1.61 mg/L	0.12 mg/L	16 mg/L	Not Detected (<0.0005 mg/L)

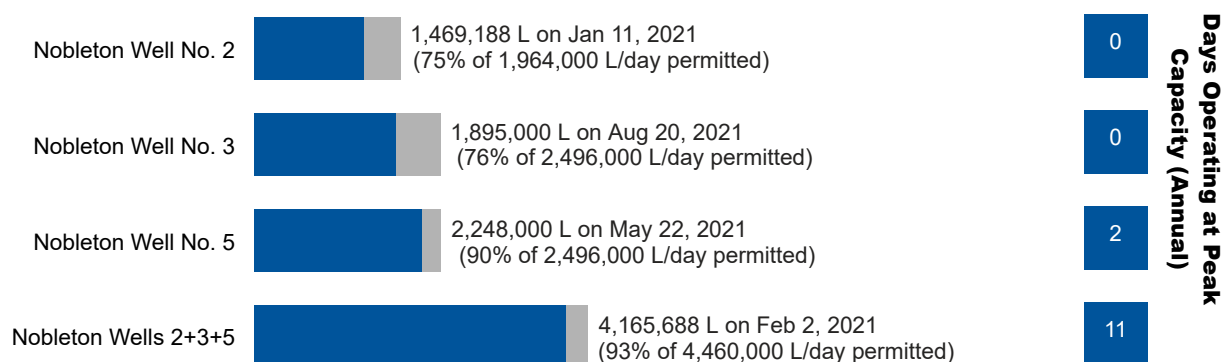
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Nobleton DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Schomberg DWS

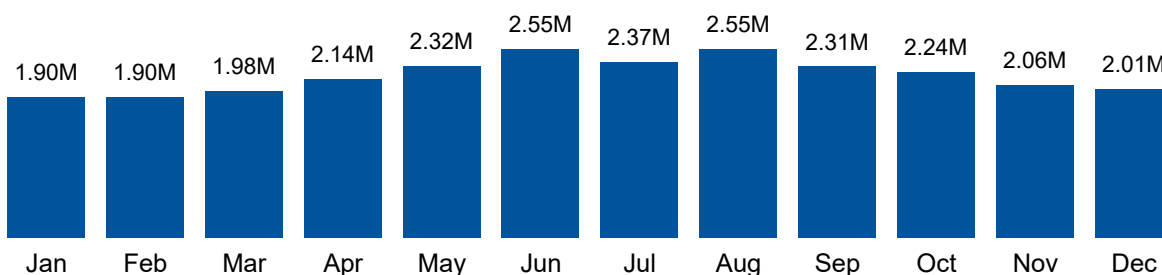
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Schomberg DWS.

Chlorine	Fluoride	Sodium	Lead
2.51 mg/L	0.16 mg/L	20 mg/L	Not Detected (<0.0005 mg/L)

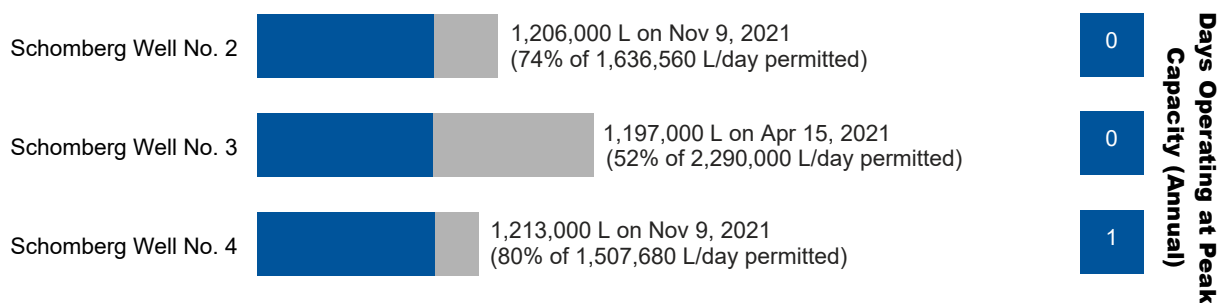
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Schomberg DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Sharon/Queensville DWS

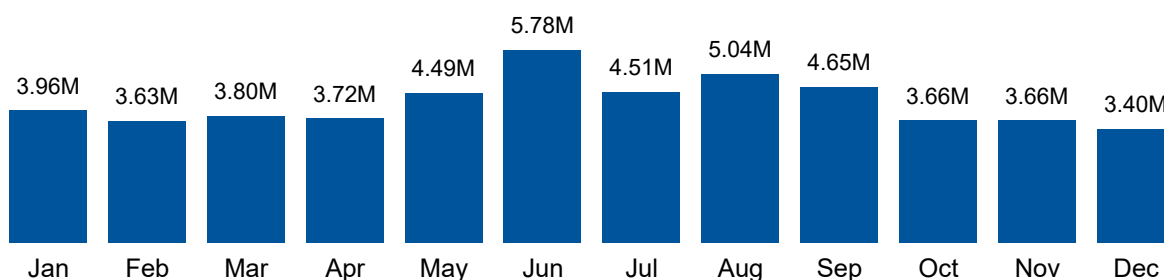
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Sharon/Queensville DWS.

Chlorine	Fluoride	Sodium	Lead
2.42 mg/L	0.21 mg/L	21 mg/L	Not Detected (<0.0005 mg/L)

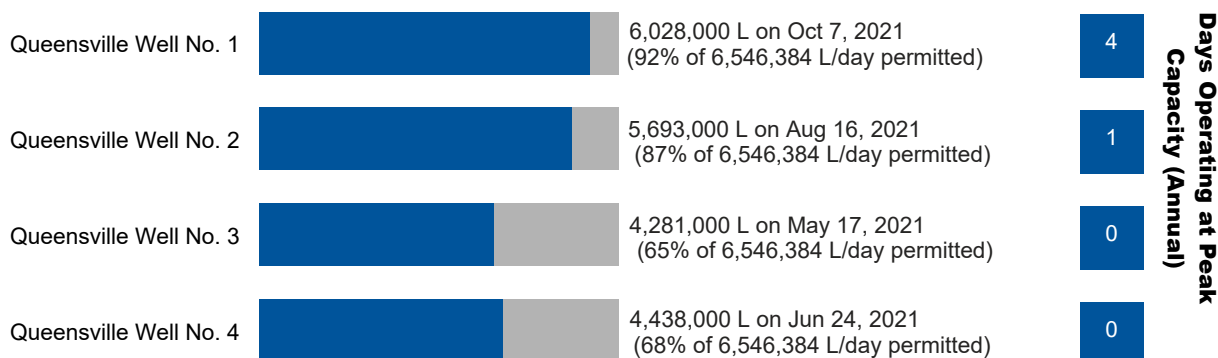
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Sharon/Queensville DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary Stouffville DWS

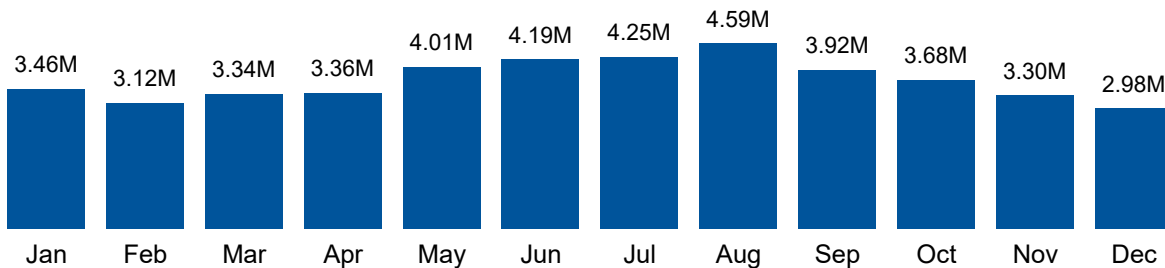
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from treatment and distribution facilities in the Stouffville DWS.

Chlorine	Fluoride	Sodium	Lead
1.57 mg/L	0.11 mg/L	44 mg/L	Not Detected (<0.0005 mg/L)

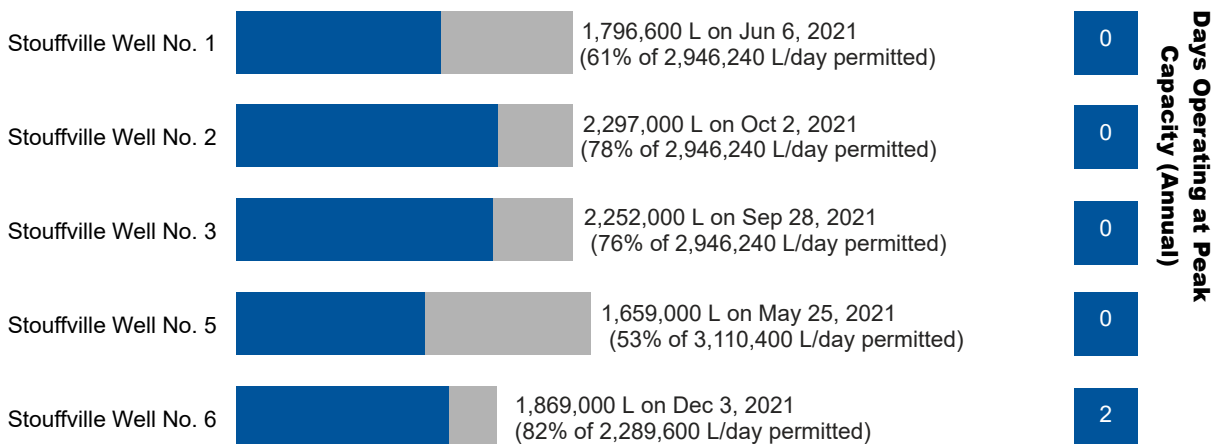
System Monthly Average Flow

The following chart shows the average flow of water produced (treated) in litres per day (L/day) each month in the Stouffville DWS.



Permitted and Actual Maximum Daily Withdrawal

The following chart shows the maximum volume of water withdrawn in a single day from each water supply facility (blue bar) compared to the maximum withdrawal permitted by the Ministry of the Environment, Conservation and Parks (grey bar). Also shown to the right is the number of days where the water supply facilities were operating at peak capacity (greater than 80% of the permitted withdrawal).



2021 Water Quality & Capacity Summary

York DWS Vaughan | Richmond Hill | Markham

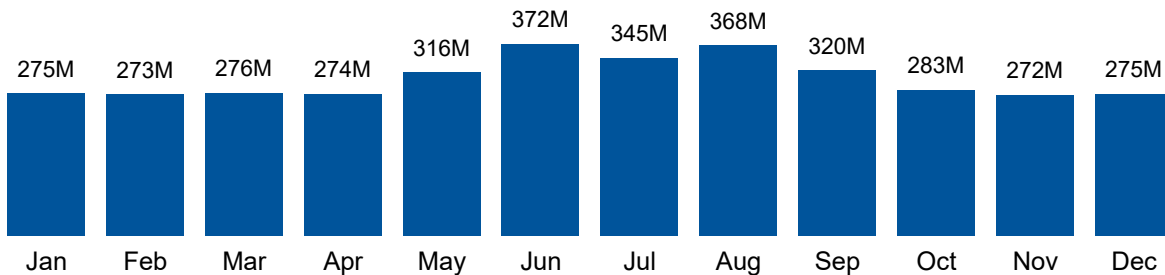
Top Requested Water Quality Parameters

Drinking water is monitored for a wide range of chemical parameters through a combination of continuous monitoring by online analyzers and routine grab samples by operators. The following annual average concentrations in milligrams per litre (mg/L) were reported from distribution facilities in the York DWS.

Chlorine	Fluoride	Sodium	Lead
1.68 mg/L	0.61 mg/L	16 mg/L	Not Detected (<0.0005 mg/L)

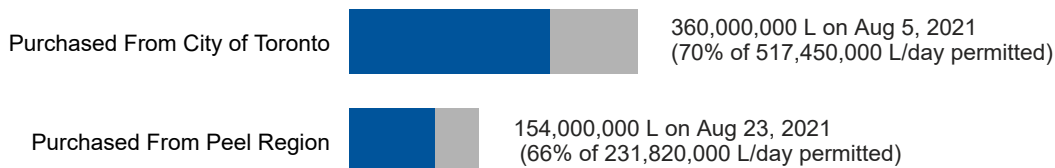
System Monthly Average Flow

The following chart shows the monthly average consumption in million litres per day of purchased Lake Ontario water.



Permitted and Actual Maximum Daily Withdrawal

The City of Toronto and Peel Region supply water to York Region under water supply agreements. The following chart shows the maximum volume of water purchased from each municipality in a single day (blue bar) compared to the maximum flow permitted under the applicable water supply agreement (grey bar).



Accessible formats or communication supports are available upon request. Contact Corporate Communications at 1-877-464-9675 ext. 71234 or yrccorporatecommunications@york.ca

eDOCS #13596252

2021 SUMMARY OF EXPENSES TO INSTALL, REPAIR OR REPLACE REQUIRED EQUIPMENT

This summary fulfills reporting requirement under *Ontario Regulation 170/03 – Drinking Water Systems* to summarize any major expenses incurred to install, repair or replace required equipment. Operating costs are not reflected in these totals.

Drinking Water System	Description of Monetary Expenses	Total
Municipality: Aurora		
Aurora Drinking Water Sub-System	Treatment facility upgrades, watermain replacement, standby power generator replacement, new well installation, well rehabilitation and maintenance, valve chamber upgrades, general maintenance and repairs	\$1,281,428
Municipality: East Gwillimbury		
Holland Landing Drinking Water Sub-System	Well rehabilitation, electrical upgrades, general maintenance and repairs	\$804,259
Mount Albert Drinking Water System	Well rehabilitation and maintenance, general maintenance and repairs	\$93,823
Sharon-Queensville Drinking Water Sub-System	Treatment facility upgrades, well rehabilitation and maintenance, general maintenance and repairs	\$362,845
Municipality: King		
Ansnorveldt Drinking Water System	General maintenance and repairs	\$16,944

Drinking Water System	Description of Monetary Expenses	Total
King City Drinking Water Sub-System	Treatment facility upgrades, elevated tank repairs and upgrades, well rehabilitation and maintenance, general maintenance and repairs	\$302,346
Nobleton Drinking Water System	Treatment facility upgrades, well rehabilitation and maintenance, general maintenance and repairs	\$308,633
Schomberg Drinking Water System	Well rehabilitation and maintenance, general maintenance and repairs	\$205,026
Municipality: Newmarket		
Newmarket Drinking Water Sub-System	Well rehabilitation and maintenance, watermain repair, new water meter chamber installation, elevated tank repairs and upgrades, SCADA upgrades, valve chamber upgrades, general maintenance and repairs	\$1,641,475
Municipality: Georgina		
Georgina Drinking Water System	Treatment plant rehabilitation, general maintenance and repairs	\$2,218,811
Keswick Drinking Water Sub-System	Treatment plant upgrades, general maintenance and repairs	\$1,149,458
Municipality: Whitchurch-Stouffville		
Ballantrae-Musselman's Lake Drinking Water System	Treatment facility upgrades, elevated tank repairs and upgrades, well rehabilitation and maintenance, general maintenance and repairs	\$804,940

Drinking Water System	Description of Monetary Expenses	Total
Stouffville Drinking Water Sub-System	Treatment facility upgrades, elevated tank upgrades, well rehabilitation and maintenance, general maintenance and repairs	\$903,397
Municipality: Markham, Richmond Hill, Vaughan		
Kleinburg Drinking Water Sub-System	Well rehabilitation and maintenance, general maintenance and repairs	\$73,413
York Drinking Water System	Standby power generator and fuel tank installation and upgrades, reservoir rehabilitation and upgrades, elevated tank rehabilitation and upgrades, valve chamber repairs and upgrades, watermain installation and rehabilitation, general maintenance and repairs	\$11,904,978
Total:		\$22,071,776

Accessible formats or communication supports are available upon request.
 Contact Corporate Communications at 1-877-464-9675 ext. 71234 or
ycorporatecommunications@york.ca

eDOCS #13596259

Regional Council Decision - 2021 Integrated Management System Update Report for Water, Wastewater and Waste Management

On March 24, 2022 Regional Council made the following decision:

1. The Regional Clerk circulate this report to the Clerks of the local municipalities and the Ontario Chief Drinking Water Inspector (Ministry of the Environment, Conservation and Parks) for information.

The original staff report is attached for your information.

Please contact David Szeptycki, Director, Strategy and Innovation at 1-877-464-9675 ext. 75723 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Regional Clerk's Office, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
O: 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Environmental Services
March 3, 2022

Report of the Commissioner of Environmental Services

2021 Integrated Management System Update Report for Water, Wastewater and Waste Management

1. Recommendation

The Regional Clerk circulate this report to the Clerks of the local municipalities and the Ontario Chief Drinking Water Inspector (Ministry of the Environment, Conservation and Parks) for information.

2. Summary

This annual update on the efficacy of Environmental Services' Integrated Management System summarizes key strategies to mitigate service delivery risk, demonstrates operational due diligence, supports Council in meeting statutory standard of care requirements and outlines Drinking Water Quality Management Standard progress under the *Safe Drinking Water Act, 2002*.

Key Points:

- Environmental Services' Integrated Management System is mature, well-established and provides a structured approach to risk mitigation and continual improvement
- In accordance with Public Health guidance, internal audits in 2021 continued to be delivered virtually. Audits performed at water, wastewater and waste management facilities provided valuable insight into delivery of our services and resulted in improved operational performance and regulatory due diligence
- In 2021, Environmental Services participated in multiple external audits, which resulted in only one minor non-conformity and successful re-registration to International Organization for Standardization's Environmental Management Standard (ISO 14001:2015). Details of this minor non-conformity are summarized herein.

3. Background

Members of Regional Council have a legal obligation to ensure safe drinking water is provided to residents under the *Safe Drinking Water Act, 2002*

Regional Councillors have an important role in ensuring that York Region's drinking water systems provide safe, high-quality drinking water. *Safe Drinking Water Act, 2002* establishes a legal duty on municipal Councillors to exercise a level of care, diligence, and skill with regard to municipal drinking water system oversight that a reasonably prudent person would be expected to exercise. Councillors are not expected to be experts but are required to be informed and act with a view to ensuring the protection and safety of users of the municipal drinking water system. York Region Council remains informed by reviewing this report and by reviewing drinking water system performance outlined in the 2021 Drinking Water Systems Report (also on this agenda), which includes Ministry of the Environment, Conservation and Parks drinking water inspection results.

The Integrated Management System (the system) encompasses three standards focusing on quality and environmental management. The system provides a consistent framework to mitigate risk, comply with applicable legal requirements, minimize operational impacts on the environment and continually improve processes. Council supports the system by providing financial resources and support for continual improvement initiatives.

Table 1 summarizes roles and responsibilities, as defined in the Integrated Management System. Council and the Chief Administrative Officer, identified as Corporate Top Management, are required to provide oversight to ensure suitability and effectiveness of the Integrated Management System. Operational Top Management, which includes the Commissioner, Directors and Managers in Environmental Services, fulfills its role in the system by making strategic and operational decisions and preparing this annual report to Council.

Table 1
Roles and Responsibilities for Environmental Services’
Integrated Management System (IMS)

Who	Roles and Responsibilities for IMS
Corporate Top Management	
<ul style="list-style-type: none"> • Council • Chief Administrative Officer 	<ul style="list-style-type: none"> • Exercise standard of care • Overall direction for Environmental Services’ IMS • Approval of resources and budget
Operational Top Management	
<ul style="list-style-type: none"> • Commissioner • Directors • Managers 	<ul style="list-style-type: none"> • Strategic direction for IMS • High-level operational decision-making • Assign Drinking Water Quality Management Standard representative to oversee standard implementation
Water, Wastewater and Waste Management Operations	
<ul style="list-style-type: none"> • Water and Wastewater Operators • Waste Management Coordinators • Technical Support Staff • IMS Coordinators 	<ul style="list-style-type: none"> • Front line operations • Water and wastewater quality sampling • Maintenance, inspections and asset management • Documentation, data capture and validation • Internal audits and regulatory reporting • Operational training requirements

Integrated Management System assists Council with meeting standard of care

The Integrated Management System assists Council by providing confidence that water, wastewater and waste management services are delivered in accordance with policies and procedures. Service delivery standards are outlined and confirmed through audits. Audits help identify and mitigate operational risks, deliver feedback for continual improvement, offer transparency and gauge operational resilience. Audit outcomes demonstrate to top management that the system is achieving intended results and support statutory standard of care obligations.

York Region is a leading municipality in management system implementation

York Region was the first organization in North America to apply International Organization for Standardization's Environmental Management Standard (ISO 14001) to a wastewater distribution system. York Region's Integrated Management System continues to evolve through a focused approach of continual improvement to program and service delivery.

Table 2 summarizes standards applied to Environmental Services' operational areas. York Region's adherence to International Organization for Standardization (ISO) standards is voluntary, while adoption of the Drinking Water Quality Management Standard (DWQMS) is a legal requirement under the *Safe Drinking Water Act, 2002* and the Municipal Drinking Water Licensing Program. By subscribing to multiple standards, the system effectively mitigates environmental and quality risks, while supporting service delivery excellence and compliance with regulatory requirements.

Table 2
Integrated Management System Framework

Operations	Management Standard	Registered Since
Wastewater	ISO 14001 Environmental Management Standard	2000
Water	ISO 9001 Quality Management Standard	2001
	Drinking Water Quality Management Standard	2009
Waste Management	ISO 14001 Environmental Management Standard	2010
	ISO 9001 Quality Management Standard	2018

Integrated Management System is a framework to manage risk, protect public health and the environment

The Integrated Management System Policy (Figure 1) is a requirement of our registration and provides the foundation for management system commitments. It sets the framework for water, wastewater and waste management quality and environmental objectives. It is displayed at all registered water, wastewater and waste management facilities.

Figure 1

Integrated Management System Policy



Auditing confirms system effectiveness by evaluating conformance with each management system standard

An effective audit program is a critical component of the Integrated Management System. Audit programs monitor compliance with regulatory requirements, conformance with internal processes and strengthen system performance by identifying continual improvement opportunities.

Facilities and programs are audited via three main types of audits:

- Internal proactive audits
 - Conducted regularly by trained auditors within Environmental Services to confirm conformance to management system requirements and to evaluate compliance with regulatory requirements

- ISO external audits
 - Completed annually by a third-party registration body (SGS Canada Inc.) to confirm conformance to ISO 9001 and ISO 14001
- Regulatory DWQMS audits
 - Completed annually by a third-party registration body (QMI-SAI Canada Limited) to confirm conformance to the DWQMS, on behalf of the Ministry of the Environment, Conservation and Parks

4. Analysis

Comprehensive audit program continues to evolve and integrate virtual delivery best practices

Environmental Services' audit program drives regulatory compliance and continual improvement through the Integrated Management System. Audits confirm system resiliency and due diligence by ensuring that staff are continually challenging the status quo and looking for opportunities to strengthen program and service delivery. To ensure the health and safety of staff and comply with Public Health measures, internal proactive audits and most external audits were conducted virtually in 2021. The virtual audit process included a thorough document review ahead of facility tours (conducted virtually with on-site staff via mobile video feeds) and in-depth staff interviews. Internal proactive audits are required by DWQMS and ISO standards and delivering audits virtually complies with these requirements.

Audit results confirm high level of compliance and demonstrate system maturity

In 2021, Environmental Services conducted 55 internal proactive audits resulting in 54 findings. Each year, audit findings identify internal process improvements and system enhancements. Table 3 summarizes the number of audit findings by audit type, from 2019 to 2021. Despite a rigorous audit program, a relatively low number of findings over the last 3 years demonstrates system strength and maturity and successful implementation of continual improvement initiatives. Audit results fluctuate based on audit techniques, technology and data management practices, which continue to evolve, allowing for refinement of audit delivery, documentation review and data analysis. Moving forward, it is anticipated that audits will take a hybrid approach, implementing best practices and lessons learned from both virtual and on-site auditing methods.

Table 3
Number of Audit Findings for Water, Wastewater and Waste Management

Audit Type	2019	2020	2021
Internal Proactive Audit	60	48	54
ISO External Audit	0	1	1
Regulatory DWQMS Audit	0	0	0

Audit findings highlight key priorities and continual improvement initiatives

Key areas of focus for 2021 included assessing chemical management practices for water and wastewater operations, reviewing equipment calibration processes and evaluating consistent implementation of new operational practices (e.g. electronic logbooks, sample process automation). Table 4 identifies internal audit findings by category. Compared to 2020, audit findings per category remained relatively unchanged. Corrective actions are put in place to address each audit finding. Actions include updating guidance documents to reflect process changes, implementing process enhancements to drive efficiencies, monitoring staff training requirements and improving data capture in work orders and daily inspections. Audit findings and corrective actions have informed key areas of focus for 2022 audits. Our systematic approach to addressing audit findings over the past 20 years minimizes risk to the Region and ensures public safety.

Table 4
Number of Internal Audit Findings by Category

Category	2020	2021
Documentation	19	23
Process Improvements	13	14
Asset Tracking and Calibration	9	6
Training	5	5
Miscellaneous	2	6

Third-party audits resulted in only one minor non-conformity and successful re-registration to ISO 14001 Standard

Third-party audits are intended to confirm the Integrated Management System complies with requirements of DWQMS and ISO standards. Audits are completed by certified external auditors who stringently review internal system processes. In 2021, three external audits were conducted over 22 audit days. Third-party audits resulted in one minor non-conformity related to storage of a small quantity of used batteries at a maintenance facility, which did not have any environmental impacts or affect drinking water quality or safety. A corrective action plan was developed, approved and implemented to address the root cause of the issue. Audit results and feedback received during 2021 external audits indicate that our operations are performing well and the Integrated Management System is effectively mitigating risks. External audits demonstrate the Region's ability to sustain services that are compliant with applicable regulations and York Region service level targets.

Operational Top Management confirm adequacy, suitability and effectiveness of the Integrated Management System

Annual management review meetings are required by all three management standards to review system performance and verify implementation of continual improvement initiatives. Operational Top Management use this opportunity to assess efficacy of the Integrated Management System. The review focuses on system and regulatory performance, audit results, resources, legal changes, customer feedback and operational risks and opportunities. A collaborative review is critical and helps identify opportunities to improve efficiency and drive results. Through discussion, management identifies systemic risks and establishes priorities for the upcoming year. Operational Top Management met in Q1 2022 to review system performance from 2021 and confirm the adequacy, suitability and effectiveness of the Integrated Management System.

Risk mitigation is a key component of the Integrated Management System

The Integrated Management System provides a multiprong approach to identify and mitigate system risks through established risk management practices and proactive audits. Operational Top Management meets quarterly to evaluate emerging risks and track progress on associated mitigation projects. In 2021, a full re-assessment of drinking water system risks was conducted, as required by the Drinking Water Quality Management Standard every 36 months. As required by ISO 14001, an annual review of environmental risks was completed for wastewater and waste management operations. These robust processes monitor and mitigate system risks and identify continual improvement projects.

Continual improvement initiatives drive efficiencies in performance

Within the Integrated Management System, staff completed several process enhancements in 2021 to drive efficiencies in water, wastewater and waste management service delivery, including:

- Conducted 11 debriefs and root cause analysis workshops reviewing incidents such as watermain breaks, minor spills and software challenges. 60 actions were identified to capture lessons learned and prevent incident recurrence
- Shifted to service-specific emergency tests to provide water, wastewater and waste management staff with specialized learning opportunities and service-specific improvements to processes and procedures
- Supported digital initiatives and data transparency for internal stakeholders through enhancements to communications data and incident tracking
- Streamlined compliance tracking and risk management through improvements to a legal registry database and risk assessment process updates
- Finalized endorsement of the Integrated Management System Policy Manual to effectively capture process changes and updates

Together, these improvement initiatives support system efficiency and performance, cost savings and risk mitigation, which strengthen service delivery in water, wastewater and waste management operations.

Emergency preparedness tools in the Integrated Management System supported COVID-19 response

Throughout the pandemic, Environmental Services provided and continues to provide York Region residents with essential services including water, wastewater and waste management. The Integrated Management System supports service delivery and operations in several areas, including emergency response. The system has a strong foundation in emergency preparedness, through emergency procedures, training and testing, which supports corporate and departmental emergency management. Beyond virtual audits, there were no major changes to delivery of Integrated Management System support functions and work continues to be virtual to support Public Health guidelines and frontline operations.

5. Financial

Integrated Management System generates a value-added return on investment for risk mitigation and regulatory compliance

Total actual program costs to operate the Integrated Management System in 2021 were \$692,649, representing less than 1% of Environmental Services' gross operating costs. Program costs, including staffing and external audit services, are funded 80% through water and wastewater user rates and 20% from the tax levy designated for waste management activities.

Council's support of the Integrated Management System generates a value-added return on investment and helps sustain our reputation as environmental stewards. Environmental

Services' high scores during regulator inspections are in part attributed to the activities and rigour of the Integrated Management System. The system provides substantial risk mitigation and consistent management of quality and environmental objectives, resulting in cost avoidance of potential environmental restoration or water quality situations. A worthwhile investment, the system assists Council in meeting standard of care obligations prescribed in the *Safe Drinking Water Act, 2002*.

6. Local Impact

York Region and local municipal partners benefit from a collaborative approach to service delivery

Environmental Services' Integrated Management System provides benefits to local municipalities as it supports a systematic approach to mitigating full-system risks and environmental impacts. Local municipalities benefit from a systems approach, which drives continual improvement and risk mitigation, that meets regulatory requirements in the shared service delivery model for water, wastewater and waste management operations.

All local municipalities maintain a quality management system to meet requirements of the DWQMS. Environmental Services staff meets regularly with municipal and provincial partners to address challenges, share best practices, evaluate operating procedures and develop common approaches for efficient and effective service delivery.

7. Conclusion

Providing a summary of Environmental Services' performance and enhancements in the context of the Integrated Management System supports Council with meeting standard of care requirements under the *Safe Drinking Water Act, 2002*. Work delivered through the Integrated Management System demonstrates York Region's commitment to ongoing improvement and resiliency of programs and services. Continual improvement initiatives support system efficiencies and accomplish improved risk mitigation.

Successful external audits in 2021, including re-certification to ISO 14001, confirm the Integrated Management System is well-established, mature, and systematically reduces operational risk. Through various check and balances that occur throughout the year, management confirms adequacy and effectiveness of the Integrated Management System to strengthen the delivery of York Region's water, wastewater, and waste management services.

For more information on this report, please contact David Szeptycki, Director, Strategy and Innovation at 1-877-464-9675 ext. 75723. Accessible formats or communication supports are available upon request.



Recommended by:

Erin Mahoney, M. Eng.
Commissioner of Environmental Services



Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

January 18, 2022
eDOCS#13519027

Regional Council Decision - 2022 Property Tax Rates

On March 24, 2022 Regional Council made the following decision:

1. Regional property tax rates for 2022 be established for the following property classes:

Broad Property Class	Tax Rates %
Residential/Farm	0.335958%
Multi-Residential	0.335958%
Commercial	0.447530%
Industrial	0.552046%
Pipelines	0.308745%
Farmland	0.083990%
Managed Forests	0.083990%

2. Local municipalities pay the final two instalments of their 2022 Regional property tax levy on or before September 29, 2022 and December 15, 2022
3. Notional tax rate calculation adjustment be adopted
4. Council approve a bylaw to give effect to these recommendations
5. The Regional Clerk circulate this report to local municipalities

The original staff report is attached for your information.

Please contact Edward Hankins, Director, Treasury Office and Deputy Treasurer at 1-877-464-9675 ext. 71644 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

 The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Finance and Administration
March 3, 2022

Report of the Commissioner of Finance

2022 Property Tax Rates

1. Recommendations

1. Regional property tax rates for 2022 be established for the following property classes:

Broad Property Class	Tax Rates %
Residential/Farm	0.335958%
Multi-Residential	0.335958%
Commercial	0.447530%
Industrial	0.552046%
Pipelines	0.308745%
Farmland	0.083990%
Managed Forests	0.083990%

2. Local municipalities pay the final two instalments of their 2022 Regional property tax levy on or before September 29, 2022 and December 15, 2022
3. Notional tax rate calculation adjustment be adopted
4. Council approve a bylaw to give effect to these recommendations
5. The Regional Clerk circulate this report to local municipalities

2. Summary

Property tax rates need to be established for various property classes in order for the tax levy component of the Regional Budget to be raised for 2022.

Key Points:

- Tax rates are set annually to raise the tax levy specified in the budget approved by Council
- The relative rates for each of the broad property classes are determined by the weighting prescribed in the Property Tax Ratio bylaw
- The proposed 2022 tax rates are calculated using the 2022 tax ratios submitted to Council concurrent to this report

3. Background

Section 311(2) of the *Municipal Act, 2001* (“the Act”) requires an upper-tier municipality to pass a tax rating bylaw each year unless otherwise specified by the Province, setting out tax rates for each property class. This allows the Region to raise sufficient revenues to meet its budgetary requirements.

The proposed tax rates are based on the 2021 Returned Roll provided by the Municipal Property Assessment Corporation (MPAC), as well as the tax ratios listed in the 2022 Property Tax Ratios report and the 2022 Budget approved by Council.

To minimize any challenges that municipalities, residents and businesses are facing, the Province announced in March 2021 that the planned 2020 reassessment would be postponed and that 2021 property taxes would be based on assessment values used for the 2020 taxation year. Consequently, Council directed that the 2020 tax ratios be maintained for the 2021 taxation year.

In the 2021 Provincial Budget, the Province subsequently extended the delay of the reassessment. In the 2021 Fall Economic Statement, the Province stated the delay would be further extended until at least 2023. As a result, staff recommended maintaining 2020-2021 ratios for the 2022 taxation year.

4. Analysis

2022 tax rates are determined using the approved budget, assessment values and tax ratios

Regional property tax rates are calculated based on the following formula:

$$\text{Property Tax Rates} = \frac{\text{Total Property Tax Funding Requirement for 2022}}{\text{Weighted and Discounted Assessment for All Classes}} \times \text{Tax Ratio for the Class}$$

Weighted and discounted property assessment is calculated by taking the assessment returned by the Municipal Property Assessment Corporation for 2022 and weighted by applying the tax ratios presented in the 2022 Property Tax Ratios Report and any discount applicable to the property subclasses, which has been submitted to Council concurrent to this report. Table 1 summarizes revenue neutral tax ratios and 2022 proposed tax rates.

Table 1
2022 Proposed Tax Rates

Property Class	Proposed Tax Ratios	Proposed 2022 Tax Rates %
Residential	1.0000	0.335958%
Multi-Residential	1.0000	0.335958%
Commercial	1.3321	0.447530%
Industrial	1.6432	0.552046%
Pipelines	0.9190	0.308745%
Farmland	0.2500	0.083990%
Managed Forests	0.2500	0.083990%

In addition, Table 2 summarizes the discounts on tax rates for certain property subclasses to ensure the special nature of these properties is recognized.

Table 2
Prescribed Subclass Discounts for Property Classes

Applicable Property Class	Subclass	Discount
Residential, Multi-Residential, Commercial and Industrial	Farmland Awaiting Development Phase 1	75% of the residential tax rate
Commercial and Industrial	Excess Land	30% of the commercial rate and 35% of the industrial rate
Commercial and Industrial	Vacant Land	30% of the commercial rate and 35% of the industrial rate

Annual adoption of the notional tax rate calculation adjustment is required

Notional tax rates are theoretical rates that would raise the same overall tax levy as the previous year, using the updated assessment roll information of the current year. While notional tax rates have no impact on the actual amount of taxes collected, it is used to better explain year over year levy changes.

In 2016, the Province introduced an option for municipalities to adjust the notional tax rate calculation. This option is a technical adjustment allowing municipalities to remove in-year assessment losses due to factual errors and methodological changes when calculating notional tax rates. This adjustment impacts only the overall levy change in the disclosure notice of the final bills.

The notional tax rate adjustment has been used by the Region since 2017.

5. Financial

Tax rates will increase to reflect the 2022 budget increase

Table 3 shows the historical relationship between average assessed value of a single-family detached home and the tax rate for residential property class. Tax rates are adjusted each year to raise the amount needed to fund the Region's approved operating budget. From 2013 to 2020, the annual increase in the operating budget was proportionately lower than the average increase in single-family detached assessment value, and as such tax rates have declined each year. However, due to the Province's delayed implementation of the 2020 reassessment due to COVID-19, property assessment values used for the 2020 property values were maintained for the 2021 and 2022 taxation years. Therefore, the proposed tax rates only reflect the requirement to raise the necessary funds to meet the approved 2022 Budget.

Table 3
Comparison of Residential Assessment to Residential Tax Rates

Year	Average Single-Family Detached Assessment	Tax Rates (%)
2022	966,508	0.335958
2021	963,247	0.326425
2020	959,600	0.321619
2019	883,328	0.336549
2018	809,104	0.350606
2017	740,630	0.371903
2016	667,714	0.397157
2015	629,000	0.406421
2014	591,000	0.416733
2013	553,000	0.434762

Attachment 1 shows the distribution of Regional revenues by the various property classes and subclasses. The table includes linear properties for which the Province has prescribed a charge per acre. It also includes payments-in-lieu, which are payments made to compensate a municipality for some or all of the tax revenues foregone from tax-exempt properties. The most common payments-in-lieu in the Region are for federally owned properties such as Canada Post, municipal utilities and crown corporations.

6. Local Impact

Subsection 311(11) of the Act requires an upper-tier tax rating bylaw to estimate the amount of upper-tier tax revenue to be raised in each of the local municipalities. The estimate is shown in Table 4.

Table 4
2022 Regional Tax Revenue to be Raised by Local Municipalities

Municipality	2021 Tax Requirement (\$)	2021 Share (%)	2022 Tax Requirement (\$)	2022 Share (%)
Aurora	59,879,284	4.91	62,599,525	4.92
East Gwillimbury	28,446,389	2.33	29,971,864	2.35
Georgina	28,872,375	2.37	30,136,532	2.37
King	33,527,284	2.75	34,858,470	2.74
Markham	350,736,842	28.77	365,056,971	28.68
Newmarket	69,085,689	5.67	71,845,336	5.64
Richmond Hill	225,671,018	18.51	235,685,132	18.51
Vaughan	376,358,186	30.87	393,790,358	30.93
Whitchurch-Stouffville	46,514,849	3.82	49,050,746	3.85
Sub-Total	1,219,091,916	100.00	1,272,944,933	
Payments-in-Lieu	4,026,366		4,184,982	
Total Tax Requirement	1,223,118,282		1,277,179,915	

The Municipal Act permits upper-tier municipalities to collect their portion of property tax payments from local municipalities on or before specified dates.

Subsection 311(12) of the Act provides that an upper-tier rating bylaw may require specified portions of the estimated taxes to be paid by the local municipalities on or before specified dates. On January 27, 2022, Council adopted interim levy payment dates of April 29, 2022 and June 30, 2022. It is recommended that the remaining two instalments for the property tax levy be paid on or before September 29, 2022 and December 15, 2022.

7. Conclusion

The proposed 2022 tax rates will raise the 2022 property tax levy requirement approved by Council in December 2021. As well, the report provides dates for the remittance of remaining instalment payments from local municipalities.

For more information on this report, please contact Edward Hankins, Director, Treasury Office and Deputy Treasurer at 1-877-464-9675 ext. 71644. Accessible formats or communication supports are available upon request.



Recommended by:

Kelly Strueby

Acting Commissioner of Finance and Regional Treasurer



Approved for Submission:

Bruce Macgregor

Chief Administrative Officer

February 18, 2022
Attachment (1)
eDocs #13558052

2022 Proposed Regional Revenues and Tax Rates by Class

Property Assessment Class and Subclass	Tax Rates (%)	Revenue Generated (\$)
Residential		
Residential	0.335958%	1,049,405,093
Residential Taxable (Shared as Payment in Lieu)	0.335958%	29,793
Residential – Farmland Awaiting Development Phase 1	0.083990%	15,215
Residential Taxable (Upper Tier and Education Only)	0.335958%	-
Multi-Residential		
New Multi-Residential	0.335958%	17,292
Multi-Residential	0.335958%	10,496,616
Commercial		
Commercial (Occupied)	0.447530%	88,859,076
Shopping Centre	0.447530%	28,541,710
New Commercial (Occupied)	0.447530%	23,184,050
Office Building	0.447530%	10,361,945
Shopping Centre (New Construction)	0.447530%	6,298,063
Commercial Vacant Land	0.313271%	3,065,227
Office Building Occupied (New Construction)	0.447530%	3,025,453
Commercial Excess Land	0.313271%	1,548,690
Small Scale On Farm Business	0.447530%	269
Commercial Excess Land (New Construction)	0.313271%	133,690
Parking Lot (Full)	0.447530%	888,828
Commercial (previously Ontario Hydro)	0.447530%	148,088
Shopping Centre Excess Land (New Construction)	0.313271%	87,590
Office Building Vacant Units and Excess Land	0.313271%	111,643
Shopping Centre Vacant Units and Excess Land	0.313271%	56,567
Commercial – Farmland Awaiting Development Phase 1	0.083990%	68,469

Property Assessment Class and Subclass	Tax Rates (%)	Revenue Generated (\$)
Commercial Vacant Land (Shared as Payment in Lieu)	0.313271%	13,254
Office Building Excess Land (New Construction)	0.313271%	8,659
Commercial Excess Land (Shared as Payment in Lieu)	0.313271%	2,293
Industrial		
Industrial (Occupied)	0.552046%	27,178,917
Large Industrial	0.552046%	5,895,381
Industrial Vacant Land	0.358830%	3,530,788
New Industrial (Occupied)	0.552046%	2,908,959
Industrial (previous Ontario Hydro)	0.552046%	711,045
Industrial Excess Land	0.358830%	191,356
Industrial Excess Land (previously Ontario Hydro)	0.358830%	163,272
Industrial Farmland Awaiting Development Phase 1	0.083990%	96,731
New Large Industrial Occupied	0.552046%	1,414,241
New Large Industrial Excess Land	0.358830%	37,437
Large Industrial Vacant Units and Excess Land	0.358830%	58,214
Industrial (New Construction)	0.552046%	27,061
Industrial Excess Land (New Construction)	0.358830%	4,686
Industrial Vacant Land (Shared as Payment in Lieu)	0.358830%	4,708
Others		
Pipeline	0.308745%	1,267,340
Farmlands	0.083990%	1,492,046
Managed Forest	0.083990%	71,215
Railway Right-Of-Way (Estimated)		594,859
Utility Transmission (Estimated)		979,105
Sub-Total (Estimated)		1,272,994,933
Payment-in-Lieu		4,184,982
Total		1,277,179,915

Regional Council Decision - 2022 Property Tax Ratios

On March 24, 2022 Regional Council made the following decision:

1. The property tax ratios for the 2022 taxation year be as follows:

Broad Property Class	Proposed 2022 Tax Ratios
Multi-Residential	1.0000
Commercial (incl. office)	1.3321
Industrial	1.6432
Pipelines	0.9190
Farmland	0.2500
Managed Forests	0.2500
Landfill	1.1000

2. Council approve a bylaw to implement the tax ratios
3. The Regional Clerk circulate this report to the local municipalities

The original staff report is attached for your information.

Please contact Edward Hankins, Director, Treasury Office and Deputy Treasurer at 1-877-464-9675 ext. 71644 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

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 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Finance and Administration
March 3, 2022

Report of the Commissioner of Finance

2022 Property Tax Ratios

1. Recommendations

1. The property tax ratios for the 2022 taxation year be as follows:

Broad Property Class	Proposed 2022 Tax Ratios
Multi-Residential	1.0000
Commercial (incl. office)	1.3321
Industrial	1.6432
Pipelines	0.9190
Farmland	0.2500
Managed Forests	0.2500
Landfill	1.1000

2. Council approve a bylaw to implement the tax ratios
3. The Regional Clerk circulate this report to the local municipalities

2. Summary

This report proposes property tax ratios for the 2022 taxation year.

Key Points:

- Tax ratios reflect how the tax rate of a given property class compares to the residential tax rate, with the residential class tax ratio being equal to “one”. They have the effect of distributing the tax burden between classes.
- In 2017, Council adopted the use of “revenue neutral tax ratios” for the four-year phase-in of the 2016 property reassessment prepared by the Municipal Property

Assessment Corporation (MPAC), which ended with the 2020 taxation year. This shifted some of the taxation impact of the reassessment from the residential class to business classes.

- Property tax reassessment was originally scheduled to be in effect for the 2021 taxation year. However, since the onset of the COVID-19 pandemic, the Province has been delaying the reassessment to provide property taxation stability for property taxpayers and municipalities.
- In the Fall Economic Statement, the Province announced the delay would include the 2023 taxation year. No date for the new assessment has been announced.
- Adopting the same tax ratios approved in 2020 and 2021 will ensure that there is no shift in tax burden between classes for the 2022 taxation year.

3. Background

Tax ratios influence the share of taxation paid by each class of property

Tax ratios influence the relative share of taxation borne by each property class. The tax rate for a given property class is determined by multiplying the residential tax rate by the tax ratio for the class. For example, if the proposed tax ratios are adopted, the tax rate for a property in the commercial class would be 1.3321 times the residential tax rate per one hundred dollars of assessment. Table 1 shows the tax ratios the Region has had in place since 2013.

Table 1
Property Tax Ratios Since 2013 Taxation Year

Property Class*	2013-2016 Ratios	2017 Ratios	2018 Ratios	2019 Ratios	2020-2021 Ratios	2022 Ratios (Proposed)	Ranges of Fairness**
Reassessment Year	2012	2016					
Residential	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Multi-Residential	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0 to 1.1
Commercial (incl. office)	1.1172	1.1813	1.2323	1.2794	1.3321	1.3321	0.6 to 1.1
Industrial	1.3124	1.4169	1.4973	1.5704	1.6432	1.6432	0.6 to 1.1
Pipelines	0.9190	0.9190	0.9190	0.9190	0.9190	0.9190	0.6 to 0.7
Farmland	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.25
Managed Forests	0.2500	0.2500	0.2500	0.2500	0.2500	0.2500	0.25
Landfill	-	1.1000	1.1000	1.1000	1.1000	1.1000	0.6 to 1.1

* Note that tax ratios are generally only adjusted for the business classes as Council's policy has been to maintain tax ratios for multi-residential, farmland, managed forests and pipelines.

** Ranges of fairness are the ranges of tax ratios established by the Province with the aim to ensure properties of similar assessment levels are paying similar amounts of taxes regardless of class. They also help align the level of taxation with the cost of providing services to that class. Business classes typically consume fewer municipal services than residential classes.

Tax Ratios may also be used as a tool by municipalities to achieve certain policy goals, so long as the new ratio is kept within the "ranges of fairness" shown above. For instance, in 2001, Council directed that the tax ratio for multi-residential property class be reduced from 2.0875 to 1.0 by the 2003 taxation year to support its initiatives for affordable housing. Since then, the Region has maintained the tax ratio at 1.0 for this property class, which is the lowest allowable ratio within the ranges of fairness and the lowest among the GTA municipalities.

Revenue neutral tax ratios were adopted for 2017 to 2020

MPAC determines the assessed value used for taxation purposes of all properties within Ontario. Since the 2009 taxation year, the reassessment of properties has taken place every four years, with increases phased-in equally over the following four years. For the 2017 to 2020 taxation years, properties were assessed based on their valuation as of January 1, 2016.

In the 2016 reassessment, the value of the residential property class in York Region increased at a significantly faster rate than other classes. In response to the reassessment outcomes, Council decided to adopt "revenue neutral tax ratios" for the 2017 to 2020 taxation years which had the result of shifting taxation impact of the reassessment primarily from residential class to both business classes. Revenue neutrality adjusts the tax ratios in a manner that results in each broad property class bearing the same proportion of the tax burden regardless of the shift in its share of the total assessment of all properties in the Region.

In early 2021, the Province had suspended Revenue Neutral tax ratios, therefore the Region's only options were to maintain existing tax ratios or move the ratios towards the "Range of Fairness", which would have increased the tax burden for residential property owners.

COVID-19 has again resulted in the Province's delay of the next reassessment

Prior to the COVID-19 situation, MPAC planned to release their results from the new reassessment of properties in 2020 to be used in the 2021 to 2024 taxation years. On March 25, 2020, in view of the unprecedented challenges that municipalities, residents and businesses were facing, the Province announced the reassessment would be postponed and the 2021 property taxes would be based on property values in effect for the 2020 taxation year. In the 2021 Provincial Budget, released on March 24, 2021, the Province announced a review of the assessment process and MPAC operations and the continued use of 2020 assessment values for the 2022 taxation year. In the 2021 Provincial Fall Economic

Statement, released on November 4, 2021, the Province further announced 2020 assessment values would remain in place until at least the 2023 taxation year.

4. Analysis

Maintaining tax ratios at 2021 levels keeps the share of the tax burden borne by each property class consistent

The freeze in assessment values limits the Region's tax policy options.

Under normal circumstances, municipalities may adjust their tax ratios by moving them towards or within the provincially defined ranges of fairness or adopt revenue neutral ratios. However, since there is no assessment to phase in, the revenue neutral ratios are the essentially same as the current ratios, even after assessment growth is factored in.

The Ranges of Fairness prescribed by the Province for commercial and industrial properties are lower than the Region's 2021 existing ratios. Choosing alternative tax ratios within these ranges would result in shifting the relative tax burden towards the residential properties, which is inconsistent with the tax policy adopted by Council in 2017 to mitigate the impact of assessment increases on residential properties.

It is recommended that the 2021 tax ratios be maintained for the 2022 taxation year.

Table 2
Proposed Tax Ratios for 2022

	2021 Actual	2022 (Proposed)
Residential	1.0000	1.0000
Multi-Residential	1.0000	1.0000
Commercial (incl. office)	1.3321	1.3321
Industrial	1.6432	1.6432
Pipelines	0.9190	0.9190
Farmland	0.2500	0.2500
Managed Forests	0.2500	0.2500
Landfill*	1.1000	1.1000

*Currently, the Region has landfill properties as payment-in-lieu only and not as a taxable property class.

Commercial and Industrial tax ratios are still competitive among GTA municipalities

Despite adopting revenue tax ratios for the 2017-2020 assessment and maintaining 2020 ratios in 2021, the Region still had the second lowest commercial tax ratio (see Figure 1) and third lowest industrial tax ratio (see Figure 2).

Figure 1

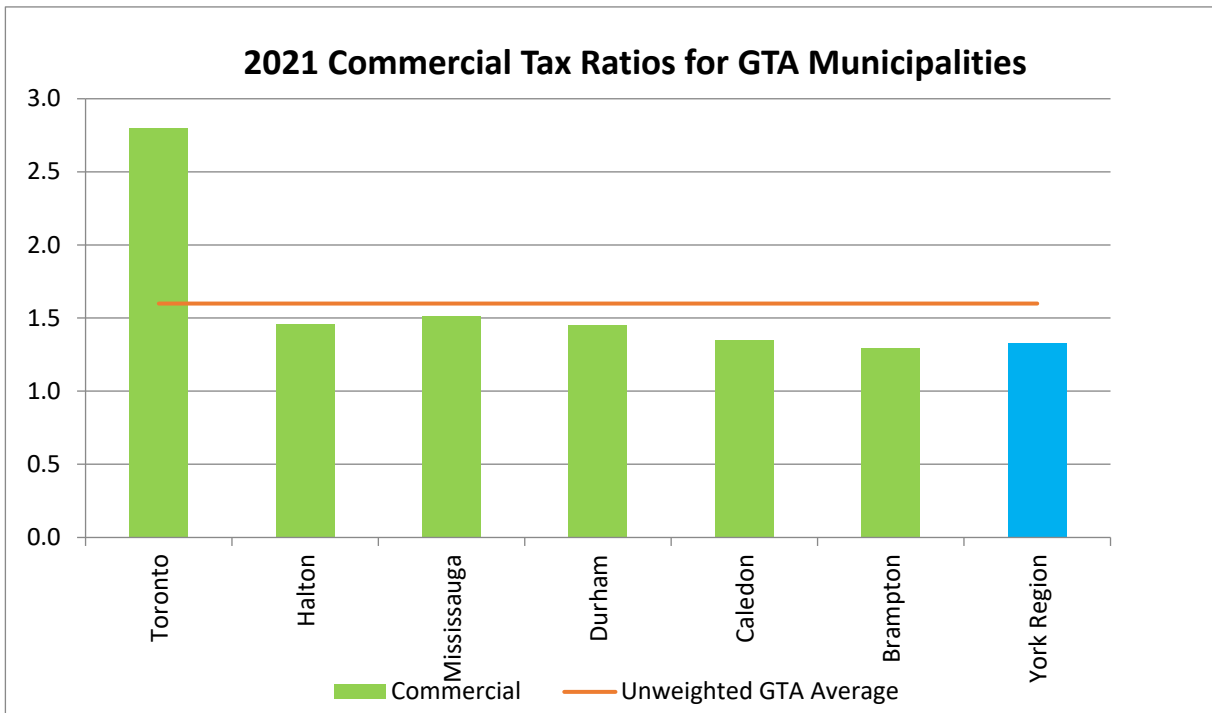
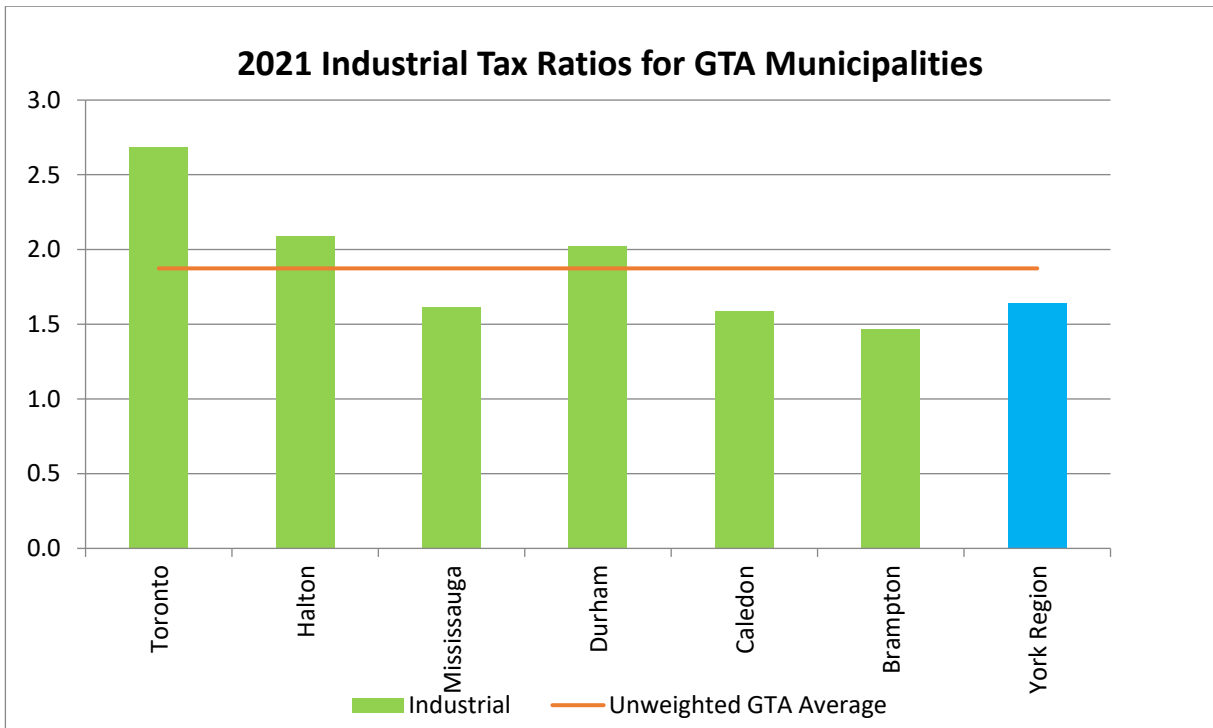


Figure 2

When translated to tax rates, the Region's 2021 commercial tax rate was lower than Durham, Mississauga and Brampton (only York Region has the identical regional tax rates for every municipality in its jurisdiction) and is competitive with Halton municipalities. Among 905 municipalities, York's industrial tax rate remains lower than Halton, Durham and Mississauga competitive Brampton, but higher than Caledon.

Compared to the City of Toronto, all nine York Region municipalities have a lower combined (Regional, Local, and Education) commercial property tax rate than the City of Toronto. Eight of the nine York Region municipalities have a lower industrial tax rate than Toronto, with Georgina being slightly higher (2.280075% for Georgina vs 2.065346% for Toronto).

5. Financial

The adoption of tax ratios enables the Region to set tax rates to raise the amount of revenue Council approved through the annual budget process.

6. Local Impact

Maintaining 2020 assessment values and tax ratios has resulted in only minimal tax shifts between municipalities

By maintaining 2020 assessment values for the 2022 taxation year, the only changes to assessment values were due to growth. With the same 2020 tax ratios, the relative tax burden borne by each municipality experienced only negligible shifts from 2021.

7. Conclusion

The proposed 2022 tax ratios will enable the Region to set tax rates to raise the property tax levy requirement approved by Council in the 2022 budget.

For more information on this report, please contact Edward Hankins, Director, Treasury Office and Deputy Treasurer at 1-877-464-9675 ext. 71644. Accessible formats or communication supports are available upon request.



Recommended by:

Kelly Strueby

Acting Commissioner of Finance and Regional Treasurer



Approved for Submission:

Bruce Macgregor

Chief Administrative Officer

February 18, 2022

eDocs #13547478

Regional Council Decision - 2022 Transportation Master Plan – Draft

On March 24, 2022 Regional Council made the following decision:

1. Council receive the draft 2022 Transportation Master Plan.
2. The Regional Clerk forward this report to the local municipalities requesting comments in advance of final approval by Council in June 2022.

The original staff report is attached for your information.

Please contact Brian Titherington, Director, Transportation Infrastructure Planning at 1-877-464-9675 ext. 75901 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Regional Clerk's Office, Corporate Services

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The Regional Municipality of York

Committee of the Whole
Transportation Services
March 3, 2022

Report of the Commissioner of Transportation Services

2022 Transportation Master Plan - Draft

1. Recommendations

1. Council receive the draft 2022 Transportation Master Plan.
2. The Regional Clerk forward this report to the local municipalities requesting comments in advance of final approval by Council in June 2022.

2. Summary

This report provides Council with an update on the draft 2022 Transportation Master Plan (TMP), along with an overview of the progress completed and next steps on continued engagement further to progress updates provided in fall 2021.

Key Points:

- The draft 2022 TMP is an update to the plan endorsed by Council in June 2016
- The draft 2022 TMP is being coordinated with the Region's Municipal Comprehensive Review Process that includes updates to the Region's Official Plan and Water and Wastewater Master Plan
- Extensive engagement with residents, stakeholders and partners has been integral in developing the draft 2022 TMP and is continuing
- Five focus areas addressing key transportation issues have been identified will be used to inform and develop recommendations and action plans for discussion and implementation over the next five years
- The final 2022 Transportation Master Plan will be presented to Council for approval in June 2022

3. Background

The draft 2022 Transportation Master Plan is an update to the plan endorsed by Council in June 2016

The 2022 TMP is an update to and builds upon the elements of the 2016 TMP endorsed by Council in [June 2016](#). It supports the corporate vision of “Strong, Caring and Safe Communities” and the four priorities of the Region’s Corporate Strategy: Economic Vitality, Good Government, Healthy Communities and Sustainable Environmental.

October and November 2021, staff reported to Council on the progress of the draft 2022 Transportation Master Plan

On [October 14, 2021](#), staff reported to Council on the outcome of stakeholder engagement on the update to the Transportation Master Plan and draft strategic planning work.

On [November 11, 2021](#), staff provided Council with an overview of the proposed 2051 transportation networks for cycling, rapid transit and roads, and five focus areas for consideration and inclusion in the draft 2022 Transportation Master Plan.

4. Analysis

The draft 2022 TMP identifies transportation infrastructure to support the Region’s communities and economic growth to 2051

The draft 2022 TMP goals align closely with the Region’s Fiscal Strategy and identifies transportation infrastructure supporting planned population and employment growth over the next 30 years. It proposes a network that provides convenient travel options, promotes economic growth, manages congestion, minimizes impacts on the environment and is financially sustainable. A copy of the draft TMP is included as Attachment 1.

The long-term transportation infrastructure required to support the Region’s communities and economic growth to 2051 is shown on Attachments 2 through 5. These include the proposed cycling, rapid transit and road networks to connect travellers safely and reliably to their destinations and efficiently move goods across the Region’s cities and towns.

The draft 2022 TMP is coordinated through the Municipal Comprehensive Review process, which includes updates to various Regional plans

As balancing improvements to the transportation network with planned growth in population and employment is critical, alignment is required through the Municipal Comprehensive Review process. This accounts for planned growth included in the [2021 Draft York Region Official Plan](#) update and servicing infrastructure identified in the Water and Wastewater Master Plan to ensure sustainable implementation.

The draft 2022 TMP supports the 50-55% intensification targets recommended by the 2021 Draft York Region Official Plan and coordinates with the Development Charge Bylaw update.

Extensive engagement has been integral in developing the draft 2022 TMP

Engagement with residents, stakeholders and partners has been ongoing throughout the 2022 TMP process. Further engagement and consultation since the last Council update includes:

- A second virtual public information session held in late October 2021, where proposed 2051 transportation network maps and focus areas were presented by staff. The session attracted 95 attendees who were able to use an interactive mapping and commenting tool to share feedback on the proposed transportation networks and focus areas.
- Presentations to local municipal councils, as requested, providing an update on the draft TMP 2022 progress to date and seeking feedback on the proposed 2051 transportation network maps and focus areas.
- Meetings with local municipal staff and government agency representatives through the Transportation Master Plan Partnership Advisory Group and follow up discussions.
- Feedback from Regional Mayors, Councillors and York Region senior management on transportation issues within communities.

The draft 2022 TMP includes five focus areas for further study

Through the update process, five focus areas addressing key transportation issues were identified and further exploration of these would be undertaken over the next five years. The focus areas include:

- Safety for all travellers
- Transportation equity: options for all lifestyles, life stages and abilities
- Reduce car travel
- Financial and environmental sustainability
- Review the role and function of Regional corridors

The five focus areas will be used to inform and develop recommendations and action plans for discussion and implementation over the next five years.

Stakeholder engagement is continuing and a third and final public information session is planned for April 2022

Meetings with community partners, such as the Agriculture and Agri-Food Committee, Accessibility Advisory Committee and numerous Indigenous communities, were scheduled through late January and February 2022. Resident, stakeholder and partnership input on the draft 2022 TMP is continuing to be collected through spring 2022, including a planned third and final virtual public information session for York Region residents and travellers in April.

The final 2022 Transportation Master Plan will be presented to Council for approval in June 2022

All input received from residents, stakeholders and partners throughout the engagement and outreach process on the draft 2022 TMP will be compiled in late spring 2022. Feedback will be reviewed, addressed and where feasible, incorporated into the final plan.

5. Financial

The draft 2022 TMP is intended to address the transportation needs of travellers while responsibly managing costs in alignment with the Region's Fiscal Strategy.

The estimated costs of the networks and related programs identified in the draft 2022 TMP are approximately \$12.3 billion for transit (not including the cost of replacing the existing fleet with electric buses), \$410 million for exclusive active transportation projects and \$6.4 billion for roads which also provides for active transportation improvements.

The growth-related infrastructure included in the draft 2022 TMP is mainly funded by development charges that cover 80% to 90% of the cost of most new projects, with the remaining projects, such as road improvements, funded through property taxes, grants, subsidies and cost-sharing opportunities with third parties, including other levels of government.

6. Local Impact

Engagement with residents, stakeholders, partners, and local municipal Councils has been ongoing throughout the draft 2022 TMP process and is continuing in spring 2022, including a third and final virtual public information session planned for April.

All input received throughout the engagement and outreach process on the draft 2022 TMP will be compiled in late spring 2022. Feedback will be reviewed, addressed and where feasible, incorporated into the final plan.

7. Conclusion

The final 2022 Transportation Master Plan will be presented to Council for approval in June 2022, in coordination with the Municipal Comprehensive Review process and 2022 Development Charge Bylaw update,

It is recommended the Regional Clerk forward a copy of this report and draft 2022 Transportation Master Plan to the local municipalities requesting any final comments be provided prior to being presented to Council for final approval in June.

For more information on this report, please contact Brian Titherington, Director, Transportation Infrastructure Planning at 1-877-464-9675 ext. 75901. Accessible formats or communication supports are available upon request.

Recommended by:



Ann-Marie Carroll

Acting Commissioner of Transportation Services

Approved for Submission:



Bruce Macgregor

Chief Administrative Officer

February 11, 2022

Attachments (5)

13544934

NOTE: This document is the draft update to the Regional Transportation Master Plan and subject to change. A final version of the Master Plan is planned to be brought forward for Regional Council approval in June 2022.

The Draft Transportation Master Plan refers to the Region's Municipal Comprehensive Review and update to the Regional Official Plan and Water and Wastewater Master Plans. Both studies are underway and expected to be approved by Regional Council in 2022.

Coordination and alignment of recommendations and network maps between the draft Regional Official Plan and the Transportation Master Plan will be completed prior to the adoption of both plans. Any differences between the two plans will be addressed prior to finalizing the plans.

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Executive Summary

York Region's corporate vision of Strong, Caring and Safe Communities guides all Regional departments and staff to be accountable to the communities we serve. The **2022 Transportation Master Plan (TMP)** is the long-term vision for York Region's transportation network and aligns with both the corporate vision and the four priorities of the Region's Corporate Strategy: **Economic Vitality, Good Government, Healthy Communities** and **Sustainable Environmental**. The TMP considers the Region's transportation infrastructure needs over the next 30 years to support growth and the changing needs of travellers, while highlighting focus areas for further study.

By 2051, York Region's population is expected to grow to over two million residents and nearly one million jobs. To support this growth, the TMP is updated every five years to ensure the regional transportation network meets the needs of all motorists, pedestrians, cyclists and transit riders. The 2022 TMP builds upon the elements of the 2016 TMP and has been coordinated to align with the Regional Official Plan and the Water and Wastewater Master Plan update.

The purpose of the TMP is to guide staff in planning, building, operating and maintaining a connected transportation network that is safe, sustainable, efficient, reliable and ready for the future. It balances the needs of the unique communities across York Region and is further supported by the following objectives:

- **Make the best use of infrastructure and services:** Maximize the effectiveness of the existing road network
- **Encourage all types of travel:** Design regional roads to accommodate all ages, abilities and modes of travel, including active transportation, transit, passenger vehicles and goods movement
- **Provide a resilient and adaptable transportation network:** Adaptable to changing social, environmental, financial and technological landscapes
- **Enhance partnerships:** Recognize the importance of collaborating with the public and private and non-profit organizations to provide transportation infrastructure, programs and services
- **Actively engage and share information:** Learn from all residents and stakeholders
- **Align project costs:** Ensure project costs are consistent with the Region's fiscal strategy and the 10-Year Capital Plan and obtain Regional Council approval annually

The following was considered when updating the 2022 TMP:

- Updates made to the Regional Official Plan to accommodate population and job growth, in-line with new provincial forecasts
- Alignment with the Region's fiscal strategy
- Active and eco-friendly travel options, including walking, cycling, carpooling and transit
- Commitments from federal, provincial and regional governments to construct the Yonge North Subway Extension to the City of Richmond Hill
- New and extended provincial freeways with provisions for parallel corridors dedicated to rapid transit
- Public participation and feedback from York Region residents and stakeholders

- Implementing new technology to collect and use data to improve efficiency, enhance safety and save costs

York Region's priorities for investment in the 2022 TMP are based on comprehensive input from a wide range of transportation users and other interested parties, including residents, elected officials, municipal, provincial and federal governments and other community and agency partners.

The update also reflects long-term trends that have seen transit use grow faster than single-occupant vehicle travel and more reliance on cycling or walking instead of driving for shorter trips. Over the next five years, staff will monitor and take into consideration the impacts of COVID-19 on York Region's transportation network, including the potential new travel patterns of motorists and transit users.

In developing the 2022 TMP, staff drew on knowledge gained while implementing the 2016 TMP and the impacts of disruptive events like the pandemic. This led to a change in the way the Region now approaches planning:

- **Allow for flexibility:** Having the ability to change plans accordingly to reflect changing travel needs, global events, new technology, regulatory changes and emerging ideas and approaches
- **Advocate for big projects the Region needs:** The Region cannot independently fund several of the major projects outlined in the 2022 TMP; advocating the provincial and federal governments and other potential funders to share in these costs will be crucial
- **Consider fiscal and environmental bottom lines:** The TMP must align with the Region's ability to pay for the projects outlined, and calls for a prudent approach in planning growth-related capital investments and the impact on the environment
- **Seek and respond to opportunities:** Respond to federal, provincial and other partnership funding opportunities to build roads, transit infrastructure and operating funding
- **Engage more often and more broadly:** Use a variety of techniques/tools, such as online surveys, social media, virtual engagement and post-pandemic in-person opportunities, to ensure as many voices as possible continue to be heard

The draft 2022 TMP identifies five new focus areas that bring together several related priorities:

- Safety for all travellers
- Transportation equity and inclusion
- Reduced car travel, especially during rush hours
- Fiscal and environmental sustainability
- Role and function of Regional corridors

While many investments and actions within Transportation Services already reflect these priorities, further work and study on the part of the Region and its partners will identify opportunities for new and/or improved approaches. Proposed actions and initiatives will be brought forward to York Regional Council for review and endorsement over its next four-year term.

The draft 2022 TMP was completed following guidance provided by the Municipal Engineers Association. Projects within master plans are subject to provincial environmental legislation, typically under the municipal class environmental assessment process.

The update also aligns with other applicable provincial legislation and guidance, including the Provincial Policy Statement, other land-use considerations and Ministry of Transportation plans.

Progress on achieving the projects and priorities outlined in the 2022 TMP will be monitored through a comprehensive review every five years. In addition, annual status updates will inform York Regional Council and the public on all focus area initiatives and actions and planned and completed work. Developing progress indicators and a framework for reporting will be key initiatives of the first status update.

1. Introduction

1.1. Setting a strategic direction for transportation

As York Region grows and changes, the 2022 Transportation Master Plan will set the strategic direction for roads, transit and active transportation options like walking and cycling, allowing people and goods to travel safely and reliably through the Region in environmentally and financially sound ways.

Provincial forecasts, revised in 2020, predict the Region will be home to just over two million residents and almost one million jobs by 2051. The Regional Official Plan, which guides the Region's growth, was updated in 2022 to incorporate this substantial increase. Infrastructure plans, including the Transportation Master Plan, align with the updated Regional Official Plan.

To meet the transportation needs of a growing population, encouraging change in how and when people travel will be needed in addition to expanding Regional roads.

Traveller behaviour is constantly changing. The global COVID-19 pandemic has accelerated a move toward working from home and, while longer-term trends are still uncertain, a large majority of Canadian workers currently show a preference to continue working from home, at least part of the time. This is likely to affect how and when people travel.

The growing urgency to address climate change is also affecting how people travel. Recent international research indicates low-carbon transportation options like transit, walking and cycling would reduce global greenhouse gas emissions. The Region has set an aspirational goal of net-zero greenhouse gas emissions by 2051 through its [Energy Conservation Demand Management Plan](#) and has committed to shifting its corporate and transit fleets to electric vehicles, including electric buses, by that date. This move and the extension of the Yonge subway line to the City of Richmond Hill represents major steps in the right direction. The move to lower-carbon options will also contribute to healthier communities by encouraging more physical activity and reducing traffic-related pollution and noise.

This Transportation Master Plan update builds on a foundation of master plans going back to 2002 that recognized the need for new solutions. With the above factors accelerating the pace of change, this update also provides flexibility as conditions continue to change.

1.2. Building on past foundations

Transportation has been critical to York Region's growth since its establishment in 1971 and will continue to play a vital role as the Region continues to accommodate new growth.

The Region was home to 1.2 million people and almost 580,000 jobs in 54,000 business establishments in 2021. Stretching from Steeles Avenue in the south to Lake Simcoe in the north, it encompasses an area of 1,776 square kilometres. Its position directly north of the City of Toronto, as shown by Figure [XX], has helped to make it the fastest-growing large municipality in Ontario.

[INSERT MAP OF YORK REGION / GTHA]

The progressive approach taken in previous transportation master plans has dramatically changed the landscape for transportation in the Region over the past two decades:

- York Region Transit (YRT) operates 34 kilometres of dedicated bus rapidways (or Viva) on Highway 7, Davis Drive and Yonge Street
- YRT service also links to the Vaughan Metropolitan Centre, Metrolinx’s GO services and other new stops in the Region along the extended western arm of the subway line (Spadina subway line), as well as to Finch station on the Yonge Street line
- Transit services have evolved to reflect new options and changing needs, with a focus on scheduled bus service in high-demand areas and options like on-request service elsewhere
- Numerous growth-related road projects have increased capacity and created connections to transit services and freeways
- Completed projects have filled in missing road links like Bathurst Street north of Green Lane and Bayview Avenue between Stouffville and Bloomington roads and have provided passage across barriers, allowing travellers to cross 400-series highways between interchanges
- The Region has also successfully advocated for the extension of Highway 404 in the towns of East Gwillimbury and Georgina as well as Highway 427 in the City of Vaughan to manage congestion and support planned growth
- Increasing use of intelligent transportation systems, discussed in Section 1.3.2, is making the network safer and more efficient
- Many road widening projects included the addition of multi-use pathways for bicycle and pedestrian traffic or dedicated cycle tracks in roadside boulevards to make active transportation easier and safer for all travellers
- More than 85% of the work on the York Region portion of a 121-kilometre walking and cycling route linking Lake Simcoe to Lake Ontario is complete
- Plans are moving forward for a more than 50-kilometre walking and cycling route (South York Greenway), parallel to Highway 407 to support active and eco-friendly ways of travelling. Details are available at york.ca/southyorkgreenway
- The Region continues to support, promote and encourage active and eco-friendly ways of travelling such as walking, cycling, scootering, hiking, carpooling and taking transit

These initiatives provide a strong foundation for continued growth and coordination and connection of transportation in and beyond York Region. Central to the next phase of growth is extending the Yonge subway line to the City of Richmond Hill. This landmark project, which has been a top transit priority for the Region for several years, is being led by the provincial government. Major construction is expected to start in 2023 and to be complete within the next decade.

1.3. Understanding travel in York Region and how it is evolving

1.3.1. Many travel options within and beyond the Region

The transportation system in York Region includes roads, active transportation, transit and rail lines.

[FUTURE INFOGRAPHIC]

The Region's direct responsibilities within this network include:

York Region Transit: Operating in all nine local municipalities, YRT offers a range of accessible services, including rapid transit, conventional bus and Mobility On-Request. It connects travellers to transit services in the City of Toronto, Peel Region, Durham Region and the provincial GO Transit rail and highway bus systems. Strategically located “park and ride” lots encourage drivers to connect to transit for trips into urban areas and key destinations such as Toronto Pearson International Airport. YRT also supports active transportation, with bike racks on the front of buses and bike parking racks at many of its bus terminals.

Active transportation and micromobility: Regional road corridors include high-quality facilities such as sidewalks, bike lanes, multi-use pathways and bike parking at bus stops and terminals, encouraging travellers to switch to more eco-friendly options. Active transportation includes walking, hiking and cycling, among others. Micromobility, which relies on smaller, electric-powered vehicles like e-bikes and e-scooters, is also emerging as a lower-carbon alternative to gas-powered travel.

Regional roads: The Region is responsible for arterial roads, most of which are typically laid out in a 2-by-2-kilometre grid. These roads are designed to accommodate all types of traffic, including passenger vehicles, trucks for the movement of goods, transit vehicles and bicycles. As the links between local municipal streets and provincial highways, they are critical in moving people and goods.

1.3.2. New technology is making travel safer and more efficient

York Region is a leader in adopting intelligent transportation system technologies that collect and use data to improve efficiency, enhance safety, and save costs:

- Over 400 Bluetooth sensors installed across the Region allow staff to monitor travel in real time on the road network, identify and respond to bottlenecks and provide alternate route information in response to incidents and adverse weather. This data helps traffic operations staff access the impacts of traffic signal timing changes to alleviate traffic delays and is also used to improve road safety
- YRT has implemented a driver support system to improve ride quality for transit passengers and extend the life of buses and is also piloting a pedestrian warning and collision avoidance system designed to improve the safety of pedestrians and cyclists on increasingly busy streets
- YRT is using a vehicle health monitoring system on electric and diesel transit vehicles to monitor components in real time and identify potential problems early to reduce vehicle breakdowns and maintenance costs
- The Region has also launched a two-year automated speed enforcement pilot to increase safety in school areas

1.3.3. The network is becoming more coordinated, connected and focused

A key aspect of York Region's work is collaborating with other levels of government and the private sector to create an integrated transportation network — one where travellers move not just from street

to road to highway in their cars, but where they can travel using several transportation options and transfer easily from one to another.

This is important because travellers are now more likely to use multiple modes of transportation: in addition to or instead of a private vehicle, they are cycling, walking, taking a bus, train or subway and using on-request transit more than travellers in the past. This means the Region and its partners need to include all modes of transportation in the network, including the movement of goods, so they connect, just as Regional roads connect with local streets and provincial highways. The Region and its partners are considering how best to expand this network and add new options, which is discussed further in Chapter 5.

Transportation services and related infrastructure, such as roads, sidewalks, walking and cycling paths, terminals and more, are also evolving to recognize that different population and employment densities call for different transportation options like carpooling, cycling, walking and other human-powered ways of getting around, as well as low-carbon options like e-scooters and e-bikes. These are referred to as “active and eco-friendly options” throughout this document.

For example:

- Supporting investments in bus rapid transit and subway expansion through comprehensive planning and integration with local and Regional Official Plans and Water and Wastewater Master Plan to align high-density growth, such as in Major Transit Station Areas and Regional Centres, to ensure the efficient movement of people and goods.
- Areas of medium density support conventional scheduled bus service
- High- and medium-density areas are also favourable for active and eco-friendly options for trips to school, shopping, work or connecting to public transit
- In low-density areas, communities with the least population, on-request transit services are the most suitable. Cycle tracks and trails are more oriented to recreational use and travel by car for longer trips is more frequently used

The Region’s transportation planning is becoming more focused on providing the right services in the right areas at the right time. This supports travel needs effectively while helping to ensure the transportation network and services stay within the Region’s financial means.

1.3.4. Matching services to land use will be key as communities grow

With roughly 800,000 more people and 345,000 more jobs expected by 2051, York Region will accommodate the largest share of growth of any municipality in the provincial Growth Plan for the Greater Golden Horseshoe Area. This growth (see Figure [X]) reflects provincial forecasts.



The updated Regional Official Plan allocates the expected distribution of population and jobs by local municipality, which in turn affects infrastructure needs. It is projected the cities of Vaughan, Markham and Richmond Hill, on the Region's southern border, will account for roughly three-quarters of the Region's population by 2051, similar to the current share.

In the north, the forecast for the Town of East Gwillimbury is to see its population and employment essentially quadruple by 2051. The Town of Georgina's population increase is projected to be less than the Regional average, the number of jobs is forecast to more than double.

The Region must plan now for future transportation needs in these growing communities due to the time it requires to complete major projects like road widening and rapid transit. Anticipating this growth will help to avoid service lags and congestion.

Transportation planning must also integrate with land use planning, including the type of use and expected intensity of development. Growth to 2051 will continue to be focused mainly along two Regional corridors: north-south along Yonge Street and east-west along Highway 7. This is the underlying framework for the Region's Centres and Corridors approach to achieving higher densities, as required under the provincial growth plan for the Greater Golden Horseshoe. The provincial government has recently required upper-tier municipalities, like York Region, to delineate boundaries and set minimum density targets for Major Transit Station Areas around subway, bus rapid transit and GO rail stations..

Sidebar: The Region's urban system is composed of Regional centres and Regional corridors and the major transit station areas within and supporting them, local centres and corridors, community areas and employment areas and several towns and villages. All these areas play a part in accommodating forecast growth while maintaining their character. It is intended that most new growth for both residents and jobs will be accommodated within these areas.

1.3.5. Transportation landscape is changing – and quickly

As new technologies emerge and people choose different ways to travel, transportation needs change, and more planning is required to meet those needs. For example, if more travellers are expected to choose to walk or cycle to their destinations in the future, more walking and cycling paths will be required. The impact of electric vehicle, e-scooter and e-bike uptake, as well as the continuation of working from home and online shopping trends, are not yet fully understood. The Region will continue to monitor these trends and adjust transportation planning as needed.

As the Region continues to grow, options like ridesharing, bike sharing and e-scooter rentals are likely to become more widely available in urban areas in the future, which could change the idea of needing to own a vehicle. These options, which can help manage traffic congestion significantly, are increasingly supported by market-supplied apps that bring data and services together to show travellers the fastest way to get to a destination and allow for easy payment along the way.

There has been much discussion of the future role of autonomous vehicles. Current evidence suggests that, in the short to medium term, the most likely use will be for specific purposes, such as short-local transit trips, with dedicated infrastructure such as fiber optic cable and sensor networks (networks that allow information to be sent to and received from objects and devices), facilities for secure public Wi-Fi and faster mobile networks. Pilot projects around the world are helping to determine how autonomous vehicles might be incorporated safely and more broadly into transportation networks.

York Region has been working with various stakeholders, including the [Canadian Urban Transit Research & Innovation Consortium \(CUTRIC\)](#) to identify potential routes to pilot autonomous transit shuttles. To date, multiple routes have been identified for further evaluation in 2022 to determine suitability for a pilot project.

1.4. Traveller feedback was vital to updating the plan

The transportation solutions recommended in this updated Transportation Master Plan are estimated to cost \$19.1 billion over the next 30 years. Where and how York Region should prioritize investments is based on comprehensive input from a wide range of transportation users and other interested parties, including:

- Residents, neighbourhood associations and community groups
- Businesses and industry, including the development community
- Local municipal councils and staff
- York Regional Council and staff
- Conservation authorities
- School boards
- Emergency services, including York Regional Police
- Neighbouring municipalities
- Indigenous communities
- The provincial government, including the Ministry of Transportation and its transit agency, Metrolinx
- The federal government

Chapter 3 discusses input received regarding the plan in more detail.

Despite different needs across the Region, all residents rely on the transportation network to connect them to homes, workplaces, local businesses, schools and other important destinations.

The Region's economy also depends on a well-designed transportation network. Businesses operate in a global economy that relies on moving people, goods and resources quickly and efficiently. Roads with robust highway, rail and air connections strengthen supply chains and get goods to market faster, while convenient public transit allows employees to get to and from workplaces.

Talking with and listening to a wide range of interested parties helped build a greater understanding of how roads and transit are currently used and, more critically, how the network needs to evolve in the future to continue meeting traveller needs. Ongoing engagement is needed to identify priorities for its transportation investments.

2. Context

The Transportation Master Plan is shaped by provincial direction and York Region’s policies, plans and strategies. Over the next 30 years, these will continue to evolve, requiring transportation planning to be flexible.

Figure [XX] provides an overview of the master planning context.

Province of Ontario	Regional Municipality of York	Others
<ul style="list-style-type: none"> • Provincial Policy Statement • A Place to Grow: Growth plan for the Greater Golden Horseshoe • <i>Accessibility for Ontarians with Disabilities Act, 2005</i> • Metrolinx 2041 Regional Transportation Plan • Ministry of Transportation Greater Golden Horseshoe Transportation Plan 	<ul style="list-style-type: none"> • Vision 2051 • Regional Official Plan • Strategic Plan • Infrastructure master plans (Transportation, Water and Wastewater) • Transportation Services 10-year capital plan • Energy Conservation and Demand Management Plan 	<ul style="list-style-type: none"> • Local municipal transportation master plans and studies • Secondary plans • Neighbouring municipal transit plans and transportation master plans and studies



2.1 Provincial guidance

The provincial government sets a framework for growth and development in Ontario that municipalities must follow.

This section outlines provincial requirements and plans relevant to the Transportation Master Plan.

2.1.1 Provincial Policy Statement

Ontario's [Provincial Policy Statement](#), last updated in 2020, provides policy direction on matters of provincial interest related to land use planning and development, including transportation facilities. The provincial [Planning Act](#) requires that all planning decisions be consistent with this statement.

The statement supports financial and environmental sustainability, encouraging, and in some cases requiring, municipalities to coordinate infrastructure projects with land use planning, make the best use of existing assets before developing new ones, incorporate green infrastructure where possible and consider climate change impacts.

The statement sets out policies to promote safe and energy-efficient transportation, including multiple modes of transportation (multimodal), such as transit, active transportation and private vehicle travel. Municipalities are expected to support this direction with compact development (an urban layout encouraging active transportation, low energy consumption and reduced pollution), mixed land uses and measures to promote a shift to transit, active transportation and other more eco-friendly transportation options.

2.1.2 A Place to Grow: Growth Plan for the Greater Golden Horseshoe

The provincial [Places to Grow Act, 2005](#) and [A Place to Grow: Growth Plan for the Greater Golden Horseshoe](#) gives the Ontario government the power to designate growth areas throughout the province and provides population and employment forecasts to 2051. York Region is part of the Greater Golden Horseshoe, an area of some 10,000 square kilometres in south-central Ontario, one of the fastest-growing areas in North America.

The provincial government requires municipalities to identify and plan for infrastructure, such as roads, transit and multi-use pathways, needed to support these growth forecasts. York Region and other regional municipalities, in coordination with local municipal planners, identify where the growth can be accommodated and should be focused locally.

The provincial growth plan's policies encourage coordinated transportation planning, interconnectedness, safety, sustainability and diverse transportation options to reduce reliance on cars.

It focuses heavily on directing growth to areas that are already built up and making intensification a priority. Strategic areas for growth in the plan include urban growth centres and major transit station areas.

2.1.3 *Accessibility for Ontarians with Disabilities Act (2005)*

The [Accessibility for Ontarians with Disabilities Act, 2005](#) sets mandatory standards for private, public and non-profit sectors to remove barriers and ensure equitable access for all individuals with disabilities by 2025. This includes, under Regulation 191/11, standards for planning, designing and building transportation facilities. The Region's transportation projects comply with the relevant requirements of the Act and regulation.

2.1.4 2041 Regional Transportation Plan

Developed in partnership with municipalities and other stakeholders, Metrolinx adopted the [2041 Regional Transportation Plan](#) in 2018. This plan is the successor to The Big Move, released in 2008, which was the first Regional transportation plan for the Greater Toronto and Hamilton Area, also incorporating the Regional Municipality of Waterloo.

The 2041 Regional Transportation Plan sets out a blueprint for a system that puts traveller needs first, reduces traffic congestion, improves air quality and supports economic viability through three goals: strong connections, complete travel experiences and sustainable and healthy communities. To support these goals, it outlines five strategies:

1. Complete the delivery of current Regional transit projects.
2. Connect more of the plan area with frequent rapid transit.
3. Optimize the transportation system.
4. Integrate transportation and land use.
5. Prepare for an uncertain future.

The 2041 Regional Transportation Plan includes projects that would directly benefit travel in the Region:

- Extending the Yonge subway north from Finch Station (currently underway)
- Filling gaps in the rapid bus transit network along Highway 7 and Yonge Street
- Providing rapid transit on Jane Street, Major Mackenzie Drive and Leslie Street and, in partnership with the City of Toronto, on Steeles Avenue from the Spadina subway line to Milliken GO station
- Providing frequent Regional express bus service on highways 407, 400, 404 and 427
- Improving GO rail service to offer more frequent all-day service
- Enhancing bus service on sections of Major Mackenzie Drive, Yonge Street and Green Lane

The Transportation Master Plan update considers the plan's timing, priorities and improvements in its infrastructure models and technical analysis. It also looks at where additional improvements will be

needed to support growth in the Region, advocating for these improvements to be included in future updates to the provincial plan.

2.1.5 Ministry of Transportation Greater Golden Horseshoe Transportation Plan

The provincial Ministry of Transportation is developing a [Greater Golden Horseshoe Transportation Plan](#) to help set priorities up to 2051, direct spending towards an optimal transportation system and prepare for new technology like automated vehicles. The goals are to support continued prosperity and quality of life while meeting environmental and social needs.

The Greater Golden Horseshoe Transportation Plan is intended to provide direction to municipalities, transportation agencies and service providers. It was still under development as the Region's Transportation Master Plan was updated. However, the Transportation Master Plan reflects new directions, technical analysis and recommendations expected to appear in the Greater Golden Horseshoe Transportation Plan.

2.1.6 Provincial *Environmental Assessment Act*

The Transportation Master Plan update describes the future transportation network at a high level and will be implemented through specific projects and initiatives. These may be subject to different requirements under the provincial [Environmental Assessment Act](#), depending on the nature and scope, as the Region continues to follow approved direction for infrastructure planning. Chapter 3 provides more details.

2.2 York Region Vision, plans and priorities

2.2.1 Vision, Strategic Plan and Regional Fiscal Strategy

Vision is the blueprint for York Region's future and helps to guide York Regional Council and staff decisions to achieve the quality of life residents want now and in the future. Approved by Council in November 2021, it carries forward the previous vision statement of "Strong, Caring and Safe Communities."

Vision describes a York Region that, among others, has interconnected transportation systems for mobility and promotes living sustainably. The Transportation Master Plan is designed to help inform and implement infrastructure needs, such as roads, transit terminals and pedestrian and cycling pathways to achieve Vision's goals and objectives.

York Region's Strategic Plan, updated every four years, is a roadmap emphasizing priorities over each term of York Regional Council that align with the long-term vision. In 2019, Council adopted the 2019-2023 Strategic Plan. Specific goals and objectives influencing the Transportation Master Plan include:

- Increasing economic prosperity
- Building sustainable communities and protecting the environment

- Supporting community health, safety and well-being
- Delivering trusted and efficient services

The Regional Fiscal Strategy helps to achieve long-term financial sustainability by carefully managing the Region's capital plan, reserves and debt. The strategy also influences the Region's annual budget, which includes a 10-year capital plan. Chapter 7 provides more information on estimated costs of the Transportation Master Plan and expected funding sources.

This Regional direction is reflected in the Transportation Master Plan through a proposed network that is safe and reliable, provides convenient travel options, promotes economic growth, manages congestion, minimizes impacts on the environment and is financially sustainable.

2.2.2 Regional Official Plan

The Regional Official Plan outlines the plans to accommodate future growth and development while meeting the needs of existing residents and businesses in the Region. Prepared with community input, it provides direction and policies guiding economic, environmental and community planning decisions. The official plans of each of the nine local municipalities must conform to the Regional Official Plan.

The Region's infrastructure plans, including the Transportation Master Plan and the Water and Wastewater Master Plan, are consistent with the Regional Official Plan. The infrastructure plans reflect the Regional Official Plan outlook for growth in population and employment. The Regional Official Plan is in turn informed by provincial growth plan forecasts.

Updates to infrastructure master plans are coordinated with updates to the Regional Official Plan in a process known as a Municipal Comprehensive Review. The Ministry of Municipal Affairs and Housing requires this process through the growth plan. Coordination helps to ensure consistent communication with interested parties and better integration of all plans to manage costs.

This updated Transportation Master Plan reflects the revised land use planning projections included in the Regional Official Plan updated in 2022 through the most recent Municipal Comprehensive Review.

2.2.3 Climate change actions

In the face of higher-than-average temperatures and more extreme weather events, both of which can cause damage to infrastructure, communities and ecosystems, York Region recognizes the growing need to address climate change. This involves mitigation, which refers to reducing greenhouse gas (GHG) emissions and adapting to reduce climate change risk and damage.

To help ease climate change, this Transportation Master Plan aims to increase the use of more active and eco-friendly modes of transportation that help to manage the demand put on the road network by single-occupant vehicles. It also supports the adoption of electric and low-emission vehicles by residents and businesses.

The Region's [Energy Conservation and Demand Management Plan](#) identifies ways to reduce GHG emissions through Regional energy use. Transit buses, corporate cars and SUVs (sport utility vehicle), trucks and other work vehicles typically account for about three-quarters of the Region's corporate GHG emissions.

In [December 2020](#), York Regional Council endorsed plans to phase out fossil-fuel-powered vehicles by 2051 in both transit and corporate fleets. By the end of 2021, the Region had bought and deployed 12 electric buses. Since 2013, the corporate fleet of almost 400 vehicles has added hybrid and fully electric sedans and SUVs. The expectation is that electric versions of other vehicle types, like snowplows, will become available in the future.

Fleet electrification builds on other measures taken to reduce GHG emissions since the Region's Energy Conservation Plan was launched in 2016, such as changing operator behaviour and introducing in-vehicle technology to reduce idling and other emission sources, right-sizing vehicles and optimizing services through Mobility On-Request.

While Regional actions are important, individual residents and businesses will also need to act to achieve net-zero GHG emissions. York Region's draft Climate Change Action Plan identifies actions that can be taken across a range of priority areas to help address climate change. Some actions are aimed at reducing impacts, others at adapting to changes and some are designed to do both. These actions are both corporate-specific and at the community level.

The Climate Change Action Plan:

- Outlines the projected impacts of climate change on York Region
- Describes and prioritizes actions needed in three priority areas: resilient communities and infrastructure, low-carbon living and supporting an equitable transition
- Identifies the role York Region will play in implementing actions
- Provides a framework for all levels of government, businesses and communities to work together

In addition to the measures described above, key actions associated with transportation include:

- Adopting emission reduction targets and guidelines for low-carbon construction practices
- Undertaking climate change vulnerability and risk assessments on all Region-owned infrastructure, systems and assets using a common methodology
- Prioritizing infrastructure and asset repairs in climate-vulnerable areas using the asset management framework

2.2.4 [Protecting and enhancing the natural environment](#)

York Region has created a Greening Strategy with the goal of fostering strong and sustainable communities with healthy natural environments. One of its objectives is to blend and connect active transportation in urban areas. This update to the Transportation Master Plan is on target with that objective.

Another element of the Greening Strategy is to create natural heritage trail links to help extend the active transportation network of pathways and trails. The Region owns and manages the 2,500 hectares made up of 24 forest tracts, which offer more than 150 kilometres of public trails. The Region is working in partnership with local municipalities and other stakeholders to create links among all natural trails, also a goal of this update.

In evaluating potential road and transit projects, the Region takes into consideration natural heritage features, such as the Oak Ridges Moraine, the Greenbelt and numerous lakes, watercourses, wetlands, woodlots and woodlands, agriculture and source water areas. Enhancement of natural features is completed where possible. For example, projects often involve improving watercourses like streams and rivers, planting trees and other landscaping along boulevards.

2.2.5 Collaboration and partnerships

York Region works with internal partners, such as Public Health and York Regional Police, local municipalities, school boards and other external partners to support a Regional transportation system that is safe, accessible and equitable.

Important goals of these partnerships include better health for people and communities, promoting active transportation to schools, making roads safer and encouraging cycling, carpooling and other eco-friendly travel options. Section 4.3.3 outlines how the Transportation Master Plan supports these goals.

3 Framework and approach

3.1 Plan update followed recommended processes

The provincial *Environmental Assessment Act* provides a streamlined approval process, called the municipal class environmental assessment, for projects that are similar in nature, are carried out routinely, have a predictable range of environmental effects and respond to mitigating measures. For roads and transit projects, this is governed by the municipal class environmental assessment. The Region's transportation projects are typically completed under this framework.

The Municipal Engineers Association provides a manual to guide the municipal class environmental assessment process. The guidance defines master plans for infrastructure as "long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles." Master plans are often updated in conjunction with other plans, as discussed in Chapter [2].

The Transportation Master Plan:

- Assesses needs at a strategic, system-wide level, allowing the Region to look at the transportation system as a whole and make recommendations for improvements
- Considers the broad land use and environmental context
- Looks at infrastructure geographically and/or by function

- Can be implemented through individual projects

The outcome is a high-level plan identifying and justifying the need for future individual projects.

The municipal class environmental assessment process consists of five phases, and a master plan must address phases 1 and 2 at a minimum.

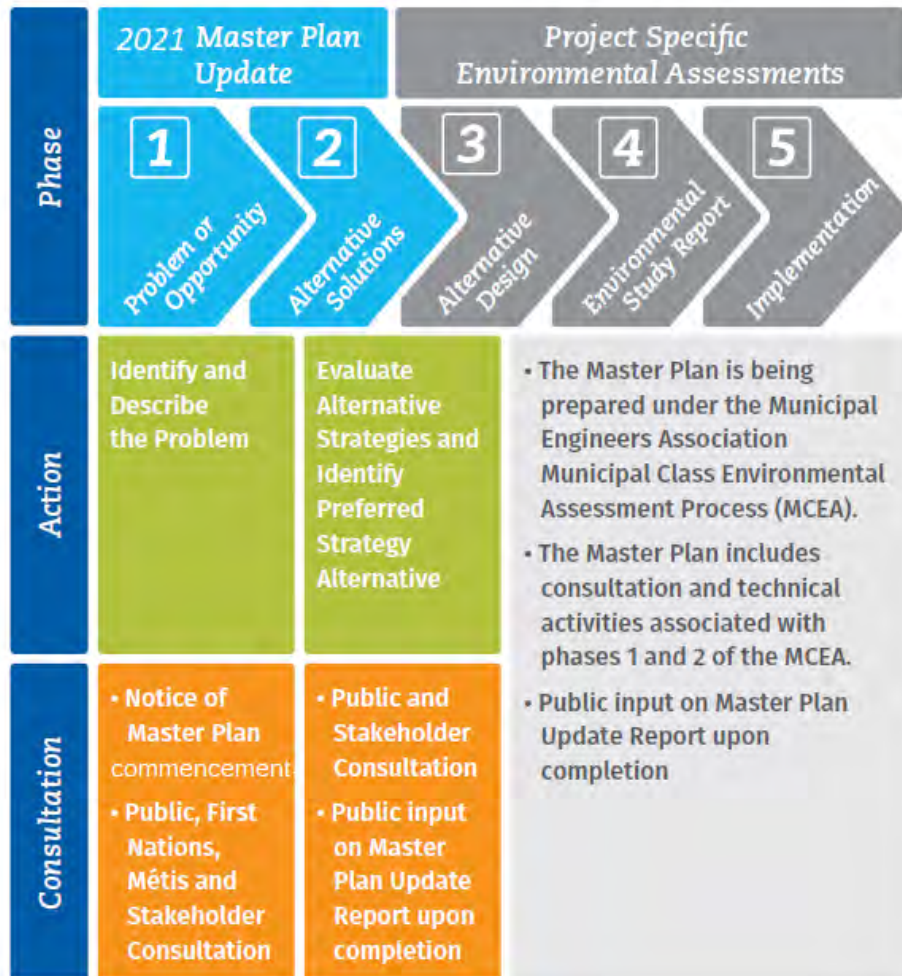


Figure # - Municipal Class EA Process

The Region followed Approach 1 for master plans set out in Appendix 4 of the Municipal Engineers Association Municipal Class Environmental Assessment document. This document fulfills the requirement in Approach 1 that decisions be documented at the end of Phase 2.

Approach 1 involves looking at the current road, transit and active transportation networks and expected needs to make recommendations on future projects. The foundation for understanding

current conditions is the Transportation Tomorrow Survey, which is normally carried out every five years as a co-operative effort by local and provincial government agencies. Major trends are highlighted in Chapter 4. Chapter 5 then presents a high-level discussion of projects to meet expected needs.

The municipal class environmental assessment process requires more detailed investigation of each project as the plan is implemented, as outlined in phases 3 through 5 in the diagram [above].

3.2 Consultation and engagement were key

The Region engaged with a diverse and inclusive range of travellers, residents, community partners and other interested parties in updating the Transportation Master Plan. Engagement sessions were completed through virtual meetings, public information centres, interviews and surveys, as well as social media and email. (In-person events were not possible due to restrictions related to the COVID-19 pandemic.)

A market research firm was hired to conduct a randomized telephone and online Transportation and Community Values survey with residents and business owners in the Region.

The survey goal was to gather feedback on what is important to these stakeholders from a transportation perspective and to collect information on travel patterns, behaviours and transportation preferences today and how they may change in the future. The telephone survey sampled approximately 1,000 people across the Region's nine local municipalities and was designed to provide statistically valid results. Almost 300 responses were also received through an online survey posted on york.ca. Chapter 4 provides highlights of these findings.

Those identified as having an interest in the Transportation Master Plan update were notified of opportunities to give feedback at each milestone. More information on the consultation approach and those identified as having an interest can be found in the plan's supporting documentation, which can be accessed at york.ca/TMP. The documentation also provides a sample of the methods used to communicate the plan update and detailed feedback gathered through three virtual open houses, as well as (background studies, etc.) [Note – Document will be available following completion of the TMP]

The consultation and plan update process was also designed to ensure feedback was taken into consideration when updating the Transportation Master Plan, as discussed in chapters 5 and 6.

3.2.0 Discover, Explore, Reveal

Engagement focused on three elements: discover, explore and reveal, as shown in Figure [XX]



Figure ##: Consultation and Engagement Milestones

Discover: Envisioning the future

This element of engagement focused on developing the foundations of the Transportation Master Plan update:

- Purpose statement, which serves as the vision for the update with all recommendations in the plan aiming to help achieve this vision
- Objectives, which support the purpose statement in the short to medium term as projects are delivered
- Guiding principles, which reflect the Region’s values and guide how to realistically achieve the purpose statement

Chapter 4 provides more detail on each of these elements.

SIDEBAR TEXT: The Transportation Master Plan purpose statement “Plan, build, operate and maintain a connected transportation network for all travellers that is safe, reliable, future-ready, sustainable and balances the needs of the unique communities we serve.”

Explore: Looking at the options

This element focused on encouraging residents and interested parties to explore transportation network options through an interactive mapping tool and a virtual idea wall. This input helped shape the proposed active transportation, rapid transit and road networks described in Chapter 5 and areas of focus discussed in Chapter 6.

Reveal: Unveiling the plan

The third and last step was to reveal the outcomes of engagement, studies, planning and other work that went into drafting the updated Transportation Master Plan, including:

- The purpose, strategic objectives and guiding principles
- Recommended transportation networks
- Areas of focus for further study and action
- Approaches to funding and implementing the transportation plan

Through the engagement process, staff learned residents and stakeholders see connected communities and safe, sustainable and convenient travel options as high priorities. While most residents now travel mainly by car, many are interested in using other options.

3.3 Approach to planning has evolved

Transportation Services gained valuable insights since the 2016 Transportation Master Plan and relied on those learnings when developing an approach to this Transportation Master Plan update.

External factors with long-term impacts, including climate change, disruptive new technologies and the COVID-19 pandemic, served as a reminder that all plans are subject to uncertainty. In addition, the Region's fiscal capacity did not allow some proposed projects to move forward.

This update is therefore based on the following principles:

- **Be more flexible and agile.** Adapt to factors like changing travel behaviour and patterns, global events, technological innovation, shifting provincial priorities and regulatory changes as the plan is put into action. Also be ready for the future and able to change direction when entirely new ideas or approaches emerge
- **Advocate for the big projects the Region needs.** This plan identifies all projects needed to serve future growth, while at the same time, it must be financially sustainable. The Region cannot independently fund several major projects discussed in this plan, including Regional interchanges with new, expanded or upgraded 400-series highways, the remaining portion of the bus rapid transit network, further subway extensions and complex projects to close gaps on Teston and Langstaff roads. These projects benefit not just the Region, but the economy of Ontario as a whole. Advocating for the provincial and federal governments and other potential funders to share in those costs will be crucial going forward
- **Watch the fiscal and environmental bottom lines.** As previously mentioned, the Transportation Master Plan must align with the Region's ability to pay for it. Through its fiscal strategy, the Region reduced its reliance on borrowing funds and, as a result, saw its debt levels peak in 2017. Since then, however, the need to fund its share of the subway extension to the City of Richmond Hill means it will face a new and higher debt peak in 2028. This calls for prudence in planning

growth-related capital investments. Planning also needs to reflect the environmental impacts, both of constructing the network and how it will be used. This is discussed in more detail in Chapter 7

- **Seek out and respond to opportunities.** Respond to federal and provincial funding opportunities and explore public-private partnership opportunities. Potential public-private partnership opportunities include transit-oriented development around major transit hubs and new developments
- **Engage more often and more broadly.** Use a variety of techniques/tools, such as online surveys, social media and virtual and post-pandemic in-person opportunities, to ensure as many voices as possible continue to be heard

4 Listening and learning

Transportation is changing dramatically around the world and within York Region due to increasing urbanization, new technologies and climate risks. The pace of change makes it more important than ever to listen to users of the transportation network and learn from their ideas and expectations while updating the Transportation Master Plan.

4.1. Travel patterns are changing

The engagement described in Chapter 3 made it clear residents understand the connection between how transportation is provided and how welcoming and livable a community is. While residents want to be able to easily get to transit hubs, schools and stores in their communities and even to further destinations using options other than their car, they want to feel safe and supported while doing so.

These themes are not new, as they have been raised in previous Transportation Master Plan updates. What is new, however, is the extent to which residents are not just talking about these changes — they are adopting them:

- People are walking or cycling more, especially for shorter and non-work-related trips:
 - Trips by walking and cycling grew by 30% between 2011 and 2016, after being near flat in the previous five years.
 - The number of car trips of less than 2 kilometres fell by 21.6% from 2011 to 2016, reaching a level slightly below that in 2006.
 - Car use decreased from 86% to 83% of total non-work trips between 2011 and 2016.

Possible factors behind this major shift could include increasing traffic congestion, higher-density growth putting more destinations within easy reach, the availability of more transit options and more accessible sidewalk and cycling infrastructure.

Another notable trend is total trips by all modes not growing as fast as the population over the same period. This may be related to retirement: in the 2021 telephone survey carried out for the Transportation Master Plan update, just over one in five residents said they were retired, with the highest proportion in the City of Richmond Hill at 28%. Another factor is that even before the COVID-19

pandemic, more people were working from home some or all of the time and doing more shopping online.

Over the longer term, there has been a trend towards greater use of transit. Data from the 2016 Transportation Tomorrow Survey show that transit mode shares have increased since 2001, while auto driver shares decreased. This means transit trips are increasing at a faster pace than car trips.

Recent ridership figures and traffic counters show:

- YRT ridership grew to 22.9 million in 2019
- Ridership increased in 2021, to 10.1 million, but continues to remain low compared to pre-pandemic ridership
- During the second half of 2021, YRT ridership increased approximately 40% compared to the same time in 2020 and is expected to continue growing gradually
- The TTC Line 1 Subway extension opened in December 2017 and provided 4.5 million passenger trips in 2019
- The Highway 7 East and Davis Drive rapidways have proven to be a positive investment with ridership increasing approximately 23% and 55% respectively, along the rapidway corridors
- The Highway 7 West, Yonge Street North and Yonge Street South rapidways opened in November 2019, January 2020 and December 2020, respectively, but did not realize potential ridership gains due to the COVID-19 pandemic
- At the onset of the pandemic, YRT ridership was approximately 80% of pre-pandemic ridership. By 2021 year-end, YRT ridership was approximately 58% of pre-pandemic ridership and by 2021 year-end, GO Transit ridership in York Region remained low at 0.6 million boardings, representing an approximate 95% decline compared to pre-pandemic
- Ridership declined on routes operating along rapid construction corridors due to increased travel time resulting from traffic delays. In 2019, ridership on routes operating along rapidway construction corridors decreased by about 1.1 million or 9%, compared to 2015
- GO Transit ridership remained low through the pandemic, seeing about 95% decline compared to pre-pandemic ridership A Metrolinx survey in 2021 found that users expected their main transit use in the future would not be commuting to work but instead taking personal/pleasure trips
- Traffic on the road network also fell in early 2020, although recovery was quicker: by 2021, volumes were back near pre-pandemic levels. The pattern, however, had changed, with a flattening of the historic morning and evening peaks.
- Workplace closures and a shift to working from home sparked major interest in active transportation. Studies in 2020 estimated that for the Greater Toronto and Hamilton Area as a whole, walking and cycling trips during the morning rush hour increased by 83% from 2016. Visits to york.ca for cycling and trail information more than doubled between 2019 and 2020.

Recent trends and survey data considered while updating the Master Plan are summarized in the following sections.

4.1.1. Most want to continue working from home at least part of the time

The longer-term impacts of the move to working from home are not yet clear, but [Statistics Canada surveys](#) show that most employees want to continue working from home at least some of the time after the pandemic. A survey by the Workforce Planning Board of York Region indicated that many employers also support working from home in industries where this is feasible.

At the time of the Transportation Master Plan telephone survey, more than half of those in the workforce were working from home, with 70% indicating they were both working from home and at a worksite (hybrid). Three in ten workers across the Region were working on-site only, the highest proportion being in the northern six communities. Overall, about 80% of those who travelled to a worksite used a private vehicle.

Before the COVID-19 pandemic, travelling to a worksite was by far residents' main use of the transportation system and, as such, contributed to increased rush-hour congestion. A permanent shift to working from home for some business sectors would have profound impacts on the transportation system within and beyond the Region. For example, the Region's network of Bluetooth sensors showed travellers on the road system in the morning rush hour were able to travel 15% faster than before the pandemic, averaging 46 kilometres per hour. This reflects a flattening of the morning peak volume, with evening peak showing a similar decline.

4.1.2. Interest in other travel options is growing

The telephone survey also carried out for this update found that 36% of respondents would like to travel to work or school by some means other than a private vehicle. Prior to the COVID-19 pandemic, upwards of 90% of trips to work or school were by private vehicle. Barriers identified in the survey to using other modes include the convenience of a car for making multiple stops and carrying groceries or sporting equipment, the extra time required to use another mode of transportation and a lack of cycling, walking and transit infrastructure.

Across the Region, the preference for options other than private vehicle travel was highest in the City of Richmond Hill, at 47%, with transit taking a 24% share against 18% for the rest of the Region. Cycling and walking were also more favoured in the City of Richmond Hill than in the Region as a whole.

Travelling to work or school by options other than private vehicle was favoured by more than half of the almost 300 individuals who completed a similar survey online. Their ideal travel choices were transit, cycling and walking in that order, and the major barriers to using these were trip time and lack of infrastructure. These responses reflect an average younger age among online survey participants.

4.1.3. A larger share of people both live and work in the Region

The percentage of people who both live and work in York Region has been gradually increasing for many years, reaching 56% in 2016. This trend may help explain the growth in morning peak car trips, despite strong ridership gains for the GO Transit system, which is oriented towards Toronto-bound commuters.

4.1.4. A shift to electric is underway among car owners

Despite more walking and cycling for trips under 2 kilometres, car ownership is still considered high in the Region, with 88% of telephone survey respondents reporting they were car owners. This compares to roughly 72% across the City of Toronto, with ownership rates in its suburbs similar to the Region's but under 50% in some downtown areas. In York Region, however, there is no clear correlation between population density and car ownership.

Increasingly, the Region's cars are powered by electricity instead of fossil fuels. Electric vehicles are powered by electricity alone and plug-in hybrid vehicles power with electricity first, with an internal combustion engine used only when electricity is not available for power. Just under 10% of York Region car owners reported owning an electric or hybrid vehicle in the 2021 surveys carried out for the Transportation Master Plan update, which is higher than the Canadian average.

While comparable Regional data from earlier years is not available, the adoption of hybrid and electric vehicles is growing rapidly in Canada. Hybrid, battery electric and plug-in hybrid vehicles accounted for 9.5% of total new registrations in the first half of 2021, up from 5.5% a year earlier, according to Statistics Canada.

The trend away from fossil fuel vehicles is likely to continue as the Government of Canada has set a mandatory target for all new light-duty cars and passenger trucks to be zero-emission by 2035, accelerating Canada's previous goal of 100% sales by 2040. Among survey respondents who do not already own an electric or hybrid vehicle, 43% of those surveyed by telephone and 58% of those surveyed online said it was somewhat or extremely likely they would choose an electric or hybrid option for their next vehicle. The likelihood rose with income level. To support the transition to electric vehicles, by the end of 2022, York Region will have 64 publicly accessible electric vehicle chargers across 12 locations.

There are concerns that electric vehicles, while beneficial to the environment, could have negative impacts on the transportation system. If drivers of electric vehicles follow the same travel patterns as in the past, traffic congestion could continue to be a problem. The UK-based Centre for Research into Energy Demand Solutions suggests a switch to electric vehicles might worsen congestion because operating costs are low, meaning there is the potential for more vehicles on the roads taking more trips.

Electrification could both help the environment and manage congestion if e-scooters and other micromobility options are used. The Ontario Ministry of Transportation regulates the use of e-bikes under the Ontario *Highway Traffic Act*. They are permitted on roads and highways where conventional bikes are permitted, unless specifically prohibited by a local restriction. Beginning January 1, 2020, the ministry launched a five-year pilot framework to permit e-scooters.

York Regional Council approved a bylaw change in 2020 to allow e-scooters and e-bikes in Regionally designated bike lanes and high-occupancy vehicle (HOV) lanes in line with provincial guidance. This demonstrates the Region's commitment to allowing and encouraging more sustainable transportation options that get people out of their cars, especially during peak travel periods.

Chapter 6 discusses the consideration to extend their use to multi-use paths and trails.

4.1.5. Respondents would invest half the budget in transit, walking and cycling options

Survey participants were asked how they would spend \$100 on transportation options. Investments in transit, pedestrian, cycling and multi-use pathways options were given a total of \$52 by telephone respondents and more by online respondents.

Improving road infrastructure was given \$30 on average by the telephone respondents, with the remaining \$18 going to technological improvements and safety measures.

These allocations were consistent with respondents from across the Region and were also comparable to survey results in 2016.

4.1.6. Youngest and oldest age groups least likely to own/drive a car

Mirroring a widespread trend, young people in York Region are now less likely to get a driver's licence soon after turning 16. In 1991, 82% of those aged 18 to 24 had a licence, but this figure had dropped to 69% by 2016. The telephone survey found that 58% of those aged 18-24 own a vehicle, significantly less than older respondents.

The current pattern, however, is that driving increases once people get their first job and form their own families. Survey results from 2016 show that among those aged 25 to 64, some 83% are drivers — the highest share of any age group. Driving then declines, falling to 76% in the 65-74 age group and 65% for those 75 and older.

The cost of purchasing a car has also increased due to a supply challenge caused by the COVID-19 pandemic, which may also contribute to fewer people owning cars.

These results have different implications for the transportation network. Walking, cycling and transit are modes of transportation that most young people readily use instead of driving. The question is whether these will remain viable choices as they are employed and form their own households.

For older individuals who have driven their entire lives, giving up driving can feel like a major loss of freedom and the survey data suggests they are resistant to other options like transit, walking and cycling.

4.1.7. Residents and stakeholders value fiscal prudence and innovative solutions

Feedback from the engagement process also stressed the importance of staying within the Region's budget by taking a "common sense" approach to spending. In addition, it was suggested the Region should work closely with its partners and explore opportunities for innovation in programs and infrastructure.

4.2. Foundations of the updated Transportation Master Plan

The engagement, research and data collection described in Section 4.1 helped in the development of the strategic direction of this Transportation Master Plan update by pinpointing what is important for the plan and why. The purpose statement, guiding principles and objectives below capture this direction.

These foundational elements in turn provide the basis for moving forward as outlined in Chapter 4.3, which sets out what the Region needs to do at a broad level, while Chapter 6 outlines focus areas for future work over the short term.

[FUTURE INFOGRAPHIC]

4.2.1. Purpose Statement

“Plan, build, operate and maintain a connected transportation network for all travellers that is safe, reliable, future-ready, sustainable and balances the needs of the unique communities we serve.”

The purpose statement serves as the vision for the update, and all recommendations in the plan aim to help achieve it. Feedback on the vision was positive, especially with the focus on safety, fiscal and environmental sustainability, connectivity, diversity and adaptability.

4.2.2. Guiding Principles

The guiding principles reflect York Region’s values and set the direction for realistically achieving the purpose statement. Future transportation initiatives should support one or more of the following principles:

- **Safety:** Measures that help reduce transportation-related fatalities and serious injuries with a focus on vulnerable road users
- **Inclusive and equitable:** Transportation infrastructure, programs and services that are available to all residents, regardless of location, personal abilities, age, gender, income, culture or faith
- **Protect the environment:** Addresses transportation needs with consideration for social and environmental impacts
- **Affordable today and tomorrow:** Balances the transportation costs and needs of the present without compromising the ability of future generations to meet their own needs
- **Balance the needs of communities and commuters:** Develop a transportation network that considers both the movement of people and goods and the importance of community building and neighbourhood placemaking, creating creative patterns of use, paying particular attention to the physical, cultural, and social identities that define a place and support its ongoing evolution
- **Future-ready:** Transportation solutions and initiatives that are flexible and can be adapted to address changing needs, processes and technologies

The feedback from consultation and engagement through the Transportation Master Plan showed general agreement with the principles and approval of a focus on people (not just drivers) living and travelling safely in sustainable, complete communities. Complete communities are described in more detail in Section 4.3.3.

4.2.3. Objectives

The objectives are intended to support the purpose statement in the short to medium term as projects are delivered.

- **Make the best use of infrastructure and services:** Maximize the effectiveness of the existing road network
- **Encourage all types of travel:** Design regional roads to accommodate all ages, abilities and modes of travel, including active transportation, transit, passenger vehicles and goods movement
- **Provide a resilient and adaptable transportation network:** Adaptable to changing social, environmental, financial and technological landscapes
- **Enhance partnerships:** Recognize the importance of collaborating with the public and private and non-profit organizations to provide transportation infrastructure, programs and services
- **Actively engage and share information:** Learn from all residents and stakeholders
- **Align project costs:** Ensure project costs are consistent with the Region's fiscal strategy and the 10-Year Capital Plan and obtain Regional Council approval annually

The draft objectives were well received by stakeholders and comments indicated approval of focusing on resiliency, connectivity, a range of travel options and partnerships.

4.3. Transportation Master Plan update reflects evolving attitudes and options

The engagement and surveys discussed in this chapter show travel patterns across the Region have been changing for some time and will continue to do so, especially where active and eco-friendly options are concerned. At the same time, new transportation options and ideas, like micromobility, are emerging.

The update process brought these streams together and used the principles and objectives outlined above to develop a Transportation Master Plan supporting progress towards the system the Region will need over the next 30 years. This section outlines key themes, and Chapter 6 provides more details on future work that will continue to inform the Region's plans.

4.3.1. Making life without a car an option

Not all residents can afford a car, or are willing or able to drive, as the telephone survey results showed:

- Those earning less than \$60,000 were significantly less likely to own a vehicle than higher-income earners.

- Younger residents are less likely to drive compared to those aged 25-64 and are comfortable with other transportation options.
- Older drivers might be at risk of losing their independence once driving is no longer an option.

For those living on a low income, finding an affordable place to live in the Region can also be a challenge. From 2008 to 2020, average home resale prices increased by 155%, while household incomes rose by only 20%. In addition, York Region has the lowest share of rental units across the Greater Toronto and Hamilton Area. The survey done for this update found that among those considering a move out of the Region, the cost of living and housing affordability were the top reasons.

The link between housing affordability and access to more travel options is a key factor in planning communities. If the only low-cost housing is far from workplaces and is poorly served by transit or other options, low-income residents may need to have one or more cars, which cuts further into their income.

The Region is helping to address this issue in its planning for urban centres and major transit station areas. The York Region Official Plan requires that 35% of new housing in these areas be affordable, while 25% of new housing be affordable outside these specified areas. The goal is to increase the percentage of affordable housing and give residents with the greatest need better access to work, school and other important destinations.

For many young people, the Region may not be the place where they will live long term: the survey found almost half of respondents aged 18 to 24 expect to leave. The most frequent reasons cited were the distance from school or work and the high cost of living, including housing. Keeping more young people in the Region may depend on creating communities where owning a car (a major expense) isn't necessary even after getting a job and forming a household.

The telephone survey also found that, compared to younger respondents, a far smaller number of those over 65 would consider a switch to transit, cycling or walking instead of driving. As they age, many residents are less inclined or able to drive. Without access to another way to travel, this severely limits their ability to get around and increases their risk of social isolation, both of which might make it hard for them to continue living independently. This is another instance where creating communities in which car ownership isn't needed is important.

4.3.2. Making transportation healthier

York Region's transportation system has an important role to play in improving residents' health. Chronic diseases such as diabetes, hypertension and heart disease are the main cause of illness and death in the developed world, including York Region, and physical inactivity is a major contributor.

Walking at the beginning or end of a trip taken by public transit is an excellent way to increase physical activity. Shifting away from vehicle use towards active transportation and public transit is also linked to less air pollution and a lower risk of traffic-related injuries.

Moving to an electrified transit and corporate fleet will also improve air quality and reduce noise pollution in communities, which will provide further health benefits.

As the survey results show, many residents would like to walk, cycle or take transit more but have concerns about how convenient it is, how much time it takes, if it's safe and whether the related infrastructure is in place.

4.3.3. Creating complete communities and complete streets

In York Region's vision, a complete community offers housing options at a range of price points, jobs, local services, clean water and air, green spaces and great recreation, all accessible by active and eco-friendly transportation. The benefits include helping residents be more physically active and protecting the environment by making it easy to reach destinations like shopping, schools and workplaces by walking, cycling and/or taking transit. The policies in the Regional Official Plan will help co-ordinate and set the stage for more detailed planning by the Region and local municipalities to create healthy, liveable places. These include human services and capital infrastructure, such as roads, transit and water/wastewater systems.

Built environments that support complete communities contain a variety of safe, accessible and connected transportation options that can be used in most weather conditions. This requires coordinating land use with investments in those options. Partnerships are also needed to ensure that other initiatives, including public health programs, the Region's Seniors Strategy and streetscaping, all factor into the creation of complete communities.

A recent example of how transportation can support complete communities is a pilot program started in 2021 in partnership with the Town of Newmarket and local school boards to encourage students and their parents to walk or cycle to school. The pilot, involving six schools, combines education, outreach and infrastructure and uses wayfinding, including markings on pavement and new curb markings, to better control traffic in active school transportation areas, along with fun touches like hopscotch grids painted on sidewalks. The hope is that, in addition to giving children more opportunities to be active, the project will help manage traffic congestion and make school zones safer. If successful, the Region hopes to broaden and extend the initiative across its nine local municipalities.

Designing complete streets allows the Region to support complete communities. In 2017, Ontario adopted a policy requiring that streets be designed for all users. The Region subsequently developed two complementary documents, its Pedestrian and Cycling Planning & Design and Designing Great Streets guidelines. Together, these shift the focus of road design from planning for vehicle capacity to planning streets everyone can use to better connect to the community. An important element when designing streets is including boulevards that run alongside them to provide safer cycling options.

5. Mapping the Region's transportation future

5.1. How the proposed network was developed

The update to the Transportation Master Plan responds to the need for a transportation network that offers travellers more options, protects the environment and fits within the Region's budget. It aims to achieve this by:

- Supporting a critical shift towards active and eco-friendly travel by making those options readily available to more residents
- Continuing to help make the entire transportation network safer for all users
- Focusing on the transportation needs of all road users, including drivers, passengers, transit riders, pedestrians and cyclists
- Using assets like boulevards along roads and underused public lands for active and eco-friendly travel

This chapter focuses on capital investments aimed at giving communities complete and connected transportation networks for all modes of travel, providing reliable and easy access to destinations and balancing the needs of various communities and travellers. It includes maps showing proposed cycling, rapid transit and road networks to provide a look at how all modes of travel are expected to evolve to support the Region's growth over the next 30 years.

The next chapter, "Strategic approach to change," discusses areas of focus that may help develop future transportation programs and initiatives, in line with the plan's purpose statement, principles and objectives.

As a long-term infrastructure plan, the Transportation Master Plan is made up of three main elements:

Active transportation. Travellers are walking, cycling and using other human-powered options to get to work or school, run errands or simply enjoy being outdoors more often. The plan supports a well-integrated network of bike lanes, trails and multi-use pathways to make these options easier and safer for all users. **(Maps 1 and 2)**

Rapid transit. Identifying and protecting corridors for rapid transit infrastructure, such as dedicated bus lanes, is critical as the Region grows. Recognizing changes since the release of Metrolinx's 2041 Regional Transportation Plan in 2018, this update recommends additional rapid transit corridors to address the Region's growth to 2051 and beyond. In addition, the updated Regional Official Plan identifies new major transit station areas that need to be supported with transportation infrastructure, such as new and improved bus rapid transit corridors, GO Transit rail stations and conventional transit service. **(Map 3)**

Optimized road network. Investments in this Transportation Master Plan will generally target managing traffic flow in the Region's most congested areas, improving roads in new development areas and enabling better access to freeways, Regional Centres, rapid transit and key links to major employment

areas. The proposed road network focuses on what is needed to make the best use of the existing assets, such as roads, lanes and intersections, as well as on investing in new projects. This process of making the best use of the existing road network, also called optimizing the network, includes adjusting signal timing and making road or intersection upgrades to resolve bottlenecks and pinch points wherever possible, instead of undertaking major construction like road widenings. This approach goes hand in hand with other steps taken to manage demand by single-occupant vehicles on the road network by making options like active transportation more readily available. **(Map 4)**

A shift to active transportation and sustainable transit makes the road network more efficient by managing the number of single-occupant cars it must accommodate as the Region grows. This results in financial benefits by reducing wear and tear on roads and reducing the need for widenings and other costly road projects.

5.2. Testing options

Decisions about transportation investments reflect the feedback and factors outlined in the previous chapter, forecasts for growth and employment to 2051, current capacity of the transportation network, how various factors might change and what the impacts will be.

The Region uses an activity-based model to analyze travel demand and forecast the impacts of growth on the network. Reflecting data gathered in the 2016 Transportation Tomorrow Survey and Cordon Count Program, it simulates the daily travel patterns of drivers, carpoolers, pedestrians, cyclists and users of transit, including GO Transit bus and rail, in York Region and the rest of the Greater Golden Horseshoe Area.

The model considers key factors that determine trip-making patterns, such as changes in household makeup over time, availability of cars to household members, how and where employment will grow, how people organize their trips in sequence and the extent to which traffic congestion will cause drivers to shift to other modes of transportation such as transit, walking or cycling.

For the Region, population and employment forecasts are key considerations included in the updated Regional Official Plan and help determine which transportation projects should be invested in and when. chapters 1 and 2 provide more detail.

A 2051 base network model was developed reflecting current Regional and provincial plans, including the Ministry of Transportation's [Southern Highways Program](#). Most of the existing 400-series highways serving the Region, including highways 400, 404, 407 and 427, will be extended and/or expanded. Plans for new roads include Highway 413 (Greater Toronto Area West corridor), which would cross the City of Vaughan from Peel Region to Highway 400, and a bypass that would connect Highway 404 to Highway 400 (commonly referred to as the Bradford Bypass) in the north. The impacts of these projects on the Regional road network were considered during the planning process.

The model then tested how the network would perform given the location and population and employment projected for 2051.

Assumptions could be changed to create a range of scenarios to find a better fit between capacity, costs and transportation options. Six scenarios were tested for this plan update. The first three scenarios would involve policy and/or funding from the Region and its partners or would have financial impacts on residents. These scenarios were:

1. Providing more frequent YRT bus service
2. Eliminating transit fares
3. Charging for parking in high-demand areas where transit is available as an alternative

Scenarios 1 to 3 resulted in the reduction of traffic congestion; however, the financial impacts on the Region would vary for each.

The further three scenarios would depend on changes in resident behaviour and would involve little or no policy changes or funding from the Region:

4. Half of trips taken under 5 kilometres would be completed by walking or cycling.
5. 25% of the labour force would continue to work from home and daily shopping trips would fall by 15% due to online shopping.
6. Travellers would avoid morning and evening traffic peaks and spread trips out over the day.

Scenarios 4 to 6 would reduce traffic congestion with minimal impacts on the Region's infrastructure investments. Of the three, scenario 4 -- more active transportation like walking or cycling for short trips - is the most feasible, based on current information. The Transportation Tomorrow Survey data show a growing interest in active transportation among York Region residents, and this trend is expected to continue over the next 30 years. The Region's roles in helping to make it happen include adding active transportation infrastructure and planning complete communities, which will also support residents' health and protect the environment.

5.2.1. A larger, more integrated active transportation network

A well-planned active transportation network lets people move within and beyond the Region in ways that are convenient and safe for everyone and connects off-road trails to lanes and paths on or beside roads.

The active transportation network should provide direct connections to workplaces, schools, libraries, shopping, recreation and other destinations, as well as link to transit for longer trips. Enabling more travellers to reach major transit stations and hubs as well as local transit stops by walking, cycling or micromobility means is an important part of managing traffic congestion in urban areas.

Collaboration is essential in creating and expanding the network. York Region has formed important partnerships with local municipalities, neighbouring municipalities, the Toronto and Region Conservation Authority and the Lake Simcoe Region Conservation Authority, as well as with school boards, advocates and other interested parties.

Updating the active transportation network was guided by the following goals:

- Active travellers should feel safe throughout the network, including where there is a highway interchange on a Regional road
- All Regional roads should accommodate all modes of travel, including walking and cycling, and design should reflect the Region's Pedestrian and Cycling Planning & Design Guidelines
- Where possible, cycling lanes should be located off the road rather than on the road next to vehicle traffic
- The network should consider underused or unused land to expand, such as hydro corridors or old rail lines
- Travelling by human power (walking or cycling) should be an option for everyone
- Outreach to encourage the shift to active transportation should target areas where new cycling/walking features are available or planned, as well as to more general audiences

The active transportation networks are shown on two maps – the Regional road network (Map 1) and the Regional trail network (Map 2). While both maps are needed to provide the level of detail required for this plan, the Region views routes on the road network and on trails as one, forming a connected network for commuting and recreational use.

Some paths on Regional roads allow for multiple users, including pedestrians, and the trail network is open to walking, hiking and cycling. Sidewalks, which also form part of the active transportation network, are a local municipal responsibility and as such are not shown on the maps.

Regional road cycling network (Map 1)

This map shows the existing and proposed Regional road cycling network. Green indicates existing multi-use pathways and cycling tracks separated from the roadway and dedicated on-street bike lanes. The dotted red lines show where these new features might be in the future. The road-based cycling network will be expanded by Regional road projects, in partnership with stakeholders and through the review of new development applications. Where a lane or path within the Region will reach a border, the Region will work with neighbouring municipalities to identify logical connections so cyclists and pedestrians can continue their journey safely.

Trail network in York Region (Map 2)

Trails enable cyclists and others to connect to neighbouring municipalities as well as destinations within the Region. Arrows show connections to neighbouring municipalities that are expected to be in place by 2051. Solid lines show existing trails and dotted lines indicate trails that are under development, planned or being explored in partnership with local municipalities and conservation authorities.

Two trails of significance are:

- The Lake to Lake Cycling Route and Walking Trail, which will provide a 121-kilometre link from Lake Simcoe to Lake Ontario with connections to other major trails when complete. The portion of the route in York Region is more than 80% complete.

- The future South York Greenway cycling, pedestrian and micromobility corridor, which will parallel Highway 407, providing connections to subway stations, other major mobility hubs and existing and future communities. When complete, it will run more than 50 kilometres from the City of Vaughan to the eastern limits of the City of Markham.

These routes will provide a safe and largely separated travel network for potentially thousands of cyclists, pedestrians and micromobility users in the most heavily populated areas of the Region, which will help reduce automobile pressure on major arterial roadways.

Improvements to the active transportation network are made in partnership with local municipalities. When road projects do not include active transportation improvements, such as the construction of walking, cycling or multi-use paths, consideration is given to constructing these later when possible. These considerations may include moving utilities, placement of street trees and intersection modifications to ensure this infrastructure can be accommodated in the future.

5.2.2. More rapid transit corridors

The proposed 2051 rapid transit network, shown on Map 3, identifies and protects rapid transit corridors, to support York Region's planned growth needs. Transit infrastructure may include physically separated lanes for the exclusive use of buses or light-rail vehicles. In York Region these are also referred to as "rapidways."

Due to the Transportation Master Plan guiding long-term capital investment, the proposed rapid transit network focuses on rapid transit infrastructure needs, including bus rapidways and the Yonge North Subway Extension. The capital needs of other transit services, like conventional bus and Mobility On-Request, are adjusted in response to shorter-term demand and reflected in YRT's five-year plans and the 10-year capital plans in the Region's budget.

The proposed rapid transit network is consistent with the 2016 Transportation Master Plan, with some adjustment to reflect budgeting needs. Its foundation is a body of background knowledge, including environmental assessments, studies and reports that provides a solid rationale for the proposed network and the major projects it identifies.

While the rapid transit network plan generally aligns with Metrolinx's 2041 Regional Transportation Plan that was released in 2018, it also recognizes that long-term planning has since evolved:

- In the provincial Greater Golden Horseshoe Transportation Plan, which is now in development, the Ministry of Transportation is moving towards including parallel transitway corridors along new or extended 400-series highways.
- The provincial government has also signalled an interest in shifting from the current mode of focusing all rapid transit on Union Station to one that includes a loop to bypass Toronto's downtown core and connects new major transit hubs, including Richmond Hill Centre, with Toronto Pearson International Airport and other important destinations.

- Infrastructure investments also reflect new forecasts for population and employment growth in the updated Regional Official Plan that are based on 2020 provincial forecasts and the Region's designation of new major transit station areas.

The rapid transit network includes the following infrastructure elements that could be added to the network by 2051:

- **Subway.** The map reflects the Yonge North Subway Extension which connects the Richmond Hill/Langstaff urban growth centre with the existing TTC subway at Finch Station. The planning and construction of the alignment and stations are led by the Province through Metrolinx. As well, this line and the existing line that now ends at Vaughan Metropolitan Centre may be extended to Major Mackenzie Drive, subject to further study.
- **GO Transit.** In addition to improvements along the Barrie, Richmond Hill and Stouffville GO Transit lines, this map also includes the Bolton rail corridor in west Vaughan and Havelock rail corridor in east Markham. These were identified in the Metrolinx Regional Transportation Plan as potential projects beyond 2041.
- **Other rapid transit.** Building on the success of 34 kilometres of bus rapid transit (or Viva) completed to date, remaining segments totalling more than 100 kilometres are needed to complete the YRT Viva network of dedicated bus lanes, including 10 kilometres that are subject to further studies. This would include building out the rapid transit network westward along Highway 7 to connect to Peel Region bus rapid transit, making it easier to get to Toronto Pearson International Airport. Additional rapid transit could include parallel transitways on new and extended 400-series highways, including highways 427 and 407 and the proposed Highway 413. The proposed transitway on Highway 407 would be another option to link York Region to the Toronto Pearson International Airport. Metrolinx has also identified 37 kilometres of future planned rapid transit along Steeles Avenue.

The Region is also working with the provincial government to explore a potential rapid transit loop to bypass Toronto's downtown core (as discussed above). The forthcoming Ministry of Transportation plan for the Greater Golden Horseshoe and future updates to [Metrolinx's Regional Transportation Plan](#) will provide more details.

The proposed number of commuter parking lots to support YRT and/or GO Transit services has been reduced since 2016. This was based on focusing on parking lots that would directly enable a connection from a private vehicle to transit at a significant YRT or GO Transit bus stop, terminal or station.

The proposed rapid transit network was refined through discussions with internal partners, York Region Rapid Transit Corporation and consultation with the public.

5.2.3. A more strategic approach to the road network

The development of the 2051 road network (Map 4) included:

- Building on the extensive work done annually for the 10-year roads and transit capital construction program
- Recognizing financial constraints and better aligning with the Regional Fiscal Strategy
- Using data-driven decision making

Decisions about specific projects considered growth-related needs, expected impact, project costs and commitments of partners, such as local municipalities and the Ministry of Transportation. With respect to the ministry, York Region has also identified improvements needed on several roads under provincial jurisdiction, such as portions of highways 48, 9 and 7, and advocates for these to be priorities in updates to the Southern Highways Program. These projects are identified in purple on the 2051 roads network map.

Evaluating potential Regional road improvements

For improvements to Regional roads, staff examined the results of the Region's travel demand forecasting model discussed in Section 2 of this chapter.

Projects were then ranked using the Region's priority-setting model, a process endorsed by York Regional Council that determines the benefit scores of each project, looking at such aspects as how much the road capacity would be increased, what type and intensity of development is expected nearby, whether the road is close to important destinations or freeways and what uses — such as trucking, transit and car travel — the road will support.

The priority-setting model was valuable for initially ranking projects based on historical and forecasted traffic volumes, then refined qualitatively in consultation with subject-matter experts looking at factors such as supporting planned growth areas or constructing eco-friendly and active transportation infrastructure to support all modes.

Potential changes resulting from expanding GO Transit train service

The 2051 road network includes separations between Regional roads and rail lines used by Metrolinx's GO Transit commuter trains, as well as Canadian Pacific Railway and/or Canadian National Railway. These separations, also known as grade separations, support GO Transit's expansion plan for two-way service and for all GO Transit lines to carry more trains.

Recent experience in the Region and elsewhere in the Greater Toronto Area shows that a crossing typically costs more than \$100 million to build. Construction is disruptive for communities and, once built, crossings are very costly to maintain. The significant construction and operating costs might not justify the traffic benefits.

Grade separations included in the Region's 2016 Transportation Master Plan but not yet underway continue to be protected from development in this update. Since projects of this nature involve shared jurisdiction, the Region typically works with Metrolinx and other rail authorities to plan for and prioritize them. Negotiation will be needed to determine roles, responsibilities and cost contributions, the last of which will also be subject to assessing priorities in the Region's capital budget.

Recommended 2051 road network

As Map 4 shows, the proposed 2051 road network focuses on:

- Improving roads located near new development areas and in the most congested core urban areas
- Construction of a new section of Teston Road between Keele and Dufferin streets
- Building mid-block crossings (crossings over freeways between interchanges) and completing missing links in mature urban areas to offer more route options
- Continuing to advocate for interchanges required to support growth and considered by the Ministry of Transportation to be a Regional or local municipal responsibility, including three linking to Highway 404 (at 19th Avenue, St. John's Sideroad and Doane Road) and one to Highway 400 (at King-Vaughan Road), as well as improving the partial interchange at Mulock Drive and Highway 404
- Protecting the areas around planned grade separations between Regional roads and rail lines and completing four projects already underway: on Rutherford Road east of Keele Street and Wellington Street east of Yonge Street on the Barrie GO Transit line, Elgin Mills Road east of Yonge Street on the Richmond Hill GO Transit/CN line, and Steeles Avenue east of Kennedy Road on the Stouffville GO Transit line

The Region is undertaking an environmental assessment for the construction of new section of Langstaff Road to cross the Canadian National Railway MacMillan Yard. This is included on a contingency basis as it can proceed only if additional funding were available from third parties.

The Transportation Master Plan update identified the need for one interchange with Highway 400 north of Teston Road, which could be at either King-Vaughan Road or Kirby Road. The preferred option is subject to further study and consultation with local municipalities and the Ministry of Transportation, as either would be affected by options to connect Highway 400 to Highway 413.

The 2010 Regional Official Plan included a potential westward extension of Donald Cousens Parkway, which currently runs from Fieldside Street (north of Steeles Avenue) to Major Mackenzie Drive. A section of Ninth Line between Steeles Avenue and Fieldside Street is in the Region's program to be widened to four lanes in the near future, completing the southern end of the Don Cousens Parkway within the Region. The 2016 Transportation Master Plan provided more details of this potential four-lane arterial road that would connect to an interchange at Highway 404 at 19th Avenue. This update proposes that the capacity that would have been provided by the extension be provided by expanding the existing road network around its planned route instead.

6. Strategic approach to change

6.1 New and evolving areas of focus

The Transportation Master Plan update identified five focus areas, each of which brings together several related priorities:

- Safety for all travellers
- Transportation equity
- Reduce car travel, especially during rush hours
- Fiscal and environmental sustainability
- Role and function of Regional corridors

[FUTURE INFOGRAPHIC]

The focus areas replace the many transportation policies and actions included in the 2016 Transportation Master Plan, because the Regional Official Plan is the major policy document for managing growth and development. The Transportation Master Plan focuses on setting and maintaining direction for transportation in York Region through initiatives, guidelines and operating procedures that support the Regional Official Plan, as well as the Region's Vision and the Strategic Plan.

Each focus area will require further study on the part of the Region and its partners, as discussed in the balance of this chapter. Proposed actions and initiatives will be brought forward to York Regional Council for review and endorsement over its next four-year term.

6.1.1. Safety for all travellers

Safety is a long-standing priority of the Region. As the transportation network evolves and changes, there will be opportunities for the Region and its partners to help make it even safer for all travellers. This update outlines specific investments and commitments to increase safety. In addition, Transportation Services expects to propose a traveller safety strategy to York Regional Council by 2023.

Additional initiatives may include:

- Reviewing posted speed limits to ensure they are consistent with the goals of more active transportation and livable communities
- Using communication campaigns to share information with road users and build awareness of safe behaviour, such as the "[Be Visible. Be Seen.](#)" campaign that provides tips for drivers, pedestrians and cyclists to arrive at their destination safely
- Putting speed reduction and speed management measures, in place

- Using safety-oriented planning and design and providing safety enhancements for pedestrians and cyclists by using the Region’s Pedestrian and Cycling Planning & Design Guidelines, including:
 - Protected bike lanes, also called cycle tracks, with physical barriers to separate cyclists from both cars and sidewalks
 - Permanent two-stage left-turn queue bike boxes in boulevards at several intersections on Highway 7 to allow cyclists to complete a left turn across multiple lanes of traffic safely
 - Pedestrian crossings, like the pedestrian bridge over the Holland River and GO Barrie rail corridor, to eliminate the need for pedestrians and cyclists to cross at street level

6.1.2. Transportation equity: options for all lifestyles, life stages and abilities

The Region designs transportation options and assets to make it easier for people of all ages and abilities to use services. This aligns with York Region’s Inclusion Charter, which has the goals of making all people feel they belong and have access to the same opportunities and moving towards recognizing mobility as a right.

The MyRide Travel Training Program helps to make customers, including seniors, newcomers to the Region and people with disabilities, more comfortable using YRT on their own by providing additional knowledge and skills needed to use YRT independently.

YRT offers fare discounts for senior citizens, children and youth, and children under five years of age ride for free. The Region is also piloting a Transit Assistance Program to make transit more affordable for eligible adults.

Other initiatives to support greater transportation equity include:

- Expanding Mobility On-Request to provide transit services to more rural communities and new riders in areas without access to large-scale transportation systems or mobility hubs
- Accepting more payment methods so it’s easier to pay fares and use the system
- Collaborating with other agencies like Metrolinx on expanding transportation options available to residents and commuters
- Making transit more convenient by offering better fare and service integration with neighbouring systems and aligning transit options with traveller needs
- Ensuring intersections comply with provincial accessibility requirements
- Communicating in more ways to ensure messages reach as many people as possible

6.1.3. Reduce car travel, especially during rush hours

The road network, air quality and the environment would benefit from having fewer cars on the road, especially during rush hours, as the population and economic activity increases.

There are many ways to build on the growing interest in walking, cycling, transit, carpooling and other eco-friendlier options, including non-travel alternatives such as working from home. The Region will continue to work with and require developers to help fund and accelerate projects that serve residents of a new development on the transportation network where appropriate. For example, a developer may fund or construct a road improvement and would be repaid for the road work at a later date.

This update continues York Region's commitment to managing traffic congestion, including looking at new ideas and approaches.

A key element will be encouraging a shift to more active and eco-friendly options. Examples of how to achieve this include:

- Supporting transit ridership recovery from the COVID-19 pandemic with marketing efforts, enhanced cleaning programs and actions to address overcrowding in high ridership areas
- Adding more active transportation infrastructure (such as cycle tracks and multi-use pathways)
- Advancing the Lake to Lake Cycling Route and Walking Trail, South York Greenway project and building stronger links throughout the trails network
- Better understanding the opportunities for transportation over short distances via eco-friendly, single-person vehicles such as e-scooters and e-bikes and how to accommodate their use in the transportation network
- Creating a comprehensive transportation demand management strategy, building on such initiatives as Smart Commute, including the Smart Commute Website and App, carpooling, [Active School Travel pilot program](#), encouragement of walking, cycling and other eco-friendly options for the first/last kilometre of longer trips and providing access to major mobility hubs by transit or active transportation
- Implementing the MyTrip program for new residential communities to promote sustainable transportation through individualized trip planning and outreach

6.1.4. Fiscal and environmental sustainability

The updated Transportation Master Plan looks at natural heritage features as well as agricultural and rural lands to avoid any negative impacts where possible. Preserving the 70,000 trees planted on Regional roads and rights-of-way is also considered as part of the road project planning process and when trees must be removed, they are replaced.

Chapter [X] discusses York Region's commitment to meet net-zero targets by moving to full electrification of the transit and corporate vehicle fleets.

There are additional ways to lessen environmental impacts of the transportation network and support fiscal sustainability.

Examples of such initiatives include:

- Improving the way priorities for capital projects are set by updating the definition of a project's benefits, building in financial constraints, looking at benefit/cost ratios and assessing the ability to mitigate environmental impacts, for example by reducing GHG emissions
- Managing assets to minimize costs and environmental impacts over their service lives
- Coordinating the Region's transportation networks with those of local and adjacent municipalities to minimize infrastructure needs and enhance the natural environment

6.1.5. Reviewing roles and functions in Regional corridors

As the transportation network evolves, York Region needs to consider issues around ownership, new technologies for micromobility and measures to manage demand on the system. The following five subsections outline the key priorities around corridors. Many of these will involve collaboration with internal and external stakeholders.

6.1.5.1. Ownership and use of boulevard

Elements in boulevards (the strips of land located between the road curb and private property) include cycling paths, sidewalks, streetscaping and lighting. The *Municipal Act* does not explicitly define the respective responsibilities of York Region and its local municipalities for all boulevard elements. For example, along a Regional road, the local municipality is responsible for constructing and maintaining the sidewalks and the street lighting between intersections. However, responsibilities for other features, including cycling paths, are not defined. This creates uncertainty about ownership and maintenance, especially as the Region is moving to shift cycle tracks into the boulevard for greater safety.

- The Region and its partners will work to more clearly define boulevard roles and responsibilities, especially where the goal is providing safer and more comfortable options for active and eco-friendly transportation, reducing reliance on single-occupancy vehicles and making the road network more efficient.
- The Region will consider what needs to be included on boulevards and what could go onto the road to make more space available for trees and other features while creating an inclusive and safe environment.

6.1.5.2. Micromobility

New micromobility choices, such as e-bikes and e-scooters, are gaining in popularity among York Region’s residents. As noted in Section [4.X], they offer convenience as well as benefits on both the environmental and the traffic congestion fronts. Users can cover longer distances compared to walking or cycling, they take up less space on the road than a car, and micromobility makes it easier to connect to mobility hubs or key destinations as parking is less of a concern.

Successful integration of these devices into Regional and local networks will require collaboration and communication. Particular attention is needed on how they would be safely integrated into sidewalks or trail systems that see high volumes of pedestrians. Going forward:

- The Region and its partners will work to define pedestrian, cyclist and micromobility infrastructure to support both safety for all travellers and the shift away from single-occupant car trips.
- Special consideration will need to be given to issues such as rentals, pick-up/drop-off locations, winter maintenance, charging facilities, speed limits in some settings, enforcement and legal/risk issues.

6.1.5.3. High-Occupancy Vehicle (HOV)/transit lanes

HOV lanes are reserved for public transit, emergency vehicles, taxis and private vehicles carrying more than one person. Their main purpose on Regional roads is to increase the total number of people moving through the corridor.

A Regional standard for six-lane roads requires the inclusion of two all-purpose travel lanes in each direction, an HOV lane and a dedicated 1.5-metre cycling lane, at a minimum.

The Regional Official Plan includes a policy to “require transit or high-occupancy vehicle lanes and cycling facilities within the rights-of-way of existing and future six-lane Regional roads based on established thresholds and criteria.” Consistent with that policy, this focus area will explore opportunities to redefine how HOV lanes are proposed and implemented across the Region’s existing four- and six-lane and future six-lane roads.

Potential work in this area could include:

- Carpooling lane incentives
- Building additional bus-only lanes on major Regional corridors
- Reviewing Regional policy on six-lane roads

6.1.5.4. Parking

In York Region, local municipalities are largely responsible for managing on-street parking through official and secondary plans, zoning of new developments and parking bylaws. The Region, however, has two closely related functions:

- Its Official Plan directs growth largely to Regional Centres and Corridors.
- It is working on several fronts to make active and eco-friendly travel options more attractive.

These roles are linked. Effective parking policies and programs can help achieve transportation goals like encouraging people to walk, cycle and use micromobility, especially in high-density areas.

Parking on a Regional road is generally considered only when all

the following criteria are met:

- It would be located within or along the Region's designated Centres and Corridors or in a Major Transit Station Area.
- It would be part of an overall parking strategy for those locations, not a stand-alone provision.
- It would be safe and not impact pedestrian and cycling facilities, sightlines, streetscaping, access, intersection operations or the road's integrity.

Additional work may include:

- Looking at a broad-based policy and standards around parking on Regional roads to support the goals of this updated Transportation Master Plan
- Charging for on-street parking in some areas

6.1.5.5. Movement of goods using large trucks

Trucks of all sizes are allowed on all Regional roads, supporting the economy as well as moving people. A Ministry of Transportation of Ontario survey in 2012 found that 21% of weekly truck trips in Ontario originated from, were going to, or crossed through York Region. Approximately \$3.8 billion worth of goods are moved in the Region weekly.

Truck traffic in the City of Vaughan accounts for more than half of all truck travel to and from the Region. This is because two major rail freight hubs, Canadian National Railway MacMillan Yard and Canadian Pacific Railway Vaughan Intermodal Terminal and major distribution centres, are located here, as are several large distribution centres. Truck volumes are also higher around key employment areas along provincial highways, which are mainly in the City of Vaughan but also in the cities of Markham and Richmond Hill.

The Region has been working with the ministry and neighbouring municipalities to improve goods movement, manage congestion and reduce conflicts between road users through:

- **Greater efficiency.** The Regional Official Plan recommends the Region work with the provincial government, local municipalities and nearby jurisdictions on an efficient, multimodal goods movement network that uses rail corridors, provincial highways and Regional roads to meet current and future needs. This is reflected in such projects as the proposed widening of Langstaff Road to six lanes between Weston Road and Dufferin Street. (Section 5.2.3 notes that a further project to take Langstaff across the MacMillan Yard is contingent on third-party funding.)
- **Operational practices.** Section 4.3.3 discusses the Region’s Designing Great Streets Guidelines focused on road design for all users. One concern is ensuring the turn radius, also known as curb return radii, at intersections used by trucks is sized right to minimize conflicts with opposing traffic and pedestrians.

6.2 Alignment of Focus Areas with Objectives

The Transportation Master Plan’s objectives are identified in Section 4.2, “Foundations of the updated Transportation Master Plan.”

OBJECTIVES / RELATED FOCUS AREAS					
2022 TMP Objectives	Focus Areas				
	Safety for all travellers	Transportation equity: options for all lifestyles, life stages and abilities	Reduce car travel, especially during rush hours	Fiscal and environmental sustainability	Reviewing roles and functions in Regional corridors
Make the best use of infrastructure and services	✓		✓		✓
Encourage all types of travel		✓	✓		✓
Provide a resilient and adaptable transportation network	✓		✓	✓	✓
Enhance partnerships		✓			✓
Actively engage and share information	✓	✓		✓	✓
Align project costs				✓	✓

The following table shows the alignment between the focus areas and objectives. Each objective aligns with at least two related focus areas. This will help maximize the value of actions and initiatives related to the focus areas.

7. From plan to action

7.1. Cost of the plan

This Transportation Master Plan update identifies the need for specific and groups of projects and provides an estimate of all costs, not just the costs to York Region. The following section discusses funding sources for growth-related projects, including contributions from other levels of government.

The estimated costs of the networks and related programs recommended in this update are \$12.3 billion for transit (not including the cost of replacing the existing fleet with electric buses), \$410 million for active transportation and \$6.4 billion for roads.

The table below provides a more detailed breakdown of capital costs.

Component	Estimated Total Capital Cost
Transit	
Bus Rapid Transit corridors	\$5,445 million
Yonge North Subway Extension (total cost)	\$5,600 million
Transit facilities/fleet (expansion)	\$1,200 million
Subtotal	\$12,245 million
Active Transportation	
Subtotal	\$410 million
Roads	
Road improvements	\$2,748 million
New road Links	\$1,083 million
Mid-block crossings	\$475 million
Interchanges	\$221 million
Grade separations	\$1,298 million
Minor capital & miscellaneous	\$600 million
Subtotal	\$6,425 million
Total Cost	\$19,080 million

NOTE: Subject to change due to ongoing refinement of cost estimates based on network changes, discussions with local municipalities, and peer review against DC Bylaw update. Will be updated before Committee Report.

7.2. Funding the plan

Growth-related infrastructure is mainly funded by development charges. These fees are collected from developers to build water supply, wastewater and transportation-related infrastructure in advance to support new houses, apartments and commercial buildings. Typically, development charges cover 80% to 90% of the cost of a project.

For example, a new single-detached house being built in York Region collects \$66,000 in development charges. Of this total, \$59,000 would cover water, wastewater and roads, and the remaining \$7,000 would cover transit, subway, general services and GO Transit.

The [*Development Charges Act, 1997*](#) provides the legislative framework for development charges. As required by the Act, municipalities set out development charges in a bylaw that is updated at least every five years.

Master plans and the annual budget are considered in the development charge background study and bylaw. In combination with the Region's annual budgets, this process determines how individual projects are funded.

In addition to development charges, the Transportation Master Plan will also be funded by funds collected from residents through property taxes, grants, subsidies and cost-sharing opportunities with third parties, including other levels of government.

7.3. Balancing services with financial needs

York Region plans according to funds available, as it must remain financially self-sufficient while providing services to more people and jobs in the Region, especially in growing areas.

The Region's financial plan, also known as the Regional Fiscal Strategy, is designed to strike the right balance between the needs of the community and funds available by carefully managing when infrastructure is built, saving funds in reserves for future needs and limiting the borrowing of funds that come with additional expenses like interest, which is repaid from development charges when received.

Through the Municipal Comprehensive Review and updates to the master plans, two key goals were identified. The first is to direct growth to local municipalities that have existing infrastructure like roads, transit and sidewalks that can be further built upon to support an increasing population rather than to local municipalities where new infrastructure would need to be constructed. The second is to time new construction projects with actual growth rather than with forecasts. Based on the fiscal strategy, these goals are in line with principles endorsed by York Regional Council in June 2019 and are key to creating the funds needed for the next generation of infrastructure projects, including the Region's share of the Yonge North Subway Extension.

In updating the Regional Official Plan, the Region also strengthened policies on coordinating the timing of projects with growth to improve efficiency and phasing the construction needed for future communities to ensure costs stay within the Region's means. Policies throughout the Regional Official

Plan were updated to highlight the importance of integrated land use, infrastructure and financial planning.

- The Transportation Master Plan update follows this direction by addressing the transportation needs of travellers while managing the costs in ways that are responsible to both current and future residents by making cost-effective investments. While major road and rapid transit projects will be needed over the next 30 years, the plan also includes less costly ways of carrying more travellers, such as multi-use pathways and bike lanes.
- Watching for trends that support new, more eco-friendly directions. For example, the use of e-bikes and e-scooters, which help manage traffic congestion and reduce GHG emissions, is on the rise, and the Region will encourage these and similar trends, while also adding more electric vehicles to the YRT and corporate fleets.
- Monitoring road and traffic conditions, along with the pace and location of growth, to adjust 10-year capital plans as needed.

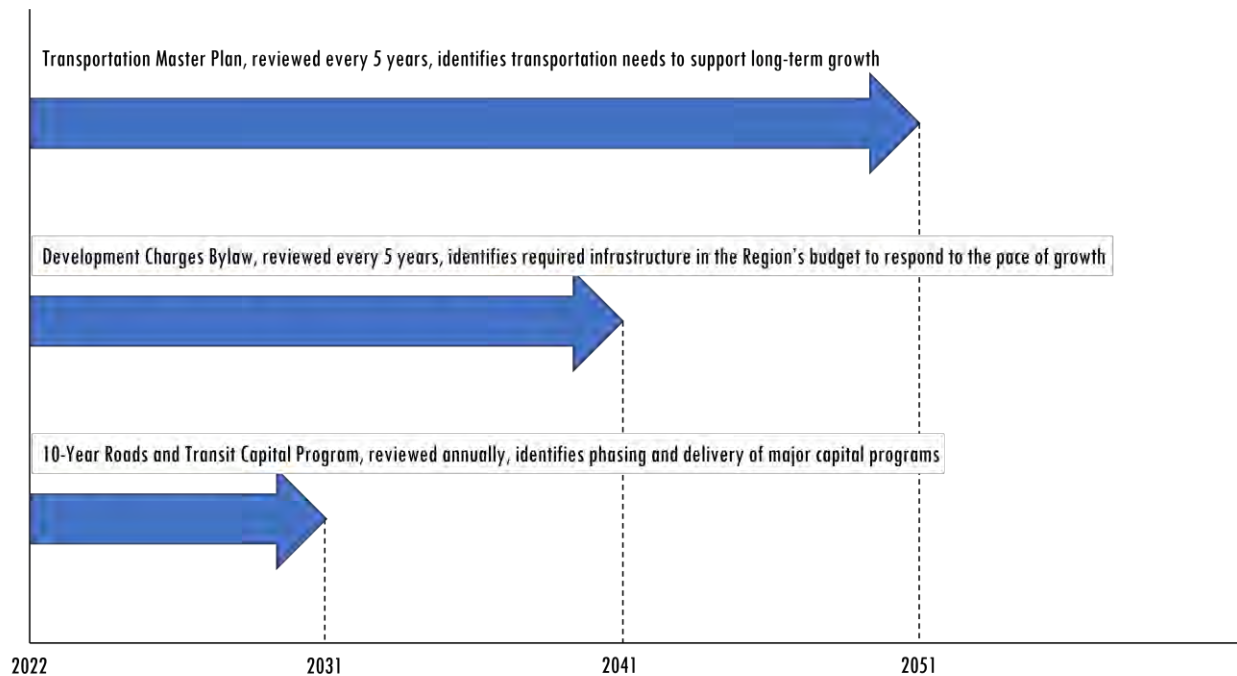
These activities will help provide the right service at the right time. To further ensure costs are managed responsibly, capital and operating plans will help to minimize the total costs of the transportation network now and as it grows to meet the needs of higher population and employment. The next section discusses this and other implementation challenges in more detail.

7.4 Approach to implementation

With the completion of the Transportation Master Plan update, 10-year programs for roads and transit capital investments provide more details regarding how and when these programs will move forward. These programs are directly linked with pace of growth and provide the infrastructure needed to support new development.

The programs also consider the time it takes to complete construction. On average, it takes eight to ten years to complete a major road improvement, like adding lanes to an existing road or dedicated bus lanes. Planning, environmental assessments, design and construction are all part of the process and take time to complete. For major projects like extending the subway line, which involves multiple levels of government, getting funding commitments and coordinating plans can add several more years.

The road and transit capital programs feed into the 10-year capital plan in York Region's annual budget. Through the budget process, the 10-year capital plan may be adjusted as needed to reflect available funds, regulatory or construction delays, growth that is different from the forecasts and other factors.



Changes made by third parties, especially the provincial government, can impact planning. For example, a Minister's Zoning Order to change the allowed use of a specific piece of land from employment to residential would change travel patterns and needs of the area, and the Transportation Master Plan could have to be adjusted to address the change in service needs. In addition, reversing previous direction on expanding provincial highways extensions, like those discussed in Section 5.2, could also affect the Region's plans for how land is used and serviced.

Individual projects may require environmental assessments, a provincially regulated planning and decision-making process used to promote environmentally responsible decision making and ensuring interested individuals have an opportunity to comment on projects that may affect them. This process also includes considerations and decisions about design. To reduce the total cost of a project and disruption to the public, Transportation Services also aims to combine growth with rehabilitation projects and to coordinate all work within a transportation corridor.

7.5. Total costs of the transportation network

York Region owns \$4.1 billion in road assets, such as pavement, bridges and traffic signals, and \$2.0 billion in transit assets, including bus garages, buses, transit stops and terminals. Each year, over \$260 million is needed to operate and maintain the Regional road network and an additional \$250 million is needed for the transit network. Examples of day-to-day operations include: clearing snow, cutting grass along boulevards, filling potholes, providing transit services and maintaining buses.

Assets also need larger rehabilitation work, like repaving a road, reconstructing a bridge or overhauling a bus, at less frequent intervals. However, major assets eventually need to be replaced. Together, rehabilitation and replacement are often referred to as renewal costs. Each year, on average, the Region spends an additional \$150 million on renewing transportation assets.

These figures demonstrate the importance of planning for the ongoing costs of new infrastructure. As soon as an asset goes into service, the Region draws up a plan to operate and maintain it and plans for its eventual replacement.

The road projects in this Transportation Master Plan will increase the department's operating budget by roughly \$6 million a year from 2022 to 2031, rising to \$13.6 million a year from 2032 to 2041 and \$21.2 million a year for the following decade. This reflects higher operations, maintenance, preservation and asset management costs over the current operating outlook and is in addition to up-front construction costs. The incremental cost of the 2051 rapid transit network is \$48.1 million a year.

[FUTURE INFOGRAPHIC]

The incremental cost figures include funds set aside in reserves for asset management. The Region follows two provincial regulations on maintaining assets in a state of good repair. One, under the *Infrastructure for Jobs and Prosperity Act*, guides how municipalities plan the management of all major assets. The other, under the *Municipal Act*, sets out maintenance standards for municipal highways. Asset management is important for maintaining service quality and keeping costs in line. It helps the Region ensure safe and reliable road and transit systems, extends the life of assets and reduces total costs over their life cycle. For instance, every dollar spent on pavement preservation, including resurfacing, results in spending five to ten times less in future rehabilitation or reconstruction costs. This also extends the life of a road before full replacement is needed and reduces the impact of construction in the short term.

As part of the Region's corporate asset management initiative, the Transportation Services Department maintains a 100-year forecast of the maintenance, rehabilitation and replacement needs of roads, bridges and transit assets. This helps determine how many dollars of the tax levy need to be placed in the asset management reserve.

7.6. Measuring and monitoring performance

It is important for York Regional Council, stakeholders, partners and the public to see progress being made towards the Transportation Master Plan's vision, goals and objectives.

Progress will be monitored through an annual Transportation Master Plan status update and a lengthier progress report every five years that help determine when the next update of the Transportation Master Plan is needed.

The annual update will show the status of all focus area initiatives and actions in the Transportation Master Plan. It will keep York Regional Council and the public informed about the work the Region has done and plans to do. The status update will also be used by staff in annual work planning and budgeting.

Developing progress indicators and a framework for reporting will be key initiatives of the first status update. The indicators are intended to be:

- **Meaningful:** Reflect the community priorities as set out in the Transportation Master Plan purpose statement and objectives
- **Timely:** Prioritize what can be delivered in the short term while keeping line of sight to the medium- and longer-term priorities based on the evolving environment for transportation
- **Achievable:** Ensure objectives are within the Region's ability to deliver, control or influence
- **Measurable:** Be based on readily available information and data

7.7. Updating the Transportation Master Plan

The Transportation Master Plan is reviewed every five years. Two other factors influence reviews:

- **Transportation Master Plan Progress Report:** The annual progress report described in the previous section will be used to gauge how the plan is performing and how extensive of a review or more comprehensive update to the Transportation Master Plan is needed
- **York Region Official Plan Review:** Provincial legislation requires a review and update of the Regional Official Plan at least every ten years. Major infrastructure plans, including the Transportation Master Plan, are typically updated at the same time to inform the Official Plan update

Glossary

Centres and Corridors, as defined in the Regional Official Plan, are the primary locations for the most intensive and greatest mix of development within the Region. Regional Centres expand on the urban growth centre and anchor hub concepts, as detailed in the provincial, A Place to Grow: Growth Plan for the Greater Golden Horseshoe and the Metrolinx Regional Transportation Plan: The Big Move.

Commuter parking lot refers to a parking facility which allows a commuter to park their own personal vehicle and then transfer to/from a different mode of travel (e.g., public transit) to complete their commute.

Cycling facility refers to pieces of infrastructure that are shared or specifically designated for use by bicycles or other designated forms of transportation. Examples can include (but are not limited to) bike lanes or multi-use pathways.

Dedicated/separated facilities refers to bike lanes or shared paths designed for use by cyclists and separated from motor vehicles by signage, markings and/or barriers.

Facilities refers to a place, amenity or piece of equipment provided for a particular purpose, e.g., bike lanes, bus rapid transit, road widenings, streetscaping, etc.

GO Transit rail corridor refers to a commuter rail service within a right-of-way, operated by Metrolinx.

GO Transit rail station is a regular stopping place on a GO train route, which includes platforms and often one or more buildings, operated by Metrolinx.

GO Transit rail station subject to further study is a future GO rail station identified for further review.

Grade separation refers to an underpass/tunnel or an overpass/bridge that allows a road or rail line to travel over or under the other, without the need for vehicles travelling on the road to stop.

Grade separation (capital program) refers to a grade separation between road and rail, identified as part of York Region's 10-year roads and transit capital construction program.

Grade separation (prioritized) refers to a grade separation identified as a priority, but not currently included in the 10-year capital construction program.

High-occupancy vehicle (HOV) lane refers to a reserved right-of-way or dedicated lane in a road for use by public transit vehicles and other vehicles such as emergency vehicles, taxis or multiple-person vehicles.

Interchange is a crossing of a Regional road over or under a provincial freeway with connecting ramps for traffic turning between the intersecting freeway and roadway.

Interchange (municipal initiative) is an interchange requested by a municipality and not within the Region's or provincial government's capital construction plan.

Major Transit Station Area refers to the area including and around selected existing or planned higher-order transit stations or stops (bus rapid transit stations, GO stations and subway stations) within a settlement area. Major transit station areas generally are defined as the area within an approximate 500- to 800-metre radius of a transit station or stop, representing about a 10-minute walk. A minimum density target and boundary delineation are assigned to all protected major transit station areas in the Regional Official Plan.

Micromobility is transportation over short distances provided by eco-friendly, usually single-person vehicles such as electric bicycles and scooters

Mid-block crossing is a road connection over or under a major highway without ramp access.

Mobility hub consists of major transit stations and the surrounding area. They serve a critical function in the Regional transportation system as the origin, destination, or transfer point for a significant portion of transit trips. They are places of connectivity where different modes of transportation – from walking to riding transit – come together seamlessly and where there is an intense concentration of working, living, shopping and/or playing.

New road link is a new road designed to provide continuous access across communities.

Neighbourhood placemaking refers to strengthening connections between residents and the places they share through better urban design, including designing roads and other transportation infrastructure to encourage physical activity, make people feel safer and widen travel options.

Official Plan comprises a municipality's policies on how land should be used. Prepared with community input, it helps ensure that future planning and development will meet the specific needs of the community and growth forecasts prescribed by the provincial government. The Official Plan prepared for York Region is typically referred to as the Regional Official Plan. Each of the nine local municipalities within the Region has its own Official Plan.

Provincial freeway refers to an express highway with controlled access, such as highways 400, 404 and 427, maintained by the provincial government, and Highway 407, maintained by ETR 407.

Provincial highway is a road connecting regions, counties and/or cities, maintained by the provincial government. Provincial highways in York Region include Highway 9 west of Highway 400 and Highway 48.

Rapid transit corridor refers to transit infrastructure where lanes are for the exclusive use of buses or light-rail vehicles and are physically separated from other modes of travel within its own section. In York Region, a rapid transit corridor may also be referred to as a "rapidway."

Rapid transit subject to further study refers to a future rapid transit corridor identified for further review.

Rapidway is a dedicated lane in the centre of the road for use by Viva vehicles (YRT's bus rapid transit service) and emergency services.

Regional Centres and Corridors See Centres and Corridors.

Regional Official Plan See Official Plan.

Regional trail network is a connected series of shared facilities typically located outside the roadway for use by cyclists, pedestrians and other forms of active transportation.

Road improvement refers to a change to a road and/or its elements, including widening, reconfiguring and/or adding new structures or facilities such as bike lanes, cycle paths, high-occupancy vehicle (HOV) or transit lanes to improve travel options and traveller experience.

Road improvements (provincial jurisdiction) refers to a change to the road and/or its elements, including widening, reducing, re-configuring and/or adding new structures on a provincial highway.

Transit hub See mobility hub.

Transitway on existing/proposed provincial highway refers to transit infrastructure that is either adjacent to or separated from parallel provincial 400-series highways and is exclusively dedicated for buses or light-rail vehicles to accommodate longer-distance (express) passenger needs.

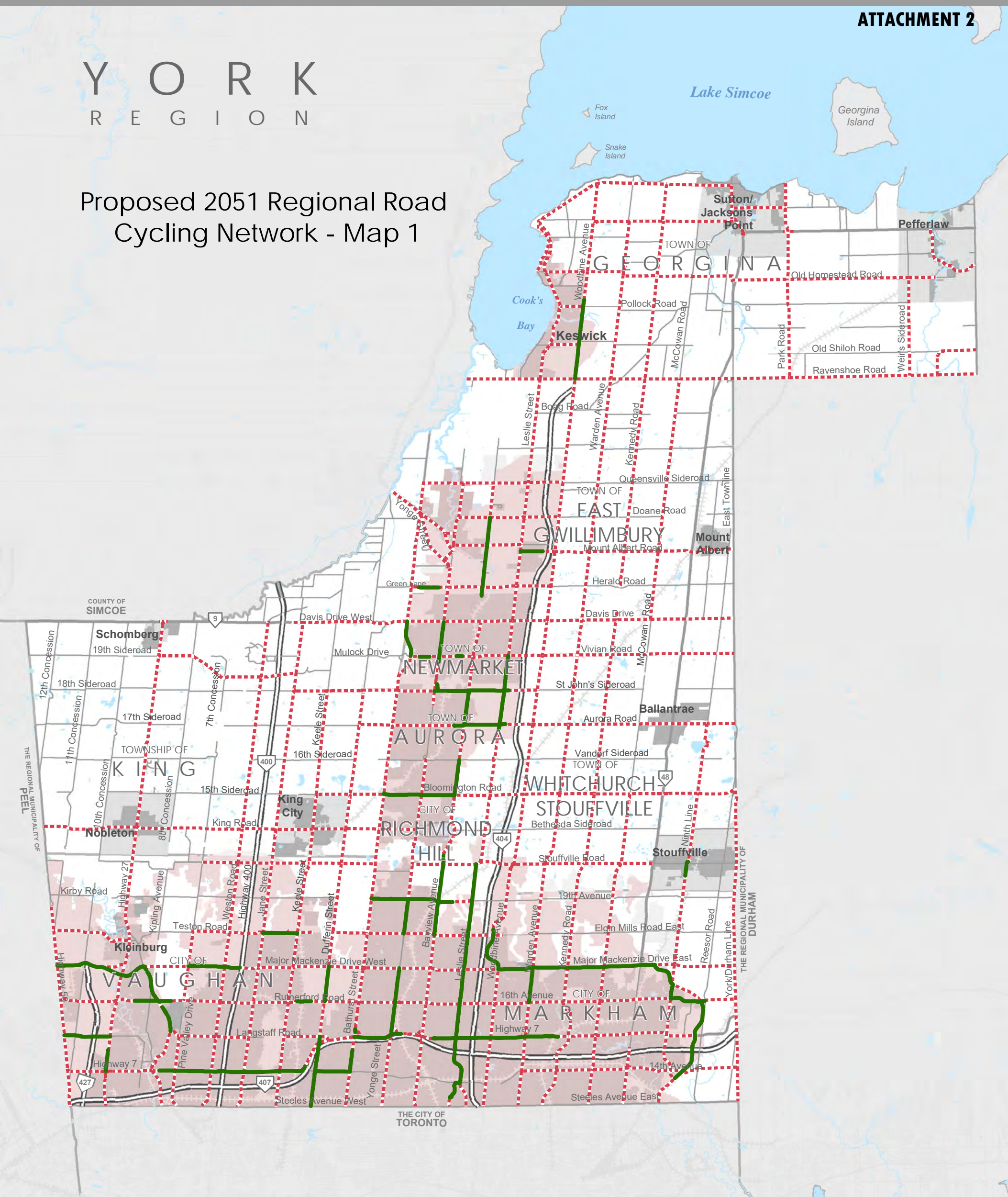
Transportation Tomorrow Survey is a co-operative effort by local and provincial government agencies to collect information about urban travel in southern Ontario. The survey has been undertaken every five years since 1986 to collect household travel data about travel origins and destinations, travel mode, trip purpose and more. The data collected helps local and regional governments, as well as the provincial government and its agencies, make informed transportation decisions on future planning and investment for roads, public transit and other transportation facilities.

Urban area refers to an area identified for existing or future urban uses.

Urban boundary defines the limit for development within an urban area serviced with infrastructure like public transit, water and sewage pipes and recreation facilities to help control urban sprawl.

YORK REGION

Proposed 2051 Regional Road Cycling Network - Map 1



Existing Network*

— Dedicated/Separated Facilities (Protected Bike Lane, Shared Pathway, Bike Lane)

Proposed Cycling Facilities

- - - Cycling facility to be determined in consultation with Pedestrian and Cycling Planning and Design Guidelines

2022 Transportation Master Plan - Draft
March 3, 2022

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway
- Urban Boundary
- Built-up Area
- Designated Urban Area



Maps are considered preliminary and subject to change through the TMP Update

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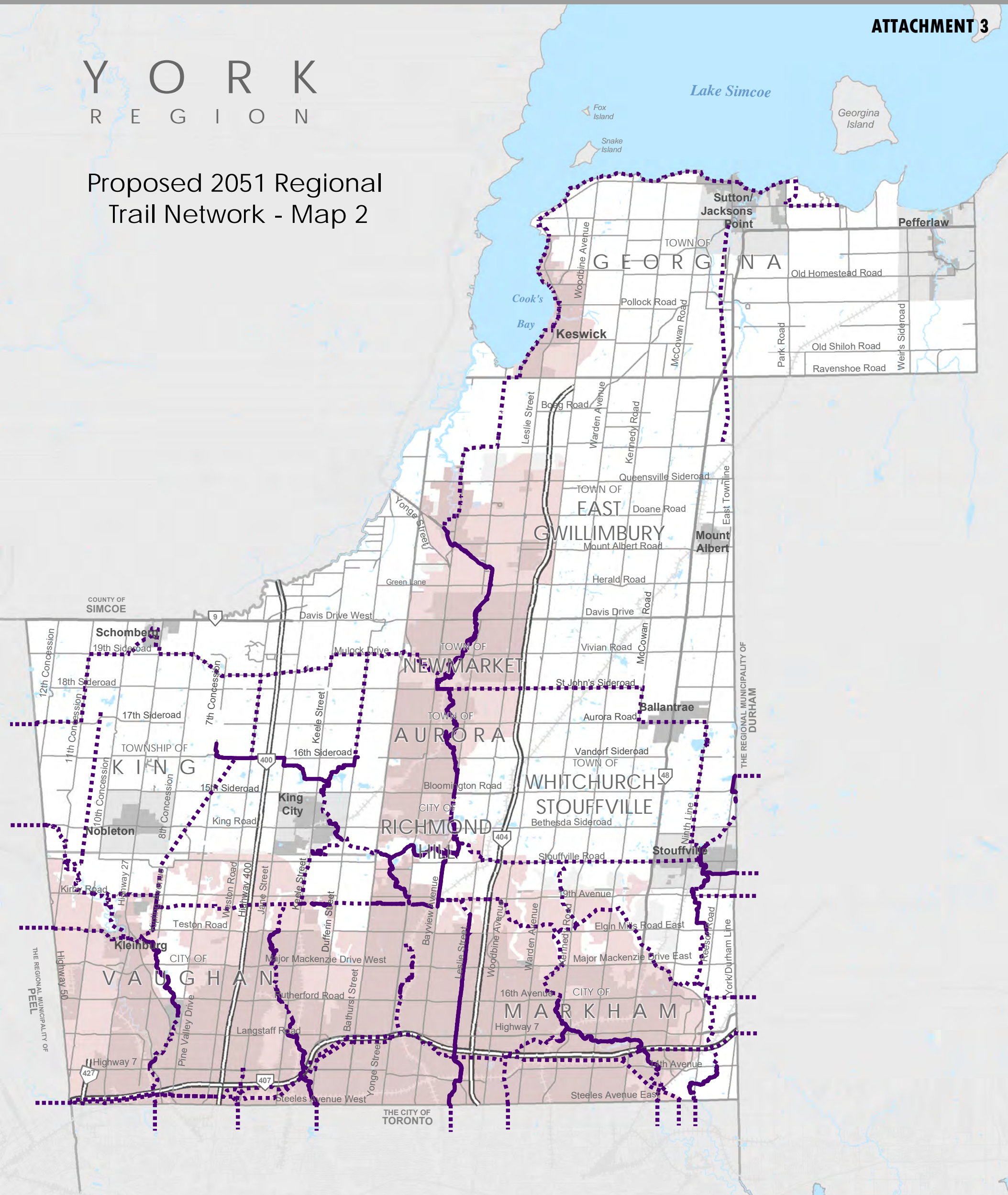
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Day Month, Year: 9 February 2022

*Wherever possible, existing cycling network is subject to infrastructure improvements in order to align with the Pedestrian and Cycling Planning and Design Guidelines.

YORK REGION

Proposed 2051 Regional Trail Network - Map 2



Trails of Regional Significance

- Existing Region-Wide Trail Network
- Proposed Region-Wide Trail Network

2022 Transportation Master Plan - Draft
 March 3, 2022

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway
- Urban Boundary
- Built-up Area
- Designated Urban Area



Maps are considered preliminary and subject to change through the TMP Update

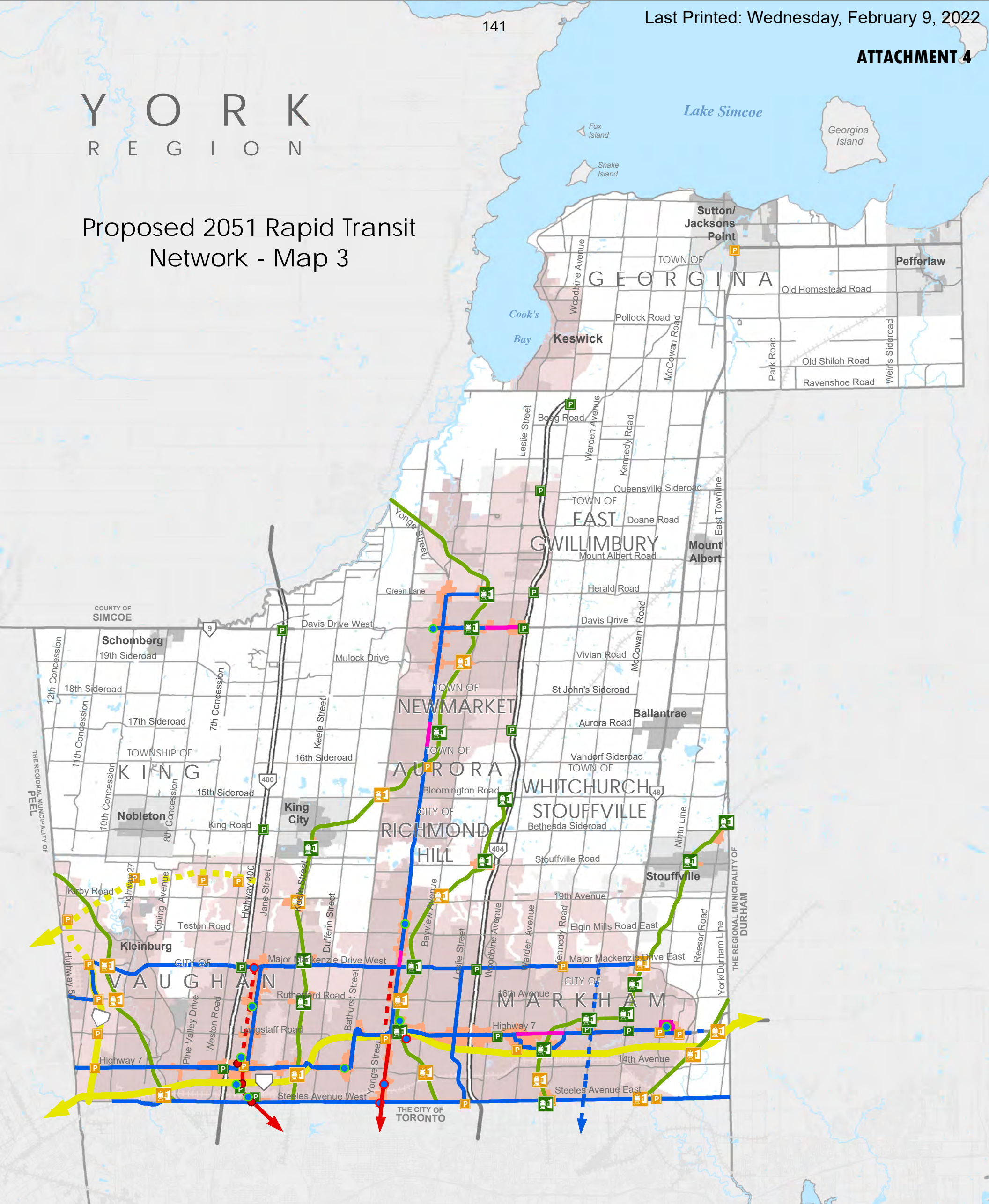
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Day Month, Year: 9 February 2022

YORK REGION

Proposed 2051 Rapid Transit Network - Map 3



Legend

- Bus Terminals**
 - Existing Bus Terminal
 - Future Bus Terminal
- Subway Stations**
 - Existing Subway Station
- GO Rail Stations**
 - GO Rail Station
 - GO Rail Station subject to further study
- Commuter Parking Lots**
 - Existing Lot
 - Potential Lot
- Rapid Transit Service**
 - Rapid Transit Corridor
 - Rapid Transit subject to further study
 - BRT Curbside Service
- Provincial GO Rail**
 - GO Rail Corridor
- Subway Service**
 - Subway
 - Subway subject to further study
- Transitway Service**
 - Transitway on Existing Provincial Highway
 - Transitway on Proposed Provincial Highway
 - Major Transit Station Area

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- Railway
- Urban Boundary
- Built-up Area
- Designated Urban Area



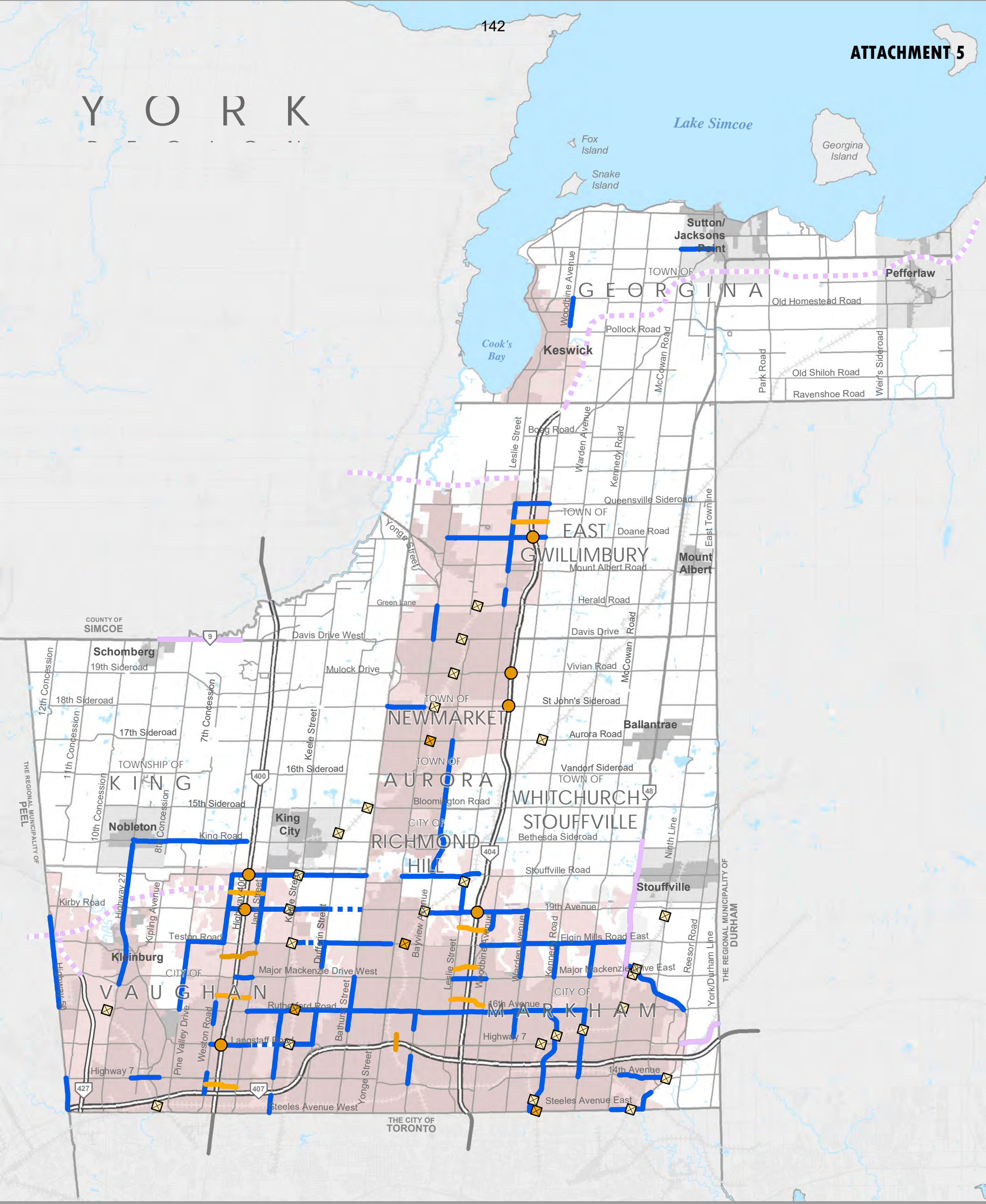
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Day Month, Year: 9 February 2022

Y O R K



Legend

Road Projects

- Midblock Crossing
- Road Improvements
- - - New Road Link
- - - - Road Improvements (Provincial Jurisdiction)
- - - - Future Highway

Interchanges

- Potential Interchange or Interchange Improvements (Subject to Future Study)

Grade Separations

- ⊠ Grade Separation (Included in 10-Year Capital Program)
- ⊠ Grade Separation (Subject to Future Study)

2022 Transportation Master Plan - Draft
 March 3, 2022

BASE MAP INFORMATION

- Provincial Freeway
- Provincial Highway
- Road
- - - - Railway
- Urban Boundary
- Built-up Area
- Designated Urban Area



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Day Month, Year: 9 February 2022

Regional Council Decision - Affordable Private Market Housing Implementation Plan Approach and Timelines

On March 24, 2022 Regional Council made the following decision:

1. Staff be directed to prepare an Affordable Private Market Housing Implementation Plan as described in this report.
2. The Regional Clerk circulate this report to the local municipalities, the Ministry of Municipal Affairs and Housing and the York Chapter of BILD.

The original staff report is attached for your information.

Please contact Paul Bottomley, Manager, Policy, Research and Forecasting at 1-877-464-9675 ext. 71530 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

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1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Planning and Economic Development
March 3, 2022

Report of the Commissioner of Corporate Services and Chief Planner

Affordable Private Market Housing Implementation Plan Approach and Timelines

1. Recommendations

1. Staff be directed to prepare an Affordable Private Market Housing Implementation Plan as described in this report.
2. The Regional Clerk circulate this report to the local municipalities, the Ministry of Municipal Affairs and Housing and the York Chapter of BILD.

2. Summary

This report provides an overview of housing challenges in York Region and recommends development of an Affordable Private Market Housing Implementation Plan (AHIP).

Key Points:

- Housing affordability continues to be a challenge in York Region and throughout the GTHA
- An AHIP is required to identify actions, advocacy, and partnership approaches to address private market housing affordability
- Advocacy is important since no one entity can solve the affordability crisis and different partners have a role in supporting the housing needs of residents and workers, including senior levels of government
- Staff are working to retain an external consultant to help guide development of the AHIP
- The AHIP will be developed with input from an inter-departmental working group, local municipalities, development proponents, Council Advisory Committees, and other stakeholders. A final Plan is anticipated to be delivered in Q4 2023
- By addressing private market affordability, the AHIP will complement the Community Housing Master Plan which focuses on developing more community and non-profit homes across the Region

- The Housing Affordability Task Force will provide ongoing input and direction as the AHIP is developed

3. Background

The Region's ability to achieve complete communities is impacted by housing affordability

Housing affordability is a challenge in York Region and throughout the GTHA. As reported to Council in [June 2021](#), in 2020 only 5% of new ownership homes were affordable based on Provincial definitions. The main alternative to the ownership market is the rental market. As of 2016, York Region had the lowest proportion of housing stock in rental tenure in the GTHA at 14%. It is estimated that over 60% of the Region's rental housing is in the secondary market, which includes renting housing originally built to be in ownership tenure such as condominiums, ground related homes or basement apartments. The secondary market is generally more expensive and offers less security of tenure than the primary rental market.

In [January 2021](#), Council received a report on housing challenges and opportunities through which a lack of affordable housing options was highlighted as one factor contributing to slower growth in the Region over the last decade. The report identified that not achieving anticipated forecasts can adversely affect development charge recovery and planned infrastructure timing. A lack of affordable housing impacts Regional efforts to achieve complete communities which are intended to offer a full range of housing options for people of all ages and abilities. A lack of affordable low-density and purpose-built rental housing was noted in the report. The need to address the interconnection between the Region's competitive economic position and its longer-term housing needs by market segment is important to realize the 2051 population and employment targets. This may include addressing the Environmental Assessment process, which complicates the ability to provide infrastructure needed to accommodate future housing supply and achieve the 2051 forecast.

Regional Council has a strong foundation supporting housing initiatives

The Region has dual legislated responsibilities related to affordable housing:

1. Service Manager role, through the *Housing Services Act, 2011*
2. Growth Management role, through the *Planning Act, 1990*, the Provincial Policy Statement and the *Places to Grow Act, 2005*

Regional Council has shown continued, strong support for affordable housing related initiatives. This support includes a [February 2021](#) motion that recognizes a housing affordability crisis exists in the Region, and establishment of a Housing Affordability Task Force to help identify solutions to the housing affordability problem.

Council has a solid foundation to support housing related initiatives through:

- [York Region's Vision](#)
- [2019 to 2023 Corporate Strategic Plan](#)
- [2010 Regional Official Plan](#) and [Draft Regional Official Plan](#)
- 2019 to 2023 [Housing and Homelessness Plan](#)
- [Housing York Inc \(HYI\) 2021 to 2024 Strategic Plan](#)

This foundation provides direction to continue to work to address housing affordability challenges.

Regional Council is committed to actively addressing affordable housing challenges

Council continues to support on the ground approaches to increase purpose-built rental supply, including development charge deferrals ranging from [36 months](#) to [20 years](#), and a [servicing allocation reserve](#). Council also continues to actively explore avenues to support a mix and range of housing options including endorsement of a feasibility study and public benefits review of a [Vacant Homes Tax](#), and approval of policy directions informing the [2022 Development Charges Bylaw](#) update.

While some actions are being undertaken to address housing needs in the private market, there is a need for a comprehensive, evidence-based AHIP with funding considerations to identify additional solutions to address market affordability. Existing and new actions will be consolidated through the AHIP in order to continue to address housing needs.

Council has also directed the development of a [Community Housing Master Plan](#) which addresses how to fund and develop more community and non-profit housing. The AHIP will complement that Plan by addressing housing affordability within the private market.

4. Analysis

The Affordable Private Market Housing Implementation Plan will identify housing gaps and solutions to address housing affordability

The objective of AHIP is to identify actions, advocacy, and partnership approaches to address private market housing gaps in the short, medium, and long term. Not all approaches to address housing needs are the responsibility of the Region. No one agency will solve the housing crisis on its own. Advocacy and partnership approaches will be required to comprehensively address housing needs. To achieve the objective, a consulting team will be retained to help guide a three-step process:

- Step 1: Identify housing affordability gaps
- Step 2: Potential approaches to address housing affordability gaps
- Step 3: Recommend solutions to help address private market housing affordability

A consultation plan is being developed to ensure input from local municipalities, development proponents, the public and other stakeholders is considered. Parallel to the Implementation Plan work, the affordable housing measuring and monitoring method, which was first established in 2013 and has had minor updates in the interim, will be updated.

The updated method will provide a more fulsome analysis by type, size, tenure and degree of affordability. The update will also work to better tie affordability to household incomes and what people can afford. This will allow for better assessment of the impact of proposed approaches to address housing affordability.

The housing affordability gaps analysis will allow for evidence-based recommendations

The first step of the AHIP, the housing affordability gaps analysis, will layer consumer data and financial approaches to affordability on top of traditional methods to more specifically identify housing need not being sufficiently addressed (housing gaps). Housing affordability will continue to be explored through traditional sources such as Statistics Canada Census data which includes income deciles for the Region's population and foundational housing data such as structure type, tenure, affordability, and suitability information. Additionally, the consultant will be challenged to consider consumer data and to comment on financial factors and approaches that may make otherwise unaffordable housing more affordable.

Consumer data provides personal, behavioural, and demographic information typically collected by marketing companies, and is intended to help create a finer grained picture of the housing supply the Region needs and to help isolate the housing needs of people entering the housing market. A better understanding of the financial factors and approaches to housing affordability and which households can access them will allow for more targeted approaches to address housing gaps. Examples include the use of additional residential units to increase income, lease to own and land lease approaches, reverse and second mortgages, co-ownership and intergenerational wealth transfers.

As the population ages and generational turnover of the existing housing stock continues, housing gaps may vary over time. As such, the Gaps Analysis will explore housing needs today as well as that anticipated in the mid (10-year) and longer (30-year) term.

The Region is required by provincial legislation to develop a new Housing and Homelessness Plan for 2024. The Gaps Analysis undertaken through the AHIP will also be used to inform the Housing and Homelessness Plan update.

The Affordable Housing Implementation Plan will identify solutions to address affordable housing challenges in the private market

The AHIP will include a national and international jurisdictional scan of potential action, advocacy and partnership efforts to address housing need. This compilation of potential approaches will build on those outlined in Attachment 3: [Innovative Housing Options to Support Affordable Housing](#) to the staff report presented to Council in [January 2021](#). These potential efforts will then be assessed to recommend approaches York Region should be pursuing today and over the mid and long term given the Gaps Analysis, housing mandates and resources available. An internal cross-departmental working group of subject matter experts will review and comment on the consultant recommendations, which will be presented to Council for consideration.

As this work evolves, principles will need to be established, including:

1. Recognizing the role of rental housing for many mid range income households (generally those currently earning between \$85,000 and \$125,000 annually) and being prepared to promote the substantial shift to rental tenure required to achieve affordability and growth targets.
2. Determining roles and responsibilities when solutions are available to various levels of government.
3. Differentiating between housing as primarily “Community or Commodity”; i.e. as shelter vs. an investment opportunity. There is evidence that more housing units are being owned and managed as an investment or commodity, rather than as shelter for York Region’s current and future residents. Recommended approaches should either work to de-commodify the housing market or to respond to the commodification.

The Housing Affordability Task Force will help guide the development of Affordability Housing Implementation Plan

As the AHIP is developed, staff will rely on the Housing Affordability Task Force to provide input on both technical and philosophical approaches being considered. Touchpoints with the Task Force will be scheduled at key intervals to gather insight and confirm direction. The Task Force is anticipated to provide key input, local context, be a conduit to Council and assist in establishing overall support and partnerships.

The workplan for the Affordable Private Market Housing Implementation Plan will extend into 2023

Figure 1 provides four anticipated Council touchpoints for the AHIP. Consulting services to support the development of the AHIP are anticipated to be in place by mid-2022. The results of the Housing Gaps Analysis will be shared with the newly formed Council early in 2023. This work will be followed by a Draft AHIP anticipated for Q2 2023, and consultation on the Draft AHIP through Q3 2023 with a Final AHIP anticipated for Q4 2023. Regional Official Plan policy will be refined to support the AHIP as needed.

Figure 1
Affordable Private Market Housing Implementation Plan Council Touchpoints

Q1 2022	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023
Council Touchpoints							
Approach and Timelines				Housing Gaps Analysis	Draft AHIP		Final AHIP
Other Considerations							
		Consultant Retained		←←← Consultation →→→			

The Affordable Private Market Housing Implementation Plan Supports the Region’s Corporate Performance Management Framework

Development of the AHIP supports residents’ Vision that “York Region is safe and welcoming with accessible opportunities for recreation and affordable housing” as well as the Corporate Strategic Plan objective that focuses on “delivering and promoting affordable housing” including through the key activity to “support creation of new affordable housing rental units.”

5. Financial

The development of the AHIP is being completed within the approved 2021/2022 business plan and budget.

Any financial implications for the Region of the recommended AHIP will be presented to Council with the proposed plan. Potential funding sources to implement the AHIP may include revenue from the Vacant Homes Tax if pursued by Council, or revenue from the Provincial Non-Resident Speculation Tax, if Council’s request of the province to access a share if it is successful.

6. Local Impact

Local municipalities are key partners in identifying and implementing approaches to increase affordability of private market housing. They can identify local priorities and solutions through mechanisms like zoning and building permit authority and are often best positioned to influence development applications through pre-consultation and planning processes based on local context. They have jurisdiction to implement inclusionary zoning within Provincial parameters and have several financial incentives and non-financial tools unavailable to the Region. All local municipalities are working towards expanding housing options in some way. Examples of local municipal housing initiatives include updated Official Plan and zoning policies, development of Housing Strategies, exploration and implementation of inclusionary

zoning, prioritization of purpose-built rental housing through incentives and championing specific local developments.

Local municipalities actively participate and provide input through the York Region/Local Municipal Housing Working Group to help work toward approaches to increase housing options. Ongoing input from the York Region/Local Municipal Housing Working Group will assist in the development of AHIP.

7. Conclusion

Housing affordability continues to be a challenge in York Region and throughout the GTHA. This report describes the need for an AHIP in York Region and describes the process and timelines to arrive at a final Plan by Q4 2023.

Staff will retain a qualified consultant to complete the work as outlined in this report. As the procurement process unfolds, staff will reach out to partners interested in providing input into this work to assist with identifying which gaps should be explored and to begin to discuss principles to assess approaches. Key partners will include local municipalities, development proponents, the Housing Affordability Task Force and other stakeholders.

For more information on this report, please contact Paul Bottomley, Manager, Policy, Research and Forecasting at 1-877-464-9675 ext. 71530. Accessible formats or communication supports are available upon request.

Recommended by:



Paul Freeman, MCIP, RPP
Chief Planner



Dino Basso
Commissioner of Corporate Services

Approved for Submission:



Bruce Macgregor
Chief Administrative Officer

February 18, 2022
13519142

Regional Council Decision - Community Safety Zone Bylaw Amendments

On March 24, 2022 Regional Council made the following decision:

1. The Region's Community Safety Zone bylaw be amended as detailed in Attachment 1 of this report.
2. The Regional Solicitor prepare the necessary bylaw.
3. The Regional Clerk circulate this report to the Clerks of the local municipalities, York Regional Police and York Region school boards.

The original staff report is attached for your information.

Please contact Joseph Petrunaro, Director, Roads and Traffic Operations, at 1-877-464-9675 ext. 75220 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Regional Clerk's Office, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
O: 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Transportation Services
March 3, 2022

Report of the Commissioner of Transportation Services

Community Safety Zone Bylaw Amendments

1. Recommendations

1. The Region's Community Safety Zone bylaw be amended as detailed in Attachment 1 of this report.
2. The Regional Solicitor prepare the necessary bylaw.
3. The Regional Clerk circulate this report to the Clerks of the local municipalities, York Regional Police and York Region school boards.

2. Summary

This report seeks Council approval to amend the Region's Community Safety Zone bylaw to reflect the limits of the new school zone speed limit reductions implemented in September 2021.

Key Points:

- Community Safety Zone is a designation under the Ontario *Highway Traffic Act* intended to help change driver behaviour and increase safety for all road users in areas of special consideration, such as near schools, daycare centres, retirement residences or high-collision locations
- Council previously approved designation of Community Safety Zones in all School Zones on the Regional road network, subject to authorized exceptions
- Community Safety Zone bylaw amendments are required to reflect the limits of the new school zone speed limit reductions that were implemented in September 2021

3. Background

Community Safety Zones are enacted through municipal bylaw and intended to help increase safety for all road users

A Community Safety Zone is a designation under the Ontario *Highway Traffic Act* and is intended to help change driver behaviour, including reducing speed and distracted driving and improving safety on roads. Fines are increased for traffic offences within a designated Community Safety Zone. A municipal bylaw must be enacted to designate a Community Safety Zone.

Community Safety Zones are typically designated on roadways near schools, daycare centres, retirement residences or high-collision locations, to advise motorists they are within a zone where public safety is of special concern.

May 2012, Council approved designation of Community Safety Zones in all school zones on the Regional road network, subject to authorized exceptions

In May 2012, Council approved revisions to the Community Safety Zone Warrant Criteria Policy to designate all school zones as Community Safety Zones. Council further directed staff to request York Regional Police and each local municipality to identify any exceptions or deletions of specific Community Safety Zones.

May 2021, Council approved a Region-wide speed limit reduction in all school zones

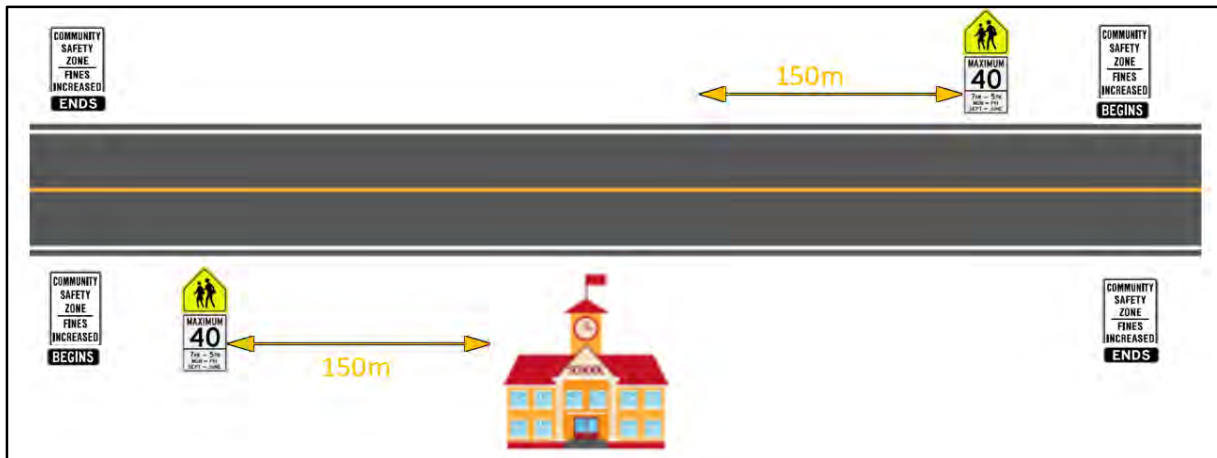
In August 2020, the Province introduced a new school zone maximum speed sign with a reduced speed limit. In [May 2021](#), Council approved implementation of school zone speed limit reductions for more than 60 school zones located on Regional roads. The new school zone speed limits were implemented in September 2021. As per the Ontario *Highway Traffic Act*, school zone speed limit reductions are limited to 150 metres on either side of the school property. This requires Community Safety Zones to be placed beyond 150 metres to fully include the school zone.

4. Analysis

Community Safety Zone bylaw amendments are required to reflect the limits of the new school zone speed limit reductions implemented in September 2021

Revisions to the bylaw are primarily focused on extending the Community Safety Zone limits to include the entire school zone speed limit reduction, as illustrated in Figure 1.

Figure 1
Community Safety Zone Revision



It is important school zones are contained completely within the limits of a designated Community Safety Zone. This provides consistency for on-street signs and travel through the Region and can mean improved compliance by motorists. This also helps with enforcement and minimizes the potential for legal challenges based on discrepancies.

The Community Safety Zone bylaw requires amendment to reflect on-street changes, as detailed in Attachment 1.

Through consultation with the school boards operating in York Region, staff have confirmed no new schools will be opening and no existing schools will be permanently closing in 2022/2023.

5. Financial

There are no financial implications as a result of this report.

6. Local Impact

Community Safety Zones are intended to help change driver behaviour, including reducing speed and distracted driving and improving safety on roads where public safety is of special concern.

York Regional Police, School Boards and local municipalities have been advised of the changes and no objections were raised.

7. Conclusion

Since 2012, Community Safety Zones have been implemented in many school zones across the Region to help improve safety for all road users.

Community Safety Zone bylaw amendments are required to reflect the limits of the new school zone speed limit reductions that were implemented in September 2021. Staff recommend the bylaw be amended as detailed in Attachment 1 of this report. Subject to Council approval, the Regional Solicitor will amend the bylaw to include these revisions.

For more information on this report, please contact Joseph Petrunaro, Director, Roads and Traffic Operations, at 1-877-464-9675 ext. 75220. Accessible formats or communication supports are available upon request.



Recommended by:

Ann-Marie Carroll

Acting Commissioner of Transportation Services



Approved for Submission:

Bruce Macgregor

Chief Administrative Officer

February 9, 2022

Attachment (1)

13407876

Community Safety Zone Bylaw Revisions

Location	Existing Limits	Required Revisions
Town of Aurora		
Bloomington Road (Y.R. 40)	From 90 metres west of the west limit of Bathurst Street (Y.R. 38) to 450 metres west of the west limit of Yonge Street (Y.R. 1)	Extend the east limit 225 metres Extend the west limit 55 metres
Wellington Street East (Y.R. 15)	From 800 metres east of the east limit of Bathurst Street (Y.R. 38) to 680 metres west of the west limit of Bayview Avenue (Y.R. 34)	Extend the east limit 160 metres
Town of East Gwillimbury		
2nd Concession Road (Y.R. 34)	From 60 metres south of the south limit of Mount Albert Road (Y.R. 13) to 530 metres south of the south limit of Mount Albert Road (Y.R. 13)	Extend the north limit 680 metres Reduce the south limit 80 metres
Leslie Street (Y.R. 12)	From 440 metres north of the north limit of Queensville Sideroad (Y.R. 77) to 790 metres north of the north limit of Queensville Sideroad (Y.R. 77)	Extend the south Limit 50 metres Extend the north limit 40 metres
Leslie Street (Y.R. 12)	From 270 metres south of the south limit of Queensville Sideroad (Y.R. 77) to 640 metres south of the south limit of Queensville Sideroad (Y.R. 77)	Extend the north limit 60 metres Extend the south limit 90 metres
Town of Georgina		
Glenwoods Avenue (Y.R. 33)	From 100 metres east of the east limit of The Queensway (Y.R. 12) to 830 metres east of the east limit of The Queensway (Y.R. 12)	Extend the west limit 100 metres
Old Homestead Road (Y.R. 79)	From 20 metres east of the east limit of Metro Road (Y.R. 78) to 375 metres east of the east limit of Metro Road (Y.R. 78)	Extend the west limit 20 metres

Location	Existing Limits	Required Revisions
Township of King		
Bathurst Street (Y.R. 38)	From 50 metres north of the north limit of Graham Sideroad to 550 metres south thereof	Extend north limit 120 metres Extend south limit 50 metres
Dufferin Street (Y.R. 53)	From 880 metres north of the north limit of King Road (Y.R. 11) to 1500 metres north of the north limit of King Road (Y.R. 11)	Extend the south limit 220 metres
Highway 27 (Y.R. 27)	From 470 metres north of the north limit of Lloydtown-Aurora Road (Y.R. 16) to 940 metres north of the north limit of Lloydtown-Aurora Road (Y.R. 16)	Extend the north limit 115 metres
King Road (Y.R. 11)	From the east limit of Warren Road to the west limit of Keele Street (Y.R. 6)	Extend the east limit 65 metres
Lloydtown/Aurora Road (Y.R. 16)	From 560 metres west of the west limit of Jane Street (Y.R. 55) to 850 metres west of the west limit of Jane Street (Y.R. 55)	Extend the east limit 110 metres Extend the west limit 200 metres
City of Markham		
14th Avenue (Y.R. 71)	From 10 metres east of the east limit of McCowan Road (Y.R. 67) to 200 metres east of the east limit of McCowan Road (Y.R. 67)	Extend the west limit 200 metres Extend the east limit 175 metres
16th Avenue (Y.R. 73)	From 60 metres east of the east limit of Markham Road to 690 metres east of the east limit of Markham Road	Extend the east limit 105 metres
16th Avenue (Y.R. 73)	From 250 metres west of the west limit of Kennedy Road (Y.R. 3) to 150 metres east of the east limit of Kennedy Road (Y.R. 3)	Extend the west limit 110 metres Extend the east limit 65 metres
Kennedy Road (Y.R. 3)	From 430 metres south of the south limit of 14th Avenue (Y.R. 71) to 980 metres south of the south limit of 14th Avenue (Y.R. 71)	Extend the north limit 130 metres Extend the south limit 20 metres

Location	Existing Limits	Required Revisions
Kennedy Road (Y.R. 3)	From 750 metres south of the south limit of 16th Avenue (Y.R. 73) to 250 metres north of the north limit of 16th Avenue (Y.R. 73)	Extend the north limit 200 metres
Leslie Street (Y.R. 12)	From 930 metres south of the south limit of Highway 7 (Y.R. 7) to 1350 metres south of the south limit of Highway 7 (Y.R. 7)	Extend the north limit 70 metres Extend the south limit 55 metres
McCowan Road (Y.R. 67)	From 650 metres south of the south limit of 16th Avenue (Y.R. 73) to 1100 metres south of the south limit of 16th Avenue (Y.R. 73)	Extend the north limit 170 metres
Warden Avenue (Y.R. 65)	From 50 metres north of the north limit of Highway 7 (Y.R. 7) to 600 metres north of the north limit of Highway 7 (Y.R. 7)	Extend the south limit 50 metres Extend the north limit 100 metres
Town of Newmarket		
Bayview Avenue/Prospect Street (Y.R. 34)	From 410 metres north of the north limit of Mulock Drive (Y.R. 74) to 770 metres north of the north limit of Mulock Drive (Y.R. 74)	Extend the south limit 255 metres Extend the north limit 230 metres
City of Richmond Hill		
Bayview Avenue (Y.R. 34)	From 1070 metres south of the south limit of Major Mackenzie Drive East (Y.R. 25) to 370 metres south of the south limit of 19th Avenue (Y.R. 29)	Extend the north limit 215 metres
Leslie Street (Y.R. 12)	From 100 metres north of the north limit of Elgin Mills Road East (Y.R. 49) to 660 metres north of the north limit of Elgin Mills Road East (Y.R. 49)	Extend the south limit 30 metres Extend the north limit 75 metres
Major Mackenzie Drive East (Y.R. 25)	From 1070 metres west of the west limit of Yonge Street (Y.R. 1) to 280 metres west of the west limit of Bayview Avenue (Y.R. 34)	Extend the west limit 125 metres Extend the east limit 105 metres

Location	Existing Limits	Required Revisions
Yonge Street (Y.R. 1)	From 75 metres south of the south limit of Regatta Avenue to the north limit of Blackforest Drive	Extend the south limit 445 metres Extend the north limit 95 metres
City of Vaughan		
16th Avenue/Carrville Road (Y.R. 73)	From 650 metres east of the east limit of Bathurst Street (Y.R. 38) to 450 metres west of the west limit of Bayview Avenue (Y.R. 34)	Extend the west limit 100 metres Extend the east limit 135 metres
Bathurst Street (Y.R. 38)	From 950 metres north of the north limit of Rutherford Road/ Carrville Road (Y.R. 73) to 630 metres south of the south limit of Rutherford Road/ Carrville Road (Y.R. 73)	Extend the south limit 160 metres
Bathurst Street (Y.R. 38)	From 640 metres north of the north limit of Centre Street (Y.R. 71) to 1250 metres north Centre Street (Y.R. 71)	Extend the south limit 100 metres
Keele Street (Y.R. 6)	From 150 metres north of the north limit of Rutherford Road (Y.R. 73) to 600 metres north of the north limit of Rutherford Road (Y.R. 73)	Extend the south limit 15 metres Extend the north limit 115 metres
Major Mackenzie Drive West (Y.R. 25)	From 360 metres west of the west limit of Weston Road (Y.R. 56) to 950 metres west of the west limit of Weston Road (Y.R. 56)	Extend the west limit 50 metres
Weston Road (Y.R. 56)	From 850 metres north of the north limit of Rutherford Road (Y.R. 73) to 1360 metres north of the north limit of Rutherford Road (Y.R. 73)	Extend the south limit 110 metres Extend the north limit 100 metres
Yonge Street (Y.R. 1)	From 450 metres south of the south limit of Centre Street (Y.R. 71) to 730 metres south of the south limit of Centre Street (Y.R. 71)	Extend the north limit 115 metres Extend the south limit 160 metres

Location	Existing Limits	Required Revisions
Town of Whitchurch-Stouffville		
Aurora Road (Y.R. 15)	From 610 metres east of the east limit of Highway 48 to 1180 metres east of the east limit of Highway 48	Extend the west limit 25 metres Extend the east limit 150 metres
Bloomington Road (Y.R. 40)	From 300 metres west of the west limit of Warden Avenue (Y.R. 65) to 230 metres east of the east limit of Warden Avenue (Y.R. 65)	Extend the west limit 145 metres
Ninth Line (Y.R. 69)	From 250 metres north of the north limit of Hoover Park Drive to 350 metres south of the south limit of Hoover Park Drive in the town of Whitchurch-Stouffville	Extend the north limit 105 metres Reduce the south limit 195 metres
Ninth Line (Y.R. 69)	From 150 metres north of the north limit of Stouffville Road (Y.R. 14) to 750 metres north of the north limit of Stouffville Road (Y.R. 14)	Extend the south Limit 75 metres Extend the north limit 140 metres
Warden Avenue (Y.R. 65)	From 390 metres north of the north limit of Bloomington Road (Y.R. 40) to 70 metres south of the south limit of Bloomington Road (Y.R. 40)	Extend the north limit 85 metres Extend the south limit 70 metres

Regional Council Decision - Draft 2022 Development Charges Bylaw and Background Study

On March 24, 2022 Regional Council made the following decision:

1. Council receive the draft 2022 Development Charges Bylaw and Background Study (Attachment 1).
2. A report be brought forward to the May 26, 2022 meeting of Council recommending the approval of a 2022 Development Charges Bylaw.
3. The Regional Clerk circulate this report to local municipalities and the Building Industry and Land Development Association – York Chapter (BILD).

The original staff report is attached for your information.

Please contact Edward Hankins, Director, Treasury Office, and Deputy Treasurer, at 1-877-464-9675 ext.71644 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

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Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Finance and Administration
March 3, 2022

Report of the Commissioner of Finance

Draft 2022 Development Charges Bylaw and Background Study

1. Recommendations

1. Council receive the draft 2022 Development Charges Bylaw and Background Study (Attachment 1).
2. A report be brought forward to the May 26, 2022 meeting of Council recommending the approval of a 2022 Development Charges Bylaw.
3. The Regional Clerk circulate this report to local municipalities and the Building Industry and Land Development Association – York Chapter (BILD).

2. Summary

Development charges are fees levied on new residential and non-residential development that help pay for growth-related infrastructure. The *Development Charges Act, 1997* (“Act”) sets out the legislative framework governing the establishment of development charges through a municipal bylaw that is to be updated at least every five years. This report tables the Regional 2022 Development Charges Background Study (“2022 Background Study”) and a draft 2022 Development Charges Bylaw (“2022 Bylaw”) brought forward for consideration.

Key Points:

- The 2017 Bylaw expires on June 16, 2022, and for the Region to continue to levy development charges, a new bylaw must come into effect on or before June 17, 2022
- As approved by Council on November 25, 2021, the 2022 Bylaw is based on a 20-year planning horizon, except for Transit services, which is limited to a 10-year horizon by legislation
- In the fall of 2021, the Province amended the Act, through Bill 13, *Supporting People and Businesses Act, 2021*, to treat the Yonge North Subway Extension as a discrete service with a forward-looking planned level of service, and extending the planning horizon from 10 to 20 years. These changes came into effect on January 1, 2022

- Out of \$16.2 billion in gross capital costs in the Background Study, \$7.9 billion is eligible for recovery through development charges under the 2022 Bylaw. Additionally, \$1.9 billion is attributed to post-period benefit and level of service deductions and will be recovered through the future bylaws. The remaining \$6.4 billion of gross capital costs will be funded through other revenue sources and third-party funding
- The 2022 Bylaw will also help to recover \$2 billion of outstanding development charges debt costs. This debt was previously issued by the Region for infrastructure that continues to support growth
- On February 24, 2022, Council endorsed in principle, the use of uniform Region-wide development charges to recover growth-related costs in the 2022 Bylaw, with the exception of those wastewater services in the Village of Nobleton, currently recovered under Bylaw No. [2021-34](#)
- Compared to the current bylaw, the residential rates are proposed to increase by between 17% and 31% depending on the dwelling type. Retail rates are proposed to increase by 4% and the industrial office and institutional rates are proposed to increase by 2%. Hotel rates are proposed to decrease by 5%
- Non-statutory transition provisions or discounts are not being recommended for the 2022 Bylaw

3. Background

To continue to collect development charges, the Region must update the 2017 Development Charges Bylaw prior to its expiration on June 16, 2022

Development charges fund vital growth-related infrastructure projects required to accommodate residential and non-residential development and are the primary source of funding for the growth-related portion of the Region's capital plan.

The Act requires that a municipality pass a new development charges bylaw at least every five years to collect development charges, and that the bylaw be supported by a background study. The background study provides an estimate of the anticipated growth and infrastructure costs to support growth. A new development charges bylaw must come into effect on or before June 17, 2022 for the Region to continue to levy development charges.

In January 2021, staff, with the assistance of Hemson Consulting Ltd. began the work on the 2022 Bylaw, which has included regular meetings with the local municipalities and BILD-York Chapter.

The draft 2022 Bylaw and Background Study, identified as Attachment 1, underpins the proposed development charges rates, as detailed in Tables 3 and 5 of this report and incorporates feedback from the meetings with BILD and the local municipalities.

The Act prescribes the rules for calculating development charges

Development charge rate calculations start with forecasting the growth anticipated in a municipality and determining the infrastructure needed to service that growth. Several statutorily required deductions (e.g., level of service cap, post-period benefit, benefit to existing) are then made to the estimated cost of infrastructure to determine the costs that are eligible to be recovered through development charges.

These eligible costs are then apportioned to the growth by class of development (i.e., residential and non-residential). The residential rates are calculated on a per-unit basis and are differentiated among four dwelling types: singles and semi-detached, multiple unit dwellings, apartments greater than or equal to 700 square feet, and apartments less than 700 square feet. The non-residential development charges are calculated on a per-square-foot basis and are differentiated among three classes of development: retail, hotel, and, industrial, office and institutional.

In November, Council approved policies that guided the 2022 Bylaw, including those that support a mix and range of housing options

Through the [November 2021](#) report entitled “2022 Development Charges Bylaw: Policy Directions”, Council approved the use of a 20-year planning horizon, to 2041, for the 2022 Bylaw. A 20-year forecast horizon balances the ability to reflect long-term infrastructure needs with risks related to accuracy in forecasting over a longer term. Where appropriate, some services have chosen to use a horizon to 2031, such as Ambulance Services (formerly Paramedic Services) and Public Health. Transit is the only service, which the Act limits to a 10-year planning horizon.

As part of the same report, Council approved other key policies to support Regional objectives on the mix and range of housing options. Where applicable, these policies have been incorporated into the 2022 Bylaw and include:

- Treating stacked townhouses as apartments
- Charging residential dwellings less than 700 square feet the small apartment rate
- Removing a four-storey minimum requirement in the “Development Charges Deferral for Purpose-Built Rental Buildings” policy

In February, Council endorsed, in principle, levying development charges on a uniform Region-wide basis for all services in the 2022 Bylaw

On February 24 through the report titled “Rate Structures for the 2022 Development Charges Bylaw”, Council endorsed, in principle, the use of a uniform Region-wide development charges rates to recover growth-related costs for all services in the 2022 Bylaw. This does not include those wastewater services in the Village of Nobleton, currently recovered under Bylaw No. 2021-34.

The Region will hold the legislatively required public meeting at March Council

Under the Act, to pass a development charges bylaw, a municipality must hold at least one public meeting to receive feedback on the proposed bylaw. A 20-day notice must be provided to stakeholders for the meeting and the proposed bylaw and background study must be available to the public at least two weeks prior to it. With these timelines in mind, the public meeting supporting the 2022 Bylaw will be held at the March 24, 2022 Council meeting.

4. Analysis

The 2022 Background Study reflects robust growth set out in the Growth Plan and the Region's Draft Official Plan

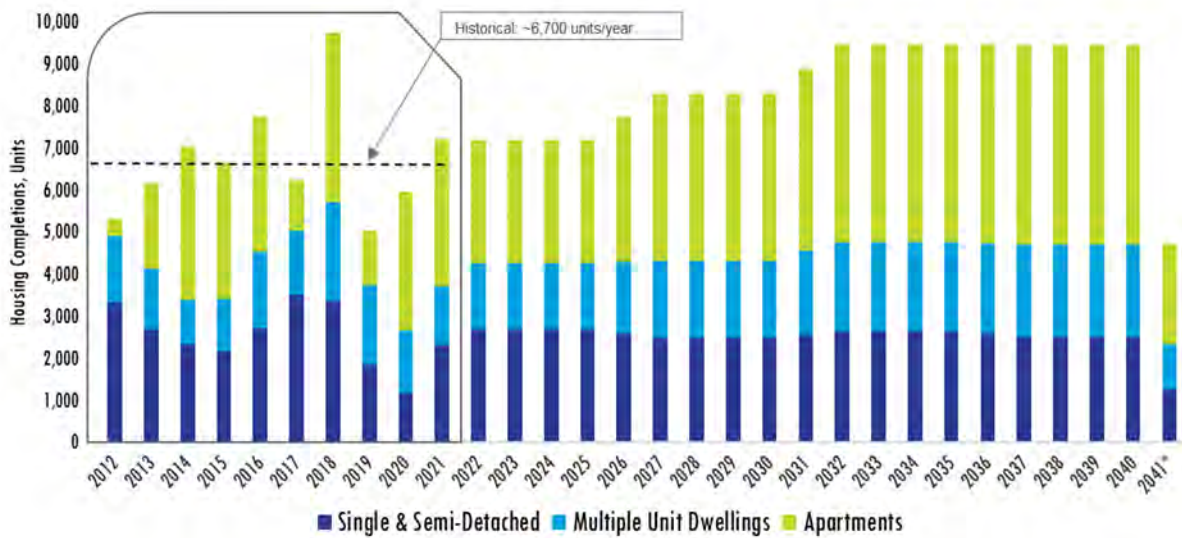
The 2022 Bylaw and Background study supports approximately 168,000 new housing units accommodating projected gross population growth of about 476,300 between 2022 and mid-year 2041, and total employment growth of 210,600 jobs during the same period.

Schedule 3 of the Growth Plan for the Greater Golden Horseshoe provides population and employment forecasts to 2051 for York Region. The mid-2041 population forecast for the 2022 Background Study is on a trajectory to meet the 2051 Growth Plan forecast and is consistent with the growth contemplated in the Region's Draft Official Plan. The population and employment forecast for the 2022 Background Study also takes into consideration demographic trends, timing of servicing infrastructure, market demand, and intensification policy targets.

The Background Study anticipates a shift toward higher density forms of housing

Over the planning horizon, the Region is expected to see a shift in the housing mix to higher density forms of housing. As a result, apartments are estimated to represent 48% of the anticipated new housing units, followed by single and semi-detached units at 30% and multiple unit dwellings at 22%. For comparison, apartments represented 38% of the overall housing mix in York Region between 2011 and 2021. The housing growth forecast to 2041 estimates average annual growth of approximately 8,400 units per year, as demonstrated in Figure 1 below:

Figure 1
York Region Historical and Forecast Housing Growth



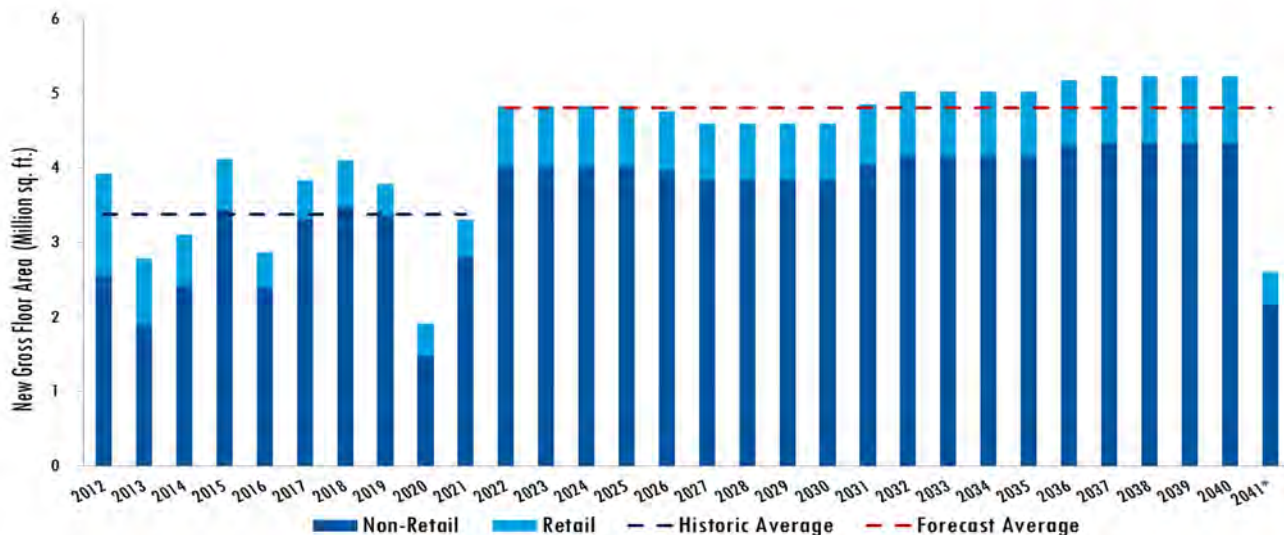
* 2041 numbers are provided for half a year

Source: Long Range Planning

The Background Study anticipates 96 million square feet of new non-residential space over the planning horizon

It is estimated that between 2022 and mid-year 2041 the Region will welcome 210,600 new jobs. To accommodate this employment growth, 96 million square feet of additional non-residential floor space would be needed over the forecast period, split between retail (15%), industrial, office and institutional (83%) and hotel (2%). As shown in Figure 2 below, average annual growth of 4.9 million square feet is forecasted between 2021 and 2041.

Figure 2
York Region Historical and Forecast Non-Residential Gross Floor Area



*2041 numbers are provided for half a year

Source: Long Range Planning

The Background Study reflects \$16.2 billion in gross capital costs, of which \$7.9 billion may be recovered through development charges under this Bylaw

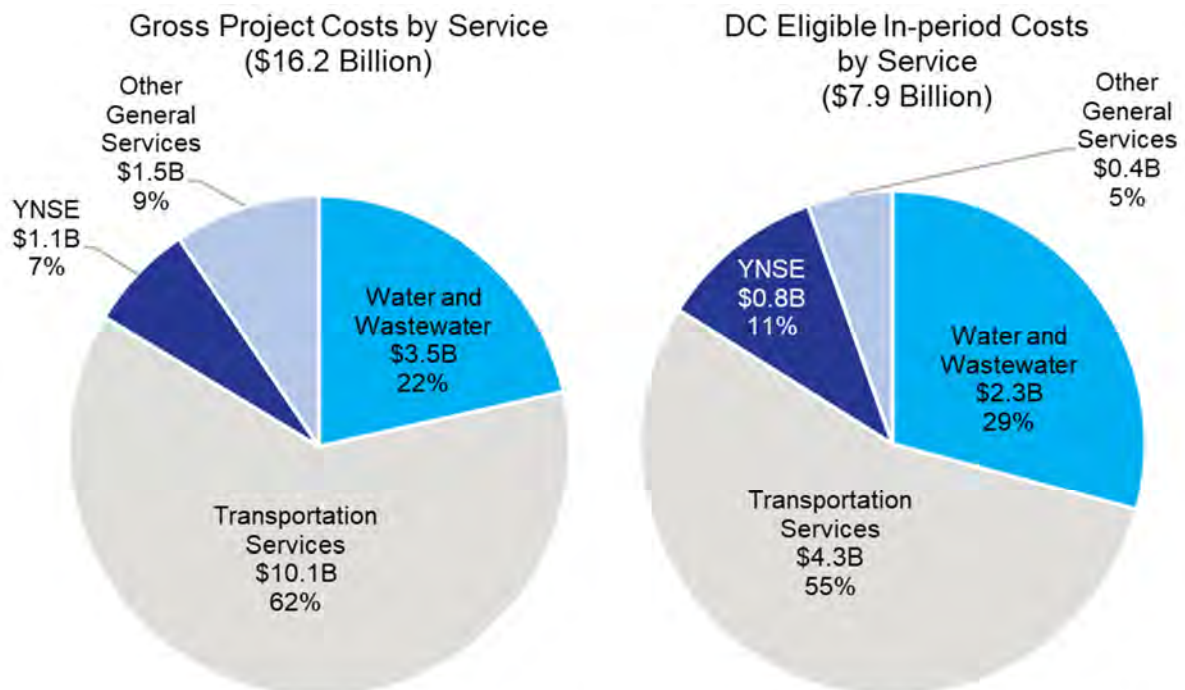
The 2022 Background Study proposes \$16.2 billion in gross capital project costs, including:

- \$3.5 billion in Water and Wastewater infrastructure, including the Upper York Water Reclamation Centre
- \$8.5 billion in Road Service to support multimodal travel in the Region
- \$1.3 billion in Transit infrastructure projects, including future BRT expansion and support for electrification
- \$1.1 billion in Region's share of the Yonge North Subway Extension
- \$0.9 billion for Housing Services
- \$0.9 billion to support other general services, such as Public Health, Ambulance Services, Police, and Waste Diversion

Development charges fund a portion of growth-related infrastructure in the Region. Other funding sources include tax levy, user rates and third-party funding such as grants. Of the \$16.2 billion in growth-related gross project costs, 49%, or \$7.9 billion, are eligible for recovery through development charges under the proposed 2022 Bylaw, as shown in Figure 3 below.

Figure 3

Project Costs by Service



Note: Transportation services include: Roads, Transit, Toronto-York Spadina Subway Extension and Public Works
 Other general services include: Waste Diversion, Police, Housing Services, Public Health, Ambulance Services, Growth Studies, Long-Term Care/Seniors Services, Court Services
 Figures may not sum due to rounding

The 2022 Background Study includes \$1.12 billion in costs for the Yonge North Subway Extension. This is the estimated Regional share for the project's capital construction costs. Under the 2022 Bylaw, 75% of this amount is eligible for recovery through development charges. In this Background Study, the Yonge North Subway Extension is treated as a discrete service, with a 20-year planning horizon and a forward-looking level of service.

The 2022 Bylaw reflects a shift towards transit and general services

Table 1 below shows that on an annualized basis, the development charges costs associated with the water and wastewater program is about the same as in the 2017 Bylaw. The 2022 Bylaw includes a notable increase in the Transportation program, driven primarily by increases in Transit (including Bus Rapid Transit infrastructure) and the new Yonge North Subway Extension. To support the Region's efforts to emplace more affordable housing, the 2022 Bylaw also includes increased investment for the Housing Services program. These trends reflect continued growth, maturation, and urbanization within the Region.

Table 1
Annualized Development Charges Costs*

Service Category	2017 Bylaw (As amended) (\$ Millions)	2022 Bylaw (\$ Millions)	Difference (\$ Millions)
Water and Wastewater	181	180	-2
Transportation Services**	275	329	+54
Other General Services***	16	29	+13
Total	472	538	+66

* Annualized DC costs include in-period DC-eligible costs and DC debt. These costs are included in the DC rate calculation. The costs shown here have not been adjusted for inflation

** Transportation services include: Roads, Transit, Toronto-York Spadina Subway Extension, Yonge North Subway Extension, and Public Works

***Other General Services include: Police, Waste Diversion, Ambulance Services, Public Health, Housing Services, Court Services, Long-Term Care/Seniors Services, and Growth Studies

Numbers may not add due to rounding

The 2022 Bylaw will help to recover \$2 billion in outstanding development charges debt

Development charges debt is issued, when necessary, to help pay for growth-related infrastructure, which is often required before growth occurs. As the growth occurs, the cost of that debt is repaid through development charge collections. The Region currently has \$2 billion in outstanding development charges debt associated with infrastructure projects that continue to service growth over the planning horizon of the 2022 Bylaw (Table 2).

Table 2
Outstanding Development Charges Debt

Service Category	Outstanding Debt to be Repaid from Development Charges (\$ Millions)
Water and Wastewater	1,293
Transportation Services	432
Toronto-York Spadina Subway Extension	222
Other General Services*	85
Total	2,031

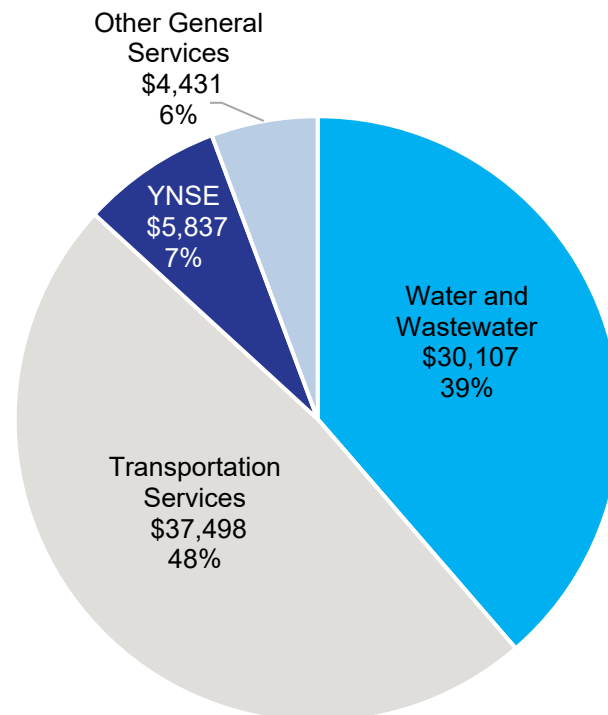
*Other General Services include: Police, Waste Diversion, Ambulance Services, Public Health, Housing Services, Court Services, Long-Term Care/Seniors Services, Growth Studies
Numbers may not add due to rounding

Regional development charges reflect the growth-related services in the 2022 Background Study

For each residential and non-residential category, Regional development charges rates were calculated based on the development and growth forecast, infrastructure costs, statutory deductions, outstanding debt, and opening reserve balances.

The split by service area is demonstrated in Figure 4 below for the proposed single and semi-detached dwelling rate under the 2022 Bylaw, for the total of \$77,873:

Figure 4
Proposed 2022 Development Charges Rate for a Single and Semi-Detached Dwelling, by Service



Note: Transportation services include: Roads, Transit, Toronto-York Spadina Subway Extension, and Public Works
 Other General Services include: Police, Waste Diversion, Ambulance Services, Public Health, Housing Services, Court Services, Long-Term Care/Seniors Services, Growth Studies.
 Figures may not sum due to rounding

The Region has prepared an asset management plan in accordance with the Act

The amended Act requires municipalities to prepare an asset management plan as part of the Background Study to demonstrate that all assets funded by development charges are financially sustainable over their lifecycle. The intent of this requirement is to ensure that municipalities do not include growth projects in their background studies that are not financially sustainable. The regulations to the Act provide specific and detailed requirements for an asset management plan for Transit services.

The asset management plan, as prepared under section 10 of the Act, can be found in Attachment 1.

5. Financial

Residential rates would rise between 17% and 31%

As Table 3 indicates, the draft 2022 development charges rates for residential development would increase by 17% to 31%, depending on the structure type.

Table 3
Residential Development Charges Rates: Current Bylaw vs. 2022 Proposed

Residential (\$ per unit)	Current Rates (As of Jan 1, 2022)	2022 Proposed Rates	% Change
Single and Semi-Detached Dwellings	65,608	77,873	+19%
Multiple Unit Dwellings	52,814	64,792	+23%
Apartments >=700 sq. ft.	38,382	50,280	+31%
Apartments < 700 sq ft.	28,042	32,702	+17%

The difference in the proposed rate increases among residential classes is largely due to the changing occupancy levels observed in the Region. As shown in Table 4 below, compared to the 2017 Bylaw, occupancy levels have increased for all structure types except for small apartments. Two sources were used for that analysis, namely, Statistics Canada Census information and RealNet data on the unit types and sizes. Large apartments have the highest increase at 12%. The trend of large apartments seeing a higher increase in occupancy levels is also observed in other municipalities. For example, the Region of Peel's 2020 Background Study and the Region of Halton's draft 2022 Background Study also reflect higher occupancy levels.

Table 4
Occupancy Levels: Current Bylaw vs. 2022 Proposed

Residential Structure Type	2017 Bylaw Occupancy Level (Persons Per Unit)	2022 Proposed Bylaw Occupancy Level (Persons Per Unit)	% Change
Single and Semi-Detached Dwellings	3.74	3.81	+2%
Multiple Unit Dwellings	3.01	3.17	+5%
Apartments >=700 sq. ft.	2.19	2.46	+12%

Residential Structure Type	2017 Bylaw Occupancy Level (Persons Per Unit)	2022 Proposed Bylaw Occupancy Level (Persons Per Unit)	% Change
Apartments < 700 sq. ft.	1.60	1.60	0%

If projected occupancy levels remained unchanged compared to the last Background Study, development charges rates would have increased by 17% for all residential structure types.

The proposed Regional single and semi-detached dwelling rate represents less than 5% of the price of a new home

Development charges are a necessary cost recovery tool for growth-related infrastructure, which enables housing supply and facilitates complete communities throughout the Region. The proposed 2022 Background Study and Bylaw would also help fund a portion of the capital costs for new Housing York Inc. developments.

York Region's current development charges for single and semi-detached dwellings represent 4.6% of the average price of a new single and semi-detached home in the Region in 2021, as per CMHC data. Similar levels are observed in other upper-tier GTA municipalities. For example, 2021 development charges in Peel Region for single and semi-detached dwellings are about 4.8% of the average price of a new home. With proposed 2022 Bylaw rate increase in York Region, the Region's share is expected to stay below 5% compared to forecasted new home prices for 2022.

Proposed non-residential rates would be approximately the same under the 2022 Bylaw

As Table 5 indicates, the proposed 2022 development charges rates represent a 4% increase for retail, 2% increase for industrial/office/institutional developments, and a 5% decrease for hotel. Changes in the share of growth from non-residential developments over the planning horizon, floor space per worker assumptions and changes in trip generation rates affects the non-residential development charges rates.

Table 5**Non-Residential Development Charges Rates: Current Bylaw vs. 2022 Proposed**

Non-residential (\$ per sq. ft. of Gross Floor Area)	Current Rates (as of July 1, 2021)	2022 Proposed Rates	% Change
Retail	58.50	60.58	+4%
Industrial/Office/Institutional	24.31	24.70	+2%
Hotel	11.44	10.91	-5%

Non-statutory transition provisions or discounts are not being recommended

Under the Act, a municipality has the option to collect development charges before (i.e., prepayments) or after (i.e., deferrals) they would otherwise be payable. Municipalities could also offer development charges discounts and/or exemptions. These provisions could result in lost revenue that must be made up through the tax levy or user rates.

Changes to the Act, through Bill 108, *More Homes, More Choices Act, 2019*, introduced the new section 26.2, which provides that development charges rates are frozen at the time of site plan or zoning bylaw amendment application. The implication of this new section, as it relates to the 2022 Bylaw, is that any new development, with a complete site plan or zoning bylaw amendment application submitted prior to the new development charges rates coming into force, would avoid having to pay the new rates.

Given the existing transition provision afforded through section 26.2 of the Act, and their possible impact on development charges collections, transition provisions or discounts are not being recommended for the 2022 Bylaw. As permitted under section 26.2 of the Act, the Region applies a 5% interest on frozen development charges, as per the Council-approved Development Charge Interest Policy.

6. Local Impact

The 2022 Bylaw will help fund vital growth-related infrastructure that will benefit all local municipalities, including the Yonge North Subway Extension, the Upper York Water Reclamation Centre, as well as a significant investment in housing services. The Region-wide rate approach will involve uniform rates to fund growth across all local municipalities within York Region.

Local municipalities have been important partners in the development of the 2022 Bylaw. Local municipal input helped inform many of the policies entrenched in the draft 2022 Bylaw. This engagement will continue, post-tabling, leading up to Council's consideration of the 2022 Bylaw for approval in May.

Local municipalities will continue to play a vital role in the process and will help administer the 2022 Bylaw once approved.

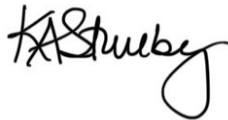
7. Conclusion

This report supports the tabling and public release of the attached 2022 Bylaw and Background Study. It also provides Council with the information related to the development charges rates proposed in the 2022 Bylaw.

On March 24, 2022, Council will hold a public meeting to seek feedback on the 2022 Bylaw and Background Study. In May, the final Background Study and Bylaw will be provided to Committee and Council for consideration.

New development charges rates are expected to be in effect on June 17, 2022.

For more information on this report, please contact Edward Hankins, Director, Treasury Office, and Deputy Treasurer, at 1-877-464-9675 ext.71644. Accessible formats or communication supports are available upon request.



Recommended by:

Kelly Strueby

Acting Commissioner of Finance and Regional Treasurer



Approved for Submission:

Bruce Macgregor

Chief Administrative Officer

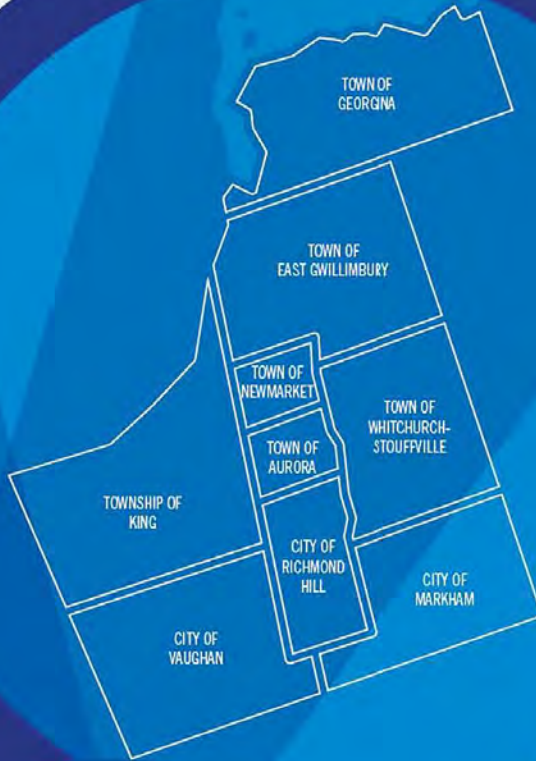
February 18, 2022
Attachment (1)
eDocs #13374197

THE REGIONAL MUNICIPALITY OF YORK

2022 DEVELOPMENT CHARGES

BACKGROUND STUDY

DRAFT



As Released March 3, 2022

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LIST OF ACRONYMS AND ABBREVIATIONS

AMP	Asset Management Plan
Bill 13	<u>Supporting People and Businesses Act, 2021</u>
Bill 108	<u>More Homes, More Choice Act, 2019</u>
Bill 197	<u>COVID-19 Economic Recovery Act, 2020</u>
Bill 213	<u>Better for People, Smarter for Business Act, 2020</u>
BTE	Benefit to existing
CANSIM	Canadian Socio-Economic Information Management System
DC	Development charges
the Act	<u>Development Charges Act, 1997</u> , as amended
EA	Environmental Assessment
FIR	Financial Information Return
FSW	Floor Space per Worker
GFA	Gross floor area
GMS	Growth Management Strategy
GTA	Greater Toronto Area
ICI	Industrial/ Commercial/ Institutional
LPAT	Local Planning Appeal Tribunal
MCR	Municipal Comprehensive Review
MTO	Ministry of Transportation
OLT	Ontario Land Tribunal
OMB	Ontario Municipal Board
OPA	Official Plan Amendment
O. Reg.	Ontario Regulation
O. Reg. 82/98	<u>General Regulation</u> under <i>Development Charges Act, 1997</i>
O. Reg. 192/07	<u>Toronto-York Spadina Subway Extension</u> under <i>Development Charges Act, 1997</i>

POA	Provincial Offences Act
PPB	Post-Period Benefit
PPU	Persons per unit
ROP	Regional Official Plan
SDU	Single detached unit
SFD	Single-family Dwelling
SWM	Stormwater management
sq. ft.	square foot
sq. m.	square metre
TMP	Transportation Master Plan
TYSSE	Toronto-York Spadina Subway Extension
WWTF	Wastewater treatment facilities
YNSE	Yonge North Subway Extension
YRP	York Regional Police
YRRTC	York Region Rapid Transit Corporation

EXECUTIVE SUMMARY

I. Purpose of the Background Study

The Act requires a municipality to update its DC bylaw every five years if not sooner. York Region's current Region-wide bylaw [2017-35](#) (as amended by bylaw [2018-42](#)) expires on June 16, 2022. A new bylaw is required to continue to levy development charges. This background study provides the justification for the proposed rates in the bylaw and is prepared pursuant to Section 10 of the Act and in accordance with the prescribed methodology.

The Act provides the statutory basis for the recovery of growth-related capital expenditures from new development. A high-level overview of the methodology is as follows:

- a) Identify amount, type and location of growth
- b) Identify servicing requirements to accommodate growth
- c) Identify capital costs required to meet servicing needs
- d) Deduct:
 - Amounts in excess of the 10-year average historical service calculation
 - Grants, subsidies and other contributions
 - Benefit to existing (BTE) development
 - Post-period benefits (PPB)
- e) Net costs are then allocated between residential and non-residential development, and within the various non-residential rate categories
- f) Using the net costs derived above, a cash flow calculation is used to determine the residential per capita rate and the non-residential rates on a per square feet basis. Where applicable, the rate calculation commences with the inclusion of reserve fund balances for the service, as at the end of 2021. Existing and projected debt payments are also tabulated.

The calculated development charges are based on expenditures eligible for recovery under the Act, included in York Region's capital plan and master plans. Changes to the Act approved through Bills 108, 197, 213, and 13 have been incorporated in the 2022 Bylaw.

This Background Study contains the following chapters:

Chapter 1: Introduction

Chapter 2: Anticipated Development in York Region

Chapter 3: Water: Capital Forecasts and DC-recoverable Costs

Chapter 4: Wastewater: Capital Forecasts and DC-recoverable Costs

Chapter 5: Roads: Capital Forecasts and DC-recoverable Costs

Chapter 6: Transit: Capital Forecasts and DC-recoverable Costs

Chapter 7: Toronto-York Spadina Subway Extension: Capital Forecasts and DC-recoverable Costs

Chapter 8: Yonge North Subway Extension: Capital Forecasts and DC-recoverable Costs

Chapter 9: Other General Services: Capital Forecasts and DC-recoverable Costs

Chapter 10: Development Charges Cash Flow Calculations

Chapter 11: Current Development Charges Bylaw and Policies

Chapter 12: Development Charges Bylaw and Policies: Areas of Review

Chapter 13: Asset Management Plan

II. Growth Forecast

The growth forecast used for calculating Region-wide development charges is summarized in Table ES-1 below.

TABLE ES-1
GROWTH IN POPULATION, HOUSING AND NON-RESIDENTIAL SPACE

	Gross Population Growth	Housing Growth	Total Employment Growth	Non-Residential Space Growth (sq. ft.)
2022 to 2031	222,074	77,109	102,150	47,329,840
2022 to 2041*	476,277	168,279	210,600	96,115,715

*2041 Mid-year

III. Growth-related Capital Program

This background study includes \$16.2 billion in gross growth-related project capital cost. Of this amount, \$7.9 billion has been determined to be DC-recoverable over the 2022-2041 period. In addition, the 2022 Bylaw will help recover \$2 billion in outstanding debt previously issued by the Region to finance vital infrastructure to support growth.

The difference between the gross and DC-recoverable amounts comprises the following deductions, pursuant to the Act (numbers may not add due to rounding):

\$16.2 billion	Gross development-related capital cost
- \$2.9 billion	Capital Grants, Subsidies and Other Contributions
- \$3.5 billion	BTE Development
<hr/>	
\$9.8 billion	Project costs eligible for DC recovery
- \$1.9 billion	Level of Service cap and Post Period Benefit deduction
<hr/>	
\$7.9 billion	DC eligible costs recoverable through the 2022 DC Bylaw
+ \$2.0 billion	Outstanding debt to be recovered from development charges
<hr/> <hr/>	
\$9.9 billion	Total DC-recoverable costs (before financing)

These calculations have been made in accordance with the principle that “Growth Pays for Growth” to the extent that it is permitted under the Act. The limitations to cost recovery include:

- A service level cap that restricts the future level of service from exceeding the 10-year historical service level, and
- Attribution of a share of the costs benefitting existing population and employment base.

“Capital Grants, Subsidies and Other Contributions” represents a funding source that does not involve local taxes or user rates. “Post Period Benefit” deduction represents the growth-related costs to be funded by means of future development charges, to be collected via subsequent bylaws, for the portion of the costs that pertains to the period beyond the planning horizon of 2041.

IV. Proposed Development Charges

Table ES-2 presents the proposed charges for residential developments, including single and semi-detached dwellings, multiple unit dwellings, and apartments (large and small); and non-residential developments, including retail, industrial/office/institutional (IOI), and hotel.

TABLE ES-2
PROPOSED DEVELOPMENT CHARGES RATES*

	Current rate*	Proposed rate	% Increase/ (Decrease)
Residential Rate (per unit)			
Single and Semi-Detached Dwellings	\$65,608	77,873	19%
Multiple Unit Dwellings	\$52,814	64,792	23%
Large Apartments > = 700 sq. ft.	\$38,382	50,280	31%
Small Apartments < 700 sq. ft.	\$28,042	32,702	17%
Non-Residential Rate (per sq. ft.)			
Retail	\$58.50	60.58	4%
Industrial/Office/Institutional	\$24.31	24.70	2%
Hotel	\$11.44	10.91	(5%)

*Excludes GO Transit, Local and Education DCs

Regional Council, having received the draft background study and bylaw, and having regard for the input at the public meeting and any other consultation sessions, shall decide upon the magnitude of the development charges it wishes to establish. Tax levy, user rate or other funding (e.g., grants) will be required to fund and finance any portion of growth-related costs not funded by development charges.

V. Bylaw Modifications

The following modifications have been included in the draft 2022 DC Bylaw:

- Stacked townhouses will be treated as apartments
- Any residential dwellings less than 700 sq. ft. (e.g., 'Tiny Homes') will be charged the small apartment rate
- Changes to the Act, through Bills 108 and 197 providing development with the ability to freeze development charges at site plan and/or zoning bylaw amendment application (section 26.2 of the Act) and the phasing of development charges for eligible development (under section 26.1 of the Act)
- Recent residential and non-residential statutory exemptions, including:
 - Exemptions for additional dwellings in, or ancillary to, existing residential buildings, but also for additional dwellings in, or ancillary to, new residential buildings
 - Exemptions for conversion of common areas in rental buildings into residential units
 - Exemptions for universities receiving funding from the government for the purposes of post-secondary education

post-secondary education

- Adding one service and renaming three services:
 - Adding Yonge North Subway Extension
 - Renaming:
 - “Seniors Services – Capital Component” to “Long-Term Care/Seniors Services”
 - “Social Housing” to “Housing Services”
 - “Paramedic Services” to “Ambulance Services”

VI. Consultation Process

Beginning in March 2021, staff held meetings with representatives of the Building Industry and Land Development Association York Chapter (BILD) and the local municipalities. Topics discussed included: the growth forecast and development charge methodologies and assumptions, the planning horizon and development charges policies.

Staff will continue to meet and engage with all stakeholders post-tabling until the 2022 Bylaw and Background Study come to Council for consideration of passage.

VII. Council Approval Sought

At this stage in the process, the Background Study and draft Development Charge Bylaw are being tabled for information purposes, as part of the consultation process and in accordance with the Act.

When that process is complete, and final development charge recommendations are made to Council on May 26, 2022, approval will be sought for the 2022 Development Charge Bylaw and the Background Study, including:

- The development forecast
- The development-related capital program
- The development charges rate calculation
- Changes to the bylaw
- An Asset Management Plan that demonstrates that all assets whose capital costs are being funded through development charges are financially sustainable over their full life cycle

All of the above may be subject to any amendments or addenda that could be produced prior to the passing of the Bylaw.

VIII. GO Transit Development Charges

Development charges for GO Transit only apply to residential development and are levied under a separate bylaw (No. [DC-0004-2001-097](#)). As such, the rates charged are not affected by the 2022 Background Study or Bylaw. For information purposes, GO Transit rates as of March 3, 2022 are provided in Table ES-3 below:

TABLE ES-3
GO TRANSIT DEVELOPMENT CHARGES
(AS OF MARCH 3, 2022)

Type of residential development	GO Transit DC Rate (\$)
Single and semi-detached dwellings	\$396
Multiple unit dwellings	\$311
Large Apartments \geq 700 sq. ft.	\$229
Small Apartments < 700 sq. ft.	\$145

1 INTRODUCTION

1.1 Legislative Context

The Act (as amended) requires that Council complete a development charges background study before passing a development charges bylaw. The mandatory inclusions in such a study are set out in s.10 of the Act and in s.8 of O.Reg. 82/98, and are as follows:

1. Estimates of the anticipated amount, type and location of development (addressed in Chapter 2 of this background study)
2. Development charges calculations for each service to which the Bylaw would relate are addressed in Chapters 3-9 of this background study
3. The following details for each service to which the development charges relate:
 - The total of the estimated capital costs relating to the service
 - Any grants, subsidies, and other contributions to be deducted
 - The allocation of the costs between benefiting new and existing development
 - The total of the estimated capital costs relating to the service that will be incurred during the term of the proposed Bylaw
 - An estimation of costs which will benefit development that occurs beyond the planning horizon of the respective services under this Bylaw
 - The estimated and actual value of credits that are being carried forward relating to the service
4. Consideration by Council of the use of area-specific charges to reflect different needs for services in different areas
5. An examination of the long-term capital and operating costs for capital infrastructure required for each service to which the Bylaw would relate (addressed in Chapter 13)
6. An Asset Management Plan that deals with all assets whose capital costs are proposed to be funded under the Bylaw, demonstrating that all assets are financially sustainable over their full lifecycle (addressed in Chapter 13)
7. A municipality's DC background study to be made publicly available 60 days prior to the passing of the bylaw
8. The proposed sequence of timing involved with putting a new Bylaw in place, ensuring that all statutory requirements are met, as set out in Table 1-1

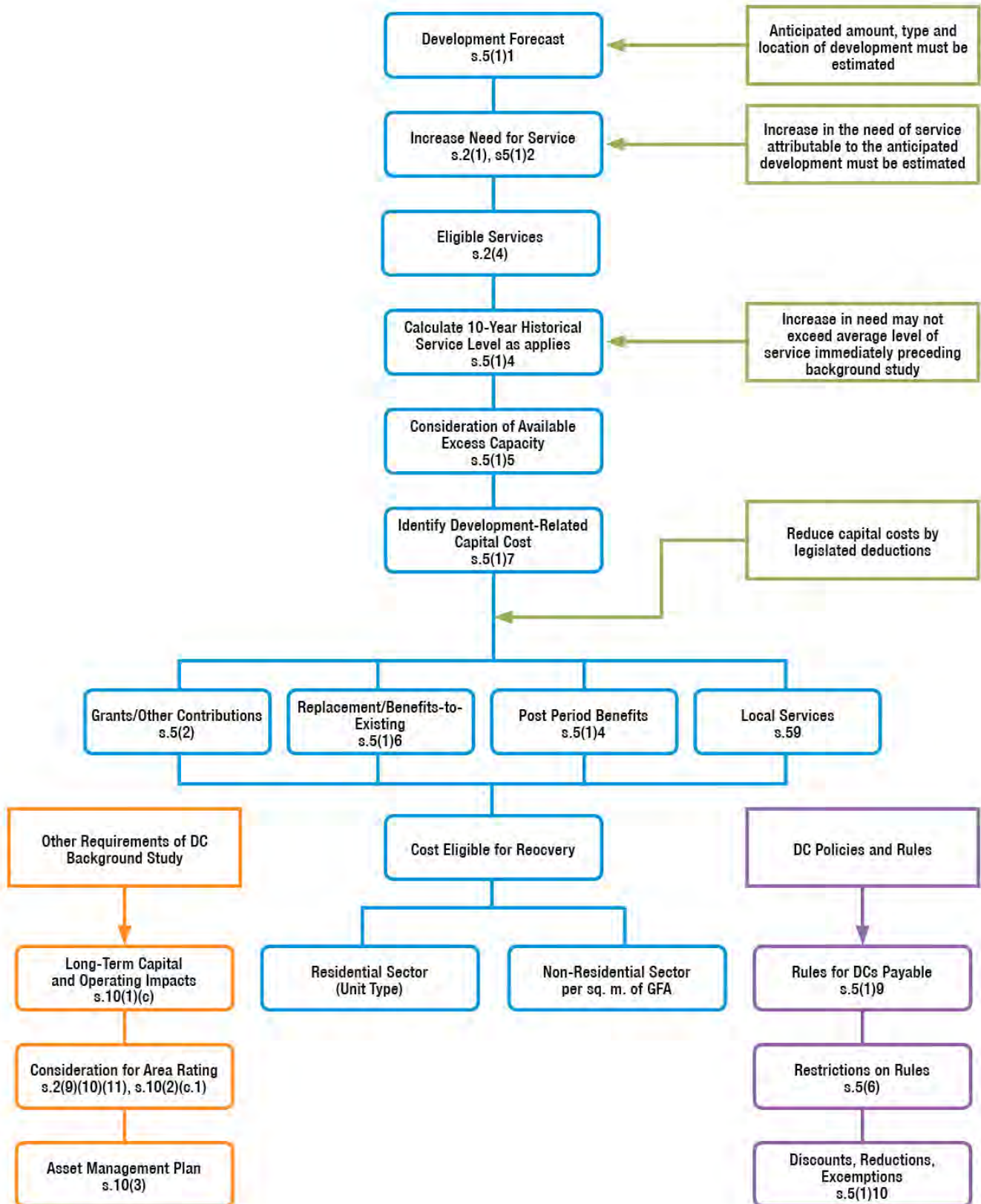
TABLE 1-1
SCHEDULE OF KEY DC BYLAW PROCESS DATES IN YORK REGION

Deliverables	Date
Status of 2022 Bylaw Update: Report to Council	June 24, 2021
2022 Development Charges Bylaw Policy Directions: Report to Council	November 25, 2021
Notice of first public meeting published	February 24, 2022
Rate Structures for the 2022 Development Charges Bylaw: Report to Council	February 24, 2022
2022 Development Charges Bylaw and Background Study tabled at Committee of the Whole	March 3, 2022
Public meeting at Council	March 24, 2022
2022 Bylaw to Council for approval	May 26, 2022
2022 Development Charges Bylaw comes into force	June 17, 2022
Notice of bylaw passage published	Within 20 days of passage
Last day for bylaw appeal	Within 40 days after passage
Region makes pamphlet available	Within 60 days after in-force date

1.1.1 Statutory Requirements for Calculating Development Charges

The key steps required in the calculation of DCs for future growth-related infrastructure are shown schematically in Figure 1-1 and summarized below:

**FIGURE 1-1
STATUTORY REQUIREMENTS FOR CALCULATING DEVELOPMENT CHARGES**



1.1.2 Changes to the Act: Bill 108, 197, 213 and 13

Table 1-2 below summarizes the changes to the Act through four bills passed by the Ontario Legislature:

- Bill 108: *More Homes, More Choice Act, 2019*
- Bill 197: *COVID-19 Economic Recovery Act, 2020*
- Bill 213: *Better for People, Smarter for Business Act, 2020*
- *Bill 13: Supporting People and Businesses Act, 2021*

The 2022 Bylaw and Background Study will be updated to reflect these changes.

TABLE 1-2
DETAILED CHANGES TO THE ACT THROUGH ONTARIO LEGISLATURE BILLS

Amendments to the Act	Details
<p>Bill 108: <i>More Homes, More Choice Act, 2019</i></p>	<ul style="list-style-type: none"> • Installment payments: Effective January 1, 2020, for profit rental housing and institutional developments shall pay D.C.s in six (6) equal annual payments commencing at first occupancy. Non-profit housing developments shall pay D.C.s in 21 equal annual payments • Interest charges: Interest may be charged for both frozen and phased development charges from the date of Site Plan of Zoning bylaw Application to the date of building permit issuance or date of final payment • Freezing provisions: Effective January 1, 2020 the D.C. amount for all developments shall be determined based on the development charges by-law in effect on the day of Site Plan or Zoning By-law Amendment application • Exemption of additional dwelling units: Additional units in prescribed classes of existing residential buildings or prescribed structures ancillary to existing residential buildings Second dwelling unit for new residential buildings and ancillary structures • Conversion exemption: Common areas in existing rental buildings can be converted into residential units and be exempt. Limited to additional units equivalent to the greater of 1 and 1% of existing units
<p>Bill 197: <i>COVID-19 Economic Recovery Act, 2020</i></p>	<ul style="list-style-type: none"> • Eligible Services: The list of DC eligible services was expanded to include most services eligible under the Act prior to Bill 108. All services currently provided by York Region remain eligible • 10% reduction: Elimination of the mandatory 10% deduction for all DC-eligible services

Amendments to the Act	Details
Bill 213: <i>Better for People, Smarter for Business Act, 2020</i>	<ul style="list-style-type: none"> • Exemption for Universities: Development on land owned or leased to a University that receives funding from the government for the purposes of post-secondary education is exempt from development charges
Bill 13: <i>Supporting People and Businesses Act, 2021</i>	<ul style="list-style-type: none"> • Yonge North Subway Extension: The amendments change the method by which the estimate for the increase in the need for the YNSE is calculated by basing it on the planned LOS provided in the municipality over the 20-year period immediately following the preparation of the background study (further guidance was provided through O.Reg. 847/21, which amended O.Reg 192/07)

1.2 Growth Forecast

The first step in the rate calculation requires a development forecast to be prepared for future residential and non-residential development anticipated to occur over the following planning horizons:

- 2022-2041 for Water, Wastewater, Roads, Yonge North Subway Extension (YNSE), Police, Waste Diversion, Public Works, Housing Services, Growth Studies, Court Services
- 2022-2031 for Transit, Toronto-York Spadina Subway Extension (TYSSE), Ambulance Services, Public Health, Long-Term Care/Seniors Services

A Place to Grow: Growth Plan for the Greater Golden Horseshoe, 2019 (Growth Plan), as amended, sets out population and employment forecasts and requires municipalities to plan to achieve these targets. The growth forecasts for the background study are based on the Growth Plan targets, Census data, employment surveys and planned development activity in the Region.

For residential growth forecast, both gross and net population growth are estimated:

Gross population growth = Total population in new housing units

Net population growth = Population in new housing units adjusted for the decline in the population in the existing base

Gross population growth is used in the calculation of DCs per capita.

The non-residential portion of the forecast estimates the gross floor area (GFA) of building space to be developed over the planning horizon based on employment forecast for the Region.

Floor space per worker index is used to convert the employment forecast into GFA for the purposes of the DC study.

Detailed growth forecast can be found in Chapter 2 of this Background Study.

1.3 Council Approval of the Capital Program

To include an increase in need for service in the development charges calculation, Regional Council must indicate "...that it intends to ensure that such an increase in need will be met" (s.s.5 (1)3). This can be done if the increase in service forms part of a Council-approved Official Plan, capital forecast or similar expression of the intention of Council (O.Reg. 82/98 s.3). The capital program contained herein reflects York Region's approved capital plan and also reflects previous approvals of York Region's Transportation Master Plan and Water and Wastewater Master Plan.

1.4 Service Categories Potentially Involved

Table 1-3 below provides a range of municipal service categories, and identifies whether they can, subject to the subsection 2(4) of the Act, be included in the development charges calculation.

In addition, subsection 5(3) of the Act lists capital costs in respect of eligible services that are eligible for inclusion and two ineligible costs, such as "computer equipment" and "rolling stock with an estimated useful life of seven years or more." In instances where rolling stock has an equivalent life, due to use, of seven years (e.g., police vehicles) they have been included as an eligible cost.

Local water, wastewater, stormwater management and road works are recovered separately under subdivision agreements and related means (as are other local services).

TABLE 1-3

ELIGIBILITY OF MUNICIPAL SERVICES FOR DEVELOPMENT CHARGES RECOVERY

Service	Service Categories	Development Charges Eligibility
Services Related to a Highway	Arterial roads	✓
	Traffic signals	✓
	Interchanges and grade separations	✓
Transit Services	Transit vehicles	✓
	Other transit infrastructure	✓
	Works yards	✓
	Rolling stock	✓
TYSSE	As defined in s. 5.1(1) of the Act	✓
YNSE	As defined in s. 5.1.1(1) of the Act	✓
Water Supply Services	Treatment plants	✓
	Distribution systems	✓
Wastewater Services	Treatment plants	✓
	Sewage trunks	✓
	Vehicles and equipment	✓

Service	Service Categories	Development Charges Eligibility
Waste Diversion Services	Collection, transfer vehicles and equipment (not for waste diversion purposes)	x
	Landfills, incineration, and other disposal facilities	x
	Other waste diversion facilities and vehicles*	✓
Police Services	Police detachments	✓
	Police vehicles*	✓
	Small equipment and gear	✓
	Communications systems	✓
Long-Term Care/Seniors Services	Long-term-care facilities	✓
Public Health Services	Public health facilities, vehicles	✓
Housing Services	Housing facilities	✓
Ambulance Services	Ambulance station space	✓
	Vehicles*	✓
Provision of Headquarters for the General Administration of Municipalities and Local Boards	Office space (all services)	x
	Office furniture	x
	Computer equipment	x
Growth Studies	Growth-related studies of a corporate nature (e.g., DC studies, master plans, official plans, etc.)	✓
Court Services	Court facilities	✓

*Note: with 7+ years of useful life or the equivalent

1.5 Historical Service Level Calculation

Section 5(1) 4 of the Act provides that the increase in the need for service attributable to anticipated development must not include an increase that would result in the level of service (LOS) exceeding the average level of that service provided in the municipality over the 10-year period immediately preceding the preparation of the background study.

Future servicing requirements for Water and Wastewater services are subject to provincial health and environmental requirements. Section 4(3) of O.Reg. 82/98 allows for the LOS to be determined under the requirements of Acts other than the Act if the average LOS determined is lower than the standard LOS required under another Act.

Transit services, TYSSE, and the YNSE are based on a “planned” LOS and are not subject to average historical service-level cap.

A review of the Region’s inventory of buildings, land, vehicles and equipment has been prepared to calculate the average LOS provided over the 2012-2021 period for the relevant services to determine the portion of future capital projects that may be included in the DC rate calculation.

Any positive reserve balances are added to the LOS while negative balances serve to reduce the LOS. The reserves are indicative of whether the municipality have constructed the service capacity needed for development that has already occurred.

Any outstanding development charge debt principal that is to be recovered under this bylaw have been removed from the historic LOS to reflect the portion of service that benefit growth under this bylaw.

The LOS calculation for each service can be found in Chapters 3 to 9.

1.6 Growth-related Capital Program and In-Period DC-eligible Costs

Section 5(1) 3 of the Act requires that the increase in the need for service attributable to the anticipated development may be included only if the council of the municipality has indicated that it intends to ensure that such an increase in need will be met. The growth-related capital program included in the study ensures that DCs are only imposed to help pay for projects that have been, or are intended to be, purchased or built to accommodate anticipated development. The Act also requires that any available uncommitted excess capacity be netted off from growth-related costs. The Region does not have uncommitted capacity for any of its services.

As required by Section 5(2) and Section 5(1) 5, 6 of the Act, the gross costs identified in the capital program have been reduced by the following to arrive at the in-period DC-eligible costs:

- **Capital grants, subsidies or contributions:** anticipated grants subsidies and contributions from other levels of government or sources
- **Benefit to existing development (BTE):** portion of the project that confer benefits to existing residents
- **Level of service cap (LOS cap):** any amount that exceeds the average level of the service provided in the municipality over the 10-year period immediately preceding the preparation of the background study
- **Post period benefit (PPB):** planned capacity intended to meet servicing requirements beyond the planning horizon of this bylaw

Detailed growth-related capital program, methodologies for determining statutory deductions, and calculated in-period DC eligible costs for each service can be found in Chapters 3 to 9.

1.6.1 Applicable Credits

Section 8(1) 5 of O.Reg. 82/98 indicates that a development charge background study must set out, “The estimated value of credits that are being carried forward relating to the service.” A credit is, in effect, a municipal payment liability linked to the prior provision of infrastructure by a landowner. Credits have been included in the development charges calculation to ensure that the necessary development charge “funding room” has been provided.

York Region has made agreements with respect to a number of credits, which are incorporated in the calculation of the charge, for each of the services involved. Details of the Region’s Development Charge Credit policy can be found in Chapter 11.

1.7 Attribution to Types of Development

The growth-related in-period development charge eligible costs are allocated between the residential and the non-residential sectors based on assessment of use to which the two types of developments are expected to require capital expenditures.

TABLE 1-4
RESIDENTIAL/NON-RESIDENTIAL COST SHARE BY SERVICE

Service	Residential Cost Share	Non-Residential Cost share	Basis of allocation
Water & Wastewater	79%	21%	Incremental flow estimates
Waste Diversion, Housing services, Long-Term Care/ Seniors Services	100%	0	All costs allocated to residential
Public Health	97%	3%	Based on a survey of current program services
Ambulance Services	90%	10%	Net increment in population and employment growth, with population weighted at three times that of employment
Transit and TYSSE	74%	26%	Net incremental population and employment growth
All other services	75%	25%	Net incremental population and employment growth

The residential component of the DC is applied to different housing types based on average occupancy factors. The non-residential component has been further categorized into retail, industrial, office, institutional, and hotel.

1.8 Reserve Fund Balances allocation and Cash Flow Analysis

A cash flow analysis is used to account for the timing of projects and receipt of DCs, together with interest earnings and/or borrowing costs and inflation. This is done through the establishment of a reserve continuity schedule.

Opening reserve balances are allocated to rate categories. Negative balances are allocated on the basis of forecasted residential and non-residential growth. Positive reserve balances are allocated based on actual development charge collections.

The cash flow analysis can be found in Chapter 10.

1.9 Other Requirements of the DC Study

1.9.1 Asset Management Plan

The asset management plan shall,

- a) deal with all assets whose capital costs are proposed to be funded under the DC bylaw
- b) demonstrate that all the assets included are financially sustainable over their full life cycle
- c) contain any other information that is prescribed
- d) be prepared in the prescribed manner

1.9.2 Long-term Capital and Operating Impacts

Section 10 (2) (c) of the Act requires an examination of the long-term capital and operating costs for capital infrastructure required for each service to which the development charge by-law would relate.

1.9.3 Consideration of Area Rating

Council must consider the use of area rating, also known as area-specific development charges, as part of the DC Background Study. The Act permits the Region to designate the areas where development charges shall be imposed. The charges may apply to all lands in the Region or only to designated areas as specified in the DC Bylaw.

With the exception of the wastewater charge for the Village of Nobleton, York Region's existing development charge policy is to levy a uniform Region-wide rate. The 2022 Bylaw update proposes to continue with this approach (discussed in more detail in Chapter 12 and in Appendix B).

1.9.4 Sixty-day Circulation Period of the DC Background Study

Municipalities must ensure that a development charges background study is made available to the public at least 60 days prior to the passing of the development charges bylaw and until the bylaw expires or is repealed by posting the study on the website of the municipality or, if there is no such website, in the municipal office.

1.9.5 Rules for Development Charges Payable

The rules for determining if development charges are payable in any particular case and for determining the amount of the development charges involved, are set out in the proposed Bylaw. The quantum of the development charges payable is as calculated in Chapters 3-9 and summarized in the Executive Summary.

The bylaw includes rules deal with matters such as: multiple charges, the connection between servicing needs and development, the list of services for which charges are being imposed, types of development approval triggering the need for the imposition of development charges, the requirements for the installation of local services in addition to payment of the development charge, the method used in calculating development charges for individual developments, the quantum of the charge, the timing of calculation and payment, the alternative means of payment, exemptions, phasing- in of charges, indexing and charges imposed on redevelopment.

2 ANTICIPATED DEVELOPMENT IN YORK REGION

This chapter details the development forecast used in calculating the development charges, as well as a summary of the forecast results.

2.1 Development Charges Growth Forecast

In August 2020, the Province updated the Growth Plan's population and employment targets for municipalities across the Greater Golden Horseshoe (GGH) and extended the planning horizon from 2041 to 2051. York Region has been assigned a target of 2.02 million people and 990,000 jobs by 2051.

York Region is undertaking a Regional Municipal Comprehensive Review (MCR), a key part of which is updating the Region's population and employment forecasts contained in the current Regional Official Plan, and ensuring it meets the target set out in Schedule 3 of the Growth Plan.

This background study assumes a total population 1,704,700 and total employment forecast 860,500 to mid-2041 as the basis for forecasting anticipated development which aligns with the MCR and the updates to Region's infrastructure Master Plans.

2.2 Population and Housing Unit Growth Forecast

The methodology used to generate the population and residential unit mix forecast is outlined in Attachment 1 of the March 2021 York Region staff report on the Proposed 2051 Forecast and Land Needs Assessment.

Net population growth refers to the total growth in population considering both population in new housing units and the decline in population in existing units. The mid-year 2041 net population forecast is 1,704,700. For the purposes of calculating development charges, the population forecast includes the Census undercount but does not include the Region's institutional population. Table 2-1 below summarizes the population and housing unit forecast for the DC growth forecast.

**TABLE 2-1
RESIDENTIAL GROWTH FORECAST SUMMARY**

Year End	Net Population (excl. institutional population)	Housing Units			Total Households
		Single and Semi-Detached Dwellings	Multiple Unit Dwellings ¹	Apartments ²	
2021	1,227,700	264,357	68,163	63,420	395,940
2026	1,333,300	276,216	76,045	79,508	431,769
2031	1,449,700	289,880	85,127	98,042	473,049
2036	1,581,300	303,046	96,025	122,056	521,127
2041 Mid-year	1,704,700	314,846	105,794	143,580	564,219
2022-2031	222,000	25,523	16,964	34,622	77,109
2022-2041	477,000	50,489	37,631	80,159	168,279

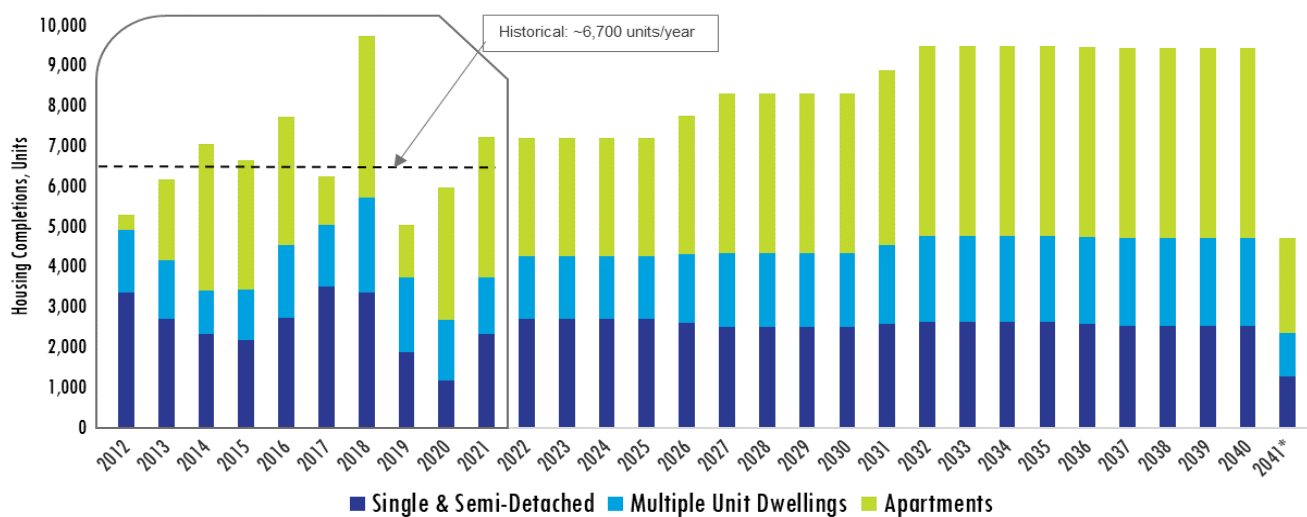
¹ Multiple dwellings consist of row and duplex units.

² Apartment category includes stacked townhouses

Numbers may not sum up due to rounding

From 2022 to mid-2041, the Region is expected to add just over 168,000 residential units, of which 30% are single and semi-detached dwellings, 22% for multiple unit dwellings, and the remaining 48% are apartments. The housing unit mix forecast to 2041 assumes a gradual shift in the Region's housing mix to higher density forms of housing over the forecast period. This change in housing mix is required to respond to the changing demographics of the Region and to meet the Growth Plan's intensification policy requirements. Figure 2-1 below shows the historical and forecast housing growth by type in the Region.

**FIGURE 2-1
HISTORICAL AND FORECAST HOUSING GROWTH (2012 – 2041)**



* 2041 is a half year

2.3 Persons Per Unit Assumptions

'Average' persons per unit (PPU) by dwelling type are based on historical data of PPU's for recently constructed units from Statistics Canada (2001 to 2016) and account for the shift of more families occupying higher density structure types. The 'total unit' PPU's are based on the unit type PPU's weighted by housing forecast mix, which are then adjusted to account for Census undercount.

Table 2-2 summarizes the PPU assumptions informing the housing forecast.

TABLE 2-2
PPU ASSUMPTIONS FOR DC RATE CALCULATIONS

Housing Type	10-year Average Persons per Unit	19.5-year Average Persons per Unit
Single and Semi-Detached Dwellings	3.81	3.81
Multiple Unit Dwellings	3.17	3.17
Large Apartments > = 700 sq. ft.	2.46	2.46
Small Apartments < 700 sq. ft.	1.60	1.60
Total Apartments	2.04	2.04
Weighted PPU	2.88	2.83

Gross population growth only includes the population in new housing units, with no consideration for the decline in the existing population base. For the 10-year DC period, the growth in gross population of 222,074 was estimated by applying the persons per unit (PPU) by dwelling type to the forecast of housing units. (Table 2-3). The calculation of population in new housing units for the 19.5-year DC period to 2041 is also based on the same PPU assumptions. Using this method, the gross population increase from 2022 to 2041 is estimated to be 476,277 (Table 2-4).

TABLE 2-3**YORK REGION 10-YEAR GROWTH FORECAST: 2022 TO 2031****ESTIMATED YORK REGION POPULATION BY DECEMBER 31, 2021: 1,227,700, including:**

- the 2016 Census population with an undercount adjustment
- CMHC housing completion data from May 2016 to June 2021
- estimates for additional units to be completed in 2021 x the 2016 PPU (does not include institutional population) adjusted for an estimated decline

Average Persons Per Unit (PPU) Assumptions

	PPU		Housing Mix	=	Weight
Single and Semi-Detached Dwellings	3.81	x	33.1%	=	1.26
Multiple Unit Dwellings	3.17	x	22.0%	=	0.70
Apartments	2.04	x	44.9%	=	0.92
Weighted Average					2.88

Persons Per Unit (PPU): Based on census 2016 information for households in newly constructed units for the 2001 to 2016 period, as well as adjustments to align with 2051 forecast and adjusted for Census undercount

* Based on estimated forecast mix for the 2021 to 2031 period.

NEW HOUSING UNITS' OCCUPANTS – END OF 2021 TO END OF 2031

Household Unit Growth		PPU	=	Gross Population Increase
77,109	x	2.88	=	222,074

Note: Numbers may not sum due to rounding

DECLINE IN HOUSING UNIT OCCUPANCY – END OF 2021 TO MID 2031

Occupied Household at Dec. 31, 2021		PPU Decline Rate	=	Total Population Decline
395,940	x	0.02%	=	74
Net Population Increase				220,000

Note: Numbers may not add up due to rounding

FORECAST FOR MID-YEAR 2031

Total Households	Total Net Population
473,049	1,449,700

Notes for the 2031 Growth Forecast**DECLINE IN HOUSING UNIT OCCUPANCY – END OF 2021 TO END OF 2031**

December 31, 2021 occupied household estimate: Based on 2016 occupied household Census total plus CMHC housing completion to Jun 2021 plus estimate of units under construction to be completed in 2021

$$\text{PPU decline rate} = \frac{\text{Gross population increase} + \text{Year-end 2021 population estimate} - \text{2031 year-end population forecast}}{\text{2021 year-end household estimate}}$$

Total population decline = PPU decline rate x 2021 year-end household estimate

Forecast for mid-year 2041: Households - 2031 year-end forecast; Population – 2031 year-end forecast (not incl. institutional population)

Net population increase = 2031 year-end forecast – 2021 year-end estimate

TABLE 2-4**YORK REGION 20-YEAR GROWTH FORECAST: 2022 TO 2041****ESTIMATED YORK REGION POPULATION BY DECEMBER 31, 2021: 1,227,700, including:**

- the 2016 Census population with an undercount adjustment
- CMHC housing completion data from May 2016 to June 2021
- estimates for additional units to be completed in 2021 x the 2016 PPU (does not include institutional population) adjusted for an estimated decline.

Average Persons Per Unit (PPU) Assumptions

	PPU		Housing Mix	=	Weight
Single and Semi-Detached Dwellings	3.81	x	30.00%	=	1.14
Multiple Unit Dwellings	3.17	x	22.36%	=	0.71
Apartments	2.04	x	47.63%	=	0.97
Weighted Average					2.83

Persons Per Unit (PPU): Based on census 2016 information for households in new constructed units for the 2001 to 2016 period, as well as adjustments to align with 2051 forecast and adjusted for Census undercount

* Based on estimated forecast mix for the 2021 to 2041 period.

NEW HOUSING UNITS' OCCUPANTS – END OF 2021 TO END OF 2041

Household Unit Growth		PPU	=	Gross Population Increase
168,279	x	2.83	=	476,277

Note: Numbers may not sum due to rounding

DECLINE IN HOUSING UNIT OCCUPANCY – END OF 2021 TO MID 2041

Occupied Household at Dec. 31, 2021		PPU Decline Rate	=	Total Population Decline
395,940	x	-0.18%	=	-723

Net Population Increase **477,000**

Note: Numbers may not sum due to rounding

FORECAST FOR MID-YEAR 2041

Total Households	Total Net Population
564,219	1,704,700

Notes for the 2041 Growth Forecast**DECLINE IN HOUSING UNIT OCCUPANCY – END OF 2021 TO END OF 2041**

December 31, 2021 occupied household estimate: Based on 2016 occupied household Census total plus CMHC housing completion to Jun 2021 plus estimate of units under construction to be completed in 2021

$$\text{PPU decline rate} = \frac{\text{Gross population increase} + \text{Year-end 2021 population estimate} - \text{2041 mid-year population forecast}}{\text{2021 year-end household estimate}}$$

Total population decline = PPU decline rate x 2021 year-end household estimate

Forecast for mid-year 2041: Households - 2041 mid-year forecast; Population – 2041 mid-year forecast (not incl. institutional population)

Net population increase = 2041 mid-year forecast – 2021 year-end estimate

2.4 Employment and Non-Residential Space Forecast

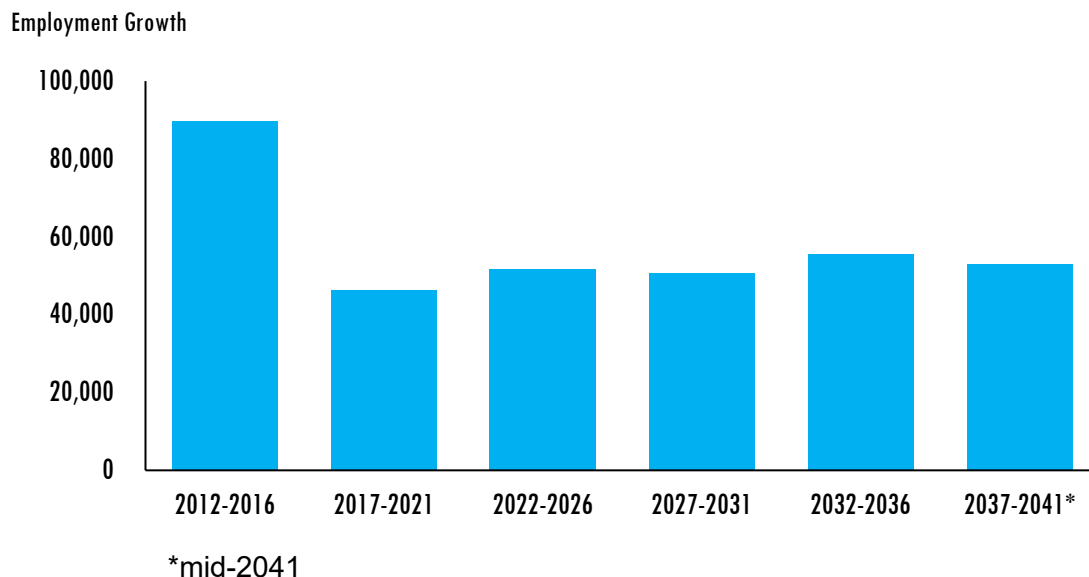
Consistent with the population forecast, the employment forecast is based on the recent York Region MCR work. The methodology for the employment forecast is outlined in Attachment 1 of the March 2021 York Region staff report on the Proposed 2051 Forecast and Land Needs Assessment. The impact of the COVID-19 pandemic was not evaluated for the forecast as it is too early to identify any long-term trends. The next MCR may provide further insights into the impacts of COVID-19.

The forecast total employment to mid-2041 is 860,500 (Table 2-5) with growth of approximately 210,600 over the 19.5-year forecast period, or about 10,800 jobs per year. To calculate non-residential development charge rates, work-at-home employment was removed from the total employment forecast growth, as it does not result in new building space. There was also an adjustment made to account for some employment growth that will occur in existing space and therefore not require new building space.

The employment growth (less work at home employment) by building type is estimated by examining the forecast by the four employment types – major office, employment land, population-related, and rural employment. The shares of growth within each employment type by the four building types (industrial, office, institutional, and retail) were estimated by examining historical shares of employment growth using York Region’s building permit data and employment survey data. In addition, a hotel space forecast was also generated as a segment of the retail building type.

Figure 2-2 shows historical forecast year-end to year-end employment growth with the exception of 2041 which is to mid-year.

FIGURE 2-2
YORK REGION HISTORICAL AND FORECAST EMPLOYMENT GROWTH



To derive the total employment growth that will generate new non-residential space (Table 2-5), the following deductions are made:

1. Work-at-Home Employment

Work-at-home employment is based on a projection that calculates work-at-home as a share of the Region's labour force. Work-at-home employment in the Region is forecast to increase from about 10% to 12% as a share of total employment growth over the forecast period. The employment growth (less work at home employment) by building type is estimated by first examining the forecast by the four employment types – major office, employment land, population-related, and rural employment. The shares of growth within each employment type by the four building types (industrial, office, institutional, and retail) were estimated by examining historical shares of employment growth using York Region building permit data and employment survey data.

2. GFA Growth Adjustment Factor

An adjustment factor is applied to the employment growth (less the work-at-home employment growth) to account for employment growth that does not require new floor space. Recent development trends suggest that the forecast employment growth does not align with growth occurring in new space. This could be due to existing space achieving planned occupancy (previously unoccupied space), and/or through renovations of existing space allowing for higher employment density. In addition, the adjustment factor also accounts for the anticipated continued increase in contracting out and growth in no-fixed place of work employment. The adjustment factor is a necessary modification to the employment forecast.

**TABLE 2-5
EMPLOYMENT GROWTH FORECAST**

	All Employment Growth											Employment requiring new space(reflecting reoccupation and intensification in new space)						
	Total Employment	Employment Growth	WFH Share	Employment growth Less WFH	Other Retail	Industrial	Office	Institutional	IOI	Hotel	Total	Other Retail	Industrial	Office	Institutional	IOI	Hotel	Total Employment requiring new space
2021	649,900																	-
2022	660,250	10,350	9.78%	9,337	1,806	3,296	2,922	1,277	7,495	36	9,337	1,714	2,802	2,192	1,213	6,207	36	7,957
2023	670,600	10,350	9.78%	9,337	1,806	3,296	2,922	1,277	7,495	36	9,337	1,714	2,802	2,192	1,213	6,207	36	7,957
2024	680,950	10,350	9.78%	9,337	1,806	3,296	2,922	1,277	7,495	36	9,337	1,714	2,802	2,192	1,213	6,207	36	7,957
2025	691,300	10,350	9.78%	9,337	1,806	3,296	2,922	1,277	7,495	36	9,337	1,714	2,802	2,192	1,213	6,207	36	7,957
2026	701,500	10,200	9.78%	9,202	1,779	3,249	2,880	1,258	7,387	37	9,203	1,688	2,761	2,160	1,195	6,116	37	7,841
2027	711,500	10,000	10.84%	8,916	1,709	3,132	2,828	1,209	7,169	37	8,915	1,622	2,662	2,121	1,149	5,932	37	7,591
2028	721,500	10,000	10.84%	8,916	1,709	3,132	2,828	1,209	7,169	37	8,915	1,621	2,662	2,121	1,149	5,932	37	7,590
2029	731,500	10,000	10.84%	8,916	1,709	3,132	2,828	1,209	7,169	37	8,915	1,622	2,662	2,121	1,149	5,932	37	7,591
2030	741,500	10,000	10.84%	8,916	1,709	3,132	2,828	1,209	7,169	37	8,915	1,621	2,662	2,121	1,149	5,932	37	7,590
2031	752,050	10,550	10.84%	9,406	1,803	3,304	2,984	1,276	7,564	39	9,406	1,710	2,809	2,238	1,212	6,259	39	8,008
2032	763,100	11,050	10.91%	9,844	1,901	3,305	3,230	1,366	7,901	42	9,844	1,804	2,810	2,422	1,298	6,530	42	8,376
2033	774,150	11,050	10.91%	9,844	1,901	3,305	3,230	1,366	7,901	42	9,844	1,804	2,810	2,422	1,298	6,530	42	8,376
2034	785,200	11,050	10.91%	9,844	1,901	3,305	3,230	1,366	7,901	42	9,844	1,804	2,810	2,422	1,298	6,530	42	8,376
2035	796,250	11,050	10.91%	9,844	1,901	3,305	3,230	1,366	7,901	42	9,844	1,804	2,810	2,422	1,298	6,530	42	8,376
2036	807,650	11,400	10.91%	10,156	1,961	3,410	3,332	1,410	8,152	43	10,156	1,861	2,899	2,499	1,339	6,737	43	8,641
2037	819,400	11,750	11.72%	10,373	1,978	3,395	3,530	1,427	8,352	44	10,374	1,877	2,885	2,647	1,355	6,887	44	8,808
2038	831,150	11,750	11.72%	10,373	1,978	3,395	3,530	1,427	8,352	44	10,374	1,877	2,885	2,647	1,355	6,887	44	8,808
2039	842,900	11,750	11.72%	10,373	1,978	3,395	3,530	1,427	8,352	44	10,374	1,877	2,885	2,647	1,355	6,887	44	8,808
2040	854,650	11,750	11.72%	10,373	1,978	3,395	3,530	1,427	8,352	44	10,374	1,877	2,885	2,647	1,355	6,887	44	8,808
mid-2041	860,500	5,850	11.72%	5,164	985	1,690	1,757	710	4,157	22	5,164	934	1,437	1,318	675	3,430	22	4,386
2022-2031		102,150		91,622	17,642	32,265	28,864	12,478	73,607	368	91,617	16,740	27,426	21,650	11,855	60,931	368	78,039
2022-2041		210,600		187,809	36,104	64,165	60,993	25,770	150,928	777	187,809	34,259	54,542	45,743	24,481	124,766	777	159,802

The forecast growth in non-residential space is derived by multiplying the employment growth requiring new space for each building type with employee density assumptions also known as floor space per worker (FSW). The FSW assumptions were derived by examining industry standards and the observed employment densities of buildings constructed using data and information from the York Region employment survey and building permits. Table 2-6 summarizes the FSW assumptions used in the non-residential space forecast (Table 2-7).

TABLE 2-6
NON-RESIDENTIAL FSW PER EMPLOYEE ASSUMPTIONS

Employment Type	Sq. Ft. per Employee
Retail	430
Industrial	850
Office	250
Institutional	900
Hotel	2,000

TABLE 2-7
NON-RESIDENTIAL GFA GROWTH FORECAST

Worker						
2022	736,966	2,381,718	547,923	1,091,742	72,000	4,830,082
2023	737,005	2,381,718	547,923	1,091,742	72,000	4,829,942
2024	736,966	2,381,718	547,923	1,091,742	72,000	4,830,082
2025	736,966	2,381,718	547,923	1,091,742	72,000	4,830,082
2026	725,783	2,347,200	539,982	1,075,920	74,000	4,761,917
2027	697,281	2,262,997	530,329	1,033,968	74,000	4,598,742
2028	697,242	2,262,997	530,329	1,033,968	74,000	4,598,883
2029	697,281	2,262,997	530,329	1,033,968	74,000	4,598,742
2030	697,242	2,262,997	530,329	1,033,968	74,000	4,598,883
2031	735,504	2,387,461	559,497	1,090,836	78,000	4,852,135
2032	775,604	2,388,152	605,601	1,168,132	84,000	5,021,010
2033	775,604	2,388,152	605,601	1,168,132	84,000	5,021,010
2034	775,604	2,388,152	605,601	1,168,132	84,000	5,021,010
2035	775,604	2,388,152	605,601	1,168,132	84,000	5,021,010
2036	800,261	2,463,795	624,783	1,205,131	86,000	5,179,714
2037	806,907	2,452,542	661,810	1,219,811	88,000	5,229,215
2038	806,945	2,452,542	661,810	1,219,811	88,000	5,229,074
2039	806,907	2,452,542	661,810	1,219,811	88,000	5,229,215
2040	806,945	2,452,542	661,810	1,219,811	88,000	5,229,074
mid-2041	401,733	1,221,053	329,497	607,310	44,000	2,603,494
2022-2031	7,198,236	23,313,521	5,412,487	10,669,596	736,000	47,329,490
2022-2041	14,730,350	46,361,145	11,436,411	22,033,809	1,554,000	96,113,316

3 WATER: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

3.1 Program Description

The water capital program (Table 3-4) consists of infrastructure and initiatives required to support growth as recommended by the 2021 York Region's Water and Wastewater Master Plan Update (2021 Master Plan), and other studies. The program includes several projects consisting of a combination of the following components:

- Water supply including wells, treatment and cost-shared projects with the City of Toronto and the Region of Peel
- Pumping stations
- Storage facilities
- Watermains and system interconnections
- Planning and studies to support growth such as Long-Term Water Conservation program, Master Plans and Capacity Assessments

3.2 Level of Service

When another Act or Provincial Agency requires a higher level of service than what is permitted under section 5(1)4 of the Act, development charges may be established based on the prescribed level of service as required under another Act. York Region's water service is provided in accordance with provincial design guidelines and requirements and recognizes engineering design standards.

Through the Water and Wastewater Master Plan, design unit rates are developed to assist in identifying infrastructure needs over the long term. Water design unit rates recommended by the 2021 Master Plan, shown in Table 3-1, have been derived from the Regional water consumption forecast model that uses regression analysis of past water consumption trends, while taking into consideration the Region's long-term Water Conservation Program. Unit rates will continue to be monitored and adjusted as flow data becomes available to inform the water program implementation.

TABLE 3-1
2041 WATER DESIGN UNIT RATES

	Residential (l/c/d*)	Employment (l/c/d)
2021 Master Plan**	195	151
2016 Master Plan	189	144
2009 Master Plan	239	228

* Litres per capita per day

** While using the same methodology to estimate unit rates (i.e., Water Consumption Forecast Model), the 2021 Master Plan unit rates are marginally higher than those in the 2016 Master Plan. This is attributed to recalibration of existing flows with measured water production data since 2016. The unit rates shown in the 2017 DC Bylaw (201 l/c/d for residential and 155 l/c/d for employment) came from the 2016 Master Plan Update and are applicable to year 2031.

3.3 Benefit to Existing Development Deduction

As with other services, the methodology for establishing benefit to existing deduction is based on the principle that growth should pay for growth. Therefore, when a project was required to meet an increase in need due to development, no benefit to existing was allocated. In cases where benefit to existing was considered, it was addressed on a project-by-project basis.

1. In cases of **enhancements and/or modification of the existing treatment processes** to meet statutory requirements, the following methodology applies:
 - a) No benefit to existing applies where a growth project requires enhancement and/or modification of the existing treatment process to meet stringent regulatory requirements as part of the project approval requirements. Existing residents should not be asked to pay for improvements they don't need if growth does not occur
 - b) Where it can be demonstrated that enhancement of treatment process is required regardless of the growth project, then a portion of the project can be considered benefit to existing
2. In the case of **enhancements for system security**:
 - a) No benefit to existing applies to growth projects which add system security
 - b) If a portion of the project is triggered solely by the need to provide system redundancy, and is not required for growth, then the corresponding cost will be considered benefit to existing and is not included in the development charges rate calculation

3. In the case of growth projects **replacing/decommissioning of existing facilities**, the following methodology applies:
- a) If the replacement year of an existing facility is within 10 years of the timing of the growth project, the two projects can be combined. As such, where a growth project replaces a facility within 10 years of the end of its useful life as identified in a completed condition assessment, the Region's Asset Management Plan or established under the Public Sector Accounting Board (PSAB) reporting a portion of the cost can be considered as benefit to existing and is calculated as follows:

$$BTE = \frac{C_o}{C_u} x P$$

Where:

C_o is the capacity of the existing facility to be replaced

C_u is the total capacity of the new facility

P is the cost of the project within the DC period including facility decommissioning

- b) Where a growth project advances the replacement of an existing facility by more than 10 years from the end of its expected useful life, no benefit to existing applies, and the replacement cost would be fully attributable to growth because:
- The existing facility is still sound, and the service received by the residents will not noticeably and tangibly be increased by the new facility
 - The time value of money for improvements is higher when payments are advanced
 - Funds collected to cover the specific facility replacement have not yet built up to the target amount

3.4 Post Period Benefit Deduction

Where infrastructure is sized to accommodate growth beyond the Bylaw planning horizon, the additional cost of providing the oversized infrastructure has been recognized as post period benefit and calculated on a project-by-project basis, as follows:

1. **In the case of discrete assets**, such as groundwater wells, storage facilities, treatment plants and pumping stations, a pro-rated capacity method is used. This method is based on pro-rating the cost of capacity attributable to growth beyond the planning horizon (post 2041), excluding base costs that would be required, regardless of the planning period or capacity of the project. Such post-period costs would be eligible for recovery in subsequent development charges bylaws.

$$PPB = \frac{C_u - F_{pp}}{C_u - C_e} \times P_{net}$$

Where:

C_u is the total capacity immediately after new facility completion in the service area up to 2051

F_{pp} is the estimated flows in the service area in 2041

C_e is the existing capacity before commissioning the new facility

P_{net} is the cost of the project excluding certain base costs, such as:

- Environmental Assessment costs which are expected to be generally the same for a facility sized for 2041 or for other years, i.e., 2051
- Supervisory Control and Data Acquisition System costs are expected to be generally the same for facility sized for 2041 or for other years
- For a pumping facility, normally at least one pump is required for standby. If a standby pump is required for the new facility, the hypothetical cost of one-pump station is considered base cost and calculated as:

Base Cost = P / Number of pumps

Where:

P is the project cost excluding environmental assessment and SCADA system costs

- Other fixed costs where applicable, on a project-by-project basis.

No post period benefit will apply for decommissioning projects in general, as there is no benefit to growth beyond 2041.

2. The determination of post period benefit **for Peel and Toronto cost-shared projects** (through partnership servicing agreements) is based on a pro-rated capacity method, which has been used since 2012, and calculated as follows:

$$PPB = \frac{C_{agt} - D_{2041}}{C_{agt} - C_{2022}} \times P_{cs}$$

Where:

C_{agt} is the total capacity that York Region secured with municipal partners (535 ML/d from Toronto and 331 ML/d from Peel)

D_{2041} is the estimated Lake Ontario based demand required from Toronto and Peel water systems in 2041

C_{2022} is the capacity York Region secured from Toronto and Peel at the beginning of 2022

P_{cs} is the total York Region share of the cost-shared projects in Toronto and Peel from 2022 onwards to provide the respective capacities, excluding costs related to administration of the servicing agreements

3. **In the case of linear assets**, a marginal cost approach is used. The cost of a project (including planning, design, construction, contingency and project management) required to service growth within the Bylaw planning horizon is determined. The additional, or marginal costs required to increase the infrastructure size to service beyond 2041 is considered to provide a post-period benefit.

This approach requires sizing “hypothetical” watermains to service 2041 growth needs through the following criteria:

- Minimum size of 300mm in diameter
- Capacity to meet maximum day demand plus fire flow need in 2041
- Capacity to meet peak hour demand in 2041

Cost estimates are derived from cost valuation models developed for the 2021 Master Plan.

3.5 Grants, Subsidies, and Other Contributions

Any applicable grants, subsidies and other contributions have been deducted from the development-charge-eligible costs in accordance with the requirements of the Act. The grants are primarily from the senior levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in this Background Study, the anticipated contributions are approximately \$48 million.

3.6 Residential versus Non-Residential Allocation

The residential vs. non-residential allocation is based on incremental flow estimates as set out in Table 3-2. The residential share is 79.40%, and the non-residential share is 20.60%.

TABLE 3-2
WATER / WASTEWATER DEMAND FORECAST CALCULATIONS:
FLOW SPLIT RESIDENTIAL VERSUS NON-RESIDENTIAL

Residential Component	
Population Growth (2021 - 2041)	476,277
Non-Residential Component	
Employment Growth (2021 – 2041)	159,802
Residential / Non-Residential Cost Share Ratio	
Proportion	= Flow per capita x growth
Residential	= 195 x 476,277 = 92,874,015 (see notes 1 and 2)
Non-Residential	= 151 x 159,802 = 24,130,102 (see notes 1 and 2)
Total	117,004,117
Residential share 79.40%	
Non-Residential share 20.60%	

Note 1 - Unit consumption rates are population weighted averages based on the projected 2041 water unit rates in the 2021 Water and Wastewater Master Plan.

Note 2 - Population growth figures can be found in the anticipated development section of the background study. These figures exclude populations in institutions. Employment population only includes employment growth that would be generated by new development.

The cost share attributable to non-residential development (shown in Table 3-3) was divided between retail, institutional office and industrial, and hotel uses. This is based on the incremental growth in employment by type.

TABLE 3-3
NON-RESIDENTIAL ALLOCATION

Retail	Industrial/ Office/ Institutional	Hotel
4.42%	16.10%	0.10%

2022 Development Charge Background Study
Water Services
Growth-related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											79.40%	Retail	Industrial/ Office/ Institutional
Water Supply													
1	Ballantrae Wells EA	2022-2031	29,000	0	29,000	0	29,000	29,000	0	23,026	1,282	4,669	29
2	Nobleton Water Servicing	2032-2041	7,603,955	0	7,603,955	0	7,603,955	7,603,955	0	6,037,540	336,194	1,224,367	7,625
3	Toronto Water Supply - Cost Shared Works	2022-2041	47,800,000	0	47,800,000	0	47,800,000	300,000	47,500,000	238,200	13,264	48,305	301
4	Peel Water Supply - Cost - Shared Works	2022-2041	16,010,000	0	16,010,000	0	16,010,000	1,595,703	14,414,297	1,266,988	70,551	256,935	1,600
5	Georgina Water System Upgrades	2032-2041	21,807,175	0	21,807,175	0	21,807,175	5,742,675	16,064,500	4,559,684	253,901	924,669	5,759
Subtotal Supply			93,250,131	0	93,250,131	0	93,250,131	15,271,333	77,978,797	12,125,439	675,192	2,458,946	15,313
Water Pumping													
6	Aurora East Booster Pumping Station Upgrades	2022-2031	11,442,000	0	11,442,000	0	11,442,000	11,442,000	0	9,084,948	505,886	1,842,358	11,474
7	North Richmond Hill Pumping Station Decommissioning	2032-2041	1,474,846	0	1,474,846	0	1,474,846	1,474,846	0	1,171,028	65,207	237,475	1,479
8	East Woodbridge Pumping Station Decommissioning	2032-2041	1,258,470	0	1,258,470	0	1,258,470	1,258,470	0	999,225	55,641	202,635	1,262
9	Northeast Vaughan Water Servicing	2022-2031	100,036,000	48,330,000	51,706,000	0	51,706,000	41,786,347	9,919,653	33,178,359	1,847,502	6,728,317	41,902
10	North Markham Water Servicing	2032-2041	112,717,333	0	112,717,333	0	112,717,333	69,306,576	43,410,758	55,029,421	3,064,255	11,159,545	69,498
11	West Park Heights Pumping Station and Watermain	2032-2041	47,948,163	0	47,948,163	0	47,948,163	27,087,055	20,861,108	21,507,122	1,197,601	4,361,480	27,162
Subtotal Water Pumping			274,876,812	48,330,000	226,546,812	0	226,546,812	152,355,294	74,191,519	120,970,103	6,736,092	24,531,811	152,776
Water Storage													
12	Newmarket West Water Servicing	2032-2041	28,574,594	0	28,574,594	0	28,574,594	23,865,216	4,709,379	18,948,981	1,055,154	3,842,708	23,931
13	Stouffville Water Servicing*	2032-2041	4,817,077	0	4,817,077	0	4,817,077	2,618,924	2,198,153	2,079,426	115,791	421,692	2,626
14	West Vaughan Water Servicing	2032-2041	25,024,374	0	25,024,374	0	25,024,374	23,910,758	1,113,615	18,985,142	1,057,168	3,850,041	23,977
15	Vaughan Storage Expansion*	2032-2041	34,884,182	0	34,884,182	0	34,884,182	25,678,483	9,205,699	20,388,716	1,135,324	4,134,675	25,749
16	Holland Landing Storage Expansion	2032-2041	10,343,476	0	10,343,476	3,620,217	6,723,260	4,073,586	2,649,674	3,234,427	180,106	655,917	4,085
17	Queensville Elevated Tank No. 2*	Post 2041	4,447,324	0	4,447,324	0	4,447,324	0	4,447,324	0	0	0	0
Subtotal Storage			108,091,028	0	108,091,028	3,620,217	104,470,811	80,146,967	24,323,844	63,636,692	3,543,542	12,905,034	80,368
Water Linear													
18	York East Water Servicing*	2032-2041	124,871,617	0	124,871,617	36,818,664	88,052,953	68,505,898	19,547,055	54,393,683	3,028,855	11,030,622	68,695
19	Bloomington - Bayview Watermain*	Post 2041	0	0	0	0	0	0	0	0	0	0	0
20	York Peel Feedermain Upgrade	2022-2031	3,396,000	0	3,396,000	0	3,396,000	3,396,000	0	2,696,424	150,148	546,814	3,405
21	Orchard Heights Reservoir Inlet Upgrade	2022-2031	1,554,000	0	1,554,000	0	1,554,000	1,554,000	0	1,233,876	68,707	250,221	1,558
22	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Water Servicing	2022-2031	3,550,000	0	3,550,000	0	3,550,000	3,550,000	0	2,818,700	156,956	571,611	3,560
23	Eagle to Kirby Pumping Station Watermain	2022-2031	11,948,364	0	11,948,364	0	11,948,364	11,948,364	0	9,487,001	528,274	1,923,891	11,981
24	Green Lane Leslie Street Watermain	2026-2036	30,992,121	0	30,992,121	0	30,992,121	24,194,950	6,797,170	19,210,791	1,069,733	3,895,801	24,262
25	East Gwillimbury Water Servicing*	2022-2031	35,144,722	0	35,144,722	0	35,144,722	35,144,722	0	27,904,910	1,553,855	5,658,902	35,242
26	Yonge Street Watermain*	Post 2041	0	0	0	0	0	0	0	0	0	0	0
Subtotal Water Linear			211,456,825	0	211,456,825	36,818,664	174,638,161	148,293,935	26,344,225	117,745,385	6,556,527	23,877,862	148,703

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
							79.40%	4.42%	16.10%	0.10%			
Subtotal Planning and Studies													
27	Water for Tomorrow Program	2022-2041	19,915,000	0	19,915,000	0	19,915,000	19,915,000	0	15,812,510	880,503	3,206,656	19,970
28	Water Master Plan Update	2022-2041	4,810,000	0	4,810,000	0	4,810,000	4,810,000	0	3,819,140	212,665	774,492	4,823
29	Water System Capacity Assessment	2022-2041	14,118,000	0	14,118,000	0	14,118,000	14,118,000	0	11,209,692	624,200	2,273,240	14,157
Subtotal Planning and Studies			38,843,000	0	38,843,000	0	38,843,000	38,843,000	0	30,841,342	1,717,368	6,254,388	38,950
Other													
30	Credits	2022-2041	50,750,000	0	50,750,000	0	50,750,000	50,750,000	0	40,295,500	2,243,812	8,171,619	50,890
Subtotal Other			50,750,000	0	50,750,000	0	50,750,000	50,750,000	0	40,295,500	2,243,812	8,171,619	50,890
Total			777,267,795	48,330,000	728,937,795	40,438,881	688,498,915	485,660,530	202,838,385	385,614,461	21,472,534	78,199,660	487,001

*These projects will have expenditures beyond 2041, not currently captured in the 2022 DC bylaw

4 WASTEWATER: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

4.1 Program Description

The wastewater capital program (Table 4-1) consists of infrastructure and initiatives required to support growth as recommended by the 2021 York Region Water and Wastewater Master Plan Update (2021 Master Plan) and other studies. The program includes several projects consisting of a combination of the following components:

- Wastewater Treatment including Water Resource Recovery Facilities, Duffin Water Pollution Control Plant and cost-shared projects with the Region of Peel
- Sewage pumping stations and forcemains
- Trunk sewers and flow control management systems
- Planning and studies including Inflow and Infiltration Reduction, Master Plans and Capacity Assessments

4.2 Level of Service

When another Act, or Provincial Agency, requires a higher level of service than what is permitted under section 5 (1)4 of the Act, development charges may be established based on the prescribed level of service as required under another Act. York Region's wastewater service is provided in accordance with provincial design guidelines and requirements and recognizes engineering design standards.

Through the Master Plan, design unit rates are developed to assist in identifying infrastructure needs over the long term. Water design unit rates recommended by the 2021 Master Plan (see Section 4.2) were also used in the development of the wastewater program. Consistent with the 2016 Master Plan, the Regional 25-year design storm was used to size the wastewater system, with inflow and infiltration reduction considered through the recalibration of the Regional wastewater hydraulic model using measured flows. For wastewater treatment (i.e., water resource recovery facilities) capacity is evaluated individually based on both hydraulic and treatment capabilities.

4.3 Benefit to Existing Development Deduction

The methodology to determine benefit to existing development deduction for wastewater assets is the same as for water assets. The methodology is based on the principle that growth should pay for growth. Therefore, when a project is required to meet the increase in need for service arising from development, no benefit to existing is allocated. In cases where benefit to existing is considered, it is addressed on a project-by-project basis.

1. In cases of **enhancements and/or modification of the existing treatment processes** to meet statutory requirements, the following methodology applies:
 - a) No benefit to existing applies where a growth project requires enhancement and/or modification of the existing treatment process to meet stringent regulatory requirements as part of the project approval requirements. Existing residents should not be asked to pay for improvements they don't need if growth does not occur
 - b) Where it can be demonstrated that enhancement of treatment process is required regardless of the growth project, then a portion of the project can be considered benefit to existing
2. In the case of **enhancements for system security**:
 - a) No benefit to existing applies to growth projects which add system security
 - b) If a portion of the project is triggered solely by the need to provide system redundancy, and is not required for growth, then the corresponding cost will be considered benefit to existing and is not included in the development charges rate calculation
3. In the case of **growth projects replacing/decommissioning of existing facilities**, the following methodology applies:
 - a) If the replacement year of an existing facility is within 10 years of the timing of the growth project, the two projects can be combined. As such, where a growth project replaces a facility within 10 years of the end of its useful life as identified in a completed condition assessment, the Region's Asset Management Plan or established under the Public Sector Accounting Board (PSAB) reporting a portion of the cost can be considered as benefit to existing and is calculated as follows:

$$BTE = \frac{C_o}{C_u} x P$$

Where:

C_o is the capacity of the existing facility to be replaced

C_u is the total capacity of the new facility

P is the project cost within the DC period incl. decommissioning of the existing facility

- b) Where a growth project advances the replacement of an existing facility by more than 10 years from the end of its expected useful life, no benefit to existing applies, and the replacement cost would be fully attributable to growth because:
 - The existing facility is still sound, and the service received by the residents will not noticeably and tangibly be increased by the new facility
 - The time value of money for improvements is higher when payments are advanced
 - Funds collected to cover the specific facility replacement have not yet built up to the target amount.

4.4 Post Period Benefit Deduction

Where infrastructure is sized to accommodate growth beyond the Bylaw planning horizon, the additional cost of providing the oversized infrastructure has been recognized as post period benefit and calculated on a project-by-project basis, as follows:

1. **In the case of discrete assets**, such as treatment facilities and pumping stations, a pro-rated capacity method is used. This method is based on pro-rating the cost of capacity attributable to growth beyond the planning horizon (post 2041), excluding base costs that would be required, regardless of the planning period or capacity of the project. Such post-period costs would be eligible for recovery in subsequent development charge bylaws:

$$PPB = \frac{C_u - F_{pp}}{C_u - C_e} \times P_{net}$$

Where:

C_u is the total capacity immediately after new facility completion in the service area up to 2051

F_{pp} is the estimated flows in the service area in 2041)

C_e is the existing capacity before commissioning the new facility

P_{net} is the cost of the project **excluding certain base costs**, such as:

- Environmental Assessment costs which are expected to be generally the same for a facility sized for 2041 or for other years, i.e., 2051
- Supervisory Control and Data Acquisition System costs are expected to be generally the same for facility sized for 2041 or for other years
- For a pumping facility, normally at least one pump is required for standby. If a standby pump is required for the new facility, the hypothetical cost of one-pump is considered base cost and calculated as:

$$\text{Base Cost} = P / \text{Number of pumps}$$

Where:

P is the cost of the project excluding environmental assessment and SCADA system costs

- Other fixed costs where applicable on a project-by-project basis

No post period benefit will apply for decommissioning projects in general, as there is no benefit to growth beyond 2041.

2. The determination of post period benefit **for the Peel wastewater cost-shared projects** is based on the estimated 2041 flow to be diverted to Peel for treatment

3. **In the case of linear assets**, a marginal cost approach is used. The cost of a project (including planning, design, construction, contingency and project management) required to service growth within the Bylaw planning horizon is determined. The additional, or marginal costs required to increase the infrastructure size to service beyond 2041 is considered to provide a post-period benefit.

This approach requires sizing of “hypothetical” sanitary sewers to service 2041 growth needs through the following criteria:

- Minimum size of 450mm in diameter
- Capacity to convey the peak wet weather flow in 2041 under a 25-year storm event

Cost estimates are derived from cost valuation models developed for the 2021 Master Plan.

4.5 Grants, Subsidies and Other Contributions

Any applicable grants, subsidies and other contributions have been deducted from the development charges eligible costs in accordance with the requirements of the Act. The grants are primarily from the senior levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in the 2022 Development Charges Background Study, the anticipated contributions are approximately \$234 million.

4.6 Residential versus Non-Residential Allocation

The residential vs. non-residential allocation is based on incremental flow estimates as set out in Table 3-1. The residential share is 79.40%, and the non-residential share is 20.60% (see Table 3-2).

The cost share attributable to non-residential development (shown in Table 3-3) was divided between retail, institutional office and industrial, and hotel uses. This is based on the incremental growth in employment by type.

2022 Development Charge Background Study
Wastewater Services
Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										79.40%	4.42%	16.10%	0.10%
Wastewater Treatment													
1	Keswick Wastewater Servicing	2022-2041	41,820,000	0	41,820,000	0	41,820,000	7,548,000	34,272,000	5,993,112	333,720	1,215,357	7,569
2	Duffin Creek Water Pollution Control Plant Phase 3 Expansion	2022-2031	5,050,000	1,919,000	3,131,000	0	3,131,000	3,131,000	0	2,486,014	138,431	504,145	3,140
3	Duffin Creek Water Pollution Control Plant Stages 1 & 2 Upgrades	2022-2031	30,000	0	30,000	0	30,000	30,000	0	23,820	1,326	4,831	30
4	Duffin Creek Water Pollution Control Plant Lab Expansion	2022-2031	2,414,000	0	2,414,000	0	2,414,000	2,414,000	0	1,916,716	106,730	388,695	2,421
5	Holland Landing Lagoon Decommissioning	2022-2031	1,100,000	1,100,000	0	0	0	0	0	0	0	0	0
6	Upper York Water Reclamation Centre	2022-2031	549,938,000	0	549,938,000	0	549,938,000	549,938,000	0	436,650,772	24,314,437	88,549,433	551,456
7	Duffin Creek Water Pollution Control Plant Outfall Effluent Strategy	2022-2031	12,341,000	2,468,000	9,873,000	0	9,873,000	9,873,000	0	7,839,162	436,515	1,589,722	9,900
8	Duffin Creek Water Pollution Control Plant Growth Expansions*	2026-2041	395,988,800	79,198,800	316,790,000	0	316,790,000	97,779,317	219,010,683	77,636,778	4,323,122	15,744,144	98,049
9	Duffin Creek Water Pollution Control Plant Stages 1 & 2 Chlorine Contact Chamber Expansion	2022-2031	15,480,000	1,549,000	13,931,000	0	13,931,000	13,931,000	0	11,061,214	615,932	2,243,130	13,969
10	Sutton Wastewater Servicing	2032-2041	56,323,442	0	56,323,442	0	56,323,442	42,203,242	14,120,200	33,509,374	1,865,934	6,795,445	42,320
11	Upper York Servicing Infrastructure Expansions 1 and 2*	2032-2041	223,236,780	0	223,236,780	0	223,236,780	0	223,236,780	0	0	0	0
12	Nobleton Wastewater Servicing	2032-2041	21,969,060	0	21,969,060	0	21,969,060	21,969,060	0	17,443,433	971,319	3,537,395	22,030
Subtotal Wastewater Treatment			1,325,691,082	86,234,800	1,239,456,282	0	1,239,456,282	748,816,619	490,639,663	594,560,396	33,107,467	120,572,296	750,883
Wastewater Pumping													
13	Queensville Holland Landing Sharon York Durham Sewage System Connection	2022-2031	2,120,000	0	2,120,000	0	2,120,000	2,120,000	0	1,683,280	93,732	341,356	2,126
14	Leslie Street Sewage Pumping Station Upgrade	2022-2031	10,000	0	10,000	0	10,000	10,000	0	7,940	442	1,610	10
15	East Queensville Sewage Pumping Station and Forcemain	2022-2031	16,315,480	0	16,315,480	0	16,315,480	14,000,400	2,315,080	11,116,317	619,000	2,254,304	14,039
16	Leslie Street Sewage Pumping Station Expansion*	2031-2041	9,507,541	0	9,507,541	0	9,507,541	5,143,071	4,364,470	4,083,599	227,391	828,123	5,157
17	East Gwillimbury Sewage Pumping Stations Expansion	2032-2041	7,036,778	0	7,036,778	0	7,036,778	4,820,828	2,215,950	3,827,737	213,144	776,236	4,834
18	King City Wastewater Servicing*	2026-2041	40,141,675	0	40,141,675	0	40,141,675	4,622,995	35,518,680	3,670,658	204,397	744,381	4,636
Subtotal Wastewater Pumping			75,131,474	0	75,131,474	0	75,131,474	30,717,294	44,414,180	24,389,532	1,358,105	4,946,010	30,802
Wastewater Linear													
19	West Vaughan Sewage Servicing	2022-2041	389,253,000	0	389,253,000	0	389,253,000	358,206,110	31,046,890	284,415,651	15,837,385	57,677,316	359,195
20	Richmond Hill Langstaff Gateway Provincial Urban Growth Centre Wastewater Servicing	2022-2031	15,178,000	0	15,178,000	0	15,178,000	12,267,950	2,910,050	9,740,752	542,403	1,975,350	12,302
21	Northeast Vaughan Wastewater Servicing	2022-2031	171,626,000	99,374,000	72,252,000	0	72,252,000	63,873,100	8,378,900	50,715,241	2,824,025	10,284,663	64,049
22	Primary Trunk Sewer	2022-2031	228,596,000	45,722,000	182,874,000	0	182,874,000	136,436,310	46,437,690	108,330,430	6,032,266	21,968,582	136,813

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										79.40%	4.42%	16.10%	0.10%
23	Newmarket Diversion Sewer	2032-2041	29,797,687	0	29,797,687	0	29,797,687	20,196,997	9,600,690	16,036,416	892,971	3,252,062	20,253
24	North Markham Trunk Sewer	2032-2041	43,204,641	0	43,204,641	0	43,204,641	34,130,001	9,074,640	27,099,220	1,508,991	5,495,514	34,224
25	Yonge Street Sewer Twinning	2022-2031	65,934,090	0	65,934,090	0	65,934,090	56,399,910	9,534,180	44,781,528	2,493,612	9,081,351	56,556
26	York Durham Sewage System Forcemain Twinning	2022-2031	2,096,000	0	2,096,000	0	2,096,000	2,096,000	0	1,664,224	92,671	337,492	2,102
27	York Durham Sewage System Conveyance Expansion*	Post 2041	2,244,858	0	2,244,858	0	2,244,858	0	2,244,858	0	0	0	0
28	York Durham Sewage System Conveyance Optimization	2022-2031	6,560,427	0	6,560,427	0	6,560,427	6,560,427	0	5,208,979	290,056	1,056,341	6,579
29	York Durham Sewage System Interim Servicing	2022-2031	25,450,000	3,100,000	22,350,000	0	22,350,000	22,350,000	0	17,745,900	988,162	3,598,733	22,412
Subtotal Wastewater Linear			979,940,703	148,196,000	831,744,703	0	831,744,703	712,516,804	119,227,898	565,738,343	31,502,542	114,727,404	714,483
Wastewater Cost-Shared													
30	Peel System Cost Shared Works	2022-2041	8,215,000	0	8,215,000	0	8,215,000	8,215,000	0	6,522,710	363,210	1,322,756	8,238
Subtotal Cost-Shared			8,215,000	0	8,215,000	0	8,215,000	8,215,000	0	6,522,710	363,210	1,322,756	8,238
Planning and Studies													
31	York Durham Sewage System Wastewater Master Plan Update	2022-2041	4,816,000	0	4,816,000	0	4,816,000	4,816,000	0	3,823,904	212,930	775,458	4,829
32	Inflow & Infiltration Reduction	2022-2041	69,668,000	0	69,668,000	0	69,668,000	69,668,000	0	55,316,392	3,080,235	11,217,741	69,860
33	Wastewater System Capacity Studies	2022-2041	39,653,000	0	39,653,000	0	39,653,000	39,653,000	0	31,484,482	1,753,180	6,384,812	39,762
Subtotal Planning and Studies			114,137,000	0	114,137,000	0	114,137,000	114,137,000	0	90,624,778	5,046,345	18,378,011	114,452
Other													
34	Credits	2022-2041	201,262,585	0	201,262,585	0	201,262,585	201,262,585	0	159,802,493	8,898,433	32,406,722	201,818
Subtotal Other			201,262,585	0	201,262,585	0	201,262,585	201,262,585	0	159,802,493	8,898,433	32,406,722	201,818
Total			2,704,377,844	234,430,800	2,469,947,044	0	2,469,947,044	1,815,665,303	654,281,741	1,441,638,251	80,276,103	292,353,199	1,820,676

*These projects will have expenditures beyond 2041, not currently captured in the 2022 DC bylaw

5 ROADS: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

5.1. Program Description

The Roads capital program is based on York Region's Transportation Master Plan and Council-endorsed 10-year Capital Plan, and includes the following service components:

- Growth structures (including road/rail grade separations)
- New Interchanges
- Midblock crossings
- Growth new infrastructure (including missing links)
- Growth widening to 4 or to 6 lanes
- Road improvements to support Transit
- Reconstruction
- Environmental assessment, design, survey and property acquisition for future capital projects
- Intersection and miscellaneous capital
- Sustainable travel options (formally transportation demand management)
- Active Transportation programs and initiatives
- Growth Planning

Table 5-4 to this section details the growth-related capital projects and cost calculation¹.

Consistent with previous DC bylaws, York Region proposes to maintain a transportation program that accommodates all improvements within York Region's right of way, which includes road widenings, road structural capacity improvements, road volume capacity improvements, high-occupancy-vehicle lanes and dedicated transit lanes.

This multi-modal division of the transportation corridors is consistent with the Regional Official Plan, which states that:

- The hierarchy of streets supports York Region's proposed urban structure. These corridors are to accommodate and provide connectivity for all modes of transportation including active transportation, transit users, automobile use and the movement of goods, public and private utilities, and on-street parking where appropriate

¹ Table 5-5 provides a list of projects contingent on certain trigger events to proceed

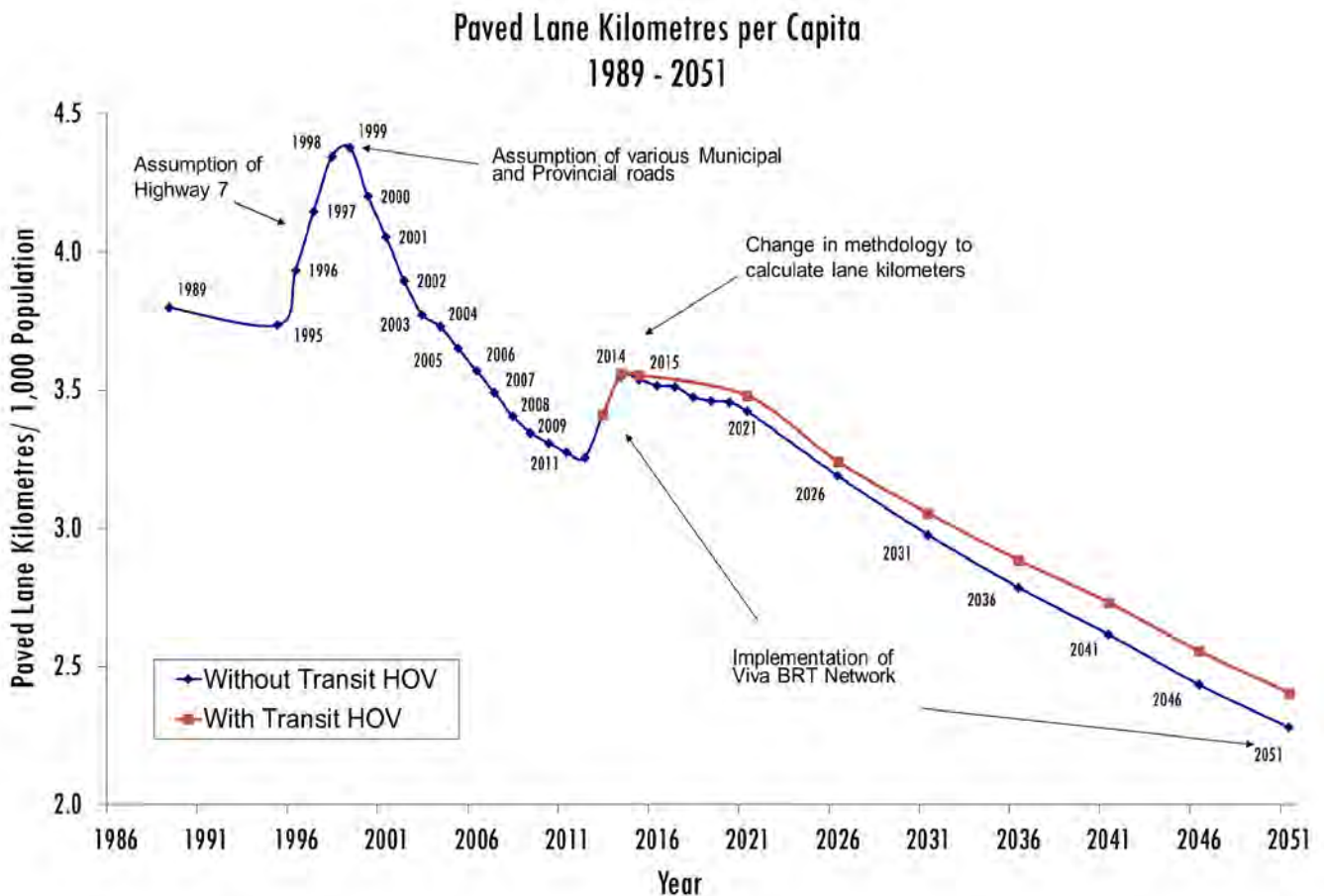
- To implement transit improvements on urban streets, which may include transit lanes, high-occupancy vehicle lanes, queue jump lanes, cycling facilities and other transit signal priority needs to support an integrated mobility network
- To require transit or high-occupancy vehicle lanes and cycling facilities within the right-of-way of existing and future six-lane Regional streets based on established thresholds and criteria

The project horizons identified in the background study are for fiscal planning purposes. To meet the changing needs of where growth is occurring and project commitments by third parties, including the Province and Metrolinx, the phasing of project will be evaluated annually through the Regional capital budgeting process. .

5.2. Level of Service

As depicted in Figure 5-1, the proposed transportation improvement program anticipates a declining road-kilometre-per-capita level of service over the long term.

FIGURE 5-1
HISTORICAL LEVEL OF SERVICE



Note: 2022 to 2051 paved lane kilometers based on Draft 2022 Transportation Master Plan and therefore includes linear kilometers not currently funded within this Development Charges Bylaw

The network of roads, transit and active transportation improvements identified in the 2022 Transportation Master Plan play a foundational role in allowing people and goods to travel safely, conveniently and reliably throughout the Region in environmentally and fiscally sustainable ways. Transportation Master Plan integrates transportation and land-use policies outlined in the Regional Official Plan to support growth in the Region. Network improvements will be phased in over the next 30 years to meet the evolving needs of York Region's growing population and employment.

History has demonstrated that simply expanding the road network will not solve congestion issues. The Region will ensure the most effective use of road space and financial resources over the long term by designing and operating Regional streets to maximize capacity to move people. This principle will support the Region's ability to meet the mobility needs of today's users while ensuring corridors can adapt in the future to meet the changing travel needs, including High Occupancy Vehicle / Transit lanes and new technologies including autonomous and connected vehicles and supporting the development of a finer grid network.

To maintain an acceptable level of transportation service, some capacity deficiencies in the road network need to be supplied through the implementation of environmentally-friendly travel options, including walking and cycling, and transit infrastructure.

The inter-jurisdictional nature of mobility in the GTHA will continue to increase the complexity of service delivery in York Region. Further, the success of the Region's Transportation Master Plan will be heavily dependent on leveraging successful partnerships with other levels of government.

5.3. Benefit to Existing Development Deduction

Consistent with previous DC bylaws, the benefit to existing (BTE) deduction will be assigned to projects based on a standard categorization as defined in Table 5-1. The table is a general guideline to the proportion of the capital cost attributed to development in each case. Projects may deviate from these classifications based on an individual assessment.

York Region has historically applied a minimum 10% BTE to all road projects as a deduction for elements such as re-paving existing lanes, sub-base reconstruction, and rehabilitation of existing structures. This standard reduction is maintained. However, the base reduction would not apply to the construction of new or missing arterial road links; including mid-block crossings and interchange ramp extensions. When a project would not otherwise be constructed if there was no new growth, it is assigned 0% BTE.

The Region's population and employment growth between 2022 and 2041 (mid-year) is forecasted to be at approximately 27%. It is the position of York Region, that the maximum BTE shall not exceed 73% of the total Regional contribution to a project.

**TABLE 5-1
PROJECT CATEGORIZATION FOR BENEFIT TO EXISTING**

Project Category	Benefit to Existing	Proportion Attributed to Development
NEW REGIONAL INFRASTRUCTURE		
New Arterial Road Link	0%	100%
New arterial roads are identified to support greenfield and provincially designated development areas. Typically, in many developing communities the existing arterial road functions as a main street through the hamlet. To service the transportation needs of these new communities, the new arterial roads are constructed to serve as a major collector as well as an arterial road and traverse the community. In many incidences the new arterial road is designed as a by-pass to distribute traffic away from existing nodes and villages which will negatively impact the existing development by increasing travel distance.		
Missing Arterial Road Link	0%	100%
The construction of a missing arterial road link would benefit existing development in a redistribution of arterial travel. However, as the demand for the missing arterial road link is needed to support future population and employment growth, the overall level of service in the corridor will be negatively impacted.		
Grade Separation; New Structure	0% to 73%	27% to 100%
BTE for construction of new grade separated rail crossings of arterial roads will be based on the difference in the rail exposure index from the time when the need was identified (i.e. in the TMP) and the time of construction. If the increase in the rail exposure index is greater than 100%, then all of the costs will be attributed to growth. If the increase in the rail exposure index is less than 100%, then the growth share will be proportionate to the increase in rail exposure and the benefit to existing will be calculated as (1-rail exposure increase).		
CAPACITY IMPROVEMENTS		
Road Widening; Urban Area	10%	90%
Capital improvement, including road widenings and intersection improvements, within the urban boundary to support proposed growth. May include continuous left turn lanes, widenings from 2 to 4 lanes and widenings from 4 to 6 lanes.		
Road Widening; Rural Area	10%	90%
Capital improvement, including road widenings and intersection improvements, within rural areas to support increased growth and densities in the towns and villages outside the main urban areas. May include continuous left turn lanes, widenings from 2 to 4 lanes and widenings from 4 to 6 lanes.		
Road Widening; HOV Lanes	10%	90%
Arterial road widenings to support multi-passenger vehicle trips. Improvements along these corridors are to increase the person trip capacity of the corridor through lanes to support car pooling and/or transit.		
Grade Separation; Widening	10% to 73%	27% to 90%
The benefit to existing for the road widening project will apply to the grade separation when being constructed concurrently. As a minimum, a 10% benefit to existing deduction will be applied to accommodate the cost of rehabilitating the existing structure.		

Jog Elimination / Intersection Improvement	10%	90%
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Major intersection improvements including jog elimination of regional intersections to support proposed growth. Benefit to existing arises from capacity and safety increases and geometric improvements, however in many cases, the addition of new signals or modifications to existing signals to accommodate for example, protected phasing, may reduce the level of service for existing development.

CONTRIBUTION TO INFRASTRUCTURE

Mid-Block Crossing	0%	100%
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To support the Regional share for new mid-block crossings of 400 series highways to support new growth areas.

400-Series Interchange - New	0%	100%
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To support the Regional share for a new interchange in new growth areas. The benefit of an added interchange to existing users is normally offset by increased traffic congestion created by proposed growth.

400-Series Interchange Improvements	10%	90%
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To support the Regional share for interchange improvements in new growth areas. The benefit of an added interchange to existing users is often offset by increased traffic congestion created by proposed growth.

Interchange Ramp Extensions	0%	100%
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To support the Regional share for new interchange ramp extensions from 400 series highways to new growth areas.

Road Improvements to Support Transit	18%	82%
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To support the Regional share for new road lanes to support transit, including but not limited to travel lanes, intersection improvements, utilities, and boulevard improvements.

MISCELLANEOUS POLICIES AND PROGRAMS

Reconstruction to Regional standard	73%	27%
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Road improvements, road structural capacity improvements and road volume capacity improvements to support increased demand related to growth within or supporting existing or urban growth areas. May include, but not limited to, reconstruction of existing general-purpose lanes, structural design, intersection improvements, turn lanes, geometric improvements, and improvements to shoulder widths.

Active and Sustainable Transportation	10%	90%
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May include, but not limited to, regionally-owned active and sustainable transportation facilities within regional rights of way, dedicated cycling corridors, partnership programs, research and planning studies, and initiatives to support active and sustainable transportation.

Programs and Studies	10%	90%
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May include, but not limited to, Master Plans, transportation planning studies, sustainable travel options (i.e., transportation demand management), and other programs and initiatives required to support planned growth.

MISCELLANEOUS CAPITAL

Include general road improvements, streetscaping, urbanization and conversion of gravel, hard and surface treated roads to Regional standard to support increased demand related to growth

■ Urbanization	10%	90%
■ Intersection and Miscellaneous Capital	10 to 73%	27% to 90%
■ Streetscaping	20%	80%
■ Forestry	0%	100%
■ Remaining Gravel Roads	73%	27%
■ Remaining Surface Treated Roads	73%	27%

5.4. Post Period Benefit Deduction

Post period benefit deduction refers to the cost of oversized infrastructure capacity which is not required by development anticipated within the planning period, and will clearly benefit development in a subsequent period. York Region's methodology for undertaking the post period benefit analysis is as follows:

1. Consistent with the Act, where maintaining a fixed level of service is the standard measure, the Region will establish an average level of service (LOS) for the past 10 years, referred hereafter as "Base". The objective is to maintain the same traffic level of service as the Base for the DC Bylaw planning horizon, referred hereafter as "Future". As described in the 2017 Development Charges Bylaw, York Region proposes that volume-to-road capacity (V/C) ratio for 2021 be used to represent the average LOS "Base", and 2041 V/C ratio to represent the "Future".

The total cost of the capital projects identified as required by 2041 will be included (2022 to 2041) in the PPB analysis, while project costs identified in the Transportation Master Plan as required post 2041 have been assigned a post period benefit of 100%.

2. To maintain theoretical consistency in the analysis, traffic volumes on the Regional road system were modeled for the Base and Future, and V/C ratios for three scenarios computed:
 - a) Future volumes on Base network
 - b) Base volumes on Base network
 - c) Future volumes on Future network
3. Volume to capacity (V/C) is a common transportation engineering measure of the ratio between the number of vehicles on the road and the estimated capacity of the road. If the ratio equals 1.0, the section of road is considered to be at capacity. For each scheduled improvement in the roads section of the Development Charges Bylaw, the morning peak period/ peak demand is tested against two thresholds as follows:

Threshold 1:

Volumes_{Future} / Capacity_{Base} are less than (0.80 or 0.90)

The purpose of Threshold 1 is to ensure that specific projects identified in the Transportation Master Plan are required to support development identified within the planning horizon. In other words, where the future demand compared to the base capacity exceeds a volume to capacity ratio of 0.90 in an urban environment and 0.80 in a rural setting, the project is necessary to maintain the historical level of service. In the case of a road widening, the increase is measured in terms of the “minimum” number of lanes that need to be added to the road system in order to maintain the quality of the base network.

Threshold 2:

$(V/C)_{Future} < (V/C)_{Base}$

The purpose of Threshold 2 is to ensure that the quality of the base road network, defined as Level of Service, has not been improved by the scheduled improvement. In other words, there may be a potential for PPB if the quality of the road segment, defined as the Volume / Capacity of the road project, improves over time.

A Post Period Benefit will be considered for projects that satisfy both thresholds. The amount of Post Period Benefit will be calculated as defined in Step 4.

4. For projects identified in Step 3 for consideration of a Post Period Benefit, a reduction in the project shall be calculated as:

$$\frac{(V/C)_{Future} - (V/C)_{Base}}{(V/C)_{Base}}$$

The reduction shall be calculated for both directions and the lower of the two reductions utilized.

5. If a reduction is applied to a specific project to accommodate PPB, it is anticipated that this reduction will be considered for recovery in development charges calculations in a period beyond the existing Bylaw horizon.

This PPB methodology is not applicable to grade separations, mid-block crossings, new Regional roads, programs and studies and miscellaneous capital expenditures.

However, where the Transportation Master Plan identifies a project need beyond the planning horizon of this Background Study, the project will be assigned a 100% post-period benefit deduction.

Further, the Background Study has historically identified a growth component in major reconstruction capital projects. These improvements provide additional lane capacity to support growth within the planning horizon of the background study. As such, no post period benefit is applicable.

5.5. Grants, Subsidies and Other Contributions

Any applicable grants, subsidies and other contributions have been deducted from the DC-eligible costs in accordance with the requirements of the Act. The grants are primarily from other levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in the 2022 DC Background Study, the applicable grants/subsidies are approximately \$1.8 billion.

5.6. Residential versus Non-Residential Allocation

5.6.1 Residential vs. Non-residential

The system of network improvements identifies infrastructure requirements needed to support a multi-modal network for all trip purposes and for all trips originating from or destined to York Region. This includes additional transit infrastructure, roads infrastructure and a system of sidewalks and trails to further enable active transportation.

The residential vs. non-residential allocation is determined by using net incremental population and employment growth. This approach is used for both Roads and Transit, including Toronto-York Spadina Subway Extension and Yonge North Subway Extension (Table 5-2 below).

TABLE 5-2
INCREMENTAL GROWTH FOR POPULATION AND EMPLOYMENT

	2022 to mid-2041	%
Gross population growth	476,277	74.88
Employment growth requiring new space	159,802	25.12
Total	636,079	100.00

5.6.2 Non-residential Cost Allocation

For the purpose of rate calculation, the non-residential share of the total capital cost is further allocated between retail, IOI and hotel uses. The cost allocation is determined based on the share of trips generated using the Institute of Transportation Engineers (ITE) Trip Generation rates.

Trip generation rates are used by transportation professionals for estimating the number of trips generated by specific types of developments or land uses. A trip generation rate is the number of trips (vehicle trips, pedestrian trips, and/or transit trips) that can be expected to access and exit a site over a given period of time, expressed over an independent variable, such as trips per 1000 sq. ft. gross floor area, or per hotel suite. For each non-residential sector, an average trip generation rate was developed based on a sample of land use categories.

To capture the travel characteristics of all land use categories, an average of the AM peak hour and PM peak hour trip generation rate was estimated. Furthermore, consistent with industry practices, retail trip rates were further reduced by 20% to accommodate “pass-by” trips. Pass-by trips are defined as trips that would have travelled on a street adjacent to a retail centre even if the retail was not constructed.

Where data is available, the peak of the land use (the trips generated for each land use during the peak period of the land use) was used in the analysis.

Using this methodology, the non-residential share of the costs is allocated to the three land uses as in Table 5-3 below. This approach is used for Roads and Transit services, including Toronto-York Spadina Subway Extension and Yonge North Subway Extension. While the methodology is consistent, the split differs slightly depending on the planning horizon of the service.

TABLE 5-3
NON-RESIDENTIAL LAND USE (BASED ON TRIP GENERATION)

Non-residential Land Use	Allocation of DC-Eligible Costs
Retail	35.60%
Industrial, Office, Institutional	63.74%
Hotel	0.66%
Total	100.00%

2022 Development Charge Background Study
Roads
Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
Growth Structures (Grade Separations)													
1	Barrie GO - Wellington Street East of Yonge Street (YR Share)	2022-2031	6,762,000	0	6,762,000	0	6,762,000	6,762,000	0	5,063,176	604,745	1,082,862	11,217
2	Barrie GO - Elgin Mills East of Yonge Street	2022-2031	57,399,000	5,444,000	51,955,000	0	51,955,000	51,955,000	0	38,902,295	4,646,486	8,320,038	86,181
3	Barrie GO - Rutherford Road East of Keele Street	2022-2031	220,000	0	220,000	0	220,000	220,000	0	164,729	19,675	35,231	365
4	Stouffville GO - Steeles Avenue - Kennedy Road to Midland Ave (YR Share)	2022-2031	12,045,000	0	12,045,000	0	12,045,000	12,045,000	0	9,018,923	1,077,219	1,928,878	19,980
Subtotal Growth Structures (Grade Separations)			76,426,000	5,444,000	70,982,000	0	70,982,000	70,982,000	0	53,149,123	6,348,125	11,367,009	117,743
New Interchanges													
5	Highway 404 Interchange at Doane Road	2032-2041	6,282,000	0	6,282,000	0	6,282,000	6,282,000	0	4,703,767	561,817	1,005,995	10,420
6	Highway 404 Interchange at St. John's Sideroad	2042-2051	57,295,875	0	57,295,875	0	57,295,875	0	57,295,875	0	0	0	0
7	Highway 400 Interchange at King-Vaughan Road or Kirby Road	2042-2051	57,295,875	0	57,295,875	0	57,295,875	0	57,295,875	0	0	0	0
Subtotal New Interchanges			120,873,750	0	120,873,750	0	120,873,750	6,282,000	114,591,750	4,703,767	561,817	1,005,995	10,420
Midblock Crossings													
8	Cedar Avenue Extension - Langstaff Road to High Tech Road	2022-2031	6,902,000	1,860,000	5,042,000	0	5,042,000	5,042,000	0	3,775,293	450,921	807,422	8,364
9	Highway 404 north of Doane Road	2042-2051	32,780,358	21,853,572	10,926,786	0	10,926,786	0	10,926,786	0	0	0	0
10	Highway 404 north of Elgin Mills Road	2042-2051	62,077,293	41,384,862	20,692,431	0	20,692,431	0	20,692,431	0	0	0	0
11	Highway 404 North of Major Mackenzie Drive	2032-2041	41,194,000	27,464,000	13,730,000	0	13,730,000	13,730,000	0	10,280,599	1,227,914	2,198,713	22,775
12	Highway 404 North of 16th Avenue	2022-2031	68,584,000	54,725,000	13,859,000	0	13,859,000	13,859,000	0	10,377,190	1,239,450	2,219,371	22,989
13	Highway 404 North of Highway 7 (Regional Share)	2022-2031	216,000	0	216,000	0	216,000	216,000	0	161,734	19,318	34,590	358
14	Highway 400 South of Teston Road (Regional Share)	2022-2031	8,666,000	0	8,666,000	0	8,666,000	8,666,000	0	6,488,832	775,025	1,387,767	14,375
15	Highway 400 north of Kirby Road	2042-2051	66,521,568	44,347,712	22,173,856	0	22,173,856	0	22,173,856	0	0	0	0
16	Highway 427 North of Langstaff Road (Regional Share)	2022-2031	2,287,000	0	2,287,000	0	2,287,000	2,287,000	0	1,712,435	204,533	366,239	3,794
Subtotal Midblock Crossings			289,228,219	191,635,146	97,593,073	0	97,593,073	43,800,000	53,793,073	32,796,083	3,917,160	7,014,102	72,654

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
							74.88%	8.94%	16.01%	0.17%			
Growth New Infrastructure (Missing Links)													
17	Highway 404 Northbound Off-Ramp Extension at Highway 7	2022-2031	216,000	0	216,000	0	216,000	216,000	0	161,734	19,318	34,590	358
18	Langstaff Road - Jane Street to Keele Street	2022-2031	783,000	0	783,000	0	783,000	783,000	0	586,286	70,026	125,389	1,299
19	Teston Road - Keele Street to Dufferin Street	2022-2041	156,056,000	0	156,056,000	0	156,056,000	156,056,000	0	116,849,899	13,956,539	24,990,702	258,861
20	Donald Cousens Parkway - Major Mackenzie Drive to Highway 48 (Inc. Grade Separation)	2032-2041	22,590,000	0	22,590,000	0	22,590,000	22,590,000	0	16,914,692	2,020,289	3,617,547	37,472
21	Arterial Road Ramp Extensions (Regional Share)	2022-2041	10,000,000	0	10,000,000	1,000,000	9,000,000	0	9,000,000	0	0	0	0
Subtotal Growth New Infrastructure (Missing Links)			189,645,000	0	189,645,000	1,000,000	188,645,000	179,645,000	9,000,000	134,512,611	16,066,171	28,768,228	297,989
Growth Widen to 4 Lanes													
22	14th Avenue - Markham Road to Donald Cousens Parkway	2032-2041	35,616,000	353,000	35,263,000	3,526,300	31,736,700	31,736,700	0	23,763,458	2,838,305	5,082,294	52,644
23	19th Avenue - Bayview Avenue to Leslie Street	2022-2031	27,118,000	0	27,118,000	2,711,800	24,406,200	24,406,200	0	18,274,607	2,182,717	3,908,392	40,484
24	2nd Concession - Green Lane to Doane Road	2022-2031	11,000	0	11,000	1,100	9,900	9,900	0	7,413	885	1,585	16
25	Baseline Road - McCowan Road to Dalton Road	2042-2051	26,998,381	0	26,998,381	2,699,838	24,298,543	0	24,298,543	0	0	0	0
26	Bayview Avenue - Bloomington Road to Wellington Street	2032-2041	37,414,000	1,886,000	35,528,000	3,552,800	31,975,200	31,975,200	0	23,942,039	2,859,634	5,120,487	53,039
27	Bayview Avenue - Stouffville Road to Bloomington Road	2032-2041	19,198,000	2,000,000	17,198,000	1,719,800	15,478,200	15,478,200	0	11,589,597	1,384,260	2,478,668	25,675
28	Bloomington Road - Yonge Street to Bathurst Street	2022-2031	350,000	0	350,000	35,000	315,000	315,000	0	235,862	28,171	50,444	523
29	Carrville Road - Bathurst Street to Yonge Street	2022-2031	3,176,000	0	3,176,000	317,600	2,858,400	2,858,400	0	2,140,281	255,635	457,742	4,741
30	Doane Road - Highway 404 to Yonge Street	2032-2041	64,910,000	6,600,000	58,310,000	5,831,000	52,479,000	52,479,000	0	39,294,650	4,693,348	8,403,951	87,050
31	Donald Cousens Parkway - 16th Avenue to Major Mackenzie Drive	2032-2041	17,565,000	520,000	17,045,000	1,704,500	15,340,500	15,340,500	0	11,486,491	1,371,945	2,456,617	25,446
32	Dufferin Street - Major Mackenzie Drive to Teston Road	2022-2031	17,410,000	1,250,000	16,160,000	1,616,000	14,544,000	14,544,000	0	10,890,097	1,300,712	2,329,066	24,125
33	Elgin Mills Road - Woodbine Bypass to Woodbine Avenue	2022-2031	12,382,000	0	12,382,000	1,238,200	11,143,800	11,143,800	0	8,344,132	996,622	1,784,561	18,485
34	Elgin Mills Road - Yonge Street to Bathurst Street	2022-2031	34,489,000	7,564,000	26,925,000	2,692,500	24,232,500	24,232,500	0	18,144,545	2,167,182	3,880,576	40,196
35	Highway 27 - Major Mackenzie Drive to Nashville Road	2022-2031	19,886,000	1,200,000	18,686,000	1,868,600	16,817,400	16,817,400	0	12,592,348	1,504,029	2,693,127	27,896
36	Highway 27 - Nashville Road to King Road	2032-2041	35,501,000	1,400,000	34,101,000	3,410,100	30,690,900	30,690,900	0	22,980,395	2,744,776	4,914,820	50,909

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential 74.88%	Non-Residential Share		
											Retail 8.94%	Industrial/Office/Institutional 16.01%	Hotel 0.17%
37	Jane Street - Kirby Road to King-Vaughan Road	2032-2041	18,707,725	0	18,707,725	1,870,772	16,836,952	0	16,836,952	0	0	0	0
38	Jane Street - Teston Road to Kirby Road	2032-2041	18,080,000	983,000	17,097,000	1,709,700	15,387,300	15,387,300	0	11,521,534	1,376,131	2,464,112	25,524
39	Jefferson Sideroad - Bathurst Street to Yonge Street	2042-2051	20,473,216	585,042	19,888,174	1,988,817	17,899,357	0	17,899,357	0	0	0	0
40	Kennedy Road - Major Mackenzie Drive to North of Elgin Mills Road	2022-2031	36,616,000	0	36,616,000	3,661,600	32,954,400	32,954,400	0	24,675,234	2,947,207	5,277,295	54,664
41	King Road - Hwy 27 to 8th Concession	2042-2051	28,227,871	0	28,227,871	2,822,787	25,405,084	0	25,405,084	0	0	0	0
42	King Road - 8th Concession to 7th Concession	2042-2051	12,805,457	1,481,895	11,323,562	1,132,356	10,191,206	0	10,191,206	0	0	0	0
43	King Road - 7th Concession to Weston Road	2042-2051	9,796,831	1,488,885	8,307,946	830,795	7,477,152	0	7,477,152	0	0	0	0
44	King Road - Weston Road to Hwy 400	2042-2051	7,359,767	699,007	6,660,760	666,076	5,994,684	0	5,994,684	0	0	0	0
45	King-Vaughan Road - Dufferin Street to Bathurst Street	2042-2051	14,505,044	1,411,994	13,093,050	1,309,305	11,783,745	0	11,783,745	0	0	0	0
46	King-Vaughan Road - Keele Street to Dufferin Street	2042-2051	11,075,637	1,328,113	9,747,524	974,752	8,772,772	0	8,772,772	0	0	0	0
47	King-Vaughan Road - Jane Street to Keele Street	2042-2051	17,315,908	1,558,785	15,757,122	1,575,712	14,181,410	0	14,181,410	0	0	0	0
48	King-Vaughan Road - Weston Road to Jane Street	2032-2041	35,894,492	0	35,894,492	3,589,449	32,305,042	0	32,305,042	0	0	0	0
49	Langstaff Road - Keele Street to Dufferin Street	2022-2031	26,620,000	820,000	25,800,000	2,580,000	23,220,000	23,220,000	0	17,386,417	2,076,632	3,718,435	38,517
50	Leslie Street - Doane Road to Queensville Sideroad	2042-2051	39,368,397	0	39,368,397	3,936,840	35,431,557	0	35,431,557	0	0	0	0
51	Leslie Street - Green Lane to Colonel Weyling Boulevard	2022-2031	10,054,000	461,000	9,593,000	959,300	8,633,700	8,633,700	0	6,464,647	772,137	1,382,595	14,321
52	Leslie Street - Mount Albert Road to Doane Road	2042-2051	21,168,908	0	21,168,908	2,116,891	19,052,017	0	19,052,017	0	0	0	0
53	Leslie Street - Wellington Street to St. John's Sideroad	2022-2031	1,366,000	0	1,366,000	136,600	1,229,400	1,229,400	0	920,537	109,949	196,875	2,039
54	Leslie Street - 19th Avenue to Stouffville Road	2022-2031	709,000	0	709,000	70,900	638,100	638,100	0	477,790	57,067	102,185	1,058
55	Leslie Street - Elgin Mills Road to 19th Avenue	2022-2031	468,000	0	468,000	46,800	421,200	421,200	0	315,382	37,669	67,451	699
56	McCowan Road - Major Mackenzie to Elgin Mills	2042-2051	17,671,985	0	17,671,985	1,767,198	15,904,786	0	15,904,786	0	0	0	0
57	Ninth Line - Steeles Avenue to Box Grove By-Pass	2022-2031	12,917,000	642,000	12,275,000	1,227,500	11,047,500	11,047,500	0	8,272,026	988,010	1,769,139	18,325
58	Pine Valley Drive - Major Mackenzie Drive to Teston Road	2032-2041	23,894,000	870,000	23,024,000	2,302,400	20,721,600	20,721,600	0	15,515,692	1,853,193	3,318,343	34,372
59	Pine Valley Drive - Rutherford Road to Major Mackenzie Drive	2032-2041	24,712,000	1,006,000	23,706,000	2,370,600	21,335,400	21,335,400	0	15,975,287	1,908,086	3,416,636	35,390
60	Queensville Sideroad - Hwy 404 to Woodbine	2042-2051	8,774,310	0	8,774,310	877,431	7,896,879	0	7,896,879	0	0	0	0

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
61	Queensville Sideroad - Leslie to Hwy 404	2042-2051	29,982,555	0	29,982,555	2,998,256	26,984,300	0	26,984,300	0	0	0	0
62	St John's Sideroad - Bayview Avenue to Woodbine Avenue	2022-2031	21,000	0	21,000	2,100	18,900	18,900	0	14,152	1,690	3,027	31
63	St John's Sideroad - Bathurst Street to Yonge Street	2042-2051	29,859,394	0	29,859,394	2,985,939	26,873,454	0	26,873,454	0	0	0	0
64	Stouffville Road - Bayview Avenue to Highway 404	2022-2031	40,650,000	0	40,650,000	4,065,000	36,585,000	36,585,000	0	27,393,715	3,271,902	5,858,697	60,686
65	Stouffville Road - Yonge Street to Bayview Avenue	2032-2041	19,456,000	654,000	18,802,000	1,880,200	16,921,800	16,921,800	0	12,670,520	1,513,365	2,709,846	28,069
66	Teston Road - Dufferin Street to Bathurst Street	2032-2041	20,861,000	0	20,861,000	2,086,100	18,774,900	18,774,900	0	14,058,064	1,679,094	3,006,600	31,143
67	Teston Road - Pine Valley Drive to Weston Road	2022-2031	40,563,000	2,754,000	37,809,000	3,780,900	34,028,100	34,028,100	0	25,479,187	3,043,231	5,449,237	56,445
68	Warden Avenue - Major Mackenzie Drive to Elgin Mills Road	2022-2031	20,517,000	1,860,000	18,657,000	1,865,700	16,791,300	16,791,300	0	12,572,805	1,501,694	2,688,947	27,853
69	Warden Avenue - Elgin Mills to 19th Avenue	2032-2041	18,057,755	0	18,057,755	1,805,775	16,251,979	16,251,979	0	12,168,979	1,453,461	2,602,581	26,958
70	Weston Road - Kirby to King-Vaughan	2042-2051	17,356,409	241,724	17,114,685	1,711,469	15,403,217	0	15,403,217	0	0	0	0
71	Weston Road - Teston Road to Kirby Road	2032-2041	23,121,000	1,008,000	22,113,000	2,211,300	19,901,700	19,901,700	0	14,901,776	1,779,866	3,187,045	33,012
72	Woodbine Avenue - Pollock Road to Old Homestead Road	2042-2051	22,728,373	332,028	22,396,344	2,239,634	20,156,710	0	20,156,710	0	0	0	0
75	Woodbine Avenue - Victoria Square Boulevard to 19th Avenue	2032-2041	13,828,000	117,000	13,711,000	1,371,100	12,339,900	12,339,900	0	9,239,735	1,103,593	1,976,103	20,469
76	Improvements to Support Bradford Bypass (HWY 400-404 Link)	2032-2041	50,000,000	0	50,000,000	5,000,000	45,000,000	45,000,000	0	33,694,606	4,024,480	7,206,269	74,645
Subtotal Growth Widen to 4 Lanes			1,117,607,413	43,075,473	1,074,531,940	107,453,194	967,078,746	624,229,879	342,848,867	467,403,997	55,826,680	99,963,749	1,035,453
Growth Widen to 6 Lanes													
77	Carrville Road - Bathurst Street to Yonge Street	2042-2051	36,809,690	751,432	36,058,258	3,605,826	32,452,432	0	32,452,432	0	0	0	0
78	16th Avenue - Yonge Street to Bayview Avenue	2032-2041	33,940,000	0	33,940,000	3,394,000	30,546,000	30,546,000	0	22,871,899	2,731,817	4,891,616	50,669
79	16th Avenue - Bayview Avenue to Leslie Street	2032-2041	26,650,000	0	26,650,000	2,665,000	23,985,000	23,985,000	0	17,959,225	2,145,048	3,840,942	39,786
80	16th Avenue - Leslie Street to Highway 404	2022-2031	17,436,000	15,000	17,421,000	1,742,100	15,678,900	15,678,900	0	11,739,875	1,402,209	2,510,808	26,008
81	16th Avenue - Highway 404 to Woodbine Avenue	2022-2031	23,354,000	0	23,354,000	2,335,400	21,018,600	21,018,600	0	15,738,077	1,879,754	3,365,904	34,865
82	16th Avenue - Woodbine Avenue to Warden Avenue	2022-2031	29,094,000	148,000	28,946,000	2,894,600	26,051,400	26,051,400	0	19,506,481	2,329,852	4,171,854	43,213
83	16th Avenue - Warden Avenue to Kennedy Road	2022-2031	41,503,000	470,000	41,033,000	4,103,300	36,929,700	36,929,700	0	27,651,815	3,302,730	5,913,897	61,258

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
84	16th Avenue - Kennedy to McCowan	2042-2051	35,303,659	0	35,303,659	3,530,366	31,773,293	0	31,773,293	0	0	0	0
85	Bathurst Street - North of Highway 7 to Rutherford Road	2022-2031	31,413,000	1,687,000	29,726,000	2,972,600	26,753,400	26,753,400	0	20,032,117	2,392,634	4,284,271	44,378
86	Bathurst Street - Rutherford Road to Major Mackenzie Drive	2022-2031	36,267,000	4,079,000	32,188,000	3,218,800	28,969,200	28,969,200	0	21,691,240	2,590,799	4,639,108	48,053
87	Bayview Avenue - North of Highway 7 to 16th Avenue	2022-2031	36,975,000	0	36,975,000	3,697,500	33,277,500	33,277,500	0	24,917,161	2,976,103	5,329,036	55,200
88	Bayview Avenue - John Street to Highway 7	2042-2051	39,402,950	0	39,402,950	3,940,295	35,462,655	0	35,462,655	0	0	0	0
89	Dufferin Street - Langstaff Road to Rutherford Road	2032-2041	40,594,000	961,000	39,633,000	3,963,300	35,669,700	35,669,700	0	26,708,366	3,190,044	5,712,122	59,168
90	Dufferin Street and Rutherford Road	2022-2031	11,691,000	951,000	10,740,000	1,074,000	9,666,000	9,666,000	0	7,237,601	864,458	1,547,907	16,034
91	Highway 27 Road Widening at the Canadian Pacific Railway Bridge	2022-2031	5,301,000	266,000	5,035,000	503,500	4,531,500	4,531,500	0	3,393,047	405,265	725,671	7,517
92	Highway 50 - Steeles Avenue to Hwy 7	2042-2051	36,207,510	0	36,207,510	3,620,751	32,586,759	0	32,586,759	0	0	0	0
93	Highway 50 - Major Mackenzie Drive to Albion-Vaughan Road	2022-2031	17,856,000	0	17,856,000	1,785,600	16,070,400	16,070,400	0	12,033,018	1,437,222	2,573,503	26,657
94	Highway 50 - Rutherford Road to Major Mackenzie Drive	2022-2031	10,144,000	0	10,144,000	1,014,400	9,129,600	9,129,600	0	6,835,962	816,486	1,462,008	15,144
95	Highway 7 West of Kipling Avenue	2022-2031	5,547,000	0	5,547,000	554,700	4,992,300	4,992,300	0	3,738,080	446,476	799,464	8,281
96	Keele Street - Langstaff Road to Rutherford Road	2022-2031	558,000	0	558,000	55,800	502,200	502,200	0	376,032	44,913	80,422	833
97	Keele Street - Highway 7 to Langstaff Road	2032-2041	63,781,000	91,000	63,690,000	6,369,000	57,321,000	57,321,000	0	42,920,189	5,126,383	9,179,346	95,082
98	Keele Street - Steeles Avenue to Highway 407	2022-2031	25,558,000	4,613,000	20,945,000	2,094,500	18,850,500	18,850,500	0	14,114,670	1,685,855	3,018,706	31,269
99	Kennedy Road - Steeles Avenue to 14th Avenue	2042-2051	33,937,212	800,363	33,136,849	3,313,685	29,823,164	29,823,164	0	22,330,662	2,667,172	4,775,861	49,470
100	Kennedy Road - 14th Avenue to Highway 407	2022-2031	59,608,000	3,260,000	56,348,000	5,634,800	50,713,200	50,713,200	0	37,972,473	4,535,428	8,121,177	84,121
101	Kennedy Road - Highway 407 to Highway 7	2022-2031	20,723,000	224,000	20,499,000	2,049,900	18,449,100	18,449,100	0	13,814,115	1,649,956	2,954,426	30,603
102	Kennedy Road - Highway 7 to Major Mackenzie Drive (EA)	2022-2031	270,000	0	270,000	27,000	243,000	243,000	0	181,951	21,732	38,914	403
103	Kennedy Road - Hwy 7 to 16th Avenue	2042-2051	44,429,402	775,898	43,653,505	4,365,350	39,288,154	0	39,288,154	0	0	0	0
104	Langstaff Road - Weston Road to Jane Street	2022-2031	746,000	0	746,000	74,600	671,400	671,400	0	502,724	60,045	107,518	1,114
105	Major Mackenzie Drive - Canadian Pacific Railway to Highway 27	2022-2031	1,613,000	502,000	1,111,000	111,100	999,900	999,900	0	748,694	89,424	160,123	1,659
106	Major Mackenzie Drive - Highway 27 to Pine Valley Drive	2022-2031	2,486,000	2,053,000	433,000	43,300	389,700	389,700	0	291,795	34,852	62,406	646
107	Major Mackenzie Drive - Highway 400 to Jane Street	2022-2031	22,418,000	0	22,418,000	2,241,800	20,176,200	20,176,200	0	15,107,314	1,804,416	3,231,003	33,468

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
108	Major Mackenzie Drive - Keele Street to McNaughton Road	2022-2031	12,035,000	1,140,000	10,895,000	1,089,500	9,805,500	9,805,500	0	7,342,055	876,934	1,570,246	16,265
109	Major Mackenzie Drive - Leslie Street to Woodbine Avenue	2032-2041	13,135,000	0	13,135,000	1,313,500	11,821,500	11,821,500	0	8,851,573	1,057,231	1,893,087	19,609
110	McCowan Road - Bullock Drive to 16th Avenue	2032-2041	15,565,000	707,000	14,858,000	1,485,800	13,372,200	13,372,200	0	10,012,689	1,195,914	2,141,415	22,181
111	McCowan Road - 14th Avenue to Bullock Drive	2022-2031	37,071,000	228,000	36,843,000	3,684,300	33,158,700	33,158,700	0	24,828,207	2,965,478	5,310,012	55,003
112	Rutherford Road - Jane Street to Westburne Drive	2022-2031	43,230,000	389,000	42,841,000	4,284,100	38,556,900	38,556,900	0	28,870,212	3,448,255	6,174,476	63,957
113	Rutherford Road - Peter Rupert Avenue to Bathurst Street	2022-2031	37,514,000	650,000	36,864,000	3,686,400	33,177,600	33,177,600	0	24,842,359	2,967,169	5,313,038	55,034
114	Steeles Avenue Donald Cousens Parkway to Morningside Avenue	2022-2031	329,000	0	329,000	32,900	296,100	296,100	0	221,711	26,481	47,417	491
115	Steeles Avenue - Tapscott Road to Ninth Line	2022-2031	23,543,000	0	23,543,000	2,354,300	21,188,700	21,188,700	0	15,865,442	1,894,967	3,393,144	35,147
116	Warden Avenue - Highway 7 to 16th Avenue	2032-2041	25,836,000	0	25,836,000	2,583,600	23,252,400	23,252,400	0	17,410,677	2,079,529	3,723,624	38,570
117	Weston Road - Highway 407 to North of Highway 7	2022-2031	8,847,000	0	8,847,000	884,700	7,962,300	7,962,300	0	5,961,924	712,091	1,275,077	13,208
118	Weston Road - North and South of Rutherford Road	2022-2031	13,408,000	0	13,408,000	1,340,800	12,067,200	12,067,200	0	9,035,546	1,079,205	1,932,433	20,017
119	Yonge Street - Davis Drive to Green Lane	2022-2031	48,175,000	541,000	47,634,000	4,763,400	42,870,600	42,870,600	0	32,100,177	3,834,042	6,865,269	71,112
Subtotal Growth Widen to 6 Lanes			1,070,304,423	25,302,693	1,045,001,731	104,500,173	940,501,558	768,938,264	171,563,293	575,757,153	68,768,369	123,137,252	1,275,490
Road Improvements to Support Transit			0	0	0	0	0	0	0	0	0	0	0
120	Short Term Rapid Transit Project (Roads Infrastructure)	2022-2031	476,000,000	349,050,800	126,949,200	22,847,058	104,102,142	104,102,142	0	77,948,459	9,310,155	16,670,846	172,681
121	Medium Term Rapid Transit Project (Roads Infrastructure)	2032-2041	1,040,000,000	762,632,000	277,368,000	49,917,941	227,450,059	227,450,059	0	170,307,558	20,341,515	36,423,698	377,287
122	Long Term Rapid Transit Project (Roads Infrastructure)	2042-2051	517,000,000	379,116,100	137,883,900	24,814,977	113,068,923	0	113,068,923	0	0	0	0
Subtotal Road Improvements to Support Transit			2,033,000,000	1,490,798,900	542,201,100	97,579,975	444,621,125	331,552,201	113,068,923	248,256,018	29,651,671	53,094,545	549,968
Reconstruction													
123	Bridge and Culvert	2022-2041	426,125,000	0	426,125,000	311,071,250	115,053,750	115,053,750	0	86,148,684	10,289,589	18,424,629	190,848
124	Roads and Pavement	2022-2041	2,077,888,791	0	2,077,888,791	1,516,858,818	561,029,974	561,029,974	0	420,081,865	50,174,530	89,842,959	930,619
125	Rapidway Corridors	2022-2041	21,465,557	9,798,539	11,667,018	8,516,923	3,150,095	3,150,095	0	2,358,694	281,722	504,454	5,225
126	Intersection	2022-2041	20,000,000	0	20,000,000	14,600,000	5,400,000	5,400,000	0	4,043,353	482,938	864,752	8,957

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
Subtotal Reconstruction			2,545,479,348	9,798,539	2,535,680,810	1,851,046,991	684,633,819	684,633,819	0	512,632,595	61,228,779	109,636,795	1,135,649
Environmental Assessment, Design, Survey and Property Acquisition for Future Capital Projects													
127	Miscellaneous Design & Survey for Future Projects	2022-2041	15,000,000	0	15,000,000	1,500,000	13,500,000	13,500,000	0	10,108,382	1,207,344	2,161,881	22,393
128	Property Acquisition for Future Capital Projects	2022-2041	10,000,000	0	10,000,000	1,000,000	9,000,000	9,000,000	0	6,738,921	804,896	1,441,254	14,929
Subtotal Environmental Assessment, Design, Survey and Property Acquisition for Future Capital Projects			25,000,000	0	25,000,000	2,500,000	22,500,000	22,500,000	0	16,847,303	2,012,240	3,603,135	37,322
Intersection and Miscellaneous Capital													
129	Intersection, Bottleneck and Miscellaneous Capital	2022-2041	432,000,000	0	432,000,000	52,435,340	379,564,660	379,564,660	0	284,206,260	33,945,563	60,783,227	629,610
130	Various Road Improvements	2022-2041	94,515,001	1,000,000	93,515,001	9,351,500	84,163,501	84,163,501	0	63,019,022	7,526,985	13,477,886	139,608
131	Regional Streetscaping	2022-2041	26,116,000	0	26,116,000	5,223,200	20,892,800	20,892,800	0	15,643,881	1,868,503	3,345,759	34,656
132	Intelligent Transportation System	2022-2041	34,157,000	0	34,157,000	3,415,700	30,741,300	30,741,300	0	23,018,133	2,749,283	4,922,891	50,993
Subtotal Intersection and Miscellaneous Capital			586,788,001	1,000,000	585,788,001	70,425,740	515,362,261	515,362,261	0	385,887,297	46,090,335	82,529,763	854,867
Transportation Demand Mangement													
133	Residential Transportation Demand Mangement	2022-2041	37,965,802	0	37,965,802	3,796,580	34,169,222	34,169,222	0	25,584,855	3,055,852	5,471,836	56,679
134	Non-Residential Transportation Demand Mangement	2022-2041	4,876,554	0	4,876,554	487,655	4,388,898	4,388,898	0	3,286,271	392,512	702,835	7,280
135	TDM Studies, Pilot Programs, and Initiatives	2022-2041	1,000,000	0	1,000,000	100,000	900,000	900,000	0	673,892	80,490	144,125	1,493
Subtotal Transportation Demand Mangement			43,842,355	0	43,842,355	4,384,236	39,458,120	39,458,120	0	29,545,018	3,528,854	6,318,797	65,452
Active Transportation Programs and Initiatives													
136	Pedestrian Cycling Partnership Program	2022-2041	11,318,000	0	11,318,000	1,131,800	10,186,200	10,186,200	0	7,627,111	910,981	1,631,211	16,897
137	Pedestrian Cycling Program inc. Urbanization	2022-2041	289,125,000	0	289,125,000	28,912,500	260,212,500	260,212,500	0	194,839,059	23,271,555	41,670,253	431,632
138	HWY 407 / South York Greenway	2022-2041	27,500,000	0	27,500,000	2,750,000	24,750,000	24,750,000	0	18,532,033	2,213,464	3,963,448	41,055
139	Keele Street - Highway 407 to Highway 7	2022-2041	12,147,000	114,000	12,033,000	1,203,300	10,829,700	10,829,700	0	8,108,944	968,531	1,734,261	17,964
Subtotal Active Transportation Programs and Initiatives			340,090,000	114,000	339,976,000	33,997,600	305,978,400	305,978,400	0	229,107,148	27,364,532	48,999,173	507,547

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
										74.88%	8.94%	16.01%	0.17%
Growth Planning													
140	Transportation Master Plan Update	2022-2041	3,066,000	0	3,066,000	306,600	2,759,400	2,759,400	0	2,066,153	246,781	441,888	4,577
141	Arterial Corridor Transportation Studies	2022-2041	5,860,000	0	5,860,000	586,000	5,274,000	5,274,000	0	3,949,008	471,669	844,575	8,748
142	Transportation Planning Studies	2022-2041	10,000,000	0	10,000,000	1,000,000	9,000,000	9,000,000	0	6,738,921	804,896	1,441,254	14,929
Subtotal Growth Planning			18,926,000	0	18,926,000	1,892,600	17,033,400	17,033,400	0	12,754,082	1,523,346	2,727,717	28,254
Miscellaneous Charges													
143	Forestry	2022-2041	24,789,000	0	24,789,000	0	24,789,000	24,789,000	0	18,561,235	2,216,952	3,969,694	41,119
144	Outstanding DC Credits	2022-2031	2,160,000	0	2,160,000	0	2,160,000	2,160,000	0	1,617,341	193,175	345,901	3,583
Subtotal Miscellaneous Charges			26,949,000	0	26,949,000	0	26,949,000	26,949,000	0	20,178,576	2,410,127	4,315,595	44,702
Total			8,484,159,510	1,767,168,750	6,716,990,760	2,274,780,509	4,442,210,251	3,637,344,345	804,865,906	2,723,530,770	325,298,207	582,481,856	6,033,511

2022 Development Charge Background Study
Roads Contingency List
Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Non-Residential Share			
										Residential 74.88%	Retail 8.94%	Industrial/ Office/ Institutional 16.01%	Hotel 0.17%
Interchanges													
1	Highway 404 Interchange at 19th Avenue	2022-2041	57,295,875	0	57,295,875	0	57,295,875	57,295,875	0	42,901,376	5,124,136	9,175,323	95,041
Subtotal Interchanges			57,295,875	0	57,295,875	0	57,295,875	57,295,875	0	42,901,376	5,124,136	9,175,323	95,041
Midblock Crossings													
2	Midblock Crossing - Highway 400 north of Rutherford Road	2022-2041	70,857,811	47,238,541	23,619,270	0	23,619,270	23,619,270	0	17,685,378	2,112,340	3,782,374	39,179
3	Midblock Crossing - Highway 400 south of Highway 7 (Regional Share)	2022-2041	56,067,000	0	56,067,000	0	56,067,000	56,067,000	0	41,981,233	5,014,234	8,978,531	93,002
Subtotal Midblock Crossings			126,924,811	47,238,541	79,686,270	0	79,686,270	79,686,270	0	59,666,611	7,126,573	12,760,905	132,181
Growth New Infrastructure													
4	Langstaff Road - Jane Street to Keele Street	2022-2041	836,448,600	557,632,400	278,816,200	0	278,816,200	278,816,200	0	208,768,934	24,935,338	44,649,437	462,491
Subtotal Growth New Infrastructure			836,448,600	557,632,400	278,816,200	0	278,816,200	278,816,200	0	208,768,934	24,935,338	44,649,437	462,491
Growth Widen to 4 Lanes													
5	Elgin Mills Road - Woodbine Avenue to Warden Avenue	2022-2041	16,432,534	0	16,432,534	1,643,253	14,789,280	14,789,280	0	11,073,755	1,322,648	2,368,345	24,532
6	Elgin Mills Road - Warden Avenue to Kennedy Road	2022-2041	16,362,615	0	16,362,615	1,636,262	14,726,354	14,726,354	0	11,026,637	1,317,020	2,358,268	24,428
7	Elgin Mills Road - Kennedy Road to McCowan Road	2022-2041	29,996,554	0	29,996,554	2,999,655	26,996,898	26,996,898	0	20,214,441	2,414,411	4,323,265	44,782
8	Elgin Mills Road - McCowan Road to Highway 48	2022-2041	16,727,980	0	16,727,980	1,672,798	15,055,182	15,055,182	0	11,272,854	1,346,428	2,410,927	24,973
9	Kirby Road - Weston Road to Jane Street	2022-2041	61,626,345	0	61,626,345	6,162,635	55,463,711	55,463,711	0	41,529,509	4,960,280	8,881,921	92,001
10	Kirby Road - Jane Street to Keele Street	2022-2041	16,918,015	0	16,918,015	1,691,801	15,226,213	15,226,213	0	11,400,917	1,361,724	2,438,315	25,257
11	Kirby Road - Keele Street to Dufferin Street	2022-2041	15,246,008	0	15,246,008	1,524,601	13,721,407	13,721,407	0	10,274,165	1,227,145	2,197,337	22,761
12	19th Avenue - Leslie Street to Woodbine Avenue	2022-2041	59,512,842	0	59,512,842	5,951,284	53,561,558	53,561,558	0	40,105,235	4,790,165	8,577,311	88,846
13	19th Avenue - Woodbine Avenue to Warden Avenue	2022-2041	13,994,435	1,398,014	12,596,422	1,259,642	11,336,780	11,336,780	0	8,488,629	1,013,881	1,815,464	18,805
Subtotal Growth Widen to 4 Lanes			246,817,328	1,398,014	245,419,315	24,541,931	220,877,383	220,877,383	0	165,386,142	19,753,702	35,371,154	366,384
Growth Widen to 6 Lanes													
14	Langstaff Road - Weston Road to Jane Street	2022-2041	37,063,731	800,271	36,263,460	3,626,346	32,637,114	32,637,114	0	24,437,660	2,918,831	5,226,485	54,137
15	Langstaff Road - Keele Street to Dufferin Street	2022-2041	26,765,446	0	26,765,446	2,676,545	24,088,901	24,088,901	0	18,037,023	2,154,340	3,857,580	39,958
Subtotal Subtotal Interchanges			63,829,177	800,271	63,028,906	6,302,891	56,726,016	56,726,016	0	42,474,683	5,073,171	9,084,066	94,095
Road Improvements to Support Transit													
16	Steeles Avenue - Jane Street to Kennedy Road (Regional Share)	2022-2041	276,000,000	202,390,800	73,609,200	13,247,454	60,361,746	60,361,746	0	45,197,006	5,398,325	9,666,289	100,126
Subtotal Road Improvements to Support Transit			276,000,000	202,390,800	73,609,200	13,247,454	60,361,746	60,361,746	0	45,197,006	5,398,325	9,666,289	100,126
Total			1,607,315,792	809,460,026	797,855,766	44,092,276	753,763,490	753,763,490	0	564,394,752	67,411,245	120,707,174	1,250,319

6 TRANSIT: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

6.1. Program Description

The Transit growth program includes facilities, transit garages, bus terminals and stops, including but not limited to:

Technology/ Equipment	Electric bus infrastructure and charging stations, expansion of the automated fare collection system
Vehicles	Fleet expansion (YRT/Viva/Mobility On-Request)
Stations and Facilities	Transit vehicle garages, terminals, stops, stations
Bus Rapid Transit	BRT infrastructure, Environmental Assessments and preliminary design

6.2. Level of Service Calculation

Transit level of service is determined using a forward-looking planned level of service as opposed to a historical 10-year average level of service.

For the purpose of the development charges calculations for transit, excluding Toronto-York Spadina Subway Extension and the Yonge North Subway Extension, the “planned level of service” is considered to be the Council-endorsed 2022 10-year capital plan. This confirms Council’s intention to meet the increased need for transit services through the transit network defined in the Transportation Master Plan, as updated, and YRT’s service guidelines outlined in the Council-approved [YRT 2021-2025 Business Plan](#) and the 10-year Capital Plan.

The YRT service guidelines define how new services are designed, and how existing transit routes are evaluated for service adjustments. They are applied in tandem with route performance measures. For Mobility On-Request Paratransit service standards and all policies meet or exceed the standards and requirements outlined in the *Accessibility for Ontarians with Disabilities Act, 2005 (AODA)*, and the *Ontario Regulation 191/11: Integrated Accessibility Standards*. The service guidelines include:

- Service Coverage
- Span of Service
- Minimum Service Frequency
- Vehicle Capacity
- New Service Implementation
- Mobility On-Request Paratransit Service Area
- Mobility On-Request Paratransit Days and Hours of Service

6.3. Ridership Forecasts

Estimated ridership, measured by trips, is obtained from the Regional Transportation Demand Forecast model. This provides a basis for estimating the total number of trips during the AM peak period for local transit, GO Rail and auto trips:

- All trips originating from York Region to all destinations
- All trips with destinations to York Region from all origins
- All trips with origins in York Region and destinations in York Region were calculated and excluded from the analysis to account for double counting of trips, as these trips were already captured in all trip origins and all trip destinations

The following horizons were evaluated related to the Base Year - the Travel Demand Forecasting Horizon that closely represents the DC Bylaw horizon:

- Total Trips – Total Auto and Local Transit Trips in the AM Peak Period at the end of the Base Year. Where required, a base year may be estimated based on two horizons within the Travel Demand Forecasting Model (T)
- Local Transit Trips – trips in the AM Peak Period at the end of the Base year (A)
Local Transit Trips are defined as trips with an origin or a destination within York Region across the following transit services:
 - Conventional Transit
 - Bus Rapid Transit
 - Subway
- Interim Local Transit Trips – trips in the AM Peak Period at the Base Year + 5 years (B)
- 10-Year Local Transit Trips – trips in the AM Peak Period at the end of a 10-year planning horizon (C)
- For the case of the 2022 DC Bylaw, it is assumed that the Yonge North Subway Extension is in service within the 10-year horizon.

The model extractions are summarized in Table 6-1 below:

**TABLE 6-1
TRANSIT MODEL EXTRACTATIONS**

Horizon	Local Transit	HOV Passenger	Non- motorized	Excl. GO Rail		
				Auto Trips	Total	Transit Mode Share
2021	62,450 (A)	110,467	61,133	502,000	736,050 (T)	8.48%
2026	69,899 (B)	124,233	64,967	539,800	798,899	8.75%
2031	84,700 (C)	138,000	68,800	577,600	869,100	9.75%
Total	217,049	372,700	194,900	1,619,400	2,404,049	9.03% (F)

6.4. Benefit to Existing Development Deduction

The Local Transit Modal Split for existing development (F) is applied to the total trips in the Base Year (T) to determine forecasted transit trips by existing development in 10 years (BTE).

Local Transit Modal Split for the existing development (F) is estimated based on an weighted average of Base, Base+5-years and Base+10-years local transit modal split. The justification of a blended average is to reflect the gradual and incremental change in mode shift over the 10-year horizon.

The growth in transit trips between the Base Year (A) and 10-Year (C - A), is attributed to a split between growth in ridership from existing residents versus planned new development for the forward looking 10-year horizon. Estimated transit trips in the 10-year horizon are calculated by applying the forecasted mode split in the 10-year horizon (F) to the total trips in the base year (T).

217,049 Transit Trips (Sum of 2021, 2026, 2031 forecasted trips)

2,404,049 Total Trips (Sum of 2021, 2026, 2031 forecasted trips)

9.03% Weighted Mode Split (F)

The justification of a step increase in the local transit mode share for existing residents is based on the anticipated faster uptake in transit use by new development compared to existing residents and employees. This is supported by the requirements in the Provincial Growth Plan promoting transit-supportive growth density targets and with transit-oriented street configurations for new development within the existing built boundary and urban growth area.

It is the position of the Region that benefit to existing for Transit be calculated based on the following formula:

$$\text{BTE} = \frac{(T \times F) - A}{C - A} = \frac{(736,050 \times (9.03\%)) - 62,450}{84,700 - 62,450} = 18\%$$

As such, the deduction for benefit to existing development has been established at 18%.

6.5. Post Period Benefit Deduction

The Region provides services to meet Council direction reflected in the [YRT 2021-2025 Business Plan](#), [10-year capital program](#), and the expansion of transit solutions as identified in the Transportation Master Plan. Transit service usage is monitored throughout the year and adjustments are made to the routes and frequency based on demand and revenue-to-cost ratios for specific routes. Where routes are not sustainable, alternative transit solutions are implemented including Mobility On-Request. There is no uncommitted excess capacity in the transit network.

- Headways and vehicle types and sizes are scheduled to meet the service standards as set by Council and outlined in the [YRT Business Plan](#)
- Transit routes and services are monitored and adjusted periodically throughout the year to optimize the use of fleet and to provide cost-effective services.

6.6. Grants, Subsidies and Other Contributions

Any applicable grants, subsidies and other contributions have been deducted from the DC-eligible costs in accordance with the requirements of the Act. The grants are primarily from senior levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in the 2022 DC Background Study, the total amount of applicable grants and subsidies are about \$595 million.

6.7. Residential versus Non-Residential Allocation

The net growth-related costs have been allocated between residential and non-residential development on the same basis as the Roads calculation outlined in subsection 5.6, yielding a 74.00% residential and 26.00% non-residential split to 2031.

TABLE 6-2
INCREMENTAL GROWTH FOR POPULATION AND EMPLOYMENT

	2022 to mid-2031	%
Gross population growth	222,074	74.00
Employment growth requiring new space	78,039	26.00
Total	300,113	100.00

2022 Development Charge Background Study
 Transit Service
 Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2031)	Post Period Benefit / Level of Service Deduction (Beyond 2031)	Non-Residential Share			
										Residential 74.00%	Retail 9.27%	Industrial/Office/ Institutional 16.56%	Hotel 0.17%
Vehicles													
1	Support Vehicles	2022-2031	500,000		500,000	89,985	410,015	410,015	0	303,396	38,028	67,907	684
2	Mobility Plus Bus Expansion	2022-2031	5,940,000		5,940,000	1,069,022	4,870,978	4,870,978	0	3,604,343	451,771	806,735	8,129
3	Conventional Bus Expansion	2022-2031	99,740,000		99,740,000	17,950,216	81,789,784	81,789,784	0	60,521,415	7,585,796	13,546,079	136,494
4	Viva Bus Expansion	2022-2031	86,400,000		86,400,000	15,549,415	70,850,585	70,850,585	0	52,426,812	6,571,213	11,734,322	118,238
Subtotal Vehicles			192,580,000	0	192,580,000	34,658,638	157,921,362	157,921,362	0	116,855,967	14,646,807	26,155,043	263,545
Facilities													
5	Transit Vehicle Garage - North	2027-2031	23,000,000		23,000,000	4,139,312	18,860,688	18,860,688	0	13,956,212	1,749,281	3,123,720	31,475
6	Transit Garage Southeast	2027-2031	88,960,000		88,960,000	16,010,138	72,949,862	72,949,862	0	53,980,200	6,765,915	12,082,005	121,742
7	Transit Garage South	2027-2031	61,200,000		61,200,000	11,014,169	50,185,831	50,185,831	0	37,135,659	4,654,609	8,311,811	83,752
8	55 Orlando Garage Expansion	2022-2026	31,250,000		31,250,000	5,624,065	25,625,935	25,625,935	0	18,962,244	2,376,741	4,244,185	42,766
9	Bus Terminals, Loops & Stops - Expansion	2022-2031	8,039,000		8,039,000	1,446,779	6,592,221	6,592,221	0	4,877,999	611,412	1,091,808	11,001
10	Mackenzie-Vaughan Hospital Terminal	2022-2026	2,000,000		2,000,000	359,940	1,640,060	1,640,060	0	1,213,584	152,111	271,628	2,737
Subtotal Facilities			214,449,000	0	214,449,000	38,594,404	175,854,596	175,854,596	0	130,125,897	16,310,069	29,125,157	293,473
Technology													
11	Intelligent TRN System Expansion	2022-2031	8,060,000		8,060,000	1,450,559	6,609,441	6,609,441	0	4,890,742	613,009	1,094,660	11,030
12	Automated Fare Collection System Expansion	2022-2031	3,000,000		3,000,000	539,910	2,460,090	2,460,090	0	1,820,375	228,167	407,442	4,105
13	Electric Bus Infrastructure	2022-2031	27,540,000	0	27,540,000	18,797,945	8,742,055	2,779,266	5,962,789	2,056,554	257,770	460,304	4,638
14	Electric Bus Depot Charging Stations	2022-2031	9,600,000	0	9,600,000	3,081,481	6,518,519	6,518,519	0	4,823,463	604,576	1,079,601	10,878
Subtotal Technology			48,200,000	0	48,200,000	23,869,896	24,330,104	18,367,315	5,962,789	13,591,134	1,703,522	3,042,007	30,652
Bus Rapid Transit													
15	Bus Rapid Transit Infrastructure	2022-2031	812,000,000	595,439,600	216,560,400	38,974,393	177,586,007	177,586,007	0	131,407,077	16,470,653	29,411,914	296,362
16	Environmental Assessment and Preliminary Design for Future Rapid Transit	2022-2031	29,903,533	0	29,903,533	5,381,741	24,521,792	24,521,792	0	18,145,219	2,274,334	4,061,316	40,923
Subtotal Bus Rapid Transit			841,903,533	595,439,600	246,463,933	44,356,134	202,107,799	202,107,799	0	149,552,296	18,744,987	33,473,230	337,285
Total			1,297,132,533	595,439,600	701,692,933	141,479,071	560,213,862	554,251,073	5,962,789	410,125,295	51,405,386	91,795,437	924,956

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7 TORONTO-YORK SPADINA SUBWAY EXTENSION: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

7.1. Program Description

This service involves York Region's share of costs for the Toronto-York Spadina Subway Extension (TYSSE) including rights of way, system tracks, tunnel and single system, crossovers, subway stations and subway commuter facilities. The gross project cost is the updated estimate as of 2022 and is net of any expenditure to date (Table 7-1). As this project was included in York Region's 2017 Development Charges Study, the existing reserve fund balance for this service has been deducted from the development charge recoverable share in the cash flow calculations.

7.2. Level of Service Calculation

Pursuant to s.s.5.1 (2) of the Act, this service is not limited by a historical level of service calculation, and is subject to a planned level of service in accordance with the Regulation.

7.3. Benefit to Existing Development Deduction

The deduction for benefit-to-existing development for this service is consistent with the previous Development Charges Background Studies and Bylaws at 26%.

7.4. Post Period Benefit Deduction

Consistent with the previous Development Charges Background Studies and Bylaw, no deduction has been made for post period benefit as the costs are being recovered over the entire benefiting period.

7.5. Grants, Subsidies and Other Contributions

The capital costs have been reduced to exclude the portion attributable to grants and subsidies. The grant share for the remainder of the project is expected to be approximately \$1.7 million.

7.6. Residential versus Non-Residential Allocation

The net growth-related costs have been allocated between residential and non-residential development on the same basis as the Roads calculation outlined in subsection 5.6, yielding a 74.00% residential and 26.00% non-residential split to 2031.

2022 Development Charge Background Study
 Toronto-York Spadina Subway
 Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2031)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2031)	Post Period Benefit/ Level of Service Deduction (Beyond 2031)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
							74.00%	9.27%	16.56%	0.17%			
1	Toronto-York Spadina Subway Extension	2022	6,639,000	1,726,000	4,913,000	1,277,380	3,635,620	3,635,620	0	2,690,224	337,195	602,134	6,067
Total			6,639,000	1,726,000	4,913,000	1,277,380	3,635,620	3,635,620	0	2,690,224	337,195	602,134	6,067

8 YONGE NORTH SUBWAY EXTENSION: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

8.1. Program Description

The Yonge North Subway Extension (YNSE) is an approximately eight-kilometre extension of TTC Line 1 (Yonge - University) to Richmond Hill, including stations, train storage, transit connections and commuter parking facilities. This service involves York Region's planned share of costs for the YNSE, including, but not limited to: land, stations, platforms, enclosures, subway infrastructure, vehicles, rights of way, system tracks, tunnel and single system, crossovers, and subway commuter facilities.

The YNSE total project cost is estimated at \$5.6 billion. In May 2020, York Region entered into a Preliminary Agreement with the Province of Ontario to fund and build the YNSE. The Preliminary Agreement ensures that the Province of Ontario, York Region and the City of Toronto are fully committed to working together in partnership. As per the Ontario-York Region Transit Partnership Preliminary Agreement (May 2020), the Region is expected to contribute its pro-rata share to the subway's construction. In May of 2021, the federal government announced up to \$2.24 billion for the project. Based on the current estimated project budget of \$5.6 billion, the Region's pro rata share of the YNSE is estimated at \$1.12 billion, which is equivalent to 75% of the total municipal contribution. This share is expressed as the principal cost of the subway line in this background study.

8.2. Level of Service Calculation

Pursuant to s.s.5.1 (2) of the Act, this service is not limited by a historical level of service calculation and is subject to a planned level of service in accordance with the Regulation.

The planned level of service is considered to be the Council-approved capital plan, Province of Ontario-Regional Municipality of York Transit Partnership (Yonge North Subway Extension) Preliminary Agreement, or Ontario-York Region Transit Partnership, in respect of the Yonge North Subway Extension.

The Act allows the treatment of the YNSE as a discrete service with a 20-year planning horizon.

8.3. Ridership Forecasts

As required under the Act, the Region must identify the subway costs that were to be considered to benefit the existing development as of the date of the completion of the background study (BTE).

For calculating the BTE share, the following assumptions have been made:

Estimated ridership, measured by trips, is obtained from the Regional Transportation Demand Forecast model. This provides a basis for estimating the total number of trips during the AM peak period for local transit, GO Rail and auto trips:

- All trips originating from York Region to all destinations
- All trips with destinations to York Region from all origins
- A YNSE trip is defined as any trip that has an origin within York Region that shares a portion of its trip using the YNSE

The following horizons were evaluated related to the Base Year - the Travel Demand Forecasting Horizon that closely represents the DC Bylaw horizon:

- Total Trips – Total Auto and Local Transit Trips in the AM Peak Period at the end of the Base Year. Where required, a base year may be estimated based on two horizons within the Travel Demand Forecasting Model (T)
- YNSE Trips - All trips with destinations to the Yonge North Subway Extension – trips in the AM Peak Period at the end of the Base Year (A)
- Interim YNSE trips – trips in the AM Peak Period at the Base Year and incremental years through to the 20-year horizon within the Travel Demand Forecasting Model (B)
- 20-Year YNSE trips – trips in the AM Peak Period at the end of 20-year planning horizon (C)
- For the case of the 2022 DC Bylaw, it is assumed that the Yonge North Subway Extension is in service within the 10-year horizon

The model extractions are summarized in the following table.

**TABLE 8-1
YNSE MODEL EXTRACTIONS**

Horizon	YNSE	Local Transit	Non- motorized	HOV Passenger	Auto Trips	Total	Excl. GO Rail
							YNSE Mode Share
2021	17,289 (A)	28,757	59,200	84,800	375,733	565,779 (T)	3.06%
2026	20,833 (B)	31,458	62,900	96,700	404,967	616,858	3.38%
2031	27,875 (C)	36,825	66,600	108,600	434,200	674,100	4.14%
2041	29,545 (D)	41,955	95,600	137,500	512,500	817,100	3.62%
Total	95,542	138,995	284,300	427,600	1,727,400	2,673,837	3.57% (F)

8.4. Benefit to Existing Development Deduction

The YNSE Modal Split for existing development (F) is applied to total trips (T) in the Base Year to determine forecasted transit trips in the 10 Year by existing development (BTE).

The YNSE Mode Split for the existing development is estimated based on an average of base, interim horizon(s), and DC horizon YNSE trips (F). The justification of a weighted average is to reflect the gradual and incremental change in mode shift over the 20-year horizon.

The growth in YNSE trips between the Base Year (A) and 20-Year (D - A), is attributed to a split between growth in ridership from existing residents versus planned new development for the forward looking 20-year horizon. Estimated transit trips in the 20-year horizon are estimated by applying the forecasted mode split in the 20-year horizon (F) to the total trips in the base year (T).

95,542	YNSE Trips (Sum of 2021, 2026, 2031, 2041 forecasted trips)
2,673,837	Total Trips (Sum of 2021, 2026, 2031, 2041 forecasted trips)
3.57%	Weighted Mode Split (F)

The justification of a step increase in the YNSE transit mode share for existing residents is based on the anticipated faster uptake in transit use by new development compared to existing residents and employees. This is supported by the requirements in the Provincial Growth Plan promoting transit-supportive growth density targets and with transit-oriented street configurations for new development within the existing built boundary and urban growth area.

Using this approach, the benefit to existing deduction is calculated as follows:

$$\text{BTE} = \frac{(T \times F) - A}{D - A} = \frac{(565,779 \times (3.57\%)) - 17,289}{29,545 - 17,289} = 23.74\%$$

In addition to the aforementioned methodology, York Region evaluated two additional methodologies to estimate the benefiting population for YNSE. One of these includes the use of the Regional Travel Demand Forecasting Model, but with different formulations as noted above. The second approach includes an assessment of population growth. The result of the various models ranged from 8% to 27% BTE, however, clustered between 24 and 27%. As such, the deduction for the YNSE benefit to existing development has been rounded to 25% (Table 8-2), or \$280 million.

8.5. Post Period Benefit Deduction

No deduction has been made for post period or uncommitted excess capacity as the costs are being recovered over the entire benefiting period of this infrastructure. The infrastructure constructed for YNSE within the planning horizon is considered the minimum investment required to implement the subway extension to support growth within the 2041 planning horizon. Additional

capacity to the system would require significant additional investment including investment in rolling stock, improvements to the existing subway infrastructure south of Finch Station not included in the extension project, additional storage and maintenance facilities, and completion of future subway corridors in Toronto which are not included in this Background Study.

Although the tunnels and stations are built for a longer horizon, the additional capacity can only be unlocked with significant additional investment on the elements identified above. For this reason, the Metrolinx Initial Business Case (IBC) to support the construction of the Yonge North Subway Extension also used a horizon of 2041.

8.6. Grants, Subsidies and Other Contributions

There are no grants or subsidies for the Regional share of the YNSE subway costs. The overall capital costs have been reduced to exclude the portion attributable to senior levels of government grants and subsidies.

8.7. Residential versus Non-residential Allocation

The net growth-related costs have been allocated between residential and non-residential development on the same basis as the Roads calculation outlined in subsection 5.6, yielding a 74.88% residential and 25.12% non-residential split.

2022 Development Charge Background Study
 Yonge North Subway Extension
 Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2031)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Non-Residential Share			
										Residential	Retail	Industrial/ Office/ Institutional	Hotel
1	Yonge North Subway Extension	2022-2041	1,120,000,000	0	1,120,000,000	280,000,000	840,000,000	840,000,000	0	74.88%	8.94%	16.01%	0.17%
	Total		1,120,000,000	0	1,120,000,000	280,000,000	840,000,000	840,000,000	0	628,965,979	75,123,625	134,517,030	1,393,365

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9. GENERAL SERVICES: CAPITAL FORECASTS AND DC-RECOVERABLE COSTS

This Chapter of the Background Study is organized into the following nine sections by service and planning horizon:

20-Year Planning Horizon:

- 9.1 Police Services
- 9.2 Waste Diversion
- 9.3 Public Works
- 9.4 Housing Services
- 9.5 Growth Studies
- 9.6 Court Services

10-Year Planning Horizon:

- 9.7 Ambulance Services
- 9.8 Public Health
- 9.9 Long-Term Care/Seniors Services

9.1 Police Services

9.1.1 Program Description

The 20-year Police Services capital program (Table 9-6) consists of:

Facilities	Largely a #1 district multi-function building, new district substation, consolidation of leased premises
Land	Land acquisition
Vehicles	Increase of inventory by adding new vehicles, marine boats and police helicopter
Equipment	Mostly specialized equipment, portable and mobile gear, radio systems, business intelligence and digital evidence management

9.1.2 Level of Service

The 10-year historical level of service is comprised of the following:

- Existing owned and leased facilities including district stations and substations, and the Central Services Building. This space has been valued based on 2022 replacement cost per square foot, including an allowance for land purchase and site servicing (Tables 9-2)
- Land for owned and leased districts and headquarters, including training facility, safety village and specialized locations (Tables 9-3)
- Vehicles including patrol cars, vans, specialty vehicles, boats and helicopters (Table 9-4)
- Equipment such as communication and radio infrastructure, data network equipment, computer-aided dispatch and specialized equipment (Table 9-5)

The total funding envelope of \$169,293,256 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$107,688,566 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.1.3 Benefit to Existing Development Deduction

Benefit to existing deduction applied to facilities, land, vehicles and equipment is summarized as follows:

Land	Land acquisition is primarily done to service new population with more facilities and equipment. There is a 10% benefit to existing deduction to recognize non-growth related service.
Facilities	Training facilities, sub-station outlook and district headquarters and expansions involve the establishment of use-specific facilities for functions that are currently being undertaken in York Region. A deduction of 10%, where applicable, has been made to recognize any potential benefit to existing development as a result of improved service.

Expansion or replacement of existing buildings will provide some service to existing population.

Vehicles Vehicle costs are incurred through rehabilitation and replacement costs with a growth component included through the addition of new vehicles. The benefit to existing deduction is based on the portion that services the existing total population and employment in 2021 as a share of total population and employment in 2041 (1,877,600 ÷ 2,565,200).

Therefore, the benefit to existing deduction is calculated as the non-growth component of 73%.

Equipment Specialized equipment added for additional staff to support growth has no benefit to existing deduction applied to it. All other equipment includes some supplies to support existing police staff that will provide an improved service to existing population.

Following the same methodology as for vehicles, a deduction of 73% is made to recognize any potential benefit to existing population as a result of the added and improved equipment.

9.1.4 Post Period Benefit Deduction

The development charges program consists of 20 years of requirements. No deduction for post period benefit has been made.

9.1.5 Grants, Subsidies and Other Contributions

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.1.6 Residential versus Non-Residential Allocation

The allocations are based on the incremental gross population growth and employment requiring new space between 2022 and 2041, as outlined in Table 9-1 below:

**TABLE 9-1
RESIDENTIAL AND NON-RESIDENTIAL ALLOCATION**

	2022 to mid-2041	%
Gross population growth	476,277	74.88
Retail employment growth*	34,259	5.39
IOI employment growth*	124,766	19.62
Hotel employment growth*	777	0.12
Total population and employment*	636,079	100.00

*Note: Employment requiring new space
Numbers may not add due to rounding

2022 DC Background Study
Police Services - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
Owned Sites											
Central Services Building (47 Don Hillock Dr. and 55 Don Hillock Dr.)	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	9.35	1,540,000
District #1 (240 Prospect St. Newmarket)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2,420,000
District #1 (429 Harry Walker Parkway South. Newmarket)				3.00	3.00	3.00	3.00	3.00	3.00	3.00	1,980,000
District #1 ED Share	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	(1.36)	4,400,000
District #2 (171 Major Mackenzie Drive W. Richmond Hill)	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	2.99	1,518,000
District #3 (3527 Baseline Rd. Sutton)	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	3.43	55,000
District #4 (2700 Rutherford Rd. Vaughan)	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	3.03	2,530,000
District#5 (8700 McCowan Rd. Markham)	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	5,500,000
Egypt Tower Site (Township of Georgina)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	22,000
Training Facility							8.00	8.00	8.00	8.00	660,000
Marine Headquarters									0.90	0.90	1,650,000
Other - Provided Space											
Headquarters (17250 Yonge Street)	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	3,300,000
90 Bales Drive (E. Gwillimbury)	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	660,000
Court Services (50 Eagle Street, Newmarket)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	2,640,000
Vaughan Mills Substation (Vaughan)	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	3,300,000
Leased Sites											
Yonge and Mulock Centre (Newmarket)	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	3,300,000
Air Support -Hangar #17A and office- (Toronto Buttonville Municipal Airport, Markham, ON)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	2,618,000
Community Resource Centre (Hillcrest Mall, 9350 Yonge St. Richmond Hill, ON)	0.24	0.24	0.24								3,300,000
Community Resource Centre (10720 Yonge Street, #112, Richmond Hill)				0.39	0.39	0.39	0.39	0.39	0.39	0.39	3,300,000
Hope Tower Site (North Maple Reservoir, Vaughan)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	880,000
Safety Village (Stouffville)	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	5.70	27,500
King Tower (King)	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	110,000

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
Stouffville Substation	0.07	0.07	0.07	0.30	0.30	0.30	0.30	0.30	0.30	0.30	1,650,000
King/Schomberg Substation	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	2,200,000
Seized Property Warehouse (Confidential Location)	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1,980,000
Peer Support Building (East Gwillimbury)					22.00	22.00	22.00	22.00	22.00		220,000
Peer Support Building (Aurora)										0.65	1,650,000
Total	33.04	33.04	33.04	36.43	58.43	58.43	66.43	66.43	67.33	45.98	1,275

Population and Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0204	0.0199	0.0196	0.0213	0.0334	0.0328	0.0365	0.0359	0.0372	0.0245

10 Year Average	2012-2021
Quantity Standard (acre. per 1,000 capita)	0.0282
Quality Standard (\$ per acre)	\$1,275
Service Standard (\$/1,000 capita)	\$0.04

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space growth	636,079
\$ per 1,000 Capita	\$0.04
DC Amount (before adjustments)	\$22,825,614

2022 Development Charge Background
Police Services - Facilities
Square Footage
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
Owned Sites											
Central Services Building (47 Don Hillock Dr., Aurora)	237,391	237,391	244,255	244,255	244,255	244,255	244,255	244,255	244,255	244,255	467
Central Services Building (47 Don Hillock Dr., Aurora) Existing Debt Share	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	(38,093)	467
Police Central Services Building - Parking Garage (55 Don Hillock Drive)			168,240	168,240	168,240	168,240	168,240	168,240	168,240	168,240	445
District #1 (240 Prospect St. Newmarket)	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	30,000	445
District #1 Existing Debt Share	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	(20,347)	445
District #2 (171 Major Mackenzie Drive W. Richmond Hill)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	445
District #3 (3527 Baseline Rd. Sutton)	25,500	25,500	25,500	25,500	26,500	26,500	26,500	26,500	26,500	26,500	445
District #3 (3527 Baseline Rd. Sutton) Existing Debt Share	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	(13,758)	445
District #4 (2700 Rutherford Rd. Vaughan)	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	45,000	445
District #4 (2700 Rutherford Rd. Vaughan) Existing Debt Share	(356)	(356)	(356)	(356)	(356)	(356)	(356)	(356)	(356)	(356)	445
District#5 (8700 McCowan Rd. Markham)	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	445
Safety Village (Stouffville)	10,000	10,000	10,000	10,000	17,533	17,533	17,533	17,533	17,533	17,533	445
Safety Village (Stouffville) Existing Debt Share	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	(1,874)	445
Training Facility							83,000	83,000	83,000	83,000	615
Training Facility Existing Debt Share							(30,482)	(30,482)	(30,482)	(30,482)	615
Marine Headquarters									8,900	8,900	795
Other - Provided Space											
Headquarters (17250 Yonge Street)1	49,895	49,895	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	339
90 Bales Drive (E. Gwillimbury)	13,598	13,598	13,598	13,598	13,598	13,598	13,598	13,598	13,598	13,598	615
Court Services (50 Eagle Street, Newmarket)	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	4,500	339
Vaughan Mills Substation (Vaughan)	949	949	949	949	949	949	949	949	949	949	339
Leased Sites											
Yonge and Mulock Centre (Newmarket)	17,672	17,672	17,672	17,672	20,319	20,319	20,319	20,319	20,319	20,319	339
Air Support -Hangar #19 and office- (Toronto Buttonville Municipal Airport, Markham, ON)	2,094	2,094	2,094	2,094	2,414	2,414	2,414	2,414	2,414	2,414	445

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
Air Support -Hangar #19 and office- (Toronto Buttonville Municipal Airport, Markham, ON) Existing Debt Share	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	(1,103)	445
Community Resource Centre (Hillcrest Mall, 9350 Yonge St. Richmond Hill, ON)	8,224	8,224	8,224								339
Community Resource Centre (10720 Yonge Street, #112, Richmond Hill)				7,603	7,603	7,603	7,603	7,603	7,603	7,603	339
Stouffville Substation	1,000	1,000	1,000	4,500	4,500	4,500	4,500	4,500	4,500	4,500	445
King/Shomberg Substation	1,000	1,000	1,000	1,000	1,000	1,000	3,000	3,000	3,000	3,000	445
East Gwillimbury/Mount Albert Substation	1,000	1,000	1,000	1,000	1,000	1,000					445
Seized Property Warehouse (Confidential Location)	9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700	9,700	445
Peer Support Building (East Gwillimbury)					3,000	3,000	3,000	3,000	3,000	0	615
Peer Support Building (Aurora)										6,946	445
Total	461,993	461,993	592,202	595,081	609,581	609,581	663,099	663,099	671,999	675,945	\$455.36

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per Capita Standard	0.2857	0.2782	0.3516	0.3473	0.3488	0.3420	0.3646	0.3580	0.3714	0.3600

10 Year Average	2012-2021
Quantity Standard (Sqft per Capita)	0.3408
Quality Standard (\$ per Sqft)	\$455
Service Standard (\$ per Capita)	\$155.17

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space growth	636,079
\$ per Capita	\$155.17
DC Amount (before adjustments)	\$98,697,965

2022 DC Background Study
Police Services - Vehicles
Number of Vehicles
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Vehicle)
Marked 24/7 Equivalent to = or > 7 years	170	173	173	181	177	195	219	211	226	242	47,896
Marked 24/7 Equivalent to = or > 7 years Existing Debt Share	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	(21)	47,896
Unmarked & Vans - All < 7 years	202	203	206	215	219	198	200	209	213	203	25,945
Specialty Vehicles:											
Operation Specialty	22	24	28	22	41	38	35	23	17	15	45,942
Operational Support	69	78	75	72	81	78	78	59	52	49	39,468
Command Post	1	1	1	1	1	1	2	2	2	2	398,836
Boats	8	8	8	8	8	7	7	6	6	7	257,913
Tractor	1	1	1	2	2	3	3	3	3	3	28,617
Motorcycle	14	12	14	13	18	18	18	17	17	17	29,347
Helicopter	1	1	1	1	1	1	1	1	1	1	6,250,000
Tactical Support Vehicle	1	1	1	1	1	1	1	1	1	2	376,144
Vehicle Equipment ¹	468	481	487	495	528	538	562	530	536	539	11,214
Vehicle Equipment ¹ Existing Debt Share	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(14)	(14)	11,214
Total	453	466	472	480	513	504	528	496	502	505	\$66,983

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.2802	0.2807	0.2804	0.2802	0.2937	0.2829	0.2904	0.2679	0.2775	0.2691

10 Year Average	2012-2021
Quantity Standard (Veh. Per 1,000 Capita)	0.2803
Quality Standard (\$ per vehicle)	\$66,983
Service Standard (\$/Capita)	\$18.77

Notes:

1. Vehicle Equipment includes specialized equipment to outfit all police vehicles for use. Value included in calculation of quality standard.

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space growth	636,079
\$ per Capita	\$18.77
DC Amount (before adjustments)	\$11,942,139

**2022 DC Background Study
Police Services - Equipment
Dollar Value of Equipment
Historic Level of Service**

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Voice Communication User Gear	\$ 4,235,271	\$ 4,235,271	\$ 4,235,271	\$ 6,260,271	\$ 3,324,275	\$ 3,324,275	\$ 3,324,275	\$ 2,483,677	\$ 2,483,677	\$ 2,483,677
Voice Communication Infrastructure & Equipment	\$ 11,653,500	\$ 11,653,500	\$ 21,103,889	\$ 23,300,889	\$ 23,642,080	\$ 23,961,029	\$ 23,961,029	\$ 24,285,474	\$ 24,561,461	\$ 24,946,883
Backup Radio Infrastructure & Operations Centre	\$ 379,716	\$ 379,716	\$ 379,716	\$ 379,716	\$ 116,093	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200	\$ 151,200
Data Network Equipment	\$ 13,063,783	\$ 14,148,760	\$ 16,174,310	\$ 16,174,310	\$ 19,416,827	\$ 16,435,224	\$ 18,798,305	\$ 18,979,090	\$ 22,542,784	\$ 20,797,607
External Assets - Fire Services	\$ 1,046,298	\$ 1,046,298	\$ 1,046,298	\$ 1,046,298	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Use of Force Equipment	\$ 3,299,547	\$ 3,647,727	\$ 4,101,788	\$ 4,101,788	\$ 2,540,987	\$ 2,733,481	\$ 2,913,564	\$ 3,542,578	\$ 4,428,977	\$ 4,656,835
Generators	\$ 194,374	\$ 196,867	\$ 196,867	\$ 196,867	\$ 169,788	\$ 169,788	\$ 169,788	\$ 169,788	\$ 155,898	\$ 155,898
Computer Aided Dispatch/Records Mgmt System	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000	\$ 3,762,000
Telephone Infrastructure & Equipment	\$ 530,527	\$ 530,527	\$ 530,527	\$ 530,527	\$ 530,527	\$ 530,527	\$ 778,954	\$ 778,954	\$ 778,954	\$ 778,954
Specialized Equipment	\$ 12,381,448	\$ 13,167,330	\$ 14,396,772	\$ 14,396,772	\$ 19,206,931	\$ 15,416,271	\$ 15,686,563	\$ 16,600,610	\$ 17,912,349	\$ 16,445,838
Specialized Equipment Existing Debt Share	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755	-\$ 1,239,755
Employee Scheduling System			\$ 356,654	\$ 356,654	\$ 356,654	\$ 356,654	\$ 356,654	\$ 447,814	\$ 447,814	\$ 447,814
Total	\$ 49,306,709	\$ 51,528,242	\$ 65,044,338	\$ 69,266,338	\$ 71,826,407	\$ 65,600,694	\$ 68,662,576	\$ 69,961,430	\$ 75,985,359	\$ 73,386,952

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per Capita Standard	30.49	31.03	38.62	40.42	41.10	36.80	37.75	37.77	41.99	39.09

10 Year Average	2012-2021
Quantity Standard	37.51
Quality Standard	1.00
Service Standard (\$perCapita)	\$37.51

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space growth	636,079
\$ per Capita	\$37.51
DC Amount (before adjustments)	\$23,857,422

2022 Development Charge Background Study
Police Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	22,825,614
Facilities	98,697,965
Vehicles	11,942,139
Equipment	23,857,422
Opening reserve adjustment	11,970,116
Funding Envelope	169,293,256
Less Existing debt principal	61,604,690
Total eligible amount for new projects	107,688,566

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											74.88%	Retail	Industrial/ Office/ Institutional
Facilities													
1	District/Major Renovations	2032-2041	53,500,000	0	53,500,000	5,350,000	48,150,000	31,667,507	16,482,493	23,711,648	1,705,485	6,211,750	38,624
2	Consolidated Leased Premises	2022-2026	10,000,000	0	10,000,000	1,000,000	9,000,000	5,919,160	3,080,840	4,432,084	318,782	1,161,075	7,219
3	#1 District Multi-Function	2022-2026	3,600,000	0	3,600,000	360,000	3,240,000	2,130,898	1,109,102	1,595,550	114,762	417,987	2,599
4	240 Prospect Renovation	2022-2026	2,050,000	0	2,050,000	205,000	1,845,000	1,213,428	631,572	908,577	65,350	238,020	1,480
5	PS Leasehold Improvements	2022-2041	3,056,000	0	3,056,000	305,600	2,750,400	1,808,895	941,505	1,354,445	97,420	354,824	2,206
6	Renovations/Major Equipment to Existing Facilities	2022-2041	24,960,000	0	24,960,000	19,968,000	4,992,000	3,283,161	1,708,839	2,458,329	176,818	644,010	4,004
	Subtotal Facilities		97,166,000	0	97,166,000	27,188,600	69,977,400	46,023,049	23,954,351	34,460,633	2,478,617	9,027,666	56,132
Vehicles													
5	Vehicles	2022-2041	108,496,000	0	108,496,000	79,202,080	29,293,920	19,266,156	10,027,764	14,425,901	1,037,598	3,779,159	23,498
6	Air Operations	2022-2041	14,008,000	0	14,008,000	10,225,840	3,782,160	2,487,468	1,294,692	1,862,539	133,965	487,930	3,034
7	Marine Boats	2027-2041	3,334,000	0	3,334,000	2,433,820	900,180	592,034	308,146	443,297	31,885	116,131	722
8	Air Operations- Helicopter Replacement	2022-2026	7,050,000	0	7,050,000	5,146,500	1,903,500	1,251,902	651,598	937,386	67,422	245,567	1,527
	Subtotal Vehicles		132,888,000	0	132,888,000	97,008,240	35,879,760	23,597,561	12,282,199	17,669,123	1,270,870	4,628,787	28,781
Equipment													
9	Business Intelligence	2022-2041	3,480,000	0	3,480,000	2,547,907	932,093	613,023	319,070	459,013	33,015	120,248	748
10	Computer Aided Dispatch - Records Mgmt System	2022-2026	3,700,000	0	3,700,000	2,701,000	999,000	657,027	341,973	491,961	35,385	128,879	801
11	Connected Officer	2022-2041	20,034,000	0	20,034,000	14,624,820	5,409,180	3,557,534	1,851,646	2,663,771	191,594	697,829	4,339
12	Data Governance and Retention Management	2022-2041	2,000,000	0	2,000,000	1,460,000	540,000	355,150	184,850	265,925	19,127	69,664	433
13	Digital Evidence Management & In-Car Cam	2022-2041	21,695,000	0	21,695,000	15,837,350	5,857,650	3,852,485	2,005,165	2,884,622	207,479	755,686	4,699
14	Disaster Recovery Plan	2022-2041	1,232,000	0	1,232,000	899,360	332,640	218,772	113,868	163,810	11,782	42,913	267
15	Employee Scheduling	2022-2041	560,000	0	560,000	408,800	151,200	99,442	51,758	74,459	5,356	19,506	121
16	Portable and Mobile User Gear	2022-2041	8,208,000	0	8,208,000	5,991,840	2,216,160	1,457,534	758,626	1,091,356	78,497	285,903	1,778
17	Radio System	2022-2031	27,880,000	0	27,880,000	20,352,400	7,527,600	4,950,786	2,576,814	3,706,995	266,629	971,123	6,038
18	Specialized Equipment - Closed-Circuit / Witness Rooms	2022-2041	1,672,000	0	1,672,000	1,220,560	451,440	296,905	154,535	222,313	15,990	58,240	362
19	Specialized Equipment - Forensic Equipment	2022-2041	6,355,000	0	6,355,000	4,639,150	1,715,850	1,128,488	587,362	844,977	60,776	221,359	1,376
20	Specialized Equipment - Growth Staff	2022-2041	26,536,000	0	26,536,000	0	26,536,000	17,452,315	9,083,685	13,067,753	939,912	3,423,365	21,286
21	Specialized Equipment - Road Safety	2022-2041	1,888,000	0	1,888,000	1,378,240	509,760	335,261	174,499	251,033	18,056	65,763	409
22	Specialized Equipment - Robotics / Support Services	2022-2041	1,676,000	0	1,676,000	1,223,480	452,520	297,615	154,905	222,845	16,028	58,379	363

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential	Non-Residential Share		
											Retail	Industrial/ Office/ Institutional	Hotel
							74.88%	5.39%	19.62%	0.12%			
23	Specialized Equipment - Technical Investigations	2022-2041	4,400,000	0	4,400,000	3,212,000	1,188,000	781,329	406,671	585,035	42,079	153,262	953
24	Specialized Equipment - Telephone	2027-2041	1,400,000	0	1,400,000	1,022,000	378,000	248,605	129,395	186,148	13,389	48,765	303
25	Talent Management	2022-2041	6,000,000	0	6,000,000	4,380,000	1,620,000	1,065,449	554,551	797,775	57,381	208,993	1,299
26	YRP Net Rewrite	2022-2041	610,000	0	610,000	445,300	164,700	108,321	56,379	81,107	5,834	21,248	132
	Subtotal Equipment		139,326,000	0	139,326,000	82,344,207	56,981,793	37,476,040	19,505,753	28,060,898	2,018,309	7,351,125	45,708
Land													
27	Land Bank Acquisition	2032-2036	1,000,000	0	1,000,000	100,000	900,000	591,916	308,084	443,208	31,878	116,107	722
	Subtotal Land		1,000,000	0	1,000,000	100,000	900,000	591,916	308,084	443,208	31,878	116,107	722
Total			370,380,000	0	370,380,000	206,641,047	163,738,953	107,688,566	56,050,387	80,633,862	5,799,674	21,123,686	131,343

9.2 Waste Diversion

9.2.1 Overview

Approved by Council in April 2020, an update to York Region's Waste Management Master Plan SM4RT Living Plan continues to move the Region to a more sustainable circular economy that emphasizes waste reduction, repair, reuse and resource recovery to ensure materials are kept in circulation, maximizing economic value and environmental protection.

Diversion from landfill is a key performance measure under the sustainable environment priority in the 2019 to 2023 Strategic Plan.

The Region provides waste diversion services through a number of projects, including Source Separated Organics Facility project and Expanded Diversion Capacity project that includes growth studies to identify additional infrastructure requirements resulting from the Waste Management Master Plan.

Source Separated Organics Facility project covers research into processing technologies applicable to York Region's waste stream, which in the long term will inform the construction of a Region-owned facility. The food waste diversion program represents at least half of the total diversion tonnage.

9.2.2 Program Description

The 20-year Waste Diversion capital program, as noted in Table 9-10, consists of:

Facilities	Building structures to expand diversion capacity and add a source-separated organic facility
Growth Studies	A study to explore new waste management needs as part of the Waste Diversion Master Plan review

9.2.3 Level of Service

The 10-year historical level of service is comprised of the following:

- Region-owned and leased land including depots, transfer stations, and environmental centres' locations, and contracted land including Source-Separated Organics and Yard Waste locations (Table 9-7)
- Existing owned and leased facilities, including recycling facilities, scale buildings, community environmental centres, and household hazardous waste depots (Table 9-8)
- Region-owned and leased equipment such as hydraulic power washers, scales, baler and feeder systems, platforms, compactors, and various sorting equipment; and contracted equipment within the Source-Separated Organics and yard waste facilities (Table 9-9)

Portions of the service related to landfill sites and servicing have been removed from the calculation.

The total funding envelope of \$70,914,679 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$70,914,679 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.2.4 Benefit to Existing Development Deduction

Expanding Diversion Capacity project has a 33% benefit-to-existing deduction based on the share of population and employment growth. The Source-Separated Organics facility has a 72% deduction, based on the share of population growth during the planning horizon, considering that the facility will service only the residents of York Region.

9.2.5 Post Period Benefit Deduction

The Waste Diversion program is related to development occurring over the 2022-2041 planning period. For the Diversion Capacity Expansion project, where a benefit will be provided to development occurring beyond 2041, a reduction of 37% has been applied. These costs will be considered for recovery under future development charges.

9.2.6 Grants, Subsidies and Other Contributions

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.2.7 Residential versus Non-residential Allocation

For this background study, all waste diversion projects have been identified as 100% residential. This is because these projects are expected to divert residential waste.

2022 Development Charge Background
Waste Diversion - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
Region Owned Land											
HHW Depot East Gwillimbury	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1.80	1,210,000
HHW & Georgina Transfer Stn	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	7.25	132,000
HHW Depot Vaughan	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	7.80	2,530,000
Waste Management Ctr East Gwillimbury @ 83% diversion (based on facility usage)	23.42	23.42	23.42	23.42	23.42	23.42	23.42	23.42	23.42	23.42	1,210,000
CEC McCleary Court @ 20% diversion	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	3,300,000
Region Contracted											
Household Hazardous Waste Depot - Markham Rental	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	2,200,000
Community Environmental Centre - Elgin Mills @ 11.5%	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	3,300,000
Leased Land											
Organics - SSO Facility 1 and 2 weighted average plus Yard Waste	106.52	106.52	106.52	106.52	106.52	106.52	106.52	106.52	106.52	106.52	464,170
Total	148	148	148	148	148	148	148	148	148	148	700,976

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0913	0.0890	0.0877	0.0862	0.0845	0.0829	0.0812	0.0798	0.0816	0.0787

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	0.0843
Quality Standard (\$ per Acre)	\$700,976
Service Standard (\$ per Capita)	\$59.09

DC Amount (before adjustments)	20 Year
Gross population increase	476,277
\$ per Capita	\$59.09
DC Amount (before adjustments)	\$28,141,624

**2022 Development Charge Background Study
Waste Diversion - Facilities
Square Footage
Historic Level of Service**

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
Region Owned											
Municipal Recycling Facility / MRF and scale buildings at 83%(base on sq footage of MRF)- East Gwillimbury	78,317	78,317	78,317	78,317	78,317	78,317	78,317	78,317	78,317	78,317	376
Georgina Transfer Station at 10% diversion	51	51	51	51	51	51	27	27	27	27	4,570
Community Environmental Centre - McCleary Ct, Vaughan Building at 20% diversion	4,308	4,308	4,308	4,308	4,308	4,308	4,308	4,308	4,308	4,308	508
Community Environmental Centre - Elgin Mills, Richmond Hill at 12% diversion	1,795	1,795	1,795	1,795	1,795	1,795	1,795	1,795	1,795	1,795	1,184
Household Hazardous Waste Depot - Georgina (Outbuilding)	512	512	512	512	512	512	512	512	512	512	2,942
Household Hazardous Waste Depot - East Gwillimbury	1,592	1,592	1,592	1,592	1,592	1,592	1,592	1,592	1,592	1,592	1,606
Household Hazardous Waste Depot - Markham	530	530	530	530	530	530	530	530	530	530	1,084
Household Hazardous Waste Depot - Vaughan	530	530	530	530	530	530	530	530	530	530	626
Region Contracted											
Organics - SSO and Yard Waste	114,338	119,610	118,890	120,207	120,207	120,207	120,207	120,207	120,207	120,207	314
Total	201,973	207,245	206,525	207,842	207,842	207,842	207,818	207,818	207,818	207,818	\$369

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per Capita Standard	0.1249	0.1248	0.1226	0.1213	0.1189	0.1166	0.1143	0.1122	0.1148	0.1107

10 Year Average	2012-2021
Quantity Standard (Sqft per Capita)	0.1181
Quality Standard (\$ per Sqft)	\$369
Service Standard (\$ per Capita)	\$43.57

DC Amount (before adjustments)	20 Year
Gross population increase	476,277
\$ per Capita	\$43.57
DC Amount (before adjustments)	\$20,751,590

2022 Development Charge Background
Study
Waste Diversion - Equipment
Number of Items
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Equipment)
Region Owned											
CEC Elgin Mills @ 11.5% - Scales	0	0	0	0	0	0	1	1	1	1	34,104
CEC Elgin Mills @ 11.5% - Scales	1	1	1	1	1	1	1	1	1	1	35,221
CEC Elgin Mills @ 11.5% - Furniture and Fixtures	1	1	1	1	1	1	1	1	1	1	2,703
CEC Elgin Mills @ 11.5% - Roll-off Bins	1	1	1	1	1	1	1	1	1	1	4,425
CEC Elgin Mills @ 11.5% - Scale Hardware	0	1	1	1	1	1	1	1	1	1	1,505
GTS @ 10% - Compactors	0	0	1	1	1	1	1	1	1	1	47,184
GTS @ 10% - Fall Protection System	0	1	1	1	1	1	1	1	1	1	2,447
GTS @ 10% - Hydraulic Power Washer	1	1	1	1	1	1	1	1	1	1	2,669
GTS @ 10% - Radiation Detector	0	0	1	1	1	1	1	1	1	1	2,068
GTS @ 10% - Scale Hardware	1	1	1	1	1	1	1	1	1	1	2,347
GTS @ 10% - Scale	0	0	0	0	0	0	1	1	1	1	9,845
GTS @ 10% - HW&SW Scale	0	0	0	0	0	0	1	1	1	1	4,877
CEC MCC Scale	0	0	0	0	0	1	1	1	1	1	144,645
CEC Vaughan POS	1	1	1	1	1	1	1	1	1	1	58,809
CEC MCC Scale	1	1	1	1	1	1	1	1	1	1	84,428
CEC MCC Scale	0	1	1	1	1	1	1	1	1	1	23,471
MRF - Baler	1	1	1	1	1	1	1	1	1	1	946,725
MRF - Baler/Feeder System	1	1	1	1	1	1	1	1	1	1	2,820,739
MRF - Compactors	1	1	1	1	1	1	1	1	1	1	526,751
MRF - Conveyor to return containers	1	1	1	1	1	1	1	1	1	1	185,963
MRF - Infeed Sorting Residue Conv	1	1	1	1	1	1	1	1	1	1	4,792,718
MRF - Instrumentation Controls	1	1	1	1	1	1	1	1	1	1	2,532,302
MRF - Mixed Paper Bypass & Scalp Scree	0	0	0	0	0	0	0	0	1	1	1,288,061
MRF - Glass Clean Up System	0	0	0	1	1	1	1	1	1	1	1,742,981
MRF - Mixed Paper Sorting	1	1	1	1	1	1	1	1	1	1	3,030,314
MRF - Newspaper by-pass conveyor	1	1	1	1	1	1	1	1	1	1	355,022
MRF - Newspaper Screens	1	1	1	1	1	1	1	1	1	1	845,289
MRF - Optical Sorting Equipment	1	1	1	1	1	1	1	1	1	1	12,654,094
MRF - Plastic Perforator	1	1	1	1	1	1	1	1	1	1	456,457
MRF - Platforms Stairs	1	1	1	1	1	1	1	1	1	1	1,215,850
MRF - Power Distribution System	1	1	1	1	1	1	1	1	1	1	693,138
MRF - Radiation Detector	1	1	1	1	1	1	1	1	1	1	56,644

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Equipment)
MRF - SCADA System w/ Controls	1	1	1	1	1	1	1	1	1	1	1,267,935
WMC Scales - Diversion Portion @ 83%	1	1	1	1	1	1	1	1	1	1	163,132
MRF - Shafts on Finishing Screens	1	1	1	1	1	1	1	1	1	1	160,605
MRF - Sort Room HVAC	0	0	0	0	1	1	1	1	1	1	40,075
MRF - SW Signage	0	0	0	1	1	1	1	1	1	1	28,063
Region Contracted											
Organics - SSO Facility 1 and 2 weighted average plus Yard Waste facility	2	2	2	2	2	2	2	2	2	2	20,618,709
Total	26	29	31	33	34	35	38	38	39	39	2,227,935

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1000 Capita Standard	0.0161	0.0175	0.0184	0.0193	0.0195	0.0196	0.0209	0.0205	0.0216	0.0208

10 Year Average	2012-2021
Quantity Standard (Number of Items per 1,000 Capita)	0.0194
Quality Standard (\$ per Equipment)	\$2,227,935
Service Standard (\$ per Capita)	\$43.23

DC Amount (before adjustments)	20 Years
Gross population increase	476,277
\$ per Capita	\$43.23
DC Amount (before adjustments)	\$20,588,893

2022 Development Charge Background Study
Waste Diversion
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	28,141,624
Facilities	20,751,590
Vehicles	0
Equipment	20,588,893
Opening reserve adjustment	1,432,572
Funding Envelope	70,914,679
Less Existing debt principal	0
Total eligible amount for new projects	70,914,679

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Non-Residential Share			
										Residential	Retail	Industrial/ Office/ Institutional	Hotel
							100%	0%	0%	0%			
Facilities													
1	Expanded Diversion Capacity	2032-2036	30,996,000	0	30,996,000	10,341,438	20,654,562	13,097,716	7,556,846	13,097,716	0	0	0
2	Source Separated Organics Facility	2022-2031	98,791,000		98,791,000	71,129,520	27,661,480	27,661,480	0	27,661,480	0	0	0
	Subtotal Facilities		129,787,000	0	129,787,000	81,470,958	48,316,042	40,759,196	7,556,846	40,759,196	0	0	0
Study													
3	New Waste Management Initiatives	2022-3036	1,326,000		1,326,000	0	1,326,000	1,326,000	0	1,326,000	0	0	0
	Subtotal Studies		1,326,000	0	1,326,000	0	1,326,000	1,326,000	0	1,326,000	0	0	0
Total			131,113,000	0	131,113,000	81,470,958	49,642,042	42,085,196	7,556,846	42,085,196	0	0	0

9.3 Public Works

9.3.1 Program Description

The 20-year Public Works program (Tables 9-17) consists of:

Facilities	Roads traffic operations main and satellite yards and maintenance facilities
Fleet	New additions to the fleet and electric fleet infrastructure; snow-melting and off-road equipment, trailers, loaders, and mowers

9.3.2 Level of Service

The 10-year historical level of service is based on the replacement cost for the following:

- Land and buildings including Operations Centre, patrol yards and salt/sand storage facilities (Tables 9-13 and 9-14)
- Fleet of service trucks, street sweepers and dump trucks (Table 9-15)

Equipment inventory both owned and contracted (Table 9-16)

The total funding envelope of \$110,293,161 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$109,512,931 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.3.3 Benefit to Existing Development Deduction

Benefit to existing deduction was applied to facilities, vehicles and equipment using the same methodology as in the Region's 2017 DC Bylaw. Vehicles and equipment have no deduction as York Region is simply expanding its resources to provide the same service level in meeting the growth-related needs. For facilities, only costs net of replacement value have been included resulting in a 5% BTE deduction:

Southeast Patrol Area Works Yard (Main and Satellite Facilities)	5% deduction
SW/Central Roads Maintenance Facilities and Yards	5% deduction
North Existing and Satellite Yards	5% deduction
Various Maintenance Facility Upgrades	5% deduction
Portable Snow Melting Facilities	No deduction
Electric Fleet Infrastructure	No deduction
Fleet New Additions	No deduction

9.3.4 Post Period Benefit Deduction

The Public Works program is related to development occurring over the 2022-2041 planning horizon with level of service cap affecting in-period cost recovery. Any exceeding amount will be considered for recovery under future DC bylaws. No deduction for post period benefit has been made.

9.3.5 Grants, Subsidies and Other Contributions

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.3.6 Residential versus Non-Residential Allocation

The allocations are based on the net increment in population and employment between 2022 and 2041, as outlined in Table 9-11 below:

**TABLE 9-11
INCREMENTAL GROWTH FOR POPULATION AND EMPLOYMENT**

	2022 to mid-2041	%
Gross population growth	476,277	74.88
Employment growth requiring new space	159,802	25.12
Total	636,079	100.00

9.3.7 Non-Residential Cost Allocation

For the purpose of rate calculation, the non-residential share of the total capital cost is further allocated between retail, IOI and hotel uses. The cost allocation is determined based on the share of trips generated using the Institute of Transportation Engineers (ITE) Trip Generation rates.

Trip generation rates are used by transportation professionals for estimating the number of trips generated by specific types of developments or land uses. A trip generation rate is the number of trips (vehicle trips, pedestrian trips, and/or transit trips) that can be expected to access and exit a site over a given period of time, expressed over an independent variable, such as trips per 1,000 sq. ft. gross floor area, or per hotel suite. For each non-residential sector, an average trip generation rate was developed based on a sample of land use categories.

To capture the travel characteristics of all land use categories, an average of the AM peak hour and PM peak hour trip generation rate was estimated. Furthermore, consistent with industry practices, retail trip rates were further reduced by 20% to accommodate “pass-by” trips. Pass-by trips are defined as trips that would have traveled on a street adjacent to a retail center even if the retail was not constructed.

Where data is available, the peak of the land use (the trips generated for each land use during the peak period of the land use) was used in the analysis.

Using this methodology, the non-residential share of the costs is allocated to the three land uses as outlined in Table 9-12 below.

TABLE 9-12
NON-RESIDENTIAL LAND USE (BASED ON TRIP GENERATION)

Non-residential Land Use	Allocation of DC-Eligible Costs
Retail	35.60%
Industrial, Office, Institutional	63.74%
Hotel	0.66%
Total	100.00%

2022 DC Background Study
Public Works - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
SE Main Yard	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	1,518,000
SE Satellite Yard	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	1,518,000
SW Main Yard	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	2,530,000
SW Satellite Yard										20.0	1,776,500
Central Main Yard	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	550,000
Central Snow Disposal Facility	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	1,980,000
North Main Yard	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	18.0	55,000
Road Ops Maintenance Yard	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1,600,000
Total	71	71	71	71	71	71	71	71	71	91	1,253,475

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0439	0.0428	0.0422	0.0415	0.0406	0.0399	0.0391	0.0383	0.0393	0.0485

10 Year Average	2012-2021
Quantity Standard (Acre per 1,000 Capita)	0.0416
Quality Standard (\$ per Acre)	\$1,253,475
Service Standard (\$ per 1,000 Capita)	\$52,139.08

DC Amount (before adjustments)	20 Year
Gross population increase and employment requiring new space	636,079
\$ per 1,000 Capita	\$52,139.08
DC Amount (before adjustments)	\$33,164,575

2022 DC Background Study
Public Works - Facilities
Square Footage
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
SE Main Yard	12,020	12,020	12,020	12,020	12,020	12,020	12,020	12,020	12,020	12,020	615
SE Main Yard Existing Debt Share	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	(1,269)	615
SE Satellite Yard	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	14,682	615
SW Main Yard	35,198	35,198	35,198	35,198	35,198	35,198	35,198	35,198	35,198	35,198	615
Central Main Yard	27,652	27,652	27,652	27,652	27,652	27,652	27,652	27,652	27,652	27,652	615
North Main Yard	35,412	35,412	35,412	35,412	35,412	35,412	35,412	35,412	35,412	35,412	445
Road Ops Maintenance Yard	8,922	8,922	8,922	8,922	8,922	8,922	8,922	8,922	8,922	8,922	615
Total	132,617	132,617	132,617	132,617	132,617	132,617	132,617	132,617	132,617	132,617	570

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per Capita Standard	0.0820	0.0799	0.0787	0.0774	0.0759	0.0744	0.0729	0.0716	0.0733	0.0706

10 Year Average	2012-2021
Quantity Standard (Sqft per Capita)	0.0757
Quality Standard (\$ per Sqft)	\$570
Service Standard (\$ per Capita)	\$43.10

DC Amount (before adjustments)	20 Year
DC Amount (before adjustments)	636,079
\$ per Capita	\$43.10
DC Amount (before adjustments)	\$27,412,755

2022 DC Background Study
Public Works - Vehicles
Number of Vehicles
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Vehicle)
Region Owned											
LD Car	26	26	26	26	26	1	1	1	1	1	36,000
LD EV-Hybrid	9	13	13	13	13	23	23	23	23	23	34,000
LD Off Road Equipment	6	8	8	8	8	8	17	17	17	17	25,000
LD Pick-up	90	97	100	105	106	85	85	85	85	85	38,000
LD SUV	15	23	24	24	24	36	36	36	36	36	35,000
LD Van	37	38	40	57	57	93	93	93	93	93	38,000
MD Pick-up 3/4+	17	17	18	20	20	26	26	26	26	26	50,000
MD Stake Truck	11	11	11	11	11	8	8	8	8	8	90,000
MD Van 3/4 +	34	38	38	40	40	27	27	27	27	27	50,000
HD Single Axle Truck	8	8	8	8	8	5	5	5	5	5	240,000
HD Tandem Truck	18	19	19	19	19	24	24	24	24	24	325,000
HD Line Marking Truck	1	1	1	1	1	1	1	1	1	1	800,000
HD Streetsweeper	2	2	2	3	3	3	3	3	3	3	100,000
Dump HD Tri-axle	1	1	1	1	1	0	0	0	0	0	334,011
Dump HD Tandem & S/A	27	27	27	27	27	11	11	11	11	11	283,260
Dump MD Reg or Crew	8	8	8	8	8	8	10	10	10	10	181,758
DC Amount (before adjustments)											
Region Contracted											
Utility Vehicle	4	4	4	4	4	0	0	0	0	0	25,000
Stake/Utility (Med. Duty)	0	0	0	0	0	0	0	0	0	0	50,751
Dump HD Tri-axle	6	6	6	6	6	6	6	6	6	6	334,011
Dump HD Tandem & S/A	55	55	55	55	55	93	93	93	93	93	283,260
Dump MD Reg or Crew	0	0	0	0	0	0	0	0	0	0	181,758
Hydro Excavator	0	0	0	0	0	2	2	2	2	2	600,000
Total	375	402	409	436	437	471	471	471	471	471	118,944

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1000 Capita Standard	0.2319	0.2421	0.2429	0.2544	0.2501	0.2643	0.2590	0.2543	0.2603	0.2509

10 Year Average	2012-2021
Quantity Standard (Vehicles per 1,000 Capita)	0.2510
Quality Standard (\$ per Vehicle)	\$118,944
Service Standard (\$ per Capita)	\$29.85

DC Amount (before adjustments)	20 Year
Gross population increase and employment requiring new space	636,079
\$ per Capita	\$29.85
DC Amount (before adjustments)	\$18,989,846

2022 DC Background Study
Public Works - Equipment
Number of Items
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Equipment)
Region Owned											
HD Off Road Equipment	8	11	11	12	12	9	9	9	9	9	200,000
HD Snowmelter	0	0	1	1	1	1	1	1	1	1	340,000
HD Crane Truck	4	4	4	4	5	5	5	5	5	5	260,000
MD Off Road Equipment	16	16	16	16	16	13	13	13	13	13	75,000
Rear Sander	0	2	4	4	4	5	5	5	5	5	95,000
Boulevard Fine Grass Cutting Mowers	0	0	0	0	0	10	10	10	10	10	20,000
Trailer	73	82	88	91	92	113	113	113	113	113	12,000
Region Contracted											
HD Bucket/Boom/Crane	0	0	0	0	0	0	0	0	0	0	300,000
Graders	1	1	1	1	4	6	6	6	6	6	375,000
Sweepers	1	1	1	1	6	4	4	4	4	4	285,620
Tractor	1	1	1	1	4	0	0	0	0	0	85,000
Loaders	4	4	4	4	7	0	0	0	0	0	375,000
MD Bucket/Boom/Crane	1	1	1	1	0	0	0	0	0	0	300,000
Trailer	0	0	0	0	0	0	0	0	0	0	18,884
DC Amount (before adjustments)	3	3	3	3	2	2	2	2	2	2	1,180,249
Rubber Tire Backhoe	0	0	0	0	2	0	0	0	0	0	375,000
Sign	0	0	0	0	0	0	0	0	0	0	300,000
Grass Cutting Tractor (One-Swath)	0	0	0	0	12	1	1	1	1	1	25,000
Plow	0	0	0	0	81	0	0	0	0	0	360,000
Flusher Truck (Dump Truck)	0	0	0	0	0	2	2	2	2	2	190,000
String Trimmers	0	0	0	0	0	16	16	16	16	16	500
Boulevard Fine Grass Cutting Mowers	0	0	0	0	0	12	12	12	12	12	22,000
6" inch trash pump with trailer	0	0	0	0	0	1	1	1	1	1	15,000
Asphalt Roller (2 to 6 tonnes)	0	0	0	0	0	4	4	4	4	4	60,000
Backhoe with attachments	0	0	0	0	0	2	2	2	2	2	135,000
Skidsteer with attachments	0	0	0	0	0	4	4	4	4	4	65,000
Miscellaneous	0	0	0	0	10	0	0	0	0	0	25,965
Total	112	126	135	139	258	210	210	210	210	210	89,339

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0693	0.0759	0.0802	0.0811	0.1476	0.1178	0.1155	0.1134	0.1161	0.1118

10 Year Average	2012 - 2021
Quantity Standard (Number of Items per 1,000 Capita)	0.1029
Quality Standard (\$ per Equipment)	\$89,339
Service Standard (\$ per Capita)	\$9.19

DC Amount (before adjustments)	20 Year
Gross population increase and employment requiring new space	636,079
\$ per Capita	\$9.19
DC Amount (before adjustments)	\$5,845,175

2022 Development Charge Background Study
Public Works
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	33,164,575
Facilities	27,412,755
Vehicles	18,989,846
Equipment	5,845,175
Opening reserve adjustment	24,880,808
Funding Envelope	110,293,161
Less Existing debt principal	780,229
Total eligible amount for new projects	109,512,931

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential 74.88%	Non-Residential Share		
											Retail 8.94%	Industrial/ Office/ Institutional 16.01%	Hotel 0.17%
Growth Fleet Roads													
1	Electric Fleet Infrastructure	2022-2031	1,603,000	0	1,603,000	0	1,603,000	661,793	941,207	495,530	59,186	105,979	1,098
2	Central Snow Management Facility	2022-2026	300,000	0	300,000	0	300,000	123,854	176,146	92,738	11,077	19,834	205
3	Fleet New Additions	2022-2041	9,636,000	0	9,636,000	0	9,636,000	3,978,188	5,657,812	2,978,744	355,781	637,064	6,599
Subtotal Growth Fleet Roads			11,539,000	0	11,539,000	0	11,539,000	4,763,835	6,775,165	3,567,012	426,044	762,877	7,902
Growth Facilities Roads													
4	Various Maintenance Facility Upgrades	2022-2041	6,757,000	0	6,757,000	337,850	6,419,150	2,650,123	3,769,027	1,984,330	237,008	424,389	4,396
5	Central Main Yard	2022-2026	4,434,000	0	4,434,000	221,700	4,212,300	1,739,033	2,473,267	1,302,134	155,527	278,488	2,885
6	Central Satellite Yard	2027-2031	39,748,000	0	39,748,000	1,987,400	37,760,600	15,589,330	22,171,270	11,672,807	1,394,199	2,496,465	25,859
7	North Existing Yard	2022-2026	5,803,000	0	5,803,000	290,150	5,512,850	2,275,961	3,236,889	1,704,169	203,546	364,471	3,775
8	North Satellite Yard	2037-2041	33,945,000	0	33,945,000	1,697,250	32,247,750	13,313,369	18,934,381	9,968,639	1,190,653	2,131,994	22,084
9	Southeast Main Yard	2022-2026	60,220,000	0	60,220,000	3,011,000	57,209,000	23,618,533	33,590,467	17,684,826	2,112,274	3,782,256	39,178
10	Southeast Main Yard - Phase 2 (10988/10990 Warden Avenue)	2027-2036	17,718,000	0	17,718,000	885,900	16,832,100	6,949,073	9,883,027	5,203,250	621,476	1,112,820	11,527
11	Southeast Satellite Yard	2032-2036	60,226,000	0	60,226,000	3,011,300	57,214,700	23,620,886	33,593,814	17,686,588	2,112,484	3,782,633	39,182
12	Southwest Main Yard	2022-2026	2,781,000	0	2,781,000	139,050	2,641,950	1,090,720	1,551,230	816,697	97,546	174,667	1,809
13	Southwest Satellite Yard	2022-2031	35,446,000	0	35,446,000	1,772,300	33,673,700	13,902,068	19,771,632	10,409,438	1,243,302	2,226,268	23,060
Subtotal Growth Facilities Roads			267,078,000	0	267,078,000	13,353,900	253,724,100	104,749,096	148,975,004	78,432,878	9,368,014	16,774,449	173,754
Total			278,617,000	0	278,617,000	13,353,900	265,263,100	109,512,931	155,750,169	81,999,891	9,794,058	17,537,327	181,657

9.4 Housing Services

9.4.1 Program Description

Community Housing Master Plan is developed to identify the need for increased housing supply, economic development, social inclusion, and creation of complete communities. The 2022 Community and Health Services 10-year capital plan and the Housing York Inc. 2021 to 2024 Strategic Plan include redevelopment projects (Table 9-19) in Unionville and Whitchurch-Stouffville, Noblevue Pines and Armitage Gardens buildings, transitional family and men's emergency housing, pre-development costs, land acquisitions and a regeneration expansion program. The program supports 10-year Housing and Homelessness Plan approved by Council in 2019.

9.4.2 Level of Service

York Region's 10-year historical level of service (Table 9-18) is based on housing units operated by Housing York Inc., as well as a large number of non-profit corporations, co-operatives and other providers. The average replacement cost, inclusive of land value and site servicing has been applied.

The total funding envelope of \$987,818,596 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$980,364,104 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.4.3 Benefit to Existing Development Deduction

Considering that the demand is largely driven by existing development with an existing wait list for community housing, the growth-related cost has been calculated as 28% of total net capital program, with the benefit to existing share of 72% based on share of population growth to 2041.

9.4.4 Post Period Benefit Deduction

The Housing Services development charges program is entirely related to development occurring over the 2022 to 2041 period. No deduction for post period benefit has been made.

9.4.5 Grants, Subsidies and Other Contributions

Any applicable grants, subsidies and other contributions have been deducted from the development charge eligible costs in accordance with the requirements of the Act. The grants are primarily from other levels of government; however, the amounts vary by project and are not based on a set formula. For the projects included in the 2022 DC Background Study, the applicable grants/ subsidies are approximately \$261 million.

9.4.6 Residential versus Non-Residential Allocation

This program is solely for the benefit of residential development. As such, 100% of the development charges eligible costs have been allocated to residential development.

2022 Development Charge Background Study
Housing Services - Facilities
Number of Units
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Unit)
Projects Transferred to Region (Pre-2002)											
Annswell Court Foundation	39	39	39	39	39	39	39	39	39	39	389,111
Bethany Co-operative Homes Inc.	68	68	68	68	68	68	68	68	68	68	386,045
Bogart Creek Co-operative Homes Inc.	40	40	40	40	40	40	40	40	40	40	382,979
Branch 414 Legion Village Non-Profit Housing Corp.	30	30	30	30	30	30	30	30	30	30	389,111
Calvary House (Markham) Corp.	100	100	100	100	100	100	100	100	100	100	336,043
Carpenters Local 27 Housing Co-operative Inc.	119	119	119	119	119	119	119	119	119	119	318,004
Centre Green Co-operative Homes Inc.	42	42	42	42	42	42	42	42	42	42	382,979
Charles Darrow Housing Co-operative Inc.	107	107	107	107	107	107	107	107	107	107	386,045
Davis Drive Non-Profit Homes Corp.	119	119	119	119	119	119	119	119	119	119	336,043
Friuli Benevolent Corporation	113	113	113	113	113	113	113	113	113	113	318,004
German-Canadian Housing of Newmarket Inc.	135	135	135	135	135	135	135	135	135	135	351,688
Hagerman Corners Community Homes Inc.	81	81	81	81	81	81	81	81	81	81	336,043
Birch Housing	149	149	149	149	149	149	149	149	149	149	359,511
Ja'fari Islamic Housing Corporation	170	170	170	170	170	170	170	170	170	170	382,979
John Fitzpatrick Steelworkers Housing Co-operative Inc.	180	180	180	180	180	180	180	180	180	180	359,511
Jubilee Garden Non-Profit Housing Corp.	100	100	100	100	100	100	100	100	100	100	382,979
Kinsmen Non Profit Housing Corporation	187	187	187	187	187	187	187	187	187	187	382,979
Landsberg Lewis Housing Co-operative Inc.	149	149	149	149	149	149	149	149	149	149	382,979
Machell's Corners Housing Co-operative Inc.	67	67	67	67	67	67	67	67	67	67	382,979
Mount Albert United Church Seniors Foundation	0	0	0	0	0	0	0	0	0	28	389,111
Oakwil Non-Profit Homes Corporation	28	28	28	28	28	28	28	28	28	28	382,979
OHR Somayach Residential Centre Inc.	125	125	125	125	125	125	125	125	125	125	318,004
Our Lady of Smolensk	35	35	35	35	35	35	35	35	35	35	389,111
Parkview Retirement Assoc. of York Region	124	124	124	124	124	124	124	124	124	124	336,043
Pefferlaw and Lions Housing Corp.	26	26	26	26	26	26	26	26	26	26	389,111
Prophetic Non-Profit (Richmond Hill) Inc.	212	212	213	213	213	213	213	213	213	213	318,004
Richmond Hill Co-operative Homes Inc.	105	105	105	105	105	105	105	105	105	105	382,979
Richmond Hill Ecumenical Homes Corporation	500	500	500	500	500	500	500	500	500	500	318,004
Robinson Street Non-Profit Homes (Markham) Inc.	26	26	26	26	26	26	26	26	26	26	382,979
Rougebank Foundation	118	118	118	118	118	118	118	118	118	118	336,043
Schomberg Lions Club Non-Profit Housing Corp.	32	32	32	32	32	32	32	32	32	32	389,111
St. Matthew's Non-Profit Homes Inc.	23	23	23	23	23	23	23	23	23	23	382,979
St. Peter's Seniors' Residence Woodbridge Inc.	65	65	65	65	65	65	65	65	65	65	336,043
Thornhill St. Luke's Seniors Home Inc.	96	96	96	96	96	96	96	96	96	96	318,004

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Unit)
Unionville Home Society	92	92	92	92	92	92	92	92	92	92	382,979
Trinity Glen Housing Corporation	90	90	90	90	90	90	90	90	90	90	382,979
Water Street Non-Profit Homes Inc.	150	150	150	150	150	150	150	150	150	150	336,043
Housing York Inc. - Thornhill Green	102	102	102	102	102	102	102	102	102	102	421,569
Housing York Inc. - Brayfield Manors	81	81	81	81	81	81	81	81	81	81	345,679
Housing York Inc. - Dunlop Pines	133	133	133	133	133	133	133	133	133	133	303,030
Housing York Inc. - East Court	10	10	10	10	10	10	10	10	10	10	500,000
Housing York Inc. - Elmwood Gardens	51	51	51	51	51	51	51	51	51	51	352,941
Housing York Inc. - Evergreen Terrace	56	56	56	56	56	56	56	56	56	56	321,429
Housing York Inc. - Fairy Lake Gardens	153	153	153	153	153	153	153	153	153	153	268,041
Housing York Inc. - Founders Place	100	100	100	100	100	100	100	100	100	100	330,000
Housing York Inc. - Glenwood Mews	64	64	64	64	64	64	64	64	64	64	296,875
Housing York Inc. - Hadley Grange	80	80	80	80	80	80	80	80	80	80	337,500
Housing York Inc. - Heritage East	120	120	120	120	120	120	120	120	120	120	444,444
Housing York Inc. - Keswick Gardens	120	120	120	120	120	120	120	120	120	120	383,333
Housing York Inc. - Kingview Court	27	27	27	27	27	27	27	27	27	27	444,444
Housing York Inc. - Maplewood Place	80	80	80	80	80	80	80	80	80	80	325,000
Housing York Inc. - Mulock Village	104	104	104	104	104	104	104	104	104	104	365,385
Housing York Inc. - Nobleview Pines	26	26	26	26	26	26	26	26	26	26	346,154
Housing York Inc. - Northview Court	72	72	72	72	72	72	72	72	72	72	350,000
Housing York Inc. - Orchard Heights Place	83	83	83	83	83	83	83	83	83	83	318,182
Housing York Inc. - Oxford Village	36	36	36	36	36	36	36	36	36	36	333,333
Housing York Inc. - Pineview Terrace	49	49	49	49	49	49	49	49	49	49	306,122
Housing York Inc. - Porter Place	25	25	25	25	25	25	25	25	25	25	240,000
Housing York Inc. - Leeder Place	15	15	15	15	15	15	15	15	15	15	466,667
Housing York Inc. - Rosetown	125	125	125	125	125	125	125	125	125	125	384,000
Housing York Inc. - Springbrook Gardens	93	93	93	93	93	93	93	93	93	93	376,344
Housing York Inc. - Trinity Square	100	100	100	100	100	100	100	100	100	100	462,500
Projects Added by Region (Since 2002)											
Housing York Inc. - Armitage Gardens	58	58	58	58	58	58	58	58	58	58	568,966
Housing York Inc. - Blue Willow Terrace	60	60	60	60	60	60	60	60	60	60	400,000
Housing York Inc. - Tom Taylor Place	50	50	50	50	50	50	50	50	50	50	360,000
Housing York Inc. - Dew St. Kingview Court	39	39	39	39	39	39	39	39	39	39	384,615
East Markham Non-Profit Homes Inc.	120	120	120	120	120	120	120	120	120	120	336,043
Voice of Vedas Cultural Sabha Inc.	25	25	25	25	25	25	25	25	25	25	389,111
Deafblind Ontario Services - Hertick	4	4	4	4	4	4	4	4	4	4	382,979
Deafblind Ontario Services - Treffy	4	4	4	4	4	4	4	4	4	4	382,979
Deafblind Ontario Services - St. George	4	4	4	4	4	4	4	4	4	4	382,979

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Unit)
Hesperus Fellowship Village	60	60	60	60	60	60	60	60	60	60	389,111
REENA	60	60	60	60	60	60	60	60	60	60	336,043
Housing York Inc. - Mackenzie Green	0	140	140	140	140	140	140	140	140	140	357,143
Housing York Inc. - Mapleglen Residences	84	84	84	84	84	84	84	84	84	84	321,429
Housing York Inc. - Lakeside Residences	0	0	97	97	97	97	97	97	97	97	268,041
Richmond Hill Hub	0	0	0	0	202	202	202	202	202	202	316,832
Richmond Hill Hub Existing Debt Share					(14)	(14)	(14)	(14)	(14)	(14)	316,832
Crescent Village	0	0	0	28	28	28	28	28	28	28	389,111
Belinda's Place	0	0	0	0	37	37	37	37	37	37	513,514
Woodbridge	0	0	0	0	0	0	0	0	162	162	308,642
Modular Home - Sutton (Transitional Housing)										8	325,000
Modular Home - East Gwillimbury (Transitional Housing)										18	217,666
Markham Inter-Church Committee for Affordable Housing										32	336,043
Total	6,315	6,455	6,553	6,581	6,806	6,806	6,806	6,806	6,968	7,054	353,720

Population	1,087,000	1,101,500	1,117,000	1,131,700	1,143,900	1,160,900	1,182,200	1,197,700	1,209,800	1,227,700
Per Capita Standard	0.0058	0.0059	0.0059	0.0058	0.0059	0.0059	0.0058	0.0057	0.0058	0.0057

10 Year Average	2012-2021
Quantity Standard (Unit per Capita)	0.0058
Quality Standard (\$ per Unit)	\$353,720
Service Standard (\$ per Capita)	\$2,055

DC Amount (before adjustments)	20 Year
Gross population increase	476,277
\$ per Capita	\$2,055.45
DC Amount (before adjustments)	\$978,963,403

2022 Development Charge Background Study
Housing Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	0
Facilities	978,963,403
Vehicles	0
Equipment	0
Opening reserve adjustment	8,855,193
Funding Envelope	987,818,596
Less Existing debt principal	7,454,492
Total eligible amount for new projects	980,364,104

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Residential 100%	Non-Residential Share		
											Retail 0%	Industrial/ Office/ Institutional 0%	Hotel 0%
1	Unionville Common	2022-2026	36,137,000	1,962,000	34,175,000	24,606,000	9,569,000	9,569,000	0	9,569,000	0	0	0
2	Stouffville (Phase I)	2022-2026	28,400,000	10,437,000	17,963,000	12,933,360	5,029,640	5,029,640	0	5,029,640	0	0	0
3	Men's Emergency and Transitional Housing	2022-2026	10,000,000	0	10,000,000	7,200,000	2,800,000	2,800,000	0	2,800,000	0	0	0
4	82 Bayview	2022-2026	87,500,000	26,250,000	61,250,000	44,100,000	17,150,000	17,150,000	0	17,150,000	0	0	0
5	Aurora	2022-2026	52,500,000	15,750,000	36,750,000	26,460,000	10,290,000	10,290,000	0	10,290,000	0	0	0
6	Nobleview Pines (Growth)	2022-2031	70,000,000	21,000,000	49,000,000	35,280,000	13,720,000	13,720,000	0	13,720,000	0	0	0
7	Armitage Gardens (Growth)	2022-2031	31,500,000	9,450,000	22,050,000	15,876,000	6,174,000	6,174,000	0	6,174,000	0	0	0
8	Stouffville (Phase II)	2022-2031	70,000,000	21,000,000	49,000,000	35,280,000	13,720,000	13,720,000	0	13,720,000	0	0	0
9	Markham Site A	2022-2031	87,500,000	26,250,000	61,250,000	44,100,000	17,150,000	17,150,000	0	17,150,000	0	0	0
10	Youth Emergency Housing (Growth)	2027-2031	7,000,000	2,100,000	4,900,000	3,528,000	1,372,000	1,372,000	0	1,372,000	0	0	0
11	East Court (Growth)	2027-2036	31,500,000	9,450,000	22,050,000	15,876,000	6,174,000	6,174,000	0	6,174,000	0	0	0
12	Aurora Site A	2027-2036	61,250,000	18,375,000	42,875,000	30,870,000	12,005,000	12,005,000	0	12,005,000	0	0	0
13	Family Transitional (Growth)	2027-2036	8,750,000	2,625,000	6,125,000	4,410,000	1,715,000	1,715,000	0	1,715,000	0	0	0
14	Dunlop Pines (Growth)	2027-2036	43,750,000	13,125,000	30,625,000	22,050,000	8,575,000	8,575,000	0	8,575,000	0	0	0
15	Thornhill Green (Phase I) - Growth	2031-2036	63,350,000	19,005,000	44,345,000	31,928,400	12,416,600	12,416,600	0	12,416,600	0	0	0
16	Pre-Development Cost	2022-2041	4,000,000	0	4,000,000	2,880,000	1,120,000	1,120,000	0	1,120,000	0	0	0
17	Northview Court (Growth)	2031-2041	9,800,000	2,940,000	6,860,000	4,939,200	1,920,800	1,920,800	0	1,920,800	0	0	0
18	Thornhill Green (Phase II) - Growth	2031-2041	58,100,000	17,430,000	40,670,000	29,282,400	11,387,600	11,387,600	0	11,387,600	0	0	0
19	Newmarket Site B (HYI)	2031-2041	36,750,000	11,025,000	25,725,000	18,522,000	7,203,000	7,203,000	0	7,203,000	0	0	0
20	Georgina Site C (HYI)	2031-2041	17,500,000	5,250,000	12,250,000	8,820,000	3,430,000	3,430,000	0	3,430,000	0	0	0
21	Thornhill Green (Phase III) - Growth	2031-2041	52,500,000	15,750,000	36,750,000	26,460,000	10,290,000	10,290,000	0	10,290,000	0	0	0
22	Evergreen Terrace (Growth)	2031-2041	40,950,000	12,285,000	28,665,000	20,638,800	8,026,200	8,026,200	0	8,026,200	0	0	0
Total			908,737,000	261,459,000	647,278,000	466,040,160	181,237,840	181,237,840	0	181,237,840	0	0	0

9.5 Growth Studies

The 2022 DC Bylaw includes Growth Studies undertaken to facilitate the completion of the Region's capital growth-related program.

9.5.1 Program Description

The 20-year Growth Studies capital program (Table 9-19) consists of growth-related studies of a corporate nature, such as DC Background Studies, Official Plan updates and Master Plans.

9.5.2 Level of Service

The 10-year historical level of service for the Growth Studies program is reflective of actual expenditures on growth studies in York Region.

9.5.3 Benefit to Existing Development Deduction

No deduction has been made for the studies, which are fully growth-related.

9.5.4 Post Period Benefit Deduction

The studies identified in the capital program are entirely related to development occurring over the 2022-2041 planning period. As such, no post-period deduction has been made.

9.5.5 Grants, Subsidies and Other Contributions

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.5.6 Residential versus Non-Residential Allocation

The methodology to determine the residential vs. non-residential allocation for Growth Studies is based on the net increment in population and employment growth 2022-2041, as follows:

TABLE 9-20
RESIDENTIAL AND NON-RESIDENTIAL ALLOCATION

	2022 to mid-2041	%
Gross population growth	476,277	74.88
Retail employment growth*	34,259	5.39
IOI employment growth*	124,766	19.62
Hotel employment growth*	777	0.12
Total population and employment*	636,079	100.00

*Note: Employment requiring new space
Numbers may not add due to rounding

2022 Development Charge Background Study
Growth Studies
Growth related capital costs

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Non-Residential Share			
										Residential	Retail	Industrial/ Office/ Institutional	Hotel
							74.88%	5.39%	19.62%	0.12%			
1	Growth Studies - Long Range Planning	2022-2041	19,195,628	0	19,195,628	0	19,195,628	19,195,628	0	14,373,092	1,033,799	3,765,325	23,412
2	Growth Studies - Finance	2022-2041	10,171,083	0	10,171,083	0	10,171,083	10,171,083	0	7,615,792	547,774	1,995,112	12,405
3	Growth Studies - Consultant	2022-2041	700,000	0	700,000	0	700,000	700,000	0	524,138	37,699	137,309	854
4	YorkTrax Enhancement	2022-2027	1,910,700	0	1,910,700	0	1,910,700	1,910,700	0	1,430,673	102,903	374,794	2,330
Total			31,977,411	0	31,977,411	0	31,977,411	31,977,411	0	23,943,695	1,722,175	6,272,540	39,002

9.6 Court Services

9.6.1 Program Description

The 20-year Court Services capital program (Table 9-25) includes the Court Services portion of 17150 Yonge Street and existing growth-related debt costs.

9.6.2 Level of Service

York Region's 10-year historical level of service for Court Services is based on square footage at the Court facilities at 465 Davis Drive (Tannery), 50 High Tech Road (South Services Centre), and 17150 Yonge Street. The average replacement cost, inclusive of land value and site servicing, has been applied.

The total funding envelope of \$9,643,284 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$5,950,018 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.6.3 Statutory Deductions

The Court Services capital program identified a 29% share costs benefitting existing development and included as a BTE deduction in rate calculation.

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.6.4 Residential versus Non-Residential Allocation

The methodology to determine the residential versus non-residential allocation for Court Services is the same as what was used for Police Services. It is based on the net increment in population and employment growth between 2022-2041 as shown in Table 9-20 below:

TABLE 9-22
RESIDENTIAL AND NON-RESIDENTIAL ALLOCATION

	2022 to mid-2041	%
Gross population growth	476,277	74.88
Retail employment growth*	34,259	5.39
IOI employment growth*	124,766	19.62
Hotel employment growth*	777	0.12
Total population and employment*	636,079	100.00

*Note: Employment requiring new space
Numbers may not add due to rounding

2022 Development Charge Background Study
Court Services - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
465 Davis Drive (Tannery)	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62		3,207,377
17150 Yonge St (Annex)										1.48	3,207,377
50 High Tech Road (South Service Centre)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	6,109,290
Total	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	1.98	3,688,848

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0019	0.0019	0.0019	0.0018	0.0018	0.0018	0.0017	0.0017	0.0017	0.0011

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	0.0017
Quality Standard (\$ per Sqft)	\$3,688,848
Service Standard (\$ per 1,000 Capita)	\$6,343.30

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space increase	636,079
\$ per 1,000 Capita	\$6,343.30
DC Amount (before adjustments)	\$4,034,837

2022 Development Charge Background Study
Court Services - Facilities
Square Footage
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
465 Davis Drive (Tannery)	21,880	21,880	21,880	21,880	21,880	21,880	21,880	21,880	21,880	0	806
17150 Yonge St (Annex)	0	0	0	0	0	0	0	0	0	74,070	806
17150 Yonge St (Annex) Existing Debt Share										(4,580)	806
50 High Tech Road (South Service Centre)	12,063	12,063	12,063	12,063	12,063	12,063	12,063	12,063	12,063	12,023	806
Total	33,943	33,943	33,943	33,943	33,943	33,943	33,943	33,943	33,943	81,513	806

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	20.99	20.44	20.16	19.81	19.42	19.04	18.66	18.32	18.76	43.41

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	21.90
Quality Standard (\$ per Sqft)	\$806
Service Standard (\$ per 1,000 Capita)	17,663.17

DC Amount (before adjustments)	20-Year
Gross population and employment requiring new space increase	636,079
\$ per 1,000 Capita	\$17,663.17
DC Amount (before adjustments)	\$11,235,173

2022 Development Charge Background Study
 Court Services
 Growth related capital costs

10-Year Historic Level of Service Cap	
Land	4,034,837
Facilities	11,235,173
Vehicles	0
Equipment	0
Opening reserve adjustment	(5,626,726)
Funding Envelope	9,643,284
Less Existing debt principal	3,693,266
Total eligible amount for new projects	5,950,018

Project Number	Project Description	Timing	Gross Project Cost (2022-2041)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2041)	Post Period Benefit / Level of Service Deduction (Beyond 2041)	Non-Residential Share			
										Residential 74.88%	Retail 5.39%	Industrial/Office/Institutional 19.61%	Hotel 0.12%
1	Annex, Courts only (17150 Yonge Street)	2022	108,460	0	108,460	31,453	77,007	77,007	0	57,660	4,148	15,105	94
	Total		108,460	0	108,460	31,453	77,007	77,007	0	57,660	4,148	15,105	94

9.7 Ambulance Services

9.7.1 Program Description

With regular updates [since 2012](#), York Region has been preparing an Emergency Medical Services 10-Year Resources and Facilities Master Plan. The Plan identifies optimal station locations, staffing and vehicle requirements to meet the needs of the Region's growing population. The 2022 update extends the Plan to 2031 and, building on previous plans, includes a more comprehensive assessment of growth needs (Table 9-30). The Ambulance Services program consists of:

Facilities	Additional growth-related bays, new stations, land acquisitions and station rebuilds for future growth
Vehicles	Additional growth-related ambulance vehicles, equipped with defibrillators and stretchers

9.7.2 Level of Service

The 10-year historical level of service cap has been applied for the Ambulance Services in the 2022 DC Background Study and is comprised of the following:

- Land, including existing paramedic response stations and a headquarters facility (Table 9-27)
- Facilities, including existing paramedic response stations and a headquarters facility (Table 9-28). The space has been valued based on estimated 2022 replacement cost per square foot
- Vehicles, such as ambulances with specialized equipment, emergency response vehicles, support vehicles, administration and command vehicles, special response units and logistics vehicles (Table 9-29)

For services such as Ambulance Services, it is recognized that response time is a critical measure of service delivery and new development can fundamentally impact the ability to provide such services at historical levels. The increase in need for service arising from new development, as identified in the capital program, has also been informed by the need to provide and meet identified response time measures.

The total funding envelope of \$45,749,856 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$33,982,185 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.7.3 Benefit to Existing Development Deduction

The 25 to 50 % benefit to existing share was identified for some facility projects. The rest of the facilities and new vehicles are being added in proportion to the growth-related call volume.

9.7.4 Post Period Benefit Deduction

Most of the Ambulance Services program reflects 10 years of requirements related to development occurring between 2022 and 2031. Facilities that support growth beyond the planning horizon have a post period benefit deduction ranging from 25% to 67%.

9.7.5 Grants, Subsidies and Other Contributions

No grants, subsidies or other contributions have been identified for this service and as such, no adjustments have been made.

9.7.6 Residential versus Non-Residential Allocation

The residential versus non-residential allocation is based on the net increment in population and employment growth between 2022-2031 (Table 9-26), with population weighted at three times that of employment in order to reflect increased per capita needs related to age and time spent in residences.

TABLE 9-26
NET INCREMENT IN POPULATION AND EMPLOYMENT GROWTH

	2022 to mid-2031		Weighted	%
Gross residential population growth	222,074	X	666,222	89.51
Retail employment growth	16,740	X	16,740	2.25
IOI employment growth	60,931	X	60,931	8.19
Hotel employment growth	368	X	368	0.05
Total population and employment	744,261	X	744,261	100.00

*Note: Employment requiring new space
Numbers may not add due to rounding

2022 Development Charge Background Study
Ambulance Services - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
Paramedic Response Stations											
Station #10 - Pepperlaw (Georgina)	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	1,338,163
Station #11 - Sutton (Georgina)	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	1,338,163
Station #12 - Keswick (Georgina)	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	1,338,163
Station #13 - Holland Landing							2.01	2.01	2.01	2.01	1,338,163
Station #14 - Queensville (East Gwillimbury)	1.22	1.22	1.22								1,784,218
Station #15 - Mount Albert (East Gwillimbury)	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	1,784,218
Station #16 - Newmarket NW								1.11	1.11	1.11	2,341,786
Station #17 - Newmarket	0.80	0.80	0.80	0.80	0.80	0.80	0.80				2,341,786
Station #18 - Aurora	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	2,341,786
Station #19 - Newmarket SE							0.43	0.43	0.43	0.43	2,341,786
Station #20 - Ballantrae (Whitchurch/Stouffville)	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	2,007,245
Station #21 - Stouffville (Whitchurch/Stouffville)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	2,007,245
Station #22 - Gormley (Whitchurch-Stouffville)											1.62
Station #23 - Markham	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	1.14	4,683,571
Station #24 - Unionville	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	4,683,571
Station #25 - Markham								1.25	1.25	1.25	4,683,571
Station #26 - Markham	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	4,683,571
Station #28 - Richmond Hill	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	4,460,544
Station #29 - Thornhill (Markham)											0.94
Station #30 - Woodbridge (Vaughan)	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	4,683,571
Station #31 - Vaughan West						0.51	0.51	0.51	0.51	0.51	4,683,571
Station #32 - Maple (Vaughan)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	4,683,571
Station #34 - Thornhill (Vaughan)	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	4,683,571
Station #36 - Thornhill Central (Vaughan)	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13			4,683,571
Station #37 - Nobleton (King)	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	2,453,299
Station #38 - Schomberg	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	2,453,299
Station #39 - King	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	2,453,299
Station #70 - Holland Landing				0.23	0.23	0.23					1,338,163
Station #85 - Richmond Hill									2.12	2.12	4,460,544
Station #99 - Sharon-Bales HQ	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	25.30	1,338,163
Total	37	37	37	36	36	36	39	40	42	45	1,965,992

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0228	0.0222	0.0219	0.0210	0.0206	0.0205	0.0213	0.0217	0.0233	0.0238

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	0.0219
Quality Standard (\$ per acre)	\$1,965,992
Service Standard (\$ per Capita)	\$43.09

DC Amount (before adjustments)	10 Year
Gross population and employment requiring new	300,113
\$ per Capita	\$43.09
DC Amount (before adjustments)	\$12,931,930

2022 Development Charge Background Study
Ambulance Services - Facilities
Square Footage
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
Paramedic Response Stations											
Station #10 - Pefferlaw (Georgina)	655	655	655	2,279	2,279	2,279	2,279	2,279	2,279	2,279	1,266
Station #10 - Pefferlaw (Georgina) Existing Debt Share	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	(279)	1,266
Station #11 - Sutton (Georgina)	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,937	1,266
Station #12 - Keswick (Georgina)	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	2,278	1,266
Station #13 - Holland Landing								5,371	5,371	5,371	1,266
Station #13 - Holland Landing Existing Debt Share							(920)	(920)	(920)	(920)	1,266
Station #14 - Queensville (East Gwillimbury)	957	957	957								1,266
Station #14 - Queensville (East Gwillimbury) Existing Debt Share	(332)	(332)	(332)								1,266
Station #15 - Mount Albert (East Gwillimbury)	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	1,266
Station #16 - Newmarket NW								7,266	7,266	7,266	126581.99%
Station #17 - Newmarket	9,179	9,179	9,179	9,179	9,179	9,179	9,179				1,266
Station #18 - Aurora	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	2,037	1,266
Station #19 - Newmarket SE							7,212	7,212	7,212	7,212	1,266
Station #20 - Ballantrae (Whitchurch/Stouffville)	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,266
Station #21 - Stouffville (Whitchurch/Stouffville)	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	1,266
Station #22 - Gormley (Whitchurch-Stouffville)											3,886
Station #22 - Gormley (Whitchurch-Stouffville) Existing Debt Share										(2,773)	1,266
Station #23 - Markham	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	6,276	1,266
Station #24 - Unionville	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,266
Station #25 - Markham								5,275	5,275	5,275	1,266
Station #25 - Markham Existing Debt Share								(743)	(743)	(743)	1,266
Station #26 - Markham	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	4,445	1,266
Station #28 - Richmond Hill	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	1,266
Station #29 - Thornhill (Markham)											5,371
Station #29 - Thornhill (Markham) Existing Debt Share										(2,810)	1,266
Station #30 - Woodbridge (Vaughan)	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	1,266
Station #31 - Vaughan West						3,767	3,767	3,767	3,767	3,767	1,266
Station #31 - Vaughan West Existing Debt Share						(746)	(746)	(746)	(746)	(746)	1,266
Station #32 - Maple (Vaughan)	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	2,226	1,266
Station #34 - Thornhill (Vaughan)	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	6,857	1,266
Station #36 - Thornhill Central (Vaughan)	1,239	1,239	1,239	1,239	1,239	1,239	1,239	1,239	1,239	1,239	1,266
Station #37 - Nobleton (King)	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	3,220	1,266
Station #38 - Schomberg	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	2,200	1,266
Station #38 - Schomberg Existing Debt Share	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	(170)	1,266
Station #39 - King	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	3,724	1,266
Station #70 - Holland Landing				2,076	2,076	2,076					1,266
Station #85 - Richmond Hill									2,082	2,082	1,266
Station #99 - Sharon-Bales HQ	63,564	63,564	63,564	63,564	63,564	63,564	63,564	63,564	63,564	63,564	1,266
Total	130,673	130,673	130,673	133,747	133,747	136,768	146,355	148,975	149,818	153,492	1,266

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per Capita Standard	0.0808	0.0787	0.0776	0.0781	0.0765	0.0767	0.0805	0.0804	0.0828	0.0817

10 Year Average	2012-2021
Quantity Standard (Sqft per Capita)	0.0794
Quality Standard (\$ per Sqft)	\$1,266
Service Standard (\$ per Capita)	\$100.49

DC Amount (before adjustments)	10 Year
Gross population and employment requiring new space	300,113
\$ per Capita	\$100.49
DC Amount (before adjustments)	\$30,157,153

2022 Development Charge Background Study
Ambulance Services - Vehicles
Number of Vehicles
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Vehicle)
Ambulances (includes Stretcher & Defib)	49	54	54	56	58	62	66	70	74	76	260,000
Emergency Response Vehicles (incl. Defib)	17	19	19	20	22	22	22	22	26	28	135,000
Emergency Support Unit (ESU)	1	1	1	1	1	1	1	1	1	1	500,000
Multi Patient Unit (MPU/bus)	0	1	1	1	1	1	1	1	1	1	1,213,106
Administration Vehicles	0	13	13	11	11	11	8	6	5	5	81,090
Special Response Units (SRU)	0	4	4	4	4	4	4	4	4	4	270,300
Community Paramedicine/EPIC (Expanding Paramedicine in the Community) (incl Logistics Vehicles	0	2	2	2	2	2	2	2	4	2	135,000
Trailers and Ranger (SRU)						4	4	2	2	2	40,000
Total	67	94	94	95	99	109	110	112	117	122	223,301

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0414	0.0566	0.0558	0.0554	0.0567	0.0612	0.0605	0.0605	0.0647	0.0650

10 Year Average	2012-2021
Quantity Standard (Vehicles per 1,000 Capita)	0.0578
Quality Standard (\$ per Vehicle)	\$223,301
Service Standard (\$ per Capita)	\$12.90

DC Amount (before adjustments)	10 Year
Gross population and employment requiring ne	300,113
\$ per Capita	\$12.90
DC Amount (before adjustments)	\$3,871,337

2022 Development Charge Background Study
Ambulance Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	12,931,930
Facilities	30,157,153
Vehicles	3,871,337
Equipment	0
Opening reserve adjustment	(1,210,564)
Funding Envelope	45,749,856
Less Existing Debt Principal	11,767,671
Total eligible amount for new projects	33,982,185

Project Number	Project Description	Timing	Gross Project Cost (2022-2031)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2031)	Post Period Benefit / Level of Service Deduction (Beyond 2031)	Non-Residential Share			
										Residential 89.51%	Retail 2.25%	Industrial/ Office/ Institutional 8.19%	Hotel 0.05%
Facilities													
1	Maple Paramedic Response Station #32 (from 1	2022 - 2026	6,925,000	0	6,925,000	1,731,250	5,193,750	3,479,813	1,713,938	3,114,931	78,269	284,893	1,720
2	Ballantrae Paramedic Response Station #20 (from 1 to 2 bays)	2022 - 2026	5,680,000	0	5,680,000	2,840,000	2,840,000	2,840,000	0	2,542,207	63,878	232,512	1,404
3	Paramedic Station Land Acquisition - Growth	2022 - 2031	12,248,000	0	12,248,000	3,551,920	8,696,080	3,826,275	4,869,805	3,425,064	86,062	313,258	1,891
4	Paramedic Response Station Rebuilds - Growth	2027 - 2031	3,690,000	0	3,690,000	1,845,000	1,845,000	922,500	922,500	825,770	20,749	75,525	456
5	Markham N/W Paramedic Response Station #27	2022 - 2026	6,504,000	0	6,504,000	0	6,504,000	6,504,000	0	5,822,012	146,290	532,484	3,214
6	Vaughan S/E Paramedic Response Station #35	2027 - 2031	2,816,000	0	2,816,000	0	2,816,000	929,280	1,886,720	831,839	20,902	76,080	459
7	Vaughan North Paramedic Response Station #33	2022 - 2026	4,735,000	0	4,735,000	0	4,735,000	4,735,000	0	4,238,503	106,501	387,656	2,340
8	Keswick South Paramedic Response Station #14	2022 - 2026	7,000,000	0	7,000,000	0	7,000,000	5,250,000	1,750,000	4,699,502	118,084	429,819	2,595
	Subtotal Facilities		49,598,000	0	49,598,000	9,968,170	39,629,830	28,486,868	11,142,962	25,499,827	640,734	2,332,227	14,079
Vehicles													
9	EMS Vehicle New	2022-2031	3,847,068	0	3,847,068	0	3,847,068	3,847,068	0	3,443,677	86,529	314,960	1,901
	Subtotal Vehicles		3,847,068	0	3,847,068	0	3,847,068	3,847,068	0	3,443,677	86,529	314,960	1,901
Total			53,445,068	0	53,445,068	9,968,170	43,476,898	32,333,936	11,142,962	28,943,504	727,264	2,647,188	15,980

9.8 Public Health

9.8.1 Program Description

The 10-year Public Health capital program (Table 9-34) consists of the provision of additional space for growth-related service expansions as, in part, reflected in York Region's 2022 capital budget.

9.8.2 Level of Service

The 10-year historical service level is made up of a number of operating locations, including the Public Health component of the Administrative Building, net of Headquarters Administration functions, and specialized vehicles. Vehicles include vaccine and staff mobile units valued at 2021 replacement costs. The land and facilities have been valued at 2022 replacement cost (Tables 9-31 to 9-33).

The total funding envelope of \$31,831,890 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$31,831,890 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.8.3 Statutory Deductions

As the provision for future vehicles and facilities is entirely related to providing an increased service arising from new development over the planning period, no benefit to existing deduction has been made.

The development charges program consists of 10 years of requirements. As such, no deduction for post period benefit has been made.

No grants, subsidies or other contributions have been identified for this service and no adjustments have been made.

9.8.4 Residential versus Non-Residential Allocation

Public Health primarily provides services to residents of York Region. However, some of its functions benefit non-residential development. The basis for determining the allocation between residential and non-residential sectors is the proportionate share of the 2022 operating budget. Based on this methodology the residential/ non-residential split is 97.18% and 2.82% respectively.

2022 Development Charge Background Study
Public Health - Land
Acres
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Acre)
22 Prospect St. (Newmarket)	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45		1,872,358
4261 Highway 7 (Markham)	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	2,184,418
465 Davis Drive	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93		1,872,358
50 High Tech Road	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	1,872,358
194 Eagle Street (Newmarket)	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01		1,872,358
100 Biscayne Blvd. (Keswick)	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02		1,248,239
20798 Dalton Road (Sutton)	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1,248,239
Vaughan Community Health Center	0.00	0.00	0.00								3,120,597
520 Cane Parkway	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33		1,872,358
24262 Woodbine (Keswick)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1,248,239
9060 Jane St (Vaughan)			1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	3,120,597
3901 Hwy 7 (Woodbridge)	0.00	0.00	0.00								3,120,597
20849 Dalton Rd, Sutton (Georgina Link Hub)										0.85	1,248,239
17150 Yonge Street - 3rd floor (clinic service)										0.17	1,872,358
17150 Yonge Street - Vaccine Depot P1 & Temp space										0.16	1,872,358
17250 / 17150 Yonge Street - Health Emergency Operations Centre						0.02	0.02	0.02	0.02	0.02	1,872,358
Total	6.95	6.95	8.21	8.21	8.21	8.23	8.23	8.23	8.23	4.68	2,063,088

Net Population + Net Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	0.0043	0.0042	0.0049	0.0048	0.0047	0.0046	0.0045	0.0044	0.0045	0.0025

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	0.0043
Quality Standard (\$ per 1,000 Sqft)	\$2,063,088
Service Standard (\$ per 1,000 Capita)	\$8,969.49

DC Amount (before adjustments)	10-Year
Gross population and employment requiring new space increase	300,113
\$ per 1,000 Capita	\$8,969
DC Amount (before adjustments)	\$2,691,862

2022 Development Charge Background Study
Public Health - Facilities
Square Footage
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Sqft)
22 Prospect St. (Newmarket)	10,939	10,939	10,939	10,939	10,939	10,939	10,939	10,939	10,939		885
4261 Highway 7 (Markham)	16,056	16,056	16,056	16,056	16,056	16,056	16,056	16,056	16,056	16,056	885
465 Davis Drive	27,137	27,137	23,616	23,616	23,616	23,616	23,616	23,616	23,616		885
50 High Tech Road	21,495	21,495	21,495	21,495	21,495	21,495	21,495	21,495	21,495	21,495	885
194 Eagle Street (Newmarket)	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670	6,670		885
100 Biscayne Blvd. (Keswick)	220	220	220	220	220	220	220	220	220		884
20798 Dalton Road (Sutton)	300	300	300	300	300	300	300	300	300		884
Vaughan Community Health Center	189	189	189								886
520 Cane Parkway	3,818	3,818	3,818	3,818	3,818	3,818	3,818	3,818	3,818		885
24262 Woodbine (Keswick)	812	812	812	812	812	812	812	812	812	812	884
9060 Jane St (Vaughan)			34,215	34,215	34,215	34,215	34,215	34,215	34,215	34,215	886
3901 Hwy 7 (Woodbridge)	48	48	48								886
20849 Dalton Rd, Sutton (Georgina Link Hub)										3,128	884
17150 Yonge Street - 3rd floor (clinic service)										8,690	885
17150 Yonge Street - Vaccine Depot P1 & Temp space										8,218	885
17250 / 17150 Yonge Street - Health Emergency Operations Centre						831	831	831	831	2,597	885
Total	87,684	87,684	118,378	118,141	118,141	118,972	118,972	118,972	118,972	95,211	885

Net Population + Net Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,877,600
Per 1,000 Capita Standard	54.2163	52.8026	70.2916	68.9472	67.6057	66.7482	65.4124	64.2293	65.7485	50.7089

10 Year Average	2012-2021
Quantity Standard (Sqft per 1,000 Capita)	62.67
Quality Standard (\$ per 1,000 Sqft)	\$885
Service Standard (\$ per 1,000 Capita)	\$55,485

DC Amount (before adjustments)	10-Year
Gross population and employment requiring new space increase	300,113
\$ per 1,000 Capita	\$55,485
DC Amount (before adjustments)	\$16,651,768

2022 Development Charge Background Study
Public Health - Vehicles
Number of Vehicles
Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Value (\$ per Vehicle)
#381 & 3028 - Caravan - Transport of Staff	2	2	2	2	2	2	2	2	2	2	25,000
#3022 - 1 tonne van - Transport of Vaccines						1	1	1	1	1	78,000
#3052 - 3/4 tonne van - Transport of Vaccines										1	44,000
Total	2	2	2	2	2	3	3	3	3	4	35,573

Population + Employment	1,617,300	1,660,600	1,684,100	1,713,500	1,747,500	1,782,400	1,818,800	1,852,300	1,809,500	1,866,700
Per 1,000 Capita Standard	0.0012	0.0012	0.0012	0.0012	0.0011	0.0017	0.0016	0.0016	0.0017	0.0021

10 Year Average	2012-2021
Quantity Standard (Vehicles per 1,000 Capita)	0.0015
Quality Standard (\$ per Vehicle)	\$35,573
Service Standard (\$ per 1,000 Capita)	\$52.27

DC Amount (before adjustments)	10 Years
Gross population and employment requiring new space increase	300,113
\$ per 1,000 Capita	\$52.27
DC Amount (before adjustments)	\$15,686

2022 Development Charge Background Study
Public Health
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	2,691,862
Facilities	16,651,768
Vehicles	15,686
Equipment	0
Opening reserve adjustment	12,472,574
Funding Envelope	31,831,890
Less Existing debt principal	0
Total eligible amount for new projects	31,831,890

Project Number	Project Description (2022-2041)	Timing	Gross Project Cost (2022-2031)	Less Capital Grants, Subsidies and Other Contributions	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split				
							Total Development Charge Eligible Cost	Growth Costs (2022-2031)	Post Period Benefit / Level of Service Deduction (Beyond 2031)	Non-Residential Share				
										Residential	Retail	Industrial/ Office/ Institutional	Hotel	
1	Provision for Public Health Facilities and Land	2022-2031	31,806,098	0	31,806,098	0	31,806,098	31,806,098	0	97.18%	0.60%	2.20%	0.01%	
2	Provision for Public Health Vehicles	2022-2031	25,792	0	25,792	0	25,792	25,792	0	30,909,554	25,065	568	4,352	4
Total			31,831,890	0	31,831,890	0	31,831,890	31,831,890	0	30,934,620	192,346	700,568	4,356	

9.9 Long-term Care/ Seniors Services

9.9.1 Program Description

The 10-year Long-term Care/Seniors Services' capital program (Table 9-36) includes Unionville Seniors Hub and Community Centre facility. Community hubs are innovative and accessible spaces that bring people together to access a range of services, programs and opportunities to promote inclusive, healthy and resilient communities. There are no development charges rates proposed for Long-term Care/Seniors Services as the available reserve funds are sufficient to fund the proposed projects.

9.9.2 Level of Service

The 10-year historical level of service cap has been applied to the Long-term Care/Seniors Services in the 2022 DC Background Study and is based on the bed count in the York Region's Long-term Care/ Seniors Services facilities (see Table 9-35).

The total funding envelope of \$52,239,962 is determined by applying the historic per capita service level to projected growth over the planning horizon and accounting for opening reserve balance levels and existing debt. Finally, \$52,239,962 is the eligible amount available to new projects after accounting for existing outstanding development charge debt costs for this service.

9.9.3 Benefit to Existing Development Deduction

Due to the fact that the demand is largely driven by existing development with a significant wait list for senior care beds; the growth-related cost has been calculated at 15% of total net capital program, with the benefit-to-existing share being 85%, based on share of population growth to 2031.

9.9.4 Post Period Benefit Deduction

The Long-term Care/ Seniors Services program is entirely related to development occurring over the 2022 to 2041 period. As such, no post period deduction has been made.

9.9.5 Grants, Subsidies And Other Contributions

Any applicable grants, subsidies and other contributions have been considered and deducted from the development charges eligible costs in accordance with the requirements of the Act. For the listed Long-term Care/ Seniors Services projects, the anticipated grants total is \$1.8 million, as listed in Table 9-35.

9.9.6 Residential versus Non-Residential Allocation

Long-term Care/ Senior Services programs are provided solely for the benefit of residential development. As such, 100% of the development charges eligible costs have been allocated to residential development.

2022 Development Charge Background Study
 Long Term Care/Senior Services - Facilities
 Beds
 Historic Level of Service

Description	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022 Building Value (\$ per bed)	2022 Value with land, site works, etc. (\$ per bed)
Bed Count	232	232	232	232	232	232	232	232	232	232	427,419	683,419
Total	232	232	232	232	232	232	232	232	232	232	427,419	683,419

Population	1,087,000	1,101,500	1,117,000	1,131,700	1,143,900	1,160,900	1,182,200	1,197,700	1,209,800	1,227,700
Per 1,000 Capita Standard	0.2134	0.2106	0.2077	0.2050	0.2028	0.1998	0.1962	0.1937	0.1918	0.1890

10 Year Average	2012-2021
Quantity Standard (per 1,000 Capita)	0.2010
Quality Standard (\$ per bed)	\$683,419
Service Standard (\$ per 1,000 Capita)	\$137,374.16

DC Amount (before adjustments)	10 Year
Gross population increase	222,074
\$ per 1,000 Capita	\$137,374
DC Amount (before adjustments)	\$30,507,229

2022 Development Charge Background Study
Long Term Care/Seniors Services
Growth related capital costs

10-Year Historic Level of Service Cap	
Land	0
Facilities	30,507,229
Vehicles	0
Equipment	0
Less Existing debt principal	0
Opening reserve adjustment	21,732,733
Total eligible amount for new projects	52,239,962

Project Number	Project Description	Timing	Gross Project Cost (2022-2031)	Less Grants and Subsidies	New Municipal Cost	Less Benefit to Existing	Potential Development Charge Recoverable Costs			Residential and Non-residential Split			
							Total Development Charge Eligible Cost	In-period Growth Costs (2022-2031)	Post Period Benefit / Level of Service Deduction (Beyond 2031)	Non-Residential Share			
										Residential 100%	Retail 0%	Industrial/Office/Institutional 0%	Hotel 0%
1	Unionville Seniors Hub	2022-2027	2,501,000	1,822,000	679,000	574,992	104,008	104,008	0	104,008	0	0	0
Total			2,501,000	1,822,000	679,000	574,992	104,008	104,008	0	104,008	0	0	0

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10 DEVELOPMENT CHARGES CASH FLOW CALCULATIONS

This Chapter provides the development charges calculations, based on the “Potential Development Charges Recoverable Cost” by service in Chapters 3-9 and the development forecasts in Chapter 2. Where applicable, the DC rate calculations commence with the development charges reserve fund balance for the service, as of the end of 2021. The DC-funded expenditures are set out by year and inflated at 2.71% annually. This rate of inflation is based on Non-Residential Building Consumer Price Index for the Toronto Census Metropolitan Area over the last 10 years. Existing debt payments and new debt proceeds and related payments are also tabulated. The interest rates assumed for the additional debt payments are consistent with the Region’s debt program.

For residential rates, the annual gross population growth forecast is shown and multiplied by the development charge per capita, also inflated at 2.71% per year. The calculated development charges ensure that the revenue stream is sufficient to fund the capital expenditures and debt payments, while leaving the development charge reserve fund balance at nil by the end of the period in mid-2041 (or 2031 where applicable).

The final adjustment that is made to this calculation is to provide for interest earnings/ expense on the annual reserve fund transactions. The interest earnings/expense assumed depends on the nature of the service. In addition, it is assumed that the various rates applied will increase in the long term. Positive interest earnings are shown for the year where the opening reserve balance for the year is above zero. This earnings figure is then adjusted up or down, depending on whether the in-year transactions were in a surplus or deficit position.

The resultant development charge per capita is multiplied by the average persons per unit occupancy for each residential unit type in order to yield the development charge.

A similar set of calculations has been made for non-residential development, based on the forecast growth in floor area (in sq. ft.) and the share of costs attributable to non-residential development.

The following tables set out the DC rate calculations for each service.

Water
Residential Development Charge Calculation

Assumptions		
Gross Population Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$370,309,520	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$2,373
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(77,954,354)	(6,895,402)	(6,895,402)	(58,110,648)	6,895,402	(113,774)	20,326	2,373	48,240,671	(9,983,751)	(2,572,494)	(164,732)	(90,675,330)
2023	(90,675,330)	(15,163,415)	(15,573,933)	(58,098,574)	15,573,933	(771,883)	20,326	2,438	49,546,687	(9,323,770)	(3,082,961)	(158,504)	(103,240,566)
2024	(103,240,566)	(26,646,893)	(28,109,242)	(58,086,583)	28,109,242	(2,146,694)	20,326	2,504	50,888,060	(9,345,217)	(3,561,800)	(161,205)	(116,308,788)
2025	(116,308,788)	(17,784,070)	(19,267,927)	(58,074,427)	19,267,927	(4,096,310)	20,326	2,571	52,265,749	(9,904,988)	(4,128,962)	(175,814)	(130,518,552)
2026	(130,518,552)	(12,244,211)	(13,624,981)	(58,269,466)	13,624,981	(5,445,472)	21,883	2,641	57,792,754	(5,922,184)	(4,698,668)	(106,599)	(141,246,003)
2027	(141,246,003)	(8,661,963)	(9,899,716)	(59,128,221)	9,899,716	(6,409,935)	23,439	2,712	63,578,004	(1,960,153)	(5,226,102)	(36,263)	(148,468,521)
2028	(148,468,521)	(12,498,208)	(14,670,854)	(59,441,065)	14,670,854	(7,253,757)	23,439	2,786	65,299,246	(1,395,577)	(5,567,570)	(26,167)	(155,457,834)
2029	(155,457,834)	(20,415,067)	(24,612,727)	(59,084,224)	24,612,727	(8,571,195)	23,439	2,861	67,067,087	(588,332)	(5,985,127)	(11,325)	(162,042,618)
2030	(162,042,618)	(28,409,281)	(35,177,944)	(55,326,795)	35,177,944	(10,710,411)	23,439	2,939	68,882,788	2,845,582	(6,643,747)	38,415	(165,802,368)
2031	(165,802,368)	(23,860,073)	(30,344,729)	(42,888,326)	30,344,729	(13,407,401)	25,131	3,018	75,854,734	19,559,007	(7,212,403)	288,495	(153,167,269)
2032	(153,167,269)	(22,758,046)	(29,726,772)	(31,815,568)	29,726,772	(15,820,468)	26,823	3,100	83,153,693	35,517,657	(6,662,776)	523,885	(123,788,502)
2033	(123,788,502)	(30,116,073)	(40,402,886)	(22,239,803)	40,402,886	(18,429,766)	26,823	3,184	85,404,906	44,735,337	(5,384,800)	659,846	(83,778,119)
2034	(83,778,119)	(31,308,460)	(43,139,691)	(17,416,481)	43,139,691	(21,720,097)	26,823	3,270	87,717,066	48,580,488	(3,644,348)	716,562	(38,125,416)
2035	(38,125,416)	(36,776,520)	(52,045,985)	(10,722,044)	52,045,985	(25,363,463)	26,823	3,359	90,091,823	54,006,316	(1,658,456)	796,593	15,019,037
2036	15,019,037	(30,801,328)	(44,770,024)	(6,434,666)	44,770,024	(29,367,053)	26,761	3,450	92,316,991	56,515,272	443,062	833,600	72,810,971
2037	72,810,971	(14,682,812)	(21,919,386)	(2,202,337)	21,919,386	(32,450,074)	26,700	3,543	94,600,154	59,947,742	2,147,924	884,229	135,790,866
2038	135,790,866	(19,930,229)	(30,558,549)	(298,095)	30,558,549	(34,390,754)	26,700	3,639	97,161,256	62,472,407	4,005,831	921,468	203,190,571
2039	203,190,571	(11,051,276)	(17,403,401)	(298,095)	17,403,401	(36,548,235)	26,700	3,738	99,791,694	62,945,364	5,994,122	928,444	273,058,501
2040	273,058,501	(8,301,384)	(13,426,830)	(298,095)	13,426,830	(37,853,403)	26,700	3,839	102,493,346	64,341,848	8,055,226	949,042	346,404,617
2041	346,404,617	(7,196,624)	(11,955,096)	(251,971)	11,955,096	(401,414,204)	13,350	3,943	52,634,070	(349,032,105)	10,218,936	(7,591,448)	0
Total		(385,501,335)	(503,526,077)	(658,485,486)	503,526,077	(712,284,351)	476,277		1,484,780,779		(35,165,113)	(891,476)	

Water
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$20,626,345	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$4.26
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(4,342,080)	(384,076)	(384,076)	(3,236,780)	384,076	(6,337)	736,966	4.26	3,138,775	(104,341)	(143,289)	(1,722)	(4,591,431)
2023	(4,591,431)	(844,607)	(867,473)	(3,236,107)	867,473	(42,994)	737,005	4.37	3,223,920	(55,182)	(156,109)	(938)	(4,803,660)
2024	(4,803,660)	(1,484,240)	(1,565,693)	(3,235,439)	1,565,693	(119,571)	736,966	4.49	3,311,028	(43,983)	(165,726)	(759)	(5,014,128)
2025	(5,014,128)	(990,578)	(1,073,229)	(3,234,762)	1,073,229	(228,166)	736,966	4.61	3,400,667	(62,261)	(178,002)	(1,105)	(5,255,495)
2026	(5,255,495)	(682,006)	(758,915)	(3,245,626)	758,915	(303,314)	725,783	4.74	3,439,730	(109,210)	(189,198)	(1,966)	(5,555,869)
2027	(5,555,869)	(482,474)	(551,417)	(3,293,459)	551,417	(357,035)	697,281	4.87	3,394,117	(256,377)	(205,567)	(4,743)	(6,022,556)
2028	(6,022,556)	(696,154)	(817,171)	(3,310,884)	817,171	(404,036)	697,242	5.00	3,485,813	(229,107)	(225,846)	(4,296)	(6,481,805)
2029	(6,481,805)	(1,137,125)	(1,370,936)	(3,291,008)	1,370,936	(477,418)	697,281	5.13	3,580,382	(188,044)	(249,549)	(3,620)	(6,923,018)
2030	(6,923,018)	(1,582,405)	(1,959,421)	(3,081,718)	1,959,421	(596,573)	697,242	5.27	3,677,110	(1,181)	(283,844)	(24)	(7,208,067)
2031	(7,208,067)	(1,329,013)	(1,690,210)	(2,388,892)	1,690,210	(746,796)	735,504	5.42	3,983,909	848,222	(313,551)	12,511	(6,660,885)
2032	(6,660,885)	(1,267,630)	(1,655,790)	(1,772,136)	1,655,790	(881,205)	775,604	5.56	4,314,846	1,661,505	(289,749)	24,507	(5,264,622)
2033	(5,264,622)	(1,677,474)	(2,250,452)	(1,238,763)	2,250,452	(1,026,543)	775,604	5.71	4,431,661	2,166,355	(229,011)	31,954	(3,295,324)
2034	(3,295,324)	(1,743,890)	(2,402,893)	(970,103)	2,402,893	(1,209,816)	775,604	5.87	4,551,639	2,371,721	(143,347)	34,983	(1,031,967)
2035	(1,031,967)	(2,048,463)	(2,898,976)	(597,221)	2,898,976	(1,412,752)	775,604	6.03	4,674,865	2,664,892	(44,891)	39,307	1,627,341
2036	1,627,341	(1,715,643)	(2,493,703)	(358,413)	2,493,703	(1,635,753)	800,261	6.19	4,954,072	2,959,906	48,007	43,659	4,678,913
2037	4,678,913	(817,837)	(1,220,916)	(122,671)	1,220,916	(1,807,478)	806,907	6.36	5,130,445	3,200,296	138,028	47,204	8,064,441
2038	8,064,441	(1,110,119)	(1,702,120)	(16,604)	1,702,120	(1,915,575)	806,945	6.53	5,269,593	3,337,414	237,901	49,227	11,688,983
2039	11,688,983	(615,559)	(969,374)	(16,604)	969,374	(2,035,747)	806,907	6.71	5,411,998	3,359,647	344,825	49,555	15,443,009
2040	15,443,009	(462,389)	(747,878)	(16,604)	747,878	(2,108,445)	806,945	6.89	5,558,782	3,433,732	455,569	50,648	19,382,958
2041	19,382,958	(400,854)	(665,902)	(14,035)	665,902	(22,358,273)	401,733	7.08	2,842,330	(19,529,978)	571,797	(424,777)	0
Total		(21,472,534)	(28,046,545)	(36,677,828)	28,046,545	(39,673,828)	14,730,349		81,775,681		(1,021,550)	(60,395)	

Water
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$75,117,972	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$2.86
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(15,813,185)	(1,398,745)	(1,398,745)	(11,787,853)	1,398,745	(23,079)	4,021,383	2.86	11,503,528	(307,404)	(521,835)	(5,072)	(16,647,496)
2023	(16,647,496)	(3,075,927)	(3,159,201)	(11,785,403)	3,159,201	(156,578)	4,021,383	2.94	11,814,962	(127,019)	(566,015)	(2,159)	(17,342,689)
2024	(17,342,689)	(5,405,372)	(5,702,012)	(11,782,971)	5,702,012	(435,461)	4,021,383	3.02	12,134,828	(83,604)	(598,323)	(1,442)	(18,026,059)
2025	(18,026,059)	(3,607,532)	(3,908,535)	(11,780,505)	3,908,535	(830,944)	4,021,383	3.10	12,463,353	(148,096)	(639,925)	(2,629)	(18,816,709)
2026	(18,816,709)	(2,483,761)	(2,763,853)	(11,820,069)	2,763,853	(1,104,624)	3,963,103	3.18	12,615,254	(309,439)	(677,402)	(5,570)	(19,809,120)
2027	(19,809,120)	(1,757,095)	(2,008,176)	(11,994,269)	2,008,176	(1,300,267)	3,827,293	3.27	12,512,776	(781,761)	(732,937)	(14,463)	(21,338,280)
2028	(21,338,280)	(2,535,285)	(2,976,010)	(12,057,730)	2,976,010	(1,471,438)	3,827,293	3.36	12,851,533	(677,635)	(800,186)	(12,706)	(22,828,806)
2029	(22,828,806)	(4,141,234)	(4,992,737)	(11,985,344)	4,992,737	(1,738,683)	3,827,293	3.45	13,199,462	(524,565)	(878,909)	(10,098)	(24,242,379)
2030	(24,242,379)	(5,762,875)	(7,135,911)	(11,223,143)	7,135,911	(2,172,627)	3,827,293	3.54	13,556,810	161,040	(993,938)	2,174	(25,073,102)
2031	(25,073,102)	(4,840,060)	(6,155,485)	(8,699,976)	6,155,485	(2,719,716)	4,037,794	3.64	14,689,643	3,269,950	(1,090,680)	48,232	(22,845,600)
2032	(22,845,600)	(4,616,512)	(6,030,131)	(6,453,847)	6,030,131	(3,209,211)	4,161,884	3.74	15,551,002	5,887,943	(993,784)	86,847	(17,864,593)
2033	(17,864,593)	(6,109,101)	(8,195,800)	(4,511,385)	8,195,800	(3,738,512)	4,161,884	3.84	15,972,013	7,722,115	(777,110)	113,901	(10,805,687)
2034	(10,805,687)	(6,350,979)	(8,750,966)	(3,532,965)	8,750,966	(4,405,962)	4,161,884	3.94	16,404,422	8,465,494	(470,047)	124,866	(2,685,374)
2035	(2,685,374)	(7,460,185)	(10,557,624)	(2,174,987)	10,557,624	(5,145,025)	4,161,884	4.05	16,848,537	9,528,525	(116,814)	140,546	6,866,884
2036	6,866,884	(6,248,106)	(9,081,682)	(1,305,284)	9,081,682	(5,957,161)	4,293,709	4.16	17,852,788	10,590,343	202,573	156,208	17,816,007
2037	17,816,007	(2,978,436)	(4,446,388)	(446,748)	4,446,388	(6,582,558)	4,334,163	4.27	18,508,872	11,479,566	525,572	169,324	29,990,469
2038	29,990,469	(4,042,884)	(6,198,858)	(60,469)	6,198,858	(6,976,228)	4,334,163	4.39	19,009,961	11,973,263	884,719	176,606	43,025,057
2039	43,025,057	(2,241,772)	(3,530,312)	(60,469)	3,530,312	(7,413,877)	4,334,163	4.50	19,524,616	12,050,269	1,269,239	177,741	56,522,307
2040	56,522,307	(1,683,951)	(2,723,657)	(60,469)	2,723,657	(7,678,633)	4,334,163	4.63	20,053,204	12,314,102	1,667,408	181,633	70,685,450
2041	70,685,450	(1,459,848)	(2,425,113)	(51,113)	2,425,113	(81,424,719)	2,157,860	4.75	10,254,231	(71,221,601)	2,085,221	(1,549,070)	0
Total		(78,199,660)	(102,141,198)	(133,575,001)	102,141,198	(144,485,304)	79,831,360		297,321,792		(3,223,171)	(225,131)	

Water
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$467,809	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$0.92
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(98,479)	(8,711)	(8,711)	(73,411)	8,711	(144)	72,000	0.92	66,072	(7,483)	(3,250)	(123)	(109,335)
2023	(109,335)	(19,156)	(19,674)	(73,395)	19,674	(975)	72,000	0.94	67,860	(6,510)	(3,717)	(111)	(119,673)
2024	(119,673)	(33,663)	(35,510)	(73,380)	35,510	(2,712)	72,000	0.97	69,698	(6,395)	(4,129)	(110)	(130,307)
2025	(130,307)	(22,466)	(24,341)	(73,365)	24,341	(5,175)	72,000	0.99	71,585	(6,955)	(4,626)	(123)	(142,012)
2026	(142,012)	(15,468)	(17,212)	(73,611)	17,212	(6,879)	74,000	1.02	75,565	(4,926)	(5,112)	(89)	(152,138)
2027	(152,138)	(10,943)	(12,506)	(74,696)	12,506	(8,098)	74,000	1.05	77,611	(5,183)	(5,629)	(96)	(163,047)
2028	(163,047)	(15,789)	(18,534)	(75,091)	18,534	(9,164)	74,000	1.08	79,712	(4,543)	(6,114)	(85)	(173,789)
2029	(173,789)	(25,790)	(31,093)	(74,641)	31,093	(10,828)	74,000	1.11	81,870	(3,599)	(6,691)	(69)	(184,148)
2030	(184,148)	(35,889)	(44,440)	(69,894)	44,440	(13,530)	74,000	1.14	84,086	662	(7,550)	9	(191,027)
2031	(191,027)	(30,142)	(38,334)	(54,180)	38,334	(16,937)	78,000	1.17	91,031	19,913	(8,310)	294	(179,130)
2032	(179,130)	(28,750)	(37,554)	(40,192)	37,554	(19,986)	84,000	1.20	100,687	40,509	(7,792)	598	(145,816)
2033	(145,816)	(38,045)	(51,041)	(28,095)	51,041	(23,282)	84,000	1.23	103,413	52,036	(6,343)	768	(99,356)
2034	(99,356)	(39,552)	(54,498)	(22,002)	54,498	(27,439)	84,000	1.26	106,213	56,772	(4,322)	837	(46,068)
2035	(46,068)	(46,459)	(65,749)	(13,545)	65,749	(32,041)	84,000	1.30	109,088	63,502	(2,004)	937	16,367
2036	16,367	(38,911)	(56,558)	(8,129)	56,558	(37,099)	86,000	1.33	114,709	69,481	483	1,025	87,356
2037	87,356	(18,549)	(27,691)	(2,782)	27,691	(40,994)	88,000	1.37	120,555	76,779	2,577	1,132	167,844
2038	167,844	(25,178)	(38,604)	(377)	38,604	(43,446)	88,000	1.41	123,819	79,997	4,951	1,180	253,972
2039	253,972	(13,961)	(21,986)	(377)	21,986	(46,171)	88,000	1.45	127,171	80,623	7,492	1,189	343,276
2040	343,276	(10,487)	(16,962)	(377)	16,962	(47,820)	88,000	1.48	130,614	82,417	10,127	1,216	437,036
2041	437,036	(9,091)	(15,103)	(318)	15,103	(507,107)	44,000	1.52	67,075	(440,351)	12,893	(9,578)	0
Total		(487,001)	(636,100)	(831,859)	636,100	(899,827)	1,554,000		1,868,433		(37,067)	(1,201)	

**Wastewater
Residential Development Charge Calculation**

Assumptions		
Gross Population Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$937,743,290	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$5,529
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(70,824,562)	(59,310,829)	(59,310,829)	(82,190,111)	59,310,829	(978,629)	20,326	5,529	112,391,142	29,222,402	(2,337,211)	277,613	(43,661,757)
2023	(43,661,757)	(71,563,886)	(73,501,329)	(82,190,111)	73,501,329	(5,611,570)	20,326	5,679	115,433,898	27,632,216	(1,484,500)	276,322	(17,237,718)
2024	(17,237,718)	(100,196,640)	(105,695,309)	(82,190,111)	105,695,309	(11,634,833)	20,326	5,833	118,559,031	24,734,086	(594,701)	253,524	7,155,191
2025	7,155,191	(118,603,708)	(128,499,695)	(82,190,111)	128,499,695	(19,960,577)	20,326	5,991	121,768,769	19,618,081	153,837	210,894	27,138,003
2026	27,138,003	(169,251,591)	(188,337,963)	(82,633,523)	188,337,963	(30,712,761)	21,883	6,153	134,645,590	21,299,305	597,036	234,292	49,268,637
2027	49,268,637	(186,249,710)	(212,863,888)	(83,823,892)	212,863,888	(45,450,898)	23,439	6,320	148,124,067	18,849,277	1,133,179	216,767	69,467,860
2028	69,467,860	(147,819,776)	(173,516,270)	(84,321,508)	173,516,270	(60,933,463)	23,439	6,491	152,134,218	6,879,247	1,632,495	80,831	78,060,432
2029	78,060,432	(103,680,382)	(124,998,709)	(82,727,663)	124,998,709	(73,317,678)	23,439	6,666	156,252,935	207,594	1,912,481	2,543	80,183,049
2030	80,183,049	(95,704,579)	(118,506,708)	(69,156,449)	118,506,708	(82,948,898)	23,439	6,847	160,483,158	8,377,811	2,164,942	113,100	90,838,903
2031	90,838,903	(64,758,533)	(82,358,512)	(57,993,493)	82,358,512	(91,602,371)	25,131	7,032	176,726,399	27,130,536	2,679,748	400,175	121,049,362
2032	121,049,362	(45,833,921)	(59,868,694)	(50,417,570)	59,868,694	(97,698,992)	26,823	7,223	193,731,520	45,614,957	3,570,956	672,821	170,908,096
2033	170,908,096	(54,988,492)	(73,771,032)	(40,774,644)	73,771,032	(102,788,752)	26,823	7,418	198,976,397	55,413,002	5,041,789	817,342	232,180,229
2034	232,180,229	(28,740,254)	(39,600,979)	(32,665,661)	39,600,979	(107,944,633)	26,823	7,619	204,363,269	63,752,975	6,849,317	940,356	303,722,876
2035	303,722,876	(53,570,338)	(75,812,530)	(22,117,766)	75,812,530	(111,898,916)	26,823	7,825	209,895,978	75,879,297	8,959,825	1,119,220	389,681,218
2036	389,681,218	(48,324,770)	(70,240,513)	(17,783,006)	70,240,513	(117,840,052)	26,761	8,037	215,080,176	79,457,118	11,495,596	1,171,992	481,805,924
2037	481,805,924	(25,598,180)	(38,214,506)	(13,702,843)	38,214,506	(122,760,249)	26,700	8,255	220,399,489	83,936,396	14,213,275	1,238,062	581,193,657
2038	581,193,657	(15,914,279)	(24,400,988)	(10,457,767)	24,400,988	(125,515,618)	26,700	8,478	226,366,346	90,392,961	17,145,213	1,333,296	690,065,127
2039	690,065,127	(16,842,649)	(26,523,578)	(10,457,767)	26,523,578	(127,513,002)	26,700	8,708	232,494,743	94,523,974	20,356,921	1,394,229	806,340,251
2040	806,340,251	(17,725,724)	(28,669,953)	(10,457,767)	28,669,953	(129,680,636)	26,700	8,943	238,789,054	98,650,651	23,787,037	1,455,097	930,233,036
2041	930,233,036	(16,537,087)	(27,471,557)	(17,239,274)	27,471,557	(1,042,676,489)	13,350	9,186	122,626,885	(937,288,878)	27,441,875	(20,386,033)	0
Total		(1,441,215,326)	(1,732,163,542)	(1,015,491,038)	1,732,163,542	(2,509,469,018)	476,277		3,459,243,065		144,719,108	(8,177,556)	

Wastewater
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$52,232,567	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$9.96
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(3,944,948)	(3,303,630)	(3,303,630)	(4,578,013)	3,303,630	(54,510)	736,966	9.96	7,341,894	2,709,372	(130,183)	25,739	(1,340,021)
2023	(1,340,021)	(3,986,129)	(4,094,045)	(4,578,013)	4,094,045	(312,566)	737,005	10.23	7,541,055	2,650,476	(45,561)	26,505	1,291,399
2024	1,291,399	(5,580,981)	(5,887,259)	(4,578,013)	5,887,259	(648,063)	736,966	10.51	7,744,808	2,518,732	26,474	25,817	3,862,422
2025	3,862,422	(6,606,260)	(7,157,470)	(4,578,013)	7,157,470	(1,111,810)	736,966	10.79	7,954,483	2,264,661	83,042	24,345	6,234,470
2026	6,234,470	(9,427,362)	(10,490,478)	(4,602,711)	10,490,478	(1,710,710)	725,783	11.09	8,045,856	1,732,436	137,158	19,057	8,123,121
2027	8,123,121	(10,374,162)	(11,856,579)	(4,669,015)	11,856,579	(2,531,628)	697,281	11.39	7,939,162	738,520	186,832	8,493	9,056,966
2028	9,056,966	(8,233,603)	(9,664,906)	(4,696,732)	9,664,906	(3,394,011)	697,242	11.69	8,153,648	62,905	212,839	739	9,333,449
2029	9,333,449	(5,775,027)	(6,962,464)	(4,607,954)	6,962,464	(4,083,815)	697,281	12.01	8,374,854	(316,916)	228,669	(6,101)	9,239,102
2030	9,239,102	(5,330,772)	(6,600,857)	(3,852,034)	6,600,857	(4,620,277)	697,242	12.34	8,601,111	128,800	249,456	1,739	9,619,096
2031	9,619,096	(3,607,069)	(4,587,393)	(3,230,254)	4,587,393	(5,102,278)	735,504	12.67	9,318,743	986,211	283,763	14,547	10,903,617
2032	10,903,617	(2,552,962)	(3,334,703)	(2,808,273)	3,334,703	(5,441,862)	775,604	13.01	10,092,834	1,842,700	321,657	27,180	13,095,153
2033	13,095,153	(3,062,875)	(4,109,067)	(2,271,159)	4,109,067	(5,725,363)	775,604	13.37	10,366,077	2,369,555	386,307	34,951	15,885,966
2034	15,885,966	(1,600,840)	(2,205,786)	(1,819,487)	2,205,786	(6,012,547)	775,604	13.73	10,646,717	2,814,683	468,636	41,517	19,210,802
2035	19,210,802	(2,983,883)	(4,222,779)	(1,231,966)	4,222,779	(6,232,801)	775,604	14.10	10,934,954	3,470,187	566,719	51,185	23,298,893
2036	23,298,893	(2,691,703)	(3,912,417)	(990,518)	3,912,417	(6,563,724)	800,261	14.48	11,588,045	4,033,803	687,317	59,499	28,079,511
2037	28,079,511	(1,425,826)	(2,128,559)	(763,252)	2,128,559	(6,837,781)	806,907	14.87	12,000,599	4,399,566	828,346	64,894	33,372,317
2038	33,372,317	(886,430)	(1,359,142)	(582,501)	1,359,142	(6,991,256)	806,945	15.27	12,326,078	4,752,322	984,483	70,097	39,179,219
2039	39,179,219	(938,140)	(1,477,371)	(582,501)	1,477,371	(7,102,510)	806,907	15.69	12,659,177	4,974,166	1,155,787	73,369	45,382,541
2040	45,382,541	(987,328)	(1,596,925)	(582,501)	1,596,925	(7,223,248)	806,945	16.11	13,002,519	5,196,770	1,338,785	76,652	51,994,748
2041	51,994,748	(921,120)	(1,530,174)	(960,232)	1,530,174	(58,077,376)	401,733	16.55	6,648,479	(52,389,130)	1,533,845	(1,139,464)	0
Total		(80,276,103)	(96,482,001)	(56,563,139)	96,482,001	(139,778,137)	14,730,349		191,281,094		9,504,371	(499,241)	

Wastewater

Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Gross Population Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$190,222,964	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$6.69
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(14,366,894)	(12,031,312)	(12,031,312)	(16,672,416)	12,031,312	(198,517)	4,021,383	6.69	26,920,809	10,049,876	(474,107)	95,474	(4,695,652)
2023	(4,695,652)	(14,516,867)	(14,909,881)	(16,672,416)	14,909,881	(1,138,317)	4,021,383	6.88	27,649,633	9,838,900	(159,652)	98,389	5,081,985
2024	5,081,985	(20,325,074)	(21,440,489)	(16,672,416)	21,440,489	(2,360,147)	4,021,383	7.06	28,398,190	9,365,626	104,181	95,998	14,647,789
2025	14,647,789	(24,058,982)	(26,066,401)	(16,672,416)	26,066,401	(4,049,040)	4,021,383	7.25	29,167,011	8,445,555	314,927	90,790	23,499,062
2026	23,499,062	(34,332,999)	(38,204,705)	(16,762,363)	38,204,705	(6,230,140)	3,963,103	7.45	29,522,493	6,529,989	516,979	71,830	30,617,860
2027	30,617,860	(37,781,099)	(43,179,834)	(17,003,832)	43,179,834	(9,219,799)	3,827,293	7.65	29,282,672	3,059,042	704,211	35,179	34,416,292
2028	34,416,292	(29,985,515)	(35,198,097)	(17,104,774)	35,198,097	(12,360,466)	3,827,293	7.86	30,075,439	610,199	808,783	7,170	35,842,444
2029	35,842,444	(21,031,757)	(25,356,220)	(16,781,460)	25,356,220	(14,872,627)	3,827,293	8.07	30,889,669	(764,417)	878,140	(14,715)	35,941,451
2030	35,941,451	(19,413,851)	(24,039,305)	(14,028,514)	24,039,305	(16,826,338)	3,827,293	8.29	31,725,943	871,091	970,419	11,760	37,794,722
2031	37,794,722	(13,136,388)	(16,706,577)	(11,764,087)	16,706,577	(18,581,711)	4,037,794	8.51	34,377,024	4,031,226	1,114,944	59,461	43,000,352
2032	43,000,352	(9,297,496)	(12,144,475)	(10,227,297)	12,144,475	(19,818,422)	4,161,884	8.74	36,392,795	6,347,076	1,268,510	93,619	50,709,558
2033	50,709,558	(11,154,517)	(14,964,591)	(8,271,212)	14,964,591	(20,850,889)	4,161,884	8.98	37,378,054	8,255,953	1,495,932	121,775	60,583,218
2034	60,583,218	(5,830,014)	(8,033,132)	(6,626,290)	8,033,132	(21,896,769)	4,161,884	9.22	38,389,987	9,866,928	1,787,205	145,537	72,382,888
2035	72,382,888	(10,866,842)	(15,378,712)	(4,486,630)	15,378,712	(22,698,902)	4,161,884	9.47	39,429,316	12,243,784	2,135,295	180,596	86,942,563
2036	86,942,563	(9,802,769)	(14,248,418)	(3,607,316)	14,248,418	(23,904,073)	4,293,709	9.73	41,779,486	14,268,097	2,564,806	210,454	103,985,920
2037	103,985,920	(5,192,638)	(7,751,883)	(2,779,647)	7,751,883	(24,902,144)	4,334,163	9.99	43,314,867	15,633,076	3,067,585	230,588	122,917,168
2038	122,917,168	(3,228,241)	(4,949,786)	(2,121,377)	4,949,786	(25,461,076)	4,334,163	10.26	44,487,527	16,905,074	3,626,056	249,350	143,697,648
2039	143,697,648	(3,416,563)	(5,380,357)	(2,121,377)	5,380,357	(25,866,249)	4,334,163	10.54	45,691,934	17,704,308	4,239,081	261,139	165,902,175
2040	165,902,175	(3,595,696)	(5,815,753)	(2,121,377)	5,815,753	(26,305,957)	4,334,163	10.83	46,928,948	18,501,613	4,894,114	272,899	189,570,800
2041	189,570,800	(3,354,579)	(5,572,656)	(3,497,019)	5,572,656	(211,508,857)	2,157,860	11.12	5,297,176	(191,008,700)	5,592,339	(4,154,439)	0
Total		(292,353,199)	(351,372,584)	(205,994,238)	351,372,584	(509,050,439)	79,831,360		695,798,972		35,449,747	(1,837,148)	

Wastewater

Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$1,184,644	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$2.14
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(89,472)	(74,927)	(74,927)	(103,830)	74,927	(1,236)	72,000	2.14	154,181	49,115	(2,953)	467	(42,843)
2023	(42,843)	(90,406)	(92,854)	(103,830)	92,854	(7,089)	72,000	2.20	158,355	47,436	(1,457)	474	3,610
2024	3,610	(126,578)	(133,524)	(103,830)	133,524	(14,698)	72,000	2.26	162,642	44,114	74	452	48,251
2025	48,251	(149,831)	(162,333)	(103,830)	162,333	(25,216)	72,000	2.32	167,046	37,999	1,037	408	87,696
2026	87,696	(213,814)	(237,926)	(104,390)	237,926	(38,799)	74,000	2.38	176,334	33,144	1,929	365	123,134
2027	123,134	(235,288)	(268,909)	(105,894)	268,909	(57,418)	74,000	2.45	181,108	17,796	2,832	205	143,967
2028	143,967	(186,740)	(219,202)	(106,523)	219,202	(76,977)	74,000	2.51	186,011	2,511	3,383	30	149,891
2029	149,891	(130,979)	(157,910)	(104,509)	157,910	(92,622)	74,000	2.58	191,047	(6,084)	3,672	(117)	147,362
2030	147,362	(120,903)	(149,709)	(87,365)	149,709	(104,789)	74,000	2.65	196,219	4,065	3,979	55	155,461
2031	155,461	(81,809)	(104,043)	(73,263)	104,043	(115,721)	78,000	2.72	212,425	23,441	4,586	346	183,834
2032	183,834	(57,902)	(75,632)	(63,692)	75,632	(123,422)	84,000	2.80	234,958	47,844	5,423	706	237,807
2033	237,807	(69,467)	(93,194)	(51,510)	93,194	(129,852)	84,000	2.87	241,319	59,957	7,015	884	305,663
2034	305,663	(36,307)	(50,028)	(41,266)	50,028	(136,366)	84,000	2.95	247,853	70,221	9,017	1,036	385,937
2035	385,937	(67,675)	(95,773)	(27,941)	95,773	(141,361)	84,000	3.03	254,563	85,260	11,385	1,258	483,840
2036	483,840	(61,048)	(88,734)	(22,465)	88,734	(148,866)	86,000	3.11	267,679	96,348	14,273	1,421	595,882
2037	595,882	(32,338)	(48,276)	(17,311)	48,276	(155,082)	88,000	3.20	281,320	108,927	17,579	1,607	723,995
2038	723,995	(20,104)	(30,826)	(13,211)	30,826	(158,563)	88,000	3.28	288,936	117,162	21,358	1,728	864,243
2039	864,243	(21,277)	(33,507)	(13,211)	33,507	(161,086)	88,000	3.37	296,758	122,461	25,495	1,806	1,014,005
2040	1,014,005	(22,393)	(36,219)	(13,211)	36,219	(163,825)	88,000	3.46	304,793	127,757	29,913	1,884	1,173,560
2041	1,173,560	(20,891)	(34,705)	(21,778)	34,705	(1,317,205)	44,000	3.56	156,522	(1,182,461)	34,620	(25,719)	0
Total		(1,820,676)	(2,188,228)	(1,282,862)	2,188,228	(3,170,192)	1,554,000		4,360,068		193,163	(10,705)	

Roads
Residential Development Charge Calculation

Assumptions		
Gross Population Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$2,590,492,489	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$6,758
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	407,327,188	(124,922,673)	(124,922,673)	(52,877,184)	124,922,673	(2,061,224)	20,326	6,758	137,360,011	82,421,604	7,739,217	783,005	498,271,014
2023	498,271,014	(136,994,066)	(140,702,895)	(52,877,184)	140,702,895	(11,579,457)	20,326	6,941	141,078,748	76,622,107	9,965,420	766,221	585,624,763
2024	585,624,763	(145,307,900)	(153,282,219)	(52,877,184)	153,282,219	(22,263,630)	20,326	7,129	144,898,161	69,757,347	12,005,308	715,013	668,102,430
2025	668,102,430	(145,144,882)	(157,255,396)	(52,877,184)	157,255,396	(33,821,355)	20,326	7,322	148,820,977	62,122,438	14,364,202	667,816	745,256,887
2026	745,256,887	(148,229,588)	(164,945,325)	(47,436,349)	164,945,325	(45,799,965)	21,883	7,520	164,558,518	71,322,204	16,395,652	784,544	833,759,287
2027	833,759,287	(135,868,519)	(155,283,470)	(38,902,839)	155,283,470	(58,131,424)	23,439	7,724	181,031,380	83,997,117	19,176,464	965,967	937,898,834
2028	937,898,834	(136,085,895)	(159,742,610)	(33,602,998)	159,742,610	(70,047,710)	23,439	7,933	185,932,428	82,281,719	22,040,623	966,810	1,043,187,986
2029	1,043,187,986	(105,017,048)	(126,610,215)	(32,548,634)	126,610,215	(81,670,897)	23,439	8,147	190,966,161	76,746,630	25,558,106	940,146	1,146,432,868
2030	1,146,432,868	(104,764,611)	(129,725,342)	(23,212,211)	129,725,342	(91,624,946)	23,439	8,368	196,136,172	81,299,015	30,953,687	1,097,537	1,259,783,107
2031	1,259,783,107	(208,387,282)	(265,022,475)	(12,354,800)	265,022,475	(104,900,979)	25,131	8,594	215,988,020	98,732,241	37,163,602	1,456,301	1,397,135,250
2032	1,397,135,250	(141,395,046)	(184,691,524)	(7,599,016)	184,691,524	(124,346,229)	26,823	8,827	236,771,006	104,825,761	41,215,490	1,546,180	1,544,722,681
2033	1,544,722,681	(127,092,601)	(170,503,900)	(6,813,919)	170,503,900	(138,806,454)	26,823	9,066	243,181,087	97,560,714	45,569,319	1,439,021	1,689,291,734
2034	1,689,291,734	(122,920,537)	(169,371,282)	(3,813,951)	169,371,282	(152,416,117)	26,823	9,312	249,764,709	93,534,641	49,834,106	1,379,636	1,834,040,117
2035	1,834,040,117	(113,987,039)	(161,314,006)	(1,914,613)	161,314,006	(165,784,598)	26,823	9,564	256,526,568	88,827,357	54,104,183	1,310,204	1,978,281,861
2036	1,978,281,861	(128,585,089)	(186,899,652)	(1,101,621)	186,899,652	(179,240,516)	26,761	9,823	262,862,489	82,520,352	58,359,315	1,217,175	2,120,378,703
2037	2,120,378,703	(148,136,511)	(221,147,111)	(793,321)	221,147,111	(194,930,777)	26,700	10,089	269,363,544	73,639,446	62,551,172	1,086,182	2,257,655,503
2038	2,257,655,503	(124,638,559)	(191,105,355)	(793,321)	191,105,355	(211,961,336)	26,700	10,362	276,656,000	63,901,344	66,600,837	942,545	2,389,100,229
2039	2,389,100,229	(163,784,619)	(257,925,825)	(793,321)	257,925,825	(228,696,367)	26,700	10,642	284,145,885	54,656,197	70,478,457	806,179	2,515,041,062
2040	2,515,041,062	(138,831,666)	(224,549,206)	(793,321)	224,549,206	(248,595,392)	26,700	10,930	291,838,543	42,449,830	74,193,711	626,135	2,632,310,739
2041	2,632,310,739	(123,436,639)	(205,054,052)	(670,572)	205,054,052	(2,801,476,043)	13,350	11,226	149,869,732	(2,652,276,883)	77,653,167	(57,687,022)	(0)
Total		(2,723,530,771)	(3,550,054,535)	(424,653,539)	3,550,054,535	(4,968,155,415)	476,277		4,227,750,136		795,922,037	(38,190,406)	

Roads
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$309,408,130	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$27.21
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	32,242,148	(14,920,750)	(14,920,750)	(6,315,645)	14,920,750	(246,192)	736,966	27.21	20,053,206	13,491,369	612,601	128,168	46,474,286
2023	46,474,286	(16,362,556)	(16,805,538)	(6,315,645)	16,805,538	(1,383,049)	737,005	27.95	20,597,181	12,898,487	929,486	128,985	60,431,244
2024	60,431,244	(17,355,559)	(18,308,011)	(6,315,645)	18,308,011	(2,659,165)	736,966	28.70	21,153,701	12,178,891	1,238,840	124,834	73,973,809
2025	73,973,809	(17,336,088)	(18,782,567)	(6,315,645)	18,782,567	(4,039,619)	736,966	29.48	21,726,394	11,371,130	1,590,437	122,240	87,057,616
2026	87,057,616	(17,704,525)	(19,701,051)	(5,665,792)	19,701,051	(5,470,343)	725,783	30.28	21,975,966	10,839,831	1,915,268	119,238	99,931,952
2027	99,931,952	(16,228,121)	(18,547,040)	(4,646,551)	18,547,040	(6,943,211)	697,281	31.10	21,684,548	10,094,787	2,298,435	116,090	112,441,264
2028	112,441,264	(16,254,084)	(19,079,639)	(4,013,538)	19,079,639	(8,366,491)	697,242	31.94	22,270,382	9,890,354	2,642,370	116,212	125,090,199
2029	125,090,199	(12,543,224)	(15,122,310)	(3,887,605)	15,122,310	(9,754,763)	697,281	32.81	22,874,570	9,232,202	3,064,710	113,094	137,500,205
2030	137,500,205	(12,513,073)	(15,494,380)	(2,772,464)	15,494,380	(10,943,673)	697,242	33.69	23,492,554	9,776,417	3,712,506	131,982	151,121,109
2031	151,121,109	(24,889,753)	(31,654,254)	(1,475,656)	31,654,254	(12,529,361)	735,504	34.61	25,452,652	11,447,635	4,458,073	168,853	167,195,669
2032	167,195,669	(16,888,208)	(22,059,535)	(907,626)	22,059,535	(14,851,900)	775,604	35.54	27,566,958	11,807,432	4,932,272	174,160	184,109,534
2033	184,109,534	(15,179,926)	(20,364,967)	(813,854)	20,364,967	(16,579,027)	775,604	36.50	28,313,276	10,920,395	5,431,231	161,076	200,622,235
2034	200,622,235	(14,681,615)	(20,229,687)	(455,538)	20,229,687	(18,204,564)	775,604	37.49	29,079,798	10,419,697	5,918,356	153,691	217,113,979
2035	217,113,979	(13,614,599)	(19,267,327)	(228,681)	19,267,327	(19,801,294)	775,604	38.51	29,867,073	9,837,099	6,404,862	145,097	233,501,037
2036	233,501,037	(15,358,189)	(22,323,273)	(131,578)	22,323,273	(21,408,467)	800,261	39.55	31,650,887	10,110,842	6,888,281	149,135	250,649,295
2037	250,649,295	(17,693,408)	(26,413,786)	(94,754)	26,413,786	(23,282,510)	806,907	40.62	32,777,711	9,400,447	7,394,154	138,657	267,582,553
2038	267,582,553	(14,886,815)	(22,825,602)	(94,754)	22,825,602	(25,316,638)	806,945	41.72	33,666,706	8,255,314	7,893,685	121,766	283,853,318
2039	283,853,318	(19,562,416)	(30,806,631)	(94,754)	30,806,631	(27,315,468)	806,907	42.85	34,576,512	7,166,289	8,373,673	105,703	299,498,983
2040	299,498,983	(16,582,038)	(26,820,132)	(94,754)	26,820,132	(29,692,206)	806,945	44.01	35,514,293	5,727,334	8,835,220	84,478	314,146,015
2041	314,146,015	(14,743,258)	(24,491,633)	(80,093)	24,491,633	(334,607,981)	401,733	45.20	18,159,254	(316,528,820)	9,267,307	(6,884,502)	(0)
Total		(325,298,207)	(424,018,112)	(50,720,571)	424,018,112	(593,395,920)	14,730,349		522,453,622		93,801,766	(4,381,046)	

Roads
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Gross Population Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$554,028,943	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$8.62
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	87,900,695	(26,717,227)	(26,717,227)	(11,308,850)	26,717,227	(440,834)	4,021,383	8.62	34,655,914	22,906,230	1,670,113	217,609	112,694,647
2023	112,694,647	(29,298,937)	(30,092,145)	(11,308,850)	30,092,145	(2,476,500)	4,021,383	8.85	35,594,150	21,808,801	2,253,893	218,088	136,975,429
2024	136,975,429	(31,077,018)	(32,782,487)	(11,308,850)	32,782,487	(4,761,525)	4,021,383	9.09	36,557,788	20,487,413	2,807,996	209,996	160,480,834
2025	160,480,834	(31,042,153)	(33,632,231)	(11,308,850)	33,632,231	(7,233,377)	4,021,383	9.34	37,547,514	19,005,287	3,450,338	204,307	183,140,766
2026	183,140,766	(31,701,880)	(35,276,877)	(10,145,218)	35,276,877	(9,795,244)	3,963,103	9.59	38,005,136	18,064,674	4,029,097	198,711	205,433,248
2027	205,433,248	(29,058,217)	(33,210,495)	(8,320,155)	33,210,495	(12,432,575)	3,827,293	9.85	37,696,407	16,943,677	4,724,965	194,852	227,296,743
2028	227,296,743	(29,104,707)	(34,164,171)	(7,186,677)	34,164,171	(14,981,112)	3,827,293	10.12	38,716,959	16,549,169	5,341,473	194,453	249,381,838
2029	249,381,838	(22,460,009)	(27,078,142)	(6,961,180)	27,078,142	(17,466,965)	3,827,293	10.39	39,765,140	15,336,995	6,109,855	187,878	271,016,566
2030	271,016,566	(22,406,020)	(27,744,375)	(4,964,398)	27,744,375	(19,595,838)	3,827,293	10.67	40,841,698	16,281,461	7,317,447	219,800	294,835,275
2031	294,835,275	(44,567,813)	(56,680,389)	(2,642,323)	56,680,389	(22,435,185)	4,037,794	10.96	44,254,509	19,177,002	8,697,641	282,861	322,992,778
2032	322,992,778	(30,240,176)	(39,499,999)	(1,625,203)	39,499,999	(26,593,943)	4,161,884	11.26	46,849,468	18,630,322	9,528,287	274,797	351,426,184
2033	351,426,184	(27,181,310)	(36,465,690)	(1,457,294)	36,465,690	(29,686,553)	4,161,884	11.56	48,117,819	16,973,973	10,367,072	250,366	379,017,595
2034	379,017,595	(26,289,030)	(36,223,457)	(815,690)	36,223,457	(32,597,253)	4,161,884	11.87	49,420,509	16,007,566	11,181,019	236,112	406,442,291
2035	406,442,291	(24,378,422)	(34,500,246)	(409,478)	34,500,246	(35,456,372)	4,161,884	12.20	50,758,466	14,892,616	11,990,048	219,666	433,544,621
2036	433,544,621	(27,500,509)	(39,972,251)	(235,604)	39,972,251	(38,334,191)	4,293,709	12.53	53,783,907	15,214,112	12,789,566	224,408	461,772,707
2037	461,772,707	(31,681,974)	(47,296,759)	(169,668)	47,296,759	(41,689,869)	4,334,163	12.87	55,760,446	13,900,909	13,622,295	205,038	489,500,950
2038	489,500,950	(26,656,464)	(40,871,725)	(169,668)	40,871,725	(45,332,197)	4,334,163	13.21	57,270,044	11,768,180	14,440,278	173,581	515,882,988
2039	515,882,988	(35,028,636)	(55,162,628)	(169,668)	55,162,628	(48,911,320)	4,334,163	13.57	58,820,511	9,739,523	15,218,548	143,658	540,984,717
2040	540,984,717	(29,691,945)	(48,024,366)	(169,668)	48,024,366	(53,167,127)	4,334,163	13.94	60,412,954	7,076,159	15,959,049	104,373	564,124,299
2041	564,124,299	(26,399,409)	(43,854,935)	(143,415)	43,854,935	(599,152,021)	2,157,860	14.32	30,892,240	(568,403,196)	16,641,667	(12,362,770)	(0)
Total		(582,481,856)	(759,250,594)	(90,820,704)	759,250,594	(1,062,540,001)	79,831,360		895,721,578		178,140,648	(8,402,215)	

Roads
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$5,738,788	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$4.50
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	1,036,631	(276,745)	(276,745)	(117,140)	276,745	(4,566)	72,000	4.50	324,353	202,647	19,696	1,925	1,260,899
2023	1,260,899	(303,487)	(311,703)	(117,140)	311,703	(25,652)	72,000	4.63	333,135	190,342	25,218	1,903	1,478,362
2024	1,478,362	(321,905)	(339,570)	(117,140)	339,570	(49,321)	72,000	4.75	342,153	175,692	30,306	1,801	1,686,161
2025	1,686,161	(321,543)	(348,372)	(117,140)	348,372	(74,925)	72,000	4.88	351,417	159,351	36,252	1,713	1,883,478
2026	1,883,478	(328,377)	(365,408)	(105,087)	365,408	(101,462)	74,000	5.01	370,956	164,407	41,437	1,808	2,091,130
2027	2,091,130	(300,993)	(344,004)	(86,183)	344,004	(128,780)	74,000	5.15	380,999	166,037	48,096	1,909	2,307,172
2028	2,307,172	(301,475)	(353,882)	(74,442)	353,882	(155,179)	74,000	5.29	391,314	161,694	54,219	1,900	2,524,984
2029	2,524,984	(232,647)	(280,483)	(72,106)	280,483	(180,928)	74,000	5.43	401,908	148,874	61,862	1,824	2,737,544
2030	2,737,544	(232,088)	(287,384)	(51,423)	287,384	(202,979)	74,000	5.58	412,789	158,387	73,914	2,138	2,971,983
2031	2,971,983	(461,646)	(587,111)	(27,370)	587,111	(232,390)	78,000	5.73	446,881	187,121	87,674	2,760	3,249,538
2032	3,249,538	(313,236)	(409,152)	(16,834)	409,152	(275,468)	84,000	5.88	494,286	201,984	95,861	2,979	3,550,362
2033	3,550,362	(281,552)	(377,722)	(15,095)	377,722	(307,502)	84,000	6.04	507,667	185,071	104,736	2,730	3,842,899
2034	3,842,899	(272,309)	(375,213)	(8,449)	375,213	(337,652)	84,000	6.21	521,411	175,311	113,366	2,586	4,134,161
2035	4,134,161	(252,519)	(357,363)	(4,241)	357,363	(367,267)	84,000	6.38	535,528	164,019	121,958	2,419	4,422,557
2036	4,422,557	(284,858)	(414,044)	(2,440)	414,044	(397,076)	86,000	6.55	563,122	163,605	130,465	2,413	4,719,040
2037	4,719,040	(328,171)	(489,913)	(1,757)	489,913	(431,835)	88,000	6.73	591,817	158,225	139,212	2,334	5,018,810
2038	5,018,810	(276,115)	(423,361)	(1,757)	423,361	(469,564)	88,000	6.91	607,840	136,519	148,055	2,014	5,305,397
2039	5,305,397	(362,836)	(571,390)	(1,757)	571,390	(506,637)	88,000	7.09	624,296	115,901	156,509	1,710	5,579,517
2040	5,579,517	(307,558)	(497,450)	(1,757)	497,450	(550,720)	88,000	7.29	641,197	88,720	164,596	1,309	5,834,141
2041	5,834,141	(273,453)	(454,262)	(1,486)	454,262	(6,206,186)	44,000	7.48	329,278	(5,878,393)	172,107	(127,855)	0
Total		(6,033,511)	(7,864,532)	(940,746)	7,864,532	(11,006,089)	1,554,000		9,172,347		1,825,538	(87,680)	

Transit
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	222,074	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$401,618,309	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$2,002
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	16,829,037	(15,655,055)	(15,655,055)	(198,012)	15,655,055	(215,257)	20,326	2,002	40,698,093	40,284,824	227,192	271,923	57,612,976
2023	57,612,976	(29,895,999)	(30,705,371)	(195,210)	30,705,371	(2,331,810)	20,326	2,056	41,799,909	39,272,890	864,195	294,547	98,044,606
2024	98,044,606	(16,806,561)	(17,728,884)	(86,548)	17,728,884	(5,888,255)	20,326	2,112	42,931,555	36,956,752	1,666,758	314,132	136,982,250
2025	136,982,250	(14,756,995)	(15,988,281)	(86,548)	15,988,281	(8,041,687)	20,326	2,169	44,093,837	35,965,603	2,465,680	323,690	175,737,223
2026	175,737,223	(11,467,969)	(12,761,203)	(86,548)	12,761,203	(9,961,688)	21,883	2,228	48,756,678	38,708,442	3,251,139	358,053	218,054,857
2027	218,054,857	(36,992,911)	(42,279,019)	(86,548)	42,279,019	(12,037,350)	23,439	2,288	53,637,386	41,513,489	4,252,070	404,757	264,225,172
2028	264,225,172	(46,327,257)	(54,380,631)	(86,548)	54,380,631	(17,496,019)	23,439	2,350	55,089,507	37,506,939	5,284,503	375,069	307,391,684
2029	307,391,684	(73,095,729)	(88,125,368)	(86,548)	88,125,368	(24,872,585)	23,439	2,414	56,580,940	31,621,807	6,455,225	332,029	345,800,746
2030	345,800,746	(75,285,196)	(93,222,298)	(86,548)	93,222,298	(36,082,958)	23,439	2,479	58,112,751	21,943,245	8,126,318	257,833	376,128,141
2031	376,128,141	(89,841,624)	(114,258,650)	(312,398)	114,258,650	(442,022,873)	25,131	2,546	63,994,611	(378,340,660)	9,779,332	(7,566,813)	0
Total		(410,125,295)	(485,104,758)	(1,311,454)	485,104,758	(558,950,483)	222,074		505,695,268		42,372,412	(4,634,780)	

Transit
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	7,198,237	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$50,339,114	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$7.86
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	1,372,822	(1,962,215)	(1,962,215)	(24,819)	1,962,215	(26,980)	736,966	7.86	5,790,103	5,738,304	18,533	38,734	7,168,393
2023	7,168,393	(3,747,185)	(3,848,632)	(24,468)	3,848,632	(292,271)	737,005	8.07	5,947,169	5,630,431	107,526	42,228	12,948,578
2024	12,948,578	(2,106,546)	(2,222,150)	(10,848)	2,222,150	(738,038)	736,966	8.29	6,107,857	5,358,971	220,126	45,551	18,573,226
2025	18,573,226	(1,849,652)	(2,003,982)	(10,848)	2,003,982	(1,007,951)	736,966	8.51	6,273,215	5,254,416	334,318	47,290	24,209,250
2026	24,209,250	(1,437,403)	(1,599,498)	(10,848)	1,599,498	(1,248,605)	725,783	8.74	6,345,275	5,085,823	447,871	47,044	29,789,988
2027	29,789,988	(4,636,717)	(5,299,281)	(10,848)	5,299,281	(1,508,770)	697,281	8.98	6,261,132	4,741,515	580,905	46,230	35,158,637
2028	35,158,637	(5,806,690)	(6,816,106)	(10,848)	6,816,106	(2,192,963)	697,242	9.22	6,430,284	4,226,473	703,173	42,265	40,130,548
2029	40,130,548	(9,161,869)	(11,045,694)	(10,848)	11,045,694	(3,117,547)	697,281	9.47	6,604,736	3,476,341	842,742	36,502	44,486,132
2030	44,486,132	(9,436,298)	(11,684,547)	(10,848)	11,684,547	(4,522,663)	697,242	9.73	6,783,171	2,249,660	1,045,424	26,434	47,807,650
2031	47,807,650	(11,260,811)	(14,321,257)	(39,155)	14,321,257	(55,398,839)	735,504	9.99	7,349,124	(48,088,871)	1,242,999	(961,777)	0
Total		(51,405,386)	(60,803,363)	(164,377)	60,803,363	(70,054,626)	7,198,237		63,892,067		5,543,616	(589,501)	

Transit
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	39,395,602	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$89,891,379	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$2.54
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	3,539,317	(3,503,960)	(3,503,960)	(44,320)	3,503,960	(48,179)	4,021,383	2.54	10,200,887	10,108,388	47,781	68,232	13,763,717
2023	13,763,717	(6,691,410)	(6,872,565)	(43,692)	6,872,565	(521,912)	4,021,383	2.61	10,477,055	9,911,450	206,456	74,336	23,955,958
2024	23,955,958	(3,761,693)	(3,968,130)	(19,371)	3,968,130	(1,317,926)	4,021,383	2.68	10,760,699	9,423,401	407,251	80,099	33,866,710
2025	33,866,710	(3,302,954)	(3,578,543)	(19,371)	3,578,543	(1,799,914)	4,021,383	2.75	11,052,023	9,232,737	609,601	83,095	43,792,143
2026	43,792,143	(2,566,794)	(2,856,249)	(19,371)	2,856,249	(2,229,654)	3,963,103	2.82	11,186,722	8,937,697	810,155	82,674	53,622,668
2027	53,622,668	(8,279,861)	(9,463,013)	(19,371)	9,463,013	(2,694,235)	3,827,293	2.90	11,095,849	8,382,243	1,045,642	81,727	63,132,280
2028	63,132,280	(10,369,101)	(12,171,631)	(19,371)	12,171,631	(3,916,010)	3,827,293	2.98	11,396,246	7,460,865	1,262,646	74,609	71,930,398
2029	71,930,398	(16,360,499)	(19,724,476)	(19,371)	19,724,476	(5,567,054)	3,827,293	3.06	11,704,775	6,118,350	1,510,538	64,243	79,623,529
2030	79,623,529	(16,850,552)	(20,865,286)	(19,371)	20,865,286	(8,076,193)	3,827,293	3.14	12,021,658	3,926,094	1,871,153	46,132	85,466,908
2031	85,466,908	(20,108,614)	(25,573,703)	(69,920)	25,573,703	(98,925,945)	4,037,794	3.23	13,026,211	(85,969,654)	2,222,140	(1,719,393)	0
Total		(91,795,437)	(108,577,559)	(293,531)	108,577,559	(125,097,023)	39,395,602		112,922,124		9,993,362	(1,064,249)	

Transit
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	736,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$905,770	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$1.35
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	47,787	(35,307)	(35,307)	(447)	35,307	(485)	72,000	1.35	97,288	96,356	645	650	145,438
2023	145,438	(67,424)	(69,250)	(440)	69,250	(5,259)	72,000	1.39	99,922	94,223	2,182	707	242,550
2024	242,550	(37,904)	(39,984)	(195)	39,984	(13,280)	72,000	1.43	102,627	89,152	4,123	758	336,583
2025	336,583	(33,281)	(36,058)	(195)	36,058	(18,136)	72,000	1.46	105,406	87,074	6,058	784	430,500
2026	430,500	(25,864)	(28,780)	(195)	28,780	(22,467)	74,000	1.50	111,267	88,605	7,964	820	527,888
2027	527,888	(83,430)	(95,352)	(195)	95,352	(27,148)	74,000	1.54	114,279	86,936	10,294	848	625,966
2028	625,966	(104,482)	(122,645)	(195)	122,645	(39,459)	74,000	1.59	117,373	77,719	12,519	777	716,981
2029	716,981	(164,853)	(198,749)	(195)	198,749	(56,095)	74,000	1.63	120,550	64,260	15,057	675	796,973
2030	796,973	(169,791)	(210,244)	(195)	210,244	(81,378)	74,000	1.67	123,814	42,241	18,729	496	858,439
2031	858,439	(202,620)	(257,688)	(705)	257,688	(996,824)	78,000	1.72	134,040	(863,488)	22,319	(17,270)	0
Total		(924,956)	(1,094,057)	(2,958)	1,094,057	(1,260,531)	736,000		1,126,567		99,891	(10,756)	

Toronto-York Spadina Subway Extension
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	222,074	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2031	\$72,191,651	
Discount Rate Applied to Post 2031 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$928
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	10,147,010	(2,690,224)	(2,690,224)	(17,445,308)	2,690,224	(44,389)	20,326	928	18,861,953	1,372,255	192,793	13,036	11,725,095
2023	11,725,095	0	0	(17,445,308)	0	(197,854)	20,326	953	19,372,601	1,729,438	234,502	17,294	13,706,329
2024	13,706,329	0	0	(17,445,308)	0	(197,854)	20,326	979	19,897,074	2,253,911	280,980	23,103	16,264,323
2025	16,264,323	0	0	(17,445,308)	0	(197,854)	20,326	1,005	20,435,745	2,792,583	349,683	30,020	19,436,609
2026	19,436,609	0	0	(17,667,689)	0	(197,854)	21,883	1,033	22,596,787	4,731,244	427,605	52,044	24,647,502
2027	24,647,502	0	0	(17,934,005)	0	(197,854)	23,439	1,061	24,858,802	6,726,942	566,893	77,360	32,018,697
2028	32,018,697	0	0	(18,761,350)	0	(197,854)	23,439	1,089	25,531,802	6,572,598	752,439	77,228	39,420,962
2029	39,420,962	0	0	(18,702,368)	0	(197,854)	23,439	1,119	26,223,023	7,322,800	965,814	89,704	47,799,280
2030	47,799,280	0	0	(18,320,784)	0	(197,854)	23,439	1,149	26,932,956	8,414,318	1,290,581	113,593	57,617,773
2031	57,617,773	0	0	(85,708,450)	0	(2,005,320)	25,131	1,180	29,658,965	(58,054,805)	1,699,724	(1,262,692)	(0)
Total		(2,690,224)	(2,690,224)	(246,875,881)	2,690,224	(3,632,541)	222,074		234,369,708		6,761,014	(769,309)	

Toronto-York Spadina Subway Extension
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	7,198,237	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2031	\$9,048,551	
Discount Rate Applied to Post 2031 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$3.66
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	740,855	(337,195)	(337,195)	(2,186,607)	337,195	(5,564)	736,966	3.66	2,700,956	508,785	14,076	4,833	1,268,550
2023	1,268,550	0	0	(2,186,607)	0	(24,799)	737,005	3.76	2,774,224	562,817	25,371	5,628	1,862,367
2024	1,862,367	0	0	(2,186,607)	0	(24,799)	736,966	3.87	2,849,181	637,775	38,179	6,537	2,544,858
2025	2,544,858	0	0	(2,186,607)	0	(24,799)	736,966	3.97	2,926,317	714,911	54,714	7,685	3,322,168
2026	3,322,168	0	0	(2,214,480)	0	(24,799)	725,783	4.08	2,959,931	720,652	73,088	7,927	4,123,835
2027	4,123,835	0	0	(2,247,861)	0	(24,799)	697,281	4.19	2,920,681	648,021	94,848	7,452	4,874,156
2028	4,874,156	0	0	(2,351,560)	0	(24,799)	697,242	4.30	2,999,586	623,227	114,543	7,323	5,619,248
2029	5,619,248	0	0	(2,344,168)	0	(24,799)	697,281	4.42	3,080,964	711,997	137,672	8,722	6,477,639
2030	6,477,639	0	0	(2,296,340)	0	(24,799)	697,242	4.54	3,164,200	843,061	174,896	11,381	7,506,977
2031	7,506,977	0	0	(10,740,864)	0	(251,258)	735,504	4.66	3,428,204	(7,563,918)	221,456	(164,515)	(0)
Total		(337,195)	(337,195)	(30,941,701)	337,195	(455,215)	7,198,237		29,804,243		948,842	(97,025)	

Toronto-York Spadina Subway Extension
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	39,395,602	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2031	\$16,158,145	
Discount Rate Applied to Post 2031 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$1.18
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	1,901,421	(602,134)	(602,134)	(3,904,660)	602,134	(9,935)	4,021,383	1.18	4,750,447	835,852	36,127	7,941	2,781,341
2023	2,781,341	0	0	(3,904,660)	0	(44,284)	4,021,383	1.21	4,879,055	930,111	55,627	9,301	3,776,380
2024	3,776,380	0	0	(3,904,660)	0	(44,284)	4,021,383	1.25	5,011,145	1,062,201	77,416	10,888	4,926,885
2025	4,926,885	0	0	(3,904,660)	0	(44,284)	4,021,383	1.28	5,146,812	1,197,868	105,928	12,877	6,243,558
2026	6,243,558	0	0	(3,954,434)	0	(44,284)	3,963,103	1.31	5,209,540	1,210,822	137,358	13,319	7,605,057
2027	7,605,057	0	0	(4,014,041)	0	(44,284)	3,827,293	1.35	5,167,221	1,108,896	174,916	12,752	8,901,621
2028	8,901,621	0	0	(4,199,220)	0	(44,284)	3,827,293	1.39	5,307,113	1,063,609	209,188	12,497	10,186,916
2029	10,186,916	0	0	(4,186,018)	0	(44,284)	3,827,293	1.42	5,450,792	1,220,489	249,579	14,951	11,671,935
2030	11,671,935	0	0	(4,100,611)	0	(44,284)	3,827,293	1.46	5,598,361	1,453,465	315,142	19,622	13,460,165
2031	13,460,165	0	0	(19,179,773)	0	(448,658)	4,037,794	1.50	6,066,171	(13,562,261)	397,075	(294,979)	(0)
Total		(602,134)	(602,134)	(55,252,736)	602,134	(812,867)	39,395,602		52,586,657		1,758,357	(180,831)	

Toronto-York Spadina Subway Extension
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	736,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2031	\$162,814	
Discount Rate Applied to Post 2031 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$0.63
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	21,658	(6,067)	(6,067)	(39,344)	6,067	(100)	72,000	0.63	45,614	6,169	411	59	28,297
2023	28,297	0	0	(39,344)	0	(446)	72,000	0.65	46,849	7,058	566	71	35,991
2024	35,991	0	0	(39,344)	0	(446)	72,000	0.67	48,117	8,326	738	85	45,141
2025	45,141	0	0	(39,344)	0	(446)	72,000	0.69	49,420	9,629	971	104	55,844
2026	55,844	0	0	(39,846)	0	(446)	74,000	0.70	52,167	11,875	1,229	131	69,078
2027	69,078	0	0	(40,447)	0	(446)	74,000	0.72	53,580	12,687	1,589	146	83,500
2028	83,500	0	0	(42,312)	0	(446)	74,000	0.74	55,030	12,272	1,962	144	97,878
2029	97,878	0	0	(42,179)	0	(446)	74,000	0.76	56,520	13,894	2,398	170	114,340
2030	114,340	0	0	(41,319)	0	(446)	74,000	0.78	58,050	16,285	3,087	220	133,933
2031	133,933	0	0	(193,272)	0	(4,521)	78,000	0.81	62,845	(134,949)	3,951	(2,935)	0
Total		(6,067)	(6,067)	(556,753)	6,067	(8,191)	736,000		528,191		16,902	(1,806)	

Yonge North Subway Extension
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$232,056,238	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per Capita	\$1,532
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	0	(42,220,914)	(42,220,914)	0	42,220,914	(696,645)	20,326	1,532	31,132,039	30,435,394	0	289,136	30,724,531
2023	30,724,531	(22,388,381)	(22,994,500)	0	22,994,500	(3,496,067)	20,326	1,573	31,974,874	28,478,807	614,491	284,788	60,102,617
2024	60,102,617	(91,472,151)	(96,492,031)	0	96,492,031	(6,474,508)	20,326	1,616	32,840,528	26,366,020	1,232,104	270,252	87,970,992
2025	87,970,992	(110,112,569)	(119,300,077)	0	119,300,077	(14,110,609)	20,326	1,659	33,729,616	19,619,007	1,891,376	210,904	109,692,279
2026	109,692,279	(120,045,626)	(133,583,079)	0	133,583,079	(23,350,134)	21,883	1,704	37,296,461	13,946,326	2,413,230	153,410	126,205,245
2027	126,205,245	(99,026,201)	(113,176,564)	0	113,176,564	(33,104,162)	23,439	1,750	41,029,962	7,925,800	2,902,721	91,147	137,124,913
2028	137,124,913	(93,967,068)	(110,301,988)	0	110,301,988	(41,674,374)	23,439	1,798	42,140,763	466,389	3,222,435	5,480	140,819,217
2029	140,819,217	(46,368,383)	(55,902,456)	0	55,902,456	(49,093,371)	23,439	1,847	43,281,636	(5,811,735)	3,450,071	(111,876)	138,345,677
2030	138,345,677	(3,364,687)	(4,166,342)	0	4,166,342	(52,399,616)	23,439	1,897	44,453,396	(7,946,219)	3,735,333	(162,897)	133,971,894
2031	133,971,894	0	0	0	0	(52,640,869)	25,131	1,948	48,952,730	(3,688,139)	3,952,171	(80,217)	134,155,708
2032	134,155,708	0	0	0	0	(52,640,869)	26,823	2,001	53,663,102	1,022,233	3,957,593	15,078	139,150,612
2033	139,150,612	0	0	0	0	(52,640,869)	26,823	2,055	55,115,918	2,475,049	4,104,943	36,507	145,767,112
2034	145,767,112	0	0	0	0	(52,640,869)	26,823	2,110	56,608,067	3,967,198	4,300,130	58,516	154,092,956
2035	154,092,956	0	0	0	0	(52,640,869)	26,823	2,168	58,140,613	5,499,744	4,545,742	81,121	164,219,563
2036	164,219,563	0	0	0	0	(52,640,869)	26,761	2,226	59,576,621	6,935,752	4,844,477	102,302	176,102,094
2037	176,102,094	0	0	0	0	(52,640,869)	26,700	2,287	61,050,056	8,409,187	5,195,012	124,036	189,830,329
2038	189,830,329	0	0	0	0	(52,640,869)	26,700	2,348	62,702,860	10,061,990	5,599,995	148,414	205,640,728
2039	205,640,728	0	0	0	0	(52,640,869)	26,700	2,412	64,400,409	11,759,540	6,066,401	173,453	223,640,123
2040	223,640,123	0	0	0	0	(52,640,869)	26,700	2,477	66,143,916	13,503,047	6,597,384	199,170	243,939,723
2041	243,939,723	0	0	0	0	(279,757,324)	13,350	2,544	33,967,312	(245,790,012)	7,196,222	(5,345,933)	0
Total		(628,965,979)	(698,137,950)	0	698,137,950	(1,030,565,502)	476,277		958,200,880		75,821,831	(3,457,209)	

Yonge North Subway Extension
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$27,716,771	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$5.92
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	0	(5,042,861)	(5,042,861)	0	5,042,861	(83,207)	736,966	5.92	4,361,990	4,278,783	0	40,648	4,319,431
2023	4,319,431	(2,674,066)	(2,746,460)	0	2,746,460	(417,570)	737,005	6.08	4,480,316	4,062,746	86,389	40,627	8,509,194
2024	8,509,194	(10,925,423)	(11,524,997)	0	11,524,997	(773,314)	736,966	6.24	4,601,371	3,828,056	174,438	39,238	12,550,926
2025	12,550,926	(13,151,833)	(14,249,188)	0	14,249,188	(1,685,370)	736,966	6.41	4,725,943	3,040,574	269,845	32,686	15,894,031
2026	15,894,031	(14,338,236)	(15,955,148)	0	15,955,148	(2,788,937)	725,783	6.59	4,780,231	1,991,293	349,669	21,904	18,256,897
2027	18,256,897	(11,827,678)	(13,517,796)	0	13,517,796	(3,953,957)	697,281	6.76	4,716,841	762,884	419,909	8,773	19,448,463
2028	19,448,463	(11,223,416)	(13,174,457)	0	13,174,457	(4,977,582)	697,242	6.95	4,844,272	(133,310)	457,039	(2,500)	19,769,692
2029	19,769,692	(5,538,234)	(6,676,983)	0	6,676,983	(5,863,707)	697,281	7.14	4,975,696	(888,011)	484,357	(17,094)	19,348,944
2030	19,348,944	(401,878)	(497,627)	0	497,627	(6,258,604)	697,242	7.33	5,110,120	(1,148,484)	522,421	(23,544)	18,699,338
2031	18,699,338	0	0	0	0	(6,287,419)	735,504	7.53	5,536,482	(750,937)	551,630	(16,333)	18,483,698
2032	18,483,698	0	0	0	0	(6,287,419)	775,604	7.73	5,996,388	(291,032)	545,269	(6,330)	18,731,606
2033	18,731,606	0	0	0	0	(6,287,419)	775,604	7.94	6,158,728	(128,692)	552,582	(2,799)	19,152,697
2034	19,152,697	0	0	0	0	(6,287,419)	775,604	8.16	6,325,462	38,043	565,005	561	19,756,306
2035	19,756,306	0	0	0	0	(6,287,419)	775,604	8.38	6,496,711	209,292	582,811	3,087	20,551,495
2036	20,551,495	0	0	0	0	(6,287,419)	800,261	8.60	6,884,728	597,308	606,269	8,810	21,763,883
2037	21,763,883	0	0	0	0	(6,287,419)	806,907	8.84	7,129,835	842,416	642,035	12,426	23,260,759
2038	23,260,759	0	0	0	0	(6,287,419)	806,945	9.08	7,323,210	1,035,791	686,192	15,278	24,998,020
2039	24,998,020	0	0	0	0	(6,287,419)	806,907	9.32	7,521,112	1,233,692	737,442	18,197	26,987,351
2040	26,987,351	0	0	0	0	(6,287,419)	806,945	9.57	7,725,099	1,437,680	796,127	21,206	29,242,363
2041	29,242,363	0	0	0	0	(33,414,183)	401,733	9.83	3,950,016	(29,464,167)	862,650	(640,846)	0
Total		(75,123,625)	(83,385,518)	0	83,385,518	(123,090,627)	14,730,349		113,644,551		9,892,079	(446,003)	

**Yonge North Subway Extension
Industrial/Office/Institutional Development Charge Calculation**

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$49,629,896	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$1.96
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	0	(9,029,792)	(9,029,792)	0	9,029,792	(148,992)	4,021,383	1.96	7,864,008	7,715,016	0	73,293	7,788,309
2023	7,788,309	(4,788,206)	(4,917,836)	0	4,917,836	(747,704)	4,021,383	2.01	8,076,909	7,329,205	155,766	73,292	15,346,572
2024	15,346,572	(19,563,160)	(20,636,762)	0	20,636,762	(1,384,704)	4,021,383	2.06	8,295,575	6,910,871	314,605	70,836	22,642,885
2025	22,642,885	(23,549,788)	(25,514,722)	0	25,514,722	(3,017,838)	4,021,383	2.12	8,520,160	5,502,323	486,822	59,150	28,691,179
2026	28,691,179	(25,674,173)	(28,569,429)	0	28,569,429	(4,993,896)	3,963,103	2.18	8,624,002	3,630,106	631,206	39,931	32,992,423
2027	32,992,423	(21,178,746)	(24,205,085)	0	24,205,085	(7,079,991)	3,827,293	2.23	8,553,947	1,473,956	758,826	16,950	35,242,155
2028	35,242,155	(20,096,748)	(23,590,300)	0	23,590,300	(8,912,903)	3,827,293	2.30	8,785,527	(127,376)	828,191	(2,388)	35,940,581
2029	35,940,581	(9,916,812)	(11,955,865)	0	11,955,865	(10,499,605)	3,827,293	2.36	9,023,377	(1,476,228)	880,544	(28,417)	35,316,479
2030	35,316,479	(719,606)	(891,056)	0	891,056	(11,206,712)	3,827,293	2.42	9,267,666	(1,939,046)	953,545	(39,750)	34,291,228
2031	34,291,228	0	0	0	0	(11,258,309)	4,037,794	2.49	10,042,090	(1,216,219)	1,011,591	(26,453)	34,060,147
2032	34,060,147	0	0	0	0	(11,258,309)	4,161,884	2.55	10,630,930	(627,379)	1,004,774	(13,646)	34,423,896
2033	34,423,896	0	0	0	0	(11,258,309)	4,161,884	2.62	10,918,740	(339,569)	1,015,505	(7,386)	35,092,447
2034	35,092,447	0	0	0	0	(11,258,309)	4,161,884	2.69	11,214,342	(43,967)	1,035,227	(956)	36,082,751
2035	36,082,751	0	0	0	0	(11,258,309)	4,161,884	2.77	11,517,947	259,638	1,064,441	3,830	37,410,659
2036	37,410,659	0	0	0	0	(11,258,309)	4,293,709	2.84	12,204,470	946,161	1,103,614	13,956	39,474,391
2037	39,474,391	0	0	0	0	(11,258,309)	4,334,163	2.92	12,652,980	1,394,671	1,164,495	20,571	42,054,128
2038	42,054,128	0	0	0	0	(11,258,309)	4,334,163	3.00	12,995,533	1,737,224	1,240,597	25,624	45,057,572
2039	45,057,572	0	0	0	0	(11,258,309)	4,334,163	3.08	13,347,360	2,089,051	1,329,198	30,814	48,506,635
2040	48,506,635	0	0	0	0	(11,258,309)	4,334,163	3.16	13,708,712	2,450,403	1,430,946	36,143	52,424,127
2041	52,424,127	0	0	0	0	(59,831,733)	2,157,860	3.25	7,009,967	(52,821,766)	1,546,512	(1,148,873)	0
Total		(134,517,030)	(149,310,848)	0	149,310,848	(220,407,169)	79,831,360		203,254,243		17,956,405	(803,479)	

Yonge North Subway Extension
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.90% - 2.95%	3.30% - 4.35%
In-year Transactions	0.95% - 1.48%	1.65% - 2.18%
New Debt Term (Years)	20	
New Debt interest	From 3.30% to 4.35%	
Target Reserve Balance 2041	\$514,080	
Discount Rate Applied to Post 2041 Debt Payments	2.95%	

Calculated Development Charge per sqft	\$1.04
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	0	(93,533)	(93,533)	0	93,533	(1,543)	72,000	1.04	74,906	73,363	0	697	74,060
2023	74,060	(49,598)	(50,940)	0	50,940	(7,745)	72,000	1.07	76,934	69,189	1,481	692	145,422
2024	145,422	(202,641)	(213,761)	0	213,761	(14,343)	72,000	1.10	79,017	64,674	2,981	663	213,740
2025	213,740	(243,935)	(264,289)	0	264,289	(31,260)	72,000	1.13	81,156	49,897	4,595	536	268,769
2026	268,769	(265,940)	(295,930)	0	295,930	(51,728)	74,000	1.16	85,669	33,941	5,913	373	308,996
2027	308,996	(219,375)	(250,723)	0	250,723	(73,337)	74,000	1.19	87,988	14,652	7,107	168	330,923
2028	330,923	(208,168)	(244,355)	0	244,355	(92,322)	74,000	1.22	90,370	(1,952)	7,777	(37)	336,711
2029	336,711	(102,721)	(123,842)	0	123,842	(108,758)	74,000	1.25	92,817	(15,941)	8,249	(307)	328,712
2030	328,712	(7,454)	(9,230)	0	9,230	(116,082)	74,000	1.29	95,330	(20,753)	8,875	(425)	316,409
2031	316,409	0	0	0	0	(116,617)	78,000	1.32	103,203	(13,414)	9,334	(292)	312,038
2032	312,038	0	0	0	0	(116,617)	84,000	1.36	114,151	(2,466)	9,205	(54)	318,723
2033	318,723	0	0	0	0	(116,617)	84,000	1.40	117,241	624	9,402	9	328,759
2034	328,759	0	0	0	0	(116,617)	84,000	1.43	120,415	3,798	9,698	56	342,311
2035	342,311	0	0	0	0	(116,617)	84,000	1.47	123,675	7,058	10,098	104	359,572
2036	359,572	0	0	0	0	(116,617)	86,000	1.51	130,048	13,431	10,607	198	383,808
2037	383,808	0	0	0	0	(116,617)	88,000	1.55	136,675	20,058	11,322	296	415,484
2038	415,484	0	0	0	0	(116,617)	88,000	1.60	140,375	23,758	12,257	350	451,849
2039	451,849	0	0	0	0	(116,617)	88,000	1.64	144,175	27,558	13,330	406	493,144
2040	493,144	0	0	0	0	(116,617)	88,000	1.68	148,078	31,462	14,548	464	539,617
2041	539,617	0	0	0	0	(619,754)	44,000	1.73	76,044	(543,710)	15,919	(11,826)	0
Total		(1,393,365)	(1,546,604)	0	1,546,604	(2,283,040)	1,554,000		2,118,266		172,700	(7,926)	

Police Services
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$45,223,717	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$284
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	9,008,312	(5,940,323)	(5,940,323)	(5,645,128)	5,940,323	(81,679)	20,326	284	5,767,646	40,838	121,612	276	9,171,038
2023	9,171,038	(2,421,241)	(2,486,791)	(5,645,128)	2,486,791	(751,923)	20,326	291	5,923,793	(473,259)	137,566	(6,862)	8,828,483
2024	8,828,483	(2,900,452)	(3,059,626)	(5,645,128)	3,059,626	(1,065,124)	20,326	299	6,084,167	(626,085)	150,084	(9,704)	8,342,778
2025	8,342,778	(5,042,925)	(5,463,694)	(5,645,128)	5,463,694	(1,480,032)	20,326	307	6,248,884	(876,277)	150,170	(14,020)	7,602,651
2026	7,602,651	(2,544,742)	(2,831,710)	(5,711,567)	2,831,710	(2,111,307)	21,883	316	6,909,691	(913,183)	140,649	(14,839)	6,815,278
2027	6,815,278	(1,958,928)	(2,238,850)	(5,982,584)	2,238,850	(2,452,253)	23,439	324	7,601,375	(833,462)	132,898	(13,960)	6,100,753
2028	6,100,753	(1,939,669)	(2,276,854)	(6,051,803)	2,276,854	(2,731,064)	23,439	333	7,807,166	(975,701)	122,015	(16,587)	5,230,480
2029	5,230,480	(4,072,511)	(4,909,884)	(5,874,322)	4,909,884	(3,061,266)	23,439	342	8,018,529	(917,059)	109,840	(16,049)	4,407,213
2030	4,407,213	(4,033,090)	(4,993,995)	(4,376,742)	4,993,995	(3,682,101)	23,439	351	8,235,614	176,771	103,569	2,077	4,689,630
2031	4,689,630	(2,173,373)	(2,764,049)	(3,405,489)	2,764,049	(4,274,736)	25,131	361	9,069,178	1,388,953	121,930	18,056	6,218,570
2032	6,218,570	(7,707,588)	(10,067,723)	(2,098,867)	10,067,723	(4,692,472)	26,823	371	9,941,841	3,150,502	161,683	40,957	9,571,711
2033	9,571,711	(7,837,477)	(10,514,542)	(1,995,605)	10,514,542	(5,318,170)	26,823	381	10,210,995	2,897,220	248,864	37,664	12,755,459
2034	12,755,459	(3,514,088)	(4,842,036)	(1,720,684)	4,842,036	(6,235,644)	26,823	391	10,487,437	2,531,109	331,642	32,904	15,651,114
2035	15,651,114	(1,928,111)	(2,728,655)	(1,629,816)	2,728,655	(6,397,450)	26,823	402	10,771,362	2,744,096	406,929	35,673	18,837,812
2036	18,837,812	(2,003,205)	(2,911,678)	(1,157,338)	2,911,678	(6,118,653)	26,761	412	11,037,403	3,761,412	489,783	48,898	23,137,905
2037	23,137,905	(2,359,565)	(3,522,500)	(378,772)	3,522,500	(6,162,137)	26,700	424	11,310,377	4,769,469	601,586	62,003	28,570,963
2038	28,570,963	(2,458,794)	(3,770,011)	0	3,770,011	(6,338,574)	26,700	435	11,616,582	5,278,008	742,845	68,614	34,660,430
2039	34,660,430	(7,760,438)	(12,221,034)	0	12,221,034	(6,659,332)	26,700	447	11,931,077	5,271,745	901,171	68,533	40,901,878
2040	40,901,878	(9,661,344)	(15,626,458)	0	15,626,458	(7,668,879)	26,700	459	12,254,086	4,585,207	1,063,449	59,608	46,610,142
2041	46,610,142	(2,375,998)	(3,947,029)	0	3,947,029	(53,177,239)	13,350	471	6,292,920	(46,884,319)	1,211,864	(937,686)	0
Total		(80,633,862)	(107,117,441)	(62,964,102)	107,117,441	(130,460,038)	476,277		177,520,124		7,450,150	(554,445)	

Police Services
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$3,252,763	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.67
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	440,370	(427,264)	(427,264)	(406,032)	427,264	(5,875)	736,966	0.67	496,925	85,018	5,945	574	531,908
2023	531,908	(174,150)	(178,865)	(406,032)	178,865	(54,083)	737,005	0.69	510,405	50,290	7,979	377	590,554
2024	590,554	(208,618)	(220,067)	(406,032)	220,067	(76,610)	736,966	0.71	524,196	41,554	10,039	353	642,500
2025	642,500	(362,718)	(392,982)	(406,032)	392,982	(106,453)	736,966	0.73	538,387	25,903	11,565	233	680,201
2026	680,201	(183,033)	(203,674)	(410,810)	203,674	(151,858)	725,783	0.75	544,572	(18,097)	12,584	(294)	674,394
2027	674,394	(140,898)	(161,032)	(430,304)	161,032	(176,381)	697,281	0.77	537,350	(69,334)	13,151	(1,161)	617,049
2028	617,049	(139,513)	(163,765)	(435,282)	163,765	(196,435)	697,242	0.79	551,867	(79,849)	12,341	(1,357)	548,184
2029	548,184	(292,920)	(353,148)	(422,517)	353,148	(220,185)	697,281	0.81	566,839	(75,862)	11,512	(1,328)	482,506
2030	482,506	(290,084)	(359,198)	(314,802)	359,198	(264,839)	697,242	0.83	582,153	2,513	11,339	30	496,387
2031	496,387	(156,322)	(198,807)	(244,943)	198,807	(307,465)	735,504	0.86	630,725	78,317	12,906	1,018	588,628
2032	588,628	(554,376)	(724,131)	(150,963)	724,131	(337,511)	775,604	0.88	683,118	194,644	15,304	2,530	801,107
2033	801,107	(563,719)	(756,269)	(143,536)	756,269	(382,515)	775,604	0.90	701,612	175,561	20,829	2,282	999,779
2034	999,779	(252,754)	(348,268)	(123,762)	348,268	(448,505)	775,604	0.93	720,607	148,340	25,994	1,928	1,176,042
2035	1,176,042	(138,681)	(196,261)	(117,226)	196,261	(460,143)	775,604	0.95	740,116	162,746	30,577	2,116	1,371,481
2036	1,371,481	(144,083)	(209,425)	(83,243)	209,425	(440,090)	800,261	0.98	784,319	260,986	35,659	3,393	1,671,519
2037	1,671,519	(169,714)	(253,359)	(27,244)	253,359	(443,218)	806,907	1.01	812,242	341,781	43,459	4,443	2,061,202
2038	2,061,202	(176,851)	(271,162)	0	271,162	(455,909)	806,945	1.03	834,272	378,364	53,591	4,919	2,498,076
2039	2,498,076	(558,178)	(879,010)	0	879,010	(478,979)	806,907	1.06	856,817	377,838	64,950	4,912	2,945,776
2040	2,945,776	(694,902)	(1,123,949)	0	1,123,949	(551,592)	806,945	1.09	880,056	328,464	76,590	4,270	3,355,100
2041	3,355,100	(170,896)	(283,894)	0	283,894	(3,824,828)	401,733	1.12	449,992	(3,374,836)	87,233	(67,497)	0
Total		(5,799,674)	(7,704,533)	(4,528,758)	7,704,533	(9,383,473)	14,730,349		12,946,572		563,547	(38,259)	

Police Services
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$11,847,276	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.44
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	2,509,799	(1,556,189)	(1,556,189)	(1,478,857)	1,556,189	(21,398)	4,021,383	0.44	1,779,298	279,043	33,882	1,884	2,824,608
2023	2,824,608	(634,293)	(651,466)	(1,478,857)	651,466	(196,982)	4,021,383	0.45	1,827,468	151,630	42,369	1,137	3,019,745
2024	3,019,745	(759,833)	(801,531)	(1,478,857)	801,531	(279,031)	4,021,383	0.47	1,876,943	119,056	51,336	1,012	3,191,148
2025	3,191,148	(1,321,097)	(1,431,326)	(1,478,857)	1,431,326	(387,725)	4,021,383	0.48	1,927,758	61,177	57,441	551	3,310,316
2026	3,310,316	(666,647)	(741,824)	(1,496,262)	741,824	(553,100)	3,963,103	0.49	1,951,253	(98,109)	61,241	(1,594)	3,271,854
2027	3,271,854	(513,181)	(586,512)	(1,567,260)	586,512	(642,418)	3,827,293	0.51	1,935,402	(274,276)	63,801	(4,594)	3,056,785
2028	3,056,785	(508,136)	(596,468)	(1,585,393)	596,468	(715,458)	3,827,293	0.52	1,987,799	(313,052)	61,136	(5,322)	2,799,547
2029	2,799,547	(1,066,877)	(1,286,244)	(1,538,899)	1,286,244	(801,961)	3,827,293	0.53	2,041,615	(299,245)	58,790	(5,237)	2,553,855
2030	2,553,855	(1,056,550)	(1,308,279)	(1,146,577)	1,308,279	(964,602)	3,827,293	0.55	2,096,887	(14,291)	60,016	(268)	2,599,312
2031	2,599,312	(569,359)	(724,099)	(892,137)	724,099	(1,119,854)	4,037,794	0.56	2,272,107	260,115	67,582	3,381	2,930,390
2032	2,930,390	(2,019,160)	(2,637,446)	(549,841)	2,637,446	(1,229,289)	4,161,884	0.58	2,405,337	626,207	76,190	8,141	3,640,928
2033	3,640,928	(2,053,187)	(2,754,499)	(522,790)	2,754,499	(1,393,203)	4,161,884	0.59	2,470,456	554,464	94,664	7,208	4,297,264
2034	4,297,264	(920,587)	(1,268,470)	(450,768)	1,268,470	(1,633,554)	4,161,884	0.61	2,537,339	453,016	111,729	5,889	4,867,899
2035	4,867,899	(505,108)	(714,827)	(426,964)	714,827	(1,675,943)	4,161,884	0.63	2,606,032	503,126	126,565	6,541	5,504,130
2036	5,504,130	(524,781)	(762,774)	(303,188)	762,774	(1,602,906)	4,293,709	0.64	2,761,364	855,269	143,107	11,119	6,513,625
2037	6,513,625	(618,136)	(922,791)	(99,227)	922,791	(1,614,298)	4,334,163	0.66	2,862,843	1,149,318	169,354	14,941	7,847,239
2038	7,847,239	(644,131)	(987,631)	0	987,631	(1,660,519)	4,334,163	0.68	2,940,348	1,279,829	204,028	16,638	9,347,734
2039	9,347,734	(2,033,005)	(3,201,549)	0	3,201,549	(1,744,548)	4,334,163	0.70	3,019,952	1,275,404	243,041	16,580	10,882,760
2040	10,882,760	(2,530,986)	(4,093,670)	0	4,093,670	(2,009,019)	4,334,163	0.72	3,101,711	1,092,692	282,952	14,205	12,272,608
2041	12,272,608	(622,441)	(1,034,005)	0	1,034,005	(13,930,863)	2,157,860	0.74	1,586,064	(12,344,800)	319,088	(246,896)	0
Total		(21,123,686)	(28,061,600)	(16,494,732)	28,061,600	(34,176,670)	79,831,360		45,987,976		2,328,313	(154,685)	

Police Services
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$73,664	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.14
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (Inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	11,634	(9,676)	(9,676)	(9,195)	9,676	(133)	72,000	0.14	10,340	1,011	157	7	12,810
2023	12,810	(3,944)	(4,051)	(9,195)	4,051	(1,225)	72,000	0.15	10,620	200	192	1	13,203
2024	13,203	(4,725)	(4,984)	(9,195)	4,984	(1,735)	72,000	0.15	10,907	(23)	224	(0)	13,404
2025	13,404	(8,214)	(8,900)	(9,195)	8,900	(2,411)	72,000	0.16	11,202	(404)	241	(6)	13,235
2026	13,235	(4,145)	(4,613)	(9,304)	4,613	(3,439)	74,000	0.16	11,825	(917)	245	(15)	12,548
2027	12,548	(3,191)	(3,647)	(9,745)	3,647	(3,994)	74,000	0.16	12,146	(1,594)	245	(27)	11,172
2028	11,172	(3,160)	(3,709)	(9,858)	3,709	(4,449)	74,000	0.17	12,474	(1,832)	223	(31)	9,532
2029	9,532	(6,634)	(7,998)	(9,569)	7,998	(4,986)	74,000	0.17	12,812	(1,743)	200	(31)	7,959
2030	7,959	(6,569)	(8,135)	(7,129)	8,135	(5,998)	74,000	0.18	13,159	32	187	0	8,178
2031	8,178	(3,540)	(4,502)	(5,547)	4,502	(6,963)	78,000	0.18	14,246	1,735	213	23	10,149
2032	10,149	(12,555)	(16,399)	(3,419)	16,399	(7,644)	84,000	0.19	15,757	4,695	264	61	15,168
2033	15,168	(12,766)	(17,127)	(3,251)	17,127	(8,663)	84,000	0.19	16,183	4,270	394	56	19,888
2034	19,888	(5,724)	(7,887)	(2,803)	7,887	(10,157)	84,000	0.20	16,622	3,662	517	48	24,115
2035	24,115	(3,141)	(4,445)	(2,655)	4,445	(10,421)	84,000	0.20	17,072	3,996	627	52	28,790
2036	28,790	(3,263)	(4,743)	(1,885)	4,743	(9,967)	86,000	0.21	17,951	6,099	749	79	35,717
2037	35,717	(3,843)	(5,738)	(617)	5,738	(10,037)	88,000	0.21	18,866	8,212	929	107	44,964
2038	44,964	(4,005)	(6,141)	0	6,141	(10,325)	88,000	0.22	19,377	9,052	1,169	118	55,303
2039	55,303	(12,641)	(19,907)	0	19,907	(10,847)	88,000	0.23	19,901	9,054	1,438	118	65,912
2040	65,912	(15,737)	(25,454)	0	25,454	(12,492)	88,000	0.23	20,440	7,948	1,714	103	75,678
2041	75,678	(3,870)	(6,429)	0	6,429	(86,620)	44,000	0.24	10,497	(76,123)	1,968	(1,522)	0
Total		(131,343)	(174,482)	(102,561)	174,482	(212,505)	1,554,000		292,397		11,896	(860)	

Waste Diversion
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$8,824,838	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$96
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	1,025,099	(102,000)	(102,000)	0	102,000	(1,403)	20,326	96	1,941,612	1,940,210	13,839	13,096	2,992,244
2023	2,992,244	(102,000)	(104,761)	0	104,761	(13,811)	20,326	98	1,994,177	1,980,366	44,884	14,853	5,032,346
2024	5,032,346	(102,000)	(107,598)	0	107,598	(26,675)	20,326	101	2,048,165	2,021,490	85,550	17,183	7,156,569
2025	7,156,569	(1,535,600)	(1,663,727)	0	1,663,727	(64,812)	20,326	103	2,103,615	2,038,804	128,818	18,349	9,342,540
2026	9,342,540	(1,535,600)	(1,708,768)	0	1,708,768	(270,794)	21,883	106	2,326,068	2,055,274	172,837	19,011	11,589,663
2027	11,589,663	(12,835,280)	(14,669,379)	0	14,669,379	(699,617)	23,439	109	2,558,916	1,859,298	225,998	18,128	13,693,088
2028	13,693,088	(12,163,000)	(14,277,375)	0	14,277,375	(2,515,545)	23,439	112	2,628,193	112,648	273,862	1,126	14,080,724
2029	14,080,724	(102,000)	(122,973)	0	122,973	(4,049,484)	23,439	115	2,699,346	(1,350,138)	295,695	(23,627)	13,002,653
2030	13,002,653	(102,000)	(126,302)	0	126,302	(4,065,056)	23,439	118	2,772,425	(1,292,631)	305,562	(24,237)	11,991,348
2031	11,991,348	(102,000)	(129,721)	0	129,721	(4,081,241)	25,131	121	3,053,035	(1,028,206)	311,775	(20,564)	11,254,353
2032	11,254,353	(102,000)	(133,233)	0	133,233	(4,096,491)	26,823	125	3,346,807	(749,685)	292,613	(14,994)	10,782,288
2033	10,782,288	(102,000)	(136,840)	0	136,840	(4,101,187)	26,823	128	3,437,415	(663,772)	280,339	(13,275)	10,385,580
2034	10,385,580	(102,000)	(140,545)	0	140,545	(4,105,890)	26,823	132	3,530,476	(575,414)	270,025	(11,508)	10,068,682
2035	10,068,682	(13,097,716)	(18,535,836)	0	18,535,836	(4,453,626)	26,823	135	3,626,056	(827,570)	261,786	(16,551)	9,486,347
2036	9,486,347	0	0	0	0	(6,246,453)	26,761	139	3,715,615	(2,530,837)	246,645	(50,617)	7,151,538
2037	7,151,538	0	0	0	0	(5,817,629)	26,700	143	3,807,509	(2,010,120)	185,940	(40,202)	5,287,155
2038	5,287,155	0	0	0	0	(4,001,701)	26,700	146	3,910,589	(91,112)	137,466	(1,822)	5,331,687
2039	5,331,687	0	0	0	0	(2,467,763)	26,700	150	4,016,461	1,548,698	138,624	20,133	7,039,142
2040	7,039,142	0	0	0	0	(2,452,190)	26,700	155	4,125,198	1,673,007	183,018	21,749	8,916,916
2041	8,916,916	0	0	0	0	(11,087,808)	13,350	159	2,118,439	(8,969,369)	231,840	(179,387)	0
Total		(42,085,196)	(51,959,060)	0	51,959,060	(64,619,176)	476,277		59,760,118		4,087,116	(253,157)	

Public Works
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$28,048,714	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$154
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	18,539,440	(3,567,213)	(3,567,213)	(78,446)	3,567,213	(49,049)	20,326	154	3,126,740	2,999,245	250,282	20,245	21,809,212
2023	21,809,212	(10,797,732)	(11,090,058)	(78,446)	11,090,058	(590,689)	20,326	158	3,211,390	2,542,255	327,138	19,067	24,697,673
2024	24,697,673	(10,229,464)	(10,790,845)	(78,446)	10,790,845	(1,943,201)	20,326	162	3,298,331	1,276,685	419,860	10,852	26,405,070
2025	26,405,070	(1,639,608)	(1,776,412)	(78,446)	1,776,412	(3,126,626)	20,326	167	3,387,627	182,555	475,291	1,643	27,064,559
2026	27,064,559	(4,176,332)	(4,647,294)	(78,446)	4,647,294	(3,392,431)	21,883	171	3,745,862	274,986	500,694	2,544	27,842,783
2027	27,842,783	(6,423,420)	(7,341,295)	(78,446)	7,341,295	(4,013,400)	23,439	176	4,120,836	28,989	542,934	283	28,414,989
2028	28,414,989	(703,650)	(825,970)	(78,446)	825,970	(4,814,757)	23,439	181	4,232,399	(660,804)	568,300	(11,234)	28,311,252
2029	28,311,252	(3,440,069)	(4,147,402)	(75,231)	4,147,402	(4,975,952)	23,439	185	4,346,982	(704,202)	594,536	(12,324)	28,189,263
2030	28,189,263	(4,835,591)	(5,987,696)	(49,350)	5,987,696	(5,533,549)	23,439	190	4,464,667	(1,118,231)	662,448	(20,967)	27,712,513
2031	27,712,513	(5,135,722)	(6,531,501)	(44,818)	6,531,501	(6,308,455)	25,131	196	4,916,557	(1,436,716)	720,525	(28,734)	26,967,587
2032	26,967,587	(905,695)	(1,183,027)	0	1,183,027	(6,987,389)	26,823	201	5,389,642	(1,597,747)	701,157	(31,955)	26,039,043
2033	26,039,043	(9,854,710)	(13,220,805)	0	13,220,805	(6,837,738)	26,823	206	5,535,556	(1,302,182)	677,015	(26,044)	25,387,832
2034	25,387,832	(722,151)	(995,046)	0	995,046	(6,930,790)	26,823	212	5,685,419	(1,245,371)	660,084	(24,907)	24,777,637
2035	24,777,637	(4,420,341)	(6,255,649)	0	6,255,649	(5,979,778)	26,823	218	5,839,340	(140,438)	644,219	(2,809)	25,278,609
2036	25,278,609	(4,097,304)	(5,955,470)	0	5,955,470	(6,507,660)	26,761	224	5,983,565	(524,095)	657,244	(10,482)	25,401,276
2037	25,401,276	(206,172)	(307,786)	0	307,786	(6,535,053)	26,700	230	6,131,549	(403,504)	660,433	(8,070)	25,650,135
2038	25,650,135	(173,868)	(266,588)	0	266,588	(5,772,219)	26,700	236	6,297,548	525,329	666,904	6,829	26,849,197
2039	26,849,197	(173,868)	(273,805)	0	273,805	(5,645,247)	26,700	242	6,468,041	822,795	698,079	10,696	28,380,767
2040	28,380,767	(10,007,712)	(16,186,681)	0	16,186,681	(5,440,910)	26,700	249	6,643,150	1,202,240	737,900	15,629	30,336,537
2041	30,336,537	(489,270)	(812,780)	0	812,780	(33,926,487)	13,350	256	3,411,500	(30,514,987)	788,750	(610,300)	(0)
Total		(81,999,891)	(102,163,322)	(718,519)	102,163,322	(125,311,380)	476,277		96,236,702		11,953,794	(700,037)	

Public Works
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$3,350,135	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.69
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	784,667	(426,068)	(426,068)	(9,370)	426,068	(5,858)	736,966	0.69	506,256	491,028	10,593	3,314	1,289,602
2023	1,289,602	(1,289,680)	(1,324,595)	(9,370)	1,324,595	(70,552)	737,005	0.71	519,989	440,067	19,344	3,301	1,752,314
2024	1,752,314	(1,221,806)	(1,288,857)	(9,370)	1,288,857	(232,096)	736,966	0.72	534,038	292,573	29,789	2,487	2,077,163
2025	2,077,163	(195,835)	(212,174)	(9,370)	212,174	(373,444)	736,966	0.74	548,496	165,683	37,389	1,491	2,281,726
2026	2,281,726	(498,821)	(555,072)	(9,370)	555,072	(405,192)	725,783	0.76	554,797	140,236	42,212	1,297	2,465,471
2027	2,465,471	(767,213)	(876,843)	(9,370)	876,843	(479,360)	697,281	0.79	547,440	58,710	48,077	572	2,572,830
2028	2,572,830	(84,044)	(98,654)	(9,370)	98,654	(575,074)	697,242	0.81	562,230	(22,214)	51,457	(378)	2,601,695
2029	2,601,695	(410,882)	(495,365)	(8,986)	495,365	(594,327)	697,281	0.83	577,483	(25,830)	54,636	(452)	2,630,049
2030	2,630,049	(577,562)	(715,170)	(5,894)	715,170	(660,926)	697,242	0.85	593,084	(73,737)	61,806	(1,383)	2,616,736
2031	2,616,736	(613,410)	(780,122)	(5,353)	780,122	(753,481)	735,504	0.87	642,568	(116,266)	68,035	(2,325)	2,566,179
2032	2,566,179	(108,176)	(141,301)	0	141,301	(834,573)	775,604	0.90	695,945	(138,628)	66,721	(2,773)	2,491,499
2033	2,491,499	(1,177,045)	(1,579,091)	0	1,579,091	(816,699)	775,604	0.92	714,786	(101,912)	64,779	(2,038)	2,452,328
2034	2,452,328	(86,254)	(118,848)	0	118,848	(827,813)	775,604	0.95	734,138	(93,675)	63,761	(1,874)	2,420,539
2035	2,420,539	(527,965)	(747,174)	0	747,174	(714,224)	775,604	0.97	754,013	39,789	62,934	517	2,523,779
2036	2,523,779	(489,381)	(711,321)	0	711,321	(777,274)	800,261	1.00	799,046	21,772	65,618	283	2,611,453
2037	2,611,453	(24,625)	(36,762)	0	36,762	(780,546)	806,907	1.03	827,494	46,948	67,898	610	2,726,908
2038	2,726,908	(20,767)	(31,841)	0	31,841	(689,433)	806,945	1.05	849,937	160,504	70,900	2,087	2,960,398
2039	2,960,398	(20,767)	(32,703)	0	32,703	(674,268)	806,907	1.08	872,905	198,638	76,970	2,582	3,238,589
2040	3,238,589	(1,195,320)	(1,933,335)	0	1,933,335	(649,862)	806,945	1.11	896,580	246,719	84,203	3,207	3,572,718
2041	3,572,718	(58,438)	(97,078)	0	97,078	(4,052,176)	401,733	1.14	458,442	(3,593,734)	92,891	(71,875)	(0)
Total		(9,794,058)	(12,202,376)	(85,820)	12,202,376	(14,967,177)	14,730,349		13,189,666		1,140,012	(61,347)	

Public Works
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$5,998,782	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.18
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	5,520,606	(762,920)	(762,920)	(16,777)	762,920	(10,490)	4,021,383	0.18	716,806	689,539	74,528	4,654	6,289,328
2023	6,289,328	(2,309,312)	(2,371,832)	(16,777)	2,371,832	(126,331)	4,021,383	0.18	736,212	593,105	94,340	4,448	6,981,221
2024	6,981,221	(2,187,777)	(2,307,839)	(16,777)	2,307,839	(415,593)	4,021,383	0.19	756,144	323,774	118,681	2,752	7,426,428
2025	7,426,428	(350,663)	(379,922)	(16,777)	379,922	(668,692)	4,021,383	0.19	776,615	91,146	133,676	820	7,652,069
2026	7,652,069	(893,193)	(993,917)	(16,777)	993,917	(725,540)	3,963,103	0.20	786,080	43,763	141,563	405	7,837,801
2027	7,837,801	(1,373,778)	(1,570,084)	(16,777)	1,570,084	(858,346)	3,827,293	0.20	779,694	(95,429)	152,837	(1,598)	7,893,610
2028	7,893,610	(150,490)	(176,650)	(16,777)	176,650	(1,029,733)	3,827,293	0.21	800,803	(245,707)	157,872	(4,177)	7,801,599
2029	7,801,599	(735,728)	(887,005)	(16,090)	887,005	(1,064,208)	3,827,293	0.21	822,483	(257,814)	163,834	(4,512)	7,703,106
2030	7,703,106	(1,034,188)	(1,280,589)	(10,554)	1,280,589	(1,183,461)	3,827,293	0.22	844,750	(349,265)	181,023	(6,549)	7,528,316
2031	7,528,316	(1,098,377)	(1,396,893)	(9,585)	1,396,893	(1,349,190)	4,037,794	0.23	915,339	(443,436)	195,736	(8,869)	7,271,747
2032	7,271,747	(193,701)	(253,014)	0	253,014	(1,494,394)	4,161,884	0.23	969,012	(525,382)	189,065	(10,508)	6,924,923
2033	6,924,923	(2,107,628)	(2,827,535)	0	2,827,535	(1,462,388)	4,161,884	0.24	995,246	(467,142)	180,048	(9,343)	6,628,486
2034	6,628,486	(154,446)	(212,811)	0	212,811	(1,482,289)	4,161,884	0.25	1,022,190	(460,099)	172,341	(9,202)	6,331,526
2035	6,331,526	(945,379)	(1,337,896)	0	1,337,896	(1,278,896)	4,161,884	0.25	1,049,864	(229,032)	164,620	(4,581)	6,262,534
2036	6,262,534	(876,291)	(1,273,697)	0	1,273,697	(1,391,794)	4,293,709	0.26	1,112,441	(279,353)	162,826	(5,587)	6,140,419
2037	6,140,419	(44,094)	(65,826)	0	65,826	(1,397,653)	4,334,163	0.27	1,153,322	(244,330)	159,651	(4,887)	6,050,853
2038	6,050,853	(37,185)	(57,015)	0	57,015	(1,234,505)	4,334,163	0.27	1,184,546	(49,959)	157,322	(999)	6,157,217
2039	6,157,217	(37,185)	(58,559)	0	58,559	(1,207,350)	4,334,163	0.28	1,216,615	9,266	160,088	120	6,326,691
2040	6,326,691	(2,140,351)	(3,461,847)	0	3,461,847	(1,163,648)	4,334,163	0.29	1,249,553	85,905	164,494	1,117	6,578,206
2041	6,578,206	(104,640)	(173,829)	0	173,829	(7,255,862)	2,157,860	0.30	638,960	(6,616,902)	171,033	(132,338)	(0)
Total		(17,537,327)	(21,849,682)	(153,670)	21,849,682	(26,800,360)	79,831,360		18,526,678		3,095,578	(188,832)	

Public Works
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$62,137	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.11
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	36,095	(7,903)	(7,903)	(174)	7,903	(109)	72,000	0.11	7,744	7,462	487	50	44,095
2023	44,095	(23,921)	(24,568)	(174)	24,568	(1,309)	72,000	0.11	7,954	6,471	661	49	51,276
2024	51,276	(22,662)	(23,905)	(174)	23,905	(4,305)	72,000	0.11	8,169	3,691	872	31	55,870
2025	55,870	(3,632)	(3,935)	(174)	3,935	(6,927)	72,000	0.12	8,390	1,290	1,006	12	58,177
2026	58,177	(9,252)	(10,295)	(174)	10,295	(7,515)	74,000	0.12	8,857	1,168	1,076	11	60,432
2027	60,432	(14,230)	(16,263)	(174)	16,263	(8,891)	74,000	0.12	9,097	32	1,178	0	61,643
2028	61,643	(1,559)	(1,830)	(174)	1,830	(10,666)	74,000	0.13	9,343	(1,497)	1,233	(25)	61,353
2029	61,353	(7,621)	(9,188)	(167)	9,188	(11,023)	74,000	0.13	9,596	(1,594)	1,288	(28)	61,019
2030	61,019	(10,712)	(13,265)	(109)	13,265	(12,259)	74,000	0.13	9,856	(2,512)	1,434	(47)	59,894
2031	59,894	(11,377)	(14,469)	(99)	14,469	(13,975)	78,000	0.14	10,670	(3,405)	1,557	(68)	57,978
2032	57,978	(2,006)	(2,621)	0	2,621	(15,479)	84,000	0.14	11,801	(3,678)	1,507	(74)	55,734
2033	55,734	(21,831)	(29,288)	0	29,288	(15,148)	84,000	0.14	12,121	(3,027)	1,449	(61)	54,096
2034	54,096	(1,600)	(2,204)	0	2,204	(15,354)	84,000	0.15	12,449	(2,905)	1,406	(58)	52,539
2035	52,539	(9,793)	(13,858)	0	13,858	(13,247)	84,000	0.15	12,786	(461)	1,366	(9)	53,435
2036	53,435	(9,077)	(13,193)	0	13,193	(14,417)	86,000	0.16	13,445	(972)	1,389	(19)	53,833
2037	53,833	(457)	(682)	0	682	(14,477)	88,000	0.16	14,130	(347)	1,400	(7)	54,879
2038	54,879	(385)	(591)	0	591	(12,787)	88,000	0.16	14,513	1,725	1,427	22	58,053
2039	58,053	(385)	(607)	0	607	(12,506)	88,000	0.17	14,906	2,399	1,509	31	61,993
2040	61,993	(22,170)	(35,859)	0	35,859	(12,053)	88,000	0.17	15,309	3,256	1,612	42	66,903
2041	66,903	(1,084)	(1,801)	0	1,801	(75,158)	44,000	0.18	7,862	(67,297)	1,739	(1,346)	(0)
Total		(181,657)	(226,325)	(1,592)	226,325	(277,606)	1,554,000		218,997		25,599	(1,493)	

Housing Services
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$47,606,450	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$417
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	8,855,193	(21,157,877)	(21,157,877)	(713,348)	21,157,877	(290,921)	20,326	417	8,473,784	7,469,515	119,545	50,419	16,494,673
2023	16,494,673	(16,794,093)	(17,248,758)	(713,348)	17,248,758	(2,799,831)	20,326	428	8,703,194	5,190,015	247,420	38,925	21,971,033
2024	21,971,033	(13,599,670)	(14,346,003)	(713,348)	14,346,003	(4,866,661)	20,326	440	8,938,814	3,359,806	373,508	28,558	25,732,905
2025	25,732,905	(15,319,500)	(16,597,720)	(713,348)	16,597,720	(6,666,756)	20,326	452	9,180,814	1,800,711	463,192	16,206	28,013,015
2026	28,013,015	(9,317,000)	(10,367,671)	(735,481)	10,367,671	(8,613,144)	21,883	464	10,151,668	803,043	518,241	7,428	29,341,727
2027	29,341,727	(8,116,500)	(9,276,308)	(944,436)	9,276,308	(9,879,520)	23,439	476	11,167,884	343,928	572,164	3,353	30,261,172
2028	30,261,172	(13,090,000)	(15,365,522)	(944,436)	15,365,522	(11,135,569)	23,439	489	11,470,232	(609,773)	605,223	(10,366)	30,246,257
2029	30,246,257	(11,803,750)	(14,230,788)	(944,436)	14,230,788	(13,033,139)	23,439	503	11,780,764	(2,196,810)	635,171	(38,444)	28,646,174
2030	28,646,174	(7,516,250)	(9,307,037)	(914,310)	9,307,037	(14,735,675)	23,439	516	12,099,704	(3,550,282)	673,185	(66,568)	25,702,509
2031	25,702,509	(7,173,250)	(9,122,785)	(545,426)	9,122,785	(15,919,568)	25,131	530	13,324,371	(3,140,623)	668,265	(62,812)	23,167,339
2032	23,167,339	(5,303,900)	(6,928,004)	(545,426)	6,928,004	(16,750,961)	26,823	545	14,606,480	(2,689,907)	602,351	(53,798)	21,025,984
2033	21,025,984	(3,160,150)	(4,239,569)	(545,426)	4,239,569	(15,073,923)	26,823	559	15,001,920	(617,429)	546,676	(12,349)	20,942,883
2034	20,942,883	(6,487,250)	(8,938,733)	(545,426)	8,938,733	(13,644,041)	26,823	574	15,408,066	1,218,599	544,515	15,842	22,721,838
2035	22,721,838	(8,288,000)	(11,729,145)	(545,426)	11,729,145	(13,041,436)	26,823	590	15,825,207	2,238,345	590,768	29,098	25,580,050
2036	25,580,050	(10,620,400)	(15,436,853)	(450,705)	15,436,853	(12,668,595)	26,761	606	16,216,072	3,096,772	665,081	40,258	29,382,161
2037	29,382,161	(10,620,400)	(15,854,773)	0	15,854,773	(13,383,946)	26,700	622	16,617,124	3,233,179	763,936	42,031	33,421,307
2038	33,421,307	(7,293,300)	(11,182,644)	0	11,182,644	(14,061,247)	26,700	639	17,066,998	3,005,751	868,954	39,075	37,335,087
2039	37,335,087	(5,492,550)	(8,649,594)	0	8,649,594	(13,542,548)	26,700	657	17,529,052	3,986,504	970,712	51,825	42,344,127
2040	42,344,127	(56,000)	(90,576)	0	90,576	(12,774,551)	26,700	674	18,003,614	5,229,064	1,100,947	67,978	48,742,116
2041	48,742,116	(28,000)	(46,514)	0	46,514	(58,274,346)	13,350	693	9,245,512	(49,028,834)	1,267,295	(980,577)	0
Total		(181,237,840)	(220,116,873)	(10,514,323)	220,116,873	(271,155,377)	476,277		260,811,273		12,797,150	(793,917)	

Growth Studies
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$10,309,310	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$46
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	4,735,689	(1,550,584)	(1,550,584)	0	1,550,584	(21,321)	20,326	46	939,621	918,300	63,932	6,199	5,724,119
2023	5,724,119	(1,062,387)	(1,091,149)	0	1,091,149	(202,682)	20,326	47	965,059	762,377	85,862	5,718	6,578,076
2024	6,578,076	(1,069,266)	(1,127,946)	0	1,127,946	(336,782)	20,326	49	991,186	654,404	111,827	5,562	7,349,870
2025	7,349,870	(1,076,296)	(1,166,099)	0	1,166,099	(476,170)	20,326	50	1,018,020	541,851	132,298	4,877	8,028,895
2026	8,028,895	(1,601,500)	(1,782,100)	0	1,782,100	(630,039)	21,883	51	1,125,674	495,635	148,535	4,585	8,677,650
2027	8,677,650	(1,739,876)	(1,988,495)	0	1,988,495	(854,316)	23,439	53	1,238,358	384,042	169,214	3,744	9,234,650
2028	9,234,650	(1,541,465)	(1,809,429)	0	1,809,429	(1,098,331)	23,439	54	1,271,884	173,552	184,693	1,736	9,594,631
2029	9,594,631	(1,549,131)	(1,867,657)	0	1,867,657	(1,325,145)	23,439	56	1,306,317	(18,827)	201,487	(329)	9,776,962
2030	9,776,962	(711,806)	(881,397)	0	881,397	(1,542,211)	23,439	57	1,341,683	(200,527)	229,759	(3,760)	9,802,433
2031	9,802,433	(719,811)	(915,440)	0	915,440	(1,655,358)	25,131	59	1,477,481	(177,877)	254,863	(3,558)	9,875,862
2032	9,875,862	(859,025)	(1,122,067)	0	1,122,067	(1,755,195)	26,823	60	1,619,649	(135,546)	256,772	(2,711)	9,994,377
2033	9,994,377	(736,349)	(987,866)	0	987,866	(1,714,589)	26,823	62	1,663,497	(51,092)	259,854	(1,022)	10,202,118
2034	10,202,118	(1,590,050)	(2,190,917)	0	2,190,917	(1,730,834)	26,823	64	1,708,533	(22,301)	265,255	(446)	10,444,626
2035	10,444,626	(1,598,778)	(2,262,585)	0	2,262,585	(1,872,955)	26,823	65	1,754,788	(118,167)	271,560	(2,363)	10,595,656
2036	10,595,656	(1,607,698)	(2,336,805)	0	2,336,805	(2,009,807)	26,761	67	1,798,129	(211,678)	275,487	(4,234)	10,655,232
2037	10,655,232	(1,747,848)	(2,609,292)	0	2,609,292	(2,089,705)	26,700	69	1,842,600	(247,105)	277,036	(4,942)	10,680,221
2038	10,680,221	(780,969)	(1,197,442)	0	1,197,442	(2,151,011)	26,700	71	1,892,485	(258,526)	277,686	(5,171)	10,694,210
2039	10,694,210	(790,488)	(1,244,849)	0	1,244,849	(2,078,220)	26,700	73	1,943,720	(134,501)	278,049	(2,690)	10,835,069
2040	10,835,069	(800,214)	(1,294,283)	0	1,294,283	(2,021,278)	26,700	75	1,996,342	(24,937)	281,712	(499)	11,091,346
2041	11,091,346	(810,154)	(1,345,835)	0	1,345,835	(12,181,783)	13,350	77	1,025,194	(11,156,589)	288,375	(223,132)	0
Total		(23,943,695)	(30,772,237)	0	30,772,237	(37,747,729)	476,277		28,920,219		4,314,256	(222,436)	

Growth Studies
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$741,508	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.13
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	6,009	(111,527)	(111,527)	0	111,527	(1,534)	736,966	0.13	95,214	93,680	81	632	100,403
2023	100,403	(76,413)	(78,482)	0	78,482	(14,578)	737,005	0.13	97,797	83,219	1,506	624	185,752
2024	185,752	(76,908)	(81,129)	0	81,129	(24,223)	736,966	0.14	100,439	76,216	3,158	648	265,773
2025	265,773	(77,414)	(83,873)	0	83,873	(34,249)	736,966	0.14	103,158	68,909	4,784	620	340,086
2026	340,086	(115,190)	(128,179)	0	128,179	(45,316)	725,783	0.14	104,343	59,027	6,292	546	405,951
2027	405,951	(125,142)	(143,025)	0	143,025	(61,448)	697,281	0.15	102,960	41,512	7,916	405	455,784
2028	455,784	(110,871)	(130,145)	0	130,145	(78,999)	697,242	0.15	105,741	26,742	9,116	267	491,909
2029	491,909	(111,423)	(134,333)	0	134,333	(95,312)	697,281	0.16	108,610	13,297	10,330	140	515,676
2030	515,676	(51,197)	(63,395)	0	63,395	(110,925)	697,242	0.16	111,544	619	12,118	7	528,421
2031	528,421	(51,773)	(65,844)	0	65,844	(119,063)	735,504	0.16	120,851	1,787	13,739	23	543,970
2032	543,970	(61,786)	(80,706)	0	80,706	(126,244)	775,604	0.17	130,890	4,645	14,143	60	562,819
2033	562,819	(52,963)	(71,053)	0	71,053	(123,324)	775,604	0.17	134,433	11,110	14,633	144	588,707
2034	588,707	(114,366)	(157,584)	0	157,584	(124,492)	775,604	0.18	138,073	13,581	15,306	177	617,770
2035	617,770	(114,994)	(162,739)	0	162,739	(134,714)	775,604	0.18	141,811	7,096	16,062	92	641,021
2036	641,021	(115,635)	(168,077)	0	168,077	(144,557)	800,261	0.19	150,280	5,723	16,667	74	663,485
2037	663,485	(125,716)	(187,676)	0	187,676	(150,304)	806,907	0.19	155,631	5,326	17,251	69	686,131
2038	686,131	(56,172)	(86,127)	0	86,127	(154,714)	806,945	0.20	159,852	5,138	17,839	67	709,175
2039	709,175	(56,857)	(89,537)	0	89,537	(149,478)	806,907	0.20	164,171	14,693	18,439	191	742,498
2040	742,498	(57,556)	(93,093)	0	93,093	(145,383)	806,945	0.21	168,624	23,241	19,305	302	785,346
2041	785,346	(58,271)	(96,801)	0	96,801	(876,187)	401,733	0.21	86,221	(789,966)	20,419	(15,799)	0
Total		(1,722,175)	(2,213,325)	0	2,213,325	(2,715,044)	14,730,349		2,480,641		239,104	(10,709)	

Growth Studies
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$2,700,734	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.09
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(4,799)	(406,207)	(406,207)	0	406,207	(5,585)	4,021,383	0.09	350,494	344,908	(132)	2,328	342,305
2023	342,305	(278,314)	(285,849)	0	285,849	(53,097)	4,021,383	0.09	359,982	306,886	5,135	2,302	656,627
2024	656,627	(280,116)	(295,488)	0	295,488	(88,227)	4,021,383	0.09	369,728	281,501	11,163	2,393	951,684
2025	951,684	(281,958)	(305,483)	0	305,483	(124,742)	4,021,383	0.09	379,738	254,996	17,130	2,295	1,226,105
2026	1,226,105	(419,546)	(466,858)	0	466,858	(165,052)	3,963,103	0.10	384,366	219,315	22,683	2,029	1,470,131
2027	1,470,131	(455,796)	(520,927)	0	520,927	(223,805)	3,827,293	0.10	381,244	157,438	28,668	1,535	1,657,772
2028	1,657,772	(403,818)	(474,017)	0	474,017	(287,730)	3,827,293	0.10	391,565	103,835	33,155	1,038	1,795,801
2029	1,795,801	(405,826)	(489,271)	0	489,271	(347,149)	3,827,293	0.11	402,166	55,017	37,712	578	1,889,107
2030	1,889,107	(186,472)	(230,900)	0	230,900	(404,014)	3,827,293	0.11	413,054	9,040	44,394	106	1,942,648
2031	1,942,648	(188,569)	(239,818)	0	239,818	(433,655)	4,037,794	0.11	447,569	13,915	50,509	181	2,007,252
2032	2,007,252	(225,039)	(293,948)	0	293,948	(459,809)	4,161,884	0.11	473,813	14,004	52,189	182	2,073,627
2033	2,073,627	(192,902)	(258,792)	0	258,792	(449,172)	4,161,884	0.12	486,641	37,469	53,914	487	2,165,498
2034	2,165,498	(416,546)	(573,956)	0	573,956	(453,427)	4,161,884	0.12	499,816	46,389	56,303	603	2,268,793
2035	2,268,793	(418,833)	(592,730)	0	592,730	(490,659)	4,161,884	0.12	513,347	22,689	58,989	295	2,350,765
2036	2,350,765	(421,169)	(612,174)	0	612,174	(526,510)	4,293,709	0.13	543,945	17,435	61,120	227	2,429,546
2037	2,429,546	(457,884)	(683,557)	0	683,557	(547,441)	4,334,163	0.13	563,935	16,494	63,168	214	2,509,423
2038	2,509,423	(204,591)	(313,694)	0	313,694	(563,501)	4,334,163	0.13	579,202	15,701	65,245	204	2,590,573
2039	2,590,573	(207,084)	(326,114)	0	326,114	(544,432)	4,334,163	0.14	594,883	50,451	67,355	656	2,709,035
2040	2,709,035	(209,632)	(339,064)	0	339,064	(529,515)	4,334,163	0.14	610,988	81,473	70,435	1,059	2,862,002
2041	2,862,002	(212,236)	(352,569)	0	352,569	(3,191,267)	2,157,860	0.14	312,430	(2,878,837)	74,412	(57,577)	0
Total		(6,272,540)	(8,061,416)	0	8,061,416	(9,888,788)	79,831,360		9,058,907		873,546	(38,865)	

Growth Studies
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$16,793	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.03
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	0	(2,526)	(2,526)	0	2,526	(35)	72,000	0.03	2,001	1,966	0	13	1,980
2023	1,980	(1,731)	(1,777)	0	1,777	(330)	72,000	0.03	2,055	1,725	30	13	3,747
2024	3,747	(1,742)	(1,837)	0	1,837	(549)	72,000	0.03	2,111	1,562	64	13	5,387
2025	5,387	(1,753)	(1,899)	0	1,899	(776)	72,000	0.03	2,168	1,392	97	13	6,889
2026	6,889	(2,609)	(2,903)	0	2,903	(1,026)	74,000	0.03	2,289	1,262	127	12	8,290
2027	8,290	(2,834)	(3,239)	0	3,239	(1,392)	74,000	0.03	2,351	959	162	9	9,420
2028	9,420	(2,511)	(2,947)	0	2,947	(1,789)	74,000	0.03	2,414	625	188	6	10,240
2029	10,240	(2,523)	(3,042)	0	3,042	(2,159)	74,000	0.03	2,480	321	215	3	10,779
2030	10,779	(1,159)	(1,436)	0	1,436	(2,512)	74,000	0.03	2,547	35	253	0	11,067
2031	11,067	(1,172)	(1,491)	0	1,491	(2,696)	78,000	0.04	2,757	61	288	1	11,416
2032	11,416	(1,399)	(1,828)	0	1,828	(2,859)	84,000	0.04	3,049	190	297	2	11,906
2033	11,906	(1,199)	(1,609)	0	1,609	(2,793)	84,000	0.04	3,132	339	310	4	12,559
2034	12,559	(2,590)	(3,569)	0	3,569	(2,819)	84,000	0.04	3,217	397	327	5	13,288
2035	13,288	(2,604)	(3,685)	0	3,685	(3,051)	84,000	0.04	3,304	253	346	3	13,890
2036	13,890	(2,619)	(3,806)	0	3,806	(3,274)	86,000	0.04	3,474	200	361	3	14,454
2037	14,454	(2,847)	(4,250)	0	4,250	(3,404)	88,000	0.04	3,651	247	376	3	15,081
2038	15,081	(1,272)	(1,950)	0	1,950	(3,504)	88,000	0.04	3,750	246	392	3	15,722
2039	15,722	(1,288)	(2,028)	0	2,028	(3,385)	88,000	0.04	3,852	466	409	6	16,603
2040	16,603	(1,303)	(2,108)	0	2,108	(3,292)	88,000	0.04	3,956	663	432	9	17,707
2041	17,707	(1,320)	(2,192)	0	2,192	(19,843)	44,000	0.05	2,031	(17,811)	460	(356)	(0)
Total		(39,002)	(50,125)	0	50,125	(61,487)	1,554,000		56,588		5,132	(233)	

Court Services
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	476,277	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$0	
Discount Rate Applied to Post 2041 Debt Payments	1.90%	

Calculated Development Charge per Capita	\$17
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (Inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(4,213,118)	(57,660)	(57,660)	(443,717)	57,660	(793)	20,326	17	344,807	(99,703)	(115,861)	(1,371)	(4,430,053)
2023	(4,430,053)	0	0	(443,717)	0	(6,949)	20,326	17	354,142	(96,524)	(128,472)	(1,400)	(4,656,448)
2024	(4,656,448)	0	0	(443,717)	0	(6,949)	20,326	18	363,729	(86,936)	(144,350)	(1,348)	(4,889,081)
2025	(4,889,081)	0	0	(443,717)	0	(6,949)	20,326	18	373,576	(77,089)	(156,451)	(1,233)	(5,123,854)
2026	(5,123,854)	0	0	(443,717)	0	(6,949)	21,883	19	413,081	(37,584)	(166,525)	(611)	(5,328,574)
2027	(5,328,574)	0	0	(443,717)	0	(6,949)	23,439	19	454,432	3,767	(178,507)	37	(5,503,277)
2028	(5,503,277)	0	0	(443,717)	0	(6,949)	23,439	20	466,735	16,070	(187,111)	161	(5,674,158)
2029	(5,674,158)	0	0	(394,696)	0	(6,949)	23,439	20	479,371	77,726	(198,596)	816	(5,794,211)
2030	(5,794,211)	0	0	0	0	(6,949)	23,439	21	492,349	485,400	(217,283)	5,703	(5,520,391)
2031	(5,520,391)	0	0	0	0	(6,949)	25,131	22	542,182	535,233	(220,816)	6,958	(5,199,015)
2032	(5,199,015)	0	0	0	0	(6,156)	26,823	22	594,352	588,196	(207,961)	7,647	(4,811,133)
2033	(4,811,133)	0	0	0	0	0	26,823	23	610,443	610,443	(192,445)	7,936	(4,385,199)
2034	(4,385,199)	0	0	0	0	0	26,823	23	626,969	626,969	(175,408)	8,151	(3,925,487)
2035	(3,925,487)	0	0	0	0	0	26,823	24	643,943	643,943	(157,019)	8,371	(3,430,192)
2036	(3,430,192)	0	0	0	0	0	26,761	25	659,848	659,848	(137,208)	8,578	(2,898,974)
2037	(2,898,974)	0	0	0	0	0	26,700	25	676,167	676,167	(115,959)	8,790	(2,329,976)
2038	(2,329,976)	0	0	0	0	0	26,700	26	694,473	694,473	(93,199)	9,028	(1,719,674)
2039	(1,719,674)	0	0	0	0	0	26,700	27	713,274	713,274	(68,787)	9,273	(1,065,914)
2040	(1,065,914)	0	0	0	0	0	26,700	27	732,585	732,585	(42,637)	9,524	(366,442)
2041	(366,442)	0	0	0	0	0	13,350	28	376,209	376,209	(14,658)	4,891	0
Total		(57,660)	(57,660)	(3,500,712)	57,660	(69,486)	476,277		10,612,667		(2,919,251)	89,900	

Court Services
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	14,730,349	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$0	
Discount Rate Applied to Post 2041 Debt Payments	1.90%	

Calculated Development Charge per sqft	\$0.04
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(303,033)	(4,147)	(4,147)	(31,915)	4,147	(57)	736,966	0.04	28,992	(2,980)	(8,333)	(41)	(314,387)
2023	(314,387)	0	0	(31,915)	0	(500)	737,005	0.04	29,778	(2,636)	(9,117)	(38)	(326,179)
2024	(326,179)	0	0	(31,915)	0	(500)	736,966	0.04	30,583	(1,832)	(10,112)	(28)	(338,151)
2025	(338,151)	0	0	(31,915)	0	(500)	736,966	0.04	31,411	(1,004)	(10,821)	(16)	(349,991)
2026	(349,991)	0	0	(31,915)	0	(500)	725,783	0.04	31,772	(643)	(11,375)	(10)	(362,019)
2027	(362,019)	0	0	(31,915)	0	(500)	697,281	0.04	31,350	(1,064)	(12,128)	(18)	(375,229)
2028	(375,229)	0	0	(31,915)	0	(500)	697,242	0.05	32,197	(217)	(12,758)	(4)	(388,208)
2029	(388,208)	0	0	(28,389)	0	(500)	697,281	0.05	33,071	4,182	(13,587)	44	(397,569)
2030	(397,569)	0	0	0	0	(500)	697,242	0.05	33,964	33,464	(14,909)	393	(378,620)
2031	(378,620)	0	0	0	0	(500)	735,504	0.05	36,798	36,298	(15,145)	472	(356,995)
2032	(356,995)	0	0	0	0	(443)	775,604	0.05	39,855	39,412	(14,280)	512	(331,351)
2033	(331,351)	0	0	0	0	0	775,604	0.05	40,934	40,934	(13,254)	532	(303,139)
2034	(303,139)	0	0	0	0	0	775,604	0.05	42,042	42,042	(12,126)	547	(272,676)
2035	(272,676)	0	0	0	0	0	775,604	0.06	43,180	43,180	(10,907)	561	(239,841)
2036	(239,841)	0	0	0	0	0	800,261	0.06	45,759	45,759	(9,594)	595	(203,081)
2037	(203,081)	0	0	0	0	0	806,907	0.06	47,388	47,388	(8,123)	616	(163,200)
2038	(163,200)	0	0	0	0	0	806,945	0.06	48,673	48,673	(6,528)	633	(120,422)
2039	(120,422)	0	0	0	0	0	806,907	0.06	49,989	49,989	(4,817)	650	(74,600)
2040	(74,600)	0	0	0	0	0	806,945	0.06	51,345	51,345	(2,984)	667	(25,572)
2041	(25,572)	0	0	0	0	0	401,733	0.07	26,254	26,254	(1,023)	341	0
Total		(4,147)	(4,147)	(251,792)	4,147	(4,998)	14,730,349		755,334		(201,919)	6,408	

Court Services
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	79,831,360	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$0	
Discount Rate Applied to Post 2041 Debt Payments	1.90%	

Calculated Development Charge per sqft	\$0.03
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(1,103,712)	(15,105)	(15,105)	(116,241)	15,105	(208)	4,021,383	0.03	106,269	(10,179)	(30,352)	(140)	(1,144,384)
2023	(1,144,384)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	109,146	(8,915)	(33,187)	(129)	(1,186,615)
2024	(1,186,615)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	112,101	(5,960)	(36,785)	(92)	(1,229,453)
2025	(1,229,453)	0	0	(116,241)	0	(1,820)	4,021,383	0.03	115,136	(2,925)	(39,342)	(47)	(1,271,768)
2026	(1,271,768)	0	0	(116,241)	0	(1,820)	3,963,103	0.03	116,539	(1,522)	(41,332)	(25)	(1,314,647)
2027	(1,314,647)	0	0	(116,241)	0	(1,820)	3,827,293	0.03	115,592	(2,469)	(44,041)	(41)	(1,361,198)
2028	(1,361,198)	0	0	(116,241)	0	(1,820)	3,827,293	0.03	118,722	661	(46,281)	7	(1,406,811)
2029	(1,406,811)	0	0	(103,399)	0	(1,820)	3,827,293	0.03	121,936	16,717	(49,238)	176	(1,439,157)
2030	(1,439,157)	0	0	0	0	(1,820)	3,827,293	0.03	125,237	123,417	(53,968)	1,450	(1,368,259)
2031	(1,368,259)	0	0	0	0	(1,820)	4,037,794	0.03	135,702	133,882	(54,730)	1,740	(1,287,367)
2032	(1,287,367)	0	0	0	0	(1,613)	4,161,884	0.03	143,659	142,047	(51,495)	1,847	(1,194,969)
2033	(1,194,969)	0	0	0	0	0	4,161,884	0.04	147,548	147,548	(47,799)	1,918	(1,093,301)
2034	(1,093,301)	0	0	0	0	0	4,161,884	0.04	151,543	151,543	(43,732)	1,970	(983,520)
2035	(983,520)	0	0	0	0	0	4,161,884	0.04	155,646	155,646	(39,341)	2,023	(865,192)
2036	(865,192)	0	0	0	0	0	4,293,709	0.04	164,923	164,923	(34,608)	2,144	(732,732)
2037	(732,732)	0	0	0	0	0	4,334,163	0.04	170,984	170,984	(29,309)	2,223	(588,835)
2038	(588,835)	0	0	0	0	0	4,334,163	0.04	175,613	175,613	(23,553)	2,283	(434,493)
2039	(434,493)	0	0	0	0	0	4,334,163	0.04	180,367	180,367	(17,380)	2,345	(269,161)
2040	(269,161)	0	0	0	0	0	4,334,163	0.04	185,250	185,250	(10,766)	2,408	(92,269)
2041	(92,269)	0	0	0	0	0	2,157,860	0.04	94,728	94,728	(3,691)	1,231	0
Total		(15,105)	(15,105)	(917,083)	15,105	(18,203)	79,831,360		2,746,639		(730,931)	23,291	

Court Services

Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	1,554,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2041	\$0	
Discount Rate Applied to Post 2041 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.01
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(6,863)	(94)	(94)	(723)	94	(1)	72,000	0.01	609	(115)	(189)	(2)	(7,168)
2023	(7,168)	0	0	(723)	0	(11)	72,000	0.01	626	(108)	(208)	(2)	(7,486)
2024	(7,486)	0	0	(723)	0	(11)	72,000	0.01	643	(91)	(232)	(1)	(7,811)
2025	(7,811)	0	0	(723)	0	(11)	72,000	0.01	660	(74)	(250)	(1)	(8,136)
2026	(8,136)	0	0	(723)	0	(11)	74,000	0.01	697	(37)	(264)	(1)	(8,438)
2027	(8,438)	0	0	(723)	0	(11)	74,000	0.01	716	(18)	(283)	(0)	(8,739)
2028	(8,739)	0	0	(723)	0	(11)	74,000	0.01	735	1	(297)	0	(9,036)
2029	(9,036)	0	0	(643)	0	(11)	74,000	0.01	755	101	(316)	1	(9,250)
2030	(9,250)	0	0	0	0	(11)	74,000	0.01	775	764	(347)	9	(8,824)
2031	(8,824)	0	0	0	0	(11)	78,000	0.01	839	828	(353)	11	(8,338)
2032	(8,338)	0	0	0	0	(10)	84,000	0.01	928	918	(334)	12	(7,742)
2033	(7,742)	0	0	0	0	0	84,000	0.01	954	954	(310)	12	(7,085)
2034	(7,085)	0	0	0	0	0	84,000	0.01	979	979	(283)	13	(6,377)
2035	(6,377)	0	0	0	0	0	84,000	0.01	1,006	1,006	(255)	13	(5,613)
2036	(5,613)	0	0	0	0	0	86,000	0.01	1,058	1,058	(225)	14	(4,766)
2037	(4,766)	0	0	0	0	0	88,000	0.01	1,112	1,112	(191)	14	(3,830)
2038	(3,830)	0	0	0	0	0	88,000	0.01	1,142	1,142	(153)	15	(2,827)
2039	(2,827)	0	0	0	0	0	88,000	0.01	1,173	1,173	(113)	15	(1,752)
2040	(1,752)	0	0	0	0	0	88,000	0.01	1,204	1,204	(70)	16	(602)
2041	(602)	0	0	0	0	0	44,000	0.01	618	618	(24)	8	(0)
Total		(94)	(94)	(5,702)	94	(113)	1,554,000		17,228		(4,696)	146	

Ambulance Services
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	222,074	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$15,661,813	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$201
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(1,083,628)	(8,191,735)	(8,191,735)	(1,046,493)	8,191,735	(112,636)	20,326	201	4,085,468	2,926,339	(29,800)	19,753	1,832,663
2023	1,832,663	(6,097,095)	(6,262,161)	(1,046,493)	6,262,161	(1,077,983)	20,326	206	4,196,074	2,071,598	27,490	15,537	3,947,288
2024	3,947,288	(7,792,917)	(8,220,582)	(1,046,493)	8,220,582	(1,874,672)	20,326	212	4,309,674	1,388,508	67,104	11,802	5,414,702
2025	5,414,702	(1,566,323)	(1,697,013)	(1,046,493)	1,697,013	(2,781,719)	20,326	218	4,426,349	598,137	97,465	5,383	6,115,688
2026	6,115,688	(484,482)	(539,117)	(1,050,738)	539,117	(2,972,260)	21,883	224	4,894,428	871,430	113,140	8,061	7,108,319
2027	7,108,319	(254,413)	(290,768)	(1,093,839)	290,768	(3,034,902)	23,439	230	5,384,376	1,255,635	138,612	12,242	8,514,808
2028	8,514,808	(348,056)	(408,561)	(1,128,341)	408,561	(3,073,031)	23,439	236	5,530,147	1,328,775	170,296	13,288	10,027,167
2029	10,027,167	(1,731,875)	(2,087,975)	(1,128,341)	2,087,975	(3,153,404)	23,439	242	5,679,864	1,398,119	210,571	14,680	11,650,537
2030	11,650,537	(1,201,792)	(1,488,126)	(1,104,964)	1,488,126	(3,405,502)	23,439	249	5,833,635	1,323,168	273,788	15,547	13,263,040
2031	13,263,040	(1,274,816)	(1,621,284)	(4,524,850)	1,621,284	(15,240,292)	25,131	256	6,424,084	(13,341,058)	344,839	(266,821)	0
Total		(28,943,504)	(30,807,322)	(14,217,048)	30,807,322	(36,726,400)	222,074		50,764,100		1,413,505	(150,527)	

Ambulance Services
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	7,198,237	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$393,534	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.16
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(27,228)	(205,834)	(205,834)	(26,295)	205,834	(2,830)	736,966	0.16	115,055	85,930	(749)	580	58,532
2023	58,532	(153,202)	(157,349)	(26,295)	157,349	(27,086)	737,005	0.16	118,176	64,794	878	486	124,691
2024	124,691	(195,813)	(206,559)	(26,295)	206,559	(47,105)	736,966	0.16	121,369	47,969	2,120	408	175,187
2025	175,187	(39,357)	(42,641)	(26,295)	42,641	(69,896)	736,966	0.17	124,655	28,463	3,153	256	207,060
2026	207,060	(12,174)	(13,546)	(26,402)	13,546	(74,684)	725,783	0.17	126,087	25,001	3,831	231	236,123
2027	236,123	(6,393)	(7,306)	(27,485)	7,306	(76,258)	697,281	0.18	124,415	20,672	4,604	202	261,601
2028	261,601	(8,746)	(10,266)	(28,352)	10,266	(77,216)	697,242	0.18	127,776	22,208	5,232	222	289,263
2029	289,263	(43,517)	(52,465)	(28,352)	52,465	(79,236)	697,281	0.19	131,243	23,655	6,075	248	319,241
2030	319,241	(30,197)	(37,392)	(27,764)	37,392	(85,570)	697,242	0.19	134,788	21,454	7,502	252	348,449
2031	348,449	(32,032)	(40,738)	(113,665)	40,738	(382,869)	735,504	0.20	146,034	(350,499)	9,060	(7,010)	0
Total		(727,264)	(774,096)	(357,201)	774,096	(922,750)	7,198,237		1,269,598		41,706	(4,125)	

Ambulance Services
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	39,395,602	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$1,432,438	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.10
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(99,109)	(749,220)	(749,220)	(95,713)	749,220	(10,302)	4,021,383	0.10	417,522	311,507	(2,726)	2,103	211,775
2023	211,775	(557,643)	(572,740)	(95,713)	572,740	(98,593)	4,021,383	0.11	428,826	234,520	3,177	1,759	451,231
2024	451,231	(712,744)	(751,859)	(95,713)	751,859	(171,459)	4,021,383	0.11	440,435	173,264	7,671	1,473	633,638
2025	633,638	(143,257)	(155,210)	(95,713)	155,210	(254,417)	4,021,383	0.11	452,359	102,229	11,405	920	748,193
2026	748,193	(44,311)	(49,308)	(96,101)	49,308	(271,844)	3,963,103	0.12	457,872	89,927	13,842	832	852,793
2027	852,793	(23,269)	(26,594)	(100,043)	26,594	(277,574)	3,827,293	0.12	454,153	76,536	16,629	746	946,704
2028	946,704	(31,833)	(37,367)	(103,199)	37,367	(281,061)	3,827,293	0.12	466,448	82,188	18,934	822	1,048,649
2029	1,048,649	(158,398)	(190,967)	(103,199)	190,967	(288,412)	3,827,293	0.13	479,076	87,466	22,022	918	1,159,054
2030	1,159,054	(109,917)	(136,105)	(101,061)	136,105	(311,469)	3,827,293	0.13	492,046	79,517	27,238	934	1,266,743
2031	1,266,743	(116,595)	(148,283)	(413,735)	148,283	(1,393,622)	4,037,794	0.13	533,162	(1,274,194)	32,935	(25,484)	0
Total		(2,647,188)	(2,817,654)	(1,300,188)	2,817,654	(3,358,753)	39,395,602		4,621,900		151,127	(14,977)	

Ambulance Services
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	736,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$8,647	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.03
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	(598)	(4,523)	(4,523)	(578)	4,523	(62)	72,000	0.03	2,414	1,774	(16)	12	1,171
2023	1,171	(3,366)	(3,457)	(578)	3,457	(595)	72,000	0.03	2,479	1,306	18	10	2,504
2024	2,504	(4,303)	(4,539)	(578)	4,539	(1,035)	72,000	0.04	2,546	933	43	8	3,488
2025	3,488	(865)	(937)	(578)	937	(1,536)	72,000	0.04	2,615	501	63	5	4,057
2026	4,057	(267)	(298)	(580)	298	(1,641)	74,000	0.04	2,760	539	75	5	4,676
2027	4,676	(140)	(161)	(604)	161	(1,676)	74,000	0.04	2,835	556	91	5	5,328
2028	5,328	(192)	(226)	(623)	226	(1,697)	74,000	0.04	2,912	592	107	6	6,033
2029	6,033	(956)	(1,153)	(623)	1,153	(1,741)	74,000	0.04	2,991	627	127	7	6,793
2030	6,793	(664)	(822)	(610)	822	(1,880)	74,000	0.04	3,072	581	160	7	7,541
2031	7,541	(704)	(895)	(2,498)	895	(8,413)	78,000	0.04	3,325	(7,586)	196	(152)	0
Total		(15,980)	(17,009)	(7,849)	17,009	(20,276)	736,000		27,949		862	(88)	

Public Health
Residential Development Charge Calculation

Assumptions		
Total GFA Growth	222,074	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$22,505,223	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per Capita	\$102
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual Gross Population Growth	Development Charge (inflated) per Capita	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	11,943,883	(3,093,462)	(3,093,462)	0	3,093,462	(42,535)	20,326	102	2,071,645	2,029,110	161,242	13,696	14,147,932
2023	14,147,932	(3,093,462)	(3,177,211)	0	3,177,211	(418,861)	20,326	105	2,127,731	1,708,870	212,219	12,817	16,081,837
2024	16,081,837	(3,093,462)	(3,263,227)	0	3,263,227	(809,006)	20,326	108	2,185,335	1,376,328	273,391	11,699	17,743,256
2025	17,743,256	(3,093,462)	(3,351,572)	0	3,351,572	(1,211,913)	20,326	110	2,244,498	1,032,585	319,379	9,293	19,104,513
2026	19,104,513	(3,093,462)	(3,442,309)	0	3,442,309	(1,626,864)	21,883	113	2,481,850	854,986	353,433	7,909	20,320,840
2027	20,320,840	(3,093,462)	(3,535,503)	0	3,535,503	(2,054,961)	23,439	116	2,730,291	675,330	396,256	6,584	21,399,012
2028	21,399,012	(3,093,462)	(3,631,219)	0	3,631,219	(2,495,855)	23,439	120	2,804,208	308,353	427,980	3,084	22,138,428
2029	22,138,428	(3,093,462)	(3,729,527)	0	3,729,527	(2,950,707)	23,439	123	2,880,126	(70,581)	464,907	(1,235)	22,531,519
2030	22,531,519	(3,093,462)	(3,830,496)	0	3,830,496	(3,422,987)	23,439	126	2,958,100	(464,887)	529,491	(8,717)	22,587,406
2031	22,587,406	(3,093,462)	(3,934,199)	0	3,934,199	(25,977,776)	25,131	130	3,257,502	(22,720,273)	587,273	(454,405)	(0)
Total		(30,934,620)	(34,988,725)	0	34,988,725	(41,011,464)	222,074		25,741,286		3,725,572	(399,276)	

Public Health
Retail Development Charge Calculation

Assumptions		
Total GFA Growth	7,198,237	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$139,934	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.02
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	72,303	(19,235)	(19,235)	0	19,235	(264)	736,966	0.02	14,633	14,369	976	97	87,745
2023	87,745	(19,235)	(19,755)	0	19,755	(2,604)	737,005	0.02	15,030	12,426	1,316	93	101,581
2024	101,581	(19,235)	(20,290)	0	20,290	(5,030)	736,966	0.02	15,437	10,406	1,727	88	113,802
2025	113,802	(19,235)	(20,840)	0	20,840	(7,535)	736,966	0.02	15,854	8,319	2,048	75	124,244
2026	124,244	(19,235)	(21,404)	0	21,404	(10,116)	725,783	0.02	16,037	5,921	2,299	55	132,519
2027	132,519	(19,235)	(21,983)	0	21,983	(12,777)	697,281	0.02	15,824	3,046	2,584	30	138,179
2028	138,179	(19,235)	(22,578)	0	22,578	(15,519)	697,242	0.02	16,251	733	2,764	7	141,682
2029	141,682	(19,235)	(23,190)	0	23,190	(18,347)	697,281	0.02	16,692	(1,655)	2,975	(29)	142,974
2030	142,974	(19,235)	(23,817)	0	23,817	(21,284)	697,242	0.02	17,143	(4,140)	3,360	(78)	142,116
2031	142,116	(19,235)	(24,462)	0	24,462	(161,526)	735,504	0.03	18,574	(142,952)	3,695	(2,859)	(0)
Total		(192,346)	(217,554)	0	217,554	(255,003)	7,198,237		161,476		23,744	(2,520)	

Public Health
Industrial/Office/Institutional Development Charge Calculation

Assumptions		
Total GFA Growth	39,395,602	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$509,670	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.01
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	455,348	(70,057)	(70,057)	0	70,057	(963)	4,021,383	0.01	34,266	33,302	6,147	225	495,022
2023	495,022	(70,057)	(71,953)	0	71,953	(9,486)	4,021,383	0.01	35,193	25,708	7,425	193	528,348
2024	528,348	(70,057)	(73,901)	0	73,901	(18,321)	4,021,383	0.01	36,146	17,825	8,982	152	555,306
2025	555,306	(70,057)	(75,902)	0	75,902	(27,446)	4,021,383	0.01	37,125	9,679	9,996	87	575,068
2026	575,068	(70,057)	(77,957)	0	77,957	(36,843)	3,963,103	0.01	37,577	734	10,639	7	586,447
2027	586,447	(70,057)	(80,068)	0	80,068	(46,538)	3,827,293	0.01	37,272	(9,266)	11,436	(155)	588,462
2028	588,462	(70,057)	(82,235)	0	82,235	(56,523)	3,827,293	0.01	38,281	(18,242)	11,769	(310)	581,679
2029	581,679	(70,057)	(84,462)	0	84,462	(66,824)	3,827,293	0.01	39,317	(27,506)	12,215	(481)	565,906
2030	565,906	(70,057)	(86,748)	0	86,748	(77,519)	3,827,293	0.01	40,382	(37,138)	13,299	(696)	541,371
2031	541,371	(70,057)	(89,097)	0	89,097	(588,312)	4,037,794	0.01	43,756	(544,555)	14,076	(10,891)	0
Total		(700,568)	(792,380)	0	792,380	(928,776)	39,395,602		379,315		105,983	(11,871)	

Public Health
Hotel Development Charge Calculation

Assumptions		
Total GFA Growth	736,000	
Inflation	2.71%	
Interest	Earned	Charged
Opening Balance	1.35% - 2.60%	2.75% - 4.00%
In-year Transactions	0.68% - 1.30%	1.38% - 2.00%
New Debt Term (Years)	10	
New Debt interest	From 2.75% to 4.00%	
Target Reserve Balance 2031	\$3,169	
Discount Rate Applied to Post 2031 Debt Payments	2.60%	

Calculated Development Charge per sqft	\$0.01
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Year	Development Charge Reserve Fund Opening Balance	Development Related Expenditures					Annual GFA Growth (sqft)	Development Charge (inflated) per sqft	Anticipated Development Charge Revenues	In Year Transactions Surplus/ (Deficit)	Interest Revenue/(Expense)		Development Charge Reserve
		Nominal	Inflated	Existing Debt Payments	Debt Proceeds	Additional Debt Payments					Opening Reserve Balances	In-Year	
2022	1,040	(436)	(436)	0	436	(6)	72,000	0.01	373	367	14	2	1,424
2023	1,424	(436)	(447)	0	447	(59)	72,000	0.01	383	324	21	2	1,771
2024	1,771	(436)	(460)	0	460	(114)	72,000	0.01	393	279	30	2	2,083
2025	2,083	(436)	(472)	0	472	(171)	72,000	0.01	404	233	37	2	2,355
2026	2,355	(436)	(485)	0	485	(229)	74,000	0.01	426	197	44	2	2,598
2027	2,598	(436)	(498)	0	498	(289)	74,000	0.01	438	148	51	1	2,798
2028	2,798	(436)	(511)	0	511	(351)	74,000	0.01	450	98	56	1	2,953
2029	2,953	(436)	(525)	0	525	(415)	74,000	0.01	462	46	62	0	3,062
2030	3,062	(436)	(539)	0	539	(482)	74,000	0.01	474	(8)	72	(0)	3,126
2031	3,126	(436)	(554)	0	554	(3,658)	78,000	0.01	513	(3,145)	81	(63)	(0)
Total		(4,356)	(4,927)	0	4,927	(5,775)	736,000		4,315		468	(49)	

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11 CURRENT DC BYLAW AND POLICIES

11.1 Overview

Development charges are fees levied on new residential and non-residential development in York Region, unless specifically exempted by the Act, section 110 of the Municipal Act, or the Region's Development Charges Bylaw. They are paid, normally as part of the building or occupancy permit issuance or occupancy approval and/or the subdivision/severance agreement process.

York Region's current Region-wide bylaw [2017-35](#) (as amended by bylaw [2018-42](#)) came into effect on June 17, 2017 and will expire on June 16, 2022.

The monies collected under the development charge bylaw are maintained in separate reserve funds for each of the services involved. Each development charge payment received is allocated to those reserve funds in accordance with the development charge rate for each service, as statutorily required and the monies collected are expended for the purposes for which the development charge was calculated.

Money borrowed from a reserve fund is returned with interest, at a rate not less than the prescribed minimum rate.

11.2 Schedule of Charges

Table 11-1 shows the development charges currently in effect, inclusive of indexing, as well as a breakdown of the charges by service.

TABLE 11-1
DEVELOPMENT CHARGES (AS OF DECEMBER 3, 2021)

	RESIDENTIAL				NON-RESIDENTIAL		
	Single and Semi-Detached	Multiple Unit Dwellings	Apartments Large Apartment >=700 sq. ft.	Small Apartment < 700 sq. ft.	Per Square Foot of GFA Industrial / Office / Institutional Retail Hotel		
<u>Hard Services</u>							
Water	\$10,578	\$8,516	\$6,188	\$4,521	\$3.96	\$6.39	\$1.12
Wastewater *	\$21,746	\$17,506	\$12,722	\$9,295	\$8.10	\$12.30	\$2.29
Roads	\$26,654	\$21,454	\$15,593	\$11,391	\$9.74	\$33.15	\$6.60
Subtotal - Hard	\$58,978	\$47,476	\$34,503	\$25,207	\$21.80	\$51.84	\$10.01
<u>General Services</u>							
Transit	\$1,509	\$1,214	\$883	\$645	\$0.62	\$2.10	\$0.48
Subway	\$2,921	\$2,350	\$1,709	\$1,248	\$1.05	\$3.59	\$0.70
Waste Diversion	\$47	\$39	\$29	\$20	\$0.03	\$0.03	\$0.03
Police	\$1,042	\$839	\$608	\$445	\$0.57	\$0.70	\$0.14
Paramedic Services	\$456	\$367	\$267	\$195	\$0.08	\$0.08	\$0.02
Public Health	\$134	\$107	\$78	\$59	\$0.01	\$0.01	\$0.00
Senior Services	\$0	\$0	\$0	\$0	\$0.00	\$0.00	\$0.00
Social Housing	\$242	\$194	\$141	\$103	\$0.00	\$0.00	\$0.00
Growth Studies	\$0	\$0	\$0	\$0	\$0.00	\$0.00	\$0.00
Public Works	\$234	\$190	\$136	\$100	\$0.13	\$0.12	\$0.05
Court Services	\$45	\$38	\$28	\$20	\$0.02	\$0.03	\$0.01
Subtotal - General	\$6,630	\$5,338	\$3,879	\$2,835	\$2.51	\$6.66	\$1.43
Total	\$65,608	\$52,814	\$38,382	\$28,042	\$24.31	\$58.50	\$11.44

* Nobleton wastewater charge applies instead of York Region's wastewater charge in the Village of Nobleton
Does not include GO Transit development charges

11.3 Services Covered

The following table details the services covered under the 2017 Bylaw:

TABLE 11-2
SERVICES COVERED UNDER THE 2017 BYLAW

Service ¹	Service components
Roads	Growth structures (grade separations), new interchanges, midblock crossings, growth new infrastructure (missing links), growth widening to 4 and to 6 lanes, road improvements to support transit, environmental assessment, design, survey and property acquisition for future capital projects, Transportation Demand Management and Active Transportation programs and initiatives
Water	Planning and studies, storage, pumping, wells and water treatment, watermains and cost-shared projects (with Toronto and Peel)
Wastewater	Planning and studies, pumping, treatment, conveyance and cost-shared projects (with Peel)
Waste Diversion	Facilities, equipment and growth studies to expand on diversion capacity
Toronto-York Spadina Subway Extension	Land, stations, platforms, enclosures, subway infrastructure, vehicles, rights of way, system tracks, tunnel and single system, crossovers, and subway commuter facilities
Transit	Fleet expansion (YRT/Viva/Mobility Plus), transit garages, bus terminals and stops, electric bus infrastructure and charging stations, expansion of the automated fare collection system, bus rapid transit infrastructure and curbside service
Police	Facilities, vehicles and equipment, including communication, business intelligence and radio equipment
Paramedic services	Facilities and vehicles, including new stations and ambulances
Public Health	Facilities
Social Housing	Facilities
Senior Services-Capital Component	Facilities
Public Works	Facilities, vehicles and equipment to support Roads traffic operations
Growth Studies	Growth studies of a corporate nature to facilitate the implementation of the Region's capital program, such as Development Charges Background Studies, Municipal Comprehensive Review and Official Plan updates

¹ Financing costs associated with all services were included (where applicable).

11.4 Timing of Development Charge Calculation and Payment

Bill 108 amended the Act, permitting eligible development to freeze their development charges rates at site plan or zoning bylaw amendment application.

Development charges are ordinarily payable in full upon issuance of a building permit with respect to development, with the following exceptions:

- Eligible rental (that is not non-profit), institutional and non-profit development can phase in their development charges payments beginning at occupancy permit, or first occupancy, and for a period of between 5 and 20 years.
- In the case of development in a residential plan of subdivision, charges for the hard service component (water, wastewater and roads) must be paid at the time of Regional subdivision agreement signing. In accordance with the bylaw, payment must be made by certified cheque. If under extraordinary circumstances, the Regional Treasurer of York Region can determine that other forms of payment are appropriate, provided that it is in a format acceptable to the Treasurer of York Region.

The policy regarding full registration and phased payment of development charges in conjunction with build-out of residential subdivisions will be continued with the enactment of a revised development charges bylaw.

In the case of a non-residential building that includes both retail and non-retail uses, the determination of which non-residential charge is to apply to the floor area is based on the principal use of the building. The principal use is that which has the greater gross floor area. If no single use has 55 per cent or greater of the total gross floor area, then the development charge payable on the total gross floor area shall be the average of the two non-residential charges payable. Residential uses in mixed use buildings are charged according to the type and number of residential units and non-residential uses are charged in accordance with the type and quantity of gross floor area.

11.5 Indexing

The Development Charge rates are indexed for inflation on July 1 each year in accordance with the Statistics Canada Quarterly, Non-Residential Building Construction Price Index-Toronto (Table 18-10-0135-01).

11.6 Interest Policy – Under Section 26.1 and 26.2 of the Act

The Region's [DC Interest Policy](#) applies to the charging of interest, as permitted under sections 26.1 and 26.2 of the Act to developments that freeze development charges at site plan or zoning bylaw amendment application (Section 26.2 of the Act) or those developments who phase in their development charge payments (under Section 26.1 of the Act).

An interest rate of 5% will be charged, which will be compounded annually and accrues from the date of the eligible application until the date the total accrued amount is fully paid.

11.7 Redevelopment Credits

The 2017 Bylaw provides for a development charge reduction for certain qualified residential and non-residential redevelopment projects . If redevelopment occurs within 48 months of a building's demolition or conversion, a credit towards the development charges payable may be offered. The credit is intended to encourage timely redevelopment after demolition.

For residential developments, or in the case of the residential uses in a mixed-use building or structure, the credit amount is calculated by multiplying the applicable development charge by the number of dwelling units, according to type, that have been or will be demolished or converted to another principal use.

For non-residential uses or non-residential uses in a mixed-use building or structure, the credit amount is calculated by multiplying the applicable development charges by the gross floor area that has been or will be demolished or converted to another principal use.

The amount of credit given will not exceed the total amount of the development charges otherwise payable with respect to the redevelopment.

For the purposes of the above, the onus is on the applicant to produce evidence to the satisfaction of York Region to establish the following:

- The number of dwelling units that have been or will be demolished or converted to another principal use; or
- The non-residential gross floor area that has been or will be demolished or converted to another principal use

For buildings deemed to be derelict by the relevant area municipal Council, the credit is extended for an additional 72 months in a declining scale. The table below details the calculation of credits provided to derelict buildings.

**TABLE 11-3
CALCULATION OF CREDITS FOR DERELICT BUILDINGS**

Number of months from date of demolition permit to date of building permit issuance	Credit provided (%) ¹
Up to and including 48 months	100
Greater than 48 months up to and including 72 months	75
Greater than 72 months up to and including 96 months	50
Greater than 96 months up to and including 120 months	25
Greater than 120 months	0

¹ Credits are calculated as a percentage of the prevailing development charge rates for the class of non-residential development or type of dwelling demolished.

11.8 Exemptions

11.8.1 Exemptions from the payment of development charges

The 2017 Bylaw includes a number of statutory and non-statutory exemptions.

Subject to restriction under the Regulations, the 2017 Bylaw, by way of the Act, provided residential development charges exemptions for additional dwelling units in existing residential buildings. Changes to the Act, through Bills 108 and 197 provide for expanded and additional residential exemptions, which will be discussed in Chapter 13 of this Background Study.

The Region also currently offers conditional development charges exemptions (full or partial) for affordable rental housing under the [Municipal Housing Facilities bylaw](#).

Finally, the Region provides development charges deferrals/exemptions, for housing built by Habitat for Humanity. These deferrals/exemptions are dependent on matching from local municipalities.

The table below provides a list of statutory and non-statutory non-residential exemptions.

TABLE 11-4
NON-RESIDENTIAL DEVELOPMENT CHARGE EXEMPTIONS:
STATUTORY AND NON-STATUTORY

Type of Use	Statutory	Non-Statutory
Institutional	<ul style="list-style-type: none"> • Public Schools • Municipal buildings 	<ul style="list-style-type: none"> • Addition or expansion that is less than 50% of the original gross floor area • Public Hospitals receiving aid under the <i>Public Hospital Act</i> • Non-residential farm buildings • Accessory structures that are less than 100m² of gross floor area • Lands, buildings or structures used for cemeteries or burial grounds exempt from taxation under the <i>Assessment Act</i> • Buildings owned by a non-profit corporation with purposes of a charitable nature and provide a facility for community use, where an area municipality agrees to a similar exemption

Type of Use	Statutory	Non-Statutory
		<ul style="list-style-type: none"> • Development of a place of worship for gross floor area up to a maximum of 5,000 square feet, or gross floor area that relates to the portion of the structure used principally for worship, whichever is greater • Land owned or leased to a university , receiving funding from the government for the purposes of post-secondary education • Land owned by and used for the purposes of a private school that qualify as exempt from taxation under the <i>Assessment Act</i>, and where an area municipality agrees to a similar exemption
Office		<ul style="list-style-type: none"> • Addition or expansion that is less than 50 per cent of the original gross floor area • Accessory structures that are less than 100m² of gross floor area
Industrial	<ul style="list-style-type: none"> • Addition or expansion if it is less than 50% of the original gross floor area 	<ul style="list-style-type: none"> • Accessory structures that are less than 100m² of gross floor area
Retail		<ul style="list-style-type: none"> • Accessory structures that are less than 100m² of gross floor area

11.8.2 Construction types exempt from development charges

The following construction types are exempt from Regional development charges:

- Accessory buildings associated with residential development (e.g., garages, garden sheds, gazebos, swimming pool enclosures, etc.)
- Additions and alterations to existing dwellings including fireplaces, stoves, decks, porches, sunrooms, etc.
- Temporary buildings (e.g., special occasion buildings, tents, temporary sales offices)
- Repairs to restore existing buildings that do not require rezoning or variance
- Designated structures: retaining walls, exterior storage tanks, pedestrian bridges, dish antennae, crane runways and solar collectors
- Interior alteration to non-residential buildings which do not change the use of the building, including: the finishing or refinishing of non-residential floor areas (note: the construction of a mezzanine would not constitute “interior alteration” in this context and may be subject to development charges)
- Buildings which do not require a permit

11.9 Deferral options

Subject to the terms and conditions of the applicable policies, the Region offers a number of development charges deferral options which are detailed below.

11.9.1 Retail Buildings

A retail development has the option of securing development charge payment obligations through the provision of a Letter of Credit at the point at which development charges would otherwise be payable. The posted Letter of Credit shall be drawn upon in equal annual amounts over a three-year period, beginning with the first anniversary of building permit issuance.

11.9.2 High-Rise Residential Buildings

This deferral is dependent upon the developer of the high-rise residential building providing a Letter of Credit at the time of building permit issuance to secure the payment of Regional development charges. The Letter of Credit shall be drawn upon at the earlier of, 18 months after building permit issuance, or registration of the condominium¹.

11.9.3 Office Buildings

This deferral is dependent upon the developer of the office building providing a Letter of Credit at the time of building permit issuance to secure the payment of Regional development charges. The Letter of Credit shall be drawn upon 18 months after building permit issuance or occupancy permit/first occupancy (see policy for further details)³.

11.9.4 Purpose-Built Rental Buildings

For the purposes of this deferral, the development may be registered as a condominium, but it must be entirely operated as a rental property for a period of not less than 20 years. In order to be eligible, the development must be a minimum of four (4) storeys that are above grade (note that this requirement is addressed in Chapter 13 to the Background Study). This deferral is for 36 months after building permit issuance or occupancy permit/first occupancy (see policy for further details).

11.9.5 Large Office Buildings

Developers of large office buildings which are a minimum of 75,000 square feet and on the Regional Centres and Corridors or specific Local Centres may defer payment of Regional development charges subject to terms and conditions in the policy. The duration of the development charges deferral will vary based on the eligible gross floor area of the building. This deferral is for 5-20 years after building permit issuance or occupancy permit/first occupancy (see policy for further details).

¹ Development Charges Policies (as per 2007 DC Bylaw Review/Background Study/Development Charge Pamphlet)

11.9.6 Affordable, Purpose-Built Rental Buildings

For the purposes of this deferral, the development may be registered as a condominium, but it must be entirely operated as a rental property for a period of not less than 20 years. This deferral is for 5-20 years, after building permit issuance or occupancy permit/first occupancy, and will vary based on the location, total number of units and number of units that are two or more bedrooms (see policy for further details).

11.9.7 Open Air Motor Vehicle Storage Structures

Developers of open-air motor vehicle storage structures may defer payment of Regional development charges, beginning on the day of building permit issuance and continuing until the structure becomes enclosed (as defined in this policy).

11.9.8 Positive Business Expansion

Adopted by Regional Council on January 15, 1998, Bylaw No. A-243-98-5, the Chief Administrative Officer and Regional Treasurer will be authorized to negotiate deferred non-residential development charge agreements with non-residential development proponents, as long as the Local Municipality has agreed to a similar deferral.

Deferrals, in these instances should lead to:

- Increased long term non-residential assessment
- Job creation for Regional residents
- Economic activity (including construction, business spin-offs, etc.)

In instances where a deferral agreement has been executed under this Bylaw, the Chief Administrative Office and Regional Treasurer shall submit a report to Council immediately following the negotiation and execution of any agreement, setting out the terms of the agreement.

11.10 Transitional collection policies

11.10.1 Vacant lots of record

If the subject lot/subdivision was created prior to the imposition of a York Region's lot levy/development charge (i.e. March 1979 for residential development; March 1988 for non-residential development), there will be no requirement to pay the current prevailing development charge prior to building permit issuance if the lot has remained vacant and has not required any planning approvals in the interim period.

11.10.2 Subdivisions/lots registered and/or created prior to November 23, 1991, which require additional development approvals under authority of the Act

If a Regional lot levy/development charge has been previously paid in its entirety to the Region as a condition of subdivision (subdivision agreement) or land development (severance) approval, and there have been no amendments to the subject lot in the interim period, there will be no further requirement to pay the current Regional development charge ("top-up") at the time of building permit issuance.

If a development proponent has provided other monetary contributions or undertaken capital works in lieu of previous levy/development charge payments, there will be a credit granted against the payment of current Regional development charges, in accordance with the Act.

11.10.3 Residential subdivisions registered after November 23, 1991

If a development proponent has paid for the applicable roads, water and sanitary sewer components of the Regional development charge, subject to a subdivision or development charge agreement entered into with the Region, the general administration component of the Regional development charge should be collected by the Area Municipality, at the prevailing rate prior to building permit issuance.

All unregistered plans of subdivision will be required to enter into a development charge agreement with York Region that will impose the current prevailing road, water and sewer service component of the Regional development charge as indicated by a schedule to the Bylaw prior to execution of the agreement. The proponent shall pay the general administration component of the Regional development charge, and balance of the Regional development charges outstanding, at the prevailing rate to the Area Municipality prior to building permit issuance.

11.10.4 Non-Residential subdivisions registered after November 23, 1991

If a non-residential subdivision is created by plan of subdivision after November 23, 1991, then the applicable Regional development charge for the roads, water, sanitary sewer and general administration components of the charge shall apply at the prevailing rate, prior to building permit issuance.

11.10.5 Development lots created by severance after November 23, 1991

Lots created by severance after November 23, 1991 will be required to pay the current prevailing Regional development charge prior to building permit issuance.

11.11 Other policy detail

11.11.1 Collection responsibility policy

The Treasurer of the York Region shall collect development charges as follows:

- In the case of a residential subdivision, collection will occur upon the owner entering into the development charge agreement respecting such plan of subdivision for the applicable roads, water and sewer components of the development charge at the prevailing rate as determined by the designated schedule to the Development Charge Bylaw
- In cases where a special agreement has been entered into between York Region and the owner providing for either provision of services in lieu of payment and/or providing for a payment at a time other than building permit issuance or subdivision agreement execution

Where York Region has collected a development charge in a format acceptable to the Treasurer of York Region, the Treasurer of York Region will notify the Treasurer of the Local Municipality in which the lands are located that the charge has been collected.

The Treasurer of the Local Municipality, where development is located and is subject to development charges, shall collect such Regional charges at the prevailing rate when due, as follows:

- In the case of residential subdivisions, collection will occur at building permit issuance stage for the general services component of Regional development charges, unless notified otherwise by York Region;
- In the case of non-residential subdivisions, collection will occur at building permit issuance for all services, unless notified by York Region that it has entered into an agreement concerning payment with a particular landowner;
- In the case of non-subdivision developments, collection will occur at building permit issuance for all services, unless notified by York Region that it has entered into an agreement concerning payment with a particular landowner;
- The Treasurer of the Local Municipality shall collect the charge imposed by the upper tier municipality when due and shall remit the amount of the charges collected to the Treasurer of York Region, on or before the 25th day of the month following the month in which the charge is received by the Local Municipality.

11.11.2 Full registration/phased development charges payment – residential subdivisions

York Region's Solicitor is authorized to prepare agreements pursuant to the Act for the purposes of allowing subdivision registration/phased payment of development charges if the following conditions are met:

- The Regional Corporation is in receipt of a written request from a sub-divider to enter into such an agreement;
 - a) The draft approved plan of subdivision is a minimum of approximately 100 units
 - b) The phases contemplated shall be a minimum of approximately 50 units
- The full development charge payment for the initial phase is made at the time of the execution of the agreement;
- The registration/phased development charge method of payment proposal be coordinated with and incorporated into the Local Municipality and Regional subdivision agreements;
- The payment of development charges for a subsequent phase must be coordinated with the provisions of the subdivision securities related to Local Municipal services for a subsequent phase; and
- For all subsequent phases of the development as specified in the agreement, the full Regional development charge shall be paid directly to the Region prior to any building permit issuance in that phase.

(Adopted by Regional Council June 22, 1995 and amended January 15, 1998)

11.11.3 Issuance of any building permits prior to registration

If an Local Municipality issues building permits for any reason prior to execution of York Region's

development charge agreement and/or registration of the subdivision (e.g. model homes), the Local Municipality is responsible for collecting the entire Regional development charge at the time of building permit issuance, and so advising York Region's Finance Department.

11.11.4 Land severances on or after November 23, 1991

Land severances approved on or after November 23, 1991 will not have a condition attached with respect to the payment of York Region's development charges. Any resulting new lots will be subject to York Region's development charges, at the prevailing rate, prior to building permit issuance.

11.11.5 Part lot control exemption approved by York Region after November 23, 1991

Any additional residential units created in a Registered Plan of Subdivision by Part Lot Control Exemption, where the exemption has received York Region's approval, will be subject to York Region's development charges. The applicant will be required to enter into an agreement with York Region pursuant to the Act, with respect to payment of the appropriate development charges. York Region will collect the road/sewer/water component of the development charges at time of execution of the agreement, and the Local Municipality will be forwarded a copy of the Agreement to ensure the appropriate general services component is collected at building permit issuance.

11.12 Alternative collection policies (old s.13, s.14 -DC Act, 1990 credits)

11.12.1 Development charge credit area - Kleinburg

Specific lots in the Kleinburg area within the City of Vaughan, as identified in Schedules "C" and "D", be incorporated as a water and/or wastewater development charge credit area with respect to payments previously made for growth-related water and sewage infrastructure.

11.12.2 Contingent development charges

Specific contingent growth-related capital costs may be incorporated into the calculation of a particular component of York Region's development charges rate. A schedule of pending rate increases, that become effective thirty days after the date of occurrence of a specific event, or events, is shown in Schedule G to the 2022 Bylaw.

11.12.3 Reserve funds

Development charges shall be deposited in a specific reserve fund established for each individual Regional (and local boards) service, in accordance with the Act.

- The Treasurer shall prepare and present to Council an annual statement of the development charge reserve fund in accordance with the Act, including, for the preceding year
- Statements of the opening and closing balances of the reserve funds and of the transactions relating to the funds

- Statements identifying all assets whose capital costs were funded under a development charge bylaw during the year, and for each asset mentioned previously, the manner in which any capital cost not funded under the Bylaw was or will be funded
- A statement as to compliance with subsection 59.1 (1) of the Act (prohibition against additional levies)
- Any other information that is prescribed

11.12.4 Complaints

Under section 20 of the Act, any person required to pay a development charge, or the person's agent, may complain to the council of the municipality imposing the development charge that,

- The amount of the development charge was incorrectly determined;
- Whether a credit is available to be used against the development charge, or the amount of the credit or the service with respect to which the credit was given, was incorrectly determined; or
- There was an error in the application of the Development Charge Bylaw.

York Region has established a detailed Development Charge Complaint procedure under authority of the Act.

11.13 Development charges credit policy

A developer may undertake or finance York Region's capital works prior to the planned York Region's capital program in consideration for development charge credits and potential recovery of non-growth costs, providing the following:

- For purposes of quantifying the costs of works eligible for development charge credits, York Region will establish a scale of project(s) to allow for unit prices for smaller sized projects—projects that have an estimated cost lower than \$1 million—undertaken by developers, to be differentiated from large sized projects—projects that have an estimated cost greater than \$1 million
- York Region shall endeavour to assist developers by liaising with utilities when possible where projects require utility relocation
- Non-growth recovery – Developers are not eligible to recover non-growth costs
- For capital works not included in the ten-year forecast, York Region will continue to require the developer to make a non-refundable contribution to the non-growth costs of projects in order to expedite the works' construction/reconstruction timing
- Application for development charge credits will only be considered if the works are included in the Regional DC Bylaw. The eligible credit shall be limited to the value of the works in the DC Bylaw
- To be considered for advancement, generally the service-specific development charges, and in all cases the total development charges generated by the development associated with the capital works must be at least twice the value of the works for which the credit/reimbursement is being requested

- Development charge credits will not be offered unless the previous year's DC collections exceed the estimated current year DC-related debt servicing obligations (principal and interest) by at least the amount of the DC credit requested, both in total and for the specific service as determined by the Commissioner of Finance
- Advancement of the project cannot result in a negative impact to the Region's Annual Repayment Limit, as determined by the Commissioner of Finance
- The developer will be required to fund 100% of the cost of the capital works, and recover eligible growth-related costs, discounted for financing costs based on the project's timing in the Capital Plan as determined by the Commissioner of Finance. Non-growth costs will not be eligible for recovery
- Development charge credits will be issued up to a maximum 50% of the service-specific DCs payable upon each subdivision registration or building permit issuance, as applicable, until the total eligible growth-related costs are recovered
- The Region will pay for intersection and minor road improvements that are recommended in a development-related traffic study approved by the Region and are constructed in their ultimate location
- Reimbursement will be provided from the Roads DC reserve in the year the works are completed, provided sufficient funds are available in the Regional annual budget
- For roads (intersections and minor road improvements) reimbursement requests, the Commissioner of Transportation Services shall be authorized to approve the eligible cost of the works

The Region's [Development Charge Credit Policy](#) was first adopted by Regional Council on May 9, 1996 and May 23, 1996, with subsequent revisions adopted by Council on June 25, 1998 and November 21, 2013.

Under the previous policy (1998), in circumstances where a landowner has paid for services that were intended to be funded by development charges, that landowner receives a credit against development charges that were otherwise payable, in the full amount of the development charge payable for the particular service involved. This created financing difficulty in that it confines the use of such development charges to the particular work involved and thereby reduces the development charge funds available for system-wide costs, such as major trunk sewers, treatment plants and pumping stations. In 2013, revisions to the development charge credit policy were made in order to address this issue and are outlined below:

- The developer shall forward a written request to Regional Council to consider a development charge credit matter, prior to construction of the works. There are no retroactive development charge credit provisions for works previously constructed by a developer without Regional Council approval.
- The costs for the works to be considered for development charge credit must be included in York Region's Development Charge Bylaw.
- Regional Council shall authorize and agree to a fixed development charge credit amount prior to allowing the construction of the works to be carried out. This is particularly important when the developer is constructing the works and the contract award process may not be as public as York Region's tendering process. Any amount agreed to for credit will be compared against awarded York Region's contracts in

order to verify pricing accuracy. The developer will be required to provide York Region with a tender form in York Region's format for comparison with recent York Region tenders.

- For Regional water and wastewater infrastructure, York Region will determine responsibility for the design, tendering and construction with the developer responsible for the front-end financing.
- In instances where York Region agrees to permit a landowner to construct and front-end finance a work that is within the development charge program, the development charge credit shall be paid as follows:
 - a) Where the cost of the work is less than the development charges payable for the service involved, by the build-out of the landowner's development, a DC credit will be issued at subdivision registration. This credit is for the units involved in each subdivision, and will amount to the average cost of the work per unit. The average cost per unit is calculated as the cost of the infrastructure project involved, divided by the number of single detached equivalent units within the landowner's total development, and shall not exceed the prevailing rate for the service component. The landowner will continue to receive such credits until reimbursed for the cost of the infrastructure project, without interest or indexing.
 - b) Where the cost of the work exceeds the development charge payable for the service involved, by build-out of the landowner's development, the development charge credit will amount to 50% of the development charge payable for the service involved. The remaining development charge credits will be paid beginning in the year that the project was originally scheduled to commence on an equal basis over the remaining term of the Bylaw i.e. 2017 to 2031. This payment will be based on a long-term credit payment arrangement, as approved by Regional Council, the timing of which recognizes the need to provide for the financing requirements of broader system-wide costs for the service involved and may include indexing provision.
- The credit will be restricted to the service component of the Regional development charge that the developer is required to pay at the registration/subdivision agreement stage (i.e. roads credits restricted to road development charge component that the developer is required to pay at registration).
- Any development charge credit request that exceeds the development charges payable by the subdivider for a particular service (i.e. roads, water or sewer) will be subject to a negotiated long-term credit arrangement as approved by Regional Council and shall include a provision to consider the system-wide costs for the service component.
- The developer shall, where warranted, be required to make a contribution toward the non-growth component costs based on the fact that the works are being constructed in advance of the Regional capital program (to minimize impacts on existing residents), particularly if the Regional Corporation is not in a position to adjust budgets, to provide for the non-growth portion of the project in a budget year.

- a) Where the capital works are included in the ten-year capital program forecast and the works are advanced for construction to the current budget year, York Region shall reimburse the developer for an amount equivalent to the present value of York Region funding the non-growth portion ahead of the planned program expenditure. The present value will be calculated based on the subject works, and will be based on an interest rate reflecting an average of long term investment and debenture rates available to the Regional Corporation, adjusted to reflect future capital cost indexing.
 - b) In situations where York Region cannot adjust its capital budget to fund the Regional share of the growth and non-growth costs in a budget year, the development charge credit request may be denied and/or the developer requested to make a larger non-recoverable contribution. In addition, York Region may enter into a deferred repayment of the growth and non-growth components until a time consistent with the planned capital program, subject to approval by Council.
 - c) Where the capital works are not included in York Region's ten-year capital program forecast, the developer will be required to make a non-recoverable contribution for the full value of the non-growth costs.
- The credit for services constructed will be included in the York Region's subdivision agreement.
 - The developer shall secure the total costs of the works by a Letter of Credit, in a format satisfactory to York Region's Treasurer. The Letter of Credit will also secure payment of the development charge component under consideration for credit. The Letter of Credit will be held until such time as the capital works are constructed to the satisfaction of the Regional Corporation.
 - The Letter of Credit will be released in the following manner:
 - a) Where York Region has constructed the capital works the Letter of Credit shall be released in accordance with the holdback release provisions in the terms of the construction contract entered into by the Regional Corporation; or
 - b) Where the developer has constructed the capital works, a 10% holdback of the value of the works shall be retained by York Region for a one-year maintenance/warranty period after satisfactory construction of the works.
 - A cost-recovery fee applicable to each credit request will be charged for engineering, legal and finance department costs incurred related to preparation and administration of the development charge credit agreement. The fee will be structured in the following manner when the developer constructs the capital works, the credit arrangement is incorporated in the subdivision agreement and the credits achieved upon satisfactory construction of the works:
 - a) A minimum fee of \$1,000 shall be required to review a development charge credit request.
 - b) A fee equivalent to 1.0% of the value of the works shall be applicable for all capital works under \$1 million.

- c) A fee up to 1.0% of the value of the works shall be applicable for all capital works greater than \$1 million.
 - d) In instances where York Region's fees to prepare and administer the agreement are beyond the cost recovery provisions outlined above, such fees shall be separately quantified and invoiced to the developer.
- Where York Region constructs the capital works and the credit arrangement is to be administered in lieu of payment of development charges at the time of subdivision(s) registration, an administration fee up to 1.0% of the value of the works shall be required, in addition to the fees outlined above.

Note: Where York Region enters into an agreement to advance the construction timing of capital works in lieu of payment of development charges at the time of subdivision(s) registration, the above mentioned fee shall be based on the awarded price of the works. If the total project cost exceeds the awarded price by 20%, York Region's Treasurer may apply an additional administration fee to cover the cost associated with administering the agreement.

11.14 Development charges roadworks credits

11.14.1 General conditions

In general, York Region will consider development charge credits for road-related works constructed to the ultimate location, as outlined in a [Guideline for applicants](#). The ultimate location is defined by the next planned upgrade for a road section as detailed in the background report for the Development Charge Bylaw. The credit will be based on the capital cost of the works with each credit application being reviewed individually. The credit will be defined by that portion of materials placed in their ultimate location that can be reused by York Region. Development charge credits will be considered for the following:

- Construction of intersection improvements
- Construction of complete road sections
- Utility relocations (York Region's share of the cost)
- Contract design and inspection costs where the developer submits the contract drawings, design files and specification documents in the York Region approved format and the work is constructed in the ultimate location

In calculating the credit, staff will determine the work and materials that do not require further reconstruction by York Region in the development of the ultimate configuration. Development Charge credits will not apply to the following:

- Land purchases
- Overall project management, co-ordination or administration
- Construction contingencies
- Road improvements required for the exclusive use of a private entrance including new signals or signal alterations, turning lanes, etc.
- Construction of that portion of a local road within the York Region's Right of Way

- Removals, unless the new works are constructed to the ultimate location

To obtain credits, the developer must submit a list in York Region's tender format of detailed items which are to be considered as recoverable, including percentages recoverable from York Region. These prices will be compared to recent unit prices for York Region's contract prices. York Region will establish a scale of project(s) to allow for unit prices for smaller sized projects undertaken by developers to be differentiated from larger sized projects.

Other costs may be recommended to be eligible by the Commissioner of Transportation Services, when such services are deemed to be in the interest of York Region subject to approval by Regional Council.

11.14.2 Non-growth recovery

For capital works included in the 10-year forecast, York Region will endeavour to recognize intersection improvements (and scheduling) as part of the capital forecast, and consider their improvement prior to the ultimate reconstruction of a road. The discount rate used by York Region to account for the differential in non-growth expenditure timing will be adjusted to reflect future capital cost indexing.

For capital works not included in the 10-year forecast, York Region will continue to require the developer to make a non-refundable contribution to the non-growth costs of projects in order to expedite the works' construction timing. In order to recover a portion of the non-growth costs, Regional Council is required to endorse the projects for construction in York Region's ten-year capital program.

Note: York Region shall endeavour to assist developers by liaising with utilities when possible where projects require utility relocation.

A cost-recovery fee applicable to each credit request will be charged for preparation and administration of the development charge credit will be structured in the following manner where the developer constructs the capital works and the credit arrangement is incorporated in the subdivision agreement and the credits achieved upon satisfactory construction of the works:

- A minimum fee of \$1,000 shall be required to review a DC credit request
- A fee equivalent to 1.0% of the value of the works shall be applicable for all capital works under \$1 million
- A fee up to 1.0% of the value of the works shall be applicable for all capital works greater than \$1 million

12 DC BYLAW AND POLICIES: AREAS OF REVIEW

The following sections outline the development charges policies and bylaw considerations that will be part of the 2022 Bylaw:

- Areas of the Bylaw and policies that have been reviewed but remain unchanged
- Areas of the Bylaw and policies that have been reviewed and updated
- Policies that have been amended

12.1 Areas of the Bylaw and Policies reviewed but unchanged

The following are areas of the Bylaw and associated policies that were reviewed but remain unchanged.

12.1.1 Region-wide versus area-specific development charges

Under section 10 of the Act, before passing a development charges bylaw, Council must consider the use of area-specific development charges. Area-specific development charges are most appropriately applied to clearly defined localized area(s) where the growth-related infrastructure provides a clear benefit to the anticipated development.

Area-specific development charges are also most often used to recover costs for hard infrastructure or engineering projects such as water towers, water mains, sewer pumping stations, sewer mains and sometimes roads and related infrastructure.

Historically, the Region has levied a uniform, Region-wide charges for its services, with the exception of the water resource recovery facility located in the Village of Nobleton.

Ontario municipalities do not typically levy area-specific development charges for “soft” services or protection services such as police, social housing, paramedic stations or others. These types of services are typically planned for and delivered on a municipality-wide basis and therefore a uniform approach would be the most appropriate.

In February 2022, Council endorsed in principal, the use of a uniform Region-wide development charges rate structure to recover the growth-related costs for all services contained in the 2022 Development Charges Background Study and Bylaw, including the Yonge North Subway Extension. Key reasons for continuing with a Region-wide, uniform approach for all services were:

- Majority of the Region’s services provide a Region-wide benefit, whereas area-specific development charges are usually more suitable for new, or currently unfunded, standalone water/wastewater systems where the benefitting area is clearly defined
- Regional services are managed as a network and the level of service is relatively consistent across the Region
- Aligns with the use of uniform Region-wide property taxes to fund the non-DC share of costs
- Data and robust methodologies are available to establish the nexus between the infrastructure and growth

- Deviation from a uniform, Region-wide approach may set a precedent

The Region retained Hemson Consulting to conduct a detailed analysis of uniform region-wide rate structure and two area specific alternatives for the Yonge North Subway Extension. This analysis can be found in Appendix B of this background study.

12.1.2 Threshold to delineate large and small apartments

As part of the 2017 Bylaw update, Council revised the threshold to delineate large and small apartments, from 650 sq. ft. to 700 sq. ft. Staff committed to reviewing this threshold as part of the work on the next DC bylaw.

An analysis using 2016 Census and size data of close to 37,000 apartments confirmed that a 700-square-foot threshold continues to be appropriate to delineate large and small apartments in York Region for the purposes of the 2022 Bylaw. In November 2021, Council approved maintaining this delineation point for the 2022 Bylaw.

12.2 Areas of the Bylaw and policies that have been reviewed and updated

The following are areas of the Bylaw and associated policies that were reviewed and updated.

12.2.1 Treatment of Stacked Townhouses

The Region's 2017 Bylaw has four categories of residential charges: single and semi-detached dwellings, multiple-unit dwellings, large apartments, equal to or greater than 700 sq.ft., and small apartment less than 700 sq.ft.. Stacked townhouses were charged a multiple unit dwelling rate.

The differences in the rates are based on the average anticipated occupancy levels, or persons per unit, for each residential category. The 2022 Bylaw and Background Study uses Statistics Canada data to forecast persons per unit in each type of dwelling to determine the residential development charges rates. Statistics Canada definition of apartments includes stacked townhouses, therefore treating stacked townhouses as apartments aligns with this.

Further, a review of over 1,500 stacked townhouses built in the Region since 2016 showed that they are more comparable to large apartments in features and size than to conventional townhouses. The average household occupancy, or persons per unit, in a typical stacked townhouse is also found to more closely resemble a large apartment.

In November 2021, Regional Council approved treating stacked townhouses as apartments in the 2022 Bylaw.

12.2.2 Treatment of residential dwellings less than 700 sq. ft. (“Tiny homes”)

“Tiny homes” are small, self-contained residential units built for year-round use with a living area that includes a kitchen, dining, bathroom and sleeping area. Under the 2017 Bylaw, a detached tiny home would have been assessed at a single-detached dwelling rate. However, based on observed sizes across Ontario, these homes appear to be closer to, if not smaller than, small apartments.

Through Council approval in November 2021, any residential dwelling in York Region less than 700 sq. ft. will be charged the small apartment rate in the 2022 Bylaw.

12.2.3 Statutory DC Exemptions – Residential and Non-Residential

Through changes to the Act and accompanying regulations, additional exemptions for both residential and non-residential developments have been provided.

Subject to [restrictions](#), the Act now not only provides development charges exemptions for additional dwellings in, or ancillary to, existing residential buildings, but also for additional dwellings in, or ancillary to, new residential buildings.

The Regulations also provide that common areas in existing rental buildings can be converted into residential units and be exempt. This conversion exemption is limited to additional units equivalent to the greater of 1 and 1% of existing units.

Finally, through Bill 213, development on land owned or leased to a university, receiving funding from the government for the purposes of post-secondary education, is exempt from development charges.

The 2022 Bylaw will reflect these exemptions.

12.2.4 Timing of payment – phased development charges payments

The 2022 Bylaw will also be updated to incorporate changes to the Act which provide that rental housing, that is not non-profit, institutional development and non-profit housing can phase in their development charges payments.

Development charges for rental housing, that is not non-profit, and institutional developments will be paid, beginning at occupancy, in equal annual instalments over five years. Development charges for non-profit housing are to be paid, beginning at occupancy, over 20 years.

12.2.5 Definition of ‘general services’

The definition of general services has been expanded to include the YNSE. In addition, the following general services’ names have been changed:

- Social Housing to Housing Services
- Senior Services Capital Component to Long-Term Care/Seniors Services
- Paramedic Services to Ambulance Services

12.3 Areas of the Bylaw and Policies that have been amended

The following summarizes changes to development charges policies approved by Council through the 2022 Bylaw update process.

12.3.1 Development charges policies amended

On November 25, 2021, Regional Council approved changes to a series of development charges policies, summarized in the Table 12-1 below.

**TABLE 12-1
SUMMARY OF COUNCIL-APPROVED DEVELOPMENT
CHARGES POLICY CHANGES**

Deferral Policy	Key Changes
Purpose-Built Rental	Removal of four-storey requirement; to align with current legislation and other Regional development charges deferral policies and to provide clarification
Office Buildings Open Air Motor Vehicle Storage Structures	To align with current legislation and other Regional development charges deferral policies and to provide clarification
Interest Policy	Provision of up to a 14-day grace period (contingent of local municipal matching)

13 ASSET MANAGEMENT PLAN

13.1 Background

Under the Act, municipalities proposing to enact a Development Charges Bylaw are required to submit an Asset Management Plan (AMP) as part of the Development Charges Background Study.

The asset management plan shall:

1. Deal with all assets whose capital costs are proposed to be funded under the DC by-law
2. Demonstrate that all the assets mentioned in item 1). are financially sustainable over their full lifecycle

This chapter has been prepared based on the *Development Charges Act, 1997* and Ontario Regulation 82/98 and includes the analysis pertaining to assets that are proposed to be funded, in whole or in part, by development charges.

Asset management at the Region has been evolving and speaks to all assets including growth, renewal and operating needs as required by O.Reg. 588/17.

The Region has an Asset Management Framework to streamline asset management activities across all infrastructure service areas. The framework incorporates leading industry asset management knowledge and provides templates for service areas to follow in advancing their asset management programming.

Key areas of the framework include:

1. Standardized State of Infrastructure Report for annual updates related to condition, capacity, and reliability
2. Risk Assessment System for understanding asset condition risks across the portfolio
3. Level of Service Framework to adhere to regulatory requirements
4. Climate Change Workbook to incorporate climate change impacts into infrastructure decision making
5. 100-year lifecycle costs to understand long-term costs of each service area portfolio, and to act as a mechanism for reserve fund planning for the Region's asset portfolio as a whole

To provide a full view of the asset management needs for all assets funded under the Region's DC Bylaw, the full range of services is included in this analysis (Section 13.3.1 – Table 13-2):

- Water
- Wastewater
- Roads
- Transit

- Toronto-York Spadina Subway Extension
- Yonge North Subway Extension
- Police
- Waste Diversion
- Ambulance Services
- Long-Term Care/ Seniors Services
- Public Health
- Housing Services
- Court Services

13.1.1 Growth to 2041

The 2022 Development Charges Background Study uses a population and employment forecast to 2041 as the basis for determining growth-related infrastructure needs, as detailed in Chapter 2.

13.1.2 *Development Charges Act, 1997* Requirements

The Development Charges Act, 1997 requires an analysis be prepared, as shown in Figure 13-1, to support the proposed infrastructure in a development charges bylaw. Additionally, a summary of the current state of infrastructure, planned level of service and potential asset management strategies must be prepared for proposed development-charge-funded transit infrastructure.

FIGURE 13-1

ASSET MANAGEMENT PLAN REQUIREMENTS



13.2 Potential Asset Management Strategies

In general, growth assets included in this asset management plan have yet to undergo environmental assessments and detailed design. This section identifies potential asset management strategies that may apply and will be considered in future lifecycle planning. Transit-specific asset management strategies are discussed in Section 13.5 of this asset management plan.

13.2.1 Asset Condition Monitoring

Annual tracking, monitoring, and reporting of asset condition by department, and an assessment of reserves for asset management are undertaken as part of the annual performance metric reporting on the percentage of Regional assets with a condition rating of fair or better.

In 2020, the overall percentage of core assets, defined by O.Reg 588/17 as water, wastewater and roads, was reported at 86% being in fair or better condition, with roads service assets accounting for approximately 10.5% of assets in poor or very poor condition. Water and wastewater service assets in similar poor and very poor condition accounted for 3.5% of the total asset base. All assets identified in the poor and very poor categories have planned rehabilitation and replacement activities in place.

The Region has set up an Asset Management Framework to streamline asset management activities across the organization; this includes ensuring a climate change lens is incorporated into infrastructure decision making.

Condition monitoring and assessments will support the refinement of asset management decision making from methods such as age-based planning to risk / condition / performance-based planning, which may allow for the greatest service life to be realized, reducing lifecycle costs.

13.2.2 Asset Lifecycle Rehabilitation and Replacement Analysis

To realize designed service life, asset rehabilitation may be required for some assets. In most cases, lifecycle cost projections have included rehabilitation needs typical for each asset type; however, as more information is known about an asset, this broad projection can be tailored to consider specific factors affecting each asset. For example, changing regulations or construction quality may apply to specific assets, differently impacting the lifecycle cost.

For major assets where rehabilitation or replacement is expected in the next 10 years, detailed condition assessments and monitoring is undertaken to verify asset deterioration and program short-term budget priorities as part of the annual budget process.

13.3 Estimated Lifecycle Costs

13.3.1 Lifecycle Cost Projection Methodology

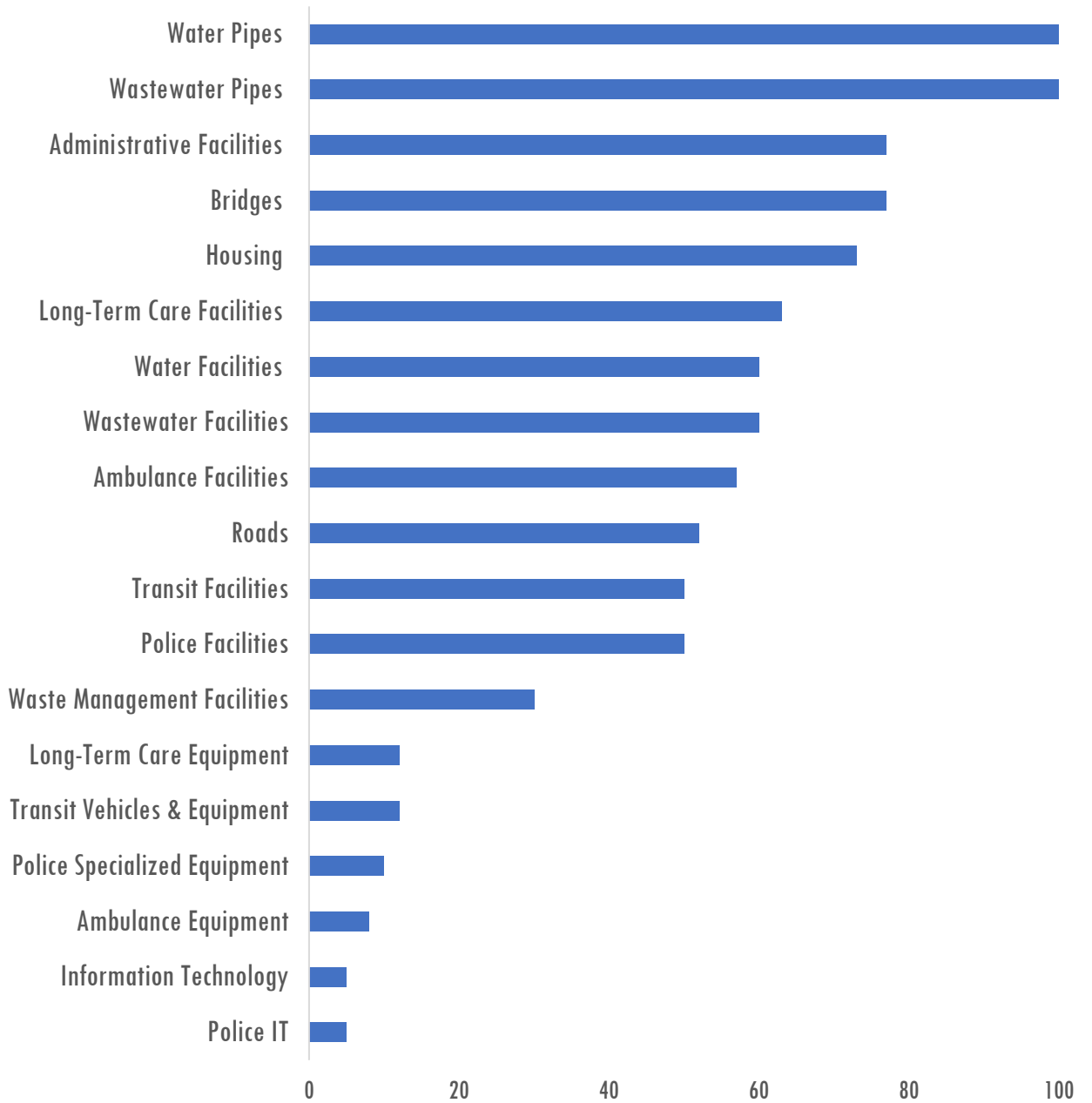
Asset lifecycles have been projected based on two methods depending on whether sufficient condition information is available. Typically, meaningful condition assessment information is not available until determinate signs of deterioration are observable. The two methods are summarized in Table 13.1 below.

TABLE 13-1
LIFECYCLE COST PROJECTION METHODOLOGY

Assets	Projection Method
Newly constructed assets and assets planned but not yet designed or constructed	Method A Expected Service Life for Asset-Type Estimated Replacement Cost
Existing assets with condition assessment information	Method B Detailed Condition Assessment and Deterioration Projection results

Lifecycle costs for the majority of assets included in this plan have been projected based on Method A in Table 13-1, which assumes that assets will be replaced at the end of expected service life. Expected service life for the asset types included in this plan is presented in Figure 13-2.

FIGURE 13-2
EXPECTED SERVICE LIFE



13.3.2 Lifecycle Cost Summary

This section summarizes the long-term investment needs to sustain the DC-funded infrastructure required to enable growth to 2041. Table 13-2 summarizes the total lifecycle costs over a 100-year period. Detailed discussion regarding lifecycle costs of transit assets can be found in Section 13.5.1 of this asset management plan.

TABLE 13-2
LIFECYCLE COST SUMMARY OF DC-FUNDED SERVICES

DC-funded Services	Gross Project Costs (Emplacement)* \$M	100-Year Lifecycle Needs (Excluding Emplacement) \$M
Rate-Funded:		
Water	676	793
Wastewater	2,389	3,144
Sub-Total: Rate	3,065	3,938
Tax Levy-Funded:		
Roads**	8,369	9,938
Transit**	1,297	1,745
TYSSE***	7	0
YNSE***	1,120	-
Police	369	3,999
Waste Diversion	130	406
Public Works	279	708
Ambulance Services	41	146
Public Health	32	64
Housing Services	909	1,817
Long-term Care/ Senior Services	3	5
Court Services	0	0
Sub-Total: Tax Levy	12,555	18,827
GRAND TOTAL	15,620	22,765
Contingencies		
Roads	1,607	1,828

* For this table, Gross Project Costs exclude items without associated life-cycle costs, like DC credits, environmental assessments, and growth studies.

** The 2022 Background Study reflects \$2.9 billion in Bus Rapid Transit (BRT) costs, which are included in Roads and Transit services. This analysis assumes that the Region is not responsible for the lifecycle costs of BRTs, consistent with the Region's existing BRT network.

*** YYSSE lifecycle costs are funded by the City of Toronto. YNSE lifecycle costs will be determined once ownership and operational agreements are negotiated.

13.4 Transit Infrastructure

13.4.1 Requirements under the Act and the Ontario Regulation 82/98

Section 8(3) of the Ontario Regulation 82/98 under the Act states that if a council of a municipality proposes to impose a development charge in respect of transit services, the asset management plan referred to in clause 10(2) (c.2) of the Act shall include the following in respect of those services:

- A section setting out the state of local infrastructure
- A section that sets out the proposed level of service
- An asset management strategy that:
 - sets out planned actions that will enable the assets to provide the proposed level of service in a sustainable way, while managing risks, at the lowest life cycle cost
 - is based on an assessment of potential options to achieve the proposed level of service, which assessment compares: life cycle costs, all other relevant direct and indirect costs and benefits, risks associated with potential options
 - provides a summary of (in relation to achieving the proposed level of service) non-infrastructure solutions, maintenance activities, renewal and rehabilitation activities, replacement activities, disposal activities, and expansion activities
 - discusses procurement measures that are intended to achieve the proposed level of service
 - includes an overview of the risks associated with the strategy and any actions that will be taken in response to those risks
- A financial strategy

This section addresses the first three requirements. The financial strategy can be found in Section 13.6 of this chapter.

13.4.2 State of Infrastructure

13.4.2.1 Asset Type and Historical Cost

York Region currently owns approximately \$749 million worth of transit infrastructure, including bus fleet vehicles, garages, transit terminals and loops, transit stops, equipment and technology.

TABLE 13-3
TRANSIT ASSET TYPE AND HISTORICAL COST

Asset Type	2019 Inventory	2019 Historical Cost (\$M)
Bus Fleet Vehicles	590	355
Garages, transit terminals and loops	20	254
Transit stops	5,000+	
Equipment and Technology	Various	140
TOTAL		749

(Source: 2019 Transportation State of Infrastructure Report Card)

Note: Only Transit Fleet (Conventional, Bus Rapid Transit (Viva buses), and Mobility on Request) and Facilities (Garages, Terminals, Transit loops, and Transit Stops) have been included in the current Transit AMP.

13.4.3 Growth Planning Proposed Level of Service

The Act requires that a planned level of service be defined if development charges are levied for Transit infrastructure. For the purpose of the development charges background study, the planned level of service for transit is defined in the Region's 10-year capital plan. Through approval of the annual budget, which includes a 10-year capital plan, Council indicated that it intends to ensure that an increase in need for transit service will meet the transit network as per the latest [Transportation Master Plan, York Region Transit Strategic Plan and Service Guidelines](#). Service Guidelines define how new services are designed, and how existing transit routes are evaluated for service adjustments. They are applied in tandem with route performance measures.

Development of Transit levels of service starts with the objectives for Transportation Services identified in York Region's Vision and 2019 to 2023 Strategic Plan. Levels of service at the customer, technical and operational levels were developed based on these directions, focusing on safety, reliability, and efficiency.

Tables 13-4 and 13-5 provide the levels of service as indicated in the Transit Asset Management Plan.

TABLE 13-4
FLEET LEVELS OF SERVICE CATEGORIES

Service	Performance Metric	1 (Lowest)	2	3	4	5 (Highest)
Fleet Reliability	Distance between failures (km)	<10,000	10,000-12,000	>12,000-14,000	>14,000-16,000	>16,000
Capacity	Demand to capacity ratio by route	<50%	50-59%	60-69%	70-90%	>90%
Operating Efficiencies (Net Cost per Passenger)	Vehicle and overhead cost per passenger (as multiples of the average fare)	>5x	>4x – <=5x	>3x – <=4x	>2x – <=3x	<=2x
Operating Reliabilities (On-time Performance)	Early/late trip starts	<91%	91-<92%	92-<93%	93-<94%	>=94%
Fleet Cleanliness	Cleanliness score based on sample inspected	<93%	93- <95%	95- <97%	97-<99%	>=99%

The Region evaluates asset performance by looking beyond the physical infrastructure condition and incorporating other factors impacting service quality and satisfaction. Levels of service are defined by current and future Regional needs, and can be defined at three levels: corporate, customer, and technical and operational. Indicators have been established to support assessment and reporting. These levels of service have been measured at the technical and operational level and linked to the Region's Strategic Plan Objectives and Transportation Services Mission.

TABLE 13-5
FACILITIES LEVELS OF SERVICE CATEGORIES

Service	Performance Metric	1 (Lowest)	2	3	4	5 (Highest)
Condition	Assessment results for Garages	Architectural components are well maintained/functional and all other components are either Poor or higher	Architectural components are well maintained/functional and all other components are either Fair or higher except one component in Poor condition	Architectural components are well maintained/functional and all other components are either Fair or higher	Architectural components are well maintained/functional and all other components are either Good or Very Good except one component in Fair condition	Architectural components are well maintained/functional and all other components are either Good or Very Good
Capacity	Capacity as a percentage of fleet size ratio for each garage	>85%	70% - 85%	60% - <70%	50% - <60%	<50%
Service Coverage	Location	<50%	50-69%	70-84%	85-89%	>=90%

(Based on 2019 Data)

Note that the level of service in this asset management plan refers to the metric that is used to identify infrastructure needs due to population and employment growth. This metric also underpins the Region's growth-related capital program, which is designed to meet these targets. This level-of-service metric is not the same as metrics used to determine long-term lifecycle needs.

Growth planning level of service for transit infrastructure is planned using average annual increase in ridership. This data is based on projections from the Regional transportation demand forecasting tool Activity Based Model (ABM) and the network of transportation improvements identified in the Transportation Master Plan updates, in terms of modal splits and forecast trips in the peak hour and peak direction. Network improvements as identified in the Transportation Master Plan and the Council-endorsed capital plan are used to update the Transit AMP.

13.4.4 Current Level of Performance Relative to the Targets

The Transit AMP defines the following levels of service categories (Table 13-6 and Table 13-7) and the level of services.

**TABLE 13-6
FLEET LEVELS OF SERVICE CATEGORIES**

Service Category	Metric	Level of Service Summary (Grade 5 = Highest)
Fleet Reliability	Distance between failures	Grade 5 - Average for conventional and Viva bus routes was greater than 16,000 km
Capacity	Demand to capacity ratio	Number of Services by Grade: Grade 5 – 24 routes Grade 4 – 17 routes Grade 3 – 11 routes Grade 2 – 5 routes Grade 1 – 21 routes
Operating Efficiencies (Net Cost per Passenger)	Vehicle and overhead cost per passenger	Number of Services by Grade: Grade 5 – 64 routes Grade 4 – 9 routes Grade 3 – 5 routes Grade 2 – 1 route Grade 1 – 5 routes
Operating Reliabilities (On-time Performance)	Early/late trip start time	Grade 5 – The percentage of on-time trip starts for conventional and Viva bus routes was greater than 94%
Cleanliness	Vehicle condition (vandalism/paint)	Grade 5 – Viva and Mobility Plus buses achieved a cleanliness score above 99% Grade 4 – Conventional buses achieved a 97% score

**TABLE 13-7
FACILITIES LEVELS OF SERVICE CATEGORIES**

Service Category	Performance Metric	Level of Service Summary (Grade 5 = Best)
Facility Condition	Condition inspection for garages	Grade 5 and 4 – The majority of inspected garages had all or most components in Good condition Grade 3 – One inspected garage had more than one component in Fair condition
Garage Capacity	Fleet size as a percentage of garage capacity	Grade 1 and 3 – In 2019, two of the transit garages had a capacity to fleet ratio of 95% or higher, while one garage was at 65%
Service Coverage	Location of transit stops relative to population	Grade 5 – 93.7% of urban residents are within 500m of a transit stop

(Based on 2019 Data)

13.5 Transit Asset Management Strategy

13.5.1 Estimated Useful Life

Table 13-8 shows the average useful life for Transit assets. Mobility on Request vehicles vary by type with Eldorado vehicles having a useful life of 12 years and other vehicles estimated to have a useful life of seven years.

**TABLE 13-8
USEFUL LIFE ESTIMATES**

Asset Type	Useful Life (years)
Bus fleet (60' and 30')	12
Bus fleet (40')	18
Garages, terminals, and transit loops	50
Transit stops (shelters and platforms)	15
Equipment and Technology	5-15

(Source: Transportation Services Department)

13.5.2 Fleet Age

Figure 13-3 provides the age profile for the York Region Transit conventional fleet. The Region owns and operates conventional buses, Viva buses and the Mobility-on-Request program. Table 13-9 shows the replacement cost profile by age of asset and type of fleet.

FIGURE 13-3
AGE PROFILE FOR ALL TRANSIT BUSES BY REPLACEMENT COST (2019 DATA)

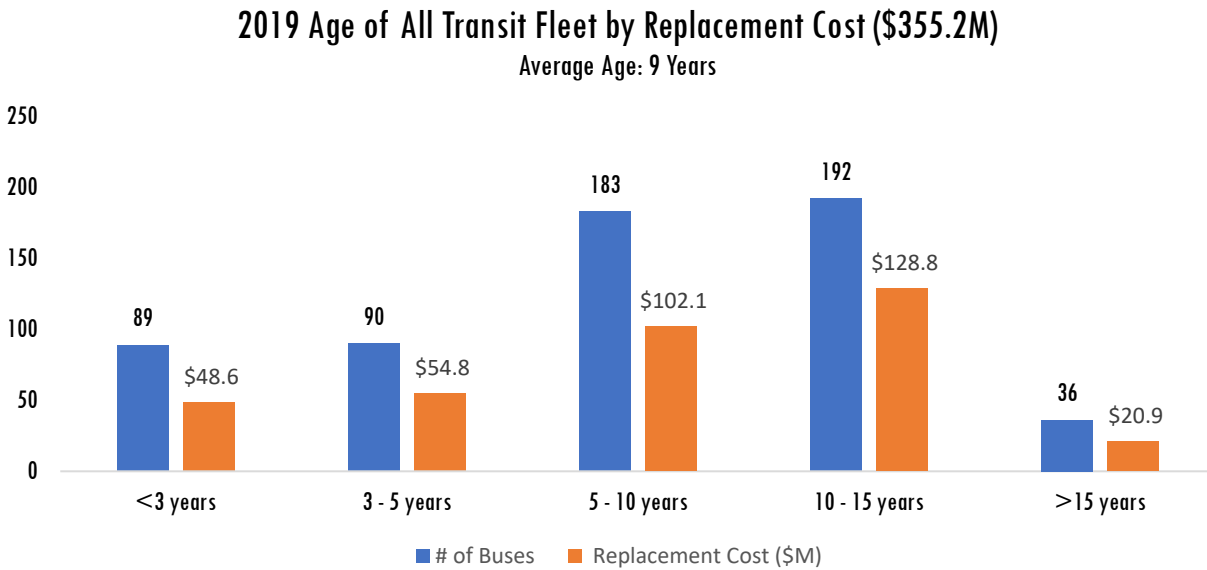
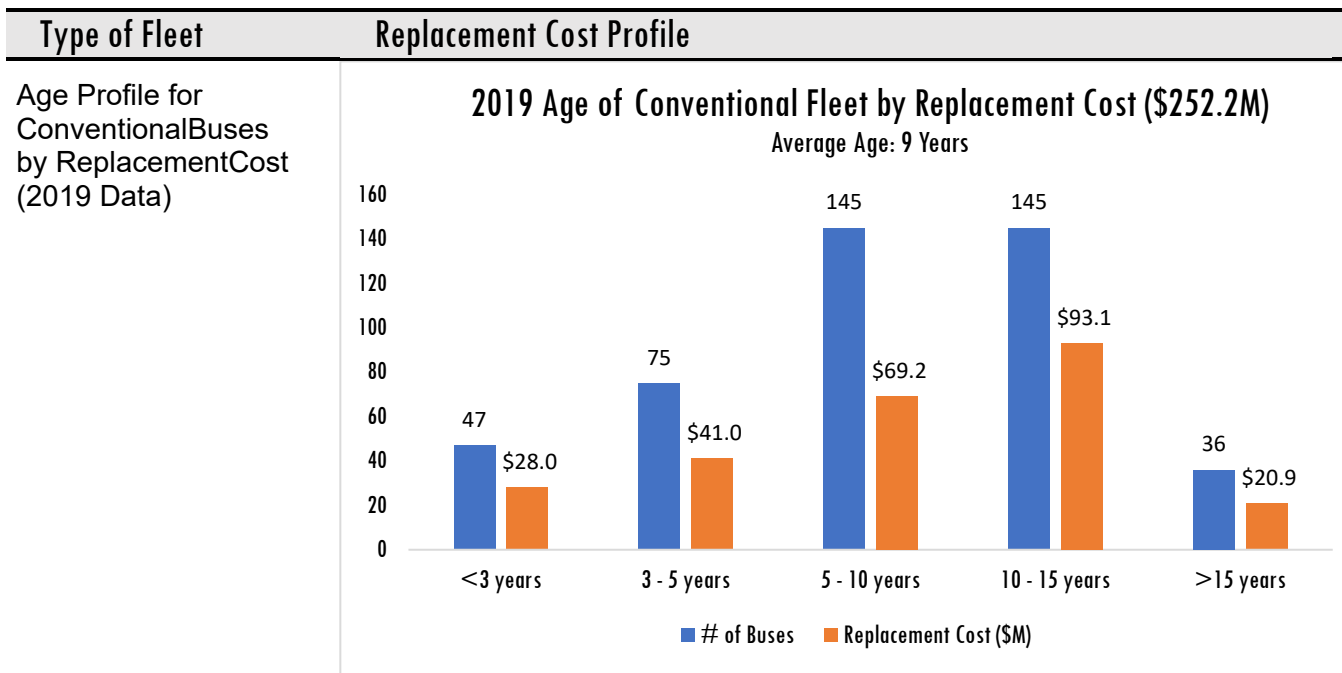
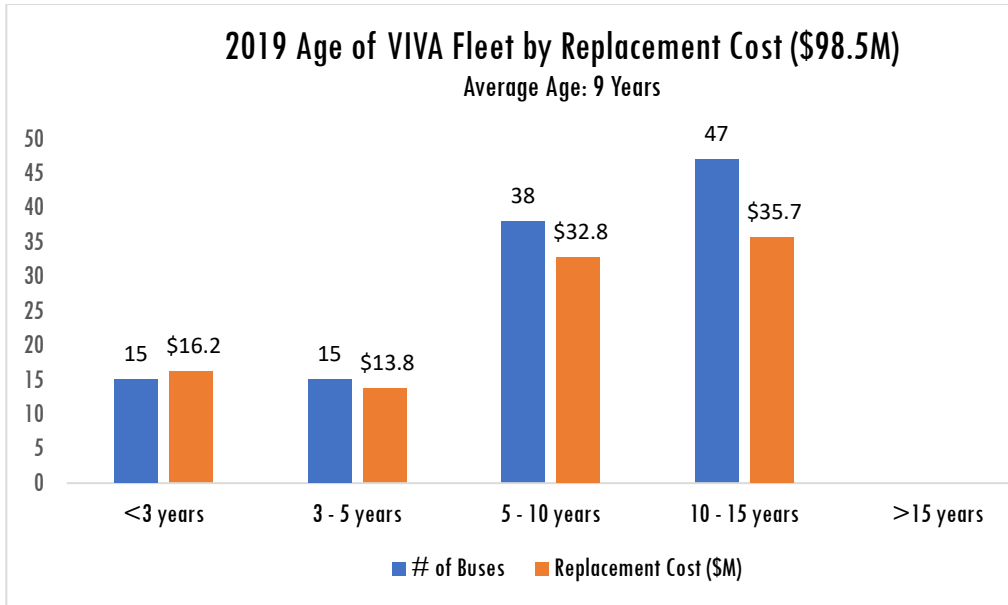


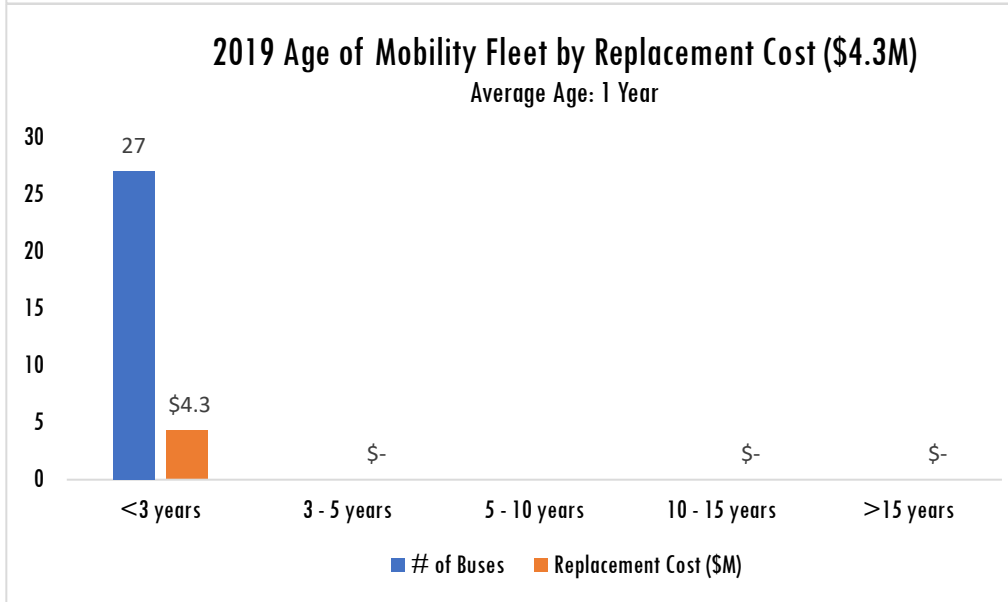
TABLE 13-9
REPLACEMENT COST PROFILE BY TYPE OF FLEET



Age Profile for Viva Buses by Replacement Cost (2019 Data)



Age Profile for Mobility-on-Request Buses by Replacement Cost (2019 Data)



13.5.3 Fleet remedial schedule and costs

Table 13-10 provides the planned fleet remedial schedule.

TABLE 13-10
FLEET CAPITAL REFRESH, REHABILITATION, AND REPLACEMENT SCHEDULE

Vehicle Type	30 ft. (years)	40 ft. (years)	60 ft. (years)	Mobility Plus (years)
Total Life	12	18	12	7 - 12
Capital Refresh	None	None	6	None
Mid-Life (Rehabilitation)	None	10	None	None

(Source: Transit AMP)

Table 13-11 shows the estimated cost of remedial activities for Transit fleet.

TABLE 13-11
COST ASSOCIATED WITH REMEDIAL ACTION

Action Type	Cost, \$000s
Capital Refresh	\$70
Mid-life Rehabilitation	\$210
Replacement/ Growth	
Conventional	\$600
Viva	\$700 - \$1,200
Mobility Plus	\$260

(Source: Transit AMP)

13.5.4 Average Sustainment Requirements

Figures 13-4 and 13-5 provide the estimated Transit average annual sustainment needs (excluding maintenance) for fleet and facilities for 2022 to 2041 as $(\$37.5M + \$7.8M) = \$45.3M$.

FIGURE 13-4
ANTICIPATED FLEET SUSTAINMENT NEEDS

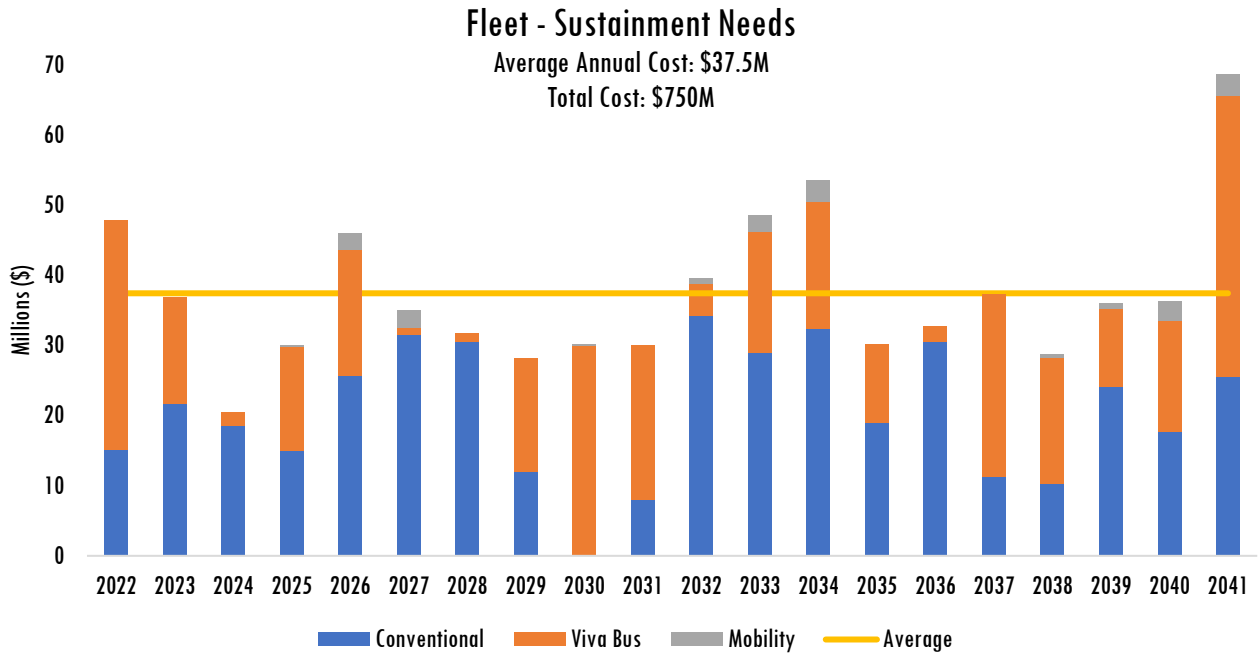
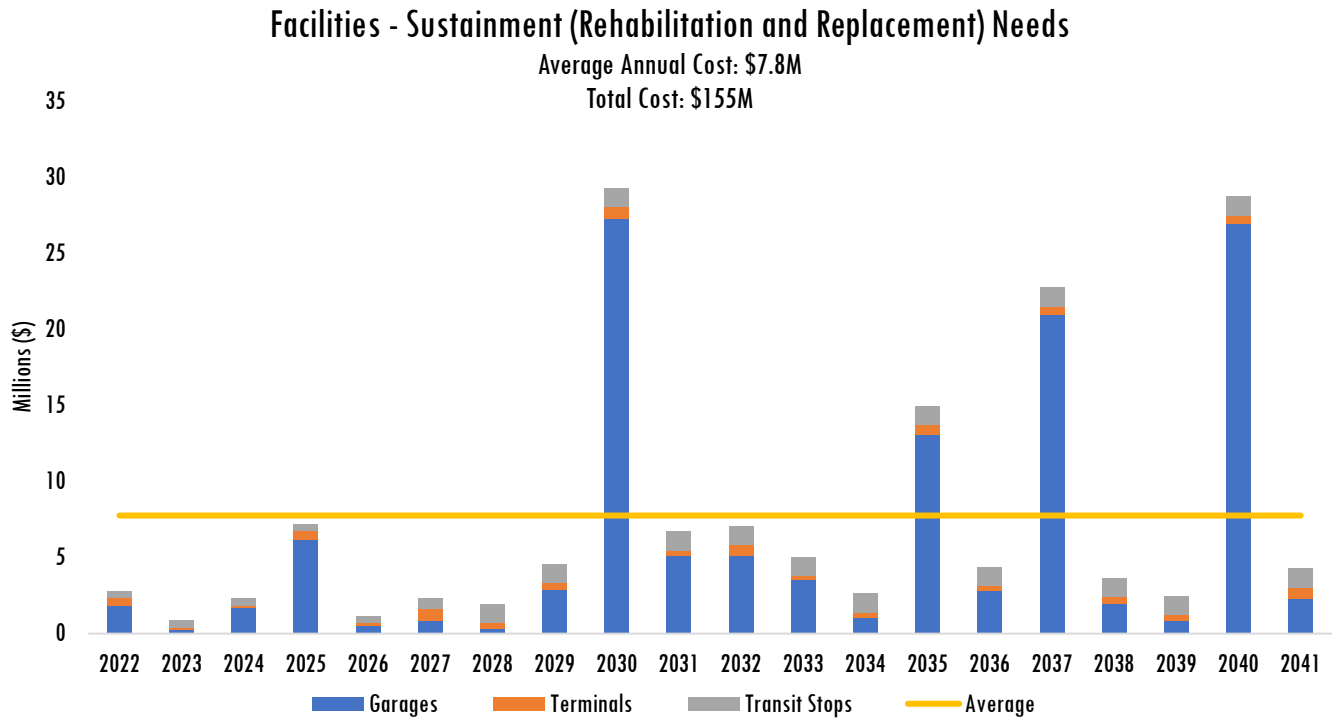
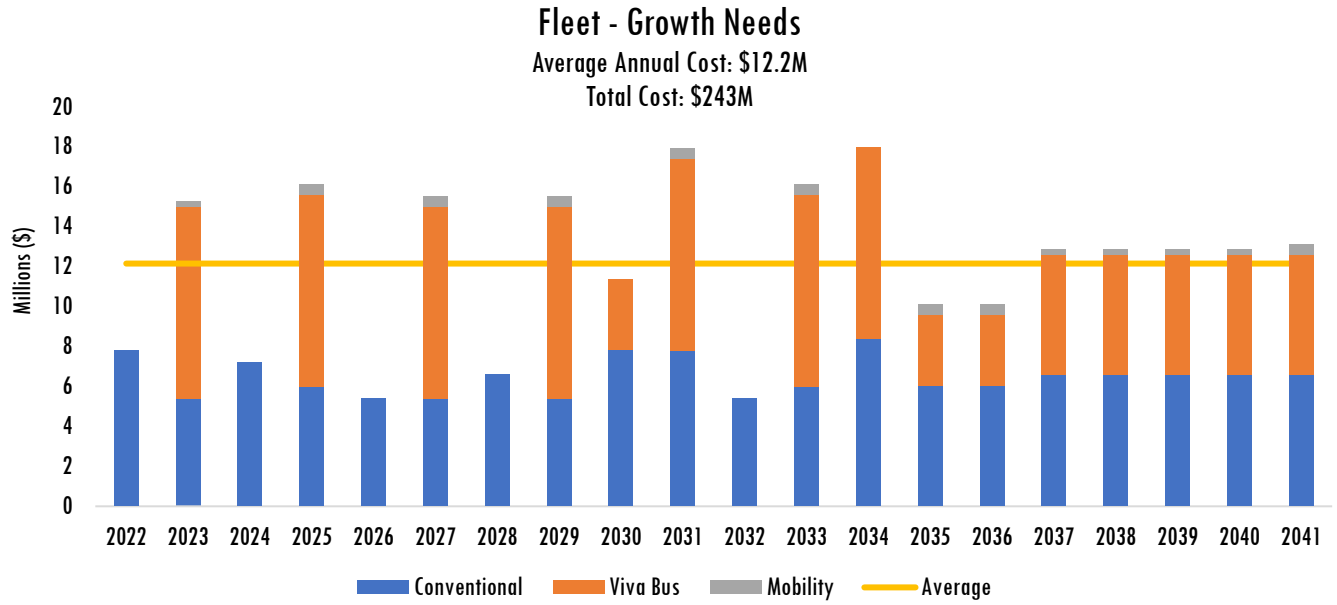


FIGURE 13-5
ANTICIPATED FACILITIES SUSTAINMENT NEEDS

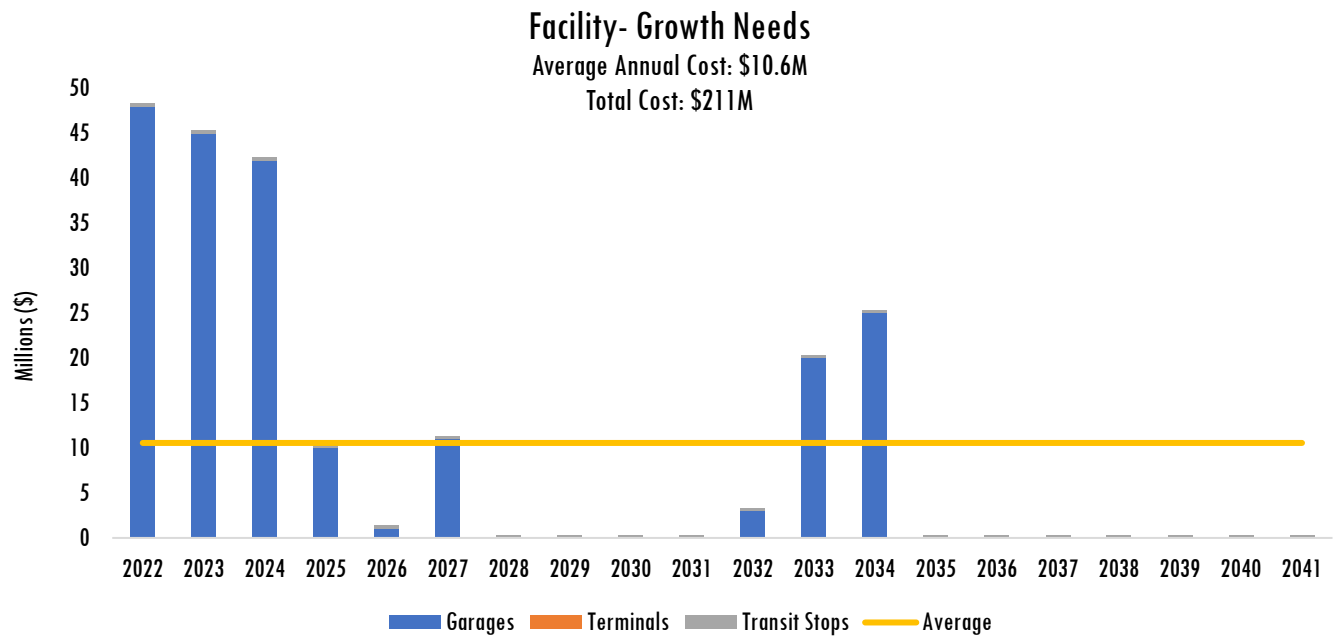


Based on the Transit Business Plan, Transportation Master Plan and Transit AMP, the average annual growth needs for fleet and facilities for 2022 to 2041 is $(\$12.2M + \$10.6M) = \$22.8M$ as indicated in Figures 13-6 and 13-7, below.

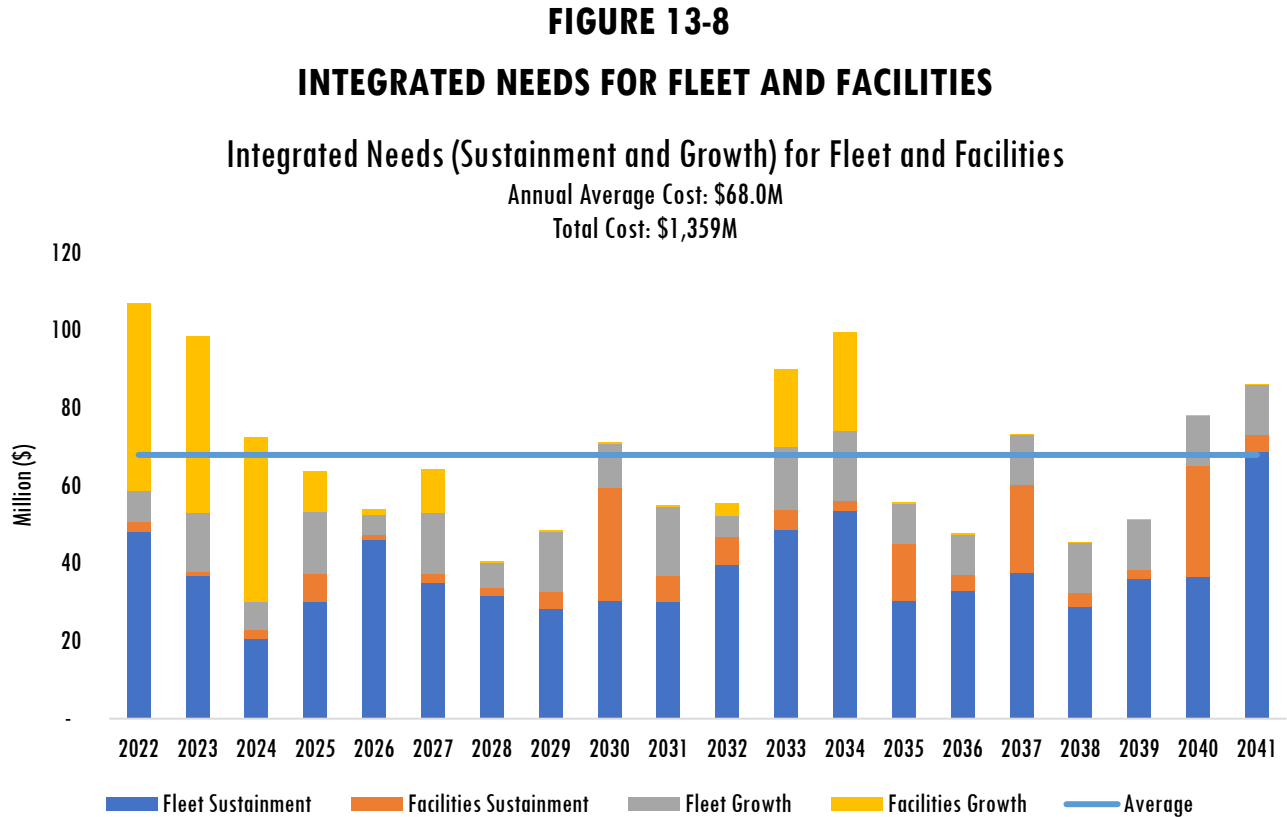
**FIGURE 13-6
ANTICIPATED FLEET GROWTH NEED**



**FIGURE 13-7
ANTICIPATED FACILITIES GROWTH NEEDS**



Based on the Transit Business Plan, Transportation Master Plan, and Transit AMP, average annual sustainment and growth needs for fleet and facilities for 2022 to 2041 is \$68.0M as indicated in Figure 13-8 below.



13.5.5 Transit Asset Management Overview

For transit vehicles, maintenance is managed through third party maintenance contracts. These performance-based contracts help incentivize the contractors to maintain appropriate levels of service. The service contract defines criteria in which the thirdparty has to follow outlined preventative maintenance, routine maintenance, and proactive maintenance requirements. These allow the Region to better benchmark andevaluate its current state.

Rehabilitation, defined as remedial actions that increase the life of the asset, is generally considered a capital expenditure. Remedial actions can increase the asset life by increasing its useful life as a whole or by installing new components to stretch out the useful life of the asset.

The purpose of replacement is to acquire an asset to substitute a current asset because the asset is at its end of life. This may slightly increase capacity and condition because of technological improvement reasons. However, the main purpose is to replace the asset due to age.

For transit fleet, the capital budget also includes capital refresh as part of sustainment in addition to rehabilitation and replacement. Although capital refresh may not extend the life of the asset beyond its design life it is part of capital expenses.

Regional Council has endorsed a Transit Bus Fleet Electrification plan, including transition of the Region's bus fleet to clean electric bus technology by the Region's target of 2051. The endorsed plan is a phased approach to electrification with a mix of electric and diesel buses being purchased between 2021 and 2029, transitioning to exclusive purchase of electric buses by 2030.

For transit fleet, York Region proactively performs midlife overhauls. Buses purchased by York Region Transit have a design life of 12 years as specified by the original equipment manufacturer. The midlife overhaul extends the life of a normal vehicle from 12 to 18 years, as required by Regional Council. Additionally, a major overhaul of the mechanical systems is conducted, including engine, transmission, radiator, charge air cooler and drive axle assessment, brake relining, suspension replacement, and auxiliary heater and air conditioning refresh.

For more details, please refer to the Transportation Asset Management Plan.

13.6 Financial Strategy

A detailed analysis was undertaken to evaluate the financial sustainability of the full life cycle costs of assets that are proposed to be funded under the development charges by-law, per Subsection 10(3) of the Act.

Financial sustainability is defined, based on the Region's Fiscal Strategy, as:

1. Balancing the current and long-term needs of the Region by:
 - Managing the capital plan, which sets priorities among infrastructure projects
 - Reducing reliance on debt
 - Saving for the future by building up reserves
2. Generating stable and adequate financing to maintain Regional infrastructure and operational capacity to provide core services
 - Stable and adequate financing will rely on revenue sources available or confirmed at the time, without relying on additional support from higher levels of government
3. Aiming for equitable outcomes by ensuring benefiting users pay for the services they are provided (e.g., growth pays for growth; the principle of inter-generational equity)

To fully assess the financial impact of the projects in the Region's proposed 2022 Development Charges Bylaw, it is necessary to consider all of the financial requirements that the Region will likely face in the future.

The financial analysis incorporates the full operating and capital requirements related to both existing and future assets, as well as service areas without capital plans (e.g., Office of the Regional Chair). Consistent with the Region's Fiscal Strategy, the analysis assumes that capital reserves will be built up adequately to avoid the use of future user rate or tax levy debt for any foreseen asset lifecycle needs, including growth related capital. It also takes inter-generational equity into account by attempting to spread the cost of capital equitably across the tax/user rate base over time.

Asset management and lifecycle assumptions were derived from service area asset management plans. To facilitate analysis of assets yet to be emplaced, life-cycle costs have been estimated based on the estimated useful life provided by the Region's tangible capital asset guideline. It is acknowledged that these assets might be further componentized into smaller asset elements as they come on-line but since they are similar to assets currently in use, the estimated useful life is deemed to be a reasonable proxy.

Water and wastewater infrastructure lifecycle costs are funded through water and wastewater rates while all other infrastructure is funded primarily through the tax levy. As such, the Region's analysis looks at services funded through water and wastewater user rates separately from all tax-supported services.

13.6.1 Rate Funded (Water and Wastewater)

In September 2021, Regional Council approved six years of water and wastewater rate increases with the goal of achieving and maintaining full cost recovery. Water and wastewater rate-setting is guided by goals and principles that recognize the importance of both operational excellence and long-term financial sustainability.

For financial sustainability, the goal is to set prices that cover the full cost of providing services, a goal to which York Region has been committed for more than a decade. Full costs include both day-to-day operating expenses and contributions to reserves to cover current and future rehabilitation and replacement costs.

The approved rate increases ensure that asset management activities can be afforded when they are required to minimize lifecycle costs and that there will be adequate reserve balances to avoid any future user rate debt. A description of the work that supported Council's 2021 rate approval can be found in the [Water and Wastewater Financial Sustainability Plan](#).

Tables 13-12 and 13-13 summarize the capital funding and additional (incremental) operating expenses and revenue for the growth-related infrastructure identified in the 2022 DC Background Study. Operating expenditures include provisions for the emplacement of infrastructure and contributions to the replacement of new and existing assets to reflect their impact on billings.

TABLE 13-12
CAPITAL FUNDING SOURCES FOR RATE SUPPORTED GROWTH PROJECTS 2022-2041:
COST OF EMPLACEMENT

Funding Sources (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
User Rate Funding (Reserves)	40,439	56	3,785	29,851	6,747
Development Charges	2,742,253	647,820	796,715	651,939	645,779
Other Funding	282,761	122,737	74,258	30,773	54,993
Total	3,065,453	770,613	874,758	712,563	707,519

For this table, Gross Project Costs exclude items without associated life-cycle costs, like DC credits, environmental assessments, and growth studies.

TABLE 13-13
INCREMENTAL GROWTH-RELATED OPERATING EXPENSES AND REVENUES 2022- 2041:
RATE FUNDED

Operating Impact of Growth (\$000s)	Total	2022-2026	2027-2031	2031-2036	2037-2041
Salaries and Benefits	37,009	9,081	7,688	9,039	11,201
Purchased Services	51,261	7,960	9,754	14,149	19,397
Asset Management Contributions	104,095	18,649	22,241	28,872	34,333
Growth-Related Financing Costs	(5,265)	20,508	20,356	(60,662)	14,534
Other Expenses*	12,140	3,070	3,221	1,987	3,862
Gross Expenditures	199,240	59,268	63,260	(6,614)	83,326
User Rates	(191,840)	(30,640)	(38,761)	(53,635)	(68,804)
Fees and Charges	(1,232)	(252)	(287)	(332)	(362)
DC Recovery	5,265	(20,508)	(20,356)	60,662	(14,534)
Total Revenue	(187,807)	(51,401)	(59,403)	6,696	(83,699)
Potential Billing Revenue Requirements	11,433	7,867	3,857	81	(373)

*Other Expenses include General Expenses; Professional Contracted Services; Occupancy & R&M Costs; Minor Capital; and Allocations and Capital Recoveries

Overall, the additional costs for water and wastewater services due to growth are paid for through revenues generated by growth. Over the period from 2022 to 2041, it is anticipated that growth will increase expenditures by \$199 million and increase revenue by \$188 million, resulting in a net impact of \$11 million on the existing user base over 20 years. The water and wastewater projects in the DC Background Study are similar to those that informed the [Water and Wastewater Financial Sustainability Plan](#). The operating projections are based on the anticipated revenues generated by the rates approved by Council, and are deemed to be financially sustainable.

13.6.2 Tax-Levy Funded

A similar methodology (as used in the water and wastewater analysis) was also applied to services funded by property taxes.

Tables 13-14 and 13-15 summarize the capital funding and additional (incremental) operating revenues and expenses related to growth projects on the main list of the 2022 DC Background Study. Similar to the user rate analysis, the incremental operating requirements calculated here include operating costs resulting from the emplacement of infrastructure and contributions to the replacement of new and existing assets.

TABLE 13-14

CAPITAL FUNDING SOURCES FOR TAX-LEVY-SUPPORTED GROWTH PROJECTS ON THE MAIN LIST OF THE 2022 DC BACKGROUND STUDY 2022-2041: COST OF EMPLACEMENT

Funding Sources (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
Tax Levy Funding (Reserves)	3,468,908	814,178	1,021,226	789,810	843,695
Development Charges	6,458,795	1,536,076	2,084,536	1,350,270	1,487,913
Other Funding	2,627,615	468,006	1,025,589	538,735	595,285
Total	12,555,318	2,818,260	4,131,350	2,678,816	2,926,893

TABLE 13-15
CAPITAL FUNDING SOURCES FOR TAX-LEVY-SUPPORTED GROWTH PROJECTS ON THE
CONTINGENCIES LIST OF THE 2022 DC BACKGROUND STUDY 2022-2041:
COST OF EMPLACEMENT

Funding Sources (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
Tax Levy Funding (Reserves)	44,092	-	-	20,852	23,240
Development Charges	753,764	-	-	356,471	397,293
Other Funding	809,460	-	-	382,811	426,649
Total	1,607,316	-	-	760,134	847,182

As shown in Table 13-16, the incremental increase in operating expenditures created by growth total nearly \$1.2 billion over the 20-year projection period, with operating revenue expected to rise by \$387 million. Forecasted assessment growth revenue of \$392 million is projected to offset more than half of the resulting net expenditure increase on taxpayers. As a result, about \$395 million of the increase is forecast to be recovered from the tax base over the 20-year forecast period. This funding requirement is considered financially sustainable as it is expected that it can be reasonably absorbed by the tax base over the forecast period.

TABLE 13-16
INCREMENTAL GROWTH-RELATED OPERATING REVENUES AND EXPENSES FOR THE MAIN
LIST OF THE 2022 DC BACKGROUND STUDY 2022-2041: TAX LEVY FUNDED*

Total over period (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
Salaries and Benefits	495,136	79,837	104,801	138,069	172,430
Program Specific Expenses	190,181	30,925	42,426	56,310	60,520
Asset management contributions	260,330	47,983	55,002	74,042	83,303
Growth-related capital reserve contributions	33,620	13,881	11,846	5,075	2,818
Other costs**	195,769	33,044	41,835	56,351	64,539
Gross Expenditures	1,175,037	205,669	255,911	329,847	383,610
Grants and Subsidies	(282,368)	(50,999)	(64,462)	(79,272)	(87,635)
User fees	(61,922)	(6,696)	(11,521)	(18,224)	(25,480)
Other Revenues***	(43,089)	(8,515)	(10,696)	(11,912)	(11,966)
Total Revenue	(387,379)	(66,211)	(86,680)	(109,409)	(125,080)
Net Expenditure Before Assessment Growth	787,657	139,459	169,231	220,438	258,529
Assessment Growth Revenue	(392,200)	(89,900)	(101,000)	(104,500)	(96,800)
Potential Net Expenditure after Assessment Growth Revenue	395,457	45,559	68,231	115,938	161,729

* Excludes the impact of growth on development charges and the debt-related payments they fund. The net impact of these two items on net expenditures is expected to be zero.

**Other Expenses include General Expenses, Chair & Council Expenses, Minor Capital, Professional Contracted Services, Occupancy and R&M costs, Contribution to non-capital reserves, Insurance, Departmental Recoveries.

***Other Revenues include Contributions from reserves, Fine Revenue, Fees and Charges, and Third-Party Recoveries.

The results of this analysis reflect the best information available at this time and are based on a number of critical assumptions, which carry an inherent degree of uncertainty. Among these include assumptions around ongoing costs for projects like the YNSE, where project details have not been finalized. However, detailed analysis will continue through the annual budget process to confirm required levels of spending, mitigate tax rate impacts and employ other funding mechanisms, where possible, consistent with the Region's Fiscal Strategy. For example, revising service levels, asset management, and/or financing strategies could contribute to alleviating the funding need.

13.7 Transit Services

The Act supported by O.Reg. 82/98 prescribes specific requirements for Transit services. One of the requirements is a detailed financial strategy that:

- Shows the yearly expenditure forecasts that would achieve the proposed level of service, categorized by,
 - A. Non-infrastructure solutions
 - B. Maintenance activities
 - C. Renewal and rehabilitation activities
 - D. Replacement activities
 - E. Disposal activities
 - F. Expansion activities
- Provides actual expenditures in respect of the categories set out above from the previous two years, if available, for comparison purposes,
- Gives a breakdown of yearly revenues by source,
- Discusses key assumptions and alternative scenarios where appropriate, and
- Identifies any funding shortfall relative to financial requirements that cannot be eliminated by revising service levels, asset management or financing strategies, and discusses the impact of the shortfall and how the impact will be managed.

Tables 13-17 and 13-18 summarize the capital funding and additional (incremental) operating revenues and expenses specifically related to growth in Transit services.

TABLE 13-17
CAPITAL FUNDING SOURCES FOR GROWTH-RELATED TRANSIT PROJECTS* 2022-2041
COST OF EMPLACEMENT

Funding Sources (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
Tax Levy Funding (Reserves)	141,479	17,032	124,447	-	-
Development Charges	560,214	67,441	492,773	-	-
Other Funding	595,440	71,681	523,758	-	-
Total	1,297,133	156,153	1,140,979	-	-

*Growth Related Transit Projects includes Bus Rapid Transit projects that fall in the Transit service area.

TABLE 13-18
INCREMENTAL GROWTH-RELATED OPERATING REVENUES AND EXPENSES 2022-2041:
TRANSIT SERVICES*

Total over period (\$000s)	Total	2022-2026	2027-2031	2032-2036	2037-2041
Maintenance/ Non-Infrastructure Solutions					
Salaries and Benefits	11,700	2,317	2,581	3,273	3,529
Program Specific Expenses	58,969	12,338	13,230	16,345	17,057
Other Expenses**	44,761	8,855	9,867	12,586	13,453
Renewal/ Rehabilitation & Replacement/ Disposal Activities					
Asset Management Contributions	73,318	13,514	15,491	20,853	23,461
Expansion Activities					
Growth-Related Capital Reserve Contributions	11,555	4,771	4,072	1,744	969
Gross Expenditures	200,304	41,794	45,239	54,801	58,468
User Rates	(67,720)	(12,508)	(11,517)	(18,220)	(25,475)
Other Revenues***	(5,092)	(2,274)	(1,032)	(990)	(796)
Total Revenue	(72,812)	(14,782)	(12,549)	(19,209)	(26,271)

* Excludes the impact of growth on development charges and the debt-related payments they fund. The net impact of these two items on net expenditures is expected to be zero.

** Other Expenses include General Expenses, Minor Capital, Professional Contracted Services, Occupancy and R&M costs, Contribution to non-capital reserves, Insurance, Departmental Recoveries

*** Other Revenues include contributions from reserves, fees and charges, and third-party recoveries

As shown in Table 13-18, growth in Transit services is projected to increase expenses by about \$200 million by the end of 2041, while user rates (transit fares) and other revenue sources would increase by \$73 million. The remainder would need to be collected through other sources, like property taxes. As noted in the aggregate financial analysis discussed in Section 13.6.2, this funding requirement is considered financially sustainable as it is expected that it can be absorbed by the tax base over the forecast period through tax levy increases.

Alternatively, revising service levels, asset management, and/or financing strategies could contribute to alleviating the funding need. These alternatives will be examined in detail through the annual budget process.

13.8 Conclusion

York Region has provided the required information specific to asset management to meet the requirements as outlined in the Act supported by O.Reg. 82/98.

York Region has undertaken asset management planning analysis to ensure that assets required to enable growth to 2041 are financially sustainable as demonstrated in section 13.6 Financial Strategy.

Appendix A: Interjurisdictional Scan

INTERJURISDICTIONAL SCAN OF DEVELOPMENT CHARGES RATES

This Appendix is split into two parts:

This first part provides an interjurisdictional scan of development charges rates in neighboring municipalities (as of February 2, 2022). It compares, across municipalities:

- Residential development charges rates (single detached, rows/multiples, large apartments and small apartments)
- Non-residential development charges rates (retail, office and industrial)

York Region rates are as proposed under the 2022 Development Charges Bylaw.

Figure A-1 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per single detached dwelling as of February 2, 2022

Figure A-2 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per rows/multiples as of February 2, 2022.

Figure A-3 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per large apartments as of February 2, 2022.

Figure A-4 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per small apartments as of February 2, 2022.

Figure A-5 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per square foot for retail developments as of February 2, 2022.

Figure A-6 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per square foot for industrial developments as of February 2, 2022.

Figure A-7 provides a comparison of **total** development charges rates for all Greater Toronto Area municipalities per square foot for office developments as of February 2, 2022.

This second part provides an interjurisdictional scan of development charges rates in Barrie and Simcoe County (as of February 2, 2022). It compares, across municipalities:

- Residential development charges rates (single detached, rows/multiples, large apartments and small apartments)
- Non-residential development charges rates (retail, office and industrial)

York Region rates are as proposed under the 2022 Development Charges Bylaw.

Figure A-8 provides a comparison of **total** development charges rates for Barrie and all Simcoe County municipalities per single detached dwelling as of February 2, 2022.

Figure A-9 provides a comparison of **total** development charges rates for Barrie and all Simcoe County municipalities per rows/multiples as of February 2, 2022.

Figure A-10 provides a comparison of **total** development charges rates for Barrie and all Simcoe County municipalities per large apartments as of February 2, 2022.

Figure A-11 provides a comparison of **total** development charges rates for Barrie and all Simcoe County per small apartments as of February 2, 2022.

Figure A-12 provides a comparison of **total** development charges rates for Barrie and all Simcoe County municipalities per square foot for retail developments as of February 2, 2022.

Figure A-13 provides a comparison of **total** development charges rates for Barrie and all Simcoe County per square foot for industrial developments as of February 2, 2022.

Figure A-14 provides a comparison of **total** development charges rates for Barrie and all Simcoe County municipalities per square foot for office developments as of February 2, 2022.

Figure A-1

**Development Charges per Single or Semi-Detached Dwelling
for Greater Toronto Area Municipalities with Proposed York Region Rates**

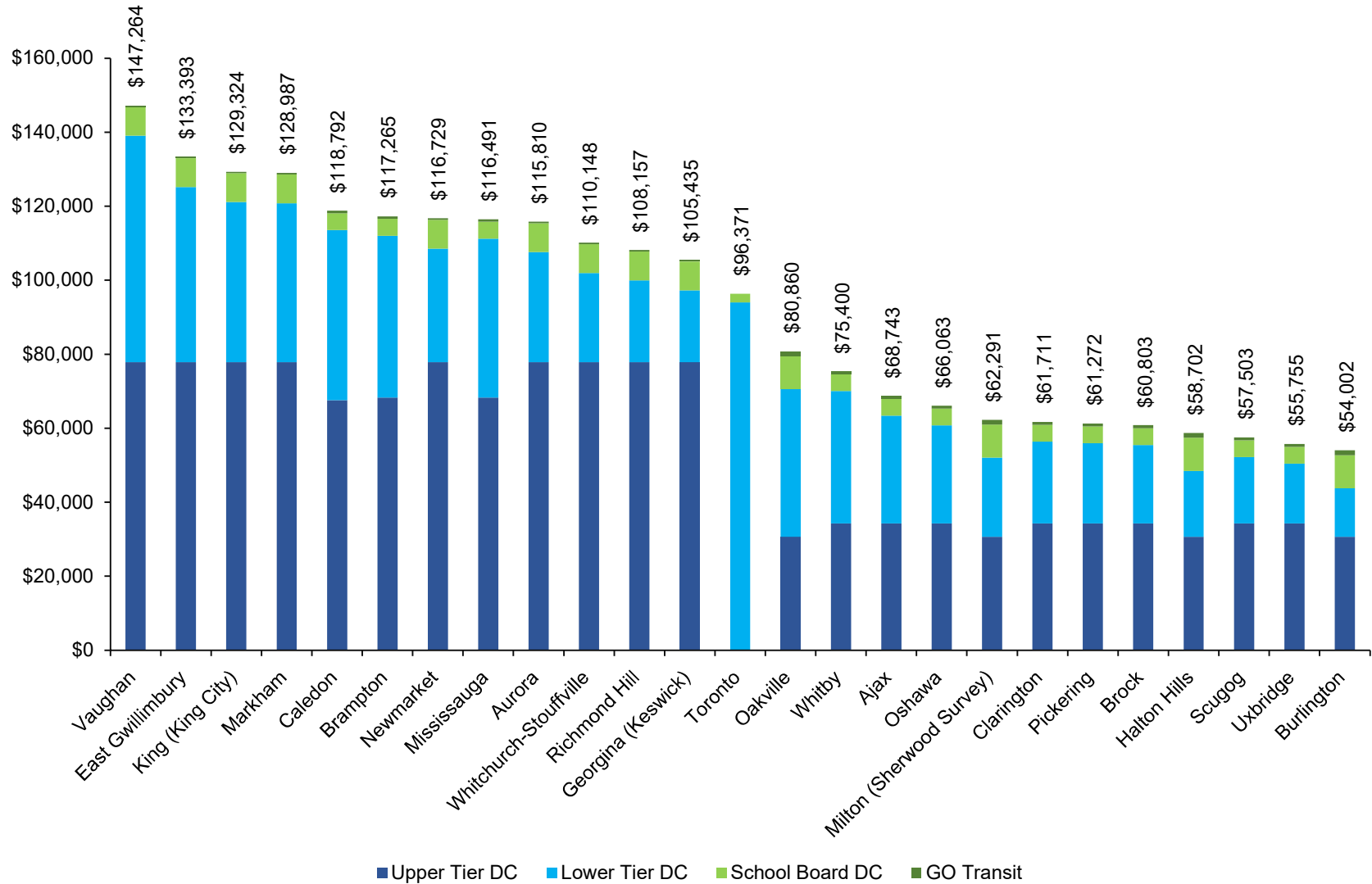


Figure A-2

**Development Charges per Multiple Unit Dwelling
for Greater Toronto Area Municipalities with Proposed York Region Rates**

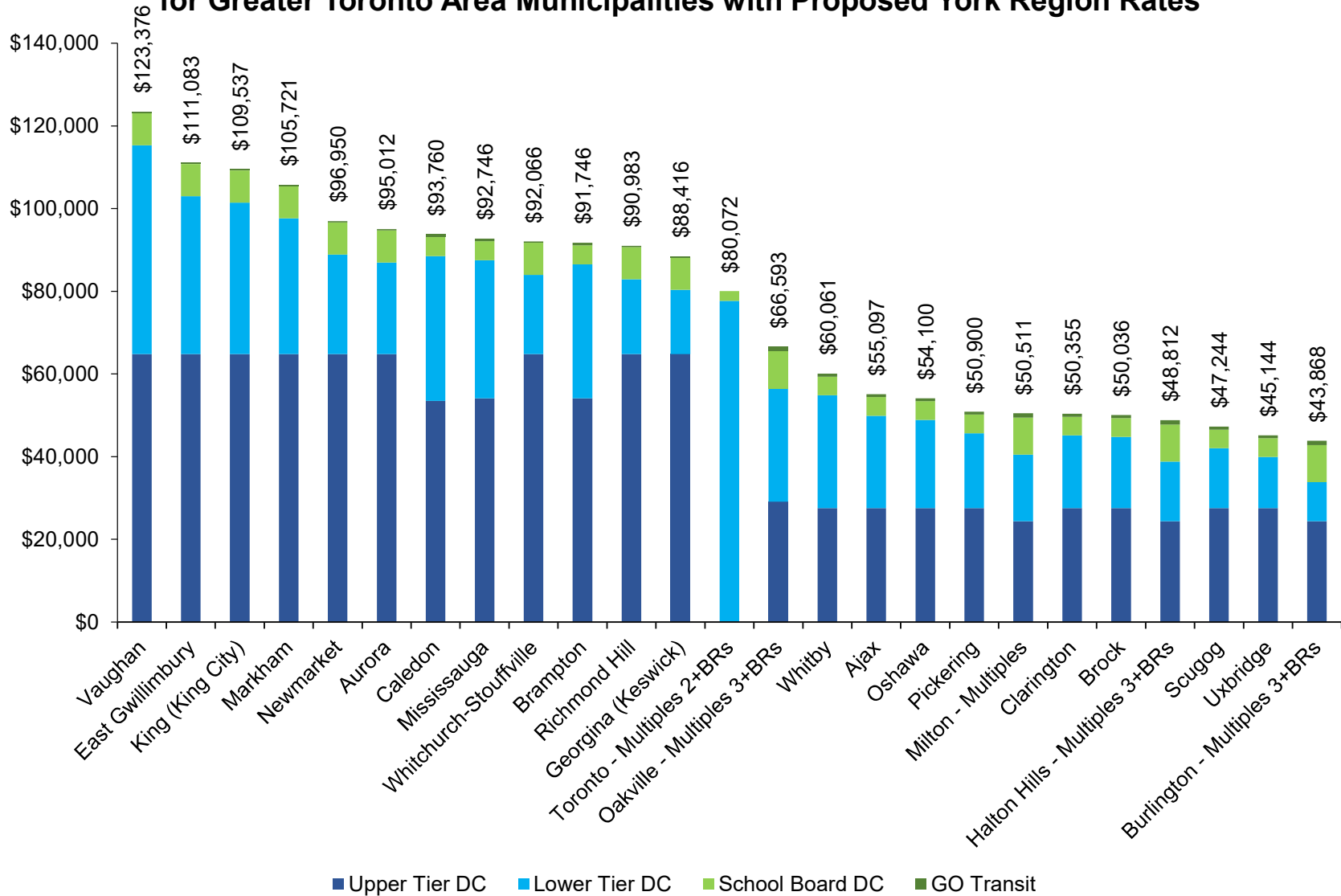


Figure A-3

**Development Charges per Large Apartments
for Greater Toronto Area Municipalities with Proposed York Region Rates**

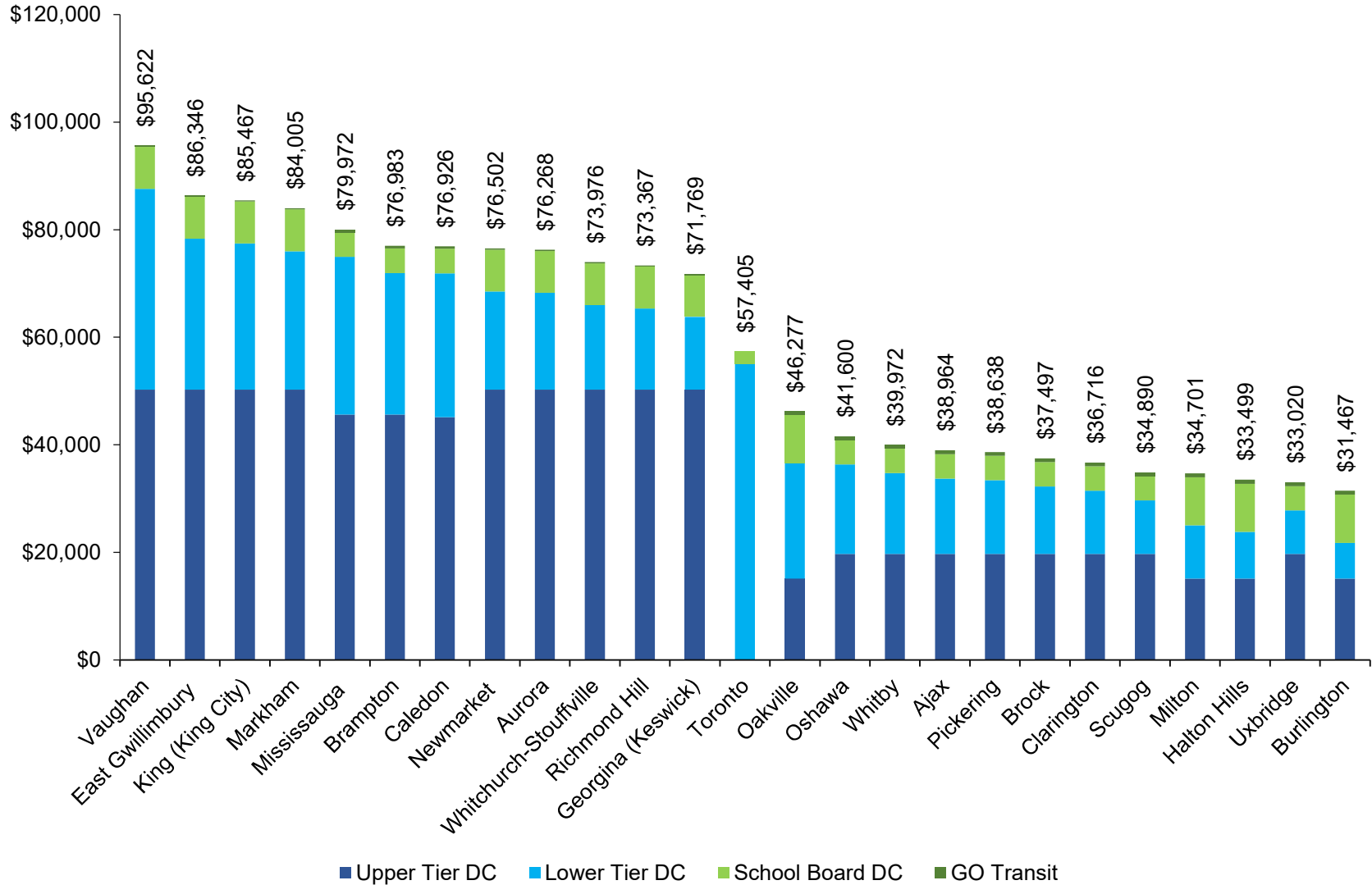


Figure A-4

Development Charges per Small Apartments For Greater Toronto Area Municipalities with Proposed York Region Rates

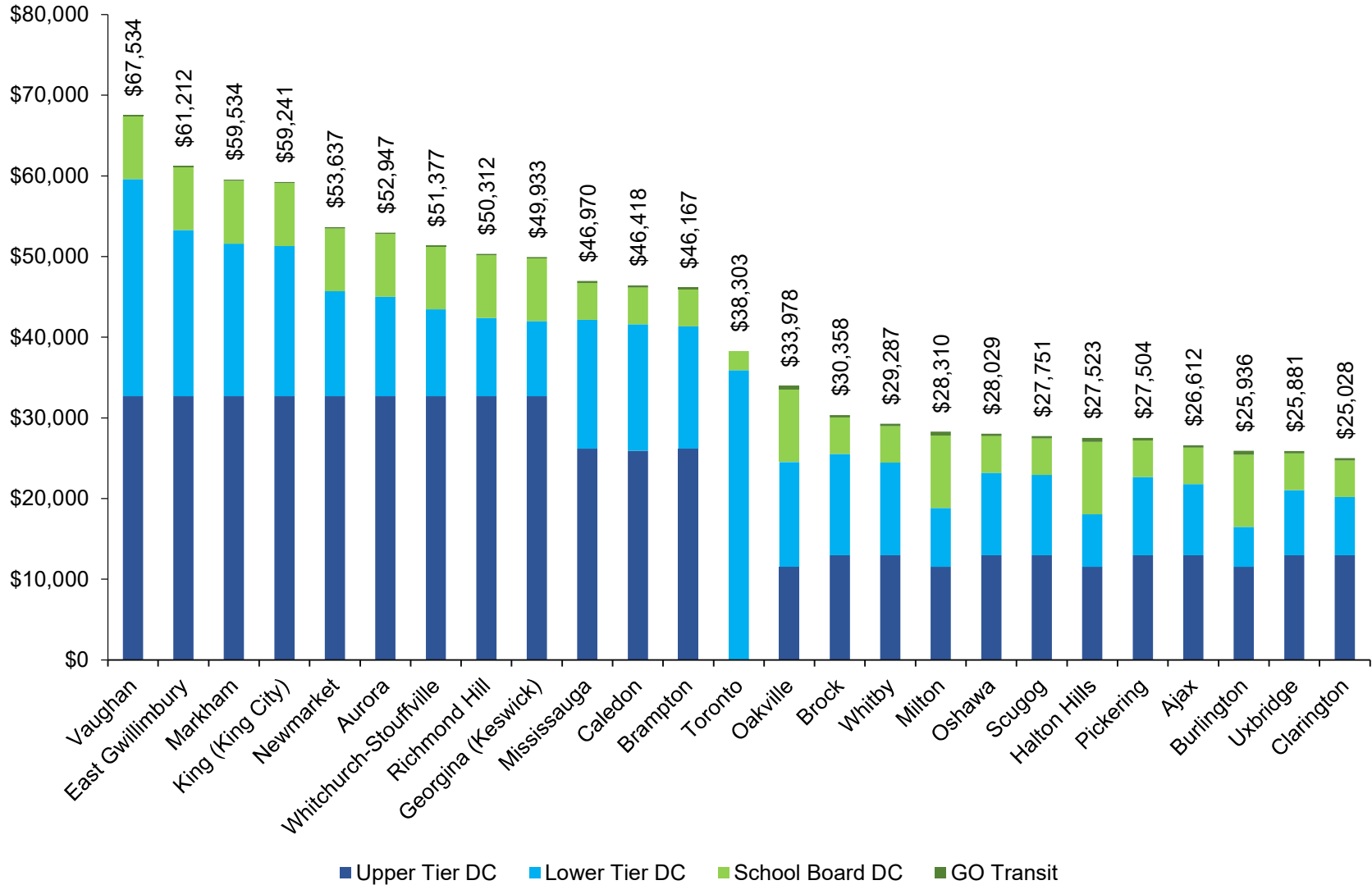


Figure A-5

**Retail Development Charges per Square Foot
for Greater Toronto Area Municipalities with Proposed York Region Rates**

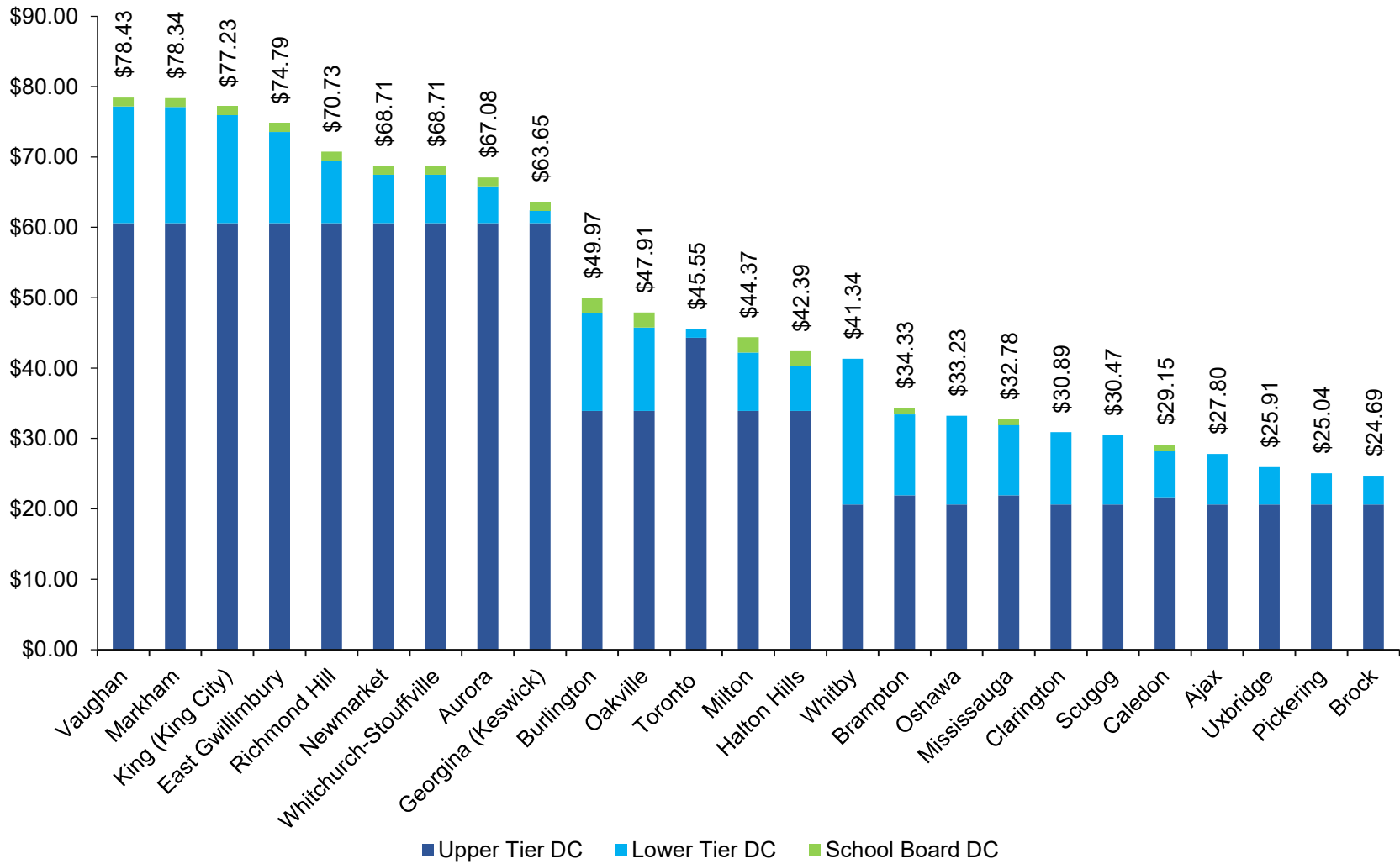


Figure A-6

**Industrial Development Charges per Square Foot
for Greater Toronto Area Municipalities with Proposed York Region Rates**

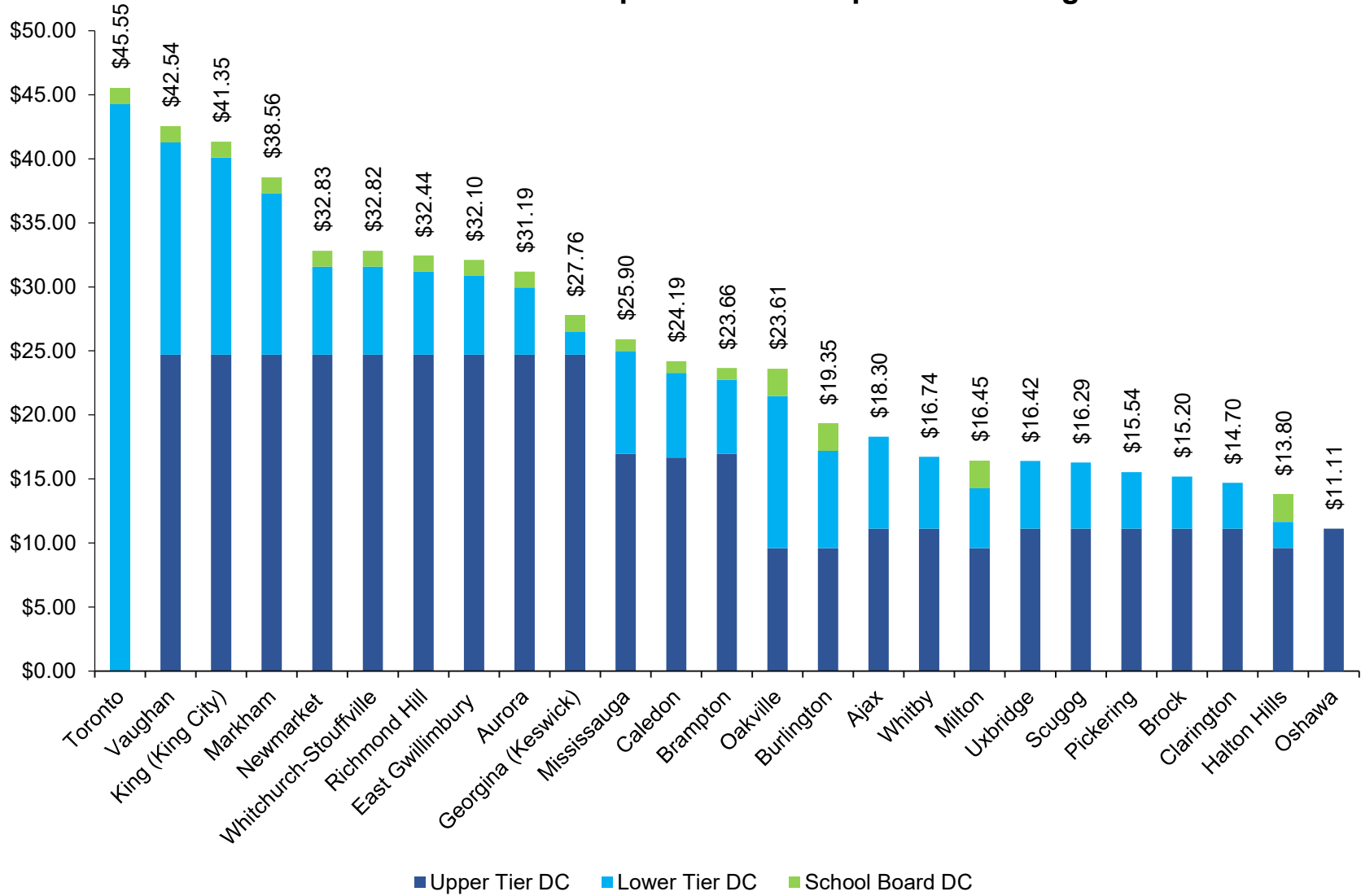


Figure A-7

**Office Development Charges per Square Foot
for Greater Toronto Area Municipalities with Proposed York Region Rates**

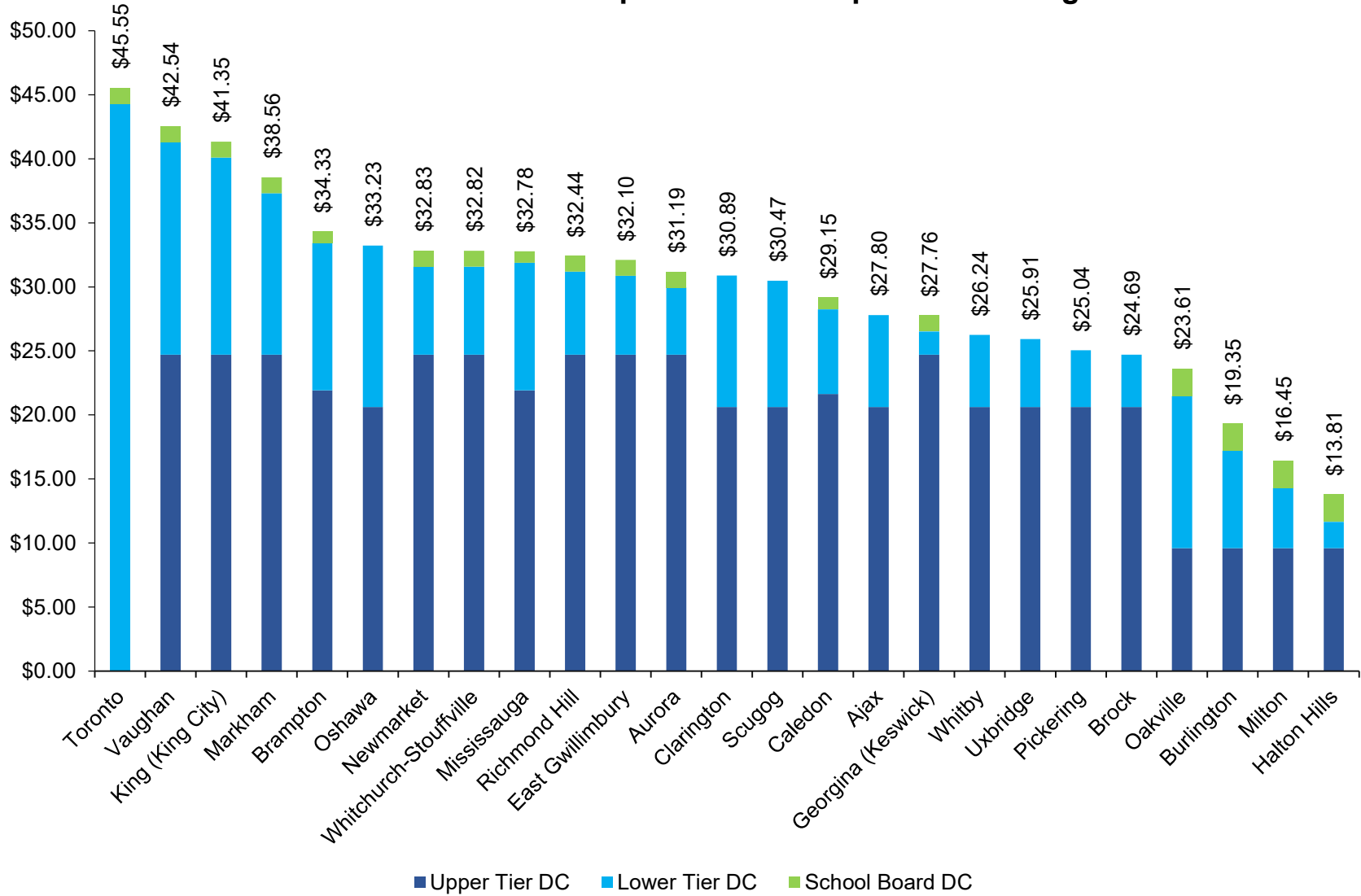


Figure A-8

Development Charges per Single and Semi-Detached Dwelling for Simcoe County and Barrie with York Region Proposed Rates

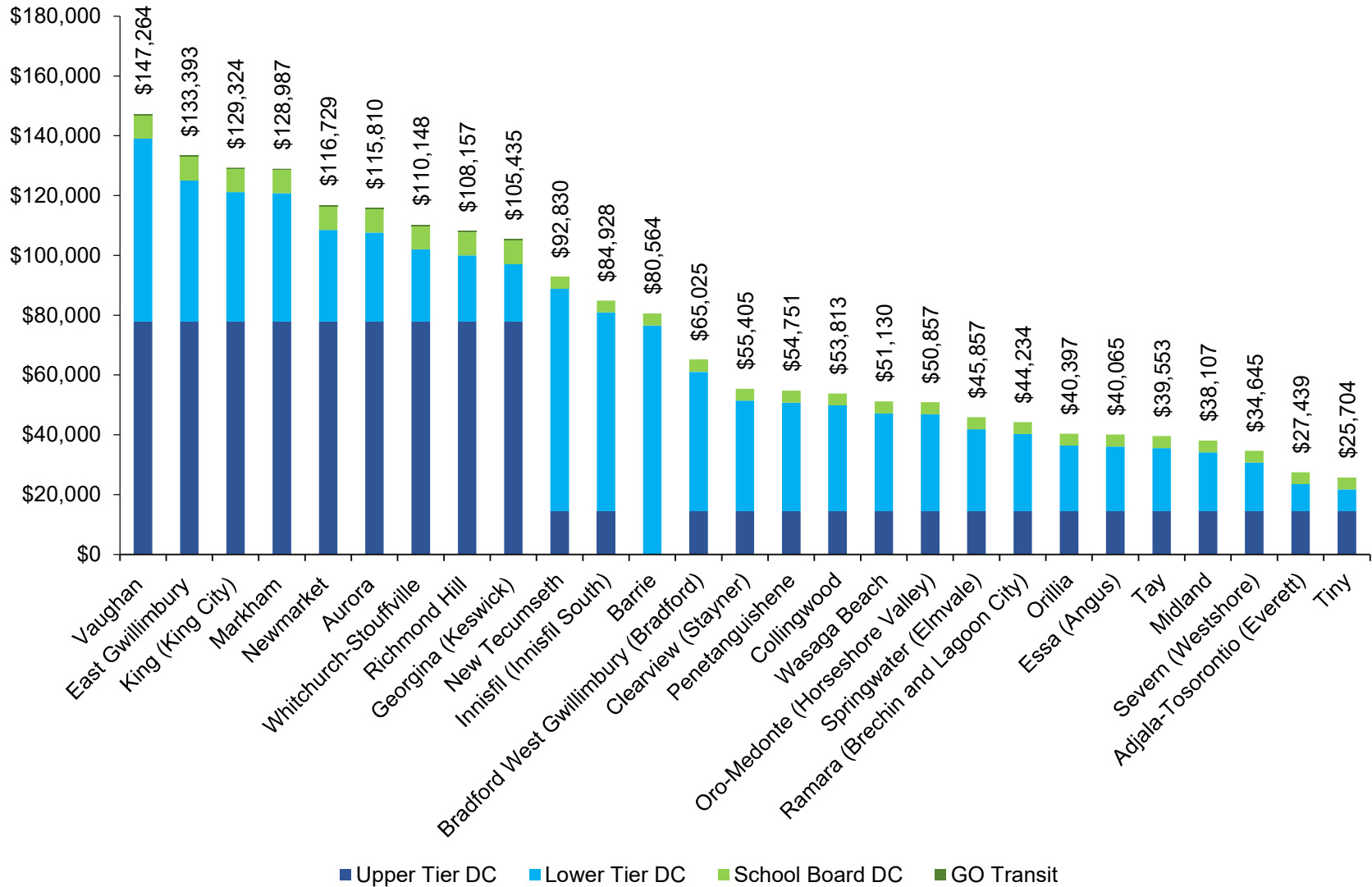


Figure A-9

**Development Charges per Multiple Unit Dwelling
for Simcoe County and Barrie with York Region Proposed Rates**

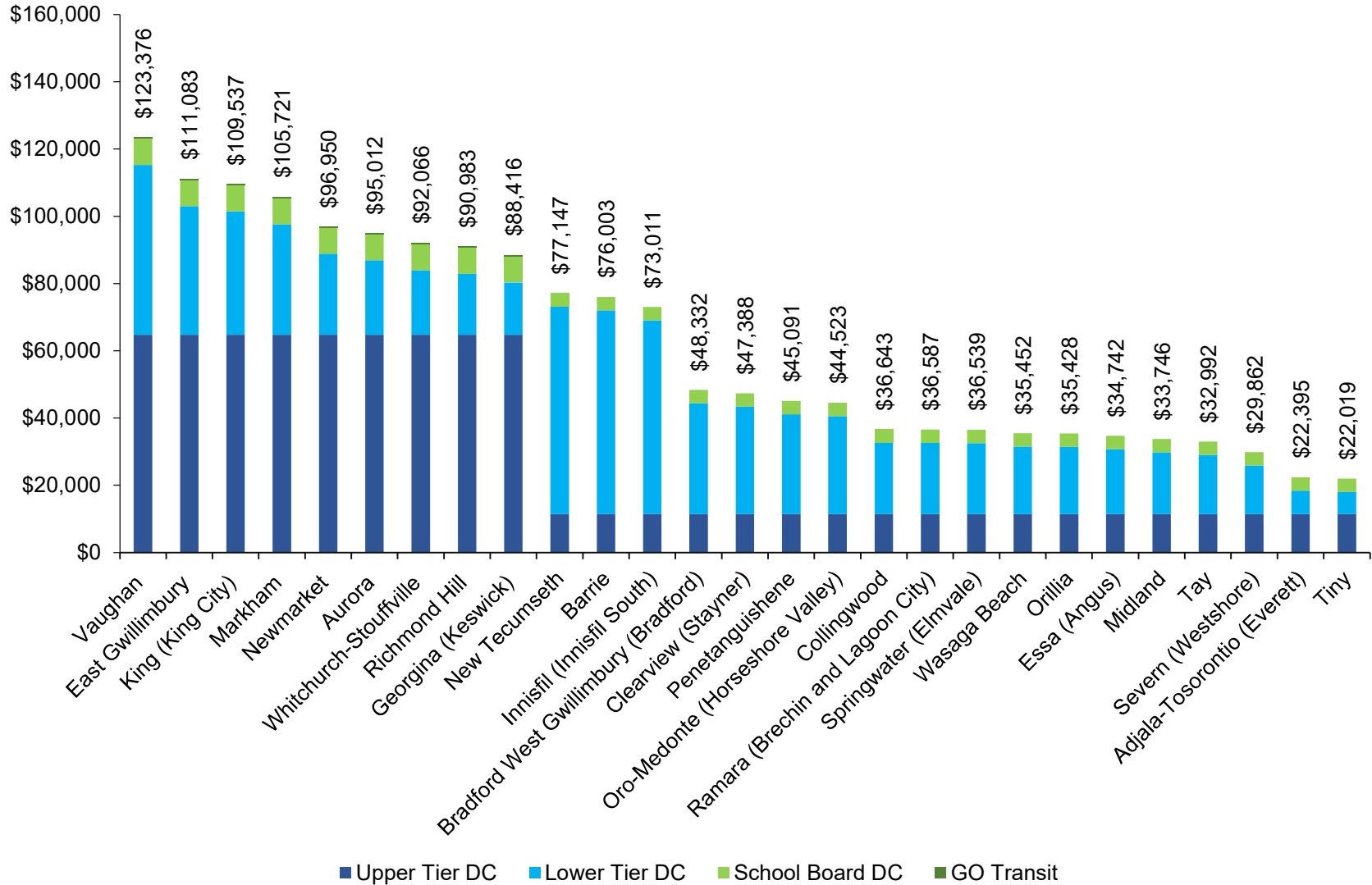


Figure A-10

**Development Charges per Large Apartment
for Simcoe County and Barrie with York Region Proposed Rates**

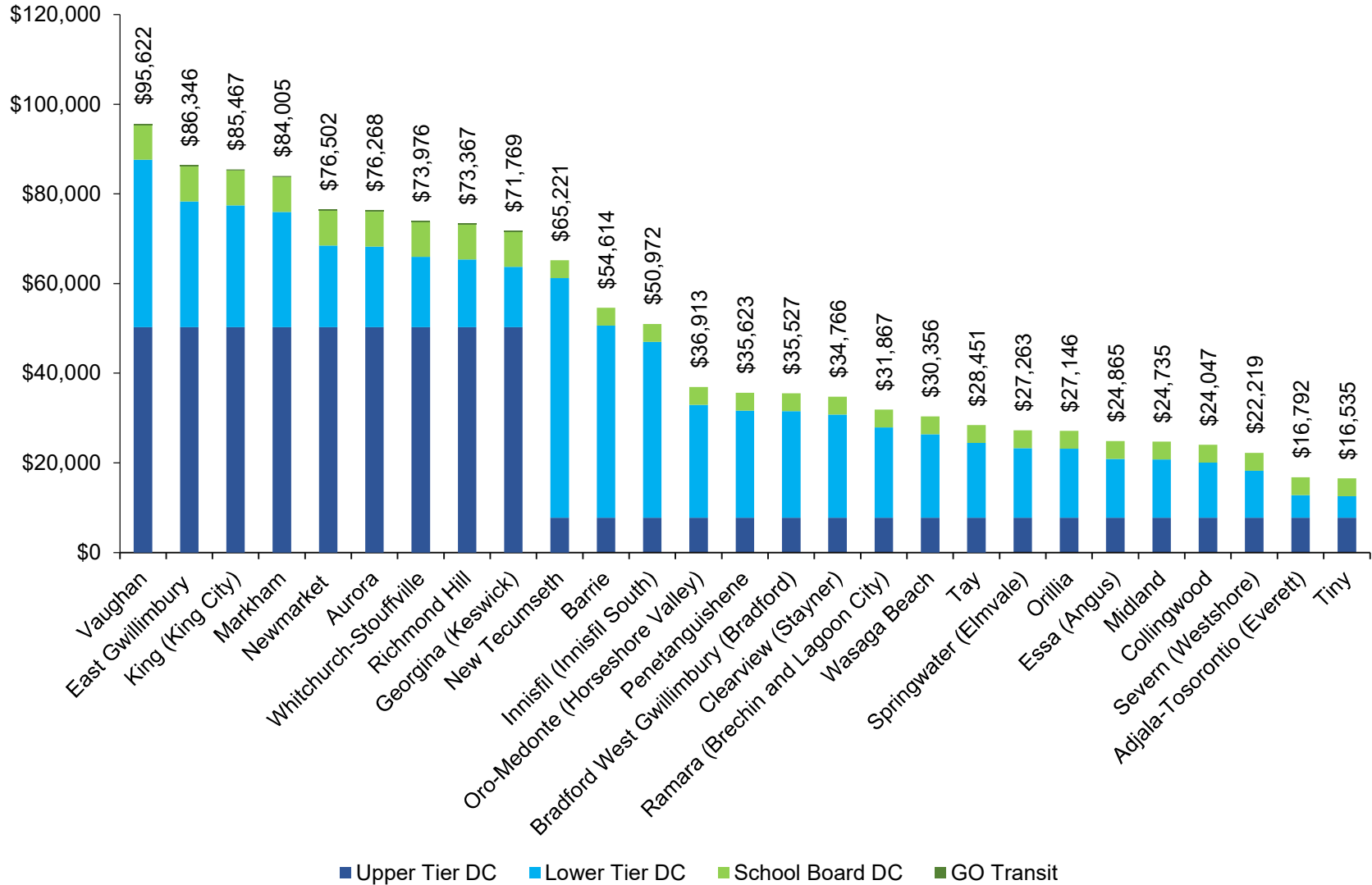


Figure A-11

**Development Charges per Small Apartment
for Simcoe County and Barrie with York Region Proposed Rates**

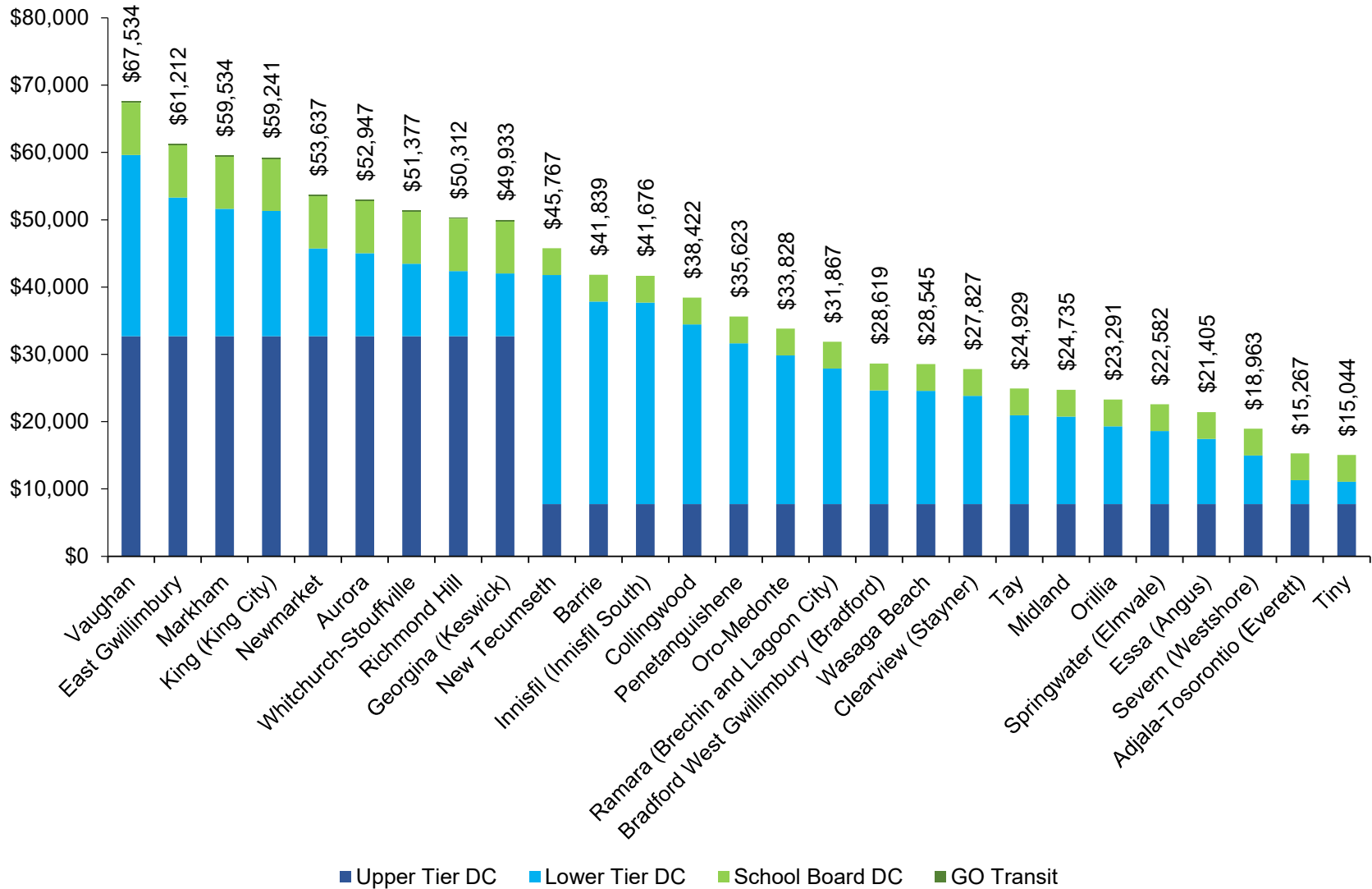


Figure A-12

**Retail Development Charges per Square Foot
for Simcoe County and Barrie with Proposed York Region Rates**

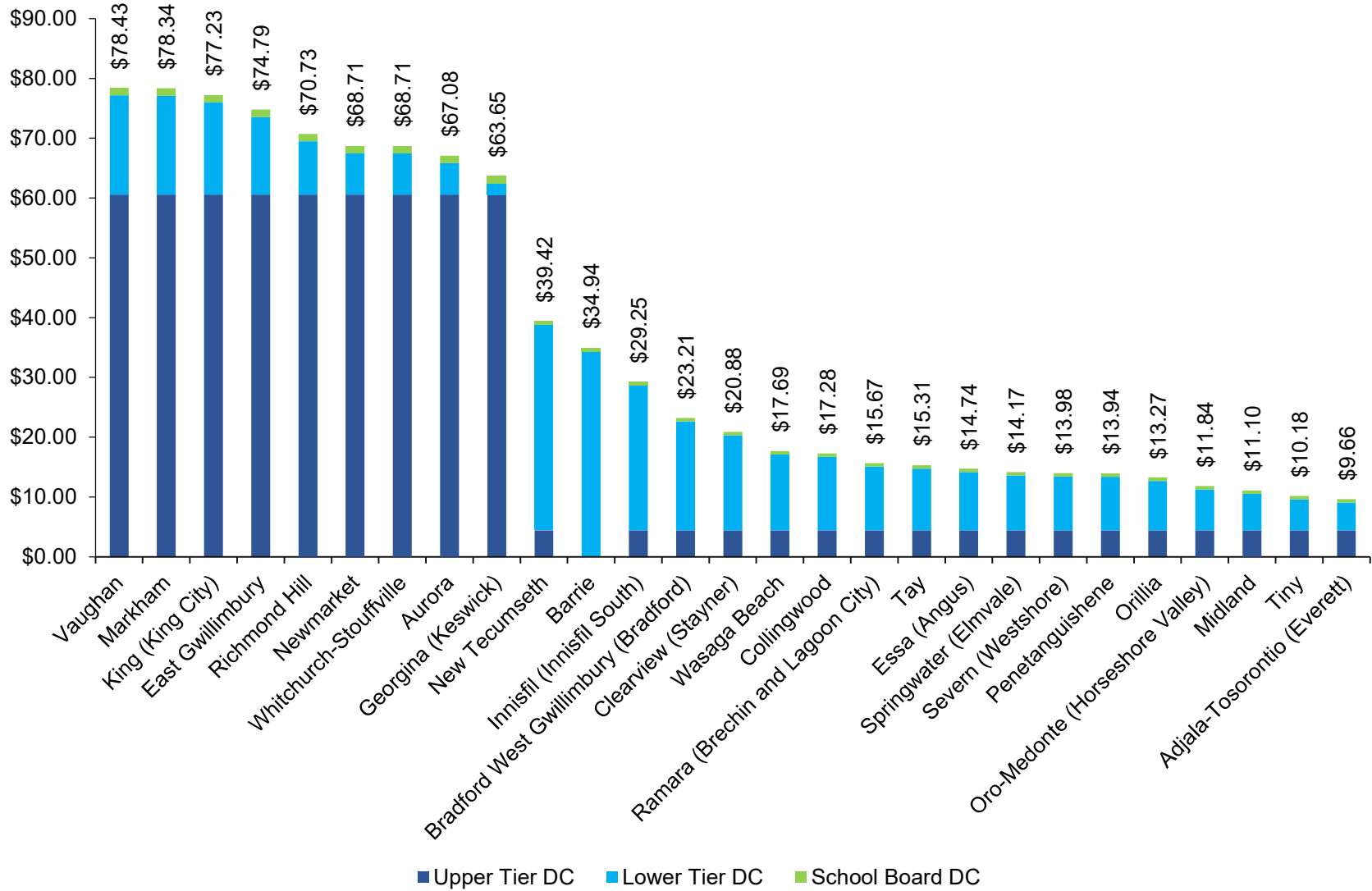


Figure A-13

**Industrial Development Charges per Square Foot
for Simcoe County and Barrie with Proposed York Region Rates**

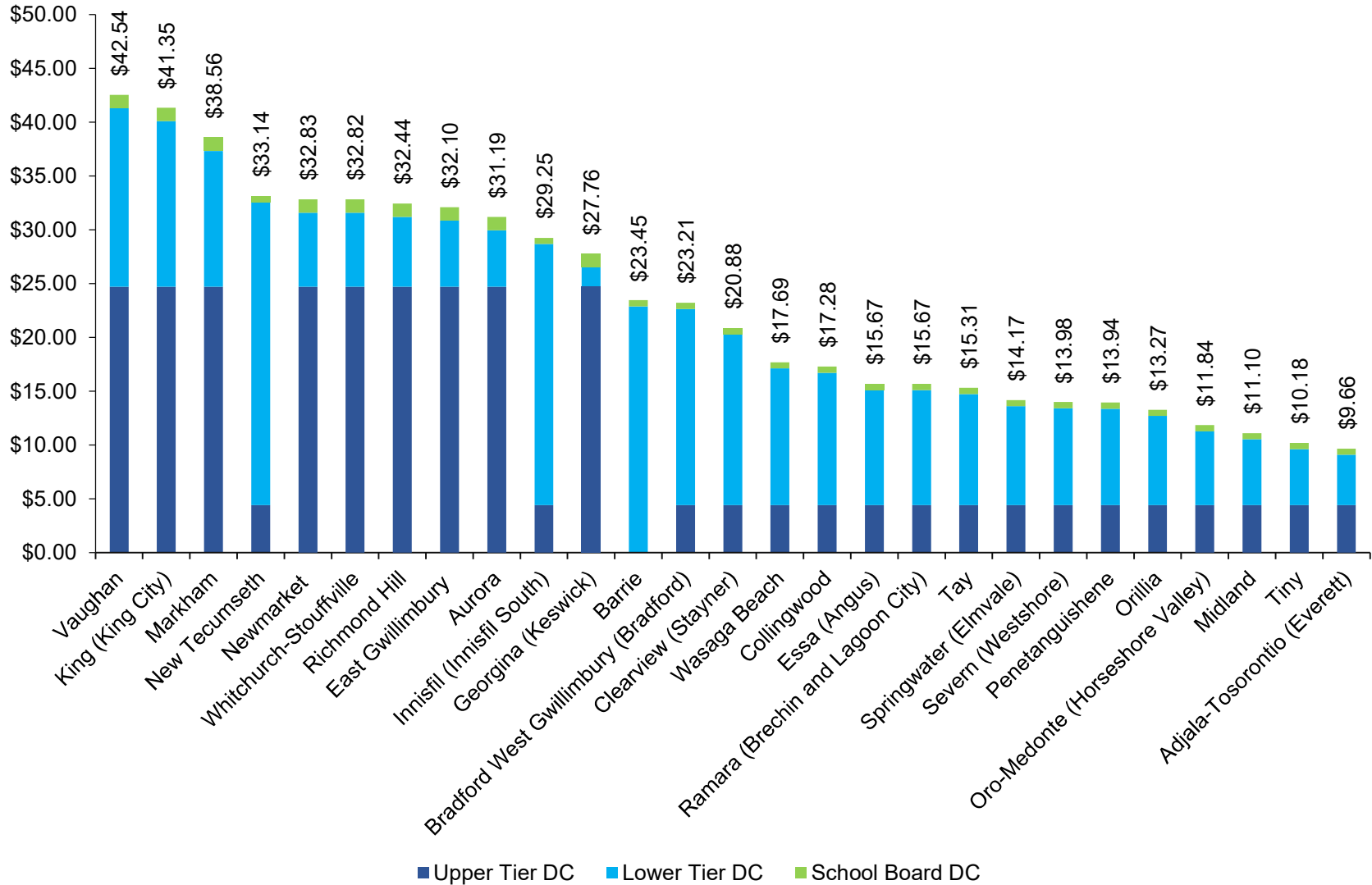
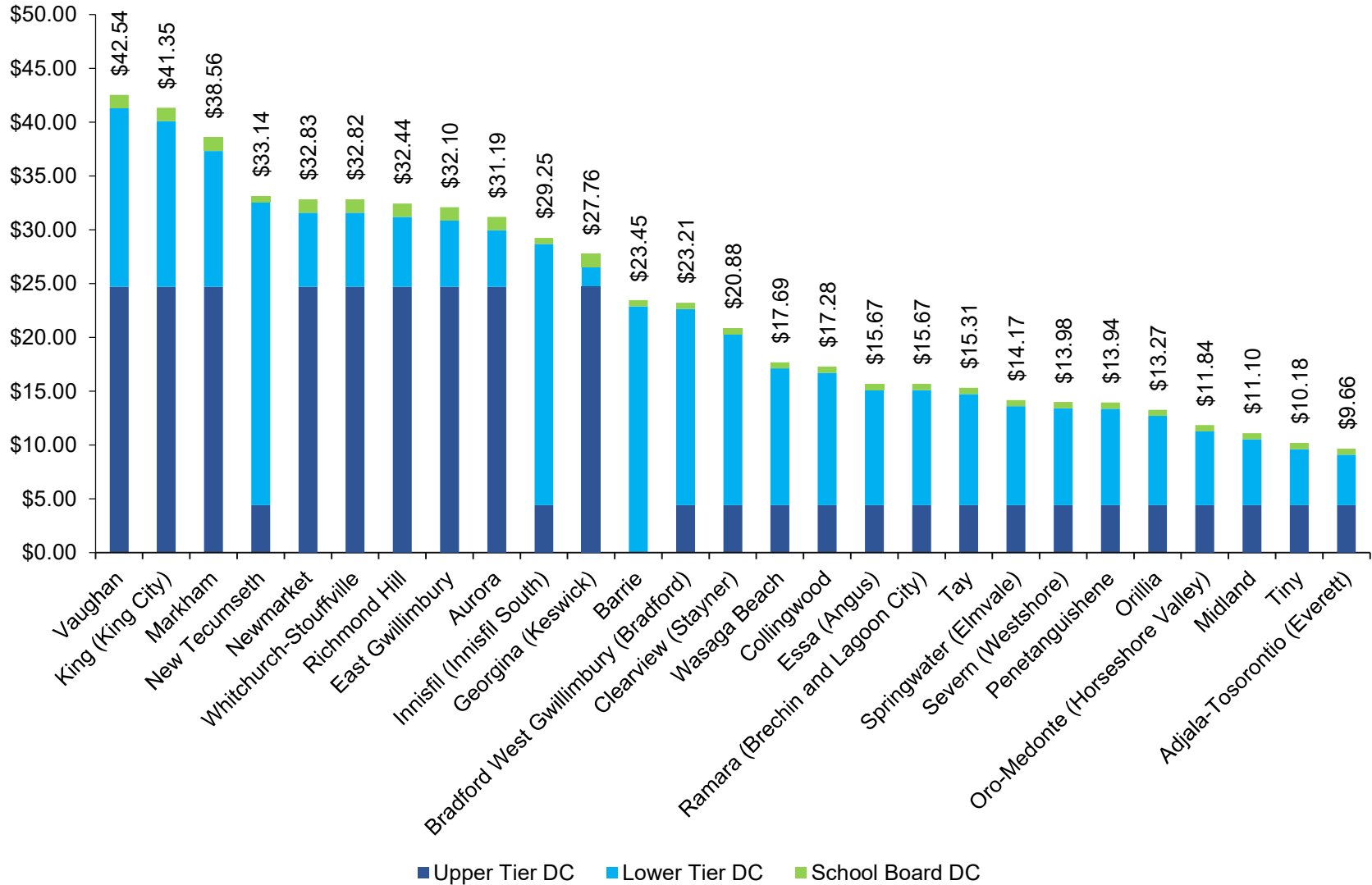


Figure A-14

**Office Development Charges per Square Foot
for Simcoe County and Barrie with Proposed York Region Rates**



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**Appendix B:
YNSE Area-specific
development charges
options**

YNSE RATE STRUCTURE CONSIDERATIONS

The following section explores options for recovering YNSE costs both on a uniform region-wide basis and on an area-specific development charge (ASDC) basis. This analysis makes up part of the consideration of the use of area rating in the Region.

Three options were considered in the recovery of growth related YNSE capital costs. The first of which is a uniform region-wide approach similar to all other services in the DC Bylaw, with the exception for wastewater, specifically the standalone wastewater system in Nobleton. The next two options deal with various levels of area-specific recoveries:

1. Uniform region-wide Rate
2. Municipalities currently serviced by the rapid transit or VIVA BRT network (Aurora, Markham, Newmarket, Richmond Hill and Vaughan) would pay for a greater share of the cost.
3. An area-specific rate for five Major Transit Station Areas (MTSAs) in addition to a Region-wide rate.

As noted in Chapter 8, and in all options considered below, the YNSE total project cost is estimated at \$5.6 billion. The Region's share of the YNSE is estimated at \$1.12 billion, matching a 75% share of the total municipal contribution. This share is expressed as the principal cost of the subway line in this background study. Details on the BTE share can be found in subsection 8.4 of Chapter 8.

A summary of rates per Single Detached Unit (SDU) for the Council approved, uniform Region-wide rate structure, and ASDC approaches reviewed is presented in Table 1 below.

Table 1
Summary of Residential Rates

SCENARIO	RATE	REGION-WIDE	BRT SERVICED	NON-BRT	MTSAS
1. Uniform	\$/SDU	\$5,837			
	% of Uniform	100%			
2. BRT Serviced	\$/SDU		\$6,972	\$1012	
	% of Uniform		19%	-83%	
3. MTSA	\$/SDU	\$5,439			\$11,274
	% of Uniform	-7%			186%

Table 2 below includes the calculated non-residential rates for each scenario.

Table 2
Summary of Non-Residential Rates

SCENARIO	RATE	REGION-WIDE	BRT SERVICED	NON-BRT	MTSAS
1. Uniform	Retail	\$5.92			
	IOI*	\$1.96			
	Hotel	\$1.04			
2. BRT Serviced	Retail		\$5.83	\$0.85	
	IOI*		\$1.67	\$0.24	
	Hotel		\$1.03	\$0.15	
3. MTSA	Retail	\$5.52			\$11.44
	IOI*	\$1.58			\$3.28
	Hotel	\$0.97			\$2.02

* Industrial/Office/Institutional

a) **Development Forecast**

The Council endorsed uniform region-wide rate structure as well as the other area-specific options are based on the development forecast for the Region aligned with the forecast used for other services. Details on the development forecast can be found in Chapter 2. Area-specific forecasts are detailed in the individual option sections below.

1. UNIFORM REGION-WIDE APPROACH

A uniform region-wide approach for collecting DCs with respect to costs associated with the YNSE is in-line with past practices for high order transit, namely TYSSE, and other DC eligible services. This approach is also supported by an overall approach to transportation planning as a network including all travel modes. Robust data is available to support this approach including transportation mode shares. The benefits of using a Region-wide approach is that it recognizes the Region-wide benefit of the works such as lower road congestion, reduced emissions, and resulting health benefits. It's also of note that it is the most common approach for recovering transit DC capital costs among Ontario municipalities. With this approach, the YNSE-related rate for a single-family detached home would be \$5,837.

Further details on the calculation of the Region-wide approach can be found in Chapter 8.

2. MUNICIPALITIES CURRENTLY SERVICED BY RAPID TRANSIT

This option takes into consideration the relationship between existing rapid transit network and the future YNSE. Five municipalities have a BRT (VIVA) line through them: Aurora, Newmarket, Markham, Richmond Hill and Vaughan.

The residential share of growth to occur within the municipalities serviced by rapid transit over the 2022 to 2041 period is 80% with the remainder to occur in municipalities without rapid transit. This is used to develop the area-specific population forecast for the 2022 to 2041 forecast period.

Table 3
Shares of Residential Growth in Municipalities with and without Rapid Transit

AREA	TOTAL AT 2021	TOTAL AT 2041	SHARE OF GROWTH
With Rapid Transit	1,063,164	1,445,011	80%
Without Rapid Transit	164,536	259,689	20%
Total	1,227,700	1,704,700	100%

Residential and non-residential growth within municipalities that are serviced by rapid transit and those not serviced is presented in Table 4 below.

Table 4
Residential and Non-Residential Shares of Growth
(2022-2041)

AREA	GROSS POPULATION	SHARE OF GROWTH	NON-RESIDENTIAL*	SHARE OF GROWTH	TOTAL (POP. & EMP.)
With Rapid Transit	382,177	74%	133,542	26%	515,719
Without Rapid Transit	91,400	78%	26,260	22%	117,660
Total	476,277		159,802		633,379

Notes:

1. Numbers may not sum due to rounding.
2. *Employment requiring new space.

The shares of cost attributed to municipalities with rapid transit is based on growth in trips generated in each municipality. The municipalities with rapid transit of Aurora, Newmarket, Markham, Richmond Hill and Vaughan make up 97% of the growth in trips over the 2021 to 2041 period with the remaining 3% in Georgina, East Gwillimbury, King and Whitchurch-Stouffville.

Of the total DC-eligible cost of \$840.0 million, \$812.2 is attributed to growth within municipalities with rapid transit and the remaining \$27.8 million to municipalities without rapid transit based on the growth in trips noted above. Of the share attributed to development in municipalities with rapid transit, the costs are split \$601.5 million residential and \$210.7 million non-residential development (based on shares identified in Table 4. The shares attributed to residential development in municipalities without rapid transit total \$21.7 million and \$6.0 million is attributed to non-residential development also based on the shares in Table 4.

The anticipated ASDC for YNSE-related costs for municipalities with rapid transit would be \$1,830 per capita or \$6,972 per single detached home. The remaining four municipalities of Georgina, East Gwillimbury, King and Whitchurch-Stouffville would have a charge of \$266 per capita or \$1,012 per single detached home.

When comparing Option 2 to the uniform region-wide rate, the five rapid transit serviced municipalities would have an 19% higher rate, or \$1,136 per SDU, while the development in the other four municipalities would be subject to a substantially lower rate, by 83% or \$4,824 per SDU. The lower YNSE DC rates in municipalities not serviced by rapid transit, under Option 2, are not reflective of the direct and indirect benefits that development in these areas will receive from the subway extension.

Generally, the non-residential rate for this option is closely aligned as under Option 1. Details on non-residential allocation methodology can be found in Chapter 6. Calculated non-residential rates for this option are as follows:

Table 5
Summary of Non-Residential Rates (Rapid Transit Serviced and Not Serviced)

RATE	BRT SERVICED	NON-BRT
Retail (excl. Hotel)	\$5.83	\$0.85
Industrial/Office/Institutional	\$1.67	\$0.24
Hotel	\$1.03	\$0.15

3. OPTION 3 – BASE RATE WITH MTSA “SURCHARGE”

The last option considered is a blended approach of both a Region-wide charge and an additional ASDC in the five MTSA located along the YNSE Richmond Hill Centre, Langstaff-Longbridge, Royal Orchard MTSA, Clark Avenue and Steeles.

i. Development Forecast

Residential share of development costs in the MTSA is based on the Region-wide scenario of 75% residential and 5.39% Retail (excluding Hotel), 19.61% IOI (Industrial, Office and Institutional) and 0.12% Hotel.

ii. Shares of Population in MTSA

Based on the development forecast data, it is estimated that 6.8% of the Region-wide gross population growth over the YNSE DC planning horizon, 2022-2041, will be within the MTSA identified above. The option is premised upon the higher projected draw on service and benefits enjoyed by development in the MTSA and therefore, arguably, should pay a higher share of the development-related costs of the YNSE.

For the purpose of this analysis the following assumption has been applied: development in the MTSA zones will be allocated an incremental benefit based on the share of population growth of 6.8% to occur in the MTSA zones. The residential share of the YNSE development-related costs is approximately \$630.0 million and under this option \$586.2 million (93%) is recovered on a region-wide uniform basis (including development in the MTSA zones) and the remaining \$42.8 million (7%) is recovered as an incremental ASDC on development in the MTSA.

In addition to the shares of population growth in the MTSA, ridership data suggests that trip origins in the MTSA are approximately two times higher than the region-wide ridership. By 2041, the MTSA average trips per capita increase to 0.0777 while the Region-wide average increases to 0.0402. It is therefore appropriate that the MTSA total charge is approximately double that which is applied region-wide.

iii. Shares of Employment in MTSA Approach

Of the total DC-eligible YNSE cost, \$211.0 million is related to non-residential development in the Region which is further broken down with \$73.6 million is related to Retail (excluding Hotel), \$136.0 million related to IOI, and \$1.4 million related to Hotel.

Region-wide non-residential development shares for YNSE were used for the purposes of determining MTSA rates. The share of non-residential growth forecasted to occur within the MTSA is 6.8%. The costs are allocated based on trip generated by each sector which forms the basis of the cost attributed to non-residential development \$5.0 million – Retail (excluding Hotel), \$9.2 million – IOI, and \$93,100 – Hotel) and region-wide (\$68.6 million - Retail (excluding Hotel), \$126.78 million – IOI, and \$1.3 million – Hotel).

The table below summarizes the non-residential rates under Option 3.

Table 6
Summary of Non-Residential Rates (MTSA and Region-Wide)

RATE	REGION-WIDE	MTSAS
Retail (excl. Hotel)	\$5.52	\$11.44
Industrial/Office/Institutional	\$1.58	\$3.28
Hotel	\$0.97	\$2.02

iv. Uplift in Land Value Analysis

In 2020, York Region retained Conference Board of Canada to examine the economic impact of the Yonge North Subway Extension. Included in this work is an analysis of potential land value uplift in areas proximate to the subway. The surcharge detailed above for the MTSA development is equivalent to capturing 5% of the uplift in land value.

This illustrates that the population approach in the section above does not result in the calculated MTSA ASDCs creating a significant financial impact on development as the approach captures just 5% of the land value uplift.

v. Comparison with Region-Wide Rates

Based on the approach described above, a base YNSE DC of \$5,443 per SDU would apply. This base DC rate would be applied against all development in the region, including in the MTSA. The incremental benefit to the MTSA is valued at \$42.8 million which results in an YNSE ASDC rate of \$5,841 per SDU. For greater clarity, development in the YNSE MTSA would be subject to a total YNSE DC of \$11,284 per SDU, made up of the \$5,443 region-wide charge plus the \$5,841 ASDC.

Under Option 3, the development in the five MTSA would have experience significantly higher, approximately \$5,438 per SDU or 186%, YNSE DC rates while the development in the other four municipalities would be subject to a lower, \$397 per SDU or 7%, YNSE DC rates when compared to the calculated uniform region-wide YNSE DC rates noted in Table 1.



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**Appendix C:
Draft 2022 Development
Charges Bylaw**

THE REGIONAL MUNICIPALITY OF YORK

BYLAW NO. 2022-

A bylaw to impose development charges against lands to pay for increased capital costs required because of increased needs for services arising from development within The Regional Municipality of York.

WHEREAS Section 2 of the *Development Charges Act*, S.O. 1997, ch. 27 (the “Act”) authorizes the Council of the Regional Corporation to enact a bylaw to impose development charges against land to pay for increased capital costs required because of increased needs for services arising from development;

AND WHEREAS a background study dated March 3, 2022 required by Section 10 of the Act was presented to Regional Council along with a draft of this bylaw as then proposed on March 3, 2022 and was completed within a one-year period prior to the enactment of this bylaw;

AND WHEREAS Regional Council directed that the background study and draft proposed bylaw be made available to the public and such documents were made available to the public 60 days prior to the passage of the bylaw and at least two weeks prior to the public meeting required pursuant to Section 12 of the Act;

AND WHEREAS the development charge background study includes an asset management plan that deals with all assets whose capital costs are intended to be funded under the development charges bylaw and that such assets are considered to be financially sustainable over their full life-cycle pursuant to Subsection 10(3) of the Act;

AND WHEREAS notice of the public meeting was provided in accordance with the requirements of Section 12 of the Act and in accordance with the Regulations under the Act, and such public meeting was held on ****, 2022;

AND WHEREAS any person who attended the public meeting was afforded an opportunity to make representations and the public generally were afforded an opportunity to make written submissions relating to the proposed bylaw;

AND WHEREAS Regional Council resolved on ****, 2022 that it is the intention of Regional Council to ensure that the increase in need for services identified in connection with the enactment of the bylaw will be met;

AND WHEREAS Regional Council resolved on ****, 2022 that no further public meeting be required and that this bylaw be brought forward for enactment;

NOW THEREFORE, the Council of The Regional Municipality of York hereby enacts as follows:

DEFINITIONS

1.0 In this bylaw,

“accessory use” means that the building or structure is naturally and normally incidental to or subordinate in purpose or both, and exclusively devoted to a principal use, building or structure;

“Act” means the *Development Charges Act*, 1997, S.O. 1997, c. 27;

“agricultural use” means lands, buildings or structures, excluding any portion thereof used as a dwelling unit, used or designed or intended for use for the purpose of a *bona fide* farming operation including, but not limited to, animal husbandry, dairying, livestock, fallow, field crops, removal of sod, forestry, fruit farming, horticulture, market gardening, pasturage, poultry keeping, equestrian facilities and any other activities customarily carried on in the field of agriculture;

“apartment building” means a residential building or the residential portion of a mixed-use building, other than a townhouse, consisting of more than 3 dwelling units, which dwelling units have a common entrance to grade;

“area municipality” means a city, town or township in the Region;

“banquet hall” means a building or part of a building used primarily for the purpose of catering to banquets, weddings, receptions or similar social functions for which food and beverages are served;

“building permit” means a permit issued under the *Building Code Act, 1992*, which permits the construction of a building or structure or, which permits the construction of the foundation of a building or structure;

“community use” means a facility traditionally provided by a municipality which serves a municipal purpose and shall include a community centre, library/research facility, recreation facility and a shelter;

“convention centre” means a building with a gross floor area greater than 40,000 square feet which is designed and used primarily to accommodate the following:

- (i) the assembly of large gatherings of persons for trade, business or educational purposes, or any combination thereof;
- (ii) the display of products or services;
- (iii) accessory uses may include administrative offices, display areas, show-rooms, training facilities and banquet facilities, but does not include a banquet hall;

“development” includes redevelopment;

“development charges” means charges imposed pursuant to this bylaw adjusted in accordance with Section 5;

“duplex” means a building comprising, by horizontal division, two dwelling units, each of which has a separate entrance to grade;

“dwelling unit” means a room or suite of rooms used, or designed or intended for use by one person or persons living together, in which culinary and sanitary facilities are provided for the exclusive use of such person or persons;

“funeral home” means a building with facilities for the preparation of dead persons for burial or cremation, for the viewing of the body and for funeral services;

“future development” means a block identified within a plan of subdivision which requires a subsequent planning approval, in addition to a building permit, which planning approval shall include a site plan approval or the approval of a plan of condominium;

“general services” means services in regard to transit, Toronto-York subway extension, Yonge North subway extension, police, ambulance services, public health, long-term care/seniors services, public works, growth studies, housing services, court services and waste diversion;

“gross floor area” means, in the case of a non-residential building or structure or the non-residential portion of a mixed-use building or structure, the aggregate of the areas of each floor, whether above or below grade, measured between the exterior faces of the exterior walls of the building or structure or from the centre line of a common wall separating a non-residential and a residential use, excluding, in the case of a building or structure containing an atrium, the sum of the areas of the atrium at the level of each floor surrounding the atrium above the floor level of the atrium, and excluding the sum of the areas of each floor used, or designed or intended for use for the parking of motor vehicles unless the building or structure, or any part thereof, is a retail motor vehicle establishment or a standalone motor vehicle storage facility or a commercial public parking structure, and, for the purposes of this definition, notwithstanding any other section of this bylaw, the non-residential portion of a mixed-use building is deemed to include one-half of any area common to the residential and non-residential portions of such mixed-use building or structure, and gross floor area shall not include the surface area of swimming pools or the playing surfaces of indoor sport fields including but not limited to hockey arenas, and basketball courts;

“group home” means a residential building or the residential portion of a mixed-use building containing a single housekeeping unit supervised on a 24 hour a day basis on site by agency staff on a shift rotation basis, funded wholly or in part by any government and licensed, approved or supervised by the Province of Ontario under any general or special act, for the accommodation of not less than 3 and not more than 8 residents, exclusive of staff;

“hard services” means water services, wastewater services and road services;

“heritage property” means a building or structure which, in the opinion of the local architectural conservation advisory committee is of historic or architectural value or interest, or which has been so designated under the *Ontario Heritage Act*;

“hotel” means a commercial establishment offering lodging to travelers which shall be assessed at a per square foot/per square metre charge and may include, without limitation, other uses such as restaurants, meeting rooms and stores, that are available to guests and/or to the general public. If the combined gross floor area of other such uses are greater than thirty three percent of the combined gross floor area of the lodging quarters, each non-lodging use in the structure will be assessed at the rate applicable to such other uses;

“high rise residential” means an apartment building that is 4 or more storeys above grade, consisting of four or more dwelling units and shall not include a townhouse or a stacked townhouse, the latter of which is less than four dwelling units and four storeys above-grade;

“industrial” means lands, buildings or structures used or designed or intended for use for manufacturing, processing, fabricating or assembly of raw goods, warehousing or bulk storage of goods, and includes office uses and the sale of commodities to the general public where such uses are accessory to an industrial use, but does not include the sale of commodities to the general public through a warehouse club;

“institutional” means lands, buildings or structures used or designed or intended for use by an organized body, society or religious group for promoting a public or non-profit purpose and shall include, but without limiting the generality of the foregoing, places of worship, medical clinics and special care facilities;

“industrial/office/institutional” means lands, buildings or structures used or designed or intended for use for any of an industrial use, office use or institutional use and shall include a convention centre and any other non-residential use which is not a retail use;

“large apartment” means a dwelling unit in an apartment building, plex or stacked townhouse that is 700 square feet or larger in size;

“live-work unit” means a unit intended for both residential and non-residential uses concurrently;

“local board” means a local board as defined in the *Act*;

“mixed-use” means land, buildings or structures used, or designed or intended for use, for a combination of non-residential and residential uses;

“mobile home” means any dwelling that is designed to be made mobile, and constructed or manufactured to provide a permanent residence for one or more persons, but does not include a travel trailer or tent trailer;

“multiple unit dwellings” includes townhouses, back-to-back townhouses, mobile homes, group homes and all other residential uses that are not included in the definition of “apartment building”, “small apartment”, “large apartment”, “single detached dwelling” or “semi-detached dwelling”;

“non-profit” means a corporation without share capital that has objects of a charitable nature;

“non-residential use” means lands, buildings or structures or portions thereof used, or designed or intended for use for other than residential use;

“office” means lands, buildings or structures used or designed or intended for use for the practice of a profession, the carrying on of a business or occupation or the conduct of a non-profit organization and shall include but not be limited to the office of a physician, lawyer, dentist, architect, engineer, accountant, real estate or insurance agency, veterinarian, surveyor, appraiser, financial institution, contractor, builder, land developer;

“place of worship” means a building or structure that is used primarily for worship;

“plex” means a duplex, a semi-detached duplex, a triplex or a semi-detached triplex;

“private school” means an educational institution operated on a non-profit basis, excluding any dormitory or residence accessory to such private school, that is used primarily for the instruction of students in courses of study approved or authorized by the Minister of Education and Training;

“Region” means The Regional Municipality of York;

“Regional Council” means the Council of The Regional Municipality of York;

“region-wide charges” means the development charges imposed with respect to the following services:

- (i) roads;
- (ii) transit;
- (iii) Toronto-York subway extension;
- (iv) Yonge North subway extension;
- (v) police;
- (vi) ambulance services;
- (vii) public health;
- (viii) long-term care/seniors services;
- (ix) public works;
- (x) growth studies;
- (xi) housing services;
- (xii) court services; and
- (xiii) waste diversion.

“Regulation” means O. Reg. 82/98 under the Act;

“residential use” means lands, buildings or structures used, or designed or intended for use as a residence for one or more individuals, and shall include, but is not limited to, a single detached dwelling, a semi-detached dwelling, a townhouse, a stacked townhouse, a plex, an apartment building, a group home, a mobile home and a residential dwelling unit accessory to a non-residential use but shall not include a lodging house licensed by a municipality;

“residential in-fill use” means ground related residential use, such as a single detached-dwelling, semi-detached dwelling, townhouse or stacked townhouse, comprising three lots or less;

“retail” means lands, buildings or structures used or designed or intended for use for the sale or rental or offer for sale or rental of goods or services to the general public for consumption or use and shall include, but not be limited to, a banquet hall, a funeral home, but shall exclude office;

“retail motor vehicle establishment” means a building or structure used or designed or intended to be used for the sale, rental or servicing of motor vehicles, or any other function associated with the sale, rental or servicing of motor vehicles including but not limited to detailing, leasing and brokerage of motor vehicles, and short or long-term storage of customer motor vehicles. For a retail motor vehicle establishment, gross floor area includes the sum of the areas of each floor used or designed or intended for use for the parking or storage of motor vehicles, including customer and employee motor vehicles. An exemption may be granted to exclude the sum of the areas for customer and employee motor vehicles on terms and conditions to the satisfaction of the Region;

“self storage building” means a building or part of a building consisting of individual storage units, which are accessible by the users, that are used to provide storage space to the public;

“semi-detached duplex” means one of a pair of attached duplexes, each duplex divided vertically from the other by a party wall;

“semi-detached dwelling” means a building divided vertically into and comprising 2 dwelling units;

“semi-detached triplex” means one of a pair of triplexes divided vertically one from the other by a party wall;

“serviced” for the purposes of section 3 means the particular service is connected to or available to be connected to the lands, buildings or structures, or, as a result of the development, will be connected to or will be available to be connected to the lands, buildings or structures;

“services” means services designated in section 2.1 of this bylaw;

“shelter” means a building in which supervised short-term emergency shelter and associated support services are provided to individuals who are fleeing situations of physical, financial, emotional or psychological abuse;

“single detached dwelling” and **“single detached”** means a residential building consisting of one dwelling unit that is not attached to another structure above grade. For greater certainty, a residential building consisting of one dwelling unit that is attached to another structure by footings only shall be considered a single family dwelling for purposes of this bylaw;

“small apartment” means a dwelling unit in an apartment building, a plex or a stacked townhouse that is less than 700 square feet in size;

“special care facilities” means lands, buildings or structures used or designed or intended for use for the purpose of providing residential accommodation, supervision, nursing care or medical treatment, which do not comprise dwelling units, that are licensed, approved or supervised under any special or general Act;

“stacked townhouse” means a building, other than a plex, townhouse or apartment building, containing at least 3 dwelling units, each dwelling unit being separated from the other vertically and/or horizontally and each dwelling unit having an entrance to grade shared with no more than 3 other units;

“standalone motor vehicle storage facility” means a building or structure used or designed or intended for use for the storage or warehousing of motor vehicles that is separate from a retail motor vehicle establishment. For a standalone motor vehicle storage facility, gross floor area includes the sum of the areas of each floor used or designed or intended for use for the parking or storage of motor vehicles, including customer and employee motor vehicles. An exemption may be granted to exclude the sum of the areas for customer and employee motor vehicles on terms and conditions to the satisfaction of the Region;

“townhouse” means a building, other than a plex, stacked townhouse or apartment building, containing at least 3 dwelling units, each dwelling unit separated vertically from the other by a party wall and each dwelling unit having a separate entrance to grade;

“triplex” means a building comprising 3 dwelling units, each of which has a separate entrance to grade;

“uniform charges” means the development charges imposed with respect to the following services:

- (i) water; and
- (ii) wastewater.

“university” has the same meaning as defined in Section 171.1 of the *Education Act*,

2.0 DESIGNATION OF SERVICES

2.1 The categories of services for which development charges are imposed under this bylaw are as follows:

- (a) water;
- (b) wastewater;
- (c) roads;
- (d) transit;
- (e) Toronto-York subway extension;
- (f) Yonge North subway extension
- (g) police;
- (h) ambulance services;
- (i) public health;
- (j) long-term care/seniors services;
- (k) public works;
- (l) growth studies;
- (m) housing services;
- (n) court services; and
- (o) waste diversion.

2.2 The components of the services designated in subsection 2.1 are described on Schedule A.

3.0 APPLICATION OF BYLAW RULES

3.1 Development charges shall be payable in the amounts set out in subsections 3.6, 3.9, 3.10 and 3.11 of this bylaw where:

- (a) the lands are located in the area described in subsection 3.2; and
- (b) the development of the lands requires any of the approvals set out in subsection 3.4(a).

3.1.1 Development charges shall be calculated in accordance with this bylaw, the background study and all policies contained within the background study dated March 3, 2022, save and except for the development charge credit policy described in section 13.3 of the background study.

Area to Which bylaw Applies

3.2 Subject to subsection 3.3, this bylaw applies to all lands in the geographic area of the Region.

- 3.3** This bylaw shall not apply to lands that are owned by and used for the purposes of:
- (a) the Region or a local board thereof;
 - (b) a board as defined in section 1(1) of the *Education Act*;
 - (c) an area municipality or a local board thereof.

Approvals for Development

- 3.4** (a) Development charges shall be imposed on all lands, buildings or structures that are developed for residential or non-residential uses if the development requires,
- (i) the passing of a zoning bylaw or of an amendment to a zoning bylaw under section 34 of the *Planning Act* or any successor thereto;
 - (ii) the approval of a minor variance under section 45 of the *Planning Act* or any successor thereto;
 - (iii) a conveyance of land to which a bylaw passed under subsection 50(7) of the *Planning Act* or any successor thereto applies;
 - (iv) the approval of a plan of subdivision under section 51 of the *Planning Act* or any successor thereto;
 - (v) a consent under section 53 of the *Planning Act* or any successor thereto;
 - (vi) the approval of a description under the *Condominium Act, 1998*, or any successor thereto; or
 - (vii) the issuing of a permit under the *Building Code Act, 1992*, or any successor thereto, in relation to a building or structure.
- (b) No more than one development charge for each service designated in subsection 2.1 shall be imposed upon any lands, buildings or structures to which this bylaw applies even though two or more of the actions described in subsection 3.4(a) are required before the lands, buildings or structures can be developed.

- (c) Despite subsection 3.4(b) and despite any other section of this bylaw, if two or more of the actions described in subsection 3.4(a) occur at different times, additional development charges shall be imposed if the subsequent action has the effect of increasing the need for services.
- (d) Subsection 3.4(a) shall not apply in respect of an action mentioned in subsection 3.4 (a) (i) to (vii), if the only effect of the action is to:
 - (i) permit the enlargement of an existing dwelling unit; or
 - (ii) permit the creation of additional dwelling units as prescribed, subject to the prescribed restrictions, in prescribed classes of existing residential buildings or prescribed structures ancillary to existing residential buildings.
- (e) The creation of a second dwelling unit in prescribed classes of proposed new residential buildings, including structures ancillary to dwellings, is, subject to the prescribed restrictions, exempt from development charges.
- (f) For greater clarity, prescribed under sections 3.4(d) and 3.4 (e) of this bylaw shall be the same as is prescribed in the Regulation.

Exemptions

- 3.5.1** Notwithstanding the provisions of this bylaw, but subject to subsection 3.5.2, development charges shall not be imposed or may be deferred, on terms and conditions, satisfactory to the Region, with respect to:
- (a) the relocation of a heritage house;
 - (b) a building or structure used for a community use owned by a non-profit corporation;
 - (c) land owned by and used for the purposes of a private school that is exempt from taxation under the *Assessment Act* or any successor thereto;
 - (d) lands, buildings or structures used or to be used for the purposes of a cemetery or burial ground exempt from taxation under the *Assessment Act* or any successor thereto;
 - (e) non-residential uses permitted pursuant to section 39 of the *Planning Act* or any successor thereto;
 - (f) agricultural uses;

- (g) development creating or adding an accessory use or structure not exceeding 100 square metres of gross floor area save and except for any live work units with a retail component; for such units development charges will be payable pursuant to subsection 3.10 on the retail component;
- (h) a public hospital receiving aid under the *Public Hospitals Act* or any successor thereto;
- (i) lands vested in or leased to a university that receives regular and ongoing operating funds from the government for the purposes of post-secondary education, if the development in respect of which the development charges would otherwise be payable is intended to be occupied and used by the university.

3.5.2 The provisions of subsection 3.5.1 shall only apply to exempt or defer, as the case may be, a development described in paragraph (a), (b) or (c) thereof from the payment of development charges if the area municipality in which the development is to be located exempts or defers development charges, as the case may be, with respect to the development in question.

Amount of Charge Residential

3.6 The development charges described in Schedule B to this bylaw shall be imposed on residential uses of lands, buildings or structures, including a dwelling unit accessory to a non-residential use and, in the case of a mixed-use building or structure, on the residential uses in the mixed-use building or structure, according to the type of residential unit, and calculated as follows:

(a) Region-wide Charges

- (i) a development charge with respect to each of the general services according to the type of residential use;
- (ii) a development charge with respect to road services according to the type of residential use;

(b) Uniform Charges

- (i) where the lands, buildings or structures are serviced by regional water services, the development charge with respect to water services according to the type of residential use;
- (ii) where the lands, buildings or structures are serviced by regional wastewater services, the development charge with respect to wastewater services according to the type of residential use;

- (c) For determining development charges under this bylaw, any residential dwelling that is less than 700 square feet of total gross floor area shall be deemed a small apartment and pay the corresponding development charge set out in Schedule B.

3.7 Despite subsection 3.6(b),

- (a) a development charge with respect to regional water services shall not be imposed against the lands shown on Schedule C;
- (b) a development charge with respect to regional wastewater services shall not be imposed against the lands shown on Schedule D;
- (c) A development charge with respect to regional wastewater services shall not be imposed against the lands shown on Schedule E.

Contingent Development Charges

- 3.8** Thirty days after the happening of an event described in Column 3 of Schedule G, the residential development charge under subsection 3.6 which corresponds to the service described in Column 2 of Schedule G shall be increased by the amounts shown in Columns 4, 5, 6 and 7 of Schedule G according to the type of residential unit.

Non-Residential

Industrial/Office/Institutional Uses

3.9 The development charges described in Schedule F to this bylaw shall be imposed on industrial/office/institutional uses of lands, buildings or structures, and, in the case of a mixed-use building or structure, on the industrial/office/institutional uses in the mixed-use building or structure, and calculated as follows:

(a) **Region-wide Charges**

- (i) a development charge with respect to each of the general services according to the gross floor area of the industrial/office/institutional use;
- (ii) a development charge with respect to road services according to the gross floor area of the industrial/office/institutional use;

(b) **Uniform Charges**

- (i) where the lands, buildings or structures are serviced by regional water services, the development charge with respect to water services according to the gross floor area of the industrial/office/institutional use;
- (ii) where the lands, buildings or structures are serviced by regional wastewater services, the development charge with respect to wastewater services according to the gross floor area of the industrial/office/institutional use.

3.9.1 Despite subsection 3.9(b)(ii), a development charge with respect to regional wastewater services shall not be imposed against the lands shown on Schedule E.

Retail Uses

3.10 The development charges described in Schedule F to this bylaw shall be imposed on retail uses of lands, buildings or structures, and, in the case of a mixed-use building or structure, on the retail uses in the mixed-use building or structure, and calculated as follows:

(a) **Region-wide Charges**

- (i) a development charge with respect to each of the general services according to the gross floor area of the retail use;

- (ii) a development charge with respect to road services according to the gross floor area of the retail use;

(b) Uniform Charges

- (i) where the lands, buildings or structures are serviced by regional water services, the development charge with respect to water services according to the gross floor area of the retail use;
- (ii) where the lands, buildings or structures are serviced by wastewater services, the development charge with respect to wastewater services according to the gross floor area of the retail use.

3.10.1 Despite subsection 3.10(b)(ii) a development charge with respect to regional wastewater services shall not be imposed against the lands shown on Schedule E.

Hotel Uses

3.11 The development charges described in Schedule F to this bylaw shall be imposed on hotel uses of lands, buildings or structures and calculated as follows:

(a) Region-wide Charges

- (i) a development charge with respect to each of the general services according to the gross floor area of the hotel use;
- (ii) a development charge with respect to road services according to the gross floor area of the hotel use;

(b) Uniform Charges

- (i) where the lands, buildings or structures are serviced by regional water services, the development charge with respect to water services according to the gross floor area of the hotel use;
- (ii) where the lands, buildings or structures are serviced by wastewater services, the development charge with respect to wastewater services according to the gross floor area of the hotel use.

3.11.1 Despite subsection 3.11(b)(ii) a development charge with respect to regional wastewater services shall not be imposed against the lands shown on Schedule E.

Multiple Industrial/Office/Institutional and Retail Uses

- 3.12** In the case of lands, buildings or structures used or designed or intended for use for both industrial/office/institutional uses and retail uses, the development charges otherwise applicable to such development under both subsections 3.9 and 3.10 shall be determined on the following basis:
- (a) as between the industrial/office/institutional uses and the retail uses, the principal use of the development shall be that use which has the greater gross floor area, such principal use being the use of 55% or greater of the total gross floor area. If no single use has 55% or greater of the total gross floor area, then the development charge payable on the total gross floor area shall be the average of the two non-residential charges payable;
 - (b) the development charges under either subsection 3.9 or 3.10 applicable to such principal use as determined under paragraph (a), provided that there is a principal use determined under paragraph (a), shall be applied to the total non-residential gross floor area of the development;
 - (c) Notwithstanding this Section 3.12, if any building or structure designed or intended for use for both industrial/office/institutional uses and retail uses, and, where such building or structure contains multiple individually owned units, each unit's payable development charges will be assessed individually based on the predominant use of that unit.
 - (d) Subsections 3.12(a) and 3.12(b) do not apply to a retail motor vehicle establishment or a standalone motor vehicle storage facility. Where a retail motor vehicle establishment is one of multiple industrial/office/institutional uses and retail uses in a building or structure, the development charge payable shall be the retail charge. For a retail motor vehicle establishment, where the sum of the areas used, or designed or intended for use for the parking or storage of motor vehicles, excluding the sum of the areas for customer and employee motor vehicles, as determined by the Region, is more than two times greater than the remaining area, the retail rate shall be applied to two times the difference between the gross floor area of the entire retail motor vehicle establishment and the gross floor area of the area used for parking or storage, and any gross floor area above that shall be levied the industrial/office/institutional rate.

Contingent Development Charges

- 3.13** Thirty days after the happening of an event described in Column 3 of Schedule G, the non-residential development charge under subsections 3.9, 3.10 and 3.11 which corresponds to the service described in Column 2 of Schedule G shall be increased by the amounts shown in Columns 8, 9, and 10 of Schedule G according to the type of non-residential development.

Place of Worship

3.14 Despite subsection 3.9, development charges shall not be imposed in respect of the gross floor area of a place of worship to a maximum of 5,000 square feet (or 464.5 square metres) or in respect of that portion of the gross floor area of a place of worship which is used as an area for worship, whichever is greater.

Reduction of Development Charges Where Redevelopment

3.15 Where, as a result of the redevelopment of land, a building or structure existing on the land within 48 months prior to the date of payment of development charges in regard to such redevelopment was, or is to be demolished, in whole or in part, or converted from one principal use to another, in order to facilitate the redevelopment, the development charges otherwise payable with respect to such redevelopment shall be reduced by the following amounts:

- (a) in the case of a residential building or structure, or in the case of a mixed-use building or structure, the residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charge under subsection 3.6 of this bylaw by the number, according to type, of dwelling units that have been or will be demolished or converted to another principal use; and
- (b) in the case of a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, an amount calculated by multiplying the applicable development charges under subsection 3.9, 3.10 3.11 or 3.12 of this bylaw by the gross floor area that has been or will be demolished or converted to another principal use. Development charges shall not be reduced under this subsection for a non-residential building or structure or, in the case of mixed-use building or structure, the non-residential uses in the mixed-use building or structure, being demolished or converted for which development charges were not imposed, or which was not subject to development charges after November 23, 1991;

provided that such amounts shall not exceed, in total, the amount of the development charges otherwise payable with respect to the redevelopment. The 48 month time frame shall be calculated from the date of the issuance of the demolition permit.

3.15.1 For the purposes of subsection 3.15, the onus is on the applicant to produce evidence to the satisfaction of the Region, acting reasonably, to establish the following:

- (a) the number of dwelling units that have been or will be demolished or converted to another principal use; or
- (b) the non-residential gross floor area that has been or will be demolished or converted to another principal use; and

- (c) in the case of a demolition, that the dwelling units and/or non-residential gross floor area were demolished within 48 months prior to the date of the payment of development charges in regard to the redevelopment.

3.15.2 Any building or structure, that is determined to be derelict or the equivalent of derelict prior to issuance of a demolition permit by the municipal council of the area municipality in which the building or structure is located, shall be eligible for development charge credits in accordance with section 3.15.3.

3.15.3 Any building or structure deemed derelict, or the equivalent of derelict in accordance with subsection 3.15.2 shall be eligible for development charge credits if a building permit is issued for a building or structure on the lands previously occupied by the deemed derelict building or structure within 120 months or less of the issuance of demolition permit for the deemed derelict building or structure. The development charge credit shall be calculated in accordance with the time requirements between demolition permit issuance and building permit issuance as set out in Schedule H. The amount of development charges payable for any development to which subsections 3.15.2 and 3.15.3 apply, shall be calculated in accordance with subsections 3.15 and 3.15.1.

Reduction of Development Charges Where Gross Floor Area is Increased

3.16 Despite any other provisions of this bylaw, if a development includes the expansion of the gross floor area of an industrial, office or institutional building, the amount of the development charge that is payable in respect of the expansion shall be calculated as follows:

- (a) If the gross floor area is expanded by fifty percent of the original gross floor area of the existing development, or less, the amount of the development charge in respect of the expansion is zero;
- (b) If the gross floor area is expanded by more than fifty percent of the original gross floor area of the existing development the amount of the development charge in respect of the expansion is the amount of the development charge that would otherwise be payable multiplied by the fraction determined as follows:
 - (i) determine the area by which the expansion exceeds fifty percent of the original gross floor area of the existing development before any expansion; and
 - (ii) divide the amount under paragraph (b)(i) by the amount of the expansion of the original gross floor area of the existing development.

When amount of development charge is determined

3.17 Where clause (1)(a) or (1)(b) of Section 26.2 of the Act applies to a development for the purposes of determining the amount of the development charge, the development charge payable under this bylaw shall be determined in accordance with section 26.2 and such development charge shall be subject to interest in accordance with Region's Interest Policy, as may be amended by Regional Council.

Time of Payment of Development Charges

3.18 Development charges imposed under this section are payable on the date on which a building permit is issued with respect to each dwelling unit, building or structure.

3.18.1 If a use or development of land, buildings or structures does not require the issuance of a building permit but requires one or more of the actions listed in subsection 3.4(a)(i) to (vi) inclusive, a development charge shall be payable and shall be calculated and collected on the earliest of any of the actions listed in section 3.4(a)(i) to (vi) being required.

3.19 Despite subsection 3.18, development charges with respect to hard services imposed under subsection 3.6 with respect to an approval of a residential plan of subdivision under section 51 of the *Planning Act*, are payable immediately upon the owner entering into the Regional development charge agreement respecting such plan of subdivision, on the basis of the following, unless such a plan of subdivision includes blocks intended for future development, in which case development charges payable for such blocks shall be determined at building permit issuance:

- (a) the proposed number and type of dwelling units in the final plan of subdivision; and
- (b) with respect to blocks in the plan of subdivision intended for future development, development charges for such blocks shall be payable at building permit issuance.

3.20 For the purposes of paragraph (b) of subsection 3.19, where the use or uses to which a block in a plan of subdivision may be put pursuant to a zoning bylaw passed under section 34 of the *Planning Act*, are affected by the use of a holding symbol in the zoning bylaw as authorized by section 36 of the *Planning Act*, the development charges for such blocks shall be payable at building permit issuance.

- 3.21** For the purposes of subsections 3.19 and 3.20, and despite any other provision to this bylaw, where a subdivision agreement identifies the number and type of dwelling units proposed for the residential plan of subdivision, the number and type of dwelling units so identified shall be used to calculate the development charges payable under subsection 3.18.
- 3.22** Notwithstanding subsection 3.18 of this bylaw, where section 26.1 of the Act applies in respect of any part of a development, the development charges imposed under this bylaw, in respect that part of the development to which section 26.1 of the Act applies only, shall be payable in annual installments in accordance with the requirements of subsection 26.1(3) of the Act, and shall be subject to interest in accordance with Region's Interest Policy, as may be amended by Regional Council.
- 3.23** Despite subsections 3.19 and 3.20, Regional Council, from time to time, and at any time, may authorize agreements providing for all or any part of a development charge to be paid before or after it would otherwise be payable.
- (a) If, at the time of issuance of a building permit or permits in regard to a lot or block on a plan of subdivision for which payments have been made pursuant to section 3.19, the type of dwelling unit for which building permits are being issued is different from that used for the calculation and payment under section 3.19, and there has been no change in the zoning affecting such lot or block, and the development charges for the type of dwelling unit for which building permits are being issued were greater at the time that payments were made pursuant to section 3.19 than for the type of dwelling unit used to calculate the payment under section 3.19, an additional payment to the Region is required, which payment, in regard to such different unit types, shall be the difference between the development charges in respect to the type of dwelling unit for which building permits are being issued, calculated as at the date of issuance of the building permit or permits, and the development charges previously collected in regard thereto, adjusted in accordance with section 5.1 of this bylaw.
- (b) If, at the time of issuance of a building permit or permits in regard to a lot or block on a plan of subdivision for which payments have been made pursuant to section 3.19, the total number of dwelling units of a particular type for which building permits have been or are being issued is greater, on a cumulative basis, than that used for the calculation and payment under section 3.18, and there has been no change in the zoning affecting such lot or block, an additional payment to the Region is required, which payment shall be calculated on the basis of the number of additional dwelling units at the rate prevailing as at the date of issuance of the building permit or permits for such dwelling units.

- (c) If, at the time of issuance of a building permit or permits in regard to a lot or block on a plan of subdivision for which payments have been made pursuant to section 3.19, the type of dwelling unit for which building permits are being issued is different than that used for the calculation and payment under section 3.19, and there has been no change in the zoning affecting such lot or block, and the development charges for the type of dwelling unit for which building permits are being issued were less at the time that payments were made pursuant to section 3.19 than for the type of dwelling unit used to calculate the payment under section 3.19, a refund in regard to such different unit types shall be paid by the Region, which refund shall be the difference between the development charges previously collected, adjusted in accordance with section 5.1 of this bylaw to the date of issuance of the building permit or permits, and the development charges in respect to the type of dwelling unit for which building permits are being issued, calculated as at the date of issuance of the building permit or permits.
- (d) If, at the time of issuance of a building permit or permits in regard to a lot or block on a plan of subdivision for which payments have been made pursuant to section 3.19, the total number of dwelling units of a particular type for which building permits have been or are being issued is less, on a cumulative basis, than that used for the calculation and payment under section 3.19, and there has been no change in the zoning affecting such lot or block, a refund shall be paid by the Region, which refund shall be calculated on the basis of the number of fewer dwelling units at the rate prevailing as at the date of issuance of the building permit or permits.

3.24 Despite subsections 3.23(c) and (d), a refund shall not exceed the amount of the development charges paid under subsection 3.19

4.0 PAYMENT BY SERVICES

4.1 Despite the payments required under subsections 3.18 and 3.19, Regional Council may, by agreement, and in accordance with approved policies, give a credit towards a development charge in exchange for work that relates to a service for which a development charge is imposed under this bylaw.

5.0 INDEXING

5.1 Development charges pursuant to this bylaw shall be adjusted annually, without amendment to this bylaw, commencing on July 1st 2023 and each anniversary of that date thereafter, in accordance with the Statistics Canada Quarterly Construction Price Statistics.

6.0 SCHEDULES

6.1 The following schedules to this bylaw form an integral part thereof:

- Schedule A - Components of Services Designated in subsection 2.1
- Schedule B - Residential Development Charges
- Schedule C - Lands Exempt from Residential Development Charge in Regard to Regional Water Supply Service
- Schedule D - Lands Exempt from Residential Development Charge in Regard to Regional Wastewater Services (Kleinburg Community)
- Schedule E - Lands exempt from Residential and Non-Residential Development Charges in regard to Regional Wastewater Services (Village of Nobleton)
- Schedule F - Non-Residential Development Charges
- Schedule G - Contingent Residential and Non-Residential Development Charges
- Schedule H - Calculation of Development Charge Credits provided to Derelict Buildings

7.0 DATE BYLAW IN FORCE

7.1 This bylaw shall come into force on the 17th day of June, 2022.

8.0 DATE BYLAW EXPIRES

8.1 This bylaw will expire on the 16th day of June, 2027, unless it is repealed at an earlier date.

9.0 REPEAL

9.1 Bylaw No. 2017-35, as amended is hereby repealed as of the 17th day of June, 2022.

ENACTED AND PASSED this ** day of **, 2022

Christopher Raynor

Regional Clerk

Wayne Emmerson

Regional Chair

*Authorized by Clause * , Report * of the Committee of the Whole, adopted by Regional Council at its meeting on May **, 2022.*

**SCHEDULE “A”
COMPONENTS OF DESIGNATED SERVICES**

Services	Service Components
Water	<ul style="list-style-type: none"> • Water Supply • Water Pumping • Water Storage • Water Linear • Water Cost Shared Works • Planning and Studies
Wastewater	<ul style="list-style-type: none"> • Wastewater Treatment • Wastewater Pumping • Wastewater Linear • Wastewater Cost Shared Works • Planning and Studies
Roads	<ul style="list-style-type: none"> • Growth Structures (Grade Separations) • New Interchanges • Midblock Crossings • Growth New Infrastructure (Missing Links) • Growth Widen to 4 lands • Growth Widen to 6 lands • Road Improvements to Support Transit • Reconstruction • Environmental Assessment, Design, Survey, and Property Acquisition for Future Capital Projects • Intersection and Miscellaneous Capital • Transportation Demand Management • Active Transportation Programs and Initiatives • Growth Planning

Transit	<ul style="list-style-type: none"> ● Facilities ● Vehicles ● Technology ● Bus Rapid Transit Infrastructure
Toronto-York Spadina Subway Extension	<ul style="list-style-type: none"> ● Toronto-York Spadina Subway Extension
Yonge North Subway Extension	<ul style="list-style-type: none"> ● Yonge North Subway Extension
Police	<ul style="list-style-type: none"> ● Facilities ● Land ● Vehicles ● Equipment
Ambulance Services	<ul style="list-style-type: none"> ● Facilities ● Land ● Vehicles
Public Health	<ul style="list-style-type: none"> ● Provision for public health facilities ● Provision for public health vehicles
Waste Diversion	<ul style="list-style-type: none"> ● Facilities ● Growth Studies
Public Works	<ul style="list-style-type: none"> ● Facilities ● Vehicles
Housing Services	<ul style="list-style-type: none"> ● Facilities
Court Services	<ul style="list-style-type: none"> ● Facilities
Growth Studies	<ul style="list-style-type: none"> ● Growth-related studies
Long-Term Care/Seniors Services	<ul style="list-style-type: none"> ● Facilities

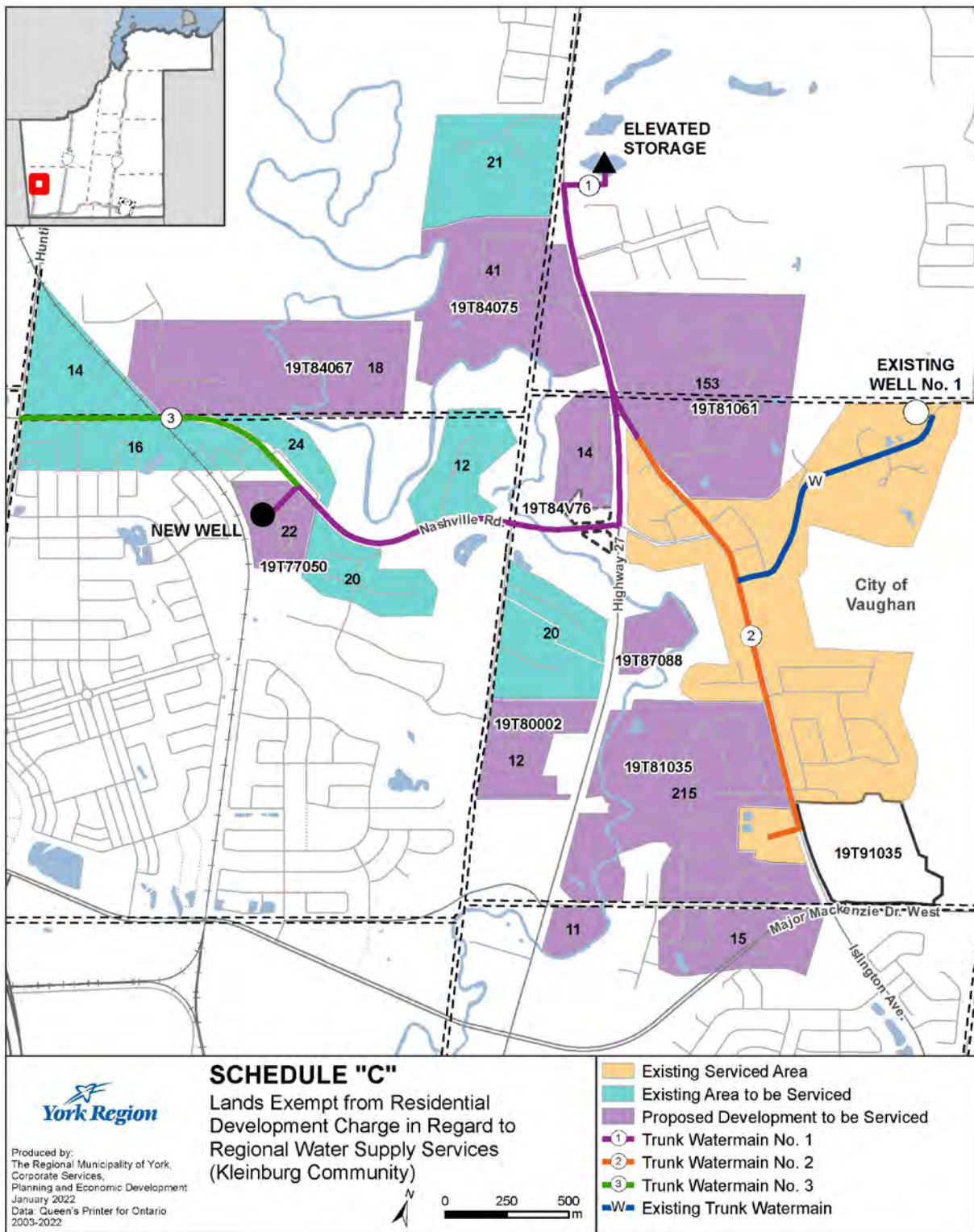
**Schedule “B”
Residential Development Charges
(\$ per unit)**

June 17 2022 to June 16 2027				
Service	Single and Semi-detached Dwelling	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)
<u>Hard Services</u>				
Water	9,041	7,522	5,838	3,797
Wastewater	21,065	17,527	13,601	8,846
Roads	25,748	21,423	16,625	10,813
Subtotal Hard Services	55,855	46,472	36,064	23,456
<u>General Services</u>				
Transit	7,628	6,346	4,925	3,203
Toronto-York Spadina Subway Extension	3,536	2,942	2,283	1,485
Yonge North Subway Extension	5,837	4,856	3,769	2,451
Public Works	587	488	379	246
Waste Diversion	366	304	236	154
Police	1,082	900	699	454
Housing Services	1,589	1,322	1,026	667
Public Health	389	323	251	163
Ambulance Services	766	637	494	322
Growth Studies	175	146	113	74
Long Term Care/Seniors Services	0	0	0	0
Court Services	65	54	42	27
Subtotal General Services	22,018	18,319	14,216	9,246
Total	77,873	64,792	50,280	32,702

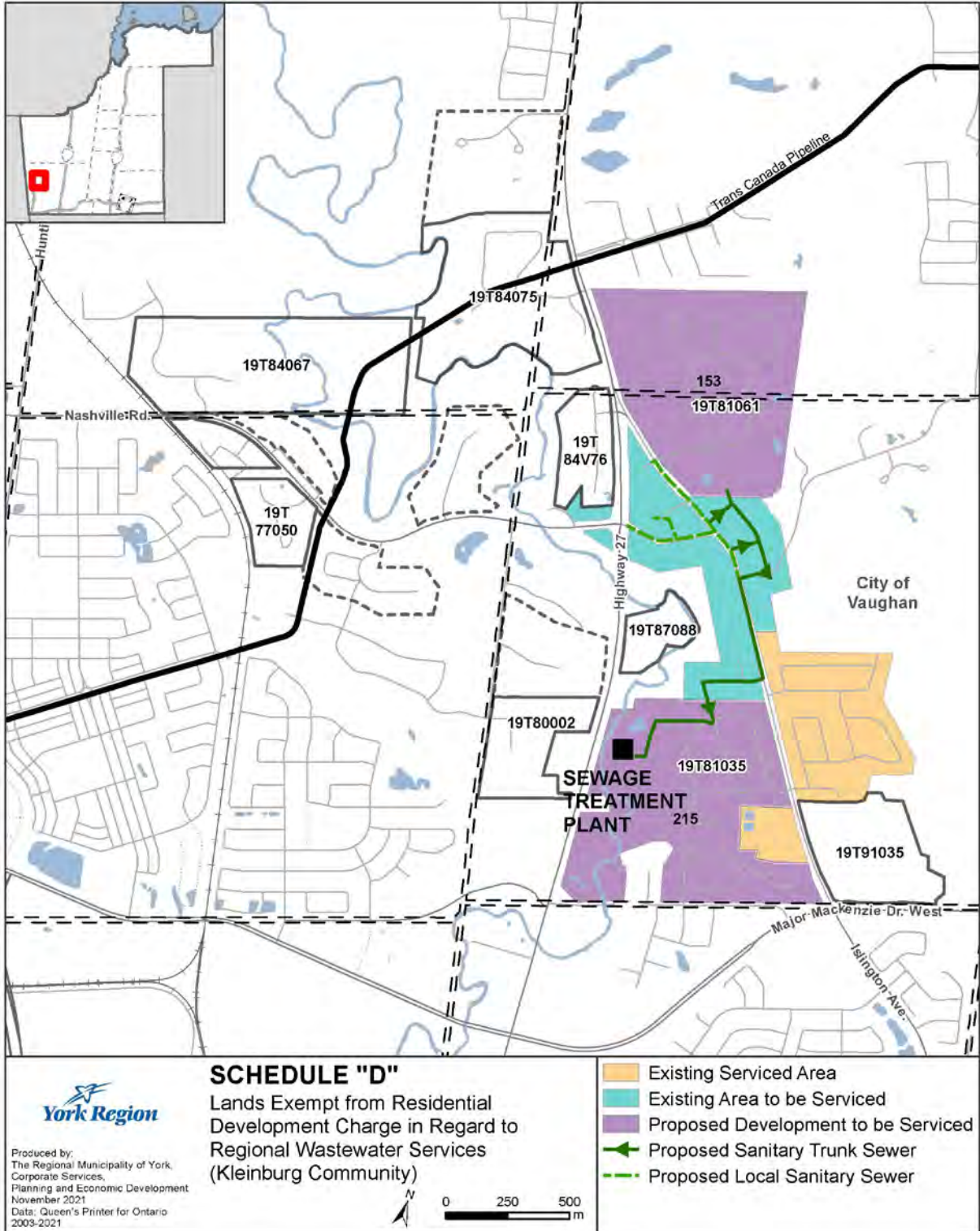
*Village of Nobleton is excluded in this table and is subject to a separate charge for Wastewater Treatment services

SCHEDULE "C"

LANDS EXEMPT FROM RESIDENTIAL DEVELOPMENT CHARGE IN REGARD TO REGIONAL WATER SUPPLY SERVICES

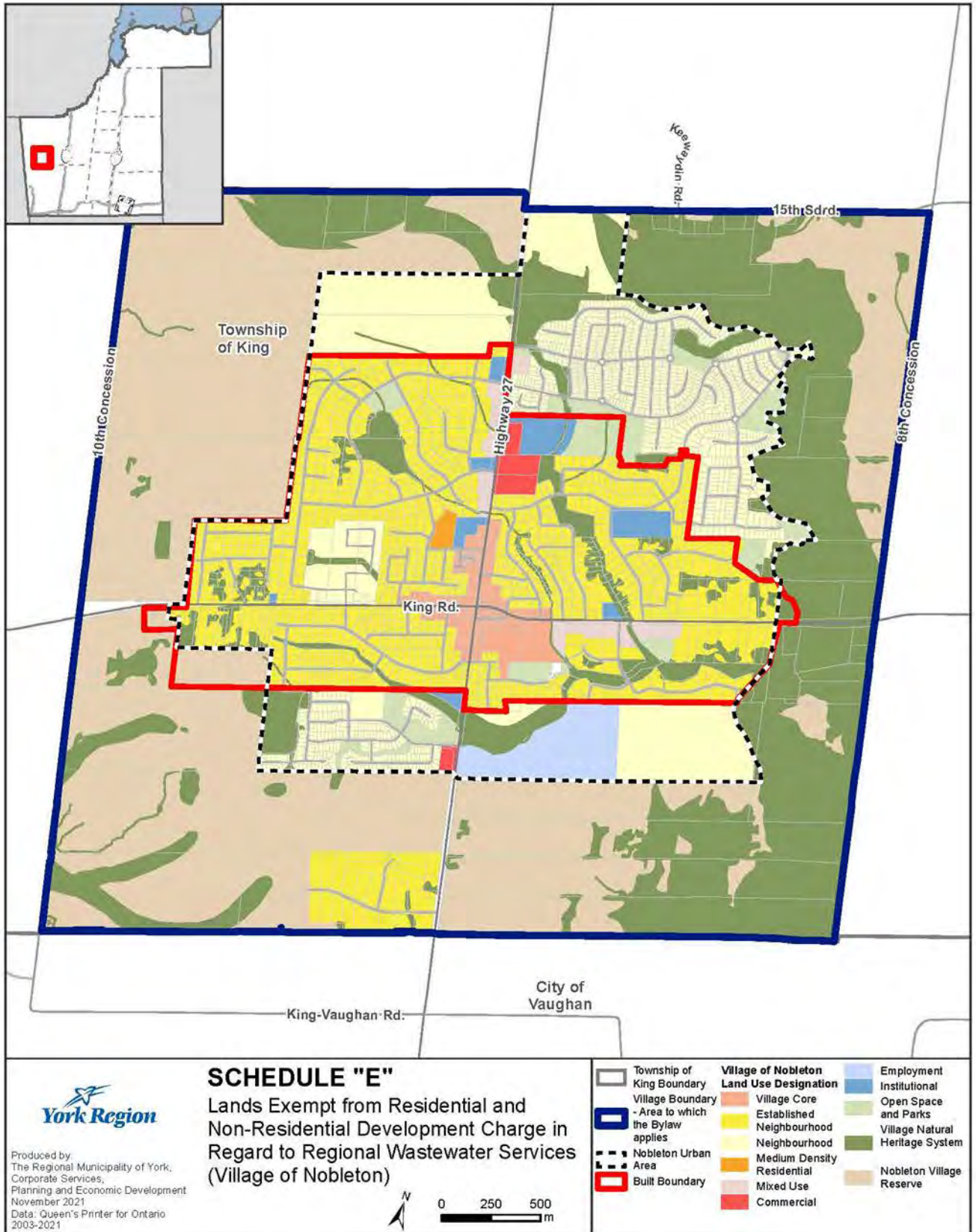


SCHEDULE "D"
LANDS EXEMPT FROM RESIDENTIAL DEVELOPMENT CHARGE IN REGARD TO REGIONAL WASTEWATER SERVICES (KLEINBURG COMMUNITY)



SCHEDULE "E"

LANDS EXEMPT FROM RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES IN REGARD TO REGIONAL WASTEWATER SERVICES (VILLAGE of NOBLETON)



Schedule "F"
NON-RESIDENTIAL DEVELOPMENT CHARGES

June 17 2022 to June 16 2027						
Service	(\$ per sqft)			(\$ per sqm)		
	Retail	Industrial/ Office/ Institutional	Hotel	Retail	Industrial/ Office/ Institutional	Hotel
Hard Services						
Water	4.26	2.86	0.92	45.85	30.78	9.90
Wastewater	9.96	6.69	2.14	107.21	72.01	23.03
Roads	27.21	8.62	4.50	292.89	92.78	48.44
Subtotal Hard Services	41.43	18.17	7.56	445.95	195.58	81.38
General Services						
Transit	7.86	2.54	1.35	84.60	27.34	14.53
Toronto-York Spadina Subway Extension	3.66	1.18	0.63	39.40	12.70	6.78
Yonge North Subway Extension	5.92	1.96	1.04	63.72	21.10	11.19
Public Works	0.69	0.18	0.11	7.43	1.94	1.18
Waste Diversion	0.00	0.00	0.00	0.00	0.00	0.00
Police	0.67	0.44	0.14	7.21	4.74	1.51
Housing Services	0.00	0.00	0.00	0.00	0.00	0.00
Public Health	0.02	0.01	0.01	0.22	0.11	0.11
Ambulance Services	0.16	0.10	0.03	1.72	1.08	0.32
Growth Studies	0.13	0.09	0.03	1.40	0.97	0.32
Long Term Care/Seniors Services	0.00	0.00	0.00	0.00	0.00	0.00
Court Services	0.04	0.03	0.01	0.43	0.32	0.11
Subtotal General Services	19.15	6.53	3.35	206.13	70.29	36.06
Total	60.58	24.70	10.91	652.08	265.87	117.43

*Village of Nobleton is excluded in this table and is subject to a separate charge for Wastewater Treatment Services.

SCHEDULE "G"
CONTINGENT RESIDENTIAL AND NON-RESIDENTIAL DEVELOPMENT CHARGES

Project Number	Project Description	Scheduled Increase	Residential Development Charges (\$ per Unit)				Non-residential Development Charges (\$ per sqft)		
			Single and Semi-detached	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)	Retail	Industrial/ Office/ Institutional	Hotel
1	Highway 404 Interchange at 19th Avenue	The local municipality transfers responsibility of 19th Avenue between Leslie Street and Woodbine Avenue to York Region and York Region adopts an Official Plan Amendment and/or amends the Regional Roads Consolidation Bylaw as required.	415	345	268	174	0.42	0.14	0.07
2	Midblock Crossing - Highway 400 north of Rutherford Road	Approval of a local official plan amendment, secondary plan, or development area plan for the redevelopment of, or portion of, the Canada's Wonderland property, or identification of any other transportation analysis, as deemed warranted by the Region of York, identifying the need for the crossing.	171	142	110	72	0.17	0.06	0.03
3	Midblock Crossing - Highway 400 south of Highway 7 (Regional	City of Vaughan's commitment to construct the crossing and inclusion in the capital program.	406	338	262	171	0.41	0.14	0.07

Project Number	Project Description	Scheduled Increase	Residential Development Charges (\$ per Unit)				Non-residential Development Charges (\$ per sqft)		
			Single and Semi-detached	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)	Retail	Industrial/ Office/ Institutional	Hotel
	Share)								
4	Langstaff Road - Jane Street to Keele Street	A two-part trigger as follows: • Approval of an Environmental Assessment • Regional Council funding commitment to implement the project	2,020	1,680	1,304	848	2.05	0.68	0.36
5	Elgin Mills Road - Woodbine Avenue to Warden Avenue	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	107	89	69	45	0.11	0.04	0.02
6	Elgin Mills Road - Warden Avenue to Kennedy Road	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	107	89	69	45	0.11	0.04	0.02

Project Number	Project Description	Scheduled Increase	Residential Development Charges (\$ per Unit)				Non-residential Development Charges (\$ per sqft)		
			Single and Semi-detached	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)	Retail	Industrial/ Office/ Institutional	Hotel
7	Elgin Mills Road - Kennedy Road to McCowan Road	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	196	163	126	82	0.20	0.07	0.03
8	Elgin Mills Road - McCowan Road to Highway 48	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	109	91	70	46	0.11	0.04	0.02
9	Kirby Road - Weston Road to Jane Street	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	402	334	259	169	0.41	0.13	0.07

Project Number	Project Description	Scheduled Increase	Residential Development Charges (\$ per Unit)				Non-residential Development Charges (\$ per sqft)		
			Single and Semi-detached	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)	Retail	Industrial/ Office/ Institutional	Hotel
10	Kirby Road - Jane Street to Keele Street	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	110	92	71	46	0.11	0.04	0.02
11	Kirby Road - Keele Street to Dufferin Street	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	99	83	64	42	0.10	0.03	0.02
12	19th Avenue - Leslie Street to Woodbine Avenue	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	388	323	250	163	0.39	0.13	0.07

Project Number	Project Description	Scheduled Increase	Residential Development Charges (\$ per Unit)				Non-residential Development Charges (\$ per sqft)		
			Single and Semi-detached	Multiple Unit Dwelling	Large Apartment (>=700 sqft)	Small Apartment (<700 sqft)	Retail	Industrial/ Office/ Institutional	Hotel
13	19th Avenue - Woodbine Avenue to Warden Avenue	The local municipality transfers jurisdiction of this section of road to York Region and York Region adopts an Official Plan Amendment and/or amends the regional Roads Consolidation Bylaw as required.	82	68	53	34	0.08	0.03	0.01
14	Langstaff Road - Weston Road to Jane Street	Commitment by the York Region to construct the road link of Langstaff Road between Jane Street to Keele Street.	236	197	153	99	0.24	0.08	0.04
15	Langstaff Road - Keele Street to Dufferin Street	Commitment by the York Region to construct the road link of Langstaff Road between Jane Street to Keele Street.	174	145	113	73	0.18	0.06	0.03
16	Steeles Avenue - Jane Street to Kennedy Road (YR Share)	A two-part trigger as follows: - York Region executes an agreement with the City of Toronto to cost share works on Steeles Avenue west of Kennedy Road - Commitment by senior levels of government to partner with the Region of York and the City of Toronto to construct rapid transit on Steeles Avenue	437	364	282	184	0.44	0.15	0.08

SCHEDULE “H”
CALCULATION OF DEVELOPMENT CHARGE CREDITS PROVIDED TO
DERELICT BUILDINGS

Number of Months From Date of Demolition Permit to Date of Building Permit Issuance	Credit Provided (%)¹
Up to and including 48 months	100
Greater than 48 months up to and including 72 months	75
Greater than 72 months up to and including 96 months	50
Greater than 96 months up to and including 120 months	25
Greater than 120 months	0

¹ Credits are calculated as a percentage of the prevailing development charge rates for the class of non-residential development or type of dwelling demolished.

For more information on this report, please contact Edward Hankins, Director, Treasury Office, and Deputy Treasurer, at 1-877-464-9675 ext.71644.

Accessible formats or communication supports are available upon request.

Regional Council Decision - Sex Trafficking: Legislation, Jurisdiction, Enforcement and Victim Support

On March 24, 2022 Regional Council made the following decision:

1. The Regional Clerk forward this report to the local municipalities, York Regional Police and the Regional Municipality of York Police Services Board.

The original staff report is attached for your information.

Please contact Dan Kuzmyk, Regional Solicitor and General Counsel at 1-877-464-9675 ext. 71401 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Finance and Administration
March 3, 2022

Report of the Regional Solicitor

Sex Trafficking: Legislation, Jurisdiction, Enforcement and Victim Support

1. Recommendations

The Regional Clerk forward this report to the local municipalities, York Regional Police and the Regional Municipality of York Police Services Board.

2. Summary

This report responds to a motion of Council at Committee of the Whole on October 14, 2021, for a staff report in relation to sex trafficking which:

- (a) Considers potential revisions to Federal and/or Provincial legislation
- (b) Clarifies enforcement jurisdiction
- (c) Considers any further measures York Region, York Regional Police or local municipalities could implement.

The report first reviews Federal, Provincial and municipal spheres of jurisdiction, including enforcement responsibilities—both individually and multi-sector. The review also considers ongoing and planned community measures related to sex trafficking involving York Region, York Regional Police (“YRP”), and the local municipalities. The report does not support a Council request for potential senior government legislative revisions relating to sex trafficking at this time.

Key Points:

- No single jurisdiction has the authority or legislative jurisdiction to deal with sex trafficking
- The *Criminal Code of Canada* and other Federal statutes describe offences and penalties in relation to commodification of sexual services, including sex trafficking

- Provincial statutes dealing with these issues include the *Municipal Act, 2001*; the *Accommodation Sector Registration of Guests Act, 2021*; the *Anti-Human Trafficking Strategy Act, 2021*; the *Child Youth and Family Services Act, 2017*; and the *Prevention of and Remedies for Human Trafficking Act, 2017*
- Local municipalities have sole jurisdiction for local land use, zoning and business licensing and regulation, including businesses which provide adult entertainment such as strip clubs and body rub parlours
- York Region’s primary role is through its Community and Health Services mandate which provides support to victims of sex trafficking and sexual exploitation in collaboration with YRP and community partners
- Investigation and enforcement of *Criminal Code* sex commodification offences, including those relating to sex trafficking, are within the jurisdiction of police services, including YRP—both independently and in collaboration with Federal and Provincial law enforcement and municipal bylaw officers
- An approach which purports to eradicate sexual exploitation and sex trafficking by focusing primarily on localized prohibition, interdiction and enforcement related to adult entertainment enterprises would have a limited effect compared to what is already in place

3. Background

This report was requested by Council at Committee of the Whole on October 14, 2021, following a deputation by Parents Against Child Trafficking—Markham & Richmond Hill (PACT) and the Council of Women Against Sex Trafficking in York Region (CWASTYR)

PACT and CWASTYR advocate for the eradication of municipally licensed and regulated adult entertainment establishments as a purported means of eliminating sex exploitation and sex trafficking in Ontario. PACT and CWASTYR have communicated their position on sex trafficking to numerous municipal Councils in York Region in addition to several deputations to the York Regional Police Services Board.

In their deputation to Committee of the Whole in October 2021, PACT and CWASTYR requested Council to take three steps which, it was suggested, would “make York Region the first zone in Ontario free from sex trafficking and the sexual exploitation of women”:

1. Secure Agreement from Markham, Richmond Hill, Vaughan and Aurora to cease licensing adult entertainment establishments, including body rub parlours and strip clubs.
2. Request Ontario Attorney General, Doug Downey, to amend the *Municipal Act, 2001*, by removing reference to licensing provisions pertaining to adult entertainment establishments which— PACT and CWASTYR contended—would thereby render adult entertainment establishments “illegal”.

3. Request Ontario Solicitor General, Sylvia Jones, to grant arrest powers to municipal bylaw enforcement officers which, according to PACT and CWASTYR, would allow them to make arrests at commercial establishments that “sell sexual services in defiance of the law”.

In response to the PACT/CWASTYR deputation, Council adopted the following motion:

Committee of the Whole received the deputation from Robert Vallee and recommends that Council refer the matter to staff for a report back on potential revisions to Federal/Provincial legislation, clarifying jurisdictions of enforcement and any other further measures the Region, York Regional Police (YRP) or local municipalities could implement.

For the reasons discussed in this report, York Region staff, in consultation with YRP, suggest that the issues of sex trafficking or sex exploitation of women in York Region are being adequately addressed through the current legislation, tools and strategies established by senior levels of government.

4. Analysis

A. FEDERAL JURISDICTION

The Federal government makes criminal law while provinces and territories, including their respective policing agencies, are primarily responsible for enforcement

The Federal government has exclusive authority to make criminal laws which apply across the country, and it shares responsibility for criminal justice with the provinces and territories. The primary role of the provinces and territories is the enforcement of the Federal *Criminal Code*, which includes investigating and prosecuting most offences, and providing services and assistance to victims of crime. Attachment 1 sets out spheres of jurisdiction and references applicable statutes and responsibilities related to sex trafficking

Canada’s *Criminal Code* was amended in 2014 to diminish the demand for and criminalize the purchase of sexual services

Laws are amended as society evolves and technology and practices change. In 2014 Bill C-36, the *Protection of Communities and Exploited Persons Act* amended the *Criminal Code* to apply a “victim-centred” approach to the sex trade by acknowledging that the sale of sexual services—the commodification of sex—is a form of exploitation that disproportionately affects women and girls. This perspective treats individuals selling their own sexual services as potential victims of sexual exploitation who may need assistance, not criminals needing punishment, and accordingly exempts them from prosecution.

The rationale behind Bill C-36 is to reduce the demand for sexual services and discourage the development of economic interests in the sexual exploitation of others by targeting those

who purchase sexual services and those who benefit materially or otherwise from the sexual exploitation of others.

Human trafficking—including sex trafficking—is illegal in Canada under the *Criminal Code* and other federal statutes

Sex trafficking is a specific form of human trafficking that focuses on sexual exploitation, primarily of women and girls and is a crime under the *Criminal Code*. It can include recruiting, harbouring, transporting, obtaining, or providing a person for the purpose of sex. It may involve the use of force, physical or psychological coercion or deception. Most individuals who are trafficked for the purpose of sexual exploitation are women and girls, but others may also be victims. Traffickers may prey upon people at odds with or separated from their families, those suffering from housing, food insecurity, or addiction issues, survivors of abuse, new immigrants, migrants, or youth at risk.

Human trafficking has also been a Federal offence under the *Immigration and Refugee Protection Act* since 2002. Under this Act, it is illegal to recruit or bring any person to Canada against their will, tricking them by fraud or deception, or using threats or force. It is also against the law to keep someone in Canada against their will or control their movements by using any of the above coercive methods.

Canada’s National Action Plan to Combat Human Trafficking consolidates the efforts of multiple ministries and agencies to better target Federal efforts

In 2012 the Federal government launched the National Action Plan to Combat Human Trafficking (NAP) consolidating all Federal activities into one comprehensive plan. The NAP aims to prevent human trafficking, support victims and potential victims and ensure perpetrators are brought to justice. Activities under the NAP include the provision of Federal grant funding to organizations that deliver critical support services to victims and survivors, a coordinated law enforcement response managed through the RCMP’s Human Trafficking National Coordination Centre and a private-public sector partnership known as Project PROTECT, which focuses on money laundering that may result from human trafficking.

B. PROVINCIAL JURISDICTION

In 2021 Ontario’s Bill 251 introduced legislative amendments aimed at assisting police investigations and the protection of victims

In June 2021 *Bill 251 - Combatting Human Trafficking Act, 2021* received Royal Assent. Bill 251 amends specific Provincial legislation to assist police in their efforts against sex trafficking and to protect victims (See Attachment 1).

As well, Bill 251 established Ontario’s Anti-Human Trafficking Strategy. In alignment with Federal Bill C-36, the Provincial strategy takes a proactive “victim-centred” approach by focusing on early intervention, victim protection, supporting survivors and holding offenders accountable. This strategy brings together multiple, cross directional ministries, with various

community stakeholder groups and service providers. This multi-sector approach promotes meaningful and effective application of the Provincial Anti-Human Trafficking Strategy.

The Province, through its ministries, work with service providers and community stakeholders directly engaged in the activities contemplated by the strategy. This direct engagement extends to municipalities only as providers of social housing and requires that human trafficking victims be a top priority, on the housing wait list, along side victims of domestic violence.

C. LOWER-TIER MUNICIPAL JURISDICTION

Local municipalities have authority to enact bylaws in relation to matters that will affect their communities and to provide personnel to enforce these bylaws

The Province delegates authority to local municipalities on a variety of matters, including bylaw and licensing authority, property matters, and enforcement of certain Provincial Offences. Under the *Municipal Act, 2001*, business licensing and property standards are among several areas that are the exclusive jurisdiction of local municipalities to regulate, ensure compliance and enforce.

Local municipalities are best situated to determine and apply community standards and expectations in relation to certain activities in ways that may be unique to their municipality. Examples include the types of businesses that may be licenced, where such businesses may be located, what hours the businesses may operate, what qualifications may be required and licensing fees to impose. In this respect, one size may not fit all and each local municipality is therefore best suited to determine constituents' expectations

Municipal bylaws are made in close proximity to those who are most affected by the issue being regulated. Citizens may attend meetings of municipal representatives, and may also participate and be heard directly during Council or Committee proceedings. It is this kind of accessible, highly transparent participatory democratic process that gives municipal lawmakers a clear lens into what their constituents want for their community.

D. UPPER-TIER MUNICIPAL JURISDICTION

York Region does not have a statutory jurisdictional role in either regulating adult entertainment establishments or enforcing sex trafficking laws, but plays an important part in victim support

As an upper-tier municipality, York Region does not have legislative authority to direct lower-tier municipalities in regard to business licensing and regulation, including adult entertainment establishments. However, York Region is actively engaged with community partners and provides support services to victims of sex trafficking directly and indirectly through a variety of program areas including:

1. Five sexual health clinics provide, testing and treatment at no cost to clients, offer support and referrals to community services, if requested, and outreach initiatives

in shelters—staff are trained to recognize and respond to clients who may be victims of human trafficking and are adept at creating safe spaces for access to sexual health consultation and services.

2. Community Partner Alliance to Stop Trafficking (CPAST) is a partnership including York Region, YRP, community members and community agencies such as Victim Services of York Region and 360° Kids.
3. Homelessness Community Program Outreach Workers provide support for individuals in the community including those who are at risk of or experiencing homelessness and provides referrals to community agencies to ensure safety, well-being and housing stability.
4. Regional Housing Services prioritizes survivors of human trafficking and domestic abuse on the housing waitlist for subsidized housing and provides Provincial funding to 360° Kids and the Women’s Support Network for programming.

E. YORK REGIONAL POLICE

York Regional Police is an active partner in Federal and Provincial efforts to combat sex trafficking and enforce criminal laws

YRP, as the municipal law enforcement agency for York Region, is an active partner in joint initiatives ranging from investigations to information sharing, working with Federal and Provincial enforcement partners and other municipal police services to implement and coordinate often lengthy and complex investigations.

YRP has a dedicated Human Trafficking Section that investigates incidents involving adult and juvenile sex trade workers. When exploitation is alleged or suspected, it is prioritized and immediately investigated utilizing the Ontario Provincial Human Trafficking Strategy “Four P” victim-centred approach, namely Prevention; Protection; Prosecution and Partnerships.

York Regional Police also partners with local community agencies and local municipalities

Rather than focusing solely on “eradication”, which drives sex work underground and often further marginalizes sex workers, YRP has worked to develop numerous partnerships with community agencies including Victim Services of York Region, 360° Kids, Blue Door Shelters, Sandgate, Yellow Brick House and the Children’s Aid Society. A key component of these partnerships—which emphasize victim protection is the “Three Rs”” Rescue; Rehabilitation; and Reintegration.

YRP also applies for additional funding through Federal and Provincial grant programmes. This funding is used for education, training community partners, providing for victims’ needs, conducting investigative probes, intelligence gathering and enforcement.

As noted, one of the key components of intelligence gathering and enforcement is working closely with local municipal bylaw officers, developing and enacting joint initiatives and providing training to facilitate recognition of the signs of human trafficking.

Focusing on “eradicating” body rub parlours as a means of combating sex trafficking or protecting children is not an effective strategy

Body rub parlours and other adult entertainment establishments, as defined in the *Municipal Act, 2001*, are not illegal businesses, *per se*. While criminal activities may occur in such establishments, the businesses themselves are lawful. Refusing to grant business licences will not “eliminate” massage parlours, nor will removing adult entertainment establishments from the provisions of the *Municipal Act*. In addition to driving the activity underground, such a strategy would only fetter municipal bylaw enforcement officers who rely on these laws for their authority to inspect such establishments to ensure compliance with public health requirements and local bylaws.

Additionally, targeting body rub parlours and other adult entertainment establishments would be concentrating enforcement efforts in an area of lesser concern in relation to sex trafficking. As was pointed out in an April 2021 letter from Jason Fraser, YRP General Counsel to PACT, the majority of human trafficking victims in York Region are trafficked within hotels, condominiums and short-term rental properties, not body rub parlours and other adult entertainment establishments. (Attachment 2)

It should be noted it is also rare that children are found within body rub parlours. As reported to the York Region Police Services Board in November 2020, since 2008, there have been no children recovered within these establishments. (Attachment 3)

F. POTENTIAL LEGISLATIVE REVISIONS

Staff do not support granting arrest powers to bylaw officers as requested by PACT and CWASTYR

Police officers have a duty to investigate crime and to arrest individuals and are therefore vested with both statutory and common law powers of arrest. On the other hand, municipal law enforcement officers have no such statutory duty to investigate crime and therefore have no common law authority to make arrests. Under the *Police Services Act*, the power of municipal bylaw officers is limited to acting as Peace Officers for the purpose of enforcing municipal bylaws.

The *Police Services Act* grants arrest powers to police officers to arrest individuals. Furthermore, the definition of “police officer” specifically excludes “municipal bylaw enforcement officers”, which means that a legislative amendment to the *Police Services Act* would be required to give arrest powers to municipal law enforcement officers.

A potential option that would not require a statutory amendment would be to have the Police Services Board, with the approval of the Solicitor General, appoint municipal enforcement

officers to be special constables and to specifically delegate powers of arrest, pursuant to the *Police Services Act*. However, neither legislative amendment nor Police Services Board appointment are advisable or practical, for the following reasons:

1. Police officers receive rigorous training in many areas, including *Charter* rights involving arrest, detention and the use of force, and if these powers are exceeded, there is a risk of *Charter* and civil damages, thereby exposing municipalities to potentially significant and unnecessary risk.
2. Granting arrest powers to municipal bylaw staff, as has been suggested, would strongly signal that the dominant purpose would be to further criminal sex commodification prohibition, a power which is explicitly reserved for Parliament pursuant to the *Constitution Act, 1867*—not the Province or municipalities—and would therefore likely be found to be unconstitutional if challenged.
3. Municipal officers currently conduct inspections of adult entertainment establishments through powers of entry contained in municipal bylaws, which does not require search warrants; if the bylaws were repealed, search warrants would then be required as there is no warrantless entry for criminal investigations.

5. Financial

There are no financial impacts directly associated with this report.

6. Local Impact

There are no direct local impacts, but this report does discuss matters of local municipal interest and jurisdiction.

7. Conclusion

Federal, Provincial and municipal powers in relation to sex trafficking are appropriately allocated through existing legislation and areas of constitutional jurisdiction and would not benefit from legislative revision

The current legislative regimes as described in this report appropriately allocate duties in relation to the jurisdictional responsibilities of the three levels of government in Canada. The multi-sector, cross-jurisdictional approach adopted by the Federal and Provincial governments in relation to the commodification of sex engages a variety of stakeholders and service providers, including law enforcement and community organizations to ensure the effective use of all the legal tools available to combat sex trafficking and support victims and survivors. Accordingly, there would be no benefit in pursuing legislative revisions at this time.

For more information on this report, please contact Dan Kuzmyk, Regional Solicitor and General Counsel at 1-877-464-9675 ext. 71401. Accessible formats or communication supports are available upon request.



Recommended by:

Dan Kuzmyk
Regional Solicitor and General Counsel



Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

February 18, 2022
Attachments (3)
#13456415

JURISDICTION	LEGISLATION
FEDERAL	<p><i>Criminal Code</i> deals with:</p> <ul style="list-style-type: none"> • Human Trafficking • Trafficking of a person under the age of 18 years • Knowingly receiving any benefit derived from human trafficking • Taking or destroying travel or personal identification documents of a person being trafficked • Exploitation <p><i>Immigration and Refugee Protection Act</i> deals with:</p> <ul style="list-style-type: none"> • Human Smuggling and Trafficking • Trafficking in persons
PROVINCIAL	<p><i>Accommodation Sector and Registration of Guests Act, 2021</i></p> <ul style="list-style-type: none"> • will require hotels to maintain guest registers and provide them to police if there are reasonable grounds to believe human trafficking may be occurring <p><i>Anti-Human Trafficking Strategy Act, 2021</i></p> <ul style="list-style-type: none"> • establishes a multi-sector provincial strategy to address trafficking and prevent victimization, the strategy is reviewed every five years <p><i>Child and Youth Family Services Act, 2017</i></p> <ul style="list-style-type: none"> • provides child protection workers and peace officers who have reasonable grounds to believe a child who has been sexually exploited to take the child to an alternative location which provides services and support • Duty to report a child in need of protection <p><i>Prevention of and Remedies for Human Trafficking Act, 2017</i></p> <ul style="list-style-type: none"> • Allows a victim and those caring for child victims of sexual exploitation to apply for a restraining order to protect a victim or any other person • A victim may bring an action against any person engaged in human trafficking
LOWER-TIER	<p><i>Municipal Act, 2001</i></p> <p>Grants exclusive jurisdiction to lower-tier municipalities in the following areas:</p> <ul style="list-style-type: none"> • Business Licensing and Regulation • Bylaws • Bylaw Enforcement • Local land use and zoning

	<ul style="list-style-type: none"> • Property Standards
UPPER-TIER	<p><i>Health Protection and Promotion Act, 1990</i></p> <ul style="list-style-type: none"> • Health programs and services • Public health inspections for infection prevention and control and health hazard complaints <p><i>Police Services Act, 1990</i></p> <p>Sets out the following principles for policing in Ontario:</p> <ul style="list-style-type: none"> • The need to ensure the safety and security of all persons and property in Ontario. • The importance of safeguarding the fundamental rights guaranteed by the Canadian Charter of Rights and Freedoms and the Human Rights Code. • The need for co-operation between the providers of police services and the communities they serve. • The importance of respect for victims of crime and understanding of their needs. • The need for sensitivity to the pluralistic, multiracial and multicultural character of Ontario society. • The need to ensure that police forces are representative of the communities they serve.



Brian Bigras
Deputy Chief
of Investigations

Paulo Da Silva
Deputy Chief
of Administration

Jim MacSween
Chief of Police

Cecile Hammond
Deputy Chief
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April 19, 2021

Via Email to rvallee@pactmarkham.com

Robert Vallee
Founder and Board Chair
People Against Child Trafficking - Markham &
Council of Women Against Sex Trafficking in York Region

Dear Mr. Vallee:

Re: Your Email to the Regional Municipality of York Police Services Board

Please be advised that a copy of your email to the Regional Municipality of York Police Services Board, dated March 31, 2021, has been forwarded to my office for review and reply on behalf of Chief Jim MacSween and York Regional Police.

You have provided two deputations to our Board regarding human trafficking and sexual exploitation in body rub parlours. After your first deputation, in December of 2019, the Board directed Chief MacSween to provide a response in the form of a report to the Board. The Chief provided his report to the Board at its November 25, 2020 meeting. The Board received your second deputation on February 24, 2021 but did not require any further response from the Chief.

I understand that, in August of 2019, you also met with Deputy Chief Brian Bigras and then Inspector Thai Troung to discuss issues related to human trafficking and the shutting down of massage parlours in Markham and elsewhere in York Region.

In your email to the Board, you have made a number of requests of Chief MacSween or York Regional Police, including:

- Completing a nine-page questionnaire that seeks a detailed breakdown of the human trafficking statistics you received from our Freedom of Information Unit;
- Petitioning the Premier of Ontario and other members of his Cabinet to amend the *Municipal Act, 2001* to criminalize activities related to body rub parlours and other adult entertainment establishments; and



The Bill Fisch Centre for Police Excellence · York Regional Police
47 Don Hillock Drive, Aurora, Ontario L4G 0S7

Deeds Speak



- Engage in a half-day workshop that would “forge a region-wide policy of prostitution/trafficking management and police force deployment that will be a new standard for municipalities in Ontario.”

Additionally, you seek a third deputation before our Board.

We share your desire to combat human trafficking in our community. However, for the reasons that follow, we are not in a position to accede to your requests.

As a preliminary matter, I would advise that Canadian police services collect and report crime statistics in a manner prescribed by Statistics Canada under the National Justice Statistics Initiative. This enables the Canadian Centre for Justice Statistics, a division of Statistics Canada, to conduct statistical analyses on national and jurisdictional levels. The statistics we collect do not lend themselves to your nine-page questionnaire.

On a more substantive note, the Province of Ontario has already embarked on a five-year anti-human trafficking strategy in an effort to raise awareness of the issue of human trafficking, protect victims and intervene early, support survivors and hold offenders accountable. York Regional Police supports the province’s efforts and works closely with our partners in the Provincial Human Trafficking Prosecution Team and various community agencies to implement this strategy within our region.

We question the efficacy of your focus on massage parlours as locations for human trafficking when the majority of human trafficking victims in York Region are being trafficked within hotels, condominiums and short-term rentals. Moreover, we believe that your emphasis on closing body rub parlours is both legally problematic and inconsistent with our victim-centred approach to human trafficking investigations.

This is not to suggest that we ignore the problems associated with body rub parlours. York Regional Police works with our partners in municipal law enforcement in the regulation of these establishments. As noted in the Chief’s Board Report, we provide training to municipal law enforcement officers to help them recognize the signs of human trafficking. As criminal investigators, the *Canadian Charter of Rights and Freedoms* constrains our officers’ authority to search these premises absent reasonable grounds and prior judicial authorization. Bylaw officers have a broader ability to conduct inspections and to carry out regulatory enforcement in accordance with municipal bylaws.

We must respectfully disagree with your assertion that body rub parlours and other adult entertainment establishments, as defined in the *Municipal Act, 2001*, are *per se* illegal businesses. While criminal offences may be committed within these establishments, the businesses themselves are lawful. Refusing to grant business licences will not eliminate massage parlours, nor will removing “adult entertainment establishments” from the *Municipal Act, 2001* or repealing bylaws that licence massage parlours. Such a move would only tie the hands of municipal law enforcement as they rely upon these laws for their authority to inspect these establishments to protect the health and safety of workers and customers alike.

We take exception to you referring to municipal officials who licence body rub parlours as “pimps”. In addition to being patently offensive, it suggests that you fundamentally misunderstand the importance of using bylaws, licencing and inspections to promote public safety.

Similarly, I would note that the Province of Ontario does not have the authority to enact legislation that would criminalize body rub parlours or any other adult entertainment establishments. In accordance with section 91(27) of the *Constitution Act, 1867*, the power to enact criminal laws

rests with the federal government. Bearing in mind the Supreme Court of Canada's decision to strike down the criminal prohibitions on common bawdy-houses [*Canada (Attorney General) v. Bedford*, 2013 SCC 72], the federal government's ability to outlaw body rub parlours may be tenuous.

We thank you for bringing your concerns to our attention. However, we do not believe that your approach to combating human trafficking through focused enforcement against body rub parlours is consistent with Ontario's anti-human trafficking strategy or our own enforcement measures. On behalf of Chief MacSween and York Regional Police, I must respectfully decline your requests as they relate to the Chief or this police service. Any further deputations will be at the discretion of the Board.

Yours truly,

A stylized, handwritten-style electronic signature in black ink, consisting of several loops and a vertical stroke.

(Electronic Signature)
Jason D. Fraser
General Counsel

c: Chief Jim MacSween

Mafalda Avellino, Executive Director
Regional Municipality of York Police Services Board

THE REGIONAL MUNICIPALITY OF YORK
POLICE SERVICES BOARD

REPORT OF THE CHIEF OF POLICE

NOVEMBER 25, 2020

PUBLIC

Response to Human Trafficking

RECOMMENDATION

1. That the Board receive this report for its information in response to the Deputation provided by Robert Vallee of Parents Against Child Trafficking-Markham and The Council of Women Against Sex Trafficking in York Region on December 4, 2019.

SYNOPSIS

York Regional Police Human Trafficking Section investigates incidents involving adult and juvenile sex trade workers. When exploitation is alleged or suspected, it is prioritized and immediately investigated.

Since 2015, the Human Trafficking Section has investigated 2,361 incidents involving sex trade workers and forced labour. In total, 1,790 or 75.8% were determined to be non-criminal. Based on our qualitative studies, the majority of trafficking victims are aware that jobs offered to them are in the sex industry but are not aware of the conditions in which they will be working.

FINANCIAL IMPLICATIONS

There are no financial implications.

BACKGROUND

In 2008, York Regional Police adopted a victim-centered approach to sex trade investigations. In 2014, this approach was legislated by the introduction of Bill C-36 to the *Criminal Code*. Prior to Bill C-36, the *Criminal Code* focused on the eradication of the sex trade.

Bill C-36 – Protection of Communities and Exploited Persons Act

One objective of Bill C-36 is to protect those individuals who sell their own sexual services, allowing them to conduct their business indoors for their own safety. The Supreme Court of Canada had struck down the bawdyhouse provision from the *Criminal Code*.

Unlike previous legislation, Bill C-36 targets those who buy sex and seeks to reduce the demand for prostitution or, namely, “sexual services for consideration.”

Bill C-36 made it illegal to “obtain sexual services for consideration”, receive “material benefits” from sexual services performed by another person and to “knowingly advertise an offer to provide sexual services for consideration” by another person.

Individual sex workers have a form of immunity for advertising or receiving consideration from “their own” sexual services. The previous prohibition on communicating in public places for the purpose of such services is not as strict. It now applies only to communications conducted at or near day care facilities, schools and playgrounds and when one interrupts pedestrian or vehicular traffic to perform such communication.

York Regional Police investigations are victim-centered. We employ the four Ps of the Ontario Provincial Human Trafficking Strategy:

- 1) Prevention;
- 2) Protection;
- 3) Prosecution; and
- 4) Partnerships.

Rather than eradication, which often further marginalizes those working in the sex trade, we approach the four Ps with a clear vision and mission. We work within the framework and authority of Federal and Provincial legislation. The Ministry of the Attorney General and the Newmarket Crown Attorney’s office have established a Provincial Human Trafficking Prosecution Team. York Regional Police investigators work closely with this team during investigations and throughout prosecution.

York Regional Police have developed numerous partnerships with outside agencies and non-profit organizations. A key component of victim protection is exercising the three Rs:

- 1) Rescue;
- 2) Rehabilitation; and
- 3) Reintegration.

These agencies include Victim Services of York Region, 360 Kids, Blue Door Shelters, Sandgate, Yellow Brick House and Deborah's Gate located in British Columbia who provide compound trauma services addressing drugs and human trafficking in a secure facility. York Regional Police have provided this facility to multiple victims.

Further, York Regional Police and the Children's Aid Society of York Region have collaborated in a joint Human Trafficking protocol.

York Regional Police applies for additional funding through Federal and Provincial grants. This funding is used for education, providing training to community partners, providing immediate needs of victims, identifying resource gaps and filling those gaps when necessary, conducting investigative probes, intelligence gathering and enforcement.

A key component of intelligence gathering and enforcement is working closely with the Municipal By-law officers, developing and enacting joint initiatives and providing training enabling the ability to recognize the signs of human trafficking.

Not all body rub/massage parlours and wellness spas offer sexual services. There have been very limited cases of victims recovered in these types of establishments, and if the exploitation is present, it is through their pimp not the owners/operators.

Since 2008, there have been no recoveries of children inside these establishments within York Region. Any allegations of children being trafficked, despite the lack of recoveries, are prioritized and investigated thoroughly. In fact, the majority of human trafficking victims are being trafficked within hotels, condominiums or short-term rentals.

The crime category as listed in our Statistical Report: The Commodification of Sexual Activity includes:

- Obtaining Sexual Services for Consideration
- Obtaining Sexual Services for Consideration from Person Under the Age of 18 Years
- Receiving Material Benefit from Sexual Services
- Receiving Material Benefit from Sexual Services provided by Person Under the Age of 18 Years
- Procuring
- Procuring a Person Under the Age of 18 years
- Advertising Sexual Services

These crime categories are the result of new legislation created from Bill C-36. While the laws came into effect in 2014, they were in print in the 2016 *Criminal Code* onwards.

The Prostitution/Public Morals offences were included in the *Criminal Code* prior to 2016. These offences encapsulated sections 210 to 212 respectively. They included offences of living on the avails of prostitution, keeping a common bawdyhouse, communicating for the purposes of prostitution and other pimping related offences between sections 212(a) to 212(j) and 212(2) and 212(2.1).

Prostitution/Public Morals violations (formally section 212) is no longer in the *Criminal Code*. Commodification of Sexual Activity Sections begin at section 286 of the *Criminal Code*. Commodification of Sexual Activity crime category replaced Prostitution/Public Morals crime category; however, the Prostitution/Public Morals crime category will continue to appear in the annual statistical reports due to historical reporting and five year crime comparisons.

Jim MacSween, B.A.A.
Chief of Police

JMS:rc

Regional Council Decision - York Region Response Draft Federal Single-Use Plastics Prohibition Regulation

On March 24, 2022 Regional Council made the following decision:

1. Council endorse comments outlined in Attachment 1, to be submitted to Environment and Climate Change Canada on March 5, 2022
2. The Regional Clerk circulate this report and submission to the clerks of the local municipalities

The original staff report is attached for your information.

Please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077 if you have any questions with respect to this matter.

Regards,

Christopher Raynor | Regional Clerk, Regional Clerk's Office, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
O: 1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

The Regional Municipality of York

Committee of the Whole
Environmental Services
March 3, 2022

Report of the Commissioner of Environmental Services

York Region Response Draft Federal Single-Use Plastics Prohibition Regulation

1. Recommendations

1. Council endorse comments outlined in Attachment 1, to be submitted to Environment and Climate Change Canada on March 5, 2022
2. The Regional Clerk circulate this report and submission to the clerks of the local municipalities

2. Summary

On December 25, 2021, the Government of Canada published a draft of the Single-Use Plastics Prohibition Regulation and Regulatory Impact Analysis Statement in the Canada Gazette and released Guidance for Selecting Alternatives for public comment. This action was identified in a federal discussion paper outlining the proposed approach to managing plastic products that the Region commented on and updated Council in [January 2021](#). Due to timing of this federal announcement and the need for collaboration with our local municipalities on comments, staff will be submitting comments by the deadline of March 5, 2022. Through this submission (Attachment 1) staff are requesting that any subsequent comments from Regional Council be considered.

Comments on the draft regulation include input from local municipal waste staff, Region staff in Environmental Services, Economic Strategy and Community and Health Services. This report outlines the Region's comments and addresses the potential impact of the proposed approach on the community and the Region's integrated waste management system.

Key Points:

- Draft regulation bans six categories of problematic single-use plastics including plastic bags, straws, cutlery and some takeout containers
- Proposed regulation aligns with SM4RT Living direction and past advocacy efforts on single-use plastics in some areas; further exploration with impacted communities required for accessibility exemptions

- Proposed regulation lacks clarity around applicability to compostable plastic alternatives
- National labelling standards must be provided in parallel with the regulation to provide better guidance for businesses and residents seeking alternatives
- Recommendation for regular updates to the banned items list as more data and better alternatives to single-use items become available
- Impacts to Region's waste management system may include increased contamination and management costs from increased presence of alternatives to conventional single-use plastic items

3. Background

Federal Regulation bans six categories of problematic single-use plastics including plastic bags, straws, cutlery and some takeout containers

The [draft regulation](#) follows through on the approach from the [discussion paper](#) to ban or restrict six categories of single-use plastics including checkout bags, cutlery, foodservice ware made from problematic plastics, six-pack ring carriers, stir sticks and straws as seen in Table 1. The government acknowledged there are challenges posed by compostable plastics that look like conventional plastics and intend to treat single-use non-plastic manufactured items made from compostable plastics the same as conventional plastic.

Table 1**Six categories of single-use plastics included in Federal ban**

Item	Definition
Checkout Bags	Bag-shaped, designed to carry goods and provided by businesses to consumers at retail point of sale
Cutlery	Plastic formed in the shape of a knife, fork, spoon, spork or chopstick that includes biodegradable and compostable plastic
Foodservice ware made from or containing problematic plastics	Clamshell, lidded container, box, cup, plate or bowl designed to transport pre-made food and beverage items. Made from or containing: <ul style="list-style-type: none"> • Polystyrene foam • Polyvinyl chloride • Black plastic • Oxo-degradable plastics (hard, breaks easily into fragments)
Ring carriers	Plastic formed in the shape of a deformable container-surrounding bands i.e. six-pack carrier
Stir Sticks	Plastic designed to stir or mix drinks and used to stop a drink from spilling (stopper in lid)
Straws	Flexible or straight plastic drinking straw (Accessibility exemption for flexible plastic straw for specified groups and settings only)

Proposed ban on manufacture and import for sale in Canada would take effect one to two years after regulation is finalized

These six categories were selected based on the federal government's assessment framework of whether plastic products meet key criteria of being problematic for the environment and inability to recover value once disposed. The regulation would prohibit the manufacture, import and sale of these six categories of single-use plastics, although these items can be made in or imported to Canada for the purposes of export. Other exemptions include accommodations for people with disabilities through the sale of flexible straws to specified groups. Once the proposed regulations are finalized, the following prohibitions will come into force:

1. Prohibition on sale of straws one year after registration
2. Prohibition on manufacture and import of all six categories one year after registration
3. Prohibition on sale of all other single-use plastics two years after registration

The delayed implementation allows businesses time to use up their existing supply of single-use items and identify and source suitable alternatives.

4. Analysis

Regulation aligns with past advocacy efforts on single-use plastics in some areas

Staff are generally pleased with the proposed regulation as it addresses many problematic plastics that end up as litter in our community. Many of the Region's concerns from the [consultation process](#) have been addressed. Key achievements include:

- Ban implementation and enforcement at a federal level applied consistently across the country on manufacture, import and sale for use in Canada.
- Consultation with disability community resulted in accessibility exemptions provided in regulation for care facilities and individuals to purchase flexible plastic straws.

As outlined in Attachment 1, Regional staff have recommendations to improve the regulation and guidance document provided to businesses to ensure smooth implementation of the ban once the regulation comes into force.

Proposed regulation lacks clarity around applicability to compostable plastic alternatives

The Regulatory Impact Analysis Statement acknowledges feedback from stakeholders about the challenges posed by compostable plastics that look like standard single-use items. The document notes that these items will be treated the same as conventional plastics under the regulation. However, the proposed regulation does not include definitions or wording addressing non-conventional plastics such as compostable or biodegradable plastics. As noted in Attachment 1, staff recommended adding definitions to the regulation to ensure there is clarity around what single-use alternatives (i.e. paper straw, compostable plastic cutlery) are permissible under the ban.

National labelling standards must be provided in parallel with Regulation to provide better guidance for businesses seeking alternatives

To provide clarity to residents and businesses seeking more sustainable alternatives to banned items, staff recommend that the federal government address compostable packaging standards in parallel with implementation of these regulations. The Regulatory Impact Analysis Statement acknowledged municipal request for national standards to address inconsistencies in product labelling and advertising using terms like “recyclable,” “compostable” and “biodegradable.” The federal government stated the creation of national standards are “out of scope for the current proposal but will be addressed as part of the Canada-wide Strategy on Zero Plastic Waste.” Direction to complete this work was also highlighted in the Mandate Letter for the federal Environment Minister, released in December, 2021. Neither document provides a specific timeline.

Guidance is needed as the regulation is implemented to reduce confusion and widespread contamination challenges. Region staff continue to recommend that compostable products and packaging not be considered as suitable alternatives unless producers can demonstrate their products are compatible with current processing technology or a producer-funded

alternative is in place to facilitate recovery. An updated standard and labelling requirements are needed to ensure transparency around these claims.

Regular updates to the banned items list recommended as more data and better alternatives to single-use items become available

Region staff are advocating that federal restrictions on materials not end with these six items and that additional items be considered for future regulatory action under the federal strategy on zero plastic waste. Many types of packaging or products labelled as “compostable” or “flushable” do not effectively break down when disposed and continue to pose challenges for the environment, infrastructure and processing. Staff will continue to advocate for flushable wipes and other single-use items to be addressed by the federal government to provide a consistent Canada-wide approach toward these products.

Proposed accessibility exemptions in Regulation require further exploration with impacted communities to reduce barriers

In September 2021, staff engaged the York Region Accessibility and Advisory Committee (YRAAC) to understand potential barriers from implementing voluntary single-use item reduction programs. Committee feedback included importance of some single-use items to ensure safety for people with disabilities, challenges with sanitizing reusables and stigma associated with using single-use items such as straws. Based on the direction provided, the proposed regulation addresses some concerns but requires further exploration to reduce barriers. In particular, exemptions under the proposed regulation will only allow plastic flexible straws to be sold to businesses, individuals for personal use upon request and care facilities (i.e. hospitals, long term care and care institutions). Restaurants are not included in the exemption for sale and distribution of plastic flexible straws presenting a barrier to the disability community. York Region staff recommended the regulation exempt restaurants and food establishments to allow them to provide straws to those that need them; this will help demonstrate their commitment to reducing stigma and barriers to accessibility.

Draft Guide to Selecting Alternatives aligns with SM4RT Living direction to address single-use items

The government published a draft Guide for Selecting Alternatives for Single-use plastics to aid businesses and organizations in choosing less-impactful plastics or non-plastic alternatives to the six categories. The Guide applies the 4R's waste management hierarchy providing options to reduce and reuse ahead of recycling and recovery, including best practice options that encourage voluntary measures such as ‘ask first’ or ‘by request’ programs. This aligns with the Region’s SM4RT Living Plan direction to reduce reliance on single-use items through ‘ask first’ policies, reusable alternatives and better packaging design.

5. Financial

Impacts to Region’s waste management system may include increased contamination and management costs from alternatives to single-use plastics

The Regulatory Impact Analysis Statement suggests that while the proposed regulation would prevent single-use plastics from entering waste streams or ending up as litter, municipalities should expect increased alternative packaging, such as compostable plastic cutlery, compostable coffee pods and paper or compostable take-out containers, being placed in the green bin or blue box. Unfortunately, many items in the marketplace currently labelled as compostable cannot be processed through the Region’s green bin program.

The impact to York Region’s waste management budget is unclear. Some costs may be offset from producer obligations under the Blue Box program once it fully transitions in late 2025, and some material may be captured in commercial waste systems that service businesses such as restaurants. Voluntary waste reduction measures such as ‘ask first’ policies that let the customer decide if they need single-use items and offering reusable alternatives may also mitigate impacts. However, without clearer guidance around preferred alternatives to single-use plastics, it is likely that more businesses will switch their conventional single-use plastics with “compostable” alternatives, increasing their presence in the green bin program through food takeout or retail purchases. This will impact future budgets and tonnages and may increase residue rates in green bin systems or impact the quality of compost end products.

6. Local Impact

Region and local municipalities developing supports to help businesses, residents and local accessibility organizations adapt to the Regulation

Local municipal partners in consultation with the Region have developed a business engagement strategy with implementation pending COVID restrictions. The Region and local municipalities will leverage findings from business engagement and the federal Guide to develop resources to support businesses. These resources will assist in compliance with the regulation and help to voluntarily reduce more single-use items through ‘ask first’ policies or offering reusable alternatives. Consultations are continuing with the disability community in 2022 to incorporate their perspectives in future public and business communications and education plans. Staff expect to begin implementing single-use items reduction programming with residents and businesses later in 2022.

7. Conclusion

The federal ban is an important step forward in reducing plastic waste and pollution and driving the transition to a circular economy. The Region and its local municipal partners will remain engaged in federal government consultations throughout the process and continue collaborating on supports for York Region businesses and residents. Region and local municipal staff will implement education and enforcement efforts. This will provide clear direction to residents on proper curbside set out for alternative packaging and minimize impacts to our integrated waste management system.

For more information on this report, please contact Laura McDowell, Director, Environmental Promotion and Protection at 1-877-464-9675 ext. 75077. Accessible formats or communication supports are available upon request.



Recommended by:

Erin Mahoney, M. Eng.
Commissioner of Environmental Services



Approved for Submission:

Bruce Macgregor
Chief Administrative Officer

February 9, 2022
Attachments (1)
eDOCS#13668981



March xx, 2022

Tracey Spack
Director, Plastics Regulatory Affairs Division
Environment and Climate Change Canada (ECCC)
Gatineau, QC K1A 0H3
plastiques-plastics@ec.gc.ca

Ms. Tracey Spack

RE: York Region Response – Proposed Single-Use Plastics Prohibition Regulation, Regulatory Impact Analysis Statement and draft Guidance for Selecting Alternatives

Regional staff thank Environment and Climate Change Canada (ECCC) for the opportunity to provide feedback on the proposed Single-Use Plastics Prohibition Regulation (the Regulation), Regulatory Impact Analysis Statement (the Statement) and draft Guidance for Selecting Alternatives (the Guidance Document). Due to timing, it was not possible to bring our response to Regional Council for endorsement prior to submission. This response will be considered by Council in March 2022 and any additional comments from our Council will be communicated to ECCC in late March.

Region staff support proposed restrictions for single-use plastics

Staff appreciate the ECCC's action to regulate single-use plastics. Overall, the proposed direction aligns with [York Region's SM4RT Living Plan](#) focus on moving towards a circular economy. Many issues raised during the consultation process were addressed in the draft regulation. Region staff support the six plastics identified in the regulation and have several recommendations to improve the regulation and guidance documents to ensure a smooth transition. Detailed comments are provided in the attached table, as requested in the posting.

Lack of standards and enforcement to address compostable packaging results in escalating costs to municipalities and businesses

While staff support the proposed approach to single-use plastics, it is likely that this will result in many of these products being replaced with alternatives labelled as compostable and small to medium businesses lack the resources and capabilities of

larger corporations to validate claims and evaluate alternatives. The Statement indicates that the prohibition will treat non-conventional plastic items such as compostable plastic cutlery in the same manner as traditional plastics however there are no explicit definitions or wording in the regulation. This creates challenges with enforcement as well as additional costs to municipalities to manage these materials. As noted in the attached table, Region staff recommend defining how various alternatives will be considered under the ban as well as ensuring access to practical resources for businesses. This specific information will reduce business risk, regulatory exposure and make it easier for businesses to select suitable alternatives and avoid unintended impacts to waste management systems.

Timely federal leadership on standards for compostable products and packaging will also help to simplify implementation of the regulation. The Statement indicates standards for compostability will be addressed in the future, however staff recommend these standards be developed and implemented in tandem with these regulations. Without better compostable standards in place, we expect increased contamination in our green bin program from packaging which is not compostable using existing infrastructure. This deficit would also impact businesses who invest in alternative materials to replace the banned single-use plastics based on incomplete information. To bridge any gap in timing between the regulation and standards, it is recommended that the guidance document include clear direction on preferred alternatives for banned items. This guidance should also include information on challenges with current compostability standards.

Consider future regulatory action on wipes and other products incorrectly labelled as flushable

While staff support the initial list of materials, additional action should be considered for other problematic materials, such as products incorrectly labelled as flushable e.g. wipes. Ryerson University's Flushability Lab at Ryerson Urban Water tested 23 products from southern Ontario stores labelled as "flushable" by manufacturers and confirmed they would not break down in Ontario sewer systems. Products incorrectly labelled as flushable should be considered for future regulatory action.

As seen in the [recent decision by the Competition Bureau to fine Keurig Canada \\$1 million for misleading claims on coffee pod recyclability](#), holding producers accountable for product claims on recycling or composting performance is an important first step, but regulatory action is needed. Clear standards for labelling of recyclable products were a priority identified in the Minister's mandate letter and staff recommend the scope of this labelling review be expanded to include compostable products and packaging as well as products labelled as flushable. Not addressing these issues leads to higher management costs for municipalities and confusion for many consumers.

Include ‘upon request’ exemption for public establishments to reduce accessibility barriers

Removing barriers to accessibility is a priority for Ontario organizations, including municipalities and is a requirement under the *Accessibility for Ontarians with Disabilities Act, 2005*. Staff are pleased accessibility and feedback from the disability community have been considered in the government’s decision-making process and are reflected in the proposed Regulation.

Restaurants and food establishments are not included in exemptions for flexible plastic straws. While consumers may purchase flexible straws, there is an expectation that those requiring flexible straws for accessibility purposes will be required to bring their own in most public establishments. Expecting people with disabilities to bring their own flexible plastic straw may not be a feasible option for some that require accessibility supports and can be a barrier to receiving services.

Staff recommend ECCC include an ‘upon request’ (also known as an ‘ask first’ policy) exemption be put into place to allow restaurants and food or beverage establishments to provide flexible plastic straws when requested by the consumer. It is recommended that further direct consultation be completed with the disability community, including Accessibility Advisory Committees where such committees exist, to establish best practices for flexible straws, and to develop educational programs to inform establishments and communities on the importance of flexible straws for many people with disabilities. Such educational programs may help address potential stigma towards people that need to use single-use plastics.

Engage Public Health to facilitate safe implementation of reusable alternatives in food service settings

Public health is supportive of the proposal to reduce single-use plastics and recognizes the positive impacts this initiative would have on both the environment and the health of Canadians. Engaging public health builds support for the implementation of desirable alternatives while addressing potential concerns regarding food handling and food safety. More research and consultation is needed to mitigate food safety concerns with allowing consumers to bring their own container to a restaurant for takeout. Consulting with public health would also provide the opportunity to identify potential impacts on source drinking water quality. A cross sector collaboration would be required to develop a comprehensive implementation plan, and new promotional activities would need to be completed in consultation with all relevant stakeholders. It is strongly recommended to engage provincial and national public health agencies, restaurant associations and food retailers to develop consistent guidance at a national level. The National Zero Waste

Council's [Opportunities for Reusables in Retail Settings During the COVID-19 Pandemic in Canada](#) could be leveraged for consultation with Public Health.

York Region looks forward to continued engagement as the government moves forward with the approach to plastics

Regional staff are encouraged by the government actions and commitment to achieving zero plastic waste by 2030. The Region looks forward to continued engagement in meaningful discussions to help advance these plans.

If you have questions regarding this response or would like to further discuss these recommendations, please contact Laura McDowell, Director of Environmental Promotion and Protection at Laura.McDowell@york.ca.

Sincerely,

Erin Mahoney, M. Eng.
Commissioner of Environmental Services
The Regional Municipality of York

cc: Charles O'Hara, Director, Resource Recovery Policy Branch, Ministry of the Environment,
Conservation and Parks
Dave Gordon, Association of Municipalities of Ontario

Feedback specific to the Single-Use Plastics Prohibition Regulation, Regulatory Impact Analysis Statement and Guidance for Selecting Alternatives to Single-Use Plastics

Section	Recommendation	Rationale
Section 1, Single-Use Plastics Prohibition Regulation	<p>Include definition for single-use plastic substitutes, like compostable plastics, and identify which are covered by the regulation.</p> <p>For example:</p> <ul style="list-style-type: none"> a) non-plastic manufactured items such as those labelled compostable or biodegradable that have a similar look and feel to conventional plastic counterparts b) composed of wood, paper and moulded fibre (list subject to change from time to time) 	<p>The Regulatory Impact Analysis Statement indicates that non-conventional plastics such as ‘compostable’ options will be treated the same as conventional plastics under the regulation. It will be difficult to enforce if this is not spelled out in the regulation with a definition of what types of substitutes are included in the prohibition.</p> <p>Items like compostable products and packaging are not compatible with current processing technology.</p> <p>Acceptable substitutes to single-use plastics need to be clearly defined to prevent greenwashing and consumer confusion in absence of national standards for these products.</p>
Section 1, Single-Use Plastics Prohibition Regulation	<p>Include definition of single-use plastic substitutes for reusables as an alternative that exceeds performance standards for plastic counterpart</p>	<p>Food handling practices may need to be modified where prepared foods are involved in the use of reusable substitutes for single-use plastics. Staff recommend engagement with provincial and local public health agencies and food retailers to develop consistent guidance at a national level. The National Zero Waste Council’s <i>Opportunities for Reusables in Retail Settings During the COVID-19 Pandemic in Canada</i> could be leveraged for consultation with Public Health.</p> <p>Acceptable reusable substitutes need to be clearly defined to better serve businesses through transition and compliance with the regulation. As suitable alternatives become more readily used or innovated, the list of suitable substitutes can be expanded.</p>
Section 3, Single-Use Plastics Prohibition Regulation	<p>Include “upon request” accessibility exemption for public establishments to sell or distribute flexible plastic straws</p>	<p>Restaurants or food establishments are not included in exemptions for flexible plastic straws and those requiring them are expected to bring their own in most public</p>

	without quantity restrictions (e.g. can provide one straw at a time)	establishments. Expecting people with disabilities to bring their own flexible plastic straw may not be a feasible option for some that require accessibility supports and can be a barrier to receiving services. Charging people with disabilities a fee to use a plastic flexible straw introduces a financial barrier and increases stigma. Staff recommend further direct consultation be completed with the disability community, such as the York Region Accessibility and Advisory Committee to establish best practices for flexible straws.
Section 6, Single-Use Plastics Prohibition Regulation	Ensure record-keeping aligns with existing producer responsibility requirements.	ECCC could leverage existing reporting databases or develop a centralized database in alignment with producer responsibility reporting requirements to reduce administrative burdens on affected parties.
Regulatory Impact Analysis Statement: Regulatory development, <i>Ban is not comprehensive enough</i>	Monitor latest research and engage with municipalities regularly to assess if additional materials meet the criteria (value recovery problematic and environmentally harmful) over time. Also monitor impacts from single-use alternatives to improve guidance on sustainable options.	Additional items should be considered in the future, such as products labelled as flushable, water bottles and hot/cold beverage cups. Science pertaining to current single-use plastics not included in the six categories needs to be monitored for impacts on pollution, landfills and the environment. Engaging with municipalities also needs to be conducted regularly to assess value recovery challenges of various materials in green bin and blue box programs. This monitoring should include impacts resulting from use of substitutes as their use increases or as new types are created.
Guidance for Selecting Alternatives to the Single-Use Plastics	Document uses complex language.	Intended audience is businesses and organizations providing single-use plastics to Canadian market or public. It is recommended that insider jargon used in the Regulatory Impact Analysis Statement not be repeated in the Guidance Document. Providing a rationale is appreciated, however, clear simple language would improve the ability of the public and other groups to understand the guidance. Using links to direct the reader to additional information would also streamline the document. For example, Page 4 explains the Framework;

		<p>ECCC could alternatively just refer the reader to existing resources that explore the Framework in depth.</p> <p>Page 7 refers to external guidance on preferred plastic materials. This language could be simplified and reduced to one sentence with a link to learn more.</p>
<p>Guidance for Selecting Alternatives to the Single-Use Plastics – Guidance Specific to Each SUP Subject to the Proposed Regulations</p>	<p>Section is text heavy and does not provide specific guidance. Case studies are useful as examples and including links to more business support tools is helpful.</p>	<p>As above, replace with a table with specific examples of substitutes and guidance with clearer understanding of the impact of the single-use plastics ban to businesses. Ensure substitutes are compatible with current processing technology for recycling and compost/anaerobic digestion.</p> <p>Small and medium businesses lack the resources and capabilities compared to larger corporations. It is recommended ECCC provide practical solutions such as incentives or access to innovative solutions to minimize additional costs, minimize regulatory exposure and reduce business risk.</p>



MUNICIPALITY OF SHUNIAH

420 Leslie Avenue, Thunder Bay, Ontario P7A 1X8

Phone: (807) 683-4545 Fax: (807) 683-6982

Email: shuniah@shuniah.org www.shuniah.org

March 24, 2022

The Honourable Doug Ford
Premier of Ontario
Legislative Building, Queen's Park
Toronto, ON M7A 1A1
premier@ontario.ca
Via Email

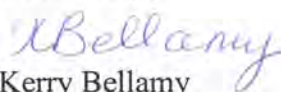
Dear Premier Ford,

RE: Support Resolution – Township of Chapple supports resolution from Northwestern Ontario Municipal Association (NOMA)

Please be advised that, at its meeting on March 22, 2022, the Council of the Municipality of Shuniah resolved to support resolution number RES-7-2022 from the Township of Chapple regarding resolution 2022-01 dated January 17, 2022, from Northwestern Ontario Municipal Association (NOMA) with regards to supporting the expansion of Northern Ontario School of Medicine (NOSM) to address the urgent need for physicians on Northern Ontario.

We kindly request your support and endorsement for the expansion of the Northern Ontario School of Medicine.

Yours truly,


Kerry Bellamy
Clerk
KB/jk

Cc:

Hon. Jill Dunlop, Minister of Colleges and Universities

Hon. Cristine Elliot, Minister of Health

Hon. Victor Fedeli, Minister of Economic Development, Job Creation, and Trade

local MPs & MPPs

Ontario Medical Association

Northern School of Medicine

Northern Ontario Academic Medicine Association

Association of Municipalities of Ontario (AMO)

Federation of Northern Ontario Municipalities (FONOM)



COUNCIL RESOLUTION

Resolution No.: 100-22

Date: Mar 22, 2022

Moved By: Don Smith

Seconded By: Danna Blunt

Supports * Resolutions and Correspondence
 THAT Council hereby receives the following correspondence:

- a. NOMA et al. Letter to Minister of Indigenous Affairs & Northern Development
- b. Township of Chapple Resolution - Support NOMA Resolution re NOSM Expansion
- c. Lakehead Region Conservation Authority Annual Meeting Minutes

and the same be filed at the Clerk's Office.

Carried

Defeated

Amended

Deferred

Wendy Landry
 Signature

March 28, 2022

BY E-MAIL

On March 24, 2022 Regional Council adopted the following motion:

WHEREAS, the Regional Municipality of York and the City of Vaughan provides service excellence in its winter maintenance operations; and,

WHEREAS, sidewalk obstructions, blockages, and ice buildups are not unique to significant snow accumulations and are a regular occurrence during road clearing operations, and that this has been an ongoing issue throughout the region for the past 20 years; and,

WHEREAS, the Regional Municipality of York received a significant winter event on January 17, 2022 emphasizing current gaps in providing optimized winter maintenance services; and,

WHEREAS, the Region's response to snow accumulation can include multiple rounds of snowplow clearing from the roadway, including a benching operation to remove snow from the curb line; and,

WHEREAS, as a result of road clearing operations, bridge deck and monolithic sidewalks will often have accumulation inhibiting the ability for pedestrians to safely pass; and,

WHEREAS, as a result of road clearing operations, snow placement causes ice buildup on sidewalks, as well as obstructions and blockages on egresses leading to inability to pedestrians to safety pass and sightline concerns; and,

WHEREAS, regional road sidewalks require a disproportionate amount of time to clear creating delays in clearing residential neighbourhoods; and,

WHEREAS, the Region has undertaken snow clearing operations on-boulevard bicycle lanes adjacent to regional roads; and,

WHEREAS, it is important and useful to improve the effectiveness of the City's and Region's operations, as part of our quest for continuous improvement in providing a demonstrated consistency of services to our residents, businesses, and emergency care centres.

THEREFORE BE IT RESOLVED that staff be directed to undertake a review regarding York Region assuming all winter maintenance including snow clearing on sidewalks adjacent to regional roads, with a preliminary report to be provided to the June 16, 2022 Committee of the Whole

meeting, including whether it could be done in-house or through a performance based contract.

BE IT FINALLY RESOLVED that the Clerk be directed to circulate this motion to all York Region municipalities for their review and consideration.

Regards,

Christopher Raynor | Regional Clerk, Office of the Regional Clerk, Corporate Services

The Regional Municipality of York | 17250 Yonge Street | Newmarket, ON L3Y 6Z1
1-877-464-9675 ext. 71300 | christopher.raynor@york.ca | york.ca

Our Mission: **Working together to serve our thriving communities – today and tomorrow**

March 28, 2022

BY E-MAIL

To the members of the Newmarket-Aurora community,

MPP Christine Elliott is pleased to advise local families in Newmarket-Aurora that the governments of Ontario and Canada have signed the best deal for Ontario families. This is a \$13.2 billion agreement that is lowering fees for families, protecting parental choice, and providing more accessible and high-quality child care, including delivering an average of \$10 a day child care by September 2025.

This provincial government stood up for taxpayers and never wavered from the critical objective of securing the best deal for Ontario families. With perseverance, the government has delivered the best deal that will dramatically reduce fees for parents.

Families in Newmarket-Aurora will immediately save 25%, retroactive to April 1st, and by 50% on average by December of 2022 – which represents on average roughly \$4,000 per child this year and over \$12,000 in 2023.

This agreement will create 86,000 additional childcare spaces and support the hiring of new early childhood educators and improve compensation for all staff working in licensed child care settings.

The government fought to deliver the best deal possible for Ontarians. And as a result has secured \$3 billion more over the course of this agreement, an additional year of funding, and flexibility to support all parents.

Together, through the Ontario Child Care Tax Credit (CARE), affordable child care options, and continued investment in all-day Kindergarten, Ontario parents are now provided with the largest array of options, benefits, and supports for early years and child care in the country.

Under the leadership of Premier Ford, the government is saving parents their hard earned money and benefiting thousands of Ontario families for years to come.

2021 Tax Filing Reminder: The [Ontario Child Care Tax Credit](#), known as Ontario Childcare Access and Relief from Expenses (CARE) Tax Credit, puts more money in the pockets of families and provides the flexibility they need to choose the child care options that work best for them. The government is providing a 20 per cent top up to this tax credit for 2021, increasing support from \$1,250 to \$1,500, on average.

Learn more about all provincial tax credits available this tax season:

<https://christineelliottmpp.ca/ontario-making-life-more-affordable-this-tax-season-with-tax-credits-for-workers-seniors-and-families-in-newmarket-aurora/>

For **Christine Elliott, MPP, Newmarket-Aurora**

16635 Yonge Street, Unit 22

Newmarket, Ontario L3X 1V6

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tf: 855-642-TOWN
townofws.ca

March 28, 2022

Delivered by email
premier@ontario.ca

Premier of Ontario
Legislative Building
Queen's Park
Toronto ON M7A 1A1

RE: Dissolve Ontario Land Tribunal

Please be advised the above-noted matter was placed before Council at its meeting held on March 23, 2022 and the following resolution was passed:

WHEREAS Municipalities across this province collectively spend millions of dollars of taxpayer money and municipal resources developing Official Plans that meet current Provincial Planning Policy; and

WHEREAS an Official Plan is developed through months of public consultation to ensure, “that future planning and development will meet the specific needs of (our) community”; and

WHEREAS our Official Plan includes provisions that encourage development of the “missing middle” or “gentle density” to meet the need for attainable housing in our community; and

WHEREAS our Official Plan is ultimately approved by the province; and

WHEREAS it is within the legislative purview of Municipal Council to approve Official Plan amendments or Zoning By-law changes that better the community or fit within the vision of the Town of Whitchurch-Stouffville Official Plan; and

WHEREAS it is also within the legislative purview of Municipal Council to deny Official Plan amendments or Zoning By-law changes that do not better the community or do not fit within the vision of the Town of Whitchurch-Stouffville Official Plan; and

WHEREAS municipal planning decisions may be appealed to the Ontario Land Tribunal (OLT; formerly the Ontario Municipal Board or “OMB”), an unelected, appointed body that is unaccountable to the residents of Whitchurch-Stouffville; and

WHEREAS the OLT has the authority to make a final decision on planning matters based on a “best planning outcome” and not whether the proposed development is in compliance with municipal Official Plans; and

WHEREAS all decisions—save planning decisions—made by Municipal Council are only subject to appeal by judicial review and such appeals are limited to questions of law and or process; and

WHEREAS Ontario is the only province in Canada that empowers a separate adjudicative tribunal to review and overrule local decisions applying provincially approved plans; and

WHEREAS towns and cities across this Province are repeatedly forced to spend millions of dollars defending Official Plans that have already been approved by the province in expensive, time consuming and ultimately futile OLT hearings; and

WHEREAS lengthy, costly OLT hearings add years to the development approval process and acts as a barrier to the development of attainable housing.

NOW THEREFORE BE IT RESOLVED THAT the Government of Ontario be requested to immediately engage municipalities to determine an alternative land use planning appeals process in order to dissolve the OLT and eliminate one of the most significant sources of red tape delaying the development of more attainable housing in Ontario; and

THAT a copy of this Motion be sent to the Honourable Doug Ford, Premier of Ontario, the Minister of Municipal Affairs and Housing, the Leader of the Opposition, the Leaders of the Liberal and Green Party, all MPPs in the Province of Ontario, the Large Urban Mayors' Caucus of Ontario, the Small Urban GTHA Mayors, the Regional Chairs of Ontario, the Association of Municipalities of Ontario, and all Ontario municipalities for consideration.

Yours truly,



Kristina Lepik, Council Coordinator
(905) 642-4130

cc. Minister of Municipal Affairs and Housing,
Leader of the Opposition,
Leaders of the Liberal and Green Party,
MPPs in the Province of Ontario,
Large Urban Mayors' Caucus of Ontario,
Small Urban GTHA Mayors,
Regional Chairs of Ontario,
Association of Municipalities of Ontario,
All Ontario municipalities

March 31, 2022

BY E-MAIL

Good morning.

Please find below a motion passed by Council of the Town of Georgina imposing limitations upon the purchase of goods that can easily be traced to have originated from Russia, and requesting support of this position by other Ontario municipalities;

RESOLUTION NO. C-2022-0081

Moved By Councillor Waddington

Seconded By Councillor Neeson

WHEREAS the country of Ukraine has experienced a premeditated and unprovoked invasion by Russia;

AND WHEREAS silence is complicity;

AND WHEREAS Canada imports hundreds of millions of dollars' worth of goods from Russia each year;

AND WHEREAS negative financial impacts upon a country can be used as a means to deter further conflict;

BE IT THEREFORE RESOLVED THAT the Town of Georgina unequivocally denounces Russia's unjustifiable war against Ukraine;

AND THAT the Town of Georgina supports the sanctions which the Federal government of Canada has thus far imposed on Russia;

AND THAT effective immediately and until a time when the sovereignty of Ukraine is once again unchallenged, the Town of Georgina will:

- 1) Not purchase any products (ie plywood, fertilizer, steel, furniture or machinery) which can be easily traced to have originated from Russia; and,
- 2) Insist that any future contracts for services for the Town of Georgina abide by these same limitations within our municipality;

AND THAT upon confirmation that the Belarusian military is engaged within Ukraine that the Town of Georgina apply these limitations upon goods from that country as well;

AND THAT this decision of Georgina Council be forwarded to all other municipalities within Ontario requesting they enact similar measures so that as a united front we can make a noticeable difference.

Carried Unanimously



Carolyn Lance

Council Services Coordinator

Clerk's Division | Town of Georgina

26557 Civic Centre Road, Keswick, ON | L4P 3G1

905-476-4301 Ext. 2219 | georgina.ca

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Doug Ford, Premier of Ontario
premier@ontario.ca (Sent via email)

April 1st 2022

Re: Funding Supports for Infrastructure Projects – Bridge / Culvert Replacements in Rural Municipalities

Please be advised that on March 30th 2022 the Town of Plympton-Wyoming Council passed the following motion supporting the Township of Clearview regarding their resolution for Funding Supports for Infrastructure Projects – Bridge / Culvert Replacements in Rural Municipalities (attached).

Motion 18

Moved by Gary Atkinson

Seconded by Mike Vasey

That Council support correspondence item 'n' from Township of Clearview regarding Funding Supports for Infrastructure Projects – Bridge / Culvert Replacements in Rural Municipalities.

Motion Carried.

If you have any questions regarding the above motion, please do not hesitate to contact me by phone or email at dgiles@plympton-wyoming.ca.

Sincerely,

Denny Giles
Deputy Clerk
Town of Plympton-Wyoming

Cc: (all sent via e-mail)

Hon. Peter Bethenfalvy, Ontario Minister of Finance minister.fin@ontario.ca

Hon. Chrystia Freeland, Federal Minister of Finance chrystia.freeland@fin.gc.ca

ROMA roma@roma.on.ca

AMO amo@amo.on.ca

All Ontario Municipalities

The Corporation of the Town of Plympton-Wyoming

P.O Box 250, 546 Niagara Street, Wyoming Ontario N0N 1T0

Tel: 519-845-3939 Ontario Toll Free: 1-877-313-3939

www.plympton-wyoming.com

**Ministry of
Municipal Affairs
and Housing**

Office of the Minister
777 Bay Street, 17th Floor
Toronto ON M7A 2J3
Tel.: 416 585-7000

**Ministère des
Affaires municipales
et du Logement**

Bureau du ministre
777, rue Bay, 17^e étage
Toronto ON M7A 2J3
Tél. : 416 585-7000



234-2022-1674

April 6, 2022

Dear Head of Council:

For the past two years, you, your council colleagues and municipal staff have been at the forefront of the response to COVID in Ontario. I deeply appreciate your continued collaboration with the province and your inspiring dedication.

With key public health and health system indicators continuing to remain stable or improve, Ontario is cautiously and gradually easing public health and workplace safety measures with [all remaining measures, directives and orders to end by April 27, 2022](#).

Today I am writing to inform you of the status of the emergency orders that were led by my ministry and made in early 2020 under the *Emergency Management and Civil Protection Act*, and later continued under the *Reopening Ontario Act, 2020*, to help municipalities address some of the challenges brought on by the pandemic.

The Work Deployment Measures for Municipalities Order will end on April 27, 2022

Since April 16, 2020, [O. Reg. 157/20](#), Work Deployment Measures for Municipalities (order) provided municipalities with the flexibility to deploy certain staff to where they were needed most in response to COVID-19 pressures.

The order was a temporary measure and, in line with the province's lifting of public health measures, it will end on April 27, 2022.

Any deployments your municipality has made using the authority in the order will need to end by April 27, 2022. If your municipality is relying on the order to deploy staff, it is important to work collaboratively and in good faith with your bargaining agents to develop staffing plans beyond April 27, 2022.

The Patios Order will end on April 27, 2022

[O. Reg. 345/20](#), Patios, eliminated Planning Act requirements for notice and public meetings and removed the ability to appeal when municipalities passed temporary use by-laws for new or expanded restaurant and bar patios. This allowed municipalities to pass or amend these by-laws quickly to address local circumstances and needs as they evolved.

The order was a temporary measure and, in line with the province's lifting of public health measures, will end on April 27, 2022.

Heads of Council
Page 2

As the order will end on April 27, 2022, your municipality may wish to consider making any necessary changes to temporary use by-laws for restaurant and bar patios prior to this date. Changes were made as part of Bill 13, the *Supporting People and Businesses Act, 2021* in December 2021 to help streamline the planning system and provide municipal councils broader authority to allow more planning decisions to be made by committees of council or staff. Municipalities can now delegate decisions dealing with minor amendments to zoning by-laws, such as temporary use by-laws, should they choose to (and subject to having appropriate official plan policies in place).

Temporary Health or Residential Facilities

[O. Reg 141/20](#) came into effect on April 9, 2020. It has exempted temporary shelters and health facilities, established to respond to the effects of the pandemic, from the requirement to obtain a building permit or a change of use permit under the Building Code Act, from complying with the technical requirements of the Building Code and with certain by-laws and approvals under the Planning Act, subject to certain conditions related to protecting public health and safety.

This order will also end on April 27, 2022. I understand that some of these temporary facilities are still in use to respond to the effects of the pandemic. I intend to make amendments to the Building Code that would continue to exempt these facilities from the need for a building permit and compliance with the Building Code on a temporary basis, while ensuring they continue to be regularly inspected. Your municipality may wish to consider if any new temporary use or zoning by-laws or amendments to existing temporary use or zoning by-laws may be needed before the order ends on April 27, 2022.

There may be other emergency orders that are ending and may impact your municipality. For the latest information, please visit the government's page on [COVID-19 emergency information](#).

If your municipality has any questions about any of the changes outlined above, we encourage your staff to contact [your local Municipal Services Office](#).

Thank you again for your continued support in protecting the health and well-being of Ontarians while delivering the services they depend upon.

Sincerely,



Steve Clark
Minister of Municipal Affairs and Housing

C: Chief Administrative Officers
Municipal Clerks
Kate Manson Smith, Deputy Minister of Municipal Affairs and Housing
Brian Rosborough, Executive Director, Association of Municipalities of Ontario



The Corporation of
The Township of Brock
1 Cameron St. E., P.O. Box 10
Cannington, ON L0E 1E0
705-432-2355

Sent via email

April 7, 2022

The Honourable Chrystia Freeland, Federal Minister of Finance
chrystia.freeland@parl.gc.ca

Re: Federal Support for Lake Simcoe Clean Up Fund - Georgina Resolution Number
C-2022-0080 (attached)

Please be advised that the Council of the Township of Brock adopted the following resolution at their meeting held on March 28, 2022:

C-2022-064

BE IT RESOLVED THAT Communication number 87/22 regarding the Town of Georgina's resolution with respect to a Lake Simcoe Clean Up Fund be received; and

WHEREAS Lake Simcoe is one of Ontario's largest watersheds, home to First Nations since time immemorial, and situated in the growing communities of Simcoe County, York Region, Durham Region, and the cities of Barrie and Orillia;

WHEREAS the watershed faces threats due to eutrophication, largely from phosphorus runoff and other contaminants into the lake and its tributaries;

WHEREAS the lake is a significant source of drinking water, as well as being integral for local recreation, tourism, agriculture and other key economic drivers;

WHEREAS the previous Federal government funded a "Lake Simcoe Clean-Up Fund" of \$65 million over 10 years between 2007-2017, but that fund has not been renewed; and

WHEREAS during the 2019 Federal Election, the Hon. Chrystia Freeland committed \$40 million over 5 years towards Lake Simcoe; and

WHEREAS during the 2021 Federal Election, the Liberal Party of Canada committed to "Implement a strengthened Freshwater Action Plan, including an historic investment of \$1 billion over 10 years. This plan will provide essential funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe..."; and

WHEREAS the Conservative Party of Canada also committed to re-funding the Lake Simcoe Clean-Up Fund in the 2019 and 2021 general elections with an investment of \$30 million over five years; and

If this information is required in an accessible format,
please contact the Township at 705-432-2355.

WHEREAS further to the Minister of the Environment and Climate Change's mandate letter dated December 16th, 2021, which directs the Minister to "...establish a Canada Water Agency and implement a strengthened Freshwater Action Plan, including a historic investment to provide funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe..."

THEREFORE BE IT RESOLVED THAT the Council of the Township of Brock:

1. Supports Federal funding for a Lake Simcoe Restoration Fund that represents a significant percentage of the overall Freshwater Action Plan Fund, with funding in excess of previous commitments, beginning in the 2022 budget;
2. Asks that such funding be used to undertake:
 - a) Shoreline mitigation and restoration, including in the tributaries of the Holland River, Maskinonge River, Black River, Pefferlaw River, the Holland Marsh, Beaver River, White's Creek, and waterfront areas in Brock including the Beaverton Harbour;
 - b) The assistance of the Federal government to achieve up to or more than 40 percent high quality natural cover;
 - c) Projects to ameliorate contaminated sites in the watershed;
 - d) Upgrades to help retrofit municipal infrastructure such as wastewater and storm water facilities to decrease total current discharges from existing facilities;
 - e) Purchasing and conservation of more forests and wetlands under the auspices of the Lake Simcoe Region Conservation Authority (LSRCA); and
3. That a copy of this resolution be sent to the Federal Minister of Finance; the Minister of the Environment and Climate Change; the President of the Treasury Board; the Members of Parliament for York-Simcoe, Newmarket-Aurora, Barrie-Springwater-Oro-Medonte, Barrie-Innisfil, Simcoe North, Haliburton-Kawartha Lakes-Brock, and Durham; and to all Lake Simcoe Region municipalities and the LSRCA, with a request for their endorsement.

Should you have any questions or concerns please do not hesitate to contact the undersigned.

Yours truly,

THE TOWNSHIP OF BROCK



Fernando Lamanna
Clerk/Deputy CAO

FL:dh

Encl.



The Corporation of
 The Township of Brock
 1 Cameron St. E., P.O. Box 10
 Cannington, ON L0E 1E0
 705-432-2355

- cc. The Hon. Steven Guilbeault, Minister of the Environment and Climate Change - Steven.Guilbeault@parl.gc.ca
 The Hon. Mona Fortier, President, Treasury Board - Mona.fortier@parl.gc.ca
 Jamie Schmale MP, Haliburton-Kawartha Lakes-Brock - Jamie.schmale@parl.gc.ca
 Scot Davidson MP, York-Simcoe - Scot.Davidson@parl.gc.ca
 Tony Van Bynen MP, Newmarket-Aurora - Tony.VanBynen@parl.gc.ca
 Doug Shipley MP, Barrie-Springwater-Oro-Medonte - Doug.Shipley@parl.gc.ca
 John Brassard MP, Barrie-Innisfil - John.brassard@parl.gc.ca
 Adam Chambers MP, Simcoe North - Adam.chambers@parl.gc.ca
 Erin O'Toole MP, Durham - Erin.otoole@parl.gc.ca
 Robert Baldwin, President, Lake Simcoe Region Conservation Authority
 Lake Simcoe Watershed Municipalities:
 City of Kawartha Lakes - clerks@kawarthalakes.ca
 Township of Scugog - mail@scugog.ca
 Township of Uxbridge - info@uxbridge.ca
 Town of Georgina - info@georgina.ca
 Town of Whitchurch-Stouffville - clerks@townofws.ca
 Town of Aurora - info@aurora.ca
 Town of Newmarket - info@newmarket.ca
 Town of East Gwillimbury - clerks@eastgwillimbury.ca
 Township of King - serviceking@king.ca
 Town of Caledon - info@caledon.ca
 Town of New Tecumseth - clerk@newtecumseth.ca
 Town of Bradford-West Gwillimbury - rmurphy@townofbwg.com
 Town of Innisfil - inquiry@innisfil.ca
 City of Barrie - cityinfo@barrie.ca
 Township of Oro-Medonte - info@oro-medonte.ca
 City of Orillia - corporate@orillia.ca
 Township of Ramara - ramara@ramara.ca

From: [REDACTED]
To: [Clerks](#)
Subject: RE: Motion - February 16th, 2022_Lake Simcoe Fund REVISED.doc
Date: March 8, 2022 11:52:54 AM
Attachments: [image001.png](#)

RESOLUTION NO. C-2022-0080

Moved By Councillor Neeson
Seconded By Councillor Fellini

WHEREAS Lake Simcoe is one of Ontario's largest watersheds, home to First Nations since time immemorial, and situated in the growing communities of Simcoe County, York Region, Durham Region, and the cities of Barrie and Orillia;

WHEREAS the watershed faces threats due to eutrophication, largely from phosphorus runoff and other contaminants into the lake and its tributaries;

WHEREAS the lake is a significant source of drinking water, as well as being integral for local recreation, tourism, agriculture and other key economic drivers;

WHEREAS the previous federal government funded a "Lake Simcoe Clean-Up Fund" of \$65 million over 10 years between 2007-2017, but that fund has not been renewed;

WHEREAS during the 2019 federal election, the Hon. Chrystia Freeland committed \$40 million over 5 years towards Lake Simcoe;

And WHEREAS during the 2021 federal election, the Liberal Party of Canada committed to "Implement a strengthened Freshwater Action Plan, including an historic investment of \$1 billion over 10 years. This plan will provide essential funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe...";

And WHEREAS the Conservative Party of Canada also committed to re-funding the Lake Simcoe Clean-Up Fund in the 2019 and 2021 general elections with an investment of \$30 million over five years;

And WHEREAS, further to the Minister of the Environment and Climate Change's mandate letter dated December 16th, 2021, which directs the Minister to "...establish a Canada Water Agency and implement a strengthened Freshwater Action Plan, including a historic investment to provide funding to protect and restore large lakes and river systems, starting with the Great Lakes-St. Lawrence River System, Lake Simcoe..."

THEREFORE BE IT RESOLVED that the Council of the Town of Georgina:

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2. Asks that such funding be used to undertake:
 1. Shoreline mitigation and restoration, including in the tributaries of the Holland River, Maskinonge River, Black River, Pefferlaw River and the Holland Marsh;
 2. The assistance of the federal government to achieve up to or more than 40 percent high quality natural cover;
 3. Projects to ameliorate contaminated sites in the watershed;
 4. Upgrades to help retrofit municipal infrastructure such as wastewater and stormwater facilities to decrease total current discharges from existing facilities;
 5. Purchasing and conservation of more forests and wetlands under the auspices of the Lake Simcoe Region Conservation Authority (LSRCA); and
3. That a copy of this resolution, along with a letter from the Mayor, be sent to the federal Minister of Finance; the Minister of the Environment and Climate Change; the President of the Treasury Board; the Members of Parliament for York-Simcoe, Newmarket-Aurora, Barrie-Springwater-Oro-Medonte, Barrie-Innisfil, Simcoe North, Haliburton-Kawartha Lakes-Brock, and Durham; and to all Lake Simcoe-region municipalities and the LSRCA, with a request for their endorsement.



Rachel Dillabough, Dipl. M.M.
Town Clerk | Legislative Services
26557 Civic Centre Road, Keswick, ON | L4P 3G1
905-476-4301 Ext. 2223 | georgina.ca
Follow us on [Twitter](#) and [Instagram](#)
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From: Clerks <Clerks@brock.ca>

Sent: March 8, 2022 11:35 AM

To: Rachel Dillabough [REDACTED]

Subject: Fwd: Motion - February 16th, 2022_Lake Simcoe Fund REVISED.doc

CAUTION: This message originated from an email address that is outside of the Town of Georgina organization. Please exercise extreme care when reviewing this message. DO NOT click any links or open attachments from unknown senders. Be suspicious of any unusual requests and report any suspicious email messages to the Georgina ITS division at support@georgina.ca.



Jaclyn Grossi
Acting Deputy Clerk
Town of Newmarket
395 Mulock Drive
P.O. Box 328 Station Main
Newmarket, ON L3Y 4X7
Email: jgrossi@newmarket.ca
Tel: 905-953-5300 ext. 2207
Fax: 905-953-5100

April 7, 2022

Sent to: [REDACTED]

Dear: Jocelyn Chee

RE: Lighting Request – May 13 – International MPS Awareness Day

I am writing to advise that your lighting request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#). The Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in blue and yellow on May 13, 2022 to recognize International MPS Awareness Day. Please note that the lighting will occur from sunset until 11:00 PM.

Your request will be communicated on the Town's Twitter account, and on the Town's website on the Proclamation and Lighting Request page.

If you have any questions regarding the above, please feel free to contact the undersigned.

Yours sincerely,

A handwritten signature in black ink that reads "JGrossi".

Jaclyn Grossi

Acting Deputy Clerk

/kh



Jaclyn Grossi
Acting Deputy Clerk
Town of Newmarket
395 Mulock Drive
P.O. Box 328 Station Main
Newmarket, ON L3Y 4X7
Email: jgrossi@newmarket.ca
Tel: 905-953-5300 ext. 2207
Fax: 905-953-5100

April 7, 2022

Sent to: [REDACTED]

Dear: Linda Li

RE: Lighting Request – May 27, 2022 – Menstrual Health Day

I am writing to advise that your lighting request has been approved in accordance with the Council-approved [Proclamation, Lighting Request and Community Flag Raising Policy](#). The Riverwalk Commons and Fred A. Lundy Bridge located on Water Street will be illuminated in red on May 27, 2022 to recognize Menstrual Health Day. Please note that the lighting will occur from sunset until 11:00 PM.

Your request will be communicated on the Town's Twitter account, and on the Town's website on the Proclamation and Lighting Request page.

If you have any questions regarding the above, please feel free to contact the undersigned.

Yours sincerely,

A handwritten signature in black ink that reads "JGrossi".

Jaclyn Grossi

Acting Deputy Clerk

/kh